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Investigations of the Andean Past: Papers from the First Annual Northeast Conference on Andean Archaeology and Ethnohistory

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LATIN AMERICAN STUDIES PROGRAM



CORNELL UNIVERSITY

INVESTIGATIONS OF THE ANDEAN PAST

Papers from the First Annual Northeast Conference on
Andean Archaeology and Ethnohistory

Edited by Daniel H. Sandweiss

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PREFACE

The papers included in this volume represent fourteen of the twenty-three original papers presented at the First Annual Northeast Conference on Andean Archaeology and Ethnohistory, held at Cornell University on November 13th and 14th, 1982.* The conference was sponsored by the Cornell Latin American Studies Program and will continue on an annual basis; the 1983 meeting will be held at the American Museum of Natural History in New York City. The purpose of the conference was to provide scholars in the northeast region with a forum for the transmission and discussion of current research into the Andean past. This volume is intended to further that aim by making a majority of the papers available as quickly as possible to a wider audience of Andeanists and other interested scholars.

Because of the broad scope of the theme of Andean archaeology and ethnohistory, it was impossible to find a single organizational scheme with which to arrange the contributions to this volume. I have chosen to place the papers as far as possible in chronological order and have divided them into archaeology and ethnohistory sections, but I would like to point out some of the connections between papers which are not obvious from such an organization.

One topic which appears in many of the papers is that of regional interaction involving coastal and highland zones. Although the theme of coast-highland connections is old in Andean prehistory, it has frequently been submerged by the exclusively coastal or highland primary

* The program from the conference is reproduced on page 291, and the addresses of all the speakers are found on page 293.

data bases of many workers. Recently, however (e.g. at the Dumbarton Oaks Conference on Early Monumental Architecture in the Andes), researchers have stressed the importance of east-west connections in the development of Andean civilization. This positive trend is apparent in the present collection.

Michael Malpass has found lithic evidence for connections between the Casma valley on the coast and the adjacent highlands during his preceramic Mongoncillo occupation, dated to between 8000 and 5000 years ago. Malpass also stresses north-south connections along the coast during Mongoncillo and the preceding (9000-8000 B.P.) Paijan times.

In her discussion of the Chavin-related iconography of Early Horizon textiles from the south coast, Rebecca Stone not only points out the similarities between these works and the iconography found in the stone sculpture from Chavin de Huantar, but also discusses the differences not "fully explained by the demands of the various media." She concludes that the south coast textiles represent a regional version of Chavin religion.

Richard Daggett's analysis of late Early Horizon megalithic sites in the Nepeña valley depends in large part on his important identification of pottery with cross-hatched pattern burnishing as a horizon marker for the late Early Horizon-early Early Intermediate timespan. This identification was made by tying the Nepeña sequence into the Ica master sequence via the Callejon de Huaylas. R. Daggett's paper therefore provides more evidence for the nature of inter-regional connections during the late first millenium B.C..

The paper by Allison Paulsen is most directly concerned with coast-highland connections, in this case between the Nasca drainage and the

adjacent highlands of Ayacucho during the transition from the Early Intermediate Period to the Middle Horizon. Paulsen sees Ayacucho influence in the architecture and ceramics of the coastal site of Huaca del Loro and at other, nearby sites. At the same time, she identifies coastal, Nasca 7 elements in Huarpa ceramics from Ayacucho. These observations suggest to her that there was a highland, Huarpa intrusion on the south coast which "might be regarded as a sort of dress rehearsal for the era of Huari expansion that follows Huarpa."

Related to the theme of regional interaction is the idea of a universal Andean religion during horizon periods. The papers by William Isbell and Anita Cook on the Middle Horizon as well as that by Stone on the Early Horizon all use the study of iconography to analyze the development and/or regional variation in Andean religion and its attendant ideology. Stone interprets the religion usually characterized as Chavin as one "concerned with communicating duality, paradox and transcendence through art." Judging by the continuity of many of its icons, particularly the front-face and profile figures, this religion seems to have survived through the Early Intermediate Period to the Middle Horizon.

Several of the authors present new models for the origin and subsequent development of complex social systems in the Andes. Thomas Patterson provides an innovative approach to prehistoric social development on the central coast. He rejects what he characterizes as "ahistorical" and "positivist" approaches to prehistory in favor of an "historical materialist problematic" emphasizing the production and reproduction of the conditions essential for life. The determining factors of social change are therefore seen as economic rather than

ideological. According to Patterson's model, three social formations succeeded each other on the central coast in the period from 6000 to 500 B.C.. Members of the final social formation, La Florida, built large U-shaped platform mounds. The model offers an explanation of why these mounds were constructed during La Florida times and why they ceased to be built following the shift from the La Florida system of patrilineal descent and segmentary lineages to a system of social classes.

In contrast to previous theories emphasizing either the predominant or precedent role of Tiwanaku, Isbell contends that the Middle Horizon states of both Tiwanaku and Huari "developed through parallel evolution...[from] an initial catalyst." That catalyst was the "incipient universal religion" ultimately derived from Chavin and associated with an iconography and ideology of cultural unification.

Cook concentrates on the development of the icons of Huari and Tiwanaku art, noting in particular the evolution of symbols from the representation of individuals to the representation of themes. She relates her analysis to the development of Middle Horizon states through the explicit assumption that "religion and politics are part of the same process" in the Andes. Thus, an understanding of the ideology behind the iconography of Huari and Tiwanaku is crucial to any understanding of these polities. Both Isbell's and Cook's papers are important steps in this direction.

The papers by Christine Brewster-Wray and Linda Spickard on Huari administrative architecture offer empirical data relevant to the analysis of Andean state formation during the Middle Horizon. Brewster-Wray discusses the results of her excavations in an administrative compound in the Moraduchayuc Sector at Huari. Items used in this

compound were mostly finished products rather than the debris of production, supporting the inference of administrative function. The sequence of construction defined by Brewster-Wray suggests to her a parallel with the expansion of the Huari state. Such expansion would have called for increasingly larger administrative facilities. The gradual abandonment of the compound may reflect the slow decline of Huari.

Spickard examines the development of Huari administrative architecture from a comparative point of view and in the light of general architectural theory. She starts by defining the common features and probable rationale of Huari administrative architectural design as seen at Huari and at five regional administrative centers. She then examines Early Horizon and late Early Intermediate (Huarpa) components at Huari; many of the diagnostic Middle Horizon features are present in these earlier periods, suggesting that Huari administrative architects drew on a long, local tradition in designing administrative installations. This finding is particularly significant in light of Cook's statement of the interrelation between Andean religion and politics and Isbell's idea of an incipient universal religion rooted in the Early Horizon and underlying the parallel development of the Huari and Tiwanaku polities. A comparison of the papers by Stone, Cook, and Isbell reveals a continuity of religious icons from the Early Horizon to the Middle Horizon which, combined with Spickard's evidence for Early Horizon to Middle Horizon continuities in administrative architecture, provides support for both Cook's and Isbell's theoretical analyses.

Several of the studies deal with the analysis of material culture remains in terms of the culture-historical or social information encoded

in them. As noted above, R. Daggett's paper uses his identification of a ceramic horizon marker as an aid in interpreting a number of megalithic sites in the Nepeña valley. Two of these sites, Virahuanca Bajo and Santa Lucia, have recently been discovered and are reported here for the first time.

Cheryl Daggett analyzed pottery collections from the Nepeña valley and identified two utilitarian wares. Serpentine Applique correlates temporally with Early Chimu pottery from the Moche valley and thus dates to the late Middle Horizon. Casma Incised pottery correlates with Middle Chimu ceramics and dates to the Late Intermediate. The descriptions and illustrations of these wares and their known distributions will prove useful to north coast archaeologists working with the later prehistoric periods.

Joan Gero's analysis of lithic tools from Initial Period through Middle Horizon contexts at the site of Huaricoto in the Callejon de Huaylas provides a number of insights into the archaeological use of unstructured remains. She argues that even classes of artifacts with little temporal variability and therefore minimal typological utility can still yield cultural information. In addition to functional interpretations of the flake tools, Gero's study indicates that mobile and sedentary lifestyles "provide very different social contexts for the production and use of lithics." The contexts of sedentism help explain the 1000 year lack of temporal variability in the Huaricoto lithic assemblage. Malpass' discovery of a similar lack of variability in the lithic assemblages from ceramic period sites in the Casma valley lends support to Gero's arguments.

Thomas McGreevey and Roxane Shaughnessy compare settlement location

with ecozones in a diachronic study of high altitude land use in the Huamachuco area. The sites which they found range in date from the Early Horizon to the present. Although there was some temporal variation, they found that habitation sites from all the prehistoric periods tended to cluster in the ecological/altitudinal interface between jalca and quichua lands. The apparently ancient Andean concepts of tinkuy, referring to meeting or joining, and to a lesser extent chaupi, meaning "in the middle," seem applicable here (Murra: lecture). Murra has noted a similar lineation of sites along the jalca (potato land) and quichua (maize land) interface in Huanuco. In the Huamachuco area, McGreevey and Shaughnessy found that only in the modern period did a new criterion (access to transport routes to the central town of Huamachuco) alter the ancient settlement pattern.

Both of the ethnohistoric contributions to this volume deal, though in different ways, with the problem of ethnicity and its identification through the analysis of post-Conquest documents. Joel Rabinowitz makes a strong argument for the existence of a separate dialect spoken by north coast fishermen at the time of contact. He proposes that this language began as a secret argot "that served to reinforce the subcultural identity of its speakers" and eventually developed into a full-fledged dialect. Thus, the emerging dialect would have paralleled the development of ethnic distinctions between the fishermen and other coast-dwellers, a distinction for which there is other ethnohistoric evidence.

Paul Dillon's paper traces the ethnic continuity of the highland Chanca group from the Late Intermediate Period through the first few centuries of colonial rule. The data for the post-Conquest period come

from a variety of administrative documents; one of the principle indicators of ethnic solidarity and continuity which these sources provide is the apparent ability of the Chanca to resist payment of mita labor. Dillon suggests that the recognition of ethnic continuities and boundaries can help explain the long cycles of Andean history.

* * * * *

The aid of a number of individuals and institutions were essential both in organizing the conference and in preparing this volume, and I would like to take this opportunity to thank them. The financial support of the Cornell Latin American Studies Program made possible both the conference and the volume. I wish particularly to thank the Director of the Program, Thomas H. Holloway, not only for granting the money but also for lending his organizational expertise and moral support. Thomas F. Lynch of the Cornell Anthropology Department and Craig Morris of the American Museum of Natural History also provided ideas and support for which I am very grateful. The American Museum of Natural History covered the expenses of the first mailing for the conference. The contributions of Martha Anders are acknowledged with gratitude. Debra Wimer of the Cornell Anthropology Office aided in the preparation of the manuscripts. Finally, I wish to thank the speakers at the conference and in particular the fourteen who submitted manuscripts and have been submitted to the tedious process of providing camera-ready copy for this volume.

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April, 1983

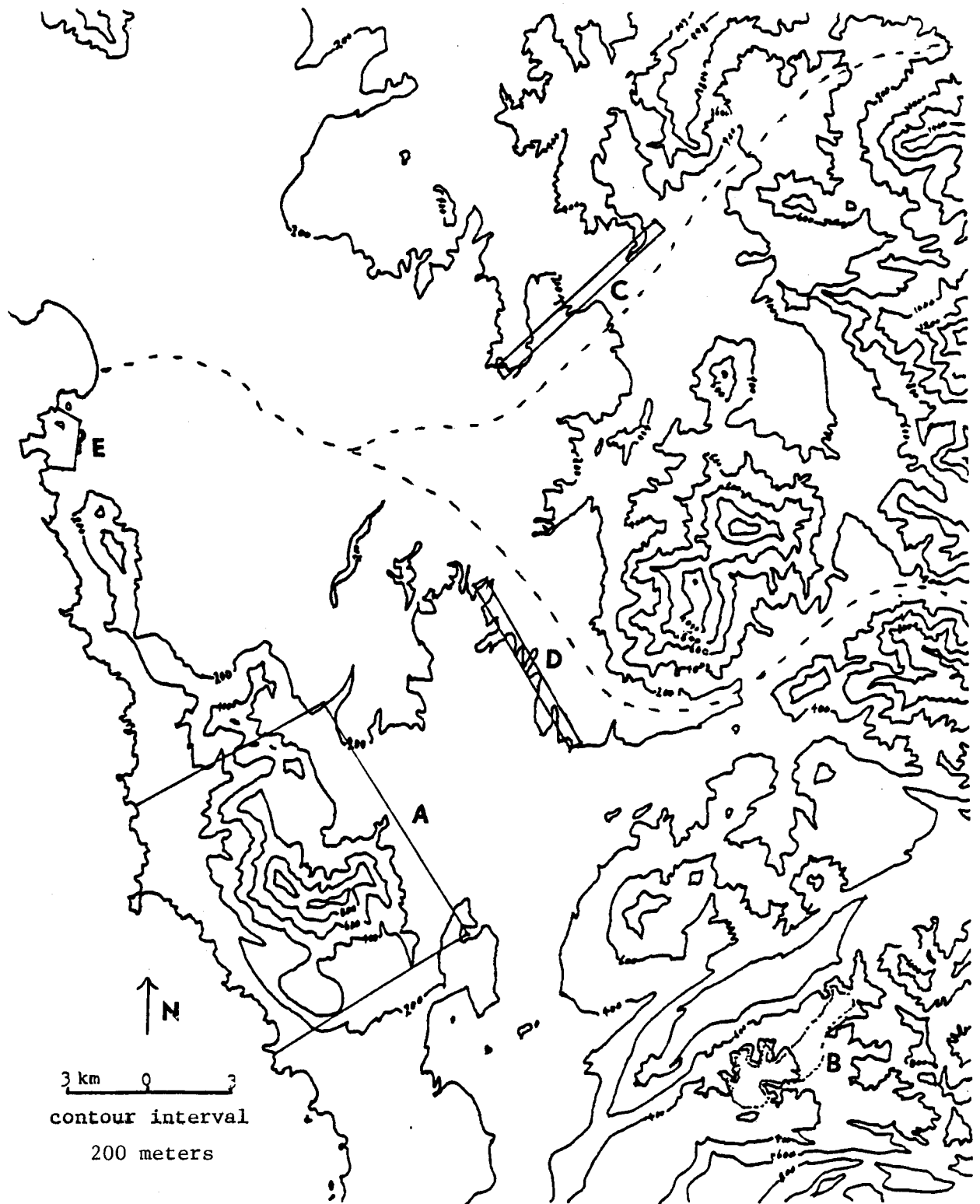
ARCHAEOLOGY

The Preceramic Occupations of the Casma Valley, Peru

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Investigations of the preceramic occupations along the Peruvian coast have been carried out in many areas, but detailed artifact sequences have been identified from three regions only: the Central Coast, specifically the area between the Chillón River and Bay of Ancon (Lanning 1963, 1967a; Moseley 1975), the North Coast (Chauchat 1975, 1978; Moseley 1982; Ossa 1973, 1978), and the Far North Coast (Richardson 1969, 1973, 1978). These sequences are distinct from each other, although some broad similarities do exist, particularly during the later phases. The distinctive nature of these sequences suggests different environmental and social factors were operating in each area. My initial research goal was to define an archaeological sequence for a valley on the North Central Coast, to determine whether cultural developments there were the same as a previously defined one from another area. Due to the proximity of the Callejón de Huaylas, I believed that there might have been a significant degree of interaction between preceramic groups in that region and those of the North Central Coast.

The Casma valley, located at 9°30' south latitude, was selected as the focus of research because it is the largest valley on the North Central Coast and it was the center of a large polity during the Initial Period. Five separate areas were investigated (Map 1). These were selected on the basis of where preceramic sites were located in other areas. Area A is centered on a large loma, a resource zone commonly exploited by preceramic groups farther south (Lanning 1963; Patterson 1971). This loma is of the prado type (Craig and Psuty 1968), and includes a



Map 1. Survey areas in the lower Casma valley.

variety of flowering and woody plants. Deer, vizcacha and other animals were reported as present up to 1972. Area B is a dry quebrada located to the south of the main valley where it was thought that Paijan occupations might have existed, as are known from the North Coast. Areas C and D are located along the margins of the valley floodplain in positions analogous to those where Patterson (1971) found Late Pre-ceramic settlements in the Chillón valley. Area E was selected because it is located in a position where marine, floodplain, and estuarine resources are juxtaposed.

Preceramic sites were found in areas A and E only. A single site was located in area E, while thirty-eight sites with preceramic components were found in area A. An additional twenty-four sites with lithics were recorded in the latter area, but these were assigned to ceramic periods because of the association of abundant potsherds with the stone tools (Malpass n.d.).

A sample of the lithic artifacts was collected from both the pre-ceramic and ceramic period sites, and the relative abundances of potsherds was recorded. The number of large tools, such as grinding implements, was also recorded, but they were left in the field. For more details on the sampling procedure, see Malpass (n.d.). A total of 1910 lithic tools formed the basis of this study.

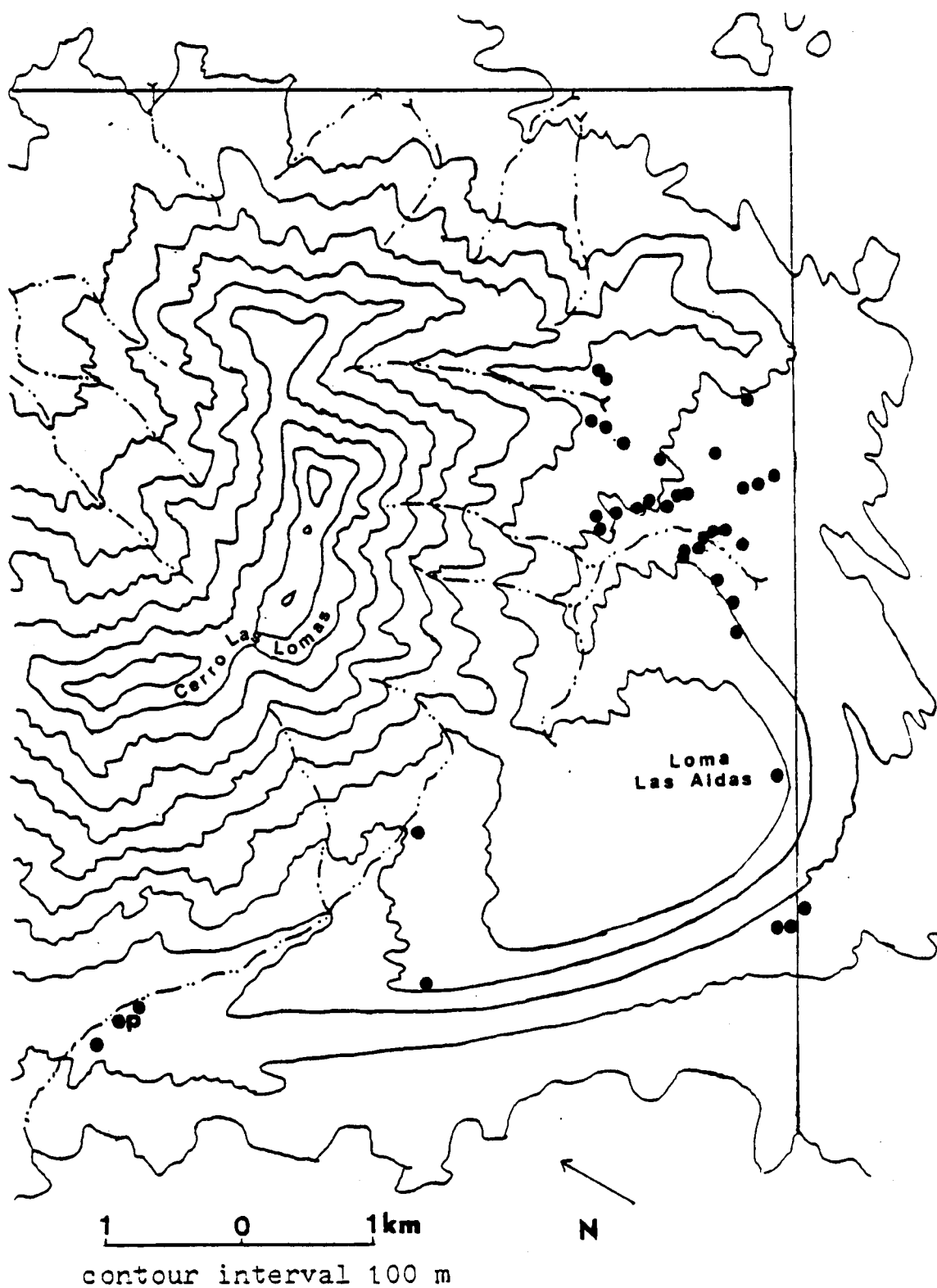
Two lithic industries were identified from the preceramic sites. The first is a member of the Paijan tradition, previously identified from occupations in the Moche and Chicama valleys (Chauchat 1975, 1978; Ossa 1973, 1978). The Paijan industry is represented at only two sites, A68b in area A and at the Campanario site (E3b) in area E. The second industry, named Mongoncillo after the loma near which most of

the sites are located, is represented at thirty-eight sites, all in area A. The distributions of the sites in the Paijan and Mongoncillo industries are presented in Map 2. A more detailed description of these two industries follows.

It is difficult to characterize the nature of the Paijan industry in the Casma valley because of the scarcity of tools. A68b is a multi-component site, hence it is not possible to segregate the tools associated with the Paijan occupation from the later ones, except for the projectile points. The Campanario site appears to be a single component, special activity site, thus it provides the clearest picture of the nature of this industry in the Casma region.

A high percentage of bifacial tools is the most significant aspect of the Campanario assemblage. 76% of the 101 tools are projectile points or bifaces, the latter being broken or unfinished points for the most part. The remainder include utilized flakes, denticulates, cores, and hammerstones. In addition to the tools, 283 pieces of chipping debris, including at least sixty bifacial thinning flakes, were recovered. These artifacts represent a thorough but by no means exhaustive sample of the total present at the site. The abundance of manufacturing debris and the absence of complete, finished points suggest the site was used as a point finishing and rehafting station. No large cores or Chivateros-like bifaces were found at the site, indicating the roughing out of the preforms was done elsewhere.

Granted the Campanario site is a special activity site which cannot be expected to include the whole range of tools utilized by the Paijan people, the other tools present do conform to types identified from the sites in the Moche and Chicama valleys. Denticulates are the most com-



Map 2. Locations of the Paijan (p) and Mongoncillo (•) sites in area A.

mon unifacial tool at the Campanario site, which is also true of the Chicama sites (Chauchat 1978). The much higher percentages of bifacial than unifacial tools is also a trait common to both areas, although this may only be a similarity due to the sites' functions.

The same range of projectile point forms are found in both areas as well. Both the convex- and straight-sided variants identified from the North Coast sites are present in Casma, the former having the elongated, awl-like tips typical of the northern points. In addition, broad-stemmed points are associated with the Paijan points from Casma, as they are in the Moche valley (Ossa 1973). Such points are also found at El Inga (Bell 1965) and Chobshi Cave (Lynch and Pollack 1980) in Ecuador, and may represent a distinct type from the narrow-stemmed Paijan varieties (Mayer-Oakes 1982).

Another similarity between the Paijan sites in Casma and those farther north is the definite preferences shown in the selection of raw materials for different artifact types. At the Campanario site, 74% of the bifacial tools were of sandstone and 21% were of crystallized quartz. None of the other tools were made of sandstone. At A68b, the majority of the points were of crystallized quartz, with a few of fine-grained rock as well. In Chicama, the projectile points were usually made of rhyolite, while only a single scraper of the many found was of that rock (Chauchat 1975). Rock crystal was also used in both areas.

The above similarities suggest the Casma occupations were probably contemporaneous with those on the North Coast. Paijan dates from the latter region range from 10,700 BP (Ossa 1978) to 7740 BP (Chauchat 1978). The Casma sites therefore date somewhere within that range, and I suggest a date of 9000-8000 BP for them, assuming a slow southward

expansion of this industry from the North Coast, and the appearance of the subsequent Mongoncillo industry around 8000 BP.

The kind of prey hunted by the Paijan occupants of the Casma region is uncertain. Given the 9000 BP date, it is probable that the game was modern, including deer, guanaco, small mammals, rodents and reptiles. Land snails were undoubtedly collected as well. Both sites are located in elevated positions overlooking the present coastline, but at 9000 BP, the shore would have been five to seven kilometers farther west (from bathymetric data in Richardson (1981)). At that time, these sites would have been overlooking flat stretches of coastal plain, and I have hypothesized possible water sources below each of these sites to which game came to drink (Malpass n.d.).

A68b and the Campanario site represent one part of a yearly subsistence round. Where the groups responsible for these tools resided during other times of the year is uncertain. It is probable that part of the year was spent in the floodplain of the Casma or Sechin rivers, and other times may have been spent at the coast. The recovery of fish remains at inland Paijan sites in the Chicama valley lends credence to this latter idea (Chauchat 1978). Excavations by the author in two rockshelters in the Cordillera Negra at the headwaters of the Sechin River recovered Paijan points at the lowest levels, of forms similar to those from the Campanario site, although of different materials. While these points are as yet undated, it does suggest the possibility that Paijan hunters at least occasionally made trips to high altitude resource zones.

Subsequent to the Paijan occupations, groups using a markedly different toolkit appeared in the Casma region. The Mongoncillo industry

is basically unifacial and is characterized by relatively high percentages (greater than 40%) of secondary tools, particularly small implements, such as gravers, notches, fine denticulates, beaked tools, and burins. The majority of these artifacts were probably used in bone- and woodworking, and plant processing. What primary tools were being manufactured with these secondary tools is unknown.

Large tools typically comprised less than 10% of the assemblages, and included utilized cores, choppers, and crude denticulates. These tools probably functioned as large chopping and smashing implements. The bipolar core technique of flake manufacture was used in addition to the direct percussion method. Mortars were relatively common at these sites, suggesting plant processing was a primary activity carried out, although recent evidence from the Paloma site (Jackson and Stocker 1982) indicates these may well have functioned in the grinding of anchoveta.

The singular lack of tools associated with the hunting and processing of terrestrial game is a distinctive characteristic of the Mongoncillo assemblages. Projectile points, bifaces, unifaces and knives do not even comprise 4% of the total tools at these sites. It is of course possible that such activities were carried out using implements of perishable materials manufactured with the secondary tools.

The locations of these sites supports the view that exploitation of lomas resources was the primary focus of activities. The majority of the sites are located within one kilometer of the loma, undoubtedly because it was the only source of wood, fiber, and game in the vicinity. Most sites are clustered around a steep sided ravine in front of the loma which may have been a source of water (Malpass n.d.). These are the

only sites dating to this period in the Casma region, which strongly suggests that lomas resources were an important part of the subsistence round of these people.

As with the Paijan industry, the Mongoncillo people used specific rock types for certain implements. Over 90% of the small flake tools were made of fine-grained materials, whereas the majority of the large tools were coarse-grained. While no quarries or outcrops of fine-grained rock were identified in the survey areas, it is presumed they were present, since cores and nodules were commonly found at the sites, and cobbles were seen along the shoreline. Coarse-grained materials were found both in outcrops and along the beach.

The Mongoncillo industry as a whole bears close typological resemblances to the Siches and Honda complexes of Talara (Richardson 1969) and to the Vegas industry of coastal Ecuador (Lanning 1967b). Similarities are also seen to the artifacts from three sites near the Loma de Lachay, reported by Fung (1968), and to the Arenal and Canario complexes of the Central Coast (Lanning 1963, 1967a). On the basis of these similarities, I tentatively date the Mongoncillo sites between 8000-5000 BP. Comparisons of the projectile points from these sites to dated points from other areas of Peru suggest a similar range of dates.

With regard to contemporaneous coastal complexes, the Mongoncillo industry bears closer resemblances to the ones farther south than to those in the north. Specifically, the presence of stone projectile points and edge-ground cobbles at the Casma sites links them to the southern industries. Both these tool classes are found at the sites near Loma de Lachay, and stone projectile points are found at Ancon-Chillon. Edge-ground cobbles may be present at the latter sites as

well, but the verbal descriptions are not sufficiently detailed to be certain. Neither of these tool classes are present at the sites in Talara or Ecuador. This evidence suggests the cultural developments in the Casma region were more closely related to those of the Central Coast than to those from farther north.

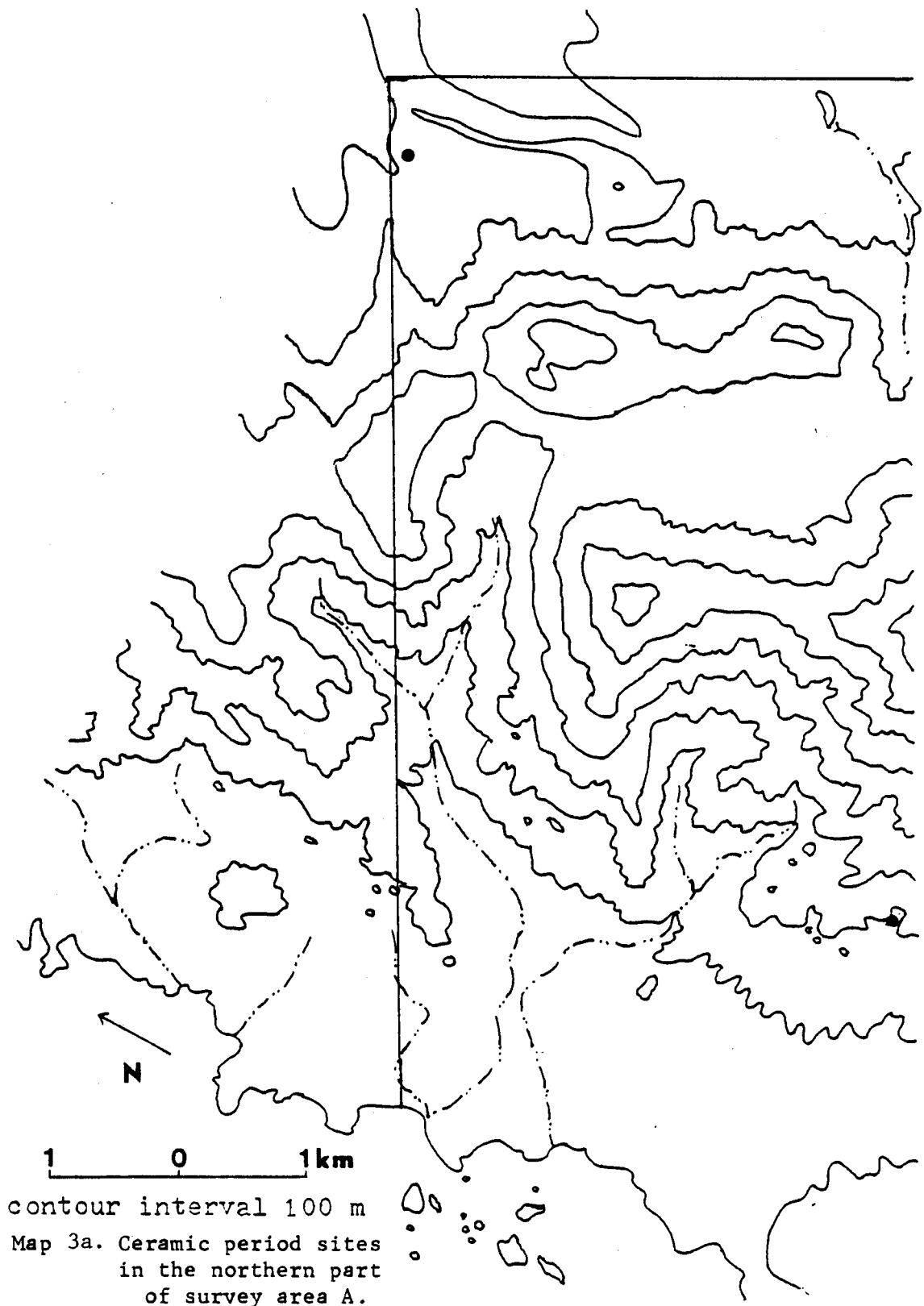
Contacts are also evident between the Casma groups and others living in the highlands during this time period. Of the sixteen unstemmed projectile points found at Mongoncillo sites, fourteen were of the willow leaf form, either the "classic" or Ayampitin variety (Lynch 1967) or the longer variety (Malpass n.d.). These points are most common in highland contexts throughout the Andes, although they have been reported at coastal sites as well (Lanning 1967a; Patterson 1971). Of interest here is the fact that all but two of these points are of rock types rarely if ever used for other artifacts, and all are either complete or broken in use. This suggests the points are of nonlocal origin. Santiago Uceda, the local archaeologist in Casma, pointed out that both the forms and materials are more typical of highland projectile points (personal communication). All sixteen of these points conform to types recognized from the Callejon de Huaylas (Lynch 1970, 1980) and the Puna of Junin (Rick 1980). Thus, it seems likely that these points are of highland origin, indicating contacts between groups on the coast and in the adjacent sierra.

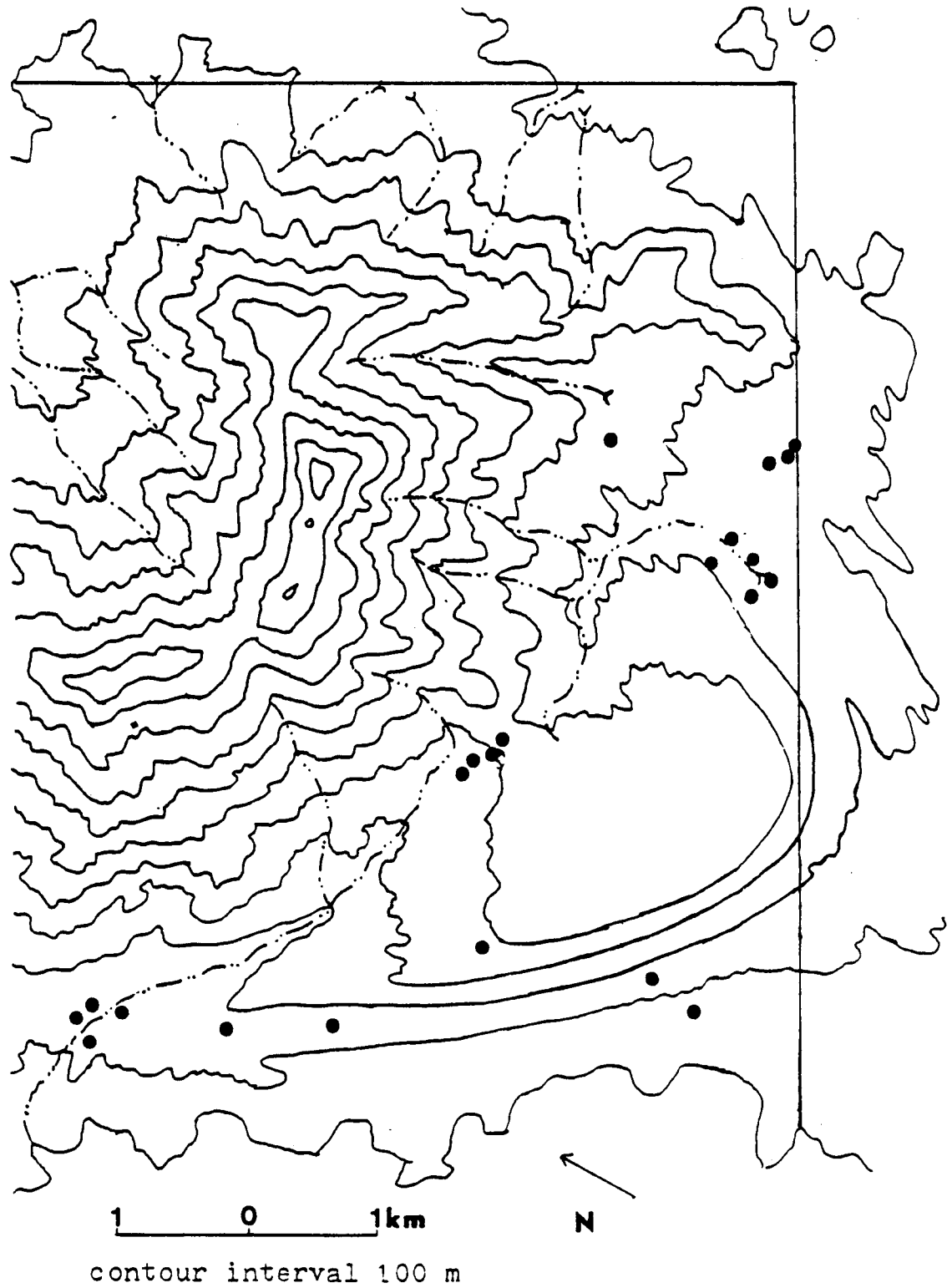
The presence of projectile points of highland origin in Casma, and perhaps at the sites in the Ancon-Chillon region and at Loma de Lachay, but their absence at the sites in Talara and coastal Ecuador can be explained by the proximity of the former areas to highland zones. The areas where the Siches and Vegas complexes are found are separated from

highland regions by large expanses of coastal plain, which is not true of the sites from Casma south. Thus, communication between coast and sierra would have been greatly facilitated in the latter areas.

The problem of reconstructing the complete subsistence round of the Mongoncillo people is the same as for the preceding Paijan groups: only a fraction of the whole remains. Certainly part of the year was spent near the loma, and it is likely that part was spent in the valley floodplain. In addition, the presence of marine shellfish in the middens of some of these sites perhaps indicates that part was also spent at the coast. This would be in keeping with the evidence from other areas of the coast at this time (Chauchat 1978; Jackson and Stocker 1982; Richardson 1973). The suggestion that contacts were maintained with highland groups, as evidenced by the projectile points, suggests the possibility that part of the year might have been spent in the sierra as well. However, I doubt that the entire social unit occupying the valley at this time travelled to the highlands en mass; rather, it is more probable that individuals or families occasionally journeyed there to visit relatives or hunt in adjacent areas. Such activities are documented for ethnographic hunters and gatherers (Bicchieri 1972; Lee and DeVore 1968; Yellen and Harpending 1972).

In addition to the preceramic sites in this study, twenty-four others included lithics, but were identified as dating to ceramic periods (Map 3). Because of the lack of published reports pertaining to such lithic assemblages, a brief description of those collected is given here. Although the sites were not identified as to specific periods because the ceramics were not collected, the overall similarities in the assemblages suggest that there were no major differences from





Map 3b. Ceramic period sites in the southern part of survey area A.

one period to the next.

An important characteristic of the ceramic period sites is their generally small numbers of lithics. The average number of tools per site was only eleven, in contrast to the preceramic sites, which averaged twenty-seven (Malpass n.d.). The lithics present are of a very general nature as well. Large tools, especially denticulates and cores, are common, as are utilized flakes. Noticeably absent are the small flake tools so common at the earlier sites. Two milling stones were found as well. These later groups preferred coarse-grained rocks, particularly diorite, which were most commonly collected as cobbles along the shore.

The results of this analysis support the often mentioned but seldom tested view that ceramic period sites on the coast are poor in lithics and the tools present are of a very general nature. The tools present give few clues as to their functions. The scarcity of small flake tools suggests the relative unimportance of fine wood- and boneworking, while the abundance of large, heavy tools indicates a greater emphasis on smashing and crushing activities.

Three lines of evidence, midden contents, site locations, and the tools, suggest that the exploitation of marine resources was the major activity carried out at the sites in area A during ceramic periods. My subjective evaluation of the middens present indicates that shellfish are by far the most common remains, although land snails are also abundant. This is true even at the sites located near the loma. In addition, the stone tools found at these sites are suitable for the processing of fish and shellfish. The large tools could have been used for opening shellfish and decapitating fish. Some of the utilized flakes

may have functioned as fish scalers: at the site of Loma Lasca in the Santa valley, Donnan and Moseley (1969) interpreted large, primary flakes struck from waterworn cobbles as having been used in this fashion, and it is probable that the numerous examples of such flakes at the Casma sites were used similarly.

The site locations also support the view of intensive exploitation of marine resources. In addition to the sites on Map 3, which only includes those sites where lithic collections were made, there were several shell middens with ceramics located on the cliffs directly above the shoreline. Four other sites, those with major architectural features and ceramics, were also found within one kilometer of the beach. These sites indicate that many of the later occupations of this area were located to specifically take advantage of the locally available maritime resources.

Utilization of the plant resources of the loma also continued. The milling stones found at these sites suggest at least some wild plant resources were being harvested. It is likely that the loma was used principally as a pasture for llama herds. Such uses are known ethnohistorically (Lynch 1971). Herding activities would require few tools which is consistent with the paucity of lithics at these sites. In addition, it is probable that land snails continued to be collected in the loma.

To summarize, the evidence from the ceramic period sites suggests that exploitation of marine resources was the primary reason for the later occupations of this region. The midden from these sites supports this view, and the simple toolkit composed primarily of large tools would have been adequate for such purposes as well. Utilization of the

loma was a second reason for locating sites in the area, both for snail procurement and as pasturage for llama herds.

Conclusions

The distributions of the archaeological sites in the Casma area and the nature of their lithic assemblages reflect changing patterns of resource utilization through time. The reasons for these changes are as yet poorly understood, but are probably related to the environmental changes which occurred at the end of the Pleistocene, including the shift to modern climatic conditions, the rise of sea level, and possibly demographic pressure on resources. A more detailed account of these factors can be found in Malpass (n.d.).

The earliest occupants of the Casma region were Paijan groups, hunters of terrestrial game, who used large stemmed points to kill their prey. It is probable, given the Holocene date of these occupations, that the game exploited was modern. Wild plants would also have been gathered, and it is possible that marine resources were utilized. Evidence from caves above the Sechin valley suggest occasional use of high altitude zones as well.

With the stabilization of the Holocene climate, groups occupying the Casma area began exploiting the resources of the large loma located to the south of the main valley. A variety of specialized flake tools were developed to exploit the floral and faunal resources there. The stone tools present indicate an emphasis on plant resources, although game was also hunted with stone-tipped projectile points. It is likely a wide variety of tools made of perishable materials were also used. Coastal resources were probably gathered during other parts of the year.

Contacts were made with groups living in the highlands, perhaps as part of mating networks or to gain access to resource zones different from those of the coast. Members of the Casma social group would travel to these areas, and individuals and families from those groups would occasionally visit the coast. This way of life lasted for 3000 years or more, reflecting a successful adaptation to the environmental conditions present.

The series of events that occurred after 5000 BP which culminated in the appearance of complex societies in the Casma valley during the Initial Period and later is not well understood. It is uncertain whether any sites in area A date to the period between 5000-3800 BP. Four sites, located midway between the loma and the shore, may reflect occupations during this period. All are located on the same narrow ridge, have a high percentage of white quartz chipping debris but few tools, and all but one have midden with land snails and marine refuse. The locations and middens of these sites suggest a compromise settlement location half way between the ocean and the loma. Such a pattern has been identified from late preceramic sites in the Ancon-Chillon area (Moseley 1975; Patterson 1971).

Large late preceramic settlements are known from Huaynuma and Las Aldas, indicating intensive exploitation of marine resources was occurring during these times. It is of course possible that similar intensive exploitation was present earlier, but all evidence for it has been submerged by the eustatic rise in sea level.

During the Initial Period, there apparently was a major demographic shift to occupation of the valley proper. This is reflected in the appearance of settlements at San Diego, Pampa Rosario, Pampa de las

Llamas, and Sechin Alto, to name a few (Thompson 1964). While the Initial Period temple complex at Las Aldas represents a major construction involving a significant amount of labor and organization, it is unlikely that there was a resident population there (Willey 1971).

The loma continued to be used in the ceramic periods, both as a source of snails and as pasture. The major emphasis of the occupations, however, seemed to be on the marine resources of the region. Such uses continued throughout prehistory up to modern times, and one can still see ranchers driving their cattle out to the loma during the dry summer months, and fishermen walking through the desert to the area to take advantage of the rich marine life that exists in that region.

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The Historical Development of a Coastal Andean Social
Formation in Central Peru, 6000 to 500 B.C.

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Archaeologists have written a good deal about the development and transformation of Andean societies on the central coast of Peru--especially about the changes they perceive as having occurred during the second and third millennia B.C. (Moseley 1975; Osborn 1977; Raymond 1981; Wilson 1981). While there is some disagreement over the relative importance of particular economic practices at different points in time--and hence with the periodization of Andean prehistory--most archaeologists would agree that three major stages of socioeconomic development can be discerned from the archaeological record.

Societies of the early stage, which began before about 6000 B.C. and lasted to 3250 B.C., had economic bases dominated by labor processes and activities that involved fishing, shellfish harvesting, hunting, and foraging; the residential communities were small, and the settlements were occupied either seasonally or on a year-round basis, depending on whether or not the subsistence resources were located in close proximity to each other. The societies of the middle stage, which spanned the period from about 3250 to 2350 B.C., had economic bases that were dominated by labor processes involving fishing; the largest settlements were occupied throughout the year and were located near marine resource areas; agriculture was a minor subsistence activity, since cotton was clearly the most important

crop being grown. Societies of the late stage, which began about 2350 B.C. and ended about 500 B.C., had economic bases dominated by agricultural food production, the establishment of residential communities in areas with environmental conditions well-suited for growing particular crops, and the appropriation of large amounts of labor for the construction of U-shaped platform mounds and water management systems.

Most archaeologists who have dealt with the questions of social change and development on the Peruvian coast have adopted, either consciously or unconsciously, a theoretical position grounded in positivism. Consequently, they have usually relied on functionalist explanations of change, which are typically based on the occurrence of some generalized precedent condition or event impinging on the society and producing the kind of change that is observed in the archaeological record (Bock 1963; Smith 1973). These precedent conditions or events-- ecological change, population pressure, diffusion, or the emergence of great men, to name only a few of more popular ones at the present time--are external to the society, to the relations that existed between the people who composed it, and to the activities that resulted from these relations. In other words, their explanations are unsatisfactory, not because they ultimately capitulate to one form or another of determinism but because they are ahistorical. We should seriously consider rejecting the positivist problematic and the intellectual baggage that accompanies it.

To do so, of course, would leave us in something of a theoretical vacuum unless we can develop a theoretical problematic

that will allow us to deal with people and their history as aspects of the same human activities rather than different orders of phenomena. I have suggested elsewhere that the historical materialist problematic is the only one that has any history of dealing with this problem in a meaningful way (Patterson 1982). Central to the problematic is the idea that the determining factor in human history is, in the final instance, the production and reproduction of the conditions essential for life (Engels 1972:71-72). On the one hand, this involves the production of food, clothing, dwellings, and the tools required to acquire and transform raw materials into useful items. On the other hand, it also involves the propagation of the species which, in economic terms, is merely the reproduction of labor power in all of its forms. No consideration of the production and reproduction of the conditions essential for life can avoid examining the connections that exist between the producers and their means of production and the social relations that are necessary for setting the productive processes in motion.

In the earliest coastal society that we can now analyze in any detail from the historical materialist perspective--what I propose to call the Paloma social formation which began before 6000 B.C. and ended about 3250 B.C.--there was a division of labor based on sex and, to a lesser extent, age, judging by the tools associated with different burials at Paloma. The presence of burials beneath house floors, the continued use of these structures after the interments, and the occurrence of storage pits in close proximity to the

buildings indicate that the household group was a primary production-consumption unit in Paloma society (Quilter 1980). The presence of infants and children as well as adult men and women among the burials suggests that filiation--the relations of dependence which an individual has initially to the members of preceding generations and later to those of succeeding ones--was the organizing principle for the production, circulation, and consumption of many subsistence items in Paloma society (Meillassoux 1981:19-22).

Matrimonial relations--mating and the rearing of children--occurred in the context of already existing household units. The reproductive capacity of these relations ultimately depended on and was limited by the number of pubescent women in the group. Given the small size of the Paloma households and residential communities--settlements estimated to have had 20 to 75 inhabitants (Quilter 1980:51-53)--it would have been impossible for either group to have been a self-sufficient breeding population (Quilter 1980:51-53); consequently, settlements must have been linked to other residential communities, and there must have been matrimonial mobility in Paloma society--either the women moved to different residential communities or the men did (Meillassoux 1981:25, 42-49). This inference is based on two lines of reasoning: one is that the re-building or re-occupation of domestic structures suggests that households did not move freely from one residential community to another which implies that there were relatively stable connections between households in the same settlement, and the other is evidence from later social formations in the area which indicates the

occurrence of female mobility between settlements. What this means is that filiation was patrilineal in Paloma society, involving a man, his siblings, his own children and those of his brothers, and that residence was patrilocal. In other words, a settlement consisted of nuclei of related men who cooperated repeatedly with each other in collective activities, even those organized on an impromptu or ad hoc basis, and adult women who came from other residential communities.

The residents of two contemporary settlements in the Chilca Valley-- Paloma and Chilca Monument I--located in easy walking distance of each other, harvested and consumed different arrays of shellfish (Donnan and Quilter, personal communications). This suggests that the major means of production, which were appropriated by the constituent households of a settlement, were owned or controlled by the residential communities. In other words, they were durable property. One sure way of guaranteeing the transmission of unequivocal or unambiguous property rights is to base inheritance on the principle of filiation (Lowie 1920:149; Fortes 1953:25-28, 31); however, for filiation to be a completely unambiguous basis for inheritance, the principle must be extended beyond two generations--i.e., it must incorporate three or more generations. This strongly implies the existence of unilineal descent groups in Paloma society with the ties established through women providing the basis for fission, and, thus, for the generation of a segmentary organization.

During the later stages of the Paloma social formation, its members began to adopt agricultural production techniques and plants

that had been domesticated elsewhere. Land was gradually transformed from an object of labor that was provisioned by nature and provided instantaneous returns to an instrument of labor--a major means of production--that yielded returns only after considerable investments of labor over extended periods of time. The productivity of the initial agricultural endeavors in Paloma society was low, judging by the paucity of domesticated plant remains in archaeological deposits from the period. Agriculture was merely one of a number of subsistence practices; it was adopted because the productivity of other subsistence practices--especially fishing--was sufficient and reliable enough to permit individuals to engage in activities where consumption was delayed for significant periods of time.

New forms of production developed after 3250 B.C. in the context of the social organization defined by the existing relations of production and relations of reproduction. At the most basic level, the new practices consisted of four interrelated features. The dominant one was the increased productivity of the labor processes associated with the extraction of marine resources. The second was the development of new labor processes associated with the production and appropriation of agricultural produce--especially cotton. The third was the emergence of collective labor processes associated with the construction of platform mounds and large architectural complexes. The fourth involved the circulation of subsistence goods between the economically specialized farming and fishing settlements of the Conchas social formation, which lasted until about 2350 B.C. (Moseley 1975; Patterson 1971).

At the level of the productive forces, the new forms of production were reflected by the settlements and the relations that existed between their processes involved in the appropriation of nature. This connection was reflected not only by the proximity of settlements to the resource areas being exploited by their residents but also by their size, which reflected in a rough way the number of individuals involved in those labor processes.

The linkages that existed between the economically specialized farming and fishing settlements of Conchas society occurred at the level of the community rather than at that of the constituent households. Textiles made from cotton--the most important crop in Conchas agriculture and the one most extensively planted--were associated with a majority of the burials in the fishing villages; these fabrics were most likely produced by the members of the domestic groups using them, judging by the presence of weaving implements in some of the burials. What this means is that a small number of farmers produced the cotton and other domesticates used or consumed by the remainder of the community. In return, they received marine products and other items from the fishing villages during the time they were engaged in agricultural activities. In other words, while the circuits through which most agricultural items moved were still limited to the level of the domestic group as they had been earlier, cotton and marine products were exceptions that circulated at the level of the settlements composing the larger community.

While the households continued to be important production-consumption units in Conchas society, there were labor

processes that were beyond the capacities of the members of a single domestic group or even a small number of cooperating ones. These involved the construction of platform mounds at Aspero and Rlo Seco and the large architectural complex at El Paraiso. The labor required for building each of the platform mounds was in excess of 60,000 man-days, while that required for El Paraiso was more than 1.9 million man-days (Patterson 1982, Tables 1-2). This focuses attention on the relations of production in Conchas society. How was the surplus social product that resulted from the new labor processes and the ways of organizing work extracted? What was the framework of power in which it occurred?

Appropriation occurred at the level of both the household and the community. When raw materials were procured and transformed at the level of the domestic group, there was always the potential for unequal accumulation. Households with large numbers of individuals in the productive age and sex categories, given the division of labor, had the ability to produce above and beyond what was required to ensure the continuity and reproduction of the group. Households with fewer individuals in the productive age and sex categories were able to produce smaller quantities of these items. The inequalities that were based on differences in the size, composition, and developmental cycles of the households were temporary. The presence and absence of grave goods, as well as differences in the quantity and variety of the items associated with interments, indicate that there were inequalities in Conchas society. Some individuals were buried without grave goods, while others were interred with fabrics

and other objects that represented labor investments of hundreds of hours. Yet, there is nothing inherent in the grave goods or in their distribution among the various burials which suggests there was a social division of labor in Conchas society--i.e., that some individuals had exclusive access or greater access than others to particular goods. This suggests that the inequalities reflected by differences in the quantity and variety of grave goods represented differences in the productivity of the various domestic groups rather than class distinctions in which one class had the ability to appropriate for its own use certain materials or the labor power of the remainder of the community.

When real appropriation occurred at the level of the domestic production units, some of the surplus social product was used to ensure the reproduction of those groups. It was used to acquire women from other settlements, judging by the three to one ratio of adult males and adolescents to adult women among the primary burials at various settlements. In a sense, the surplus product was transferred from the members of one generation in the domestic production unit to those of the next. At the same time, however, the domestic groups had to maintain access to the collective resources of the community--i.e., those that were owned or controlled by the constituent households. To do so meant that the other part of the surplus produced by the households was appropriated at the community level. This entailed the appropriation of goods such as fish or cotton or of labor power for the construction and maintenance of platform mounds and architectural complexes and for ceremonies. In

other words, the unequal accumulation of the autonomous domestic production-consumption units of Conchas society was continually transformed into the accumulation of surplus social product by the community as a whole. Those households with access to more labor power contributed more to the reproduction of the community than those with access to less, yet their contributions were structurally equivalent. Any tendency for accumulation by the individual domestic groups was continually transformed into the growth of the community as a whole.

The intensification of agricultural production, based largely on cotton, laid the foundations for the development of new forms of production and appropriation after about 2350 B.C.--in what I propose to call the La Florida social formation (Patterson 1982). These new forms reflected the decisive role then played by agricultural food production in determining the social organization of the community. They consisted of several interrelated features. The dominant one was the increased productivity of labor processes associated with the production of domesticated plant foods. The second involved the development of new labor processes associated with the production and appropriation of cultivated plant foods. The third involved the intensification of the collective labor processes involved in the construction of platform mounds. The fourth involved the increased appropriation of collective labor power at the community level to ensure the continued productivity of agricultural activities.

At the level of the productive forces, the new forms of production involved the establishment of economically specialized

hamlets in localities with environmental conditions that were well-suited for the production of particular food crops--like the coca fields in mid-valley localities--and the construction of water management systems. Nearly all of the known La Florida settlements are located inland near arable land and away from marine resource areas. Also, virtually all of the large-scale construction activities of La Florida society occurred at inland locations. Together with the greater quantity and variety of domesticated food plant remains in refuse deposits at the coastal fishing village of Ancón, these indicate the greater importance of agriculture in the subsistence economy and suggest that a significantly greater portion of the total population was engaged in agricultural food production.

This shift occurred in the context of the existing relations of production. The established relations of production were extended to include the residents of the economically specialized agricultural settlements located away from the coast; the labor processes involved with the production and circulation of foodstuffs were intensified as were those involved with the construction of pyramids and irrigation canals.

The labor required for the construction of platform mounds on the central coast during the second millenium B.C. exceeded 12 million man-days (Patterson 1982; Scheele 1969; Williams Leon 1981). This suggests that labor was appropriated at a rate that was two to three and a half times greater than it had been in Conchas society. These construction activities were clearly beyond the capacity of individual production units and even settlements. They involved the

appropriation of labor at the community level and in the context of the linkages that already existed between the residents of the economically specialized settlements. These connections involved a division of labor based on farming and fishing in the broadest sense of the terms; the circulation of foodstuffs, raw materials, and perhaps some finished goods; the division of labor based on age and sex within the household production-consumption units; and the matrimonial mobility of women. The construction activities benefited the entire community not only by intensifying agricultural production through the development and extension of irrigation systems but also by providing the setting for those predictions, rituals, and offerings that occurred at the pyramids and that were essential for providing and maintaining the conditions required for successful farming (Burger and Burger 1982).

Real appropriation also still occurred at the level of the constituent domestic units, judging from the various kinds of toolkits found among the grave goods in different interments, the association of storage pits and refuse deposits with residential structures, and inequalities reflected by differences in the quantity and variety of grave goods associated with various burials. The intensification of the labor processes involved with the production of foodstuffs and the acquisition of raw materials led to a concentration of labor power by the various domestic groups. This meant that there was an increase in the number of individuals associated with these groups and, of course, the number that participated in the labor processes involving the members of the

domestic production-consumption units. Judging by significant increases in the volumes of cooking vessels and the absence of significant changes in the capacities of serving vessels, the size of the residential groups doubled or tripled during the early years of the La Florida social formation. It involved a change from a group consuming nine servings at the beginning of the second millenium B.C. to one consuming twenty servings a century or so later and, finally, to one consuming thirty servings a century after that. The increased size of the domestic units dampened the effects of demographic factors and random fluctuations on the age and sex composition of the group. This, in turn, reduced the impact of demographic and statistical factors on the ability of the members of a domestic group to develop their own production in relation to their ability to mobilize the labor power of their members. The increased size of the domestic groups also enhanced any tendencies they had toward unequal accumulation. The fact that unequal accumulation continued to occur only within the constraints that already existed focuses attention once more on the contradiction that existed between the relations of production, on the one hand, and the relations of reproduction, on the other, for it has a number of implications concerning the organization of La Florida society.

First, the contradiction was reflected in the incompatibility between any tendencies for unequal accumulation by households and the necessity they had of maintaining equal access to the collective resources of the community. Any tendency for the domestic groups to accumulate brought about increased production to retain access to the

resources of the community. In other words, unequal accumulation was continually transformed into the economic growth of the community as a whole. The high rate of growth or expansion would remain so only as long as the contradiction between the relations of production and the relations of reproduction persisted.

Second, the segmentary organization of the community, which reflects the contradiction between the relations of production and the relations of reproduction, incorporates the territorial organization of the constituent domestic groups into the production process, since each of them must have access to all or part of the territory held by the community as a whole (Bonte 1979). This form of organization established the structural equivalence of the various domestic production units, providing them with equal access to the collective resources of the community in spite of any tendencies toward unequal production. It shifted or exported the problems resulting from the unequal production and accumulation of the domestic production units to the periphery of the social formation, where they were resolved by expansion into previously unoccupied territories, raiding, or the creation of matrimonial alliances with groups outside the larger community.

Third, given the lack of correspondence between the relations of production and the relations of reproduction in La Florida society and its predecessors, it is unlikely that any organizing authority involved in the administration of production and redistribution was vested in the same individuals or groups that were concerned with creating and maintaining the conditions necessary for the acquisition

of pubescent women. The purely political activities involved in the latter were distinct from the managerial, administrative, and ritual activities involved in the allocation of tasks, the organization and supervision of production and redistribution, and the performance of ceremonies which also involved offerings at the pyramids.

Fourth, the contradiction between the relations of production and the relations of reproduction was the dynamic mechanism for social transformation in the Andean social formations of the central coast of Peru. The segmentary lineage organization of La Florida society ultimately gave way to one with social classes. This change occurred when surplus labor ceased to be appropriated for the reproduction of the community as a whole and was directed, instead, toward the creation and maintenance of social classes defined in terms of unequal distribution and unequal access to the collective resources of the community. When this happened about the middle of the first millenium B.C., the peoples of the central coast of Peru stopped building pyramids.

Footnotes

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Stone Tools in Ceramic Contexts: Exploring the Unstructured

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Classification procedures are usually undertaken in archaeology either to address chronological questions or to sort cultural influences by mapping spatial relations between prehistoric populations. In both cases, "types" are established as necessary units of meaning by the stipulation of redundancies (Dunnell 1971:44). However, the danger exists that it can become simple archaeological reflex to sort items unquestioningly into piles of more similar and less similar, and, in the process, to ignore those classes of items which will not sort themselves neatly.

In this discussion, I wish to address the archaeological utility and contribution of non-structured categories of items, beginning with the characterization of an assemblage of stone tools which fits the description of "unstructured," an assemblage which does not sort neatly for all that it spans more than one thousand years of Peruvian prehistory. I want to argue thereafter that cultural information is available to us through what might be called "the negative evidence" as well as from highly distinctive cultural features. Most specifically, I would like to use this discussion to suggest that stone tools, unspectacular as they often are, represent an important source of cultural information which we cannot afford to neglect.

Under the auspices of the Huaricoto Project, directed by Drs. Richard Burger, Abalardo Sandoval and Lucy Salazar Burger, I had the opportunity to analyze a sample of lithic materials recovered from the first two field seasons at the highland temple site of Huaricoto in the Callejón de Huaylas,

Peru. My sample was taken from three sectors of the site, identified and dated by the project directors: from a deep habitation/refuse area dating to the late Early Intermediate period and into the Middle Horizon (yielding a total of 5770 lithic artifacts); from a stratified pit and series of floors within the Early Horizon temple itself (269 artifacts); and from a series of terraces dating through the Initial period and the Early Horizon building phases of the Huaricoto temple (3048 artifacts). A small sample of preceramic materials was recovered from the deepest levels in these sectors and is included in this analysis, although this sample of only 38 tools is unreliably small.

The lithic artifacts from Huaricoto have been distinguished in three basic categories: debitage (the unused by-products of tool manufacture), bifaces (including projectile points), and flake tools (which exhibit some evidence of use, whether or not they have been retouched in any way). This study will focus primarily on the flake tool component of the assemblage.

Until the last period of site occupation, the ratio of flake tools to bifaces is fairly constant (between three and eight times as many flake tools as bifaces), but in the late Early Intermediate period, this ratio jumps up to 25 times as many flake tools as bifaces, marking a significant drop in the biface representation. (Of course, these distributions could simply reflect shifting tool-use and tool-discard patterns within discrete contexts of the site.) Debitage frequencies remain low throughout the site sequence except for one dense concentration of shale chipping debris in a very well demarcated area of the Initial period terrace sector, where a workshop is clearly indicated. Interestingly, only the final shaping and thinning phases of biface manufacture are represented in this workshop, corresponding nicely to the high proportions of (shale) bifaces which characterize the Initial period lithic assemblage.

The raw materials utilized in the Huaricoto assemblages are, throughout the sequence, dominated by extremely local materials, and this trend becomes even more pronounced in the last period of site occupation when roughly 90% of the flake tools are seen to be composed of the sandstones, granites, quartzites and metamorphosed sedimentary rock available as river cobbles from the Rio Santa or the Rio Marcara, both flowing within 500 m. of the site (Table 1). Smaller amounts of rhyolites, volcanic tuffs, shales, slates and caliz are indicative of materials which, though also local, are probably not being taken from the riverbed sources; artifacts made of these materials seldom exhibit any cortex remaining on their exterior surfaces, suggesting that they were either mined from outcrops in the plutonic Cordillera Negra or from stratified beds on either side of the Rio Santa. High quality, non-local or rare lithic materials such as obsidian, clear quartz or fine-grained cherts are virtually absent in the

Table 1. Raw Materials of Huaricoto Flake Tools.

	METAMORPHOSED SHALE	QUARTZITE	SANDSTONE	GRANITE	RHYOLITE/TUFF	SLATE	CALIZ	SHALE	CHERT	QUARTZ	OBSIDIAN
EARLY INTERMEDIATE PERIOD (n=636)	392 61.6%	85 13.4%	58 9.1%	32 5.0%	7 1.1%	7 1.1%	10 1.6%	37 5.8%	6 1.0%	1 .15%	1 .15%
EARLY HORIZON (n=57)	21 36.8%	7 12.3%	3 5.3%	3 5.3%	1 1.7%	5 8.8%	5 8.8%	8 14.0%	2 3.6%	1 1.7%	1 1.7%
INITIAL PERIOD (n=221)	68 30.7%	45 20.4%	20 9.1%	4 1.8%	6 2.7%	6 2.7%	19 8.6%	47 21.3%	6 2.7%	-	-
PRECERAMIC PERIOD (n=38)	11 39.3%	15 17.8%	4 14.3%	-	-	5 17.8%	1 3.6%	1 3.6%	-	1 3.6%	-

flake tools of all cultural periods although they occur in small percentages in the biface samples.

A third critical characteristic of the Huaricoto ceramic-period lithics is that the amount of flake modification, or retouch, is extremely low, averaging throughout the sequence only between two and three retouch scars per flake tool. Moreover, between 32% and 49% of the utilized flake tools consistently exhibit no retouch whatever (Table 2). This observation has

Table 2. Distribution of Retouch Scars on Huaricoto Flake Tools.

	0	1	2	3	4	5	6	7	8	9	>9	average
EARLY INTERMEDIATE (n=523) PERIOD	166 31.8%	55 10.5%	65 12.4%	54 10.3%	45 8.6%	29 5.5%	32 6.1%	17 3.3%	14 2.7%	13 2.5%	33 6.3%	3.26
EARLY HORIZON (n=66)	32 48.6%	7 10.6%	2 3.0%	6 9.1%	5 7.6%	3 4.5%	3 4.5%	4 6.1%	-	1 1.5%	3 4.5%	2.36
INITIAL PERIOD (n=199)	86 43.2%	24 12.1%	27 13.6%	17 8.5%	15 7.5%	8 4.0%	4 1.9%	4 1.9%	3 1.4%	4 1.9%	7 3.5%	2.12
PRECERAMIC PERIOD (n=27)	7 25.9%	3 11.1%	1 3.7%	2 7.4%	4 14.9%	1 3.7%	3 11.1%	2 7.4%	-	2 7.4%	2 7.4%	3.78
(n=815) TOTALS	35.7%	10.9%	11.7%	9.7%	8.5%	5.0%	5.2%	3.2%	2.1%	2.5%	5.5%	

important ramifications: the shapes of flake tools are not being determined by deliberate modification processes but, rather, shape is largely conditioned by the structure of the raw material and by such technological factors as the striking implement employed, the direction, force and placement of the primary blow, and by the morphology and topography of the prepared nucleus or nodule surfaces. Without evidence of deliberate retouch, introduced either during the initial manufacturing episodes or later, to rejuvenate dulled edges, classifications based on tool shapes such as "discoïdal" and "trianguloid" are meaningless. Furthermore, no purpose would be served in comparing the shapes of Huaricoto lithic tools with shape classes of tools reported from comparable ecological or temporal contexts, such as

Lynch's Quishqui Puncu materials (1970), or MacNeish's Formative sequence from the Ayacucho Basin (1980).

As an alternative to shape classes, one could attempt groupings based on sets of metric measurements chosen to reflect technological constraints. That is, patterned variability in flake tool dimensions could reveal more tightly specified production of tools in some cultural periods than in others. Summary ratios representing various proportions in flake tool dimensions were therefore calculated (Table 3), each designed to capture a different technological aspect of production. (For example, tool length multiplied by tool width offers a rough measure of fracture surface area which also approximates the force required to detach the flake (Phagan 1980:256).) However, for all the calculated proportions in the Huaricoto flake tools, extremely high degrees of variability are evident, and no categories of restricted or specialized production can be designated.

Table 3. Ratios Summarizing Huaricoto Flake Tool Dimensions

	$\frac{\text{TOOL LENGTH}}{\text{TOOL WIDTH}}$	$\frac{\text{TOOL WIDTH}}{\text{TOOL THICKNESS}}$	$\frac{\text{FLAKE LENGTH}^*}{\text{FLAKE WIDTH}}$	$\frac{\text{TOOL LENGTH} \times \text{TOOL WIDTH}}{\text{TOOL WIDTH}}$	$\frac{\text{LENGTH} \times \text{WIDTH}}{\text{THICKNESS}}$
EARLY INTERMEDIATE PERIOD (n=523)	$\bar{x} = 1.53$ SD = 1.04 CV = 68.02	$\bar{x} = 2.59$ SD = .90 CV = 34.75	$\bar{x} = 1.20$ SD = .63 CV = 52.48	$\bar{x} = 25.20$ SD = 18.67 CV = 74.08	$\bar{x} = 14.66$ SD = 7.30 CV = 49.63
EARLY HORIZON (n=51)	$\bar{x} = 1.43$ SD = .25 CV = 17.92	$\bar{x} = 2.79$ SD = .89 CV = 31.90	$\bar{x} = 1.17$ SD = .35 CV = 29.68	$\bar{x} = 22.32$ SD = 19.45 CV = 87.12	$\bar{x} = 14.58$ SD = 9.1 CV = 62.41
INITIAL PERIOD (n=199)	$\bar{x} = 1.48$ SD = .34 CV = 22.70	$\bar{x} = 3.03$ SD = 1.46 CV = 48.25	$\bar{x} = 1.14$ SD = .36 CV = 32.06	$\bar{x} = 15.31$ SD = 15.03 CV = 98.14	$\bar{x} = 13.01$ SD = 8.47 CV = 65.12
PRE CERAMIC PERIOD (n=38)	$\bar{x} = 2.14$ SD = 2.35 CV = 109.80	$\bar{x} = 2.82$ SD = 1.02 CV = 36.08	$\bar{x} = 1.27$ SD = .57 CV = 44.45	$\bar{x} = 26.76$ SD = 23.38 CV = 87.35	$\bar{x} = 20.75$ SD = 23.36 CV = 112.56

\bar{x} = mean SD = standard deviation CV = coefficient of variation, or $100 \times \frac{\text{SD}}{\text{mean}}$

*The flake length/flake width statistics are based on smaller sample sizes (Early Intermediate Period=361; Early Horizon=42; Initial Period=156; Preceramic=20) because not all flake tools exhibited identifiable striking platforms or other technological orienting features.

Finally, we might seek meaningful lithic units related to tool functions. Evidence for different kinds of use applications was observed for the sample of Huaricoto flake tools, including the length and character of each working edge, the presence of striations, polish and microchipping which can be associated with particular patterns of use (such as cutting, sawing, scraping, hacking, abrading, etc.), patterns of tool edge damage which are indicative of the relative hardness or softness of the material being worked by the tool, and measurements of tool angles, including both spine-plane and edge angles.

Comparing these various lines of evidence, certain associations of variables are clearly repetitive, such as low tool angles, striations parallel and close to the working edge, and regularized edge morphologies which convincingly identify a cutting function. However, these associated variables do not associate invariably nor do they regularly co-occur with any particular tool shape. Furthermore, frequencies of these (or other identified functions) do not pattern themselves by cultural levels at Huaricoto. Most often, a single tool exhibits several use applications, sometimes on distinct segments of the tool perimeter, as shown in Table 4,

Table 4. Number of Working Edges per Flake Tool.

	1	2	3	4	5	6	\bar{x}
EARLY INTER- MEDIATE (n=521)	132 25.2%	168 32.5%	116 22.2%	73 14%	24 4.6%	8 1.5%	2.45
EARLY HORIZON (n=61)	12 20%	14 23.3%	16 26.7%	12 20%	6 10%	-	2.76
INITIAL PERIOD (n=212)	28 13.2%	48 22.6%	59 27.8%	50 23.6%	19 9%	8 3.8%	3.04
PRE- CERAMIC (n=27)	4 14.8%	11 40.7%	4 14.8%	6 22.2%	1 3.7%	1 3.7%	2.70
TOTALS (n=820)	176 21. %	241 29.4%	195 23.8%	141 17.2%	50 6.1%	17 2.1%	2.74

but also frequently superimposed on a single portion of the tool edge (Table 5).

Table 5. Number of Working Actions per Working Edge on Huaricoto Flake Tools.

	WORKING EDGES SHOWING ONE WORK ACTION	WORKING EDGES SHOWING TWO WORK ACTIONS	WORKING EDGES SHOWING THREE WORK ACTIONS
EARLY INTERMEDIATE PERIOD (n=523 tools)	832 64.9%	431 33.6%	20 1.6%
EARLY HORIZON (n=61 tools)	128 75.3%	40 23.5%	2 1.2%
INITIAL PERIOD (n=199 tools)	393 66.0%	189 31.8%	13 2.2%
PRE CERAMIC PERIOD (n=27 tools)	50 69.4%	22 30.6%	

Edge angles can also vary widely on the same working edge, in part because little retouch has eliminated thick portions of the edge. Thus, a vast majority of all the tools are complexly multi-purpose, although some trend can be noted through the Huaricoto sequence towards using fewer and longer portions of the tool perimeter for single function activities. By and large, however, the Huaricoto lithic use strategies defy clean typological sorting into functional categories.

Mention must be made of one notable exception to the untypological functional mess at Huaricoto: a particular repetitive form occurring in the last period of site occupation (Figure 1). This is a distinctive thick, squared-off flake tool with two or three vertically defined sides and the remaining segment of the perimeter steeply beveled at an angle of between 70° and 90° . The entire "bottom" surface of the tool is left covered with smooth cortex, so that the tool can function as a scraper-plane, gliding on the cortex surface where parallel striations can be noted at right angles

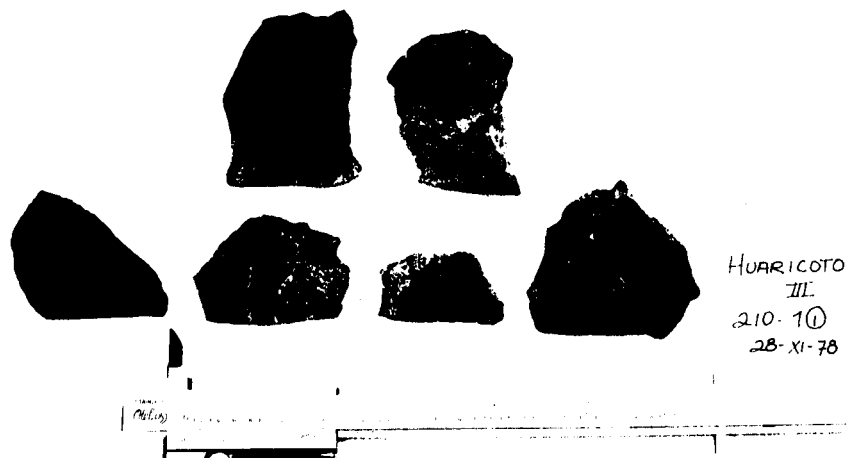


Figure 1. Early Intermediate Period scraper-planes

to the beveled edge. Significantly, Lavallee reports identical rectangular cobble scraper-planes from the Huaraz period at Chavin de Huantar, interpreting them as wood-working implements (Lavallee 1969-1970: 198-201, Lamina 3D).

Because similar appearing tools have been reported in the Southwestern United States as cactus-defleshing implements, and to check the function of these Huaricoto tools, I reproduced a set of replicas of the tool form from local materials and applied them to the leaves of the Fourcraea occidentalis Trel., known locally as maguey blanca or penqua. Both water-soaked leaves and unsoaked leaves were planed, cortex side of the tool pressed against the waxy coating of the plant leaf, trying to remove the waxy coating to extract the plant fiber. For this purpose, however, the Huaricoto-type scraper-plane proved highly ineffective, consistently tearing the fibers and ripping them off along with the waxy leaf-cover, forcing the conclusion that this tool's application was for harder materials, most likely against wood as Lavallee had surmised.

The Huaricoto tools, then, are for the most part produced to have neither specific shapes nor particular functions. Shape seems to be determined mostly by circumstances of initial flake-blank removal with little additional retouch, and functions are casually assigned and frequently overlapping on the same tool or even on the same working edge. Moreover, only small percentages of the analyzed tools are discarded with broken working edges (in contrast, for instance, with the biface samples, where tips and blades are frequently broken and snapped, or entire bifaces are reworked and reduced), suggesting again that flake tools were generally seen as expendable after a short use-life.

In interpreting these finds, there is, at first, something counter-intuitive about the casualness and lack of structure in this class of material culture, something which violates expectations about conditions of social complexity. Our understanding of the Formative economy in which Huaricoto would have been participating is that production was becoming increasingly specialized and narrowly-focused on maize agriculture, calling forth a more specialized lithic use-strategy and higher investments in tool manufacture; greater energy capture from the environment should perhaps correspond to greater energy investments in tool production. Moreover, if trade networks were expanding through the Early Horizon and between the Early Intermediate period polities, higher quality stone could have been made available, and curatorial or conservative strategies of lithic use should be apparent. Finally, the sequence of cultural periods at Huaricoto is long enough to expect significant change in stone-using patterns through time and through the changes in the function of the site itself.

To make sense of this unstructured assemblage, then, we must focus on some factor that is common to all the Huaricoto levels but which dis-

tinguishes them from highly structured classes of lithic artifacts familiar to us, like the Paiján complex on the Pampa de Cupisnique, where 85% of the identified tools were bifaces or projectile points (Chauchat 1975:90), or like Malpass' assemblages from Campanario, Casma, where 78% of the lithics were bifaces (Malpass 1982). I propose an interpretation which compares lithic use-strategies of sedentary, agricultural populations, particularly in the highlands, with lithic use-strategies of mobile, transhumant or foraging peoples.

In mobile societies, moving through an annual round is likely to include scheduled stops in areas where high quality stone can be acquired, and these highly selective raw materials are then curated for use in less well-endowed areas. This is particularly important since mobile strategies require few tools to do all tasks, so that the quality of the stone used becomes especially critical (Frison 1968; Shott 1982). Mobile societies can afford to, and are under pressure to, rely on high quality stone resources.

In contrast, sedentary and agricultural people in the highlands locate permanent sites in relation to topographic and hydraulic features of the landscape. The demand for flat parcels of well-watered land make river terraces and flood plains (or mounds above flood plains) convenient settlement areas of the early Formative periods, where stone may be conveniently gathered as river cobbles for casual and ready consumption. Evidence of river-cobble dependence for lithic resources is extremely common at highland Formative period sites and at Huaricoto in particular.

A second consequence of mobility is that stone, heavy and dense, has to be economically packaged in a minimum number of tools to satisfy all work requirements on the road. Tool versatility is assured by retouching a tool into a general form which maximizes the working perimeter with uniformly

thinned edges (Keeley 1980; Shott 1982). This generalized tool or preform can then be carried through different environmental zones and reworked in slight modifications as new tool applications are required. At the same time, retouching the tool strengthens the working edges and prevents uneven breakage, thereby conserving the tool. The highly typological tool classes of the preceramic periods are largely accounted for by a narrow range of generalized bifaces or preforms which are erroneously interpreted as single-purpose "projectile points" by many investigators.

In sedentary, agricultural situations, however, tool versatility and conservation are not selected for; common stone is abundant. Rather, the sharpness of an unretouched edge is often desired, without worry about edge damage and resource replenishment. Stone can be and apparently is used expediently and casually when relying on common raw materials. (In this context, it should be recalled that the Huaricoto bifaces, made of less common, non-river-cobble materials, and heavily ground or chipped, are obviously curated and reworked in very pronounced conservational efforts.)

Finally, I argue that mobile and sedentary populations provide very different social contexts for the production and use of lithics, and that this social context also determines to a great extent how formally structured an assemblage will be. In mobile societies, work is public and few other material culture classes are as ubiquitous as stone tools which will therefore emerge as effective media for transmitting social information. In contrast, the function of transmitting social information is not well suited for stone tools in more complex, sedentary circumstances, where other more visible and plastic classes of material culture are available for these purposes (Gero 1983).

The lack of structure and the lack of change in the Huaricoto lithics,

then, is a product of both material and social conditions of existence and follows logically from them. This insight into the Huaricoto lithic assemblages may also help account for the dearth of lithic studies reported from other Formative sites where, according to the expectations laid out here, assemblages are likely to be comparably unstructured. However, it is only through a willingness to research and report on non-classifiable, non-redundant classes of material culture that archaeological questions and understandings can continue to grow.

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Possible uses, roles and meanings
of Chavín-style painted textiles
of South Coast Peru

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Nearly two hundred textiles painted in a style closely related to the sculptures at Chavín de Huantar have been found over 500 kilometers from that site, on the South Coast of Peru. The likely provenance for these elaborately-decorated fragments (Fig. 1) is the Callango Valley. Burials at the site of Karwa (Carhua) in particular have been suggested (Cordy-Collins 1976:43).¹ These cloths provide a source of largely un-mined information on the complex character of the Early Horizon in Peru. Their physical iconographic and formal properties shed light on regional interaction, ritual practice, religious expression and the role of art in early Peru.



Fig. 1. Painted South Coast textile depicting a female figure with vegetal staffs.

The internal evidence of the textiles, both the fabric and its decoration, is treated as direct information on the period. Though encoded, this evidence gives clues as to possible uses, roles and meanings of the painted cloth and textiles in general. While this approach avoids the difficult archaeological questions that again

surround the concept of the "Chavín Empire," close study of the textiles themselves reveals complexity analogous to that being discovered in the field. The technical, religious and artistic considerations manifest in the painted South Coast pieces reflect larger cultural and religious issues.

PHYSICAL EVIDENCE

Consideration of the physical and technical attributes of the textiles may help to determine their place(s) of manufacture as well as their possible pre-burial use(s). In the attempt to pinpoint location of manufacture, evidence is found in construction sequence and the yarn and base cloth characteristics. The forms taken by the finished products suggest their uses. It is probable that these cloths were not made solely for burial, but rather performed many functions before placement in the grave. Just as the nets interred with fishermen and looms with weavers were utilized as tools before death, so the buried cloths probably functioned in other roles during life.

The construction sequence can be inferred from close observation of the finished works. Strips of cotton cloth, averaging around seventeen inches in width, were seamed together to make larger square or rectangular pieces (Fig. 2). These were painted with dyes after assembly, given that the seam threads are colored and the patterns extend uninterrupted over the different strips. This two-part construction allows for a division of cloth production from cloth decoration; different locations for the various stages are possible. The characteristics of the base cloth and its coloration order also suggest this possibility.

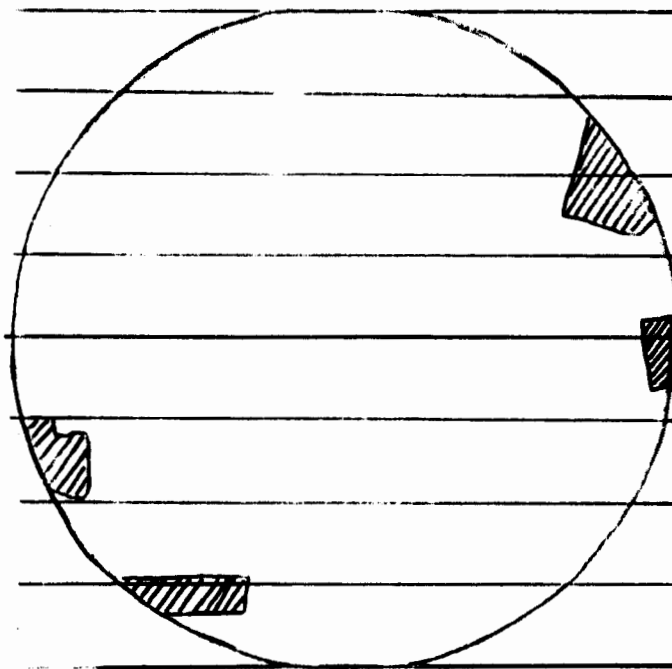


Fig. 2. Reconstruction of a 9 by 13 foot painted Chavin-style textile with a circular composition constructed in seamed cloth strips.

The base cloth displays several characteristics of North Coast and Central Coast textiles, although found on the South Coast. The "Karwa" textiles were plain-woven, with single warps and wefts or with one element paired and the other single (Fig. 3). Direction of yarn twist while spinning is diagnostic of place of manufacture in ancient Peru. In an extensive study of plain-weaves, Dwight Wallace reports that many of the South Coast examples were made with yarn twisted in a counter-clockwise direction ("S" spun) that is characteristic of North Coast weaving (Wallace 1975; 1979:32). Other "Karwa" pieces were formed with yarns both "S" and "Z" (clockwise spun). "Z"-spinning is considered diagnostic of the South Coast, while a combination of "S" and "Z" spinning may indicate Central Coast production. Thus, Karwa cloths display either a foreign or an intermediate pattern of yarn conformation. Other foreign, i.e. North Coast, attributes include: single-ply warps, paired wefts, close

ratio of warp to weft, and multiple bobbin weaving. Wallace suggests importation of the South Coast cloths from elsewhere, either the North or Central Coasts (Wallace 1979:48). Thus, they could have been woven and seamed outside the South Coast, then decorated subsequently.

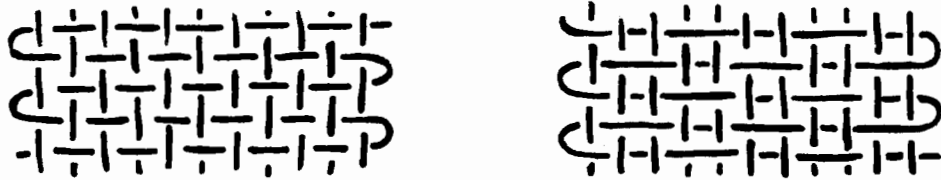


Fig. 3. Plain-weave technique using either single warps and wefts or one paired element in semi-basket weave.

Coloration also took place in several stages: first negative, or "resist," techniques, then positive, or "direct," painting were used. Often three different methods of painting were employed. This reinforces the picture of ancient Peruvian textile virtuosity; the Pre-Columbian weaver and dyer left no method unexplored. In fact, the use of batik (painted paste resist) on these South Coast pieces may lengthen the list of revolutionary weaving inventions of the Early Horizon proposed by William Conklin (Conklin 1978).

Both batik and plangi (tie-dye) were exploited to create patterns in paste-covered or tied-off portions of the base cloth (Fig. 4). These resist areas preserved the original white cloth from the brown dyebath into which the entire piece was then immersed. The white circles with slightly uneven edges characterize plangi, while the painted shape with hard edges distinguishes batik. It is important to note that these negative techniques entail an inversion of the normal painting process; what is painted (or tied) is where color does not appear. This reversal at the technical level characterizes the iconographic, formal, and by implication, the

conceptual levels at work in the Karwa textiles.

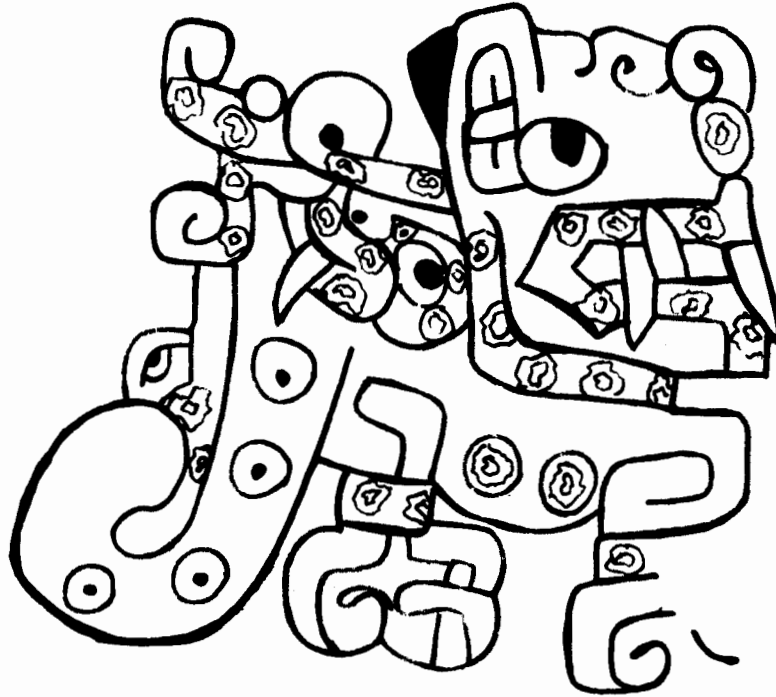


Fig. 4. Jaguar-patterned cloth showing plangi circles, batik areas and directly painted lines.

Following these resist processes, dye was painted directly on the cloth surface. Incorporating the white patterns made by the batik and plangi processes, areas of red, yellow, brown and sometimes olive green were added. The dark brown outlines, or contour lines, were painted on last. The negative and positive dyeing techniques "interlock" to suggest prior overall design planning; the patterns created through negative dyeing were placed in relation to the anticipated positive painted areas. For example, the jaguar spots were tied and dyed before the animal's body was delineated in Fig. 4. This represents a developed skill of pre-visualization on the part of the artist and a level of inverted

conceptualization higher than that implicit in the negative dyeing techniques themselves.

Besides indicating complex pre-visualization, this two-part "blind" coloration could imply the use of templates. A cut-out of the entire figure easily determines the placement of the various design elements regardless of technique to be employed. Alana Cordy-Collins and Peter Roe both have suggested templates to explain the similarity of repeated figures within, if not between, cloths (Cordy-Collins 1976:48; Roe 1974:7-8). There are several arguments in favor of the template hypothesis as well as certain important qualifications.

In addition to the interlocking of the dye techniques, the symmetry of the frontal figures argues in favor of the template hypothesis (Fig. 10). It seems probable that the more sacred figures, as indicated by their frontality and staffs, would have merited greater control over their representation. Therefore, it would be more likely that a pattern of some kind be used to insure a perfect and symmetrical composition. As before, this implies inversion in conceptualization: in making a full template, the material would be folded and half the final design cut out, and in using a half-template flipping would reconstruct the entire design. In either case halving and doubling are used to produce a single image. Template use with an even more complicated process of inversion is described by Cordy-Collins as a "twisted splayed" motif. One face is repeated upsidedown and backwards in relation to another (Cordy-Collins 1976:245).

Arguing against the use of templates are certain cases in which there is no absolute symmetry within a figure or no complete

similarity between figures in one piece. Cordy-Collins admits that Chavín art is not always concerned with true mirror-imagery, but rather with harmoniously balanced designs (Cordy-Collins 1976:9). Roe finds the two sides of many figures are "nearly alike" or two figures are "nearly identical" (Roe 1974:7-8). Less evidence of templates is evident in looser compositions, filler elements and non-frontal figures (Fig. 5). Because repetition is favored in Chavín art in general, artists would probably have developed skills in creating nearly identical repetitions of an element. In these ways, the template hypothesis becomes a didactic crutch that can denigrate Chavín artistic virtuosity. Thus, it is suggested that pre-visualization of designs, incorporating inversion as a guiding principle, is predominant in the South Coast textile compositions while only limited, prescribed use of templates is indicated.



Fig. 5. Painted textile with loose composition of plants and animals, showing no use of a template.

Physical evidence again comes into play to hypothesize about the pre-burial uses of the painted textiles. Firstly, single-ply, unevenly-spun warp threads are found in most of the cloths. Since the warp is the tension-bearing element, hence usually made stronger

than the weft, most of this fabric is unsuitable for garments (which take greater stress than hangings and coverings). The large size of these pieces is another indication that many were used as hangings. Reconstructions range from several feet across to nine by thirteen feet (Fig. 2); size alone bespeaks a function as large-scale decoration. In addition, Conklin points out that the fragile fabric and non-fast dyes, especially susceptible to fading in sunlight, makes it unlikely these were hung outside (Conklin 1978:3). Thus, the wall-sized hangings may have been used as portable, ritual decorations within structures. Cordy-Collins notes that one textile (Cordy-Collins 1976:Fig. 118) closely echoes the arrangement of the circular sunken courtyard and its encircling jaguar frieze at Chavín de Huantar. While the textile is not a direct reference or illustration of the courtyard, considering that the jaguars face rather than follow each other, it suggests a similar intention: to delineate a ritual space with a circular composition of jaguars. If the linkage between the site and the textile is valid, the latter created the ritual spaces of the former in two dimensions.

Many other types of cloths appear in addition to wall-hangings: fringed coverings, plus what may be belts or ties and a canopy. A high-quality, fringed cloth smaller than the hangings is seen in Fig. 6. There fringe is added at the sides of the representation--or rather its principal orientation--while another example is fringed above and below the figure (Lyon 1974, Plate 30). If the fringe is presumed to hang downwards rather than over the cloth in both cases, they probably functioned as covering for flat surfaces. In this position, the fringe would not obscure the depiction which could be

seen from many directions, including "upright." This positioning is consistent with the multi-directional character of Chavín-style art, within which one view predominates.

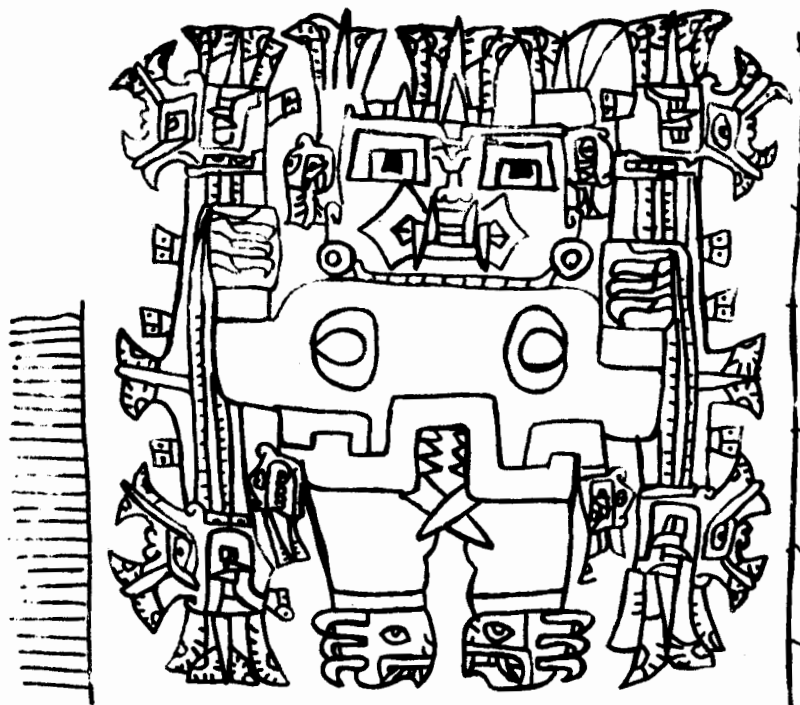


Fig. 6. Representation of a female staff-bearing figure on a fringed cloth.

Another form of the painted South Coast textile appears as a long, thin strip (Fig. 7). Measuring 35 inches long in fragmentary form and around 5 inches wide with both selvages, this may have been worn as a belt or tie. The construction suits this piece for wear: the plain-weave is tightly constructed in S-spun, Z-ply cotton threads. Some circumstantial evidence for this attribution as a belt comes from belts prominently worn by figures in Chavín sculpture and in the painted textiles themselves (Fig. 7). Belts with an analogous meander-type pattern are found on the Lanzón, the Raimondi and various processional figures at Chavín de Huanter as well as

staff-bearers on the "Karwa" textiles. The actual belts were not washable, so would have been worn as ceremonial items (as suggested by the ritually important characters on which belts are represented).

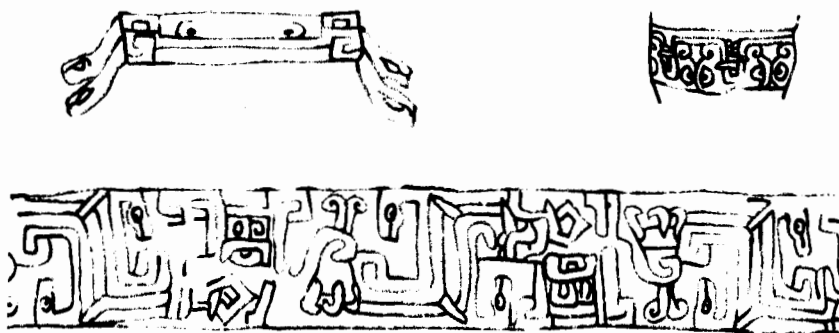


Fig. 7. Painted South Coast cloth belt or tie (below) compared with belts worn by the Raimondi (top left) and Lanzón (top right) figures.

A unique complete piece suggests another ritual use (Fig. 8). Measuring seventeen by nineteen inches with all four selvages intact, this cloth has the same strong construction as the belts. Two webs were sewn together and the heading cords, or extra wefts at the selvages, were braided at the eight corners thus formed. These heading cord braids created strings at the corners and two sides by which the textile could have been mounted or stretched (Bird and Conklin 1970: Fig.9). However, the bird iconography further implies suspension as a canopy or ceiling hanging, by analogy with the overhead bird cornice at Chavín de Huantar. Whether or not the piece was a canopy, its form indicates a different function than the hangings, covers and belts.²

As ritual coverings for walls, objects, people and ceilings, painted fabrics created a total environment. Cloths complemented the extensive corpus of Chavín ritual paraphernalia such as mortars,

snuffers, trays, shells and vessels. Yet this ceremonial role has been passed over in the literature. Cordy-Collins subtitled her dissertation on the iconography of the textiles "The Discovery of a Pre-Columbian Catechism," thereby calling the corpus a manual of religious instruction. Given the various forms taken by the pieces, this overt religious education role seems secondary to the ceremonial functions through which indirect instruction could have taken place. The use of the term "catechism" unfortunately implies a set of Post-Conquest, Christian assumptions about religion not necessarily applicable to the Chavin case, still poorly understood at present. Some brief iconographical observations about the painted staff-bearing figures may shed further light on some unique qualities of this Pre-Columbian religion and its regional expression.

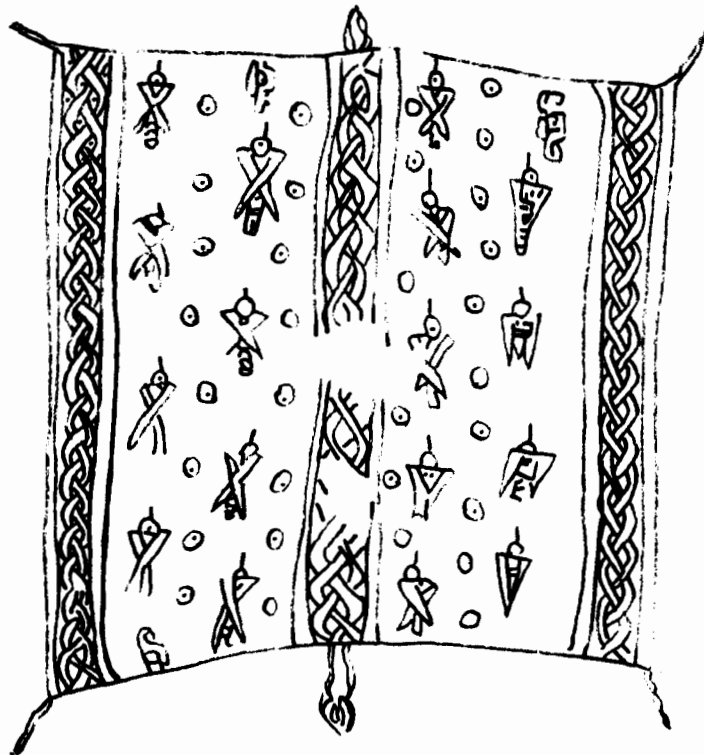


Fig. 8 Possibly canopy or ceiling hanging measuring approximately 17 by 19 inches.

ICONOGRAPHIC OBSERVATIONS

An Iconographic Study of Chavín Textiles from the South Coast of Peru: The Discovery of a Pre-Columbian Catechism remains the most valuable compendium of Chavin painted textile iconography. Yet, like all pioneering works, it now bears re-evaluation and further analysis of the data. Cordy-Collins stressed similarities over differences in her attempt to categorize the diverse images and relate them to other Chavín-style media. For example, all frontal staff-bearers were grouped together regardless of staff type and other features.³ However, differences in manner of representation, such as a disembodied or abstracted version of a figure, were considered separately. The generalized definition of Chavín art was applied despite greater complexity in the images.⁴ Finally, several iconographic elements and emphases appear unique to the medium, although Cordy-Collins concludes that only the "Cotton Goddess" is idiosyncratic (Cordy-Collins 1976:267).

Generally speaking, the painted textiles display iconographic themes found at Chavín de Huantar: staff-bearer, jaguar, harpy eagle, cayman, processional human figures, trophy-head-bearer, monkey, and San Pedro cactus. Yet direct comparison of a textile representation with its stone or gold "counterpart" reveals a great number of fundamental differences not explained fully by the demands of the various media. For example, the sculpted trophy-head-bearer is a simple human figure in a procession showing no metaphoric substitutions of mouths for joints (Fig. 9).⁵ In contrast, the painted examples are seen as a group of barely humanoid figures scattered across the cloth, their bodies shown as fanged faces and

their square heads highly abstracted. Thus, surface similarity yields to variation in conception, attributes and style of representation.



Fig. 9. Comparison of Chavin de Huantar stone trophy-head bearer (top) with South Coast textile representation of the same subject (bottom).



The greater emphases on the staff bearer and on snakes throughout the textile corpus contrasts with those on the feline and bird in Chavín sculpture. There are twenty-eight staff figures in Cordy-Collins' sample, making them the largest single iconographic unit. (Snakes appear as staffs, belts and hats on these figures.) Because the staff-bearer forms the largest subgroup, finer iconographical characterization is possible. Staff-bearers can be subdivided consistently by gender and staff type as well as by body

position. These new categories allow for the identification of figures in extremely fragmentary pieces. They also betray different roles and a possible status hierarchy within the South Coast Chavín-related religion.

Gender includes female, male and neuter categories (Figs. 6,10-13). Patricia Lyon suggests a useful methodology for determination of gender in her "Female Supernaturals in Ancient Peru":

If some figures are depicted with genitals while others in the same style are not, it is sometimes possible to establish regularities of dress or adornment, such as hair-do, on the former which may then be used to identify the latter. One might also find other iconographic features such as certain plants, animals or abstract symbols consistently associated with one or the other sex. (Lyon 1978:96).

Following this method, definite iconographic constellations differentiate the three gender categories.

Female figures often display readily recognizable metaphoric substitutions for primary and secondary sexual attributes: a toothed mouth stands for the "vagina dentata" while eyes stand for breasts (Figs. 6,10).⁶ These gendered females are shown in a frontal position and hold vegetalized staffs in either hand. Besides the consistent frontality and plant features, these females can be inverted to reveal a second fanged face made up of headdress and face elements from the upright image (Fig. 15). This invertibility is familiar from the primary cult image, the Raimondi stela. By extension, these frontal females are highly venerated and probably supernatural. Many types of vegetalized staffs appear, some with leafy fanged animals or snakes, some with cotton and other specific plants. One female holds twisted grasses or fibers that may represent the primordial technique

of twining. It is tempting to identify the circle above her right "staff" as the moon, archetypally associated with females and their textile arts. Thus, varied roles relating to Nature and textiles are indicated for the frontal, invertible female staff-bearers. With this constellation of features, fragmentary images such as Fig. 1 may be assigned to the female gender.⁷

Fig. 10. Female figure perhaps representing the primordial textile technique of twining.



Males display a complex of attributes opposite from those of females: they appear in profile carrying fanged-animal staffs (Figs. 11-12). Male genitalia is metaphorically substituted by a triangle, representing a schematic penis or loincloth.⁸ They often wear a snake belt and can be found in cartouche arrangements (Fig. 11). Because they are profile representations, they are not invertible and so may play a more human or subsidiary role in comparison to the females. Males' consistent identification with animal staffs makes it possible to assign Fig. 12 to the male category.⁹



Fig. 11. Typical male profile figure carrying fanged-animal staffs.

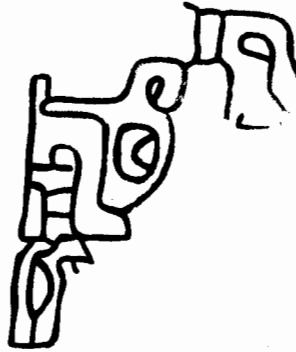


Fig. 12. Fragmentary staff, probably from male figure.

Females and males constitute two small, opposing subgroups; however, the majority of the Chavín-style textile staff-bearers are genderless. These neuters display a unique quality: with only two exceptions, all carry snakes and some wear triangular snake hats (Fig. 13). Neuters also show some intermediate characteristics in that both profile and frontal figures are found, although profiles predominate. In addition, the exceptions to the snake-staff rule are frontal and semi-invertible, similar to the females.¹⁰

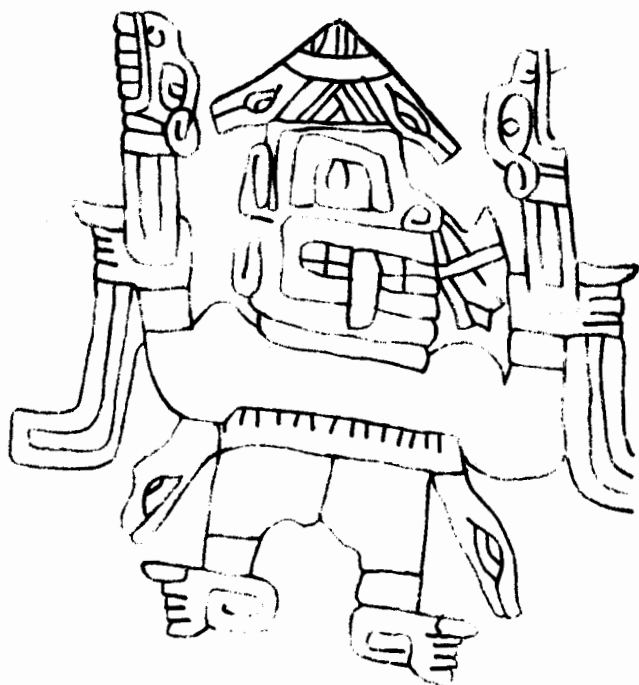


Fig. 13. Typical neuter profile figure carrying snake "staves" and wearing a triangular snake hat.

Thus, neuters form a bridge between female and male. This, plus their numerical predominance, calls into question the centrality of depicting gender in Chavín-style art and religion. It appears that only when sex was a vital descriptive aspect of the figures was it delineated metaphorically, while much of the time it was ignored as extraneous information. Rather, it is larger iconographic constellations such as plant-bearing frontal female, animal-bearing profile male and snake-bearing neuter that characterize the textile figures. Lyon's theory proves highly applicable and the South Coast textile iconography betrays deeper levels of religious complexity and organization at work.¹¹

FORMAL CONSIDERATIONS

This intricate iconographic system is, of necessity, revealed through the forms in art. As at the technical level, questions of reversal and visualization characterize the formal level. The manipulation of line especially embodies the broader communicative

concerns of the "Chavín" religion by making possible the inversion of important personages. Inversion represents an ingenious solution to the problems of depicting the concepts of duality, paradox and transcendence. This visual device encodes meaning through the perceptual effects of multiple axes and "contour rivalry."

Multiple visual axes are found in the mythical representations of Chavín-style art. For example, the south column bird on the Black-and-White portal at Chavín de Huantar has ten angles along which upright faces can be seen. This gives the viewer a sense of dizzying circular movement while trying to orient the various images within the primary one. As one figure is actually many, depending quite literally on the point of view, these axes communicate the difficult concept of multiplicity within unity. The lack of one consistent orientation runs counter to human, gravity-dependent perception of the world. Thus, multiple axes also depict a supernatural environment in which earthly rules do not apply.

"Contour rivalry," as described in the perceptual psychology theory of Rudolf Arnheim, allows for complete inversion along axes (cf. Arnheim 1974:223-224). Contour rivalry denotes the sharing of outlines by two wholes and the subsequent creation of visual paradox (Fig. 14). Arnheim describes the situation:

The sharing of borders is uncomfortable, and the hexagons [Fig. 14] exhibit an urge to pull apart, since each figure has a simple, independent shape of its own ... Everyone is familiar with the goblet whose outlines can be seen alternatively as two profile faces confronting each other. When one sees the goblet, the outlines look so completely different from those of the faces that the identity can only be understood intellectually, not acknowledged visually, nor can the two versions be seen at the same time. (Arnheim 1974:223-225).

These conditions apply to the contour rivalry seen in the female supernatural figures (Figs. 1,15). Both the "upright" and the "upside-down" versions claim certain lines: when inverted the wrinkled brow of Fig. 1 turns into the nose of Fig. 15, the pupils move from upper to lower lid and the headdress spikes of the former become the teeth of the latter. The standing and the descending creatures coexist in one body by sharing such contours. This represents a supreme depiction of the difficult concept of duality, or "two in one."

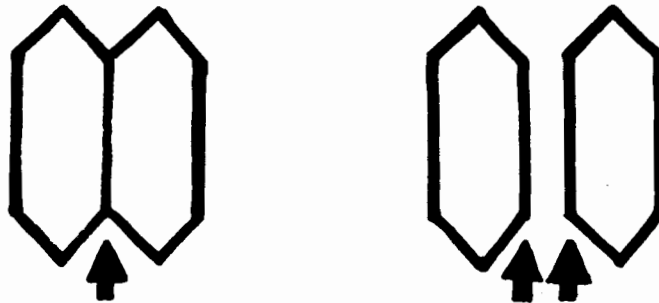


Fig. 14. Visual tension inherent in shared line or "contour rivalry" (left) is resolved as simpler, separated elements (right) under certain perceptual circumstances.

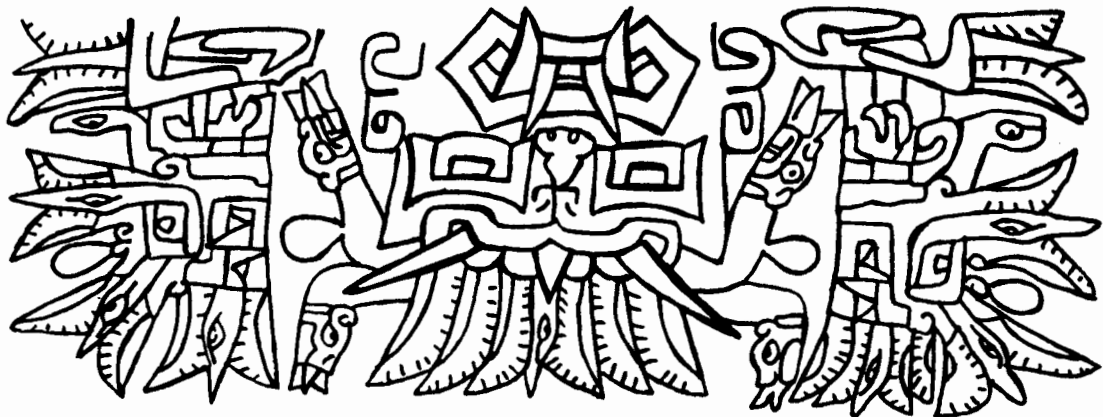


Fig. 15. Inverted view of Fig. 1 showing duality encoded through "contour rivalry."

These dual entities can be separated visually under special circumstances. In perceptual experiments "when the control of the stimulus over the organizing forces in the brain is weakened--for example, by the exposure of dim figures for a split second--... sometimes [there is] a tendency to give each unit its own contour" (Arnheim 1974:224). In other words, the shared line can be seen twice so as to make both wholes complete and separate. Chavín altered perception through drug-induced hallucinations or religious trance could weaken normal mental organization and allow both aspects to be perceived.¹² Even without external aids, religious training and visual familiarity would make it possible to tease apart dual images with relative ease. This perceptual trickery "shocks the observer out of ... complacent trust of reality" (Arnheim 1974:227). Like multiple axes, contour rivalry inhabits an impossible, and therefore non-human, world. Thus, the concepts of paradox and transcendence are visually portrayed, along with duality, through formal manipulation.

Physically, textiles are an ideal form in which to convey the principle of inversion through multiple axes and contour rivalry. In general, fabric is eminently portable and thus suitable for large-scale dissemination of ideas. (The non-local characteristics of the "Karwa" cloth show that some movement took place.) In specific, its flexibility allows for actual inversion of the principle image in order to display the "hidden" one. A complex, confusing representation resolves itself into component figures when flipped over. Small cloths could be handled, fringed ones circumnavigated and belts are seen from above by the wearer.

Wall hangings, and the sculpture at Chavin de Huantar, are immovable but still demonstrate their message to the trained, possessed or intoxicated. Thus, in a broad sense, textiles are suited to religious education and ritual expression in physical, iconographic and formal aspects.

The South Coast Chavín-style cloths are a regional interpretation of a religion concerned with communicating duality, paradox and transcendence through art. Inversion and pre-visualization characterize these works of art from creation through observation. Analysis of their internal evidence helps paint a more complete picture of this revolutionary period.¹³

FOOTNOTES

1. Karwa was suggested as the provenance for these textiles by looters and second-hand accounts and so remains speculative (Cordy-Collins 1976:43).
2. Other ritual garments such as capes are represented in the Chavín de Huantar sculptural record (Sharon and Donnan 1977: 377); however, the corresponding actual textiles have not been distinguished as yet.
3. Cordy-Collins observes at one point that frontal staff "gods" "hold unique staffs" (1976:81). She follows this up for the "Cotton Goddess" (1979).
4. For example, treatment of the question of fangs disregards the evidence that several placements were possible especially in profile views (for example, Cordy-Collins 1976:121).
5. Rather than employing John Rowe's more familiar term "kenning" (Rowe 1962:15-17), I am adopting George Kubler's "metaphoric substitution," in order to avoid the literary analogy implicit in the former (Kubler, personal communication).
6. The "North" figure on the Black-and-White Portal at Chavin de Huantar is the prototype for this delineated gender (See Lyon, 1978).

7. Females can be seen in Cordy-Collins 1976: Figs. 47a,48,49,55; 1979: Fig. 2; Rowe 1962: Fig. 29; Lyon 1974: Plate 30, Fig. 8.
8. Male genitalia is seen most clearly on the "South" figure of the Black-and-White Portal at Chavín de Huantar. It is interesting to note that eyes again stand for secondary sexual characteristics; here they substitute for testicles.
9. Males can be seen in Cordy-Collins 1976: Figs. 5,26,58,60,67; Roe 1974: Fig. 16.
10. Neuter exceptions are seen in Corday-Collins 1976: Figs. 15, 52a. Neuters can be seen in Cordy-Collins 1976: Figs. 16,23,24, 42,46a,46b,54,57,66; Roe 1974: Figs. 13,17.
11. Since the various staff figures fall into discernible subdivisions and a possible hierarchy of roles, it would be useful to differentiate between them more effectively in our terminology. Though cumbersome, terms like "Female plant-bearing supernatural" are precise and avoid the inevitable imposition of Western religious ideas that terms such as god or goddess carry with them. These specific, descriptive categories do justice to the complexity of the expression by recognizing the different roles of celebrant and celebrated.
12. Chavín use of hallucinogenic drugs is strongly suggested (Sharon and Donnan 1977; Cordy-Collins 1980).
13. My thanks to Barbara Conklin, William Conklin, George Kubler, Michael Coe and Richard Burger for their kind assistance in this project.

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Megalithic sites in the Nepeña Valley, Peru

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The focus of this paper is on a number of intriguing megalithic ruins in the Nepeña Valley. After briefly describing this valley, a history of research into the nature and extent of these ruins will be provided as will a discussion of specific ideas which have been offered to account for their origin. A discussion of relevant research conducted elsewhere will follow and it will provide a chronological framework for the Nepeña ruins. Finally, discussion will center on two newly discovered sites in Nepeña and, on the basis of the configuration of one of these sites, relationships between specific megalithic sites in Nepeña will be suggested.

The Nepeña Valley is located approximately 400 km north of the capital city of Lima (Figure 1). The valley is narrow relative to others and it lacks a fan-shaped coastal plain (Kosok 1965: 207). About 60 km in length, the valley has been divided into lower, middle and upper parts for the purpose of discussion (Proulx 1968: 5). The lower valley extends from the shore to Capillania (Figure 2). A valley bottleneck just above San Jacinto marks the juncture of the middle and upper parts of the valley and this latter part extends above Jimbe to about 1550 m in elevation (Daggett 1982).

The upper part of the valley may be subdivided into wider and narrower parts as one proceeds up valley and immediately beyond the bottleneck there is a marked expansion of the valley floor into an agricultural pocket (Kosok 1965: 95). Known as the Moro Pocket, the broadening of the valley floor is primarily due to the fact that the Vinchamarca River, the last major tributary, merges with the Nepeña River at this point.

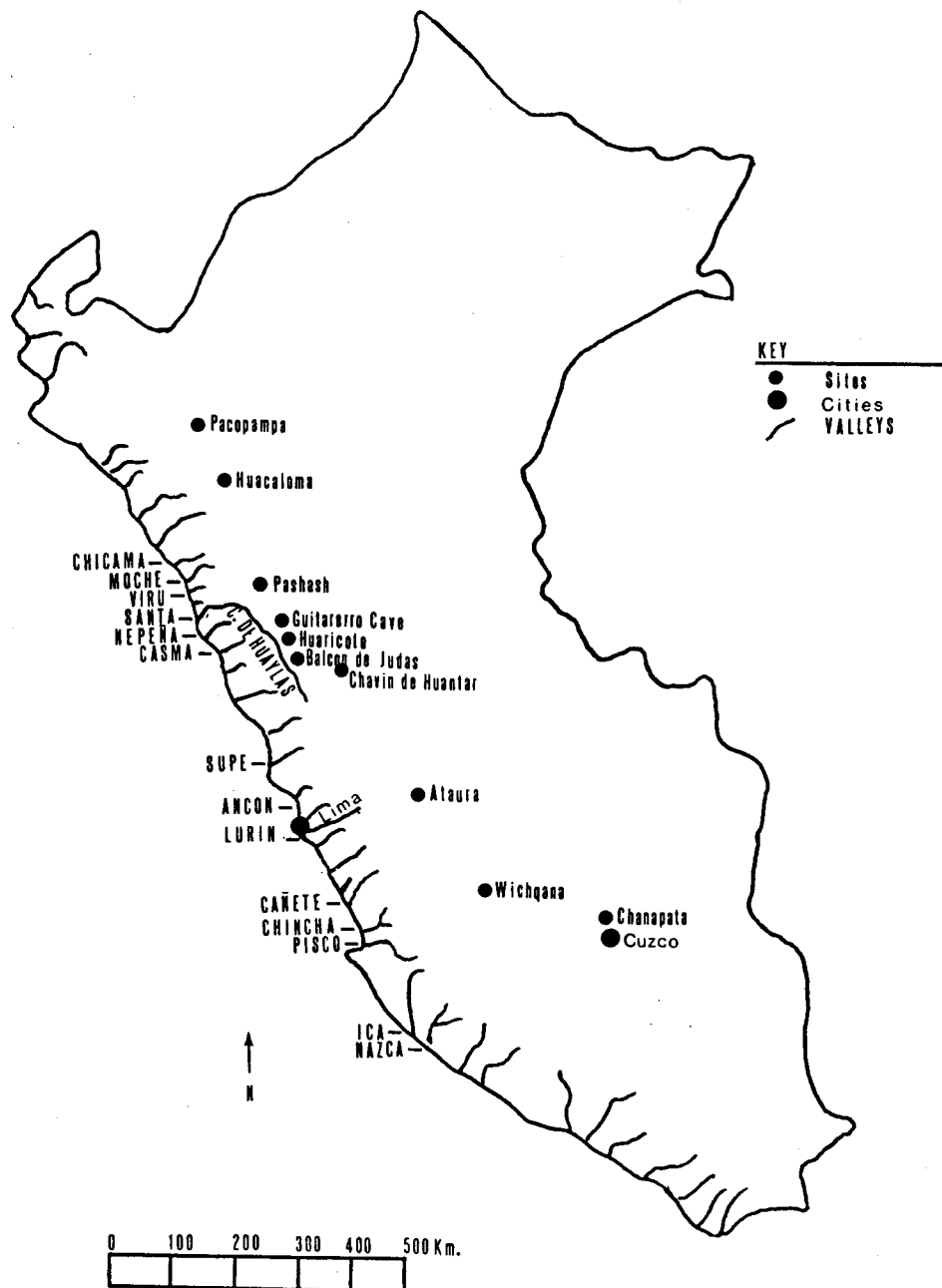


Figure 1. Map of Peru.

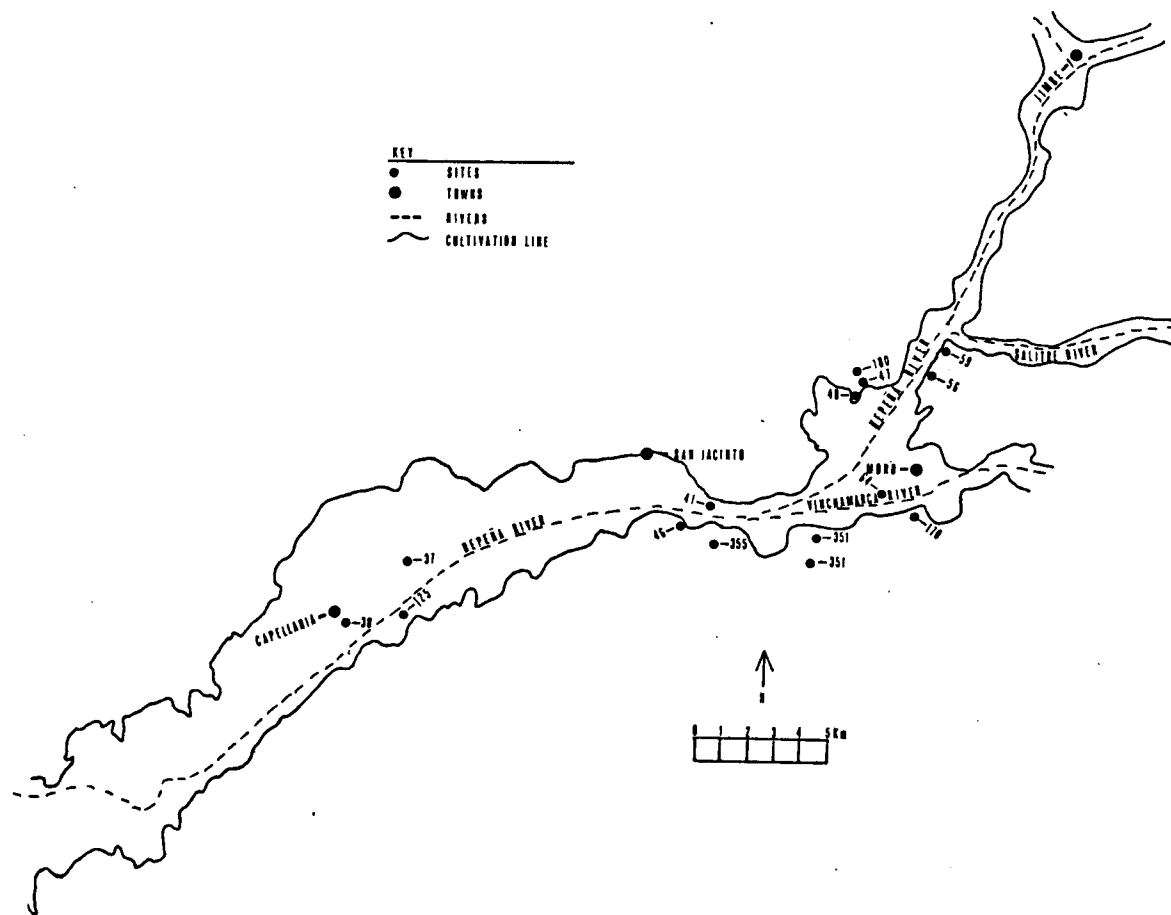


Figure 2. The Nepeña Valley.

Above the Moro Pocket the valley floor narrows considerably to just below Jimbe, this also being the case in the Salitre area where the Salitre and Nepeña Rivers come together. As for Jimbe, it is situated on the center-most of a number of ridges extending in finger-like fashion down from the Andes and which are formed by the upper tributaries of the Nepeña River.

In recording his travels in Nepeña, Ernst W. Middendorf (1894) mentions his visits to the ruins of Pañamarca (PV31-38)¹, Kushipampa (PV31-56) and Huancarpon (PV31-59). Ephraim G. Squier likewise comments on his visits to these first two ruins while providing detailed drawings of them (1877). He does the same for the ruins of Paredones (PV31-64), Motocachy (PV31-48), Quisque (PV31-46) and Alpacote (PV31-41). As for Quisque, this site particularly sparked the interest of the early twentieth century investigator Julio C. Tello.

This megalithic site was constructed off the valley floor on the southern side of the bottleneck distinguishing the middle and upper parts of the valley. Its strategic setting and the fact that its walls were parapeted led both Squier (*ibid.*) and Tello (1928: 263-264) to conclude that its function was defensive. Tello also concluded that Quisque exemplified how far what he had become convinced was a highland megalithic culture had spread to the west and, hence, to the coast (*ibid.*). He was later to expand his roster of such sites in Nepeña to include Kushipampa (1943: 138), Paredones (*ibid.*; 1960: 33) and Alpacote (1956: 16) in the upper valley and Huaca Partida (PV31-125) (1943: 138), the second huaca of Cerro Blanco (PV31-37) (*ibid.*: 139) and Pañamarca (*ibid.*: 138; 1956: 16) in the middle valley. The upper valley sites of Motocachy (Mejia X. 1963) and Huancarpon (*ibid.*; Sor-

iano I. 1941: 265) were subsequently added to this roster by other investigators.

Tello's idea of a highland origin for these sites was predicated upon his extensive work in the highlands and was in direct contrast to that of his contemporary Rafael Larco Hoyle. Having worked exclusively on the coast, Larco Hoyle had become equally convinced that such a megalithic culture was coastal in origin and that highland sites of this type were a later and related manifestation (1938: 36; 1966: 45).

A systematic documentation of sites in Nepeña has been under way since 1967 (Daggett 1982; Proulx 1968; 1973; Proulx and Daggett 1980). With the aid of aerial photographs, sites were initially recorded up to the Salitre area (Proulx 1968, 1973) and these sites included all of those mentioned by Tello as being megalithic in type. During his initial reconnaissance of the valley, Donald A. Proulx discovered at Kushipampa fragments of bowls decorated on the exterior with cross-hatched pattern burnishing (1968: 99). He had discovered like pottery at Motocachy in association with sherds decorated with stamped circle and dot (ibid.: 92; Figures 13e-f: 159).

Pottery decorated with stamped circle and dot had been widely reported to be an Early Horizon diagnostic (Izumi and Sono 1963; Menzel et al. 1964; Tello 1956; 1960; Willey and Corbett 1954) but this was hardly the case for pottery decorated with cross-hatched pattern burnishing. Because of this, Proulx initially concluded that this latter decorative technique was unique to Nepeña during the Early Horizon (1973: 23-26). Later, on the basis of further research in the Salitre area, he concluded that this technique was a late Early Horizon time marker for the valley (Proulx and Daggett 1980).

The ceramic prehistory of Peru has been divided into a series of alternating Periods and Horizons (Rowe 1962). This is based upon the fact that Peru experienced three periods of stylistic homogeneity each of which was preceded by a period of stylistic heterogeneity. The Chavin, Huari and Inca art styles date to the Early, Middle and Late Horizons, respectively. The site of Chavin de Huantar, located in the North Central Highlands, is the type site for the Early Horizon and it is especially well-known for its megalithic architecture and the Chavin art style. The essence of this art style was the feline motif (Willey 1951: 103) and, given that the iconography carved in stone at Chavin de Huantar embodies the Chavin art style (ibid.), the introduction of this style into a local assemblage, or of artifacts normally found in association with it, marks the beginning of the Early Horizon there (Menzel et al. 1964). A master sequence has been established for the Ica Valley on the South Coast and there the Early Horizon begins with the introduction of the Chavin art style and ends, arbitrarily, with the replacement of resin painting by slip painting (Rowe 1963: 1).

Decorative techniques are termed horizon techniques when they can be shown to have been practiced widely across space but during a relatively brief span of time (Willey 1945). One such technique, circle stamping, has already been shown to be an accepted Early Horizon diagnostic. Another well-known horizon technique is that of decorating a red or red-slipped ware with geometric designs painted in white. In the Callejon de Huaylas, where it is best known, this technique characterizes pottery of the White-on-red (Bennett 1944), Huaylas (Lanning 1965: 140) or Huaras (Lumbreras 1974) phase.

For the purpose of this discussion, it is important to note that distinctive Huaras phase painted pottery is to be found in association

with bowls decorated on the exterior with cross-hatched pattern burnishing (Richard Burger, personal communication). These bowls are like those found in Nepeña and, in fact, the Nepeña ceramic assemblage which includes these bowls is essentially replicated at sites in the Callejon de Huaylas (ibid.). Equally important, the Huaras phase dates to the end of the Early Horizon (Burger 1978: 402-405; Lumbreras 1974: 17) and it corresponds to the last three epochs or phases of the Ica Valley Early Horizon sequence (Burger 1979: 139).

It is now possible, then, to tie the Nepeña sequence into the Ica master sequence by way of the sequence established for the Callejon de Huaylas. Significant is the fact that two sherds decorated with pattern burnishing, one of which was specifically decorated with a cross-hatched design, were found in an Janabarriu phase context at Chavin de Huantar (Burger 1978: 231). This is the second of three Early Horizon phases which have been established for this site, the last being the Huaras. Significant, too, is the fact that pattern burnishing was a characteristic decorative technique in the Ica Valley during the last three of ten Early Horizon phases and the initial phase of the Early Intermediate Period (Menzel et al. 1964).

Absolute dating makes it clear that the time frame under consideration here brackets the final centuries of the first millennium B.C.. The end of the Early Horizon in the Ica Valley has alternatively been dated to A.D. 100-150 (ibid.: 4), 350-300 B.C. (Rowe 1967: 25; Table 3) and 400 B.C. (Rowe and Menzel 1967). As for Chavin de Huantar, recent excavations there have provided radiocarbon evidence to support a dating of 390-200 B.C. for the Janabarriu phase (Burger 1981: 596) and a single date of 150 B.C. \pm 100 has been obtained for the Huaras phase (Amat 1976). Other excavations at the site of Huaricoto in the Callejon

de Huaylas support this dating (Burger and Burger 1980: 31). At Huaricoto (Richard Burger, personal communication) and at the site of Pashash in the North Highlands (Smith 1978: 277-278, 302) white-on-red pottery was found in association with pattern burnished pottery. At Pashash the interface between the Early Horizon and the Early Intermediate Period is dated to 200 B.C. (ibid.: 60).

The North Coast equivalent of the Huaras pottery is Salinar in the Chicama and Moche Valleys (Larco H. 1944; 1966) and Puerto Moorin in the Viru Valley (Ford 1949; Willey 1953). Though pattern burnished pottery has not been reported for the megalithic sites in the Viru Valley it has been reported for the Early Horizon site of Huaca Herederos Chica (Pozorski 1976: 106) and the Salinar site of Cerro Arena (Brennan 1978, Appendix B) in the Moche Valley. Salinar is dated 450-200 B.C. (Donnan and Mackey 1978: 6) and a single radiocarbon date of 180 B.C. ± 220 has been obtained from Cerro Arena (Curtiss Brennan, personal communication). Finally, the South Highland equivalent of Salinar and Huaras would be Chanapata. This is so both in terms of the dating of Chanapata (350 B.C.-B.C./A.D.) (Chavez 1977: 154; Figure 4.5) and in terms of the fact that pattern burnishing is a characteristic decorative technique (Rowe 1944: 17; Figures 10-10,11,14).

The late Early Horizon practice of decorating bowls on the exterior with cross-hatched pattern burnishing is now known for the sites of Pacopampa (Morales C. 1980: Lamina 48), Huacaloma (Terada 1982: Plates 25-26) and Pashash (Smith 1978: 278; Illustration A-2,3) in the North Highlands as well as for the sites of Guitarrero Cave (Lynch 1980: 225; Figure 9-23a), Huaricoto (Richard Burger, personal communication) and Balcon de Judas (Steven Wegner, personal communication)² in the North

Central Highlands. As for the single sherd found at Chavin de Huantar, it is considered to be an exotic piece (Richard Burger, personal communication).

Further south, the late Early Horizon practice of decorating pottery with pattern burnishing per se is known for the sites of Ataura in the Central Highlands (Matos M. 1974: 98-100) and Wichqana in the South Central Highlands (Lumbreras 1959: 74). As already mentioned, Chanapata sites in the Cuzco region of the South Highlands characteristically include pottery decorated with pattern burnishing. On the South Coast this technique has been discussed as well for the Ica Valley. Immediately to the south, this technique has been reported for the Nazca Valley (Strong 1957: 19; Figure 7) and, presumably, it was practiced toward the end of the Early Horizon there just as it was in the Pisco, Chíncha and Cañete Valleys on the South Central Coast (Stothert 1980: 289).

In the Lurin Valley on the Central Coast bowls like those found in Nepeña and decorated in the same manner with cross-hatched pattern burnishing have been found at Early Horizon sites (Scheele 1970). The same may be said for sites in the Bay of Ancon and in the Supe Valley (Wiley and Corbett 1954: 43; Figure 7) both also being situated on the Central Coast. As for the North Central Coast, the only valley for which pottery decorated with cross-hatched pattern burnishing has been reported besides Nepeña is that of neighboring Casma where it has been found at one upper valley site (Fung P. y Williams L. 1977: 135; Lamina ln-o). This is in sharp contrast to the Santa Valley, Nepeña's North Coast neighbor, which is now known to have experienced a late Early Horizon cultural phenomenon very similar to that of Nepeña with megalithic architecture and cross-hatched pattern burnished decoration being very

popular (Wilson 1981: 41-45). Finally, I have already mentioned the fact that the decorative technique of pattern burnishing is a Salinar trait in the Moche Valley.

To summarize, the decorative technique of pattern burnishing has been shown to have enjoyed considerable popularity in Peru, on the coast and in the highlands, from north to south, from the end of the Early Horizon to the beginning of the Early Intermediate Period. As for the specific decorative technique of cross-hatched pattern burnishing, it enjoyed a more restricted popularity in the northern highlands and on the north to central parts of the coast from Santa to Lurin. It is anticipated that as widespread as these phenomena appear to be each will prove to be even more so and each of these decorative practices will come to be recognized as true horizon techniques.

During 1981 two new sites were documented in Nepeña on the south side of the Moro Pocket and the discovery of these sites has led to a new perspective regarding the relationship between specific megalithic sites in the valley. The first of these two sites, Virahuanca Bajo (PV31-351), is the most important and as such it will be discussed first. The second, Santa Lucia (PV31-355) will be discussed in terms of the first, as will the sites of Anta (PV31-170), Huancarpon, Kushipampa, Motocachy, Paredones and San Juan (PV31-47 & PV31-180) all of which are to be found in the upper valley. Finally, the sites of Quisque and Alpacote at the juncture of the upper and middle parts of the valley and the sites of Huaca Partida, Pañamarca and the second huaca of Cerro Blanco in the middle valley will all be discussed in terms of these upper valley sites.

Virahuanca Bajo has spatially distinct northern and southern parts

(Figure 3). The northern part consists of four principal architectural features: a pair of stone-walled compounds, A and B, a stone-faced platform, and a stone-faced platform mound. This latter feature is situated at the western end of this part of the site, it is constructed of earth and rubble and it is faced at its corners with large well-cut blocks of stone. There are the remains of a fieldstone foundation atop this truncated mound and at the base of its northeastern corner huaqueros have exposed a large subterranean jar which was presumably used for storage. A low quadrangular stone wall encloses this mound while a natural gully separates it from the largest and most complex of the two compounds.

Situated to the north of the platform mound, Compound B measures approximately 350 by 60 meters and it may be perceived as having three distinct parts. The western end is subdivided into a number of rooms of varying dimensions while the central part is subdivided into lateral rooms of equal size, there being seven of these on a side. As for the eastern end, it was left open and may be thought of as a plaza or courtyard. The outer walls of this compound were constructed of alternating layers of large and small split fieldstone with smaller stones being used for chinking.

About a hundred meters of open ground separates this larger compound from the smaller and less well-preserved one. There is ample evidence that Compound A bore the brunt of flash flooding in times past and at present it is bisected by a dirt road used principally by large trucks hauling stone from a local quarry. Fortunately, severe damage is essentially restricted to the northern side of this compound and enough remains of it to ascertain the overall dimensions of the compound. Measuring roughly 230 by 60 meters, the walls of this compound were con-

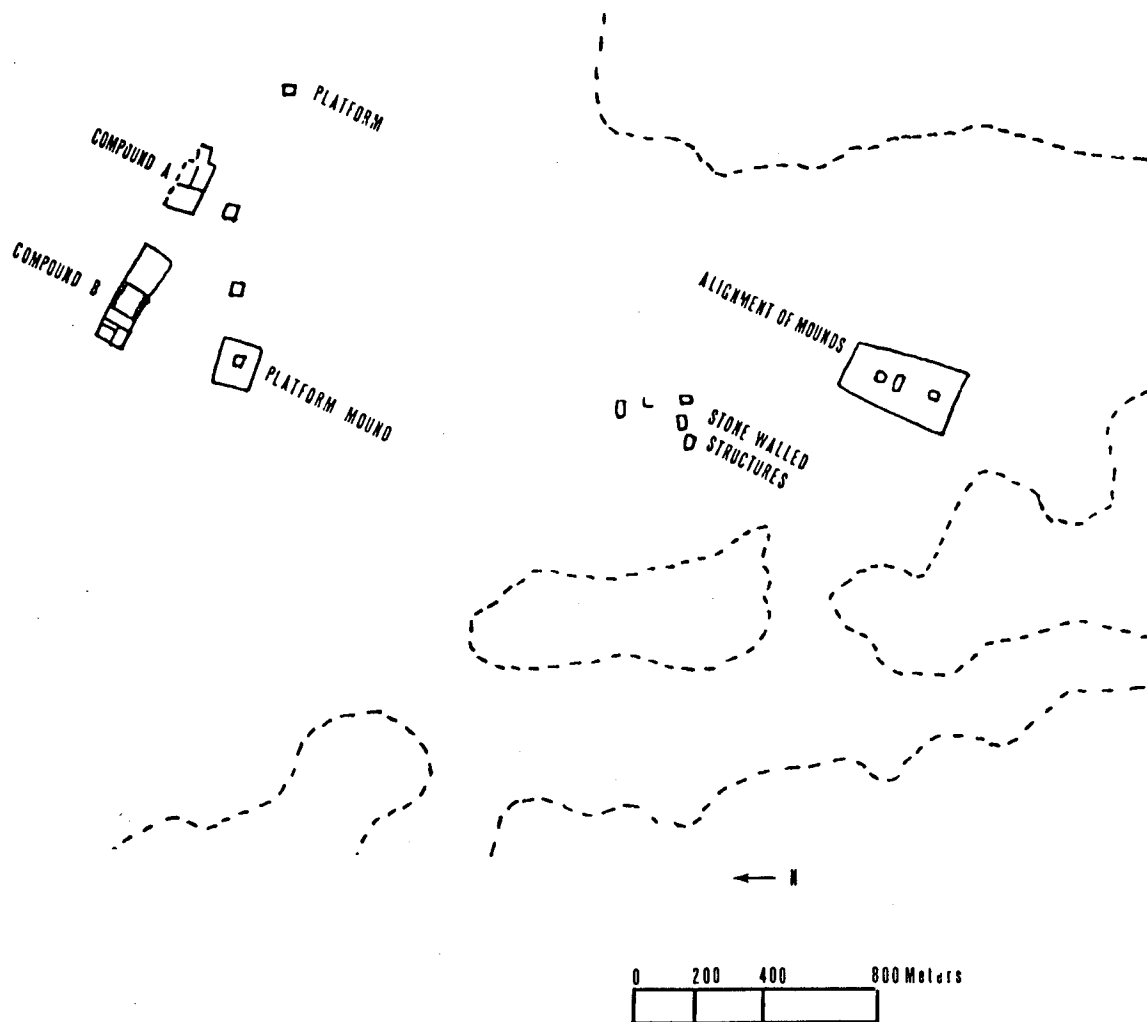


Figure 3. Virahuanca Bajo (PV31-351).

structed of alternating layers of large and small split fieldstone with smaller stones used to fill spaces. In addition, like Compound B, Compound A may also be viewed as having three parts. The western end is left open like the eastern end of the larger compound. This is followed by a central area which was bisected by a stone wall and which was probably subdivided into smaller rooms. As for the eastern end, it may actually have been an addition. It is indented 10 meters on its only preserved side and the enclosing stone wall actually consists of two walls back-to-back.

To the southeast of this compound is the stone-faced platform. Like the platform mound, it was constructed of earth and rubble but, unlike it, six stone-lined holes or cists have been exposed by huaqueros. While there is no surface evidence to support the contention that these cists had a mortuary function, the placement of the holes in close juxtaposition rules out their having been used as settings for pillars.

Evidence to suggest the likelihood that these stone-lined holes are indeed cists and did serve a funerary function comes from the first of two principal architectural features making up the second part of Virahuanca Bajo. This evidence consists of three stone-lined holes to be found on the middle of three aligned low earthen mounds which are enclosed by a low stone wall. It is assumed that this was a ritual alignment of mounds and that the holes were in fact cists used for the interment of remains, human or otherwise.³ Situated approximately 400 meters northwest of this ceremonial area is a cluster of five quadrangular structures of varying dimensions. Like the compounds, these structures were built of split fieldstone, though the specific technique of alternating layers of large and small stones is not in evidence.

These two parts of Virahuanca Bajo, though spatially distinct, are

components of a single large site. Pottery decorated with cross-hatched pattern burnishing was found in association with all of the architectural features discussed above as have other late Early Horizon diagnostics. In addition, a canal was carved into the side of the low mountains which enclose the ceremonial part of this site on three sides.

Not long after the discovery of Virahuanca Bajo, a second and somewhat similar site was discovered in the Quebrada Santa Lucia near the valley bottleneck mentioned earlier. Like Virahuanca Bajo, Santa Lucia has been exposed to the ravages of flash flooding in times past and it is currently exposed to truck traffic. Unlike Virahuanca Bajo, however, it is much more the worse for this treatment. The remnants of stone-walled structures and terracing are difficult to make out on the rock-strewn slopes of the western side of the quebrada. Other structures built with the use of masonry techniques seen at Virahuanca Bajo are to be found on the floor of this side and are in a relatively good state of repair. The same cannot be said, however, for what must have been an impressive compound in the center of the quebrada. Enough remains, though, to make it clear that its architects were the same or were ones who shared ideas with those who constructed the Virahuanca Bajo compounds.

The Santa Lucia compound is indented at the only preserved end of its only remaining side. In this regard, then, it is like the smaller compound at Virahuanca Bajo. It is also like the larger compound there, however, because this end is subdivided into two sets of seven rooms of equal size separated by a narrower entryway. Interestingly, most of what remains of the wider part of the Santa Lucia compound consists of a third set of seven rooms. Diagnostic late Early Horizon artifacts were found in association with all of the architectural features making

up the site of Santa Lucia and a canal is visible on the slopes on either side of the quebrada.

The unique configuration of Virahuanca Bajo makes it clear that megalithic sites previously thought of as being individual sites are in fact components of much larger sites or centers. In addition to the centers of Virahuanca Bajo and Santa Lucia, there are two other such centers in the Moro Pocket, one in the Salitre area and, possibly, one in the middle valley.

Situated on neighboring plateaus at the confluence of the Nepena and Salitre Rivers, the sites of Kushipampa and Huancarpon are the major components of one such center. Huancarpon may be described as an alignment of stone-faced earthen platform mounds. Ceremonial in nature, (Proulx 1968: 100-101; Plate 6a: 174), this site is known to have been occupied at the end of the Early Horizon because of the presence of cross-hatched pattern burnished pottery, large underground storage jars and stone-lined cists.

As for Kushipampa, it is by far the largest compound in the valley. Its walls were constructed of alternating layers of large and small split fieldstone with chinking and large well-cut blocks of stone were used to define corners and entryways. A lintel stone for one of these entryways was carved with a figure (ibid.: 99; Plate 5b: 173) and, as has already been mentioned, the pottery of this site dates almost entirely to the end of the Early Horizon. Finally, though separated by about a kilometer, Huancarpon and Kushipampa are linked by a canal which was excavated along the lower slopes of their respective plateaus.

The sites of Paredones and Anta may also be shown to be components of a larger site. Situated in a pampa to the southwest of Paredones on the south side of the Moro Pocket, Anta looks remarkably like the cere-

monial sector of Virahuanca Bajo. It consists of an alignment of three earthen mounds around which a low stone wall was erected (Proulx 1973: 191-193; Figure 45). Of interest is the fact that the largest of these mounds has five segments, three of which are defined at either end by stone-lined cists. During 1981 distinctive late Early Horizon pottery was discovered at this site and at the nearby compound of Paredones which was constructed of alternating layers of large and small split fieldstone and with large dressed stones used to define corners and entryways (Proulx 1968: 104-105; Plan 12; 1973: Plate 22: 277).

Finally, the sites of Motocachy and San Juan may be paired in the same manner. Motocachy is a ridgetop platform mound site situated on the north side of the Moro Pocket across from Paredones. During the late Early Horizon this site was transformed into a ritual alignment of platform mounds, two of which were surmounted by stone structures. In addition to cross-hatched pattern burnished sherds, large subterranean storage jars (Proulx 1968: 92; Squier 1877: 208-209) and the masonry technique of alternating layers of large and small split fieldstone (Proulx 1968: 91) are to be seen here.

In the pampa below and to the northeast of it are to be found the remains of the non-ceremonial part of this late Early Horizon center. The stone foundation of a hilltop quadrangular structure overlooks a segment of a stone wall (ibid.: 89), perhaps all that is left of a megalithic compound. To the northeast is a small earthen mound set upon a meter-high earthen platform. This mound associates with what may be a plaza and about a hundred meters to the west of the mound there is a larger stone-faced platform (Proulx 1973: 198-199). A final stone-walled structure, long and narrow and divided into four compartments of roughly equal size, is to be found about 200 meters to the west of the platform. Typ-

ical late Early Horizon pottery was found over a wide area of this pampa.

Quisque is an excellent match for Kushipampa and Paredones in terms of the architectural techniques employed in its construction. Like the two compounds, Quisque was built by putting down alternate layers of large and small split fieldstone. Small stones were used to fill in spaces and very large well-cut stones were then used to define corners and entryways (Proulx 1973: Plate 23B: 279). To cement the late Early Horizon dating for Quisque, cross-hatched pattern burnished decorated sherds were found there in 1980.

The same cannot be said for the ruins of Alpacote situated on the valley floor below Quisque. This compound was constructed of rounded river cobbles set in mud (Kosok 1965: 206; Proulx 1968: 82-83; Plan 7) and, though ceramic evidence is lacking, the use of this construction technique sets Alpacote apart from the other sites being considered here. Hence, the assessment that this site is post-Early Horizon in date (Mejia X. 1963; Proulx 1973: 117) appears to be correct.

It is conceivable that the sites of Pañamarca, Huaca Partida and, possibly, the second huaca of Cerro Blanco are parts of a late Early Horizon center in the middle valley. Pañamarca is dominated by an Early Intermediate Period (Moche) mud brick ceremonial center, but there is also a smaller stone structure which is the focus of interest here. Though this latter structure has been argued to be Middle Horizon in date (Schaedel 1951), the fact that its walls were constructed of large and small split fieldstone put down in alternating layers and the fact that its corners and entryways were defined by large blocks of well-cut stone supports the counter-argument that it is late Early Horizon in date. This latter argument receives additional support from the fact

that a sherd decorated with cross-hatched pattern burnishing was collected here in 1967 (Donald Proulx, personal communication).

Unfortunately, very little in the way of surface artifacts have been found at the site of Huaca Partida and none that have been found are distinctive of the late Early Horizon. This large earthen platform mound receives its name by virtue of the fact that a deep trench has been excavated into its summit and this has created the illusion that there are two mounds (Proulx 1973: 152-153; Figure 34). Ceremonial in nature (ibid.: 152), this artificial mound was faced with distinctive alternating layers of large and small split fieldstone with small stones being used to fill the gaps (ibid.: Plate 24a: 281).

As for the site of Cerro Blanco, it is composed of a larger and a smaller mound and this is considered to be an example of an Initial Period form of ceremonial architecture (Pozorski 1976: 242-243). Evidence for a late Early Horizon occupation of the larger of these two mounds, then, serves to document a later use of this mound. This evidence consists of large blocks of well-cut stone on the down valley side of the mound and distinctive pottery discovered atop the mound in 1981.

To conclude, a number of megalithic ruins in the Nepeña Valley have been discussed. These ruins are characterized by specific masonry techniques and by pottery decorated with cross-hatched pattern burnishing. This particular form of pattern burnishing and pattern burnishing in general have been shown to be horizon techniques indicative of the late Early Horizon-early Early Intermediate Period time frame. In Nepeña at this time, valley settlement favored the Moro Pocket and the Salitre area immediately adjacent to it in the upper valley. There, five centers composed of spatially distinct ceremonial and non-ceremonial parts were constructed.⁴

Footnotes

- ¹ In accordance with the Instituto Nacional de Cultura, Centro de Investigación y Restauración de Bienes Monumentales, Lima, Perú, sites in the Nepeña Valley have been numbered consecutively with the prefix PV31 (Peruvian Valley 31). For convenience sake, sites are so numbered without this prefix on Figure 2.
- ² According to Steven Wegner, while no pattern burnished pottery has come to light during his recent excavations at the site of Balcon de Judas, he did see a single sherd decorated with cross-hatched pattern burnishing in the collection made by Wendell C. Bennett in 1938 and which is housed at the American Museum of Natural History, New York.
- ³ Stone-lined cists, mortuary in function, are reported by Gary Vescelius to be a new feature characteristic of the Huaylas (Huaras) phase in the Callejon de Huaylas (Lanning 1965). In addition, stone-lined cists are a feature of the Puerto Moorin phase sites in the Viru Valley (Willey 1953).
- ⁴ Research during the year August 1980-August 1981 was conducted under the auspices of Credenciales No. 112-80-DTCPMC and 029-81-D-OMA issued by the Instituto Nacional de Cultura. Funding for field research was provided by a Fulbright-Hays grant for graduate study abroad and by a Sigma Xi grant-in-aid of research.

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Huaca del Loro revisited: the Nasca-Huarpa connection

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In her monumental study, "Style and Time in the Middle Horizon," Dorothy Menzel (1964: 8-10) pointed out that the forms and decoration of some Huarpa ceramics from Ayacucho resemble those of Early Intermediate Period 7 and 8 on the adjacent south coast, and that since Nasca 7 and 8 represent temporal differences, the presence of these interregional crossties between coast and highlands suggest that future study could make further Huarpa subdivision possible. Her observations suggest a corollary hypothesis: if specific Nasca 7 and 8 stylistic elements are found incorporated into Huarpa pottery, might we not expect to find some trace of this Nasca-Huarpa connection on the south coast as a result of reciprocal complementary influence from Ayacucho? This paper summarizes some of the evidence implying that this hypothesis may be supported on the basis of our present knowledge of both areas. We may begin with the findings of William Duncan Strong (1957) at the site of Huaca del Loro in the Nasca drainage.

THE SITE OF HUACA DEL LORO

Huaca del Loro lies on a flat stretch of the north bank of the middle course of the Tunga river, the southernmost tributary of the Nasca drainage system (Fig. 1a). Its main features are a western and an eastern multiroomed compound, while a short distance to the north, on the south side of a rocky spur, there is a cemetery containing many looted tombs (Strong 1957: Fig. 16). Attached to the southeastern

corner of the western compound is a round structure which Strong called a temple, a word which in this paper will be spelled with a capital "T," to remind us that there is no reason to believe that its functions were purely ceremonial. Strong's expedition excavated this Temple, a midden, one habitation room located in the northwestern corner of the western compound, and some other features which need not concern us here.

Architecture

The Temple's architecture warrants a reasonably detailed description (Fig. 2). The central circular wall, Wall A, measures about 10.25 meters in outside diameter and is uniformly one meter thick. It is built of rough, angular stones set in adobe mortar, has been plastered and replastered several times, and is painted faded red or pink. Walls B, G, H, L, N, and O are also made of this pirka masonry, but they are not plastered, although Wall F, which is not made of stone, is both plastered and painted. The remaining walls are made of adobes, either loaf-shaped or in the form of tapered, flattened cylinders.

The patterns of association between these various building materials and the wall abutments suggest the order of construction of the different walls. The central circle and most of its contingent walls were built first. D, F, and I came next, and C, E, J, K, L, and Q were built last. The walls of the habitation room combined stone and adobe: its west and south walls are made of stone set in adobe, while its northern and eastern ones are of adobe on their inner surfaces, but are faced with stone on the outside. If these differences are of chronological significance, then the Temple must have been built in the first period of construction of the site.

Room ABCD contains two features of interest. The first of these is

a pair of deep bins created by building a narrow (35 cm) wall perpendicular to Wall Q (Fig. 3a), and then placing across the end of this auxiliary wall two molded adobe slabs whose upper ends are thickened and curled outward like a balustrade (Fig. 3b). Rose Lilien Solecki's fieldnotes record that Strong remarked that he had seen something similar at Pachacamac. West of Wall Q were found many remains of guinea pigs as well as a reed enclosure which, say the notes, "might have been guinea pig pens." Wall C is only about one meter high, substantially lower than Walls B and D. Between C and the Temple, the space is filled with sand, the upper half of which is flecked with charcoal and the remains of fires (Fig. 3c).

The other built-in feature of Room ABCD consists of two concentric rings of moulded adobe which are attached to the flat top of an engaged pillar built of adobe and extending into the room from Wall C (Fig. 3d). The function, antecedents, and significance of this feature are unknown.

Two large pieces of fossilized whalebone were found north of Wall A (Fig. 2).

The shape and dimensions of the round Temple and the extensive use of stone in its construction stamp this building, and the whole site, as the work of highland builders. Round stone buildings are highly characteristic of the sierra, but not of the coast. In fact, the Temple architecture alone suggests the actual presence of highland builders, perhaps even a highland colony, in the Nasca drainage.

Dating Huace del Loro

The relative date of occupation of the site can be estimated by the stylistic characteristics of the pottery recovered from the midden, the Temple, and the habitation room. The two lowest layers of the seven-

level, 1.6 meter deep midden produced decorated ceramics of Early Intermediate Period 7, or Nasca 7. For example, a trophy head design (Fig. 4a) from Level 7, the bottom of the midden, is identical to one found at Chaviña (Lothrop and Mahler 1957: Plate VIIc) and identified by Dorothy Menzel (personal communication) as "quite early Nasca 7." Another sherd from Level 7 is decorated with a design of linked diamonds (Fig. 4b), while a handful of sherds from the Temple also date from Nasca 7. No example of any style earlier than Nasca 7 was found at Huaca del Loro. This implies that the site was first occupied no earlier than Nasca 7. Unfortunately, this chronological floor under the site cannot be dated with any more precision. Nasca 7 has been subdivided into three consecutive subphases, A, B, and C (Menzel 1977: Chronological Table and personal communication), but the specific criteria for Nasca 7 subphase assignment are at present unpublished and hence inaccessible.

All of the other identifiable pottery found at the site dates from either Nasca 8 or Nasca 9. The former has not been subdivided, but distinctions have been drawn between Nasca 9A and Nasca 9B (Menzel 1977: Chronological Table). Again, these differences have never been spelled out. Nevertheless, Dorothy Menzel very kindly identified the general phase assignments of each of the pieces published in Strong's report and some of those illustrated elsewhere in the literature. We must now be content to correlate Huaca del Loro ceramics with Nasca 7, Nasca 8, and Nasca 9 (Table 1), although finer temporal distinctions are essential because they can help to clarify our understanding of processes of sociocultural change before, during, and after the crucial transition from the Early Intermediate Period to the Middle Horizon.

In general, Nasca 8 ceramic decoration consists of geometric or iconographic motifs derived from Nasca 7 (Strong 1957: Fig. 15, C-J; Fig. 17, A-D) (Fig. 4c, d; Fig. 5a). One vessel in a Nasca 8 gravelot that Strong excavated at Cahuachi, the ancient Nasca capitol (Fig. 1a), is decorated with a single large zigzag framed between two straight parallel lines (Strong 1957: Fig. 15 C). This motif is of the utmost value for tracing relationships between the coast and the highlands between Nasca 7 and Middle Horizon 1. Much of the Nasca 8 pottery from Huaca del Loro also contains this zigzag motif, which may appear as a set of parallel straight lines arranged in bunches as a series of alternating diagonals (Fig. 5b), or as a single large zigzag encircling the rimband of a vessel, dividing single repeated motifs derived from Nasca 7 (Fig. 5c, d). These specimens contrast with others from Nasca 8 which derive from Nasca 7 but which lack the zigzag framework (Fig. 4c, d; Fig. 5a).

As predicted, Nasca 9 ceramics from Huaca del Loro show similarities amounting to identities with Middle Horizon 1 pottery from Ayacucho. It is still impossible to say if the Huaca del Loro style which Strong (1957: Fig. 17, G-I) called "Tunga Polychrome" is to be placed in Chakipampa A or B, since these two successive Ayacucho substyles are not clearly differentiated in the literature. Huaca del Loro Nasca 9 trophy heads (Fig. 6b) are nearly identical to those in Ayacucho. Curiously, trophy heads are found in Nasca 7 and Nasca 9, but not in Nasca 8. On the other hand, some Nasca 8 iconographic designs are shown recumbent, with the head thrown back, a single fullface eye, and the mouth open and touching the upper edge of the rimband (Fig. 4c), exactly the pose of a trophy head.

Significance of Huaca del Loro

Is Huaca del Loro unique on the south coast? Strong (1957: 38-40) reported that

"...A site similar to this, and marked by the same pottery types was briefly noted on the lower Nazca Grande at Tres Palos II. Here occurs a similar circular unexcavated temple of unworked angular stones, set in adobe and plastered on the outside. It occurred at the edge of a large cementery containing looted tombs similar to those at Huaca del Loro."

Of equal interest are the fieldnotes taken by Ronald Olson at Pacheco in 1930. He records that at Pacheco he discovered a round stone structure (Fig. 1b) that was located near the rectangular underground chambers which were the scene of ritual sacrifices and smashing of Middle Horizon 1B Robles Moqo pottery (Menzel 1964: 8).

As noted, round structures are common in the sierra and so are stone structures, but these are rare on the south coast during the Early Intermediate Period. In Ayacucho, a large circular structure dominates the center of the east plaza at the site of Nawim Pukio, a large, complex Huarpa site which may have been a regional capitol of a Huarpa Early Intermediate Period state (Lumbreras 1981: 183; Fig. 7-22). Another masonry circle of about the same diameter as Wall A at Huaca del Loro has been excavated in the Moraduchayuk sector at Huari. It dates before Middle Horizon 1B, and not far away are cut-stone lined chambers which are also painted red (William H. Isbell, personal communication). So the existence of probably two, and possibly three such structures in the Nasca drainage during Nasca 8 or even Nasca 7 reinforces a suspicion that Huarpa people may have appeared on the south coast in the latter part of the Early Intermediate Period, building colonies at several strategically located points on Nascan rivers, which are natural

arteries of communication with the highlands to the east. This raises the possibility that at Huaca del Loro, Pacheco, and Tres Palos II, we may be dealing with a Huarpa expansion that antedates and develops into the more widespread expansionism of the Huari Period.

HUARPA, NASCA, AND THE TRANSITION TO THE MIDDLE HORIZON

By the end of the Early Intermediate Period, the Huarpa population of the Ayacucho valley was large and dense, occupying more than 300 sites, a larger number than is recorded for any other local occupation and about 10 times larger than those recorded for the ensuing Huari Period (MacNeish 1981: Table 16; Table 18). Many if not all Huarpa sites are very small, but some are immense, including those at Nawim Pukio, Acuchimay, Conchopata, Churukana, and at Huari itself, where Huarpa ceramics consistently underlie Huari pottery. In fact, it is possible that the total Huarpa population was not much smaller than that of Huari. The heavy demands of this populace upon subsistence resources were mitigated by complex intra-site systems of underground canals and cisterns and by elaborate networks of stone-reinforced agricultural terraces, many of them in places which are totally arid today (Lumbreras 1974; 1980).

At present there is a Huarpa ceramic chronology which is generally correct (Lumbreras 1960a: 187-189; 1960b: 75-80; 1974: 133-138; Benevides 1971). If this temporal framework were a little more refined, we might be able to date the times of occupation and abandonment of many Huarpa sites and to identify other significant prehistoric events which are at present unrecognizable. Not only might this illuminate processes of change during the Huarpa Period, but it might also throw light upon

the Huari phenomenon itself.

In 1980, I was able to visit Ayacucho, where I examined a collection of several hundred Huarpa sherds collected from seven Huarpa sites: Acuchimay (Eb2), Conchopata (Eb3), Nawim Pukio (Eb21), Sympapata (Eb135), Tablapampa (Eb447), La Vega (Eb446), and Units 212 and 213 at Huari (Eb4). A preliminary study suggests the existence of five or perhaps more separate stylistic units which with further study could be linked and expanded into a well defined and detailed ceramic sequence with considerable internal consistency and coherence (Table 1, Table 2). When more associations are known, some of these units may prove to be contemporary; others may turn out to be of different relative age without any temporal overlap. The following is a necessarily short description of a few of the key features defining these Huarpa or Huarpa-related units. The proposed seriation is at present based not upon the heavy Huarpa urn-like forms, but only upon smaller, thinner vessels which can be related to Nasca ceramics. It appears that Nasca urns were not only conservative, but never incorporated any Nasca 7 or Nasca 8 elements.

Huarpa Unit 1 consists of vessels painted with solid rectangles and narrow parallel framing lines painted in black on a white slip (Fig. 6c). This is the classic Huarpa Black on White as originally defined by Rowe, Collier, and Willey (1953).

Huarpa 2 is marked by black and white vessels that contain stylistic references to Nasca 7 styles of the south coast, as Menzel suggested. These foreign elements, for example spirals, hooks, and dots (Fig. 6d), but not what Menzel (1964: 8-10) calls "special patterns of zigzag designs," come from Nasca 7, where they are also painted in

black. The large zigzag does not seem to occur in Nasca 7 as far as one can tell. However, the large zigzag used to divide major zones of black on white ceramic decoration is used in Huarpa 2 (Fig. 7a, b, c), and it also occurs in Huancayo in Huacrapukio A, a phase that comes at the end of the Early Intermediate and corresponds to Huarpa, to which it bears many other resemblances (Browman 1970) (Fig. 7d).

Huarpa Unit 3 adds red paint to the previous black and white, creating what Lumbreras, Benevides, and others call Huarpa Tricolor. This unit may turn out to consist of two subunits, each of which may be of slightly different age. The first, 3A, uses solid rectangles painted in red and framed in narrow, parallel black lines. This is a kind of reproduction of Huarpa Black on White, carried out in a three color scheme (Fig. 7e, f; Fig. 8a). A second subunit, 3B, is related to and derived from Unit 2 through its use of the large organizing zigzag and of typical Nasca 7 design layout (Fig. 8b, c, d).

A fourth Huarpa unit simply adds gray to Unit 3. Evidently this addition represents increasing Nasca infiltration of the Huarpa style (Fig. 8e-h).

Unit 5 is not a Huarpa unit, but since it is closely related to and derived from Nasca 8, it may well be contemporary with Unit 4. It consists of those vessels belonging to the styles that Lumbreras and Benevides call variously "Pongora," "Totorá," and "Tinajera." These styles represent garbled but recognizable versions of Nasca 8, with their black bottoms, panelled design areas, choice of colors, and the reduced and highly simplified motifs of Nasca 8, modified still farther away from the original through their translation from coast to highlands. One Pongora vessel has the scattered black dots of Nasca 7

(Fig. 9a); another may be an early version of the "Ayacucho Serpent" (Fig. 9b).

Unit 6 dates from Middle Horizon 1A, but contains many diluted Huarpa traits. This period is a ceramically complex one, emblematic of an era when Huari was still coming into being and a great many factors were boiling around in the evolutionary vortex that centered in Ayacucho. Huarpa survivals appear in the Middle Horizon 1A style that Bennett (1953: 85) called "Acuchimay Buff Based Polychrome" (Fig. 10a, b), whose black zigzag bands are seen against various background colors, including gray, yellow, orange, and faded red. These zigzags bridge a transition from horizontal zigzags to black-painted chevron bands (Fig. 10c), since chevrons are simply disconnected zigs or zags stacked singly in a row. The black and white chevrons on Nasca Middle Horizon ceramics may thus derive from Huarpa antecedents and it should be noted that this tradition lasted until Middle Horizon 4 on the south coast, long after Huari had collapsed.

CONCLUSIONS

For the present we might conclude that Huaca del Loro and other Early Intermediate Period sites with highland architecture suggest an incursion from the sierra one or even two phases before the beginning of the Middle Horizon as presently defined. Perhaps this intrusion may be related to the contemporary appearance of Nasca 7 elements in Huarpa ceramic styles in Ayacucho. This might be regarded as a sort of dress rehearsal for the era of Huari expansion that follows Huarpa, indicating that the emergence of Huari dominance may not have been as abrupt an upheaval as has previously been conjectured. Certainly a Huarpa arrival

in the Nasca-Ica area, by intensifying the highland-coastal link, could have built a wide pre-Huari economic and geopolitical base that introduced a vital factor of verticality into Ayacucho culture. We might also look around for a model or models to guide us as we search for the proximate conditions that accompanied some striking evolutionary changes which are at present very imperfectly understood.

Footnotes

1. This paper owes its existence to the generosity and kindness of many people. Rose Lilien Solecki and the late Robert L. Stigler, Jr. provided access to their fieldnotes, photographs, and personal recollections, as well as to the 1952-1953 notes and collections of William Duncan Strong. William H. Isbell, the members of his Huari Urban Prehistory Project, and my colleagues at the Ceramiteca at the Universidad Nacional de San Cristobal de Huamanga introduced me to the archaeology of Ayacucho. Dorothy Menzel very kindly identified various Nasca ceramics illustrated in the literature. Craig Morris permitted me to examine and copy the 1930 fieldnotes taken by Ronald Olson which are part of the archives of the American Museum of Natural History. Edward P. Lanning directed the graduate seminar for which my original study of Huaca del Loro was undertaken. The drawings were made by Tore Fredrik Paulsen.

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THE NASCA-HUARPA CONNECTION

NASCA			AYACUCHO		
Strong 1957		Menzel 1964	Paulsen 1965	Paulsen 1981	Menzel 1964
Early Inca (Epigonal)	Middle Horizon	Epigonal	Huaca del Loro 3	Huarpa 5	
		Pinilla			
Atarco B		Viñaque			
Atarco A					
Nasca 9B*					Robles Moqo Chakipampa B
Coast Tia- huanaco		Nasca 9A*			Conchopata Chakipampa A
Late Nazca	C. 550 A.D.				
	Early Intermediate Period	Nasca 8	Huaca del Loro 2	Huarpa 4	Huarpa
		Nasca 7C*	Huaca del Loro 1	Huarpa 3	
		Nasca 7B*		Huarpa 2	
		Nasca 7A*		Huarpa 1	

(* for Nasca 7 and Nasca 9 subdivisions, see Menzel 1977, Chronological Table)

Table 1.

CORRELATIONS OF PROPOSED HUARPA UNITS

Ica-Nasca Sequence	Huarpa Unit	Huarpa		Nasca derived	Tiahuanaco derived
		Heavy jars	Smaller vessels		
Epigonal					
Pinilla					
Atarco					
Nasca 9B	6?		B/W chevrons	Chakipampa B	Robles Moqo
Nasca 9A	5	Kumun Senqa	polychrome zigzag	Chakipampa A	Conchopata
C. 550 A.D.					
Nasca 8	4	?	Tricolor/Gray	Totora Pongora Tinajera	
Nasca 7C	3	Tricolor	Tricolor ^B / _A ?		
Nasca 7B	2	Black/White	B/W plus Nasca 7		
Nasca 7A	1	Black/White	Black/White		

Table 2.

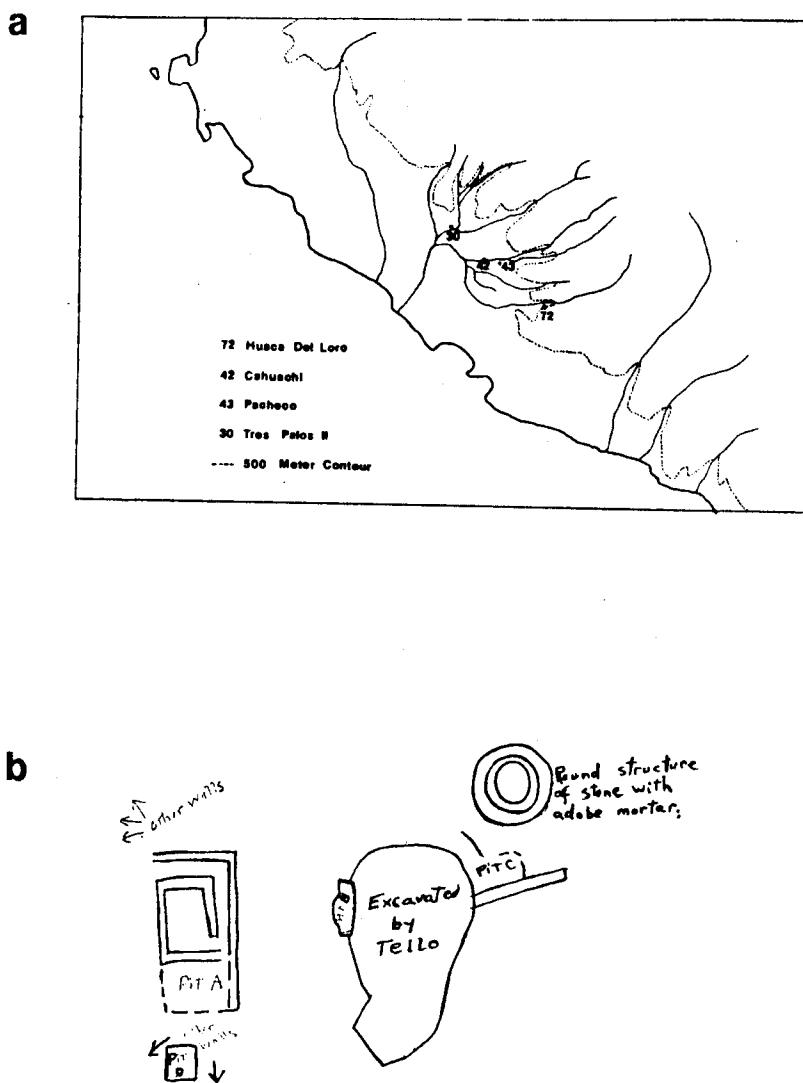


Figure 1.

Sites in the Nasca drainage.

- Map of Nasca drainage showing sites mentioned in text (Strong, 1957).
- Sketch plan of Pacheco excavations (Olson, 1930).

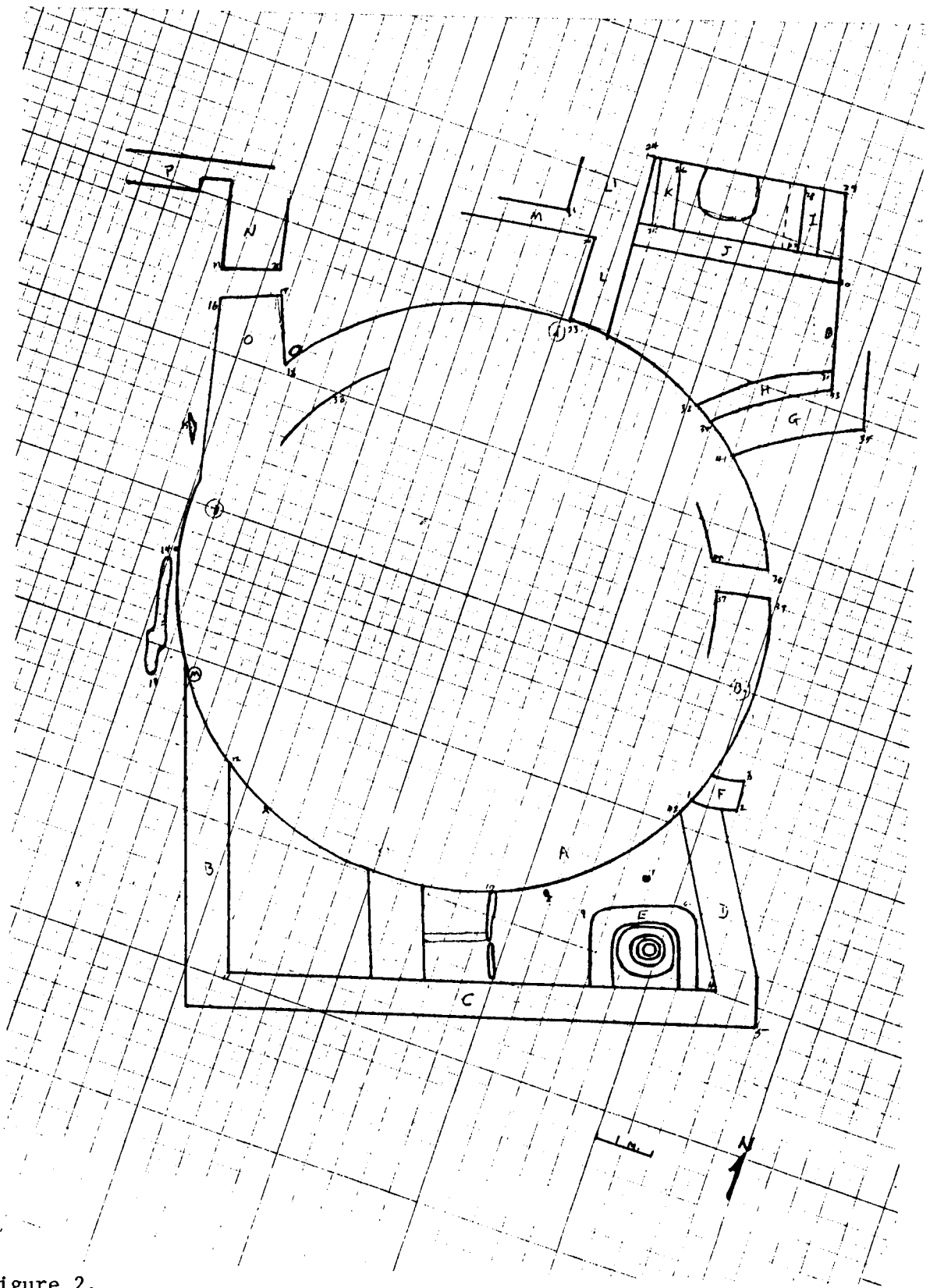


Figure 2.
Plan of Huaca del Loro Temple (field notes of Rose Lilien Solecki, 1952).

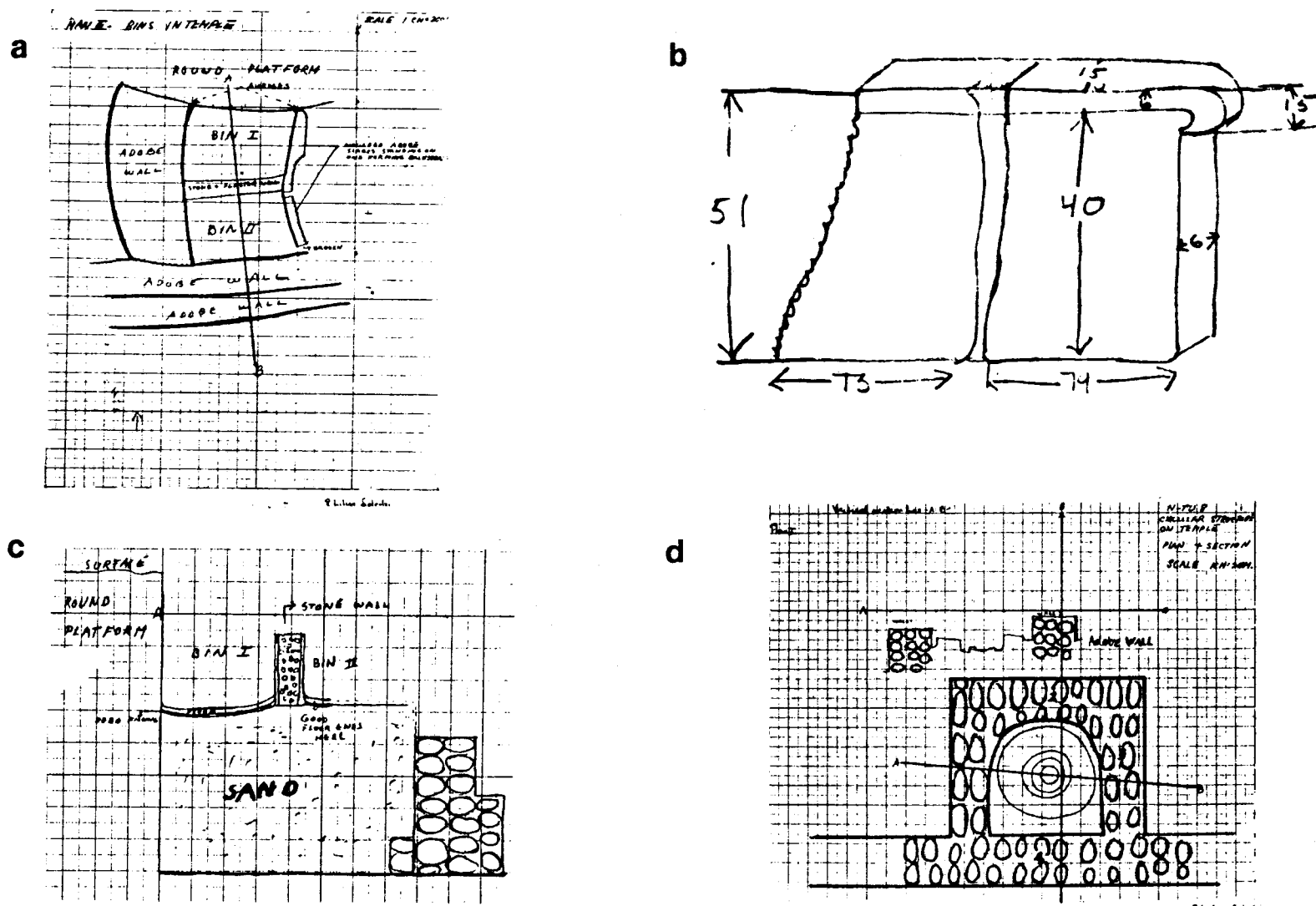


Figure 3.
Details of Room ABCD, Huaca del Loro Temple (field notes of Rose Lilien Solecki).

- Top view of bins.
- Side view of bins.
- Section through bins and Wall A.
- Plan and section of concentric adobe rings.

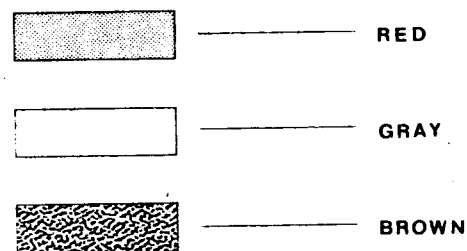
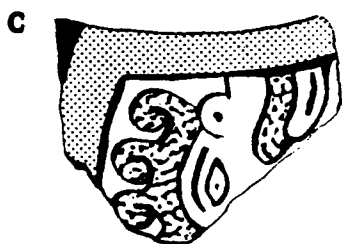
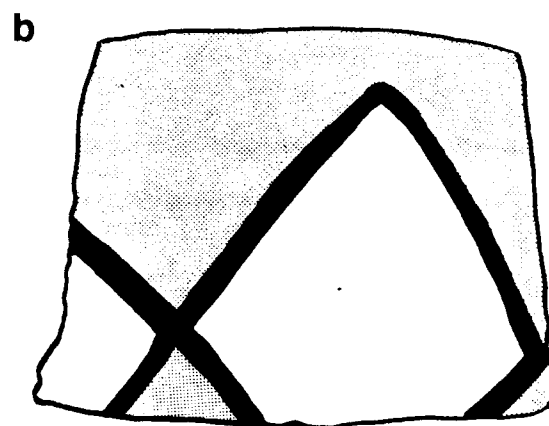
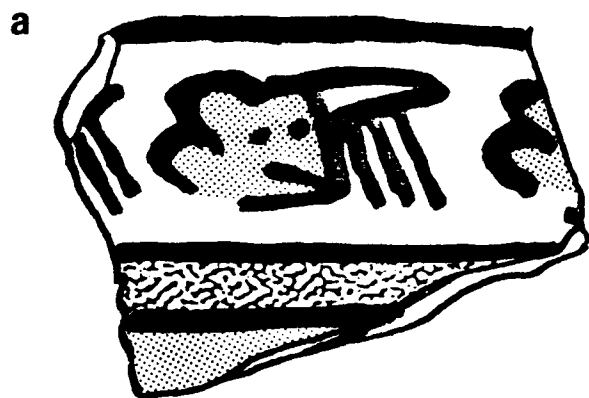


Figure 4.

Huaca del Loro ceramics.

- a. Nasca 7 trophy head, 3 cm. high.
- b. Nasca 7 linked diamonds, 5.5 cm. high.
- c. Nasca 8 iconographic motif in trophy head pose, 4.5 cm. high.
- d. Nasca 8 iconographic motif, 4.5 cm. high.

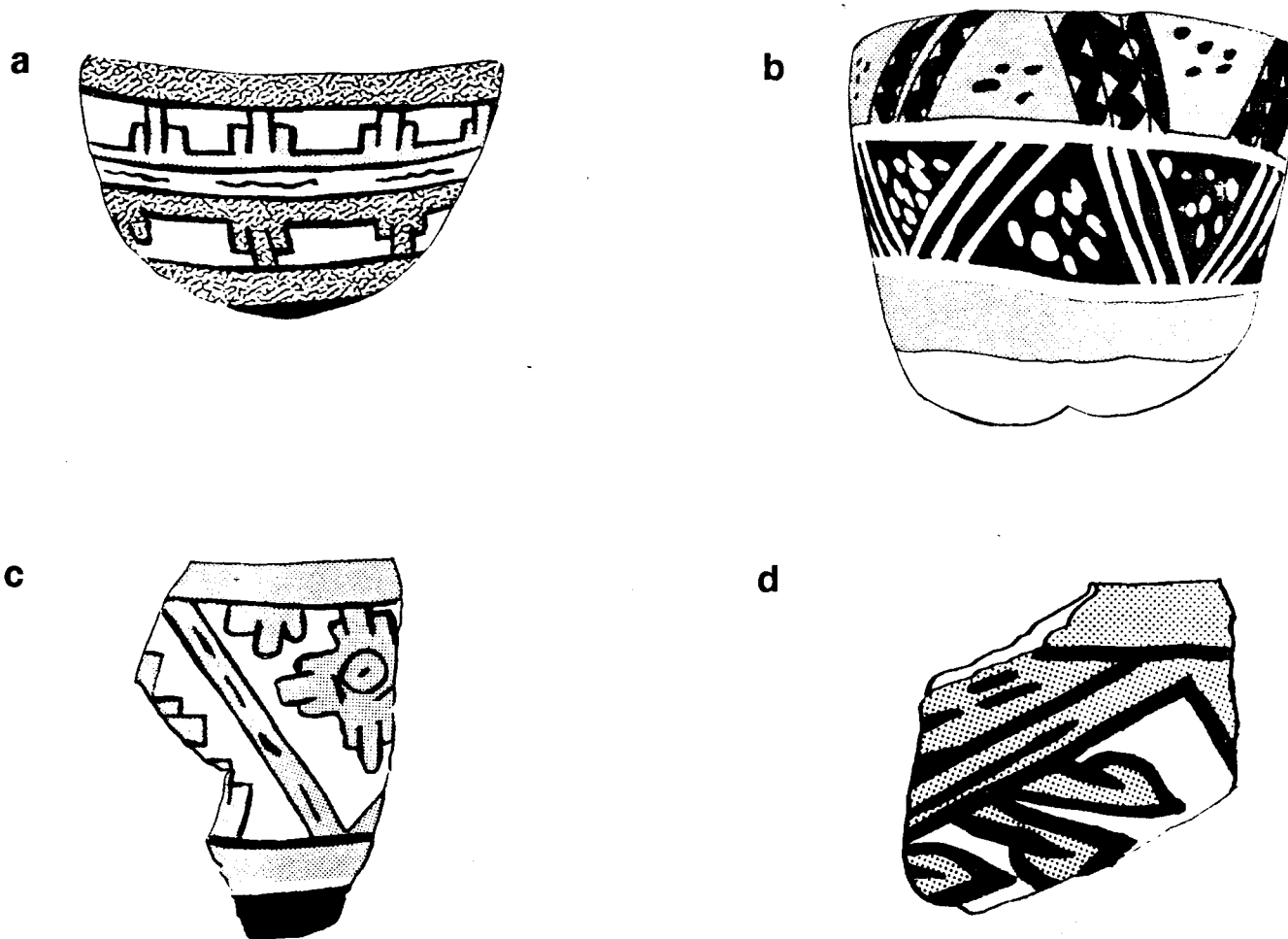


Figure 5.

Huaca del Loro ceramics.

- a. Nasca 8 rays with rectangular ends, 9.5 cm. high.
- b. Nasca 8 stacked bands with groups of diagonal lines and dots, 9 cm. high.
- c. Nasca 8 large zigzag separating repeated single motifs, 6 cm. high.
- d. Nasca 8 large zigzags separating groups of rays with pointed ends, 5 cm. high.

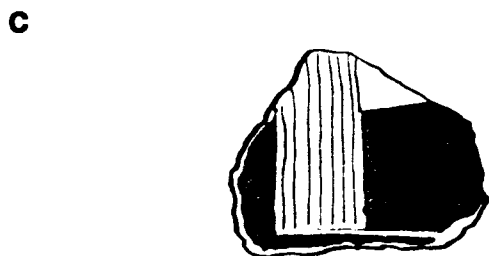
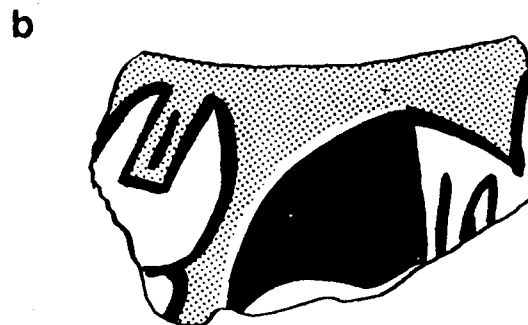
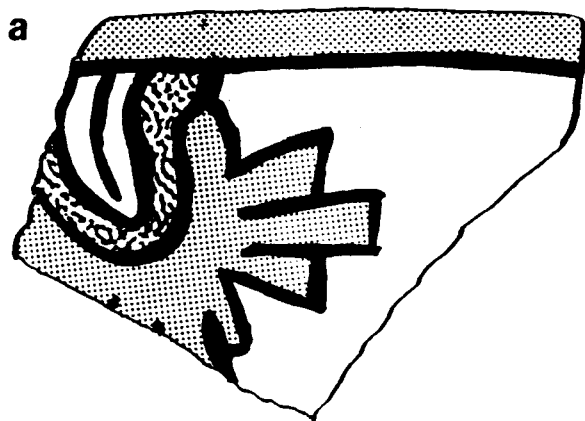


Figure 6.

Huaca del Loro and Huarpa ceramics.

- a. Nasca 9 iconographic motif, 5.5 cm. high.
- b. Nasca 9 trophy heads, 5.5 cm. high.
- c. Huarpa 1, Nawim Pukyo (Eb21), 4.5 cm. high.
- d. Huarpa 2, Nawim Pukyo (Eb21), 4.5 cm. high.

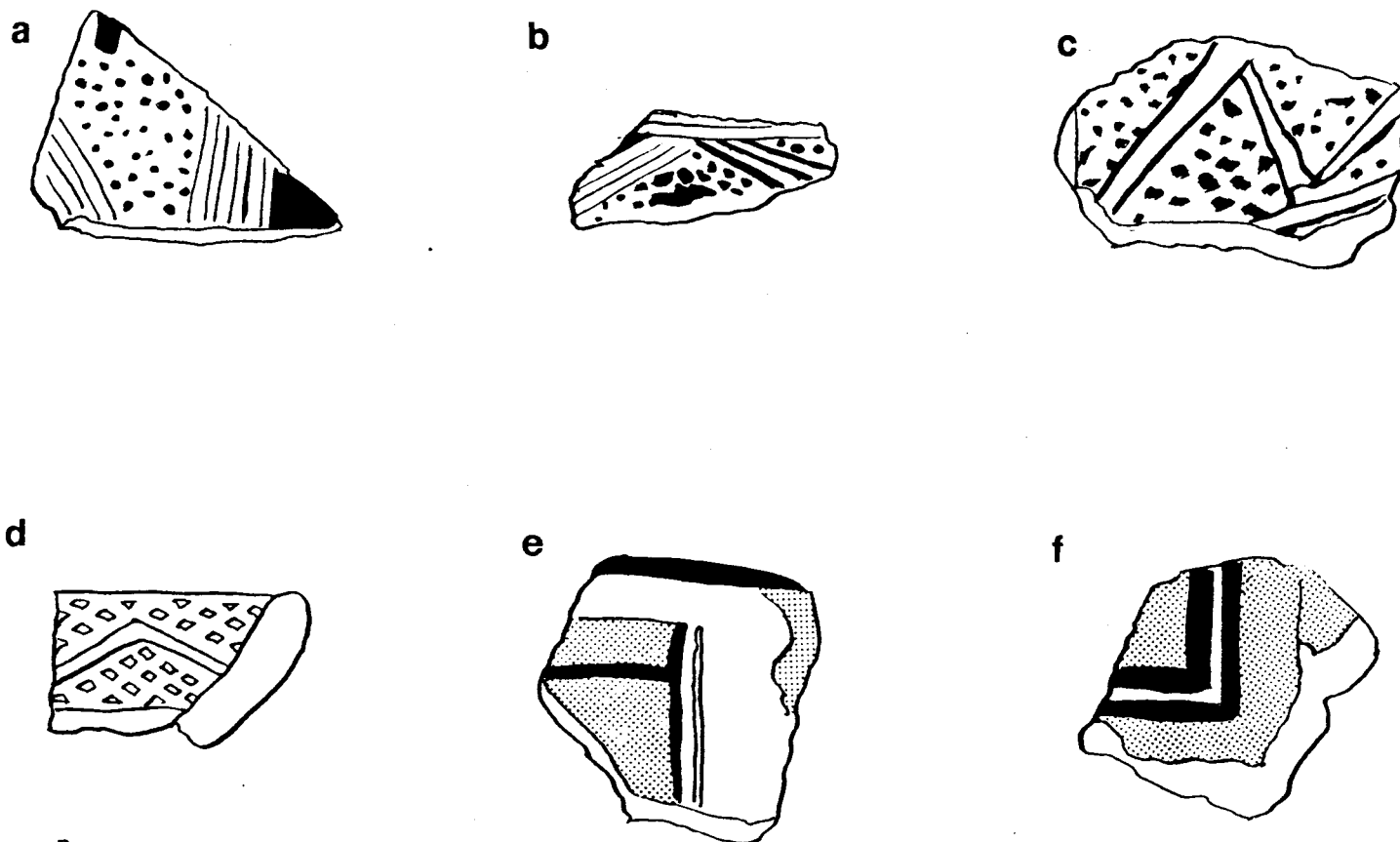


Figure 7.

Huarpa and Huancayo ceramics with zigzag motifs.

- a. Huarpa 2, Conchopata (Eb3), 3 cm. high.
- b. Huarpa 2, Unidad 213, Huari (Eb4), 2.5 cm. high.
- c. Huarpa 2, Unidad 213, Huari (Eb4), 3 cm. high.
- d. Huacrapukio, Huancayo (Browman, 1970), 3 cm. high.
- e. Huarpa 3A, Tablapampa (Eb447), 6 cm. high.
- f. Huarpa 3A, Tablapampa (Eb447), 4 cm. high.

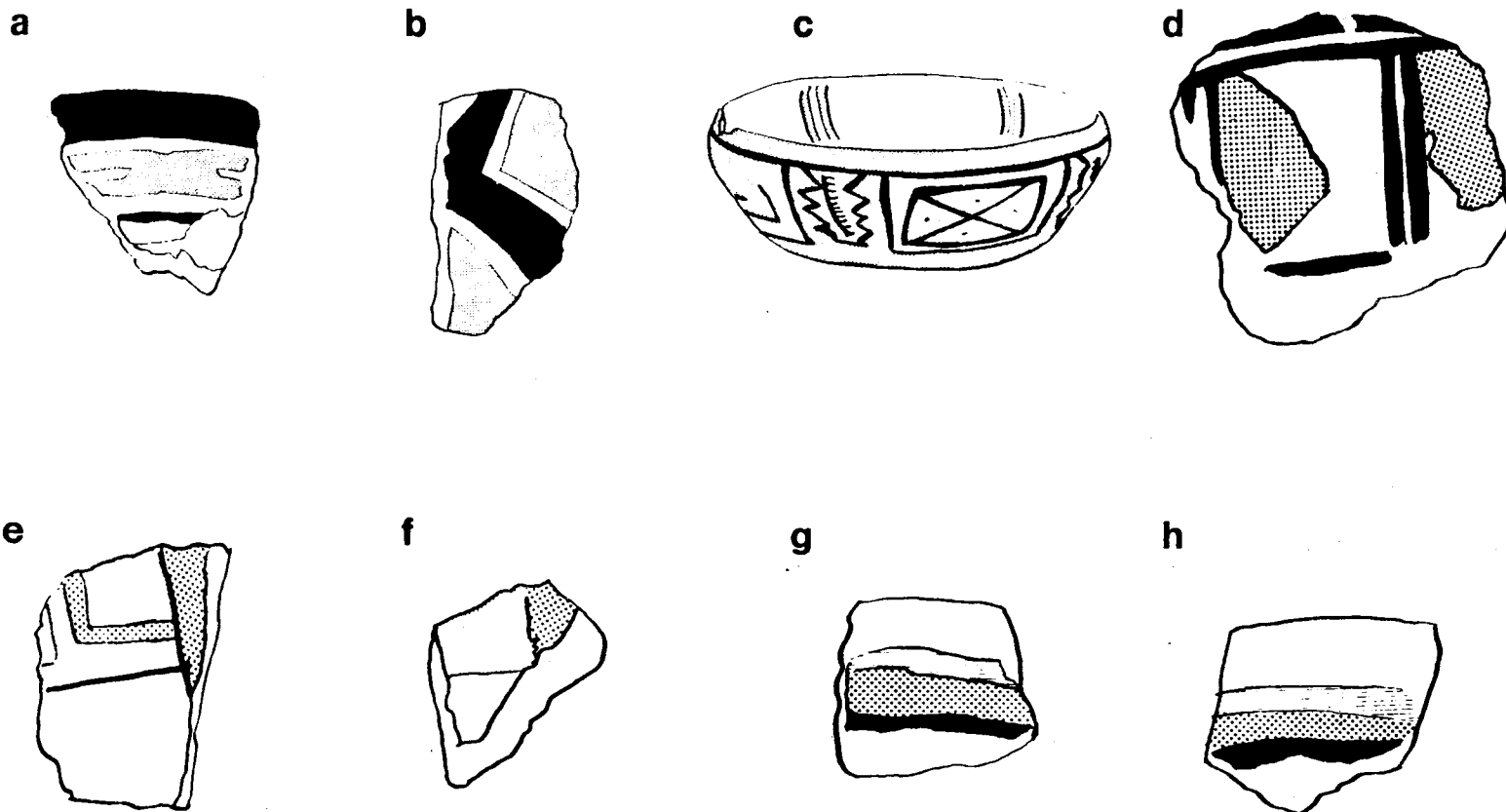


Figure 8.
Huarpa ceramics.

- a. Huarpa 3A, Tablapampa (Eb447), 6 cm. high.
- b. Huarpa 3A, Tablapampa (Eb447), 4 cm. high.
- c. Huarpa 3B, Sympapata (Eb135), 4 cm. high.
- d. Huarpa 3B, Tablapampa (Eb447), 4 cm. high.
- e. Huarpa 4, Tablapampa (Eb447), 3 cm. high.
- f. Huarpa 4, Tablapampa (Eb447), 3 cm. high.
- g. Huarpa 4, Tablapampa (Eb447), 3 cm. high.

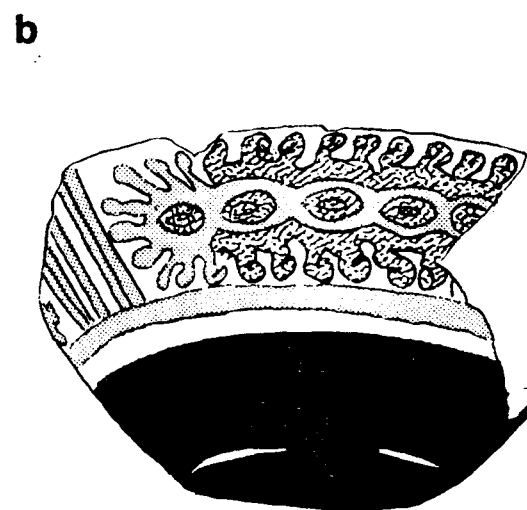
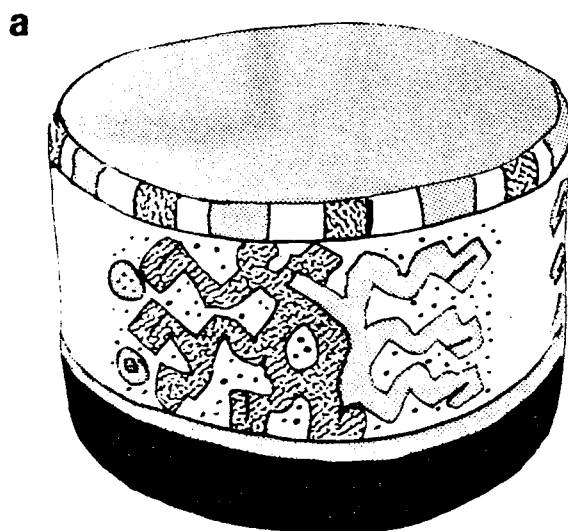


Figure 9.

Nasca 8 derived Ayacucho ceramics.

- a. Unit 5 ("Pongora"), Conchopata (Eb3), 7.5 cm. high.
- b. Unit 5 ("Pongora"), Conchopata (Eb3), 10 cm. high.

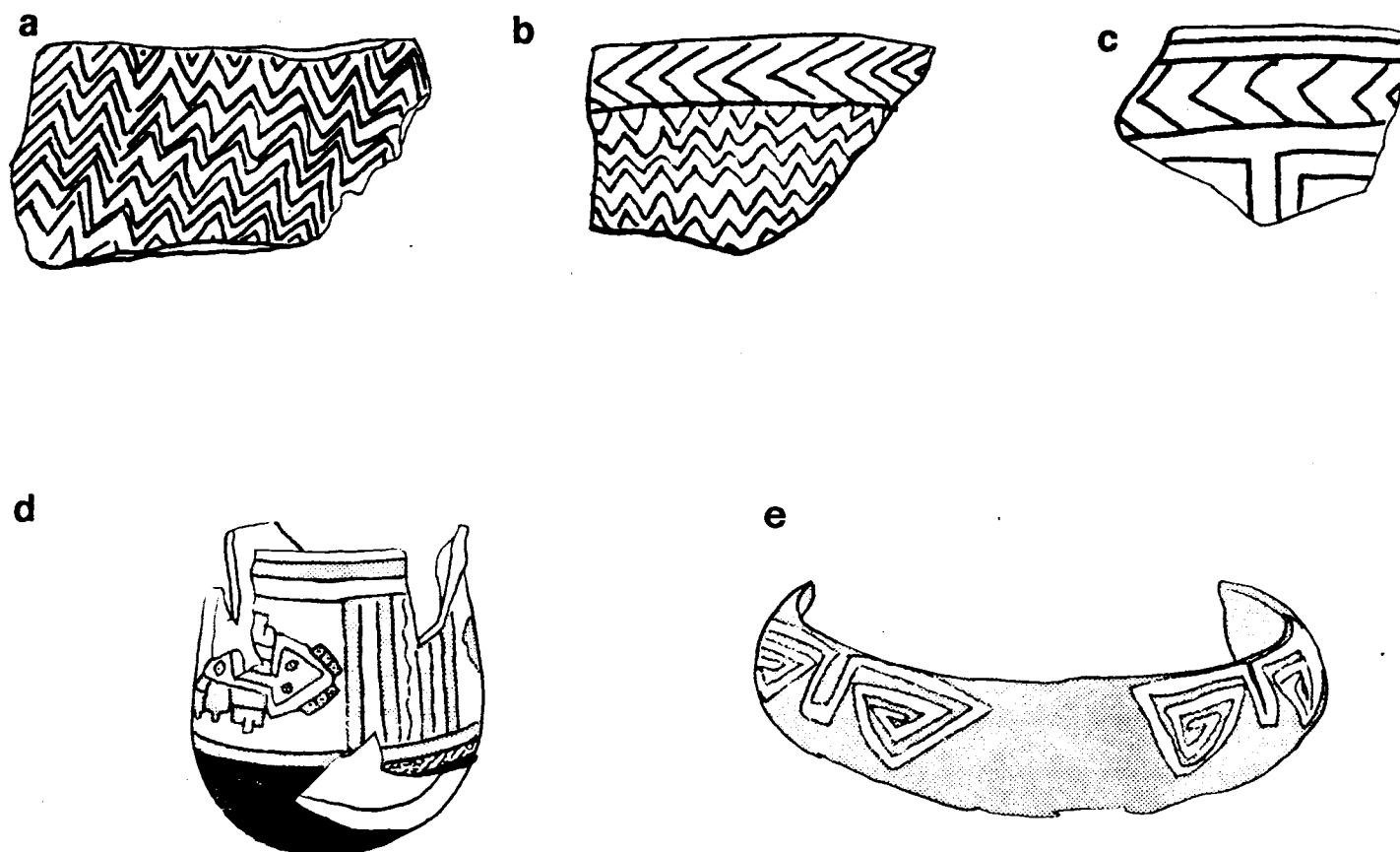


Figure 10.

Ayacucho ceramics of Middle Horizon 1.

- a. Chakipampa A (Bennett, 1953, Fig. 19 C).
- b. Chakipampa A (Bennett, 1953, Fig. 19 A).
- c. Chakipampa (Bennett, 1953, Fig. 19 B).
- d. Okros, Conchopata (Eb3), 9 cm. high.
- e. Cruz Pata, Conchopata (Eb3), 4 cm. high.

Spatial Patterning and the Function of a
Huari Architectural Compound

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In 1977 and 1979-81 archaeological research was carried out in the Moraduchayuc sector of Huari, which is located near the center of the architectural core of the site. The Moraduchayuc sector, which covers an area of about half a hectare, was wall trenched to reveal the architectural plan. This revealed most of a walled architectural compound and portions of adjacent architecture (Figure 1). The compound covers an area of about a quarter of a hectare, and is bounded on the north, east and south sides by what appear to be walled streets. Access to the compound is limited to a main entrance in the southwest corner and two secondary entrances on the north and north-east sides.

The internal structure and composition of the compound can be illustrated by a graph (Figure 2), in which the nodes represent rooms and the edges represent the access between rooms. The rooms within the compound are of two types: large, unroofed courtyard areas (which are represented on the graph as squares); and long, narrow, multi-story rooms, which I will refer to as corridors (corridors are represented by circles on the graph). The graph illustrates that the compound is composed of at least seven virtually identical clusters of rooms, each consisting of a central courtyard area and a set of satellite corridor rooms. Each of these room clusters, or Cells, is a semi-independent unit, with access between Cells being quite limited. The only major architectural difference between the Cells is that relatively few have direct external access.

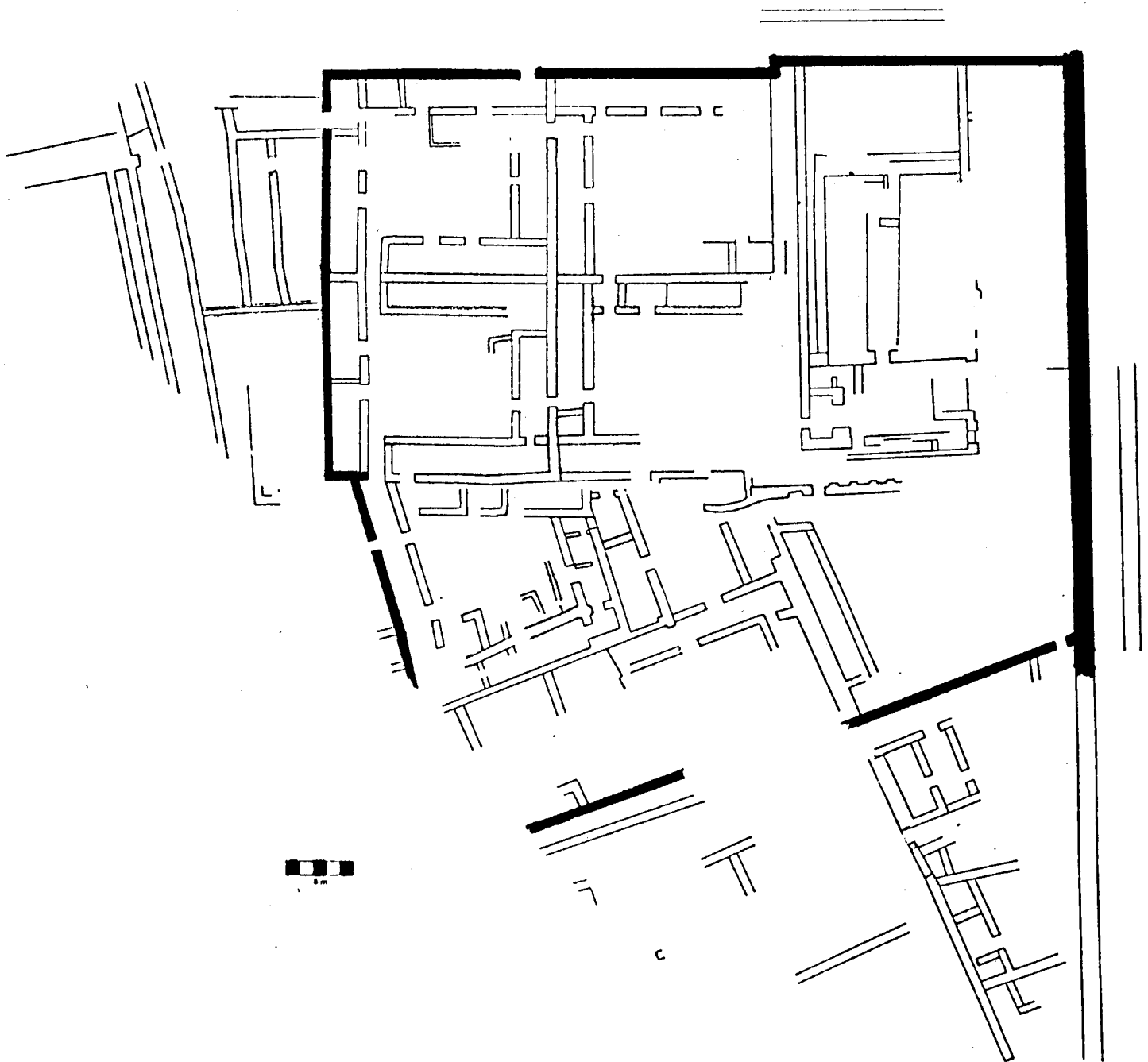


Figure 1. Architectural plan as revealed by wall trenching and excavation in the Moraduchayuc sector of Huari.

The northeastern corner of the compound is architecturally distinctive, since it is not composed of courtyards and corridor rooms, but instead contains a stone-filled platform and an unknown number of associated rooms. On the graph this area is represented by a triangle. This area is somewhat isolated from the rest of the rooms in the compound, having direct access to none of the Cells. In addition, it is located at the maximum distance from any of the entrances to the compound.

Examination of the architecture reveals three other features of importance in reconstructing the function of the compound. These are: that it was built using corporate labor; that it was built in the style of Huari administrative architecture; and that it includes features suggesting that the occupants and/or activities carried out in the compound were of at least moderately high status.

The evidence that the compound was built using corporate labor is clearest in the northern section, which was built first. In this section there is a standardization of room shapes and sizes, and a regular arrangement of rooms indicating that they were built according to a formal plan. Additionally, although there were two periods of construction in the compound, it is clear from the wall bondings that the original structure and the later addition were each built in a single stage. The irregularities in the arrangement of rooms in the later addition to the compound appear to be the unintentional result of attempting to accommodate rectangular rooms to an area which is trapezoidal in shape.

Associated with the territorial expansion of the Huari state are the intrusive regional administrative centers of Viracochapampa,

Pikillacta and Jincamocco (Isbell and Schreiber 1978). These sites all share distinctive features of plan and construction which represent the Huari administrative architectural style (Schreiber 1978). One of the major characteristics of this style is that it is planned, or contains regular arrangements of rooms of standardized shapes, and contains as a major component the repetition of architectural units consisting of a courtyard surrounded by serially arranged multi-story corridors. The Moraduchayuc compound shares not only these characteristics with the other examples of Huari administrative architecture, but various architectural details as well, such as similar types of floor construction and the presence of low benches around the perimeters of the courtyards. On the basis of these similarities I would argue that the Moraduchayuc compound was built in the style of Huari administrative architecture, and therefore that it was built to serve some administrative function.

The argument that the Moraduchayuc compound was built for relatively high status occupants and/or activities suffers from the lack of comparative data, but there are several features that indicate that this may have been the case. First, there is the presence of the stone-filled platform structure within the compound. This structure represents extra labor investment as well as a special function architectural feature which is noticeably lacking in other known cases of Huari administrative architecture. Secondly, there is evidence of sacrifices or at least offerings of human heads placed under the floors at the time of the construction of the compound. Only one such skull, which apparently had been wrapped in cloth pinned together by four copper tupus, was found in situ under one of

the courtyard floors, but the presence of other skulls and tupus in the fill of rooms with disturbed floors indicates that such offerings probably occurred in other rooms as well. Finally, clay-lined cists and shallow pits were found under the floors of several rooms. Most of these were empty, but a few contained luxury items such as worked pieces of shell, Spondylus, lapis lazuli, copper and silver. One such pit, located in the center of one of the courtyards, contained 82 pieces of worked Spondylus. Thus, the evidence suggests that the Moraduchayuc compound was built for relatively high status occupants and/or activities which were associated with the state administrative system.

Through the examination of the architecture and artifactual remains, it is possible to reconstruct the general history of growth and decline in the use of the Moraduchayuc compound. Construction of the north section, consisting of Cells B, C, E and F, and the area containing the stone-filled platform structure (Figure 3) was begun in Middle Horizon 1B. Somewhat later the number of Cells within the compound was doubled with the construction of an additional three to five Cells (including Cells A, D and G) on the south side of the original structure. At some later time, possibly at the end of Middle Horizon 1B or the beginning of 2A, the progressive abandonment of the compound began. The first Cell to be abandoned was Cell B, followed by Cells A and C, Cell D, Cell F and finally, Cell E. Each of these abandoned areas were used as dump sites for refuse generated within the remaining occupied areas of the compound. The order of Cell abandonment and re-utilization as a dump site appears to be related to the general accessibility of the Cell. That is, at each

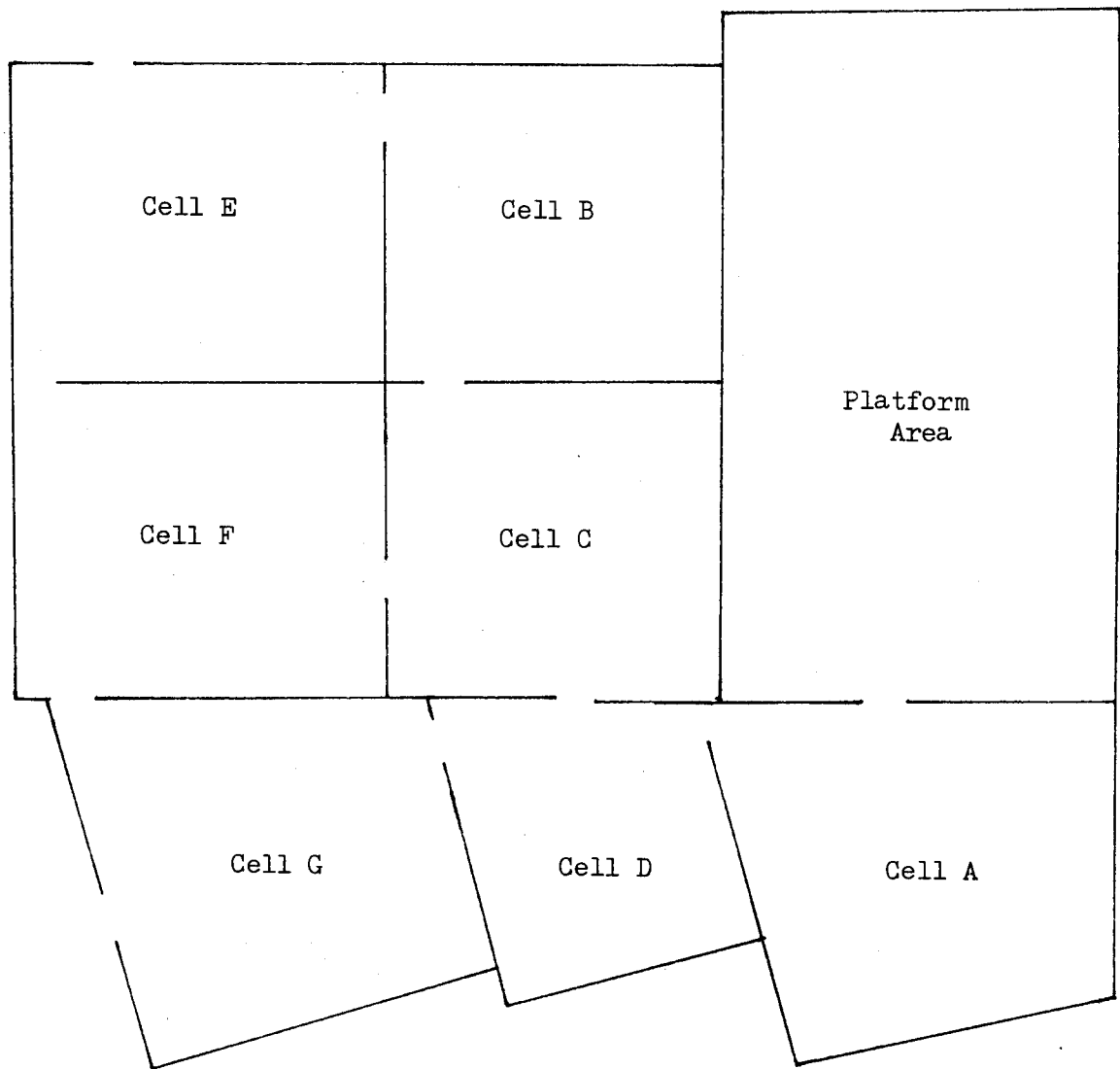


Figure 3. Architectural subdivisions within the Moraduchayuc compound.

point in time the Cell which was abandoned was that which had the fewest number of occupied Cells directly accessible to it, and was the Cell furthest from the entrance/exit of the compound. As rooms and Cells were abandoned they were occasionally blocked-off. Specifically, the doorway providing access between Cells B and C was blocked, as well as that providing access between Cells D and G. The last areas to be abandoned were the one Cell located at the main entrance to the compound (Cell G) and the area containing the platform structure. This conclusion is based on the fact that both areas are fairly clean of refuse. It is possible that the relatively small amount of material associated with these two areas represents that which was abandoned by the occupants when they left the compound. As such, the artifacts may reflect the types of activities carried out in the specific rooms, a situation which is obviously not the case for those areas which were used as dumping sites.

The one feature that stands out immediately when the material from the various dumps is compared is the similarity in the frequencies of different artifact types. Basically the only difference between the various dumps is in the density of the refuse, which is a product of differences in their length of use. These similarities in the composition of the dumps suggests that there were no major changes in the types of activities associated with the compound, at least during the period of its progressive abandonment. This would suggest that the functions of the compound remained the same during the period of its progressive abandonment, but that, through time, they were being performed on a smaller scale.

In all the dump deposits the frequency of individual serving

vessels (bowls and cups) is about 70% of the ceramic assemblage. While we lack comparative data from Huari, we do have some data from an early component at the Middle Horizon site of Jargampata (Isbell 1977). In this assemblage, representing domestic refuse, the frequency of individual serving vessels is only 50%, which is considerably lower than that for the Moraduchayuc compound. These differences suggest that serving activities were being carried out on a larger scale than the purely domestic within the Moraduchayuc compound. The types of jars associated with the compound also support this interpretation. The associated jar forms are almost all those associated with serving functions (bottles, larger narrow-necked jars, and pitchers), or those used for the fermentation and short-term storage of chicha (large, wide-mouthed jars). Vessels which are extremely rare in the material associated with the compound are large storage jars and cooking vessels (as indicated by the presence of sooting). However, the possibility that cooking or food preparation was carried out within the compound cannot be completely ruled out, as the dump deposits do contain a fair amount of ash and two areas which may have been hearths were found, as were a few large tripod bowls which from the extensive sooting on their interiors appear to have functioned as braziers. Based on the present data all that can be concluded is that food preparation and cooking does not appear to have been a major activity carried out within the compound.

With respect to non-ceramic artifacts, the bone in the dump deposits is virtually all from camelids, and there is an under-representation of skulls, vertebrae and ribs. The vast majority of the bones are long bones, which is the portion of the animal which

contains the most meat. This would suggest that the animals were being butchered outside the compound, with the more choice parts being brought into the compound for consumption there.

Chipped stone from the dump deposits consists solely of broken tools and small chips from the reworking of tools. There are no cores or other debris indicating the manufacture of chipped stone tools within the compound. This suggests that only finished tools were brought into the compound.

Shell, copper and Spondylus, while present in low frequency in the dump deposits, occurs solely as finished items and unworked pieces. Virtually no debris from the manufacture of these items was found in the refuse deposits within the compound.

Thus, the ceramic and non-ceramic artifacts found in the refuse generated within the compound indicate that the activities carried out were, in the main, involving consumption and use of finished products rather than their production.

While the material from the dump deposits provides information on the types of activities carried out within the compound as a whole, it is of little use in determining the uses to which the different rooms were put. The last Cell to be abandoned, Cell G, was not used as a dumping area and the material associated with the rooms in this Cell may reflect the patterning of activities within the Cell. The eastern corridor and an adjacent portion of the courtyard were excavated in this Cell. The courtyard area was relatively free of material, which suggests that this area was probably kept clean. The corridor is subdivided into four small rooms by crosswalls. The two northernmost rooms, which do not have

direct access to the courtyard, contain little material, but what is there consists mostly of well-finished, elaborately decorated bowls and cups, and a number of miniature vessels. It is possible that these rooms served as storage areas for vessels used only occasionally, perhaps in ceremonial or ritual activities. The room at the southern end of the corridor is also not directly accessible from the courtyard, and contains the remains of five large, wide-mouthed jars, which were probably used for the fermentation and storage of chicha. The room in the corridor which has direct access to the courtyard seems to have been used for more day-to-day activities, rather than storage as seems to have been the case for the other rooms in the corridor. This room contains a high frequency of the less elaborate, 'domestic' wares, as well as some ash, a few sooted jars and pieces of a large tripod bowl which may have been used as a brazier. This suggests that food preparation was carried out in this area.

We are left with the question of whether the organization of activities within this corridor can be generalized to the other corridors within the compound. While this could be the case, it is also a fact that the corridors in the compound are not architecturally identical. That is, the corridor in Cell G is subdivided into four small rooms by crosswalls, yet other corridors in the compound are divided into two or three rooms, while some do not appear to have been divided into any smaller rooms. Because of these differences, it would seem unlikely that the other corridors in the compound were used in exactly the same fashion as this one. However, it seems likely that, in general, the courtyard areas were kept clean and used for transit, while the corridors were used for storage.

The architecture in the section of the compound containing the stone-filled platform structure is quite different from the pattern of courtyards surrounded by corridors found in the rest of the compound. This would indicate that the functions or activities carried out in this area were different from those carried out in the Cell sector of the compound as well. As was the case with the ceramic material associated with the Cell sector of the compound, there is a high frequency of ceramic forms associated with the consumption of food and drink found in the platform area. The major difference between the ceramics associated with these two areas (the platform area vs. the Cell sector), is that there is an even higher frequency of individual serving vessels (80% of the ceramic assemblage), and a considerably lower frequency of large jar forms in the deposits associated with the platform area. There is also a higher frequency of well-finished, elaborately decorated bowls and a lower frequency of less well-finished, undecorated bowls associated with the platform area as compared to those associated with the Cell sector. There are no cooking vessels associated with the platform area. As was the case with the Cell sector of the compound, there are only finished items and no debris associated with their manufacture or production in the deposits associated with the platform area. The major difference between the non-ceramic material associated with these two areas of the compound is that there is a considerably higher frequency of luxury items, especially Spondylus and lapis lazuli associated with the platform area. Thus, the high quality of the ceramic vessels, the absence of 'domestic' activities (such as cooking), and the high frequency of luxury items associated with the platform

area suggests that this area may have been used for ritual or ceremonial activities. The fact that the platform area is located so far from the entrances to the compound suggests that its use was restricted to the occupants of the compound.

In conclusion, the fact that the Moraduchayuc compound was built using corporate labor and in the style of Huari administrative architecture suggests that it was built to serve an administrative function. The artifactual material associated with the compound suggests that the range of activities producing refuse within the compound were fairly restricted. That is, the material remains indicate that most of the activities within the compound involved the consumption or use of finished products, rather than their production or manufacture. The ceramic assemblage associated with the compound contains 70% individual serving vessels, and the jars are primarily forms used for serving as well. Large storage jars and cooking vessels are extremely rare in these deposits. Also lacking are the kinds or amount of debris associated with the manufacture of either tools or luxury items. For these reasons I would argue that the compound served as the residence(s) of Huari administrators.

The construction of the compound was begun in Middle Horizon 1B, which is the period in which we first begin to find evidence of the regional expansion of the Huari state. The construction of the compound at this time could have been in response to a need for more administrative personnel at the state capital, as a result of the regional expansion of the state. Still within the period of the territorial expansion of the Huari state, an additional three to five Cells were built on the south side of the compound. Again, this

could have been in response to the need for more administrative personnel as the state continued to expand.

At some time later the progressive abandonment of the compound began. The least accessible Cells were abandoned first, and converted into dump sites for refuse generated within the still occupied areas of the compound. The abandonment of the compound was a fairly slow and gradual process. This would suggest that it was not the result of any drastic changes within the Huari administrative system. The progressive abandonment of the Moraduchayuc compound could be reflecting the slow decline of the Huari state, but it could just as easily be the reflection of other types of changes in the state administrative system, such as its progressive de-centralization. Obviously the answers to these broader questions can only be found through future research.

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Transition to statehood in the Andean Highlands during the Middle Horizon involved the development of architecture designed to facilitate bureaucratic administration. Planned¹ buildings believed to have served bureaucratic administrative purposes are present at several sites, notably Azangaro near Huanta (Anders 1981), Jargampata near San Miguel (Isbell 1977), Jincamocco near Cabana Sur (Schreiber 1978), Pikillaqta near Cuzco (McEwan 1979, 1980, 1981; Sanders 1973), and Viracochapampa near Huamachuco (McCown 1945; Thatcher 1975; Topic and Topic 1982), but their long presumed center of origin at Huari near Ayacucho (Isbell and Schreiber 1978; Rowe 1963; Rowe, Collier, and Willey 1950) can only now be demonstrated. Excavations at Huari during 1979 and 1980 by the Huari Urban Prehistory Project, under the direction of William H. Isbell provide evidence of the evolution of state administrative architectural forms.

Huari is an urban site that covered between 1000 and 1500 hectares and possessed an architectural core of 400 hectares (Isbell 1982). The site appears to have risen to prominence during the late Early Intermediate Period and to have begun to establish a number of state administrative centers throughout the highlands during Epoch 1B of the Middle Horizon (see Figure 1, Isbell, this volume). The site appears to have been largely abandoned by Epoch 3.

A number of archaeologists have contributed to our understanding of the site of Huari. Tello (1970) published the first archaeological description of Huari. Rowe, Collier, and Willey (1950) visited the site in 1946 and attempted to relate Huari to other Andean sites, including

Nazca and Tiwanaku, based on ceramic analysis. Bennett (1953) undertook the first systematic excavations at Huari and published a sketch map of the site. Menzel (1964, 1968) conducted detailed analyses of Huari ceramics and established a chronology of the Middle Horizon. She suggested that militaristic expansion by Huari would account for the distribution of Huari ceramics and regional administrative centers. Lumbreras (1960, 1974, 1981) conducted archaeological surveys and excavation in the Ayacucho Valley under the auspices of the National Registry of Peruvian Archaeological Sites, the University of Huamanga, and the Ayacucho Archaeological and Botanical Project, directed by Richard S. MacNeish. Benavides (1979) excavated at the Cheqo Wasi Sector of Huari which contained a number of rectangular structures fashioned from finely prepared cut stone blocks, similar in construction to those encountered at Tiwanaku (Posnansky 1945: 113-117). Isbell (1980, 1982, this volume; Isbell and Schreiber 1978) initiated the Huari Urban Prehistory Project in 1974 by conducting a reconnaissance survey and mapping of the well-defined portions of Huari. In 1977-1978 an intensive survey was initiated to define the site boundary, and excavations were conducted in the Moraduchayuq Sector of the site. In 1979 excavations to determine the transition between Early Intermediate and Middle Horizon Periods were conducted in the Ushpa Joto, south of the Capilla Pata, and Churukana Hill Sectors of Huari. Knobloch (1983) analyzed ceramics of a Huarpa component immediately south of the Capilla Pata Sector which dated to A.D. 295 \pm 110. Pancho Solano excavated remains of human burials in the Monqachayuq Sector of the site, immediately north of the Moraduchayuq Sector. Michael and Christine Brewster-Wray (1979, 1982, this volume) excavated at the Moraduchayuq Sector in an effort to determine if activity

specialization correlated with room shape types established during wall trenching operations in 1977. Isbell and Spickard (1982) conducted excavations in the Moraduchayuq Sector dealing with the upper Middle Horizon 1B component and exposing a semi-subterranean structure of cut stone blocks beneath it.

The particular combination of architectural features and overall plan that characterizes Huari administrative architecture is distinctive, even though several of the features occur in earlier building traditions from other parts of the Andes. A number of scholars have offered lists of features of Huari administrative architecture based on the remains from provincial facilities (Isbell 1977; Rowe, Collier, and Willey 1950; Sanders 1973), and Katharina J. Schreiber (1978) has presented a detailed comparison of the rural administrative centers, emphasizing the planned nature of the installations and describing their construction sequence based on excavations at Jincamocco. By contrast, the goals of this paper are to present the major features of Huari administrative architecture based on a comparison of regional centers, to offer an interpretation of administrative architectural design in light of general architectural theory, and to establish an outline of the development of administrative architecture at the capitol city of Huari.

In discussing the evolution of Middle Horizon state administrative architecture, it is important to note that evolution is predicated on cultural evolution instead of biological analogy. Rather than emphasize the importance of tradition and gradual reforming of previous forms, it is argued that transformation to state administration necessitated a formalized, systematic design that facilitated bureaucracy. The apparent goals were the immediate impression of massiveness, control of traffic

flow within the complex, efficient network integration of specialized task or habitation areas, and structural design for flexibility through time, rapidity of construction, and minimal cost. Historically, it has been demonstrated that under conditions of colonization, planted towns have tended to assume their most stereotyped forms (Scargill 1979:176). The design elements were present in previous Huari architectural forms, but the Huari architects combined them in a new way to facilitate bureaucratic administration both at Huari and in intrusive, colonial installations.

The following architectural features appear to be present at the five sites believed to be administrative centers and at the Moraduchayuq Sector at Huari (Brewster-Wray 1982; Isbell and Spickard 1982). The features are rank ordered in terms of my perception of their significance to the Huari state administrative architectural design. Textual support for the presence of these features at different administrative centers is indicated in Table 1. While limited excavations, differential preservation, local building traditions (McCown 1945:254), relative time of construction, and probable diversity of function (Schreiber 1978:190-191) at various regional administrative centers have contributed to some apparent lack of correspondence of features in Table 1, lack of evidence from some sites is not assumed to negate the majority-indicated patterns. The state administrative design features include:

- 1) Rectangular enclosures² whose planning is evinced in bonding of foundations,³ and underlying canal system;
- 2) Division of the larger enclosures by main avenues,⁴ which may signify some underlying symbolic duality in separating areas of dense, complex construction from relatively open places and permit organic growth;

- 3) The area circumscribed by enclosure walls is designed as an infrastructure of rectangular cells; each cell when built up forms an integrated unit⁵ composed of an open courtyard at ground level, flanked by multistoried corridors⁶ (at least in larger installations) on at least two sides;
- 4) Mortared rubble masonry walls of modal thicknesses and types; while thickness modalities may vary between infrastructures, the proportional decrease in width correlating to perimeter enclosure, integrated unit, and corridor subdivision positions appears to be consistent;
- 5) Streets and avenues that serve to restrict and/or channel access of the populace, and limit access between integrated units;
- 6) Elaborately prepared rooms which apparently served as bureaucratic reception areas and/or elite residences and possessed
 - a) plastered and painted walls
 - b) niches of modal size
 - c) furnishings⁷
 - d) finely prepared plaster floors
 - e) subfloor shallow, plastered depressions or deep, stone-lined and plastered cists.

Frequently in archaeological analysis of architectural design, emphasis has been placed on function rather than form (Earl and March 1979:327). This appears to reflect both anthropological concerns with "adaptation" and concern to avoid ethnocentric bias. While it might be argued that design is culture specific, it is also true that certain features relating to the definition of space and structural properties remain constant across architecture of varying technology.

It is argued here that an examination of Huari administrative archi-

ture in light of architectural principles forms the basis for a new explanation of the origin of the general Huari administrative architectural design. Earlier descriptions have been based on functional explanations, both in terms of domestic residence (Isbell 1977) and state administration (Schreiber 1978). Isbell (personal communication) suggests that a traditional Andean Highland settlement pattern of rectangular structures surrounding an open communal area may have coalesced to form the Huari pattern of courtyard surrounded by corridors. Schreiber (1978: 237) emphasizes the role architecture plays in reflecting activity patterns associated with social and political organization. She develops a typology of Huari architecture based on attribute analysis and site planning.

Huari architects appear to have maximized several spatial and structural principles of general architectural theory in developing the designs of state administrative installations. These principles are integrated into an expanded discussion of the six administrative architectural features listed above.

Beginning with an idea of a structure to be placed at a strategic control point in a valley or along a transportation system (Schreiber 1982), or in a region of possibly newly-integrated peoples of different ethnic groups, it was important to insure that the installation could be erected relatively quickly and appear to be invincible and bureaucratically efficient. Enclosure walls of greater thickness and height than internal walls were constructed first, over foundations that were bonded. A grid plan is the most efficient architectural plan in a bounded structure (Broadbent 1973:241). Therefore the space within the enclosure wall was subsequently subdivided into rectangular integrated units. Some of these were left relatively undeveloped for future modification,

while others were immediately built up. It would seem likely that this rectangular infrastructure was designed to facilitate installation renewal in the face of functional change, but the division may also have emphasized some duality of open and closed spaces since major avenues separate these areas in at least the larger regional administrative centers.

Central, open courtyards surrounded by multi-storied corridors are the dominant feature of the Huari infrastructural plan. Norberg-Schulz (1971:23) emphasizes that from an architectural perspective, the largest areas in which activities will be carried out should be placed at ground level and small, enclosed multiple-storied structures should surround the large open areas. In this way there is a focal area for specialized task and communal activities, and minimization of difficulty in providing for structural support members, wide spans, and restriction of light. Reinforcement for this perspective is present in the integrated unit design wherein the courtyard areas are clearly linked to their surrounding corridors by doorways, whereas links between corridors are infrequent.

Evidence for the fact that corridors were multi-storied is plentiful. Walls were coursed only at the level of change between stories. At this level, support for floor beams of the next story was afforded by rows of corbels,⁸ ledges, or square holes extending through the masonry walls,⁹ or some combination of these three on opposite interior sides of the corridors. Based on evidence at the Moraduchayuq Sector of Huari, beams were laid across the corridors and supported by corbels. Wooden cross-pieces were lashed to the beams and to each other with 2-ply, Z-spun twine, and then heavily coated with clay (Isbell and Spickard 1982). In one area of the Moraduchayuq Sector that was possibly remodeled at the time of the construction of the planned administrative infrastructure,

the lower story was deliberately filled in and upon excavation, the two stories were revealed with filled-in doorways to the north (Brewster-Wray 1979). This circumstance clearly indicates the nature of multi-storied corridor construction.

In other cases, accessibility is more difficult between adjacent corridors and corridor rooms, and especially between adjacent integrated units. As indicated in Table 1, nearly all investigators have commented on apparent restriction of mobility within the installations. Various explanations have been offered, including the likely presence of ladders, or short steps to negotiate corridor crosswalls (Schreiber 1978:47, 67), stairways to second stories, and the possibility that transit across the site was achieved by roof-top pathways (Sanders 1973:58-59). While each of these options may have been actualized in some cases, the likelihood of flat roofs (McCown 1945:253; Sanders 1973:389) seems remote in the highland rainy areas where Inca and present-day roofs are steeply gabled or sloped.

The likelihood that second stories were an important means of access between integrated units suggests itself on the basis of modern architectural principles regarding high density enclaves (Friedman 1975:28). The complexity of Huari administrative architecture may result from examining two-dimensional plans and attempting to design for both restriction of access between some integrated units and connection of other units. In comparing the plans of the Huari administrative installations, it becomes apparent that as the number of courtyards increases, the number of corridors increases. If in the infrastructure one desires to move from one cell to the next in linear sequence, then the route is easy and direct, but if it becomes necessary to interconnect four cells that all have linear sequence connections, but also individual access each to every

other, then it is not possible to remain in the planar frame. One either has to cross over one of the cells or tunnel beneath it in order to connect cells on its opposite sides. In the case of preserved Huari architecture, this crossover would be most likely to occur via an upper story. Ascension to the second story could be by ladder or stairway. The apparent lack of access between integrated units on ground floor levels may have served to reinforce cooperative interaction within each unit, lack of disruption, and personnel control, as well as privacy in residential areas.

The number of crossover points, or in the case of Huari administrative architecture, the number of corridors, is a function of the number of integrated units to be connected. Each time there are more than seven cells to connect, there will be more crossovers than linked points. A linkage of seven main integrated units would necessitate nine corridors, if each integrated unit were to be directly connected to every other (Friedman 1975:64).

While there are difficulties in relating this model directly to the Huari installations because exposed walls may not reveal doorways, and second story levels may not be preserved, counts were made of integrated units and associated large rooms, and corridors based on a proportional relationship of 7:9. In every case, the number of corridors relative to rooms corresponded remarkably closely to the expected frequencies, deviating by only + or - 1 (Spickard 1982b:12).

It is suggested that the original filling in of the infrastructure left many corridors as open passages. Subsequently, functional necessity or increased controls led to divisions of the corridors into small rooms (modally 2-3 in the 6 administrative centers). This suggestion is supported by the fact that internal walls of corridors were not bonded, but

Table 1. Basic description and textual references of Huari administrative architectural features at Huari and five Huari regional administrative centers.

<u>Sites</u>	<u>Integrated Units</u>	<u>Second Story Supports</u>	<u>Benches</u>	<u>Wall and Floor Preparation</u>	<u>Room Niches and Subfloor Features</u>	<u>Access Across Site</u>	<u>Between Rooms</u>
Huari, Moraduchayuc Sector (Brewster-Wray 1982) (Isbell and Spickard 1982)	Open courtyards measure 9 x 10-11 m.; corridors are 7-16 m. long and 2 m. wide (Brewster-Wray 2-3)	corbels occur in corridor rooms at 2-2.3 m. above floors	in 4 of 5 courtyards low benches line perimeter and extend 1 m. into yards and lie 20 cm. above floor (Brewster-Wray 3-4)	white plastered walls over a layer of clay (Brewster-Wray 3) finely prepared floors including fine gravel overlaid by tamped earth with cap of white plaster (Isbell-Spickard)	clay-lined depressions and subfloor cists 1 m. diameter, 1.5 m. depth; (Brewster-Wray 4); 4 stone-lined cists 60 cm. diameter, 45 cm. depth 2nd subfloor depressions (Isbell-Spickard)	access to complex through a single doorway to north; stairs in east-west corridors	doorways to courtyards pass through adjacent corridors
Azangaro (Anders 1981)	north sector contains courts and galleries of varying patterns (6)		largest reception hall had benches lining at least two walls (8)	flagstone floors (15)	tombs (10); caches of luxury items (14)	main entry in south wall and avenue to north with control points (6)	low, narrow doors found in central sector (7)
Jargampata (Isbell 1977)	large plaza with galleries, without internal partitions (41)	corbels, that are not matched on opposite walls and not present in corridor units (37)	long east-west walls of second construction had low benches built against their courtyard faces; these are 40 cm. wide and 40 cm. high (41)	no evidence of white plastered walls; fine gravel inclusions in floors (37)			door in east walls of rooms open onto terrace; possible door to plaza from south gallery (37, 41)
Jincamocco (Schreiber 1978)	rooms (courtyards) bounded on 3 sides by corridors arranged in series and measuring 2.3 m. in width; corridors from 2 types (41, 53, 67)	indications are that structure had only one story; walls were not preserved to a height that would have revealed second story supports (27-28, 30, 32)	benches lined rooms (courtyards; 36-42, 52)	clay plastered walls, possibly covered with white plaster (56, 65) pounded earth floors (65) and white plastered floors with subfloor bedding of small stones (29, 55, 65, 97, 100)	sub-bench, stone-lined depression with burial and stone-lined burial pit (35-41)	some corridors used as walkways (46)	absence of doors for access between walkways and rooms; walkways serve effective boundary between adjacent room blocks (41, 58-59, 67)
Pikilliqta (McEwan 1979, (1980, 1981) (Sanders 1973)	open court with surrounding galleries; one building measured 1,296 m. ² of which 810 m. ² was open court and remainder roofed corridors (393, 395)	ledges, corbels, and wall holes all present; occur 2.5-2.9 m. above floors (388, 390)	upper terraces placed against corridor walls (396)	walls capped with white plaster, white gypsum plaster floor, underlain by dense stucco of pounded earth and gravel (387)	3 large niches in center of wall, about 1.28 m. apart and 86 cm. wide (385)	two wide avenues approach site from north and south; other streets and avenues roof transit (384, 391-393, 405)	stairways only definite ancient doors between corridor and central court; restricted access (388, 393, 396, 406)
Viracochapampa (McCown 1945) (Topic and Topic 1982)	open court with surrounding galleries is fundamental building unit (268-269)	corbels of quartzite cobbles, ledges, and wall holes; frequently the latter were placed just above corbels or ledges; supports placed 2-2.8 or 3 m. above "ground" (270-271; 1982:6-7)			niches that pierce the walls are very rare (271); but these may refer to beam supports	long street run length of site; (267)	entrances rare, in regular system of communicating doorways or passages (271)

Table 1. Basic description and textual references of Huari administrative architectural features at Huari and five Huari regional administrative centers.

<u>Sites</u>	<u>Size and Orientation</u>	<u>Foundations/ Planning</u>	<u>Site Divisions</u>	<u>Canals</u>	<u>Wall Masonry and Form</u>
Huari, Moraduchayuc Sector (Brewster-Wray 1982) (Isbell and Spickard 1982)	1000-1500 ha. 45.5 m. N-S 56.5 m. E-W .5 ha. 60 rooms align with cardinal directions	pattern of wall bonding and abutment indicate that north unit was built as planned unit	possible open area to southeast but site too disturbed to be seen; not a consideration in Moraduchayuc itself	elaborate drain system with worked stones indicating under- lying canal orienta- tions (Brewster-Wray: 4)	mortared rubble masonry that is double-faced with rubble interior
Azangaro (Anders 1981)	447 m. NW-SE 175 m. SW-NE 7.5 ha. (6, 25)	pattern of wall bonding and abutment indicate simultaneous construc- tion (6)	few artifacts in north sector; north- eastern sector only blocked into grid; lack of internal sub- divisions may reflect site abandonment (12-13)	failure in the water supply system may have caused site abandonment (14)	
Jargampata (Isbell 1977)	25-25.5 m. ² 15 x 25 m. addition to north Walls align with cardinal directions	layout and construction indicate single effort; base of foundation lies 10-20 cm. below court- yard (35)			fieldstone laid in clay mortar (17)
Jincamocco (Schreiber 1978)	250-260 m. NE-SW 130 m. SW-NE 4-6 ha. (7, 140)	planned construction se- quence; foundations are bonded and set into trenches 80-140 cm. below floor levels (28-29, 45, 62-64, 142)	large open plaza areas to east and residential areas to west (50, 66, 76-77)	stone-lined canals covered with small, flat slabs (36-38, 41, 45, 64)	rubble filled masonry preserved to single story level (27-28)
Pikillaqta (McEwan 1979, 1980, 1981) (Sanders 1973)	735 m. NW-SE 630 m. SW-NE (1979:16) 700 m. NW-SE 600 m. SW-NE 50 ha. (382)	concept of planning in- volves linkage with other site areas (1979:34-35) planned town (383, 386, 394-395, 401, 408)	large, empty walled areas in southern section (383) various expansions may account for incompletely devel- oped areas (1979: 35-36)	canal system present (McEwan, personal communication)	90 cm. colica wall thick- ness (1981) rubble masonry walls to 8 m. height, battered with 3 width modalities (382, 387-388)
Viracochapampa (McCown 1945) (Topic and Topic 1982)	565 m. N-S 580 m. E-W orientation closely approximates cardinal directions (267)	evidence of planning (252, 267)	western part less built up than eastern part (268)	no canals encountered (271); however, I personally observed one drain to main avenue	random rubble type with blocks packed with snecks; double batter of high walls; wall site modalities (270)

abutted, in contrast to larger walls of the integrated units. The fact that the corridors were often arranged serially around the courtyards, especially at the earlier and smaller centers, may support their construction at different times. This would support the idea of blocking out a rectangular infrastructure, but only building it up as the need arose. While Schreiber (1978:50) reports that corridors were installed simultaneously at Jincamocco, this may reflect the nature of the units excavated or a later stage of integrated unit planning.

Jargampata is the least complex of the regional centers (Isbell 1977). Although this may indicate that the center housed few functions, it also supports the idea that the fewer the units that were to be connected, the fewer the corridors, and the concomitant unlikelihood of second story levels. At Jargampata, corridors are present on north and south sides of the courtyard. No corridor existed to the east, and a corridor was observed to extend only midway on the western side. These corridors were built at the time of an addition to the northern side (Isbell 1977:41). While projecting stones do exist at Jargampata, they are present only in small rooms that are not parts of corridors and are lower in height than the typical pattern of 2.5 m. at the other centers. It is likely that they supported shelves at Jargampata.

Benches were placed at the perimeter of courtyards of integrated units adjacent to walls of corridors. In addition to the fact that doorways connecting corridor rooms to courtyards are numerous, the presence of benches suggests that many activities took place in the courtyards. The benches were likely roofed with porticos. As the remaining portions of the courtyards were unroofed, the benches likely served to protect the interior from rainwater as well as to provide a dry working area. Canals under the courtyard floors probably functioned as drains.

The Moraduchayuq Sector at Huari has yielded evidence of an elaborate canal system¹⁰ that was carefully installed before the construction of the interior walls of the integrated unit (Brewster-Wray 1982:4). In some cases the canals were simple troughs cut into bedrock. In others, they were stone-lined and capped with stones. Schreiber (1978:63) has noted that canal preparation was effected immediately after setting of the foundations at Jincamocco. A canal outlet is apparent at the base of the east wall at the southern end of the main avenue that divides Viracochapampa into two sections. Canals have also been located at Azangaro (Anders 1981:12) and Pikillaqta (McEwan, personal communication). Indeed, Anders (1981:12) postulates that canal system malfunction may have led to site abandonment.

The construction sequence employed by Huari builders attests to the high degree of planning behind the design of administration (Schreiber 1978:63). The foundations were laid in trenches cut into bedrock at Moraduchayuq and Jincamocco and were bonded. Major avenues and streets were established in relation to these. The infrastructure of major division walls of integrated units was then set in, followed by corridor walls and smaller rooms distinct from corridors. These walls were likely to have been bonded to one another if set in at the same time period, or abutted if they were added at a later time period. Thinner walls that divide the corridors into small rooms were always abutted. Schreiber (1978:30-33, 143-146) has extensively discussed wall forms and size modalities for each of these types of walls.

The transformation to bureaucratic administration at Huari was marked by two significant developments that can be inferred from the available archaeological record. First is an architectural design that united

multiple building forms in a grid layout, presumably to facilitate different administrative functions. Second is the integrated unit that served to coordinate increased specialization by encouraging departmental efficiency. The finely fashioned corridor rooms[^] apparently served as reception and office areas, as well as residences of the administrators.

Excavations at the Moraduchayuq Sector of Huari (Brewster-Wray 1982; Isbell and Spickard 1982) provide the bulk of the information on these finely fashioned rooms, but similar features have been encountered at Azangaro (Anders 1981:8) and Pikillaqta (Sanders 1973:385). The following architectural features distinguish these rooms:

- 1) finely prepared and plastered floors
- 2) plastered walls, painted white or red
- 3) wall niches of modal sizes
- 4) subfloor depressions or cists
- 5) built-in furnishings, such as tables and platforms.

In contrast to other corridor rooms with tamped floors, those that are more elaborate have floors that are carefully prepared in a sequence of six steps:

- 1) bedrock may be smoothed
- 2) a canal system prepared
- 3) the ground surface may be leveled with trash fill
- 4) a relatively thick layer of compacted soil is applied
- 5) a cover of dense gritty layer or stucco or fine pebbles is added
- 6) a fine white plaster of gypsum or lime is applied.

Beneath some of these floors are either white-plastered, stone-lined cists (60 cm. diameter, 45 cm. depth), or shallow,

plaster-lined depressions (22 cm. diameter, 8 cm. depth; Spickard 1982a). Activity of looters had severely disturbed the cists in one residence, but evidence suggested that there had been four cists and that there may have been burials in at least two of them. Finely prepared, decorated pottery was in association. Caches of luxury items were encountered in some of the plaster-lined depressions and provide evidence for the presence of elite persons.

In the same corridor room with the four subfloor cists were built-in furnishings. A semicircular raised platform lay over one cist in the northeast corner of the room and a table measuring 60x30x60 cm. lay directly below a niche at the center of the west wall (Isbell and Spickard 1982). In another corridor room in the same complex, another table was encountered with an offering pot mortared into its base.

Niches in the Moraduchayuq administrative complex are of two modal sizes. Smaller niches measure 25x25x30 cm., while larger niches measure 75x45x50+ cm. (Height of larger niches is not determinable as walls are not preserved to their full height; Isbell and Spickard 1982.) A small niche was heavily stained with soot of the type produced by repeated burning of a lamp. In a large niche above a hearth area in another corridor room were lithic flakes, bones, and ceramic fragments that had not been broken in situ but appear to have been stored in the niche.

Having presented the major features of Huari administrative architecture in the context of architectural principles that may account for many of them, I would like to briefly outline corresponding features which may be observed in earlier structures at Huari. While some of these features may also occur elsewhere in the Andes, it is significant that at Huari they form a long tradition.

The earliest structure at Huari dates to about 1000 B.C. on the basis of associated ceramics. The western wall of this Early Horizon building was encountered at the bottom of a 2x2 m. excavation at the summit of Churukana Hill at the eastern margin of Huari (Spickard 1982a). The sherds located at floor level and immediately beneath the floor included some similar to Curayacu on the Central Coast and others with dark red pigment on brown suggesting ties with the South Highlands (Edward P. Lanning, personal communication).

This rectangular structure was oriented on a NE-SW line, which accords favorably with other Early Horizon sites with corners oriented to cardinal directions (Lumbreras 1981:170; Terada 1982). The foundation of the structure rested on bedrock and consisted of a single course of sun-dried clay blocks (Spickard 1982a). These crudely formed blocks appeared to be reutilized portions of a tapia wall.¹¹ Upon these blocks was placed a tapia wall whose height in the excavation profile was apparent to 50 cm. The exterior of the foundation was plastered with clay to a thickness of 10 cm. A collection of large rocks which may have been mortared bordered the structure. The floor was constructed of very hard lime plaster and averaged 7 cm. in thickness. Possibly to insure proper drainage and evaporation, some sun-dried clay blocks were placed on the bedrock beneath the floor. Trash was utilized as fill beneath the floor. Thus, from the Early Horizon structure at Huari, prototypes exist for:

- 1) straight-sided structures that probably formed rectangular buildings
- 2) concern with orientation of structures to the cardinal directions
- 3) foundations that rest on bedrock (although not yet placed in

trenches within bedrock)

- 4) clay plastered external walls
- 5) finely prepared interior walls (in this case, of tapia)
- 6) specialized floor construction, including
 - a) incipient drainage
 - b) subfloor leveling with trash
 - c) floor surface of compacted white plaster

Two structures were excavated in 1977 and 1979 in the area between the Moraduchayuq and Capilla Pata Sectors of Huari. The structures were rectangular, and the earlier structure was clearly part of a complex of rectangular rooms. The buildings were constructed of rubble masonry walls. The structures dated to the transition period between the late Early Intermediate Period and Epoch 1A of the Middle Horizon. The southernmost structure was clearly Huarpa at its earliest levels based on associated ceramics (Knobloch 1983). It was underlain by a stone-lined canal which was excavated into sterile soil. In an adjacent room was a stone-lined and capped cist with a depth of 75 cm. The structure was plastered and presented a series of plaster floors interspersed with layers of trash fill. The northern structure was bordered by a collection of rocks reminiscent of those adjacent to the Early Horizon structure. The interior of the structure was plastered and two subfloor depressions were encountered. One may have been a hearth and the other contained a few pieces of obsidian and chert.

Two circular structures with Huarpa ceramics were encountered just to the north of the Moraduchayuq Sector of Huari. The easternmost structure measured 10 m. in diameter. Its wall was faced and constructed of field stones and mortar with a rubble hearting.¹² This construction is characteristic of Huari administrative architecture, excepting corri-

dor subdivision walls. The wall varies in thickness between 75-80 cm., which is intermediate in size between Huari integrated unit wall and enclosure size modalities (Spickard 1982a). The wall is seated into bedrock in a trench which is characteristic of Huari administrative architectural foundations placed on bedrock (Brewster-Wray 1982; Schreiber 1978). The trench was prepared to a depth of 40 cm. beneath bedrock surface. The wall was set as close to the interior of the trench as possible. The structure appeared to have been plastered with light red plaster.

The circular structure to the west included a number of floor features that appear to be Huari administrative architectural antecedents. Further excavations will be needed to verify the association between the wall of the structure and apparent division walls encountered in an excavation conducted by Brewster-Wray (1979). But the plan may be interpreted as a rectangular area at the center of the circular structure with small compartments lining its perimeter. This may have been a fore-runner of the integrated unit. Other features associated with this building were subfloor plaster-lined depressions and a possible bench that was 20 cm. higher than the floor. The bench and floor were coated with a fine white plaster.

The function of these circular structures is unknown, and their interpretation is complicated by considerable disturbance. It is possible that the westernmost structure may have borne some relation to high status elites. A fine interior and sub-floor depression imply that the building was a residence, but it may have been a workshop for production of luxury goods, including chrysocolla (locally known as "turquoise"), Spondylus shell, gold, and other semi-precious stones. Brewster-Wray

(personal communication) recovered 20 kg. of chrysocolla per cubic meter. Few of the luxury materials were finished pieces. The majority of the chrysocolla was of poor quality or possessed cortex (Spickard 1982a:5). Both the volume of luxury material and the fact that most of it appears to be waste from manufacturing support the idea of a production center. However, the finely prepared floor, bench, and subfloor depressions may indicate a residence and/or storage area of high status elites.

Thus by the end of the Early Intermediate Period at Huari the following features of administrative architecture have been shown to be present:

- 1) Groups of closely associated rectangular rooms;
- 2) Possible open center patio area with surrounding small rooms;
- 3) Walls seated into trenches in bedrock and constructed of faced field stone and mortar construction with rubble hearting;
- 4) Walls intermediate in thickness between perimeter enclosure and major interior wall modalities;
- 5) Walls plastered with white and red plaster;
- 6) White plastered floors and benches;
- 7) Subfloor depressions and cists;
- 8) Canals, cut into bedrock and stone-lined;
- 9) Artifactual and architectural evidence of high status elites.

The cut stone monumental structure encountered below the Middle Horizon 1B Moraduchayuq Sector of Huari is unique in the archaeological record of the Central Highlands. It was constructed in A.D. 580 \pm 60 based on a radiocarbon sample collected from the stone and mortar stabilizing fill (Isbell and Spickard 1982). The cut stone structure most closely resembles the semi-subterranean temple at Tiwanaku (Ponce 1969),

but rather than a pattern of cut stone blocks, interspersed with vertical ashlers, the structure was built of tightly fitted rectangular, trapezoidal, or polygonal blocks. The cut stone structure was built in a natural depression which was enlarged and shaped in the bedrock. A fill of roughly-shaped field stones and mortar was placed between the external wall of the temple and the side of the natural depression.

The temple is square, measuring 24.11 m to a side, or 581 m² (Isbell and Spickard 1982). Its west wall was determined to lie 4-5 degrees west of present-day magnetic north. As declinations may alter as much as 10 degrees through time, it is conceivable that the temple was deliberately oriented to the cardinal directions.

The monumental structure saw three major phases of construction. The original floor was of plaster. A second plaster floor was painted red. A carbon sample collected between the two plaster floors yielded a date of A.D. 720 \pm 60. At a later date the upper walls of the temple were finely planed and a floor of finely fitted cut stone blocks was installed. A number of well preserved painted cut stone blocks suggest that the entire structure was painted red. A carefully prepared canal system may have functioned to transport water into the center of the temple.

The cut stone structure provides evidence of the knowledge of structural engineering appropriate to massive structures and hydraulic management. It may also have helped in the development of the grid form for planned buildings. When the temple was leveled for the construction of an administrative complex, a rectangular area was vacated and the remaining wall bases created a square foundation base aligned to cardinal directions. The Epoch 1B construction utilized the north and south walls as foundations, and was built parallel to, but not on top of the east and

west temple walls.

Within the enclosure were placed all of the features defined above as characterizing Huari administrative architecture. Whether this enclosure was the first such administrative complex to be constructed at Huari remains to be demonstrated, but its relation to the underlying large rectangular unit is supportive. A related administrative complex was constructed to the south of this unit at the same time period (Brewster-Wray 1982). The Huari architects had clearly perfected an administrative design which they could use to plan installations for the expansion of the Huari state. The enclosure at the Moraduchayuq Sector was constructed in early Epoch 1B, and shortly thereafter, administrative centers begin to be constructed in various highland regions.

Footnotes

1. "Planning" is distinguished from "order." Order may result from organic growth (Scargill 1979:143), but planning involves design and authority to implement.
2. "Enclosure" is used to refer to the thick perimeter wall that defines the margin of the administrative installation.
3. "Foundation" is defined as "the materials through which the load of a structure is transmitted to the earth, and which usually lie below ground level" (Cowan 1973:110; Harris 1975:216).
4. "Avenue" refers to a relatively broad thoroughfare that serves to divide major sections within an enclosure. "Streets" serve to facilitate transit between the rectangular integrated units (Schreiber 1978:164-165).
5. "Rectangular integrated unit" is chosen to distinguish this form in order to avoid some of the ambiguity present in the terms "room block" and "room complex" (Schreiber 1978:164). "Room" is used to refer to enclosed spaces adjacent to rectangular integrated units, or subdivisions within corridors. The term "compound" has occasionally been used to refer to these units, but it has the connotation in English of an enclosed space used for the temporary confinement of prisoners of war (Webster's).
6. "Corridor" refers to elongated rooms and not necessarily to spaces designed to facilitate transit. In the Andean Middle Horizon literature other terms may be used to distinguish these functions and forms.

Schreiber (1978) employs "corridors" to indicate passages, and "galleries" to indicate elongated spaces that are subdivided into rooms. Isbell (1982) prefers the term "hallway" which can simultaneously indicate a walkway or hall analogous to medieval dining halls. In publications in Spanish, galleria is used and has then been translated directly into English as "gallery." However, in English, gallery has the connotation of "portico" ("a porch or covered walk consisting of a roof supported by columns"; Webster's).

7. "Furnishings" is used to refer to the furniture (movable items) and built-in fixtures of a room.
8. "Corbel" in masonry is a projection used to support beams of second stories, lintels, or overhanging courses, such as balconies (Cowan 1973:61; Harris 1975:129). In the vernacular (Webster's), there may be a connotation of a bracket that is attached to the wall for the support of the upper course. However, this does not typify the form as the stones project from the wall itself. Coursing is only apparent at the level of change in stories (Schreiber 1978:142). Corbels may also have served to reduce destruction by earthquakes. Wright often used cantilever effects in earthquake regions (Broadbent 1973:44).
9. The expression "square holes extending through the masonry walls" is utilized instead of the term "niche" which is frequent in the literature. While Webster's indicates that a niche is "a position particularly suitable for the person or thing in it," and a beam could apply here, the more frequent connotation of a niche is "a recess or hollow in a wall, usually intended for a statue or vase." The term "niche" is reserved here for recessed cubicals in walls of rooms in which items could be placed. The square holes extending through the masonry walls which were used to support beams for the upper stories are distinguished from other holes in the walls by the fact that the masonry is coursed, and corbels, ledges, or similar holes are located opposite them at the same level. Various authors (McEwan 1981; Sanders 1973; Schreiber 1978) have noted that sometimes the corbels are stepped. I would suggest that the holes may have supported balconies or scaffolding. Although some authors (McCown 1945:245) have discounted scaffolding as an explanation, it seems very apparent that construction of 2-3 stories or more would require it. As the walls would have been plastered subsequently, the holes would not ultimately be visible or sufficient in number to structurally weaken the walls. Having recently discussed masonry construction with a British stonemason and viewed holes in an old Norman wall in Southampton that were utilized for overhanging galleries and scaffolding, I am impressed with the diversity of uses of such wall holes.
10. "Canal" refers to troughs prepared for the transport of water. Sometimes canals are distinguished from drains on the basis of whether they transport fresh or waste waters. Here they may do either.
11. "Tapia" refers to adobe-like stiff clay that is formed and rammed in a movable frame (Harris 1975:495, 364).
12. "Hearting" is "masonry forming the interior of the wall, as distinguished from facework" (Harris 1975:246).

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Aspects of state ideology in Huari
and Tiwanaku iconography: the
Central Deity and Sacrificer

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Huari and Tiwanaku emerged as two highland states in the central and southern Andes around 500 A.D. The nature of the relationship between these two polities, separated by at least 500 Km. of rugged Andean terrain, remains obscure. The history of investigations in both areas reveals that Tiwanaku has received considerably more attention from scholars. This is in part due to its known location and mythical importance since Incaic times. Only in recent years have we begun to appreciate the equally important role played by Huari in the central highlands. The two sites seem to have remained politically independent, although their symbol systems were so similar, that scholars, today, continue to confuse material culture items from these centers and smaller sites within their spheres of influence. They share what can generally be considered a common iconography focused on themes of figures in a deity pantheon. Several models for the assumed interaction between the two sites have been proposed, because clear evidence for trade has not yet been documented (Browman 1978, 1980, 1981; Isbell this volume; Lumbreras 1960; Menzel 1964, 1968). They include arguments that either favor religious pilgrimages between Huari and Tiwanaku, or the development of commercial enterprises (Browman 1981; Lumbreras 1974; Menzel 1964). All, however, remain largely untested.

My objective, in this paper, is to demonstrate the importance of documenting the evolution and transformation of this shared iconography. It is my belief that changes in design form and content convey the alteration of ideology. With the highland social-organizational transitions from dispersed temple towns (Early Intermediate Period) to centralized

urban states (early Middle Horizon), came an iconographic conversion. In the earliest known forms, the depictions convey individual figures on various media. Later, with the emergence of Huari and Tiwanaku, an amalgamation of these figures occurred, rendered in representational themes.

The common design repertoire is found predominantly on ceramics, textiles, monumental stone sculpture and various media that served as ritual paraphernalia (e.g. semi-precious stone, shell, bone and wood). The consistent appearance of an ordered cosmology depicted in iconographic terms at Huari and Tiwanaku conflicts with our understanding of their political nature. Where data are available, the picture that emerges indicates that Tiwanaku was both an important commercial and religious center that seems to have gradually expanded south, west to the coast, and east to the montaña. Huari grew more rapidly. Once a certain bureaucratic and military organization was achieved, it expanded at an explosive rate through conquest and the establishment of walled administrative compounds at strategic locations. Despite the differences in political strategy, both polities adopted an iconography often depicted on objects found in ceremonial contexts (e.g. associated with human interments and in buried offerings).

Hierarchical power structures of early states were in part legitimized through figural depictions and symbolic media. At Huari and Tiwanaku, the common iconographic expressions of a ranked and ordered cosmology became manifest around 500 A.D. Prior to this time, each sphere followed quite different rules of design execution. It is certainly no coincidence that both polities embarked simultaneously on a period of artistic expression and stylistic innovation. The appearance of ceramics, textiles and other symbolic media helped mark political boundaries and mask earlier ethnic or village stylistic affinities. Both Huari and Tiwanaku designs

addressed similar themes and an ideology particular to growing and competing political powers.

In this essay, I take a different approach to the relationship between politics and religion than is customary. In recent literature on prehistoric government, problems of secular political administration are separated from issues concerned with religion and the 'sacred'. The administration of ritual is considered a domain relegated to research on religious belief systems and the recovery of prehistoric ideology. The ensuing discussion can only be understood if it is assumed that religion and politics are parts of a single process, both largely dependent on ceremonialism. It is through ceremony that ritual activity is expressed, social solidarity is maintained and conflict is transformed or masked. Too often, we carry with us the assumption that beyond a certain degree of social complexity (e.g. stratified society) state politics and religion become separate or competitive processes. Their relationship is usually ignored, due either to the impact of our own ideology, that demands such a separation, or to the whims of professionalism that require we artificially define certain variables. I strongly believe that the emergence of administrative bodies in the central Andean highlands was largely due to the increasing power invested in ritual leaders, which by its very nature had a secularizing effect. The figural art and iconography of a society represents static images that captivate moments of this process.

The relationship between Huari and Tiwanaku can thus be approached through an examination of their iconography. In this light, it is instrumental to view the role of ideology as exhibited in figural thematic art as potentially constituting the physical reality --the distorted reality-- perceived by members of a group. A state-sponsored iconography can thus

mask the internal contradictions (e.g. social differentiation: leaders to non-leaders) and preserve a vision of harmony and legitimization of the power elite. From this position (Cook in progress), the internal tensions and competitive forces at work between the two polities might be better explained. Elsewhere (Cook in progress), I also develop the thesis that this iconography masked or helped temporarily displace underlying tensions between Huari and Tiwanaku, and may have provided the milieu for trade of vital goods. In the case presented here, some of these aspects of emergent state ideology are reconstructed.

The Emergence of Huari and Tiwanaku iconography: the empirical base.

One of the dominant iconographic themes during Huari and Tiwanaku sovereignty was the classic image of a Staffed Front Face Deity on a pedestal flanked by two or more rows of Profile Attendants, Front Face Deity heads and miniature human Sacrificers. It will be referred to here as the Central Deity Theme. Variants of this image appear in both areas for example, the Gate of the Sun at Tiwanaku (Posnansky 1945:PL. XIX) and the ceremonial urns and jars from offerings at the site of Conchopata near Huari (Figs. 1, 2, 3; Menzel 1977: Figs. 62, 63, 66, and 67).

In the following pages I build the argument that Huari and Tiwanaku adopted the Central Deity Theme pantheon simultaneously around 500 A.D. (see Isbell, this volume). Several scholars have suggested that an iconographic tradition preceded the emergence of Huari and Tiwanaku art in the Titicaca Basin. This would suggest that it evolved in the southern highlands, and was later transmitted north to Huari. Instead, the picture that emerges from the following analysis suggests that a figural design repertoire existed in both areas, each characterized by its own structural rules and meaning. The appearance of themes that conveyed a hierarchical pantheon, occurred in both polities as a product of increased power and

territorial expansion. This required an orderly, yet ritually sanctioned transition, from dispersed to centralized administrative structures. An example of such a transition is incorporated in this paper.

Although a great deal of variation is initially conveyed by Huari and Tiwanaku iconography, it can be divided into three classes: 1) Staffed Front Face Deities, 2) Profile Attendants, and 3) Human Figures. The iconography is depicted on a wide variety of media. These differ to a large degree in each area. Textiles and ceramics are common to both Huari and Tiwanaku, however, the images depicted on these media differ in each polity. The principal expressive medium in Tiwanaku is the well-known stone sculpture tradition, while within the Huari sphere images are most often found on ceramics, especially oversized ceremonial urns and jars. It is interesting to note that portable miniature lithic figurines and other miniature stone artifacts were produced in large numbers within the Huari sphere, in contrast to the large stone sculptures that were favored at Tiwanaku. Wooden snuff tablets and other drug-related paraphernalia were elaborately decorated and found throughout the Tiwanaku sphere, while these are conspicuously missing within the Huari area. Here, items such as wooden spoons with decorated handles have been found. The general picture that emerges suggests that the distributions of particular media may prove to be quite different from one sphere to the other.

The earliest known form of Huari and Tiwanaku iconography is found at the site of Pucara in the southern Peruvian highlands and north of the Lake Titicaca Basin circa 200 B.C. - 200 A.D. (Lumbreras and Amat 1968). The basis of Pucara economy is little known, but the site is located in the grassland altiplano at approximately 3950 meters above sea level, where little cultivation is possible and herding conditions are excellent.

At this center an iconographic art style is found that featured Front Face Figures, running Profile Attendants, anthropomorphized felines, birds, and numerous trophy heads. Only one type of attendant is known (Rowe and Brandel 1969-1970: PL. II-IX). It has human features but the facial decorations and mouth appendages convey supernatural status (Cook 1982). The figures have several supra-human features such as wings. These are present on all but the Profile Attendants. It will be shown that the presence or absence of wings is important to the understanding and evolution of this figural art form.

There was a marked increase in the variety and frequency of figures depicted over time. The occurrence of a Front Face Figure (not a staffed deity) and Profile Attendants, the main components of the later Central Deity Theme, is continuously present in this iconographic tradition making fruitful comparisons possible.

The two principal figures of Huari and Tiwanaku iconography were supernaturals and humans. In its earlier form at Pucara the division between these two categories is less clearly visible. Available examples of Pucara figures indicate that the human component is only found in the depiction of trophy heads. The Front Face Figure and Profile Attendants (Rowe and Brandel 1969-1970: PL. II-V) are characterized by the features that endow them with supernatural status. The Profile Attendants face each other. Their facial features are those of a human. Smaller trophy heads are found around the eyes and on the chin of some of these figures. A staff is held in the left hand, while an axe and trophy head are grasped by the right. These features identify a common figure in Andean iconography, best described here as the "Sacrificer" (Hocart 1970:60-71; Valcarcel 1959).

The Front Face Figure (Rowe and Brandel 1969-1970: PL. IV-V) as it appears on Pucara ceramics is a supernatural figure characterized by split

eyes, tear motifs, a collar with pendants, round shoulder medallions and wings. The presence of wings, earspools, and forehead ornaments on Pucara Front Face Figures are features absent on later representations of the figure. Even more characteristic of this Pucara figure are the objects it holds: an axe or digging stick in its right hand and a tethered camelid in its left. This figure is repeatedly depicted with a pack animal. Pucara and sites in its vicinity were characterized by a mixed economy largely dependent on pastoral activities. Ritual ceremonies that assured the production and reproduction of flocks can be expected to have been important then, as they are today.

One small lithic figurine is said to come from Pucara (Rowe 1976: Lam. IX). This example clearly indicates a precedent or model for the later Staffed Front Face Deity. Other images frequently depicted include birds, fishes, a large variety of felines, and supernatural anthropomorphs. All of these figures are modeled and incised on serving vessels, such as regular bowls, pedestaled bowls and beakers. The precise function of these vessels has yet to be determined. Their utilitarian nature indicate they may have served as recipients of food and drink associated with particular imbibing ceremonies and/or offerings.

The Pucara Front Face Figure is structurally a precursor to the Staffed Front Face Deity of the Middle Horizon, just as the Profile Attendant Sacrificers present in Pucara art reappear in a newly conceived context several centuries later, at Huari and Tiwanaku. Within both of these spheres of influence there are still no known sites where direct iconographic continuity of the Pucara style Front Face Figure and Sacrificers have been found. It seems reasonable to suggest that Huari and Tiwanaku iconography was an archaizing style to which was attributed new or altered meanings by ruling elites. We will see that the iconography

harked back to an ancestral past while simultaneously incorporating the surviving portions of earlier art traditions.

Pucara had a stone sculptural tradition that included human or trophy heads and full figures. Some of these sculptures had incised decoration similar to monoliths found at other sites in the Lake Titicaca Basin and at Tiwanaku. These early pieces or stelae do not depict components of the Central Deity Theme. Male and female forms and felines are sculpted in stone during the period between Pucara and Tiwanaku occupations. The designs on these stone sculptures are predominantly feline, reptilian and geometric (Chavez 1976, 1981; Chavez and Chavez 1976). The elaborate iconography seems to have lost importance as socio-political transformations occurred that eventually lead to large-scale urban life.

Niño Korin is a site situated close to Pucara moving south towards Tiwanaku within the modern boundaries of Bolivia. The discoveries from this dry cave site are considered to be part of a medicineman's equipment consisting of various containers, spatulas, syringes, tubes of pyroengraved bone, snuff tablets, baskets, ceramics, leaves of the Ilex Guayasa plant used in medicinal curing and human skeletal remains (Wassen 1972)¹.

A long history of coast-highland interactions significantly pre-dates the Middle Horizon. Niño Korin and other villages in the region are still today the homeland of the reknowned itinerant Callawaya medicinemen (Isbell, this volume). They served the Inca as both advisors and litter-bearers (Guaman Poma 1956: Folio 331). The Niño Korin cave offers data that support the early importance of the Callawayas. Their role in disseminating information throughout the central highland region was clearly significant and provided the context in which new styles and ideas could flourish.

Some of the icons found on these Niño Korin artifacts are the Staffed Front Face Deity pyroengraved on bone (Oblitas 1963: Lam. No. 85), a Front Face Deity head repeated around the exterior of a basket (Wassen 1972: PL. II), and a bird design decoration on a woven bag (Wassen 1972: Fig. 10). Several snuff tablets were also found, one of which portrayed a new type of attendant figure, its face characterized by camelid-like features (Fig. 4). When viewed vertically the figure is the Sacrificer standing wingless, a staff in one hand, and trophy head clutched by the hair in the other. The head is thrust back. The object that extends from the figure's right elbow may be a stylized axe or a wing. We will have to return to this question below. The importance of this rests in its transitional quality placing it between Pucara and later Huari and Tiwanaku Profile Attendants.

Moving further south and east of Tiwanaku, to the site of San Pedro de Atacama in Chile, we find that a series of snuff tablets, very similar to those found at Niño Korin, were recovered as burial offerings within cemeteries (le Paige 1965: Lam 13, 47, 58-60). The handles of some of the snuff tablets depict various forms of the Sacrificer. The figures are kneeling (not standing as in the Niño Korin example), wingless, a staff is held in their right hand, a trophy and axe in the left, and their heads are thrown back. These figures are further distinguished by a long extended nose and a feather appendage emerging from their mouths (le Paige 1965: Lam. 58, 60). One stands on a pedestal similar to the one found under the Staffed Front Face Deity on the Gate of the Sun. These figures convey the attributes of an attendant fulfilling a similar role to those found at Pucara and Niño Korin: they all lack wings but hold axes, trophy heads and staffs. I would suggest that these various figures appear to be individuals associated with trophy-head rituals. The figures are variants of the Sacrificer. This figure was important to different ethnic groups

or villages throughout a large area. Although the Sacrificer was represented in different forms, its basic paraphernalia remained constant. This figure assumed somewhat different identities probably due to differing local traditions: at Pucara a human-like attendant with supernatural qualities, at Niffo Korin a camelid-related figure and at San Pedro de Atacama another Sacrificer with an over-extended nose.

The iconography in this early phase included several figures performing similar roles. They contrast with later Middle Horizon mythological scenes because attendants are all winged in the Huari and Tiwanaku pantheon, e.g. Feline or Bird-Headed Profile Attendants. The Pucara winged Front Face Figure is later replaced by the wingless Staffed Front Face Deity. The wingless Sacrificer, depicted in its earliest known image as a Pucara Profile Attendant, is transformed into a winged Profile Attendant under Huari and Tiwanaku dominion. In this study, attention is strictly directed to the transformation of the Central Deity and Sacrificer over time. The structural reversal from winged to wingless in the former and the opposite in the latter helps support my contention that an iconographic transformation occurred in the transition from single figure depictions to themes. It also helped maintain a formal similarity between a Pucara iconography and the Huari and Tiwanaku versions. Simultaneously, the structural reversal of key supernatural features, such as wings, indicates a contextual change that may imply a shift in the meaning conveyed by the figure. The Sacrificer is now associated with other members of the pantheon. The significance of certain figures in this central and southern Andean iconography shifts over time. Although it is unlikely we will ever know the exact meanings of these icons, changing interpretations are observable. It is to clues such as these that we should be paying closer attention.

The San Pedro de Atacama snuff tablets include a depiction of the Staffed Front Face Deity head on a pedestal (le Paige 1965: Lam.59). Another illustrates a stylized camelid, probably a llama or related species. These figures are all vertically positioned on the snuff tablet handle. At Pucara the Front Face Deity holds an axe in one hand and a tethered llama in the other. The number and nature of the represented icons at these sites are strikingly similar, if one considers that the Niño Korin and the San Pedro de Atacama artifacts are roughly contemporary and the Pucara examples precede these artistic developments by at least 100-200 years. It should also be noted that a comparison of snuff tablet handle designs from San Pedro de Atacama clearly indicates that the icons were depicted vertically. The Sacrificers are positioned standing directly above the snuffing surface in a vertical and not floating or flying position.

At Tiwanaku, an incised stone fragment located at the Akapana section of the site was excavated by de Crequi-Montfort (1906) at the turn of the century. This piece illustrates a winged Profile Attendant (Fig. 6) running on all fours wearing a headdress with trophy heads and other appendages, and carrying an abbreviated staff below the body. Two heads were depicted on the extremities of this staff. The symbolically important association between the trophy head and the Sacrificer is repeated on this fragment. Here we have clear evidence reaffirming the relationship between this class and trophy-head ceremonials. The de Crequi-Montfort fragment is poorly preserved, but it demonstrates that features found associated with the Pucara Sacrificer appear at Tiwanaku as a distinct figure yet in an earlier style than the classic monolithic stone sculpture.

Several phases of stone sculpture have been defined for the Tiwanaku area (Bennett 1934, 1936; Browman n.d.; Chavez 1976; Wallace 1957). Bennett

excavated the semi-subterranean temple in 1934 where he located two monoliths, referred to by Ponce as Stela 15, which he assigned to Tiwanaku III, and Stela 10, attributed to Tiwanaku IV.

Stela 15 depicts a personage who lacks a headdress, is bearded and is associated with feline and reptilian figures. Most strikingly, the arms are positioned horizontally across the torso, the left hand below the right, a common posture of Tiwanaku III sculpture. (Note as well that this figure is empty-handed). Phase III of Tiwanaku stone sculpture thus combines reptilian and feline zoomorphs of the preceding periods with a crudely sculpted human figure. This style, popular in many parts of the Titicaca Basin, is largely unrelated to Pucara and later Tiwanaku IV staffed deity iconography.

Stela 10 (Posnansky 1948: Figs. 113-116), or the Pachamama, is a classical Tiwanaku piece. The unnaturally inverted hand position holds various objects. It has a finished surface covered in fine, incised iconographic detail, and the general dimensions and style of the monolith place it in the Tiwanaku IV period.

A view of just one of the semi-subterranean temple walls at Tiwanaku indicates the even spacing of tenoned heads projecting from the wall matrix (Posnansky 1945: PL. VII-VIII). Each head, although in some cases badly worn, bears a headdress (like the Phase IV stone monoliths) or a hat with an incised decorated border suggestive of textile head bands better known on the coast, where they are more frequently preserved. The temple construction and tenoned heads are approximately assigned to Phase III because there was no material dating to the first two periods within the fill of the temple structure. It would follow, from the above descriptions that the tenoned heads are stylistically more akin to the Phase IV stone sculpture (e.g. Stela 10), than to pieces dated to the preceding period.

Clearly, more work needs to be done to improve the Tiwanaku stone sculpture sequence. Some helpful hints are provided by iconography displayed on two lintels from Tiwanaku.

The Kantataita architrave (Fig. 7) and the lintel found on Linares Street in La Paz, Bolivia (Fig. 5; Posnansky 1945: Fig. 140, 140a) are architectural forms that convey an iconographic evolution towards the full Central Deity Theme. The Kantataita monument is probably part of a doorway; the stone is rectangular in shape but the design field is raised. The Linares Street piece lacks a raised surface and is a rectangular lintel that was also probably part of a doorway. In both instances, the Huari and Tiwanaku Sacrificers are depicted. They are horizontally positioned yet in a kneeling stance. Stylistic similarities are clearly seen when the headdress, facial decoration, chin, belt, mouth appendage and collar details are compared. The differences are few but important. These figures lack wings and are for the first time in our sample horizontally positioned. These two characteristics place the depictions apart from the earlier examples already discussed.

Internal differences exist when the two architraves are compared iconographically. Although the Kantataita monument was extensively damaged by both time and human intervention, the six repeated figures on it still reveal the fine, detailed workmanship that was applied to these architectural surfaces. The figures follow one another moving from both extremities toward the mid-point of the architrave. They meet face to face at the center. These figures are not identical and can be distinguished by comparing the figures that bear a trophy head on their bodice below the collar from those with feline heads. All the figures hold a double headed staff in their right hand. The object(s) held in the left hand are only partially visible on one figure: a trophy head

grasped by its hair or by two braided strands of hair, cord or textile are identified as well as an axe held in the same hand (Fig. 7). This identification helps to substantiate the observation that the object extending off the right elbow of the Niño Korin Sacrificer is probably also a stylized axe. A trophy head is depicted as well on the bodice of this figure and at the base of its staff. These similar stylistic and iconographic conventions strongly suggest we are dealing with a figure performing related symbolic tasks in two different geographic areas. The Linares Street lintel on the other hand might best be considered a link between singular depictions of the Sacrificer and its transformation and inclusion in the Central Deity Theme prevalent during the classic Huari and Tiwanaku periods.

The carved Linares Street lintel combines four running horizontally positioned Profile Attendants and a Staffed Front Face Deity. This piece might best be considered stylistically transitional between an iconography largely concerned with figures acting upon a trophy-head cult, and the peak of an architecturally oriented art form. The Kantataita architrave was described above and only includes horizontal Sacrificers. The Linares Street lintel also conveys a similar floating figure but accompanied by a centrally positioned Staffed Front Face Deity. This is closely related to the Tiwanaku IV theme image on the Gateway of the Sun (Posnansky 1945: PL. XLV). This horizontal figure represents the Sacrificer transformed into Profile Attendant. Although many of its design elements are shared with the earlier Kantataita figures, it is not holding a trophy head or an axe. The floating figures on the Linares Street lintel seem in fact to be good copies of the Kantataita figure stripped of its earlier symbolic attributes. Note that where the hand should be one finds a peculiar claw-like replacement, which is difficult to identify. In the

bodice of each horizontal figure a feline head is repeatedly incised, again a feature strongly associated with Tiwanaku IV iconography.

The Staffed Front Face Deity is badly damaged; only half of the body is visible. The figure wears a tunic, probably belted at the waist (note the two feline heads below each elbow which indicate the terminal points of the missing belt). Repeated felines adorn the headdress, tear motifs surround the eyes, and the Central Deity holds the symbolically important staffs in each hand with a zig-zag vertically divided band with repeated triangles. The Staffed Deity is not a new introduction to the iconography; instead it had already appeared in a similar form as a small stone figure carved in the same frontal position from the site of Pucara. The characteristics that help define this lintel as transitional are 1) the inclusion of a centrally positioned Staff Front Face Deity, 2) the repeated Profile Attendant strongly reminiscent of the Kantataita lintel yet lacking in essential trophy head paraphernalia characteristic of an earlier interpretation and, 3) the consistent lack of wings on supernatural attendants in contrast to their later depiction as winged figures in classic Tiwanaku IV. This particular figure also appears headless as a pedestal ornament on an incised stone slab, housed at the American Museum of Natural History (Fig. 8). Its catalogued provenience is the Island of Titicaca. Clearly, the Sacrificer played a key role in this highland pantheon and may be one of its earliest traceable figures.

Huari and Tiwanaku share early representations of the Staffed Front Face Deity and Sacrificer. Iconographic data from the Ayacucho region, and specifically the site of Conchopata, (located 10 Km. south of Huari proper) are here considered, because they most clearly represent the simultaneous adoption of the Central Deity pantheon in the Ayacucho area.

Two ceremonial ceramic offerings have been recovered from Conchopata.

They include the burials of oversized painted vessels that were ritually broken in situ. Julio Tello excavated the first discovered cache of urns in 1942, referred to below as Conchopata A. Subsequently, a second ceramic interment of oversized face-neck jars was located in 1977, hereafter Conchopata B. The two caches are stylistically distinct both in terms of vessel shape and design layout. Their iconography consists of the Central Deity Theme pantheon. Various images are conveyed on the Conchopata A offering vessels. Each oversized urn displays a somewhat different sequence of figures. Not only is there a considerable degree of variation in depicted scenes, but this cache might be the earliest known assemblage that includes two Front-Face Deities. One wears a loosely-fitting tunic, the other wears a belt and the two figures have varied headdress appendages. They have not been found to occur together on any one vessel, but they are both associated with running Profile Attendants and miniature humans (Cook 1979; Menzel 1964, 1968, 1977).

In contrast, the Conchopata B cache consistently depicted the Central Deity Theme: a single Staffed Front Face Deity accompanied by two rows of running Profile Attendants (Fig. 3). This image envelopes the central and most visible surface of each jar. Only three vessels of the twenty-five found in this cache have different main design fields. These convey figures derived or inspired from the Nasca 9B stylistic tradition (Fig. 2). These Nascoïd figures and the humped-back animals (Fig. 1) that appear on the shoulder of many of these jars, help date the cache with relation to the Nasca sequence to Middle Horizon 1B (Menzel personal communication).

Central to our discussion is the more frequent and dominant Central Deity Theme depicted on these jars. Menzel (1964, 1968) has previously argued on stylistic grounds that the Conchopata A offering belongs to

and defines Middle Horizon 1A. It has the greatest known variety of figures from a single context in the Ayacucho area. The repertoire includes two Staffed Front Face Deities, four Profile Attendants (winged), several human figures, a series of captive human miniatures, hands clasped behind their backs, and trophy heads (Cook 1979; Menzel 1977). The Profile Attendants are of three types: 1) positioned vertically either standing or kneeling (e.g. the Sacrificer)(Menzel 1977: Fig. 67), 2) placed in a horizontal flying or floating stance with crossed canines (Menzel 1977: Fig. 91) and, 3) a profile head and headdress of a figure here depicted without a body and with crossed canines (Cook 1979: Fig. 10, 11). Many of the vessels in this assemblage remain in fragmentary condition. Nonetheless, it is clear that felines, smiling staff heads, and flowering plant mouth appendages are also used in this style (Cook 1979; Menzel 1968, 1977). The iconographic variability characteristic of this early cache is further emphasized in the uniqueness of each frame. There is little image redundancy and the structure of these scenes suggest that each is meant to convey specific information that might have been read sequentially around the circumference of the vessel. No other caches of this nature have been found. Comparisons to early Central Deity Theme figures at Tiwanaku are the two Staffed Central Deities, the Sacrificer, and the Profile Attendants (Cook 1979, n.d.; Menzel 1968, 1977).

The period in the Ayacucho sequence potentially cross-datable to the early classic Tiwanaku IV monuments, such as the Kantataita architrave and the transitional Linares Street lintel, was probably late Middle Horizon 1A, exemplified by the Conchopata A cache. In the Huari region there are two horizontal figures; one has the facial features of a bird, the other is feline in nature with crossed canines. They represent two winged deities (Menzel 1977: Fig. 91). Positionally, these figures are

depicted horizontally as they are found on the Tiwanaku lintels. However, at Conchopata they do not represent the Sacrificer. Instead, the running Profile Attendant or Angel A (Menzel 1964) holds a staff in one hand at the base of which is either a trophy head or a miniature captive. An axe is held in the other hand (Menzel 1977: Fig. 67). This is the earliest known example of the Sacrificer in the Huari highland region. It is associated with the most complex and varied iconographic assemblage unearthed in the area. It can be directly compared to the same figure seen at Niño Korin (with camelid features) and the San Pedro de Atacama snuff table figures. It is likewise the same figure depicted horizontally on the Kantataita and Linares Street lintels at Tiwanaku and bears some resemblance to the damaged de Crequi-Montfort stone fragment. These figures appear in both spheres during the same time period. By 500 A.D. or Middle Horizon 1B the figure is associated with a range of other figures in the pantheon at Huari, while in the Tiwanaku sphere, it appears as a miniature human Sacrificer on the Gateway of the Sun (Posnansky 1945: PL. LII, LXII, LXIV).

Tracing the development of the Sacrificer with relation to its spatial distribution and context has offered an interesting yet complex picture of figures appearing within the Huari and Tiwanaku spheres. In brief, the pattern that emerges from this analysis indicates that although Pucara art conveys many aspects of later Middle Horizon state iconography its context and use is of a different nature. As one moves out towards Tiwanaku to sites where this iconography has been found, the Sacrificer bearing an axe, trophy head and staff is repeatedly found on snuff-tablets and later appears briefly on Tiwanaku stone sculpture. Known examples of the figure never appear with wings within the Tiwanaku sphere. Within the Huari area, during this same period, the figure is

present, winged and in conjunction with a full repertoire of pantheistic figures depicted in themes on oversized vessels. The earlier trophy-head ritual participants are now embraced and transformed in a symbolic repertoire utilized by a growing number of ethnic groups that have come under the centralizing influence of two strong polities. The Central Deity Theme is a supernaturally-oriented configuration whose figures were attributed wings, facial decoration, split eyes, etc., placing them above the human. Simultaneously, the figures conveyed status symbols such as earspools, staffs and pedestals. The figures themselves reflect a hierarchy ranging from a Staffed Front Face Deity to Profile Attendants, humans and animal figures.

Current ethnographers and ethnohistorians maintain that a long tradition of cultural continuity characterizes the Central Andean region. Accounts of native Andean genealogy and cosmology, provided by modern informants (Isbell, B.J. 1978; Isbell, Wm. 1976; Nuñez del Prado 1968; Pease 1973; Zuidema 1972; Zuidema and Quispe 1973) indicate that boundaries between the human and the supernatural are often confused and ambiguous. This strongly suggests that similar conceptions of cosmology existed prehistorically. It is therefore not surprising to see the worldly and superhuman combined in iconographic scenarios.

It still remains to be seen how Huari and Tiwanaku symbolic congruence is a result of competitive polities, each made up of different ethnic groups whose power elites attempt both internal and external integration through a common imagery reflective of relations of dominance.

Footnotes

1. The Carbon 14 date of an associated skull is 755 A.D., the leaves date to 355-375 A.D. indicating that subsequent interments were

possibly made. (It is well known that Carbon 14 dating results are most reliable with large comparative samples. The date of one skull should therefore not be considered definitive). The Carbon 14 dates that cluster around 300-500 A.D. can also be substantiated iconographically by comparison with Pucara art.

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FIGURES

- Figure 1. Conchopata B offering cache: small Nascoïd 9B related humped-back animals arranged on the shoulder of oversized face-neck jars.
- Figure 2. Conchopata B offering cache: Nascoïd animal with stinger, located on the main design panel of oversized face-neck jars. This theme occurs only three to four times on the main panel.
- Figure 3. Conchopata B offering cache: Central Deity Theme consisting of a Staffed Front Face Deity and two rows of running Profile Attendants. This is the most common theme in the offering, located on the main design panel.
- Figure 4. Niño Korín snuff tablet with Sacrificer. (Length 18.5 cm). After Wassen 1972: Fig. 5.
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- Figure 6. Lithic fragment from the Akapana section of Tiwanaku excavated by de Crequi-Montfort (1906). After de Crequi-Montfort 1906: Fig. 11. (Approximate dimensions 16 cm by 8 cm).
- Figure 7. A Sacrificer from the Kantataita lintel located at Tiwanaku. This is the most complete figure on the piece that indicates the axe, trophy head and staff attributes.
- Figure 8. Lithic fragment from the Bandelier collection housed at the American Museum of Natural History. Catalogued provenience: Ticani, Island of Titicaca (B2121). An example of the Sacrificer's head used as a pedestal appendage.

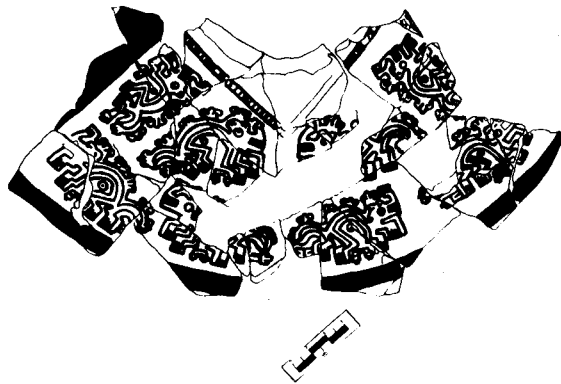


Fig. 1

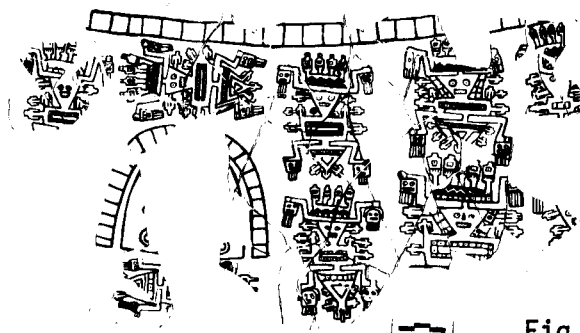


Fig. 2

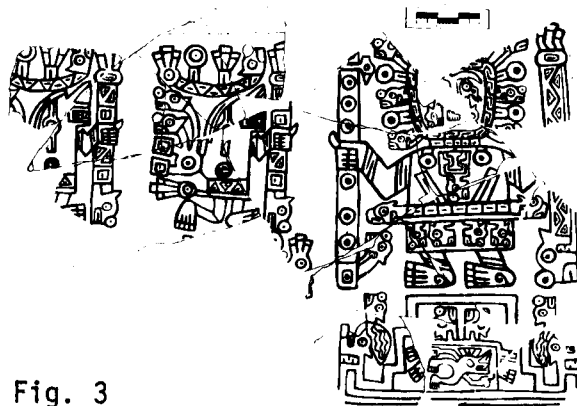


Fig. 3

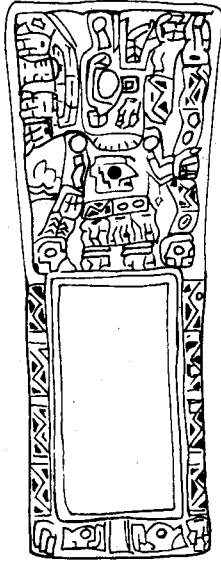


Fig. 4

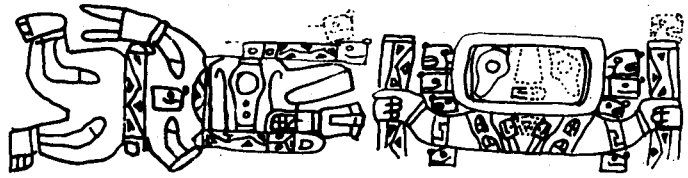


Fig. 5

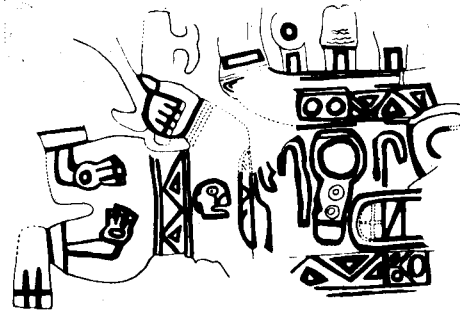


Fig. 7

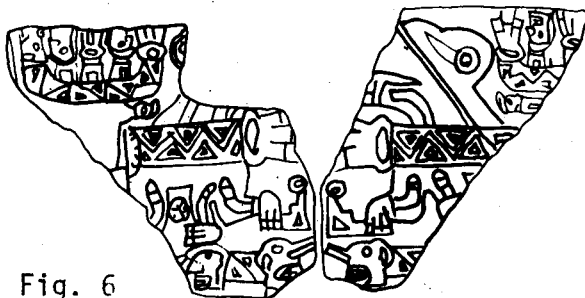


Fig. 6

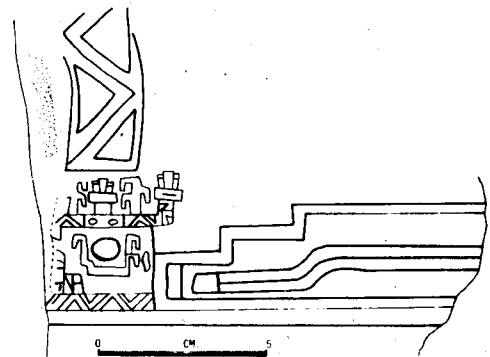


Fig. 8

Shared ideology and parallel political development:
Huari and Tiwanaku

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Important evolutionary advances were achieved by the ancient cultures of Peru and Bolivia during the Middle Horizon (A.D. 500-1000). Earlier societies had already developed hierarchically structured polities whose administrative nodes were located in impressive temple centers. The labor invested in the monumental architecture of each ceremonial center probably reflected its position in the regional hierarchy. In several areas, the altiplano around Lake Titicaca and the north coast around the Moche Valley, there is sufficient differentiation in size of the ceremonial centers to imply a hierarchical chain of command with three superimposed administrative levels. This degree of administrative differentiation is frequently identified with state governments (Isbell and Schreiber 1978; Wright and Johnson 1975). These ceremonial centers, however, lack extensive architectural facilities for housing bureaucrats, storing goods, and quartering laborers or soldiers. Consequently, it must be assumed that the sanctions supporting the rulers were almost exclusively ideological in nature, that control over surplus goods was relatively limited, that the size of the elite administrative class was small, and that the amount of information collected and processed by the administrators was also tiny. This priestly elite probably remained outside community politics where local, kin-based authority prevailed, and concentrated instead on communication with ancestral deities, and increasingly important problems of intercommunity interactions.

During the Middle Horizon, some capitals grew in size, attaining urban population aggregates. Monumental temple platforms were replaced by walled

compounds with numerous internal rooms. Lower order provincial capitals were carefully planned complexes with streets, plazas, compounds and elongated rooms. Some possessed rows of buildings or rooms that appear to have been storehouses (Isbell 1977, 1980; McCown 1945; McEwan 1980, 1981, personal communication; Sanders 1973; Schreiber 1978; John Topic personal communication). The earliest evidence of the knotted string accounting device (quipu) belongs to this period (Conklin 1982) as well. These data imply that the number of elite administrators increased significantly. Control over surplus goods and labor was greater, and the larger body of administrators was probably involved in processing data and making decisions about a much broader range of human activities. It seems likely that even local level, kin-based authority was superceded by the central government, and standardized room complexes may indicate barracks-like residences for workers and military that guaranteed physical force to back the decisions of the elite.

During the Middle Horizon, it is apparent that the bureaucratic state was born in the Central Andes of Peru and Bolivia. What is more, the distribution of diagnostic art shows that a vast area, including several of the earlier theocratic states, was welded together into a single political unit, the empire (Browman 1978; Isbell and Schreiber 1978; Lumbreras 1974; Menzel 1964, 1968, 1978). But careful study of the art indicates that the most popular developmental scenarios accounting for these cultural advances are probably incorrect and misoriented.

In one generally respectable reconstruction of the Middle Horizon, culture change and increase in political complexity are considered to have taken place at a single precocious center, Tiwanaku (Ponce 1969a, 1971, 1972, 1979). Subsequently, these new organizational advances were spread throughout the Andes by conquering armies or missionary merchants who established

secondary, provincial centers. A vast administrative or commercial empire was created with the altiplano center of Tiwanaku as its political capital and cultural leader.

This scenario assumes that the transition from a ceremonially based polity to a bureaucratic state, and/or politico-economic empire, was due to processes taking place in Tiwanaku's core territory. As a consequence, archaeological studies of the ideological and behavioral changes, as well as the selective pressures that produced the Middle Horizon must focus only on Tiwanaku and its immediate surroundings. Societies and events more removed in space or time need not be considered, except perhaps as some of these impinged on the government and organization of Tiwanaku during the expansion of its borders and creation of its provincial capitals.

A second scenario recognizes two stages in the evolutionary process, and two cultural centers. In this conceptualization of the past, Tiwanaku is also the precocious center where initial organizational transformations took place. Subsequently, its newly developed sophistication was transmitted to the Ayacucho Valley, and the site of Huari, that soon emerged as the dominant settlement and regional capital in that area. Mechanisms for the transmission of Tiwanaku's political skills to Ayacucho are hypothetical, but conquering armies, colonists, and merchant-missionaries from Tiwanaku have all been proposed, as well as pilgrims from Ayacucho who visited the great altiplano center, learning something of its administrative organization and converting to its dogma before returning to their Ayacucho homes (Lumbreras 1974; Menzel 1964).

In this second, two stage scenario, Huari was established as, or became, an independent center employing Tiwanaku's sophisticated organizational pattern. Within a couple of centuries it extended its influence over much

of the Central Andes north of the Tiwanaku sphere, becoming a cultural and political capital comparable to Tiwanaku itself.

Some scholars feel that Huari employed Tiwanaku's organizational forms virtually unmodified while others argue that it reinterpreted them and formulated another and more progressive system. A popular interpretation endorsed by archaeologist David Browman (1978) describes the Tiwanaku sphere as a commercial empire held together by economics, ideology and skillful merchant-missionaries while Huari's sphere was carved out by conquest and held together by an administrative bureaucracy backed by force of arms. Be that as it may, archaeologists subscribing to the two stage scenario must focus their research on the initial innovation at Tiwanaku, the information transmitted from Tiwanaku to Huari, and the subsequent development at Huari in order to explain the cultural advances achieved during the Middle Horizon.

Both of these scenarios of Middle Horizon political evolution depend on interpretations of art and iconography. I agree that the diagnostic iconography of Tiwanaku and Huari provides a sensitive indicator of past political boundaries, as well as the regional structure of Middle Horizon empires. Even the ideology, and its transformations through time, are preserved in the iconography, where they may possibly be recovered by insightful research. The association of the characteristic Middle Horizon icon inventory with expansionist ideology and organization is obvious since it reappeared in only slightly modified form with almost every period of cultural and political unification in the Central Andes. My disagreement is with the assumption that progressive change originates in one precocious and inventive center - Tiwanaku in this case - to be subsequently diffused into cultures that lacked conditions appropriate for the transformation.

Examination of the art and iconography of the Middle Horizon shows that it

is more likely that Tiwanaku and the ancient Ayacucho centers, especially Huari, developed through parallel evolution spurred by mutual information exchange. What is more, each experienced the same initial catalyst, an infusion of ideology, with corresponding icon inventory, from an ancient tradition of cultural unification that was foreign to both. The recognition of these factors in the simultaneous development of both centers should help archaeologists realize the inadequacy of explanations of culture change that attempt to locate a precocious center with material conditions responsible for great innovations. Instead, we must turn our attention to the conditions under which innovations take place and are adopted, an endeavor that should be assisted by determining the factors shared by Huari and Tiwanaku during their impressive parallel development.

The diagnostic, fusional iconography shared by Tiwanaku and Huari, as well as other important Middle Horizon centers, emphasizes an anthropomorphic figure, standing erect and viewed front-face. Referred to as the front-face deity, it has both arms raised and spread, with each hand grasping a staff. While details of its elaborate headdress and costume may vary somewhat, and the entire figure can even be reduced to a disembodied head, the front-face deity is easy to recognize throughout the Andes. Attendant figures usually accompany the front-face deity, being located to its left and right. These attendant figures are depicted in profile and usually have one leg forward and the other to the back as though kneeling or running. One arm is raised and grasps a staff that is held parallel to the body. Some specimens have wings on their backs, wear elaborate costumes and have headdresses quite similar to those of the front-face deity.

In Andean prehistory, the front-face deity with attendant figures is very ancient, although its temporal distribution appears to have been

discontinuous and associated with periods of cultural unification. It is one of the principal themes of widespread Chavin art during the Early Horizon (Rowe 1962). As interregional diversity emerged during the Early Intermediate Period, the theme declined in popularity except perhaps at Pucara (Rowe and Brandel 1970). This ceremonial center is located on the northern edge of the altiplano between Tiwanaku and Ayacucho. Pucara culture is still poorly known but reports of artifacts in Pucara style as far away as northern Chile and the Cuzco area demonstrate that it, too, was expansionistic, employing the iconography and associated ideology to unify diverse peoples (Conklin 1983).

In the Middle Horizon, great empires were formed and the front-face deity with attendant figures became a dominant theme in art throughout the Central Andes. As the great polities declined, they too lost popularity except on Peru's north coast where the Chimu empire fashioned a new multi-ethnic polity out of Middle Horizon roots (Schaedel 1978). Only Inca fusion appears to have been achieved without the front-face deity and attendants. Inca art, however, is almost devoid of representational depictions so it is possible that the ideas symbolized by the theme did exist in Inca ideology without overt depiction in art. Anthropologists Zuidema and Quispe (1973) have found a modern Indian conceptualization of God that expresses the same thematic structure as Middle Horizon depictions of the deity and attendants. This would support the contention that the ideology associated with the theme was present in Inca thinking, continuing into modern catholicism under colonial and republican rule.

Archaeologists' assumption that Middle Horizon diffusion of the front-face deity with its attendants was from a center at Tiwanaku is a curious happenstance of history. Tiwanaku is an unusually impressive site and it

has always attracted a great deal of attention. The German archaeologists Alfons Stübel and Max Uhle (1892) published an influential monograph on Tiwanaku. Its most important contributions were first, a detailed description and definition of Tiwanaku's sculptural art, and second, the demonstration that the sculptures and ruins of Tiwanaku were older than Inca civilization. This was the first scientific demonstration that a cultural chronology with significant time depth existed in the Andes.

Several years after his study of Tiwanaku's art, Max Uhle (1903b) was excavating the temple of Pachacamac on the central coast of Peru. To his surprise, he found burials under an early addition to the temple. They were accompanied by ceramics and textiles decorated with the Tiwanaku-like front-face deity and attendant figures. Immediately, Uhle realized that the textile and ceramic representations from Pachacamac were not identical to the stone sculptures of Tiwanaku. He also knew that the shapes of the pottery vessels from Pachacamac were unknown at Tiwanaku, where the important deity and attendants very rarely occurred on ceramics anyway. Carefully, he warned that it was unlikely that the Pachacamac artifacts had come from Tiwanaku and that Tiwanaku was unlikely to have been the center from which the iconography was dispersed. What Uhle did believe was that the similarity in the Pachacamac and Tiwanaku figures established a contemporaneous artistic horizon that would permit him to create a regional chronology for much of Peru and Bolivia. In this, Uhle was successful, formulating the first archaeologically defined regional chronology for any center of pristine archaic civilization in the world (Uhle 1903a). But he also named the newly discovered coastal style after Tiwanaku (Tiahuanaco), which apparently implied a Tiwanaku origin for subsequent generations of archaeologists. In 1944, the famous anthropologist, archaeologist and

style analyst, Alfred Kroeber (1944) stated that it still remained unproved, even though virtually everyone assumed that Tiwanaku was the source of the broadly diffused, diagnostic art which I shall refer to as Tiahuanacoid. (I have retained Uhle's spelling of Tiahuanaco and added the suffix "oid" to distinguish Middle Horizon art emphasizing the front-face deity and attendant figures from the Bolivian archaeological site of Tiwanaku.) Kroeber's claim is equally valid today, and it is possible to begin to show that Tiwanaku was not the center of dispersal for the Tiahuanacoid icons or for Middle Horizon political forms. First, let us examine the cultural sequence from Tiwanaku itself.

A chronology of ceramic styles was established for Tiwanaku through stratigraphic excavations conducted by Wendell Bennett (1934) in 1932. Various other archaeologists have excavated at Tiwanaku since then, but none has published a revision of Bennett's sequence. In 1955, Alfred Kidder II (1956) reexcavated at Tiwanaku to collect charcoal samples for radiocarbon dating. Kidder observed that many of the charcoal samples could have suffered disturbance or contamination. More important for us is the question whether Kidder could adequately distinguish the ceramic phases described by Bennett so that he and other archaeologists would know what phases were really associated with each date. The most recent archaeology at Tiwanaku has been directed by Carlos Ponce and his associates. It has been oriented toward the exposition of architectural remains and the formulation of a chronology of building periods, although new carbon samples and a vast amount of pottery were also collected. However, until most of these latter are analyzed and published we have no way to be sure that Ponce's building periods are precisely associated with Bennett's ceramic chronology or Kidder's dates.

According to Ponce, the monumental temples at Tiwanaku were constructed during the period he calls Tiwanaku III, which corresponds to Bennett's Early Tiahuanaco period. Sculptures from this period, such as stela 15 (Ponce and Mogrovejo 1970: Fig. 31-32), or the tenoned heads from the semi-subterranean temple (Ponce 1969: Fig. 17-25), belong to a fairly broadly diffused, early style that universally lacks the front-face deity and attendant figures which define Tiahuanacoid iconography. In the subsequent, Tiwanaku IV period (Bennett's Classic Tiahuanaco) the temples were refurbished with facades and sculptures replete with Tiahuanacoid icons, such as the Gate of the Sun (Ponce et al. 1971: Fig. 103), originally from the Pumapuncu but now standing on the corner of the Kalasasaya temple platform. This places Tiahuanacoid iconography at the beginning of the Tiwanaku IV period, an interpretation that agrees with Dwight Wallace's (1957) conclusions based on a comparison of sculptural details with ceramic decorations.

Radiocarbon dates from Tiwanaku (Chart I) imply that the Tiwanaku IV period began about A.D. 500, so the adoption of Tiahuanacoid iconography must have taken place at about that time. This date of A.D. 500 is virtually identical with the beginning of Middle Horizon 1A in Peru, and the appearance of Tiahuanacoid icons in Ayacucho, at the site of Conchopata, only 10 km. from Huari. At Conchopata, a cache of large urns decorated with Tiahuanacoid icons was found in 1942. The mythical beings include two variants of the front-face deity; five kinds of profile attendants, including a large, disembodied profile head, apparently from an angel; and several other beings. Dorothy Menzel (1964) has shown that on seriation grounds, this cache belongs to Epoch 1A of the Middle Horizon.

Now if Tiahuanacoid iconography was adopted at Tiwanaku and Conchopata-Huari at about the same time, a third artistic and cultural tradition must

exist that influenced both centers. Pucara is the most likely antecedent since it is earlier and located between Tiwanaku in the southern altiplano and Huari in the Ayacucho Valley. It possesses some strange looking versions of a front-face deity who grasps a weapon or agricultural tool in one hand and the tether of a camelid in the other. Attendant representations are, however, much more similar to those of Tiwanaku and Conchopata-Huari (Rowe and Brandel 1970). Unfortunately the sample is still small and all published examples lack wings but share many other attributes with the later icons. Finally, a small stone sculpture in Pucara style depicts a front-face deity very similar to the Tiwanaku and Conchopata-Huari examples (Rowe 1976).

Pucara is a definite antecedent for Middle Horizon Tiahuanacoid art but it is unlikely to be the direct and immediate antecedent. The radiocarbon dates from the site cluster in the first century B.C., and even if the ceremonial center was not abandoned until A.D. 200 or 300, that leaves several centuries unaccounted for. What is more, the known sample of Pucara icons tends to confirm a hiatus of several hundred years during which the figures underwent significant change before being adopted in Ayacucho and Tiwanaku.

One candidate for a Pucara-derived common ancestor of Middle Horizon Tiahuanacoid art comes from Niño Korin on the eastern slopes of the Andes mountains between Lake Titicaca and the Amazon jungle (Wassen 1972). This archaeologically little known area has produced the burial of a medicine-man complete with his paraphernalia for herbal and ritual cures. Among the objects preserved with this burial (which was placed in a dry cave) is a wooden tablet used in snuffing hallucinogenic powders (Wassen 1972: Fig. 5; see also Cook, this volume: Fig. 4). Incised on the tablet is an attendant figure in an early Tiahuanacoid style that possesses trophy heads

very reminiscent of those in Pucara art. The disembodied head of the front-face deity is depicted on a basket from the same burial (Wassen 1972: plate II). Four radiocarbon dates are available for the Niño Korin burial, A.D. 1120 \pm 100, A.D. 755 \pm 100, A.D. 375 \pm 100, and A.D. 355 \pm 200. The earliest two dates are indistinguishable from one another and fit well with Pucara relationships, especially in the trophy heads. If the Niño Korin find dates between A.D. 300 and 500 it may provide an example of the late, Pucara-inspired art that was adopted in both Ayacucho and Tiwanaku.

Decorations from the Conchopata urns discovered in 1942, the earliest Tiahuanacoid art in the Ayacucho area, share a number of features with the profile attendant on the Niño Korin tablet. Many of these early characteristics disappeared in the Tiahuanacoid art of Ayacucho that, through seriation and stratigraphic superposition, can be shown to be later.

The identification of initial and later Tiahuanacoid stylistic constellations in Ayacucho facilitates the dating of important sculptures at Tiwanaku. For the most part, front-face deities and profile attendant figures from Tiwanaku are very similar to one another, sharing so many stylistic elements that no more than a century or so could separate the known examples. By comparing examples of this group of Tiwanaku icons with the Ayacucho representatives it should be possible to determine whether they share more features with the earliest, or the later styles. Sculptures stylistically contemporary with Ayacucho's first Tiahuanacoid icons can be searched for, and we can determine whether the art from Tiwanaku includes even more primitive, Pucara-like figures that would document the presence of the front-face deity and attendants before their introduction to Ayacucho.

An examination of Tiwanaku sculpture reveals three pieces that contrast with the bulk of the art and share a number of features among

themselves. One is a small stone fragment with two incomplete attendant figures mistakenly illustrated upside down by Count Creque-Montfort (1906: Fig. 11; see also Cook, this volume: Fig. 6). Second is a carved lintel, certainly from Tiwanaku, but reutilized in a house at Calle Linares in La Paz (Posnansky 1945: Fig. 140; see also Cook, this volume: Fig. 5). It depicts the front-face deity and four attendants. The third specimen appears to have remained unpublished until now and was probably only recently excavated (Cook, this volume: Fig. 7). It lies at the western edge of the ruined compound within Tiwanaku's civic center that is known as the Kantataita. Stylistically, this group belongs with Niño Korin and Conchopata 1942, sharing Pucara-like trophy heads, a distinctive zigzag band, a long nosed being, "N" shaped canines and horizontally positioned attendants. However, the contemporaneity of these icons as indicated by shared attributes is discussed in more detail by Anita Cook in this volume.

Later Tiahuanacoid iconography from Ayacucho includes an offering deposit of face-neck jars found by construction workmen at Conchopata in 1977 (see Cook, this volume: Figs. 1-3). A broadly contemporary offering of pottery was found at Pacheco, Nasca in 1927 (Menzel 1964) and many fragmentary pieces are known from Huari and its provincial settlements. These icons share a large number of elements with the bulk of Tiwanaku sculptures, such as the Gate of the Sun, stela 10 and stela 15 (Ponce and Mogrovejo 1970: Figs. 27-29).

A study of the published examples of Tiwanaku art, the examination of numerous museum collections, and correspondence with both professionals and knowledgeable amateurs has failed to reveal specimens of Tiwanaku art that belong to a phase in the development of Tiahuanacoid iconography that should be significantly earlier than the Middle Horizon 1A examples from

Ayacucho, the Niño Korin tablet, or the three Tiwanaku pieces discussed above. The conclusion is obvious. Based on the information available, Tiwanaku cannot be considered to be the center for the development and dissemination of Tiahuanacoid art. Rather, Tiwanaku and Ayacucho both adopted Tiahuanacoid iconography at about the same time. A late and derived tradition of Pucara-like mythical figures has been postulated to fill the temporal and stylistic hiatus between Pucara and Tiwanaku-Huari. Thus far, Niño Korin provides the specimens most likely to belong to a Pucara-derived tradition in existence between A.D. 300 and 500.

A larger sample of early Tiahuanacoid art is required before the relationships among the various early groups of icons can be established with security. The 1942 Conchopata urn collection possesses two variants of the front-face deity and five forms of attendant angels (Cook 1979). The early inventory from Tiwanaku has only one variant of front-face deity and one or two forms of attendant angels. Unless a number of early Tiahuanacoid icons remains to be discovered at the altiplano site, Tiwanaku lacks enough variation to provide the antecedent for the Conchopata figures. This supports the contention that the Ayacucho icons were not borrowed from Tiwanaku, but that both were adopted from a third source. Niño Korin possesses unfortunately little information with only one example of the front-face deity in highly abbreviated form, and a single specimen with a profile attendant figure. The wet climate of the eastern Andean slopes makes it very unlikely that more examples of such perishable artifacts will be found around Niño Korin. The Niño Korin icons are closely related to, but not themselves the direct ancestors of Tiwanaku's and Ayacucho's versions of Tiahuanacoid art.

Perhaps the most exciting implication of the Niño Korin discovery

comes from its location in the heartland of the modern Callawaya Indians. The Callawaya are famed curers who travel throughout Peru and Bolivia selling their special herbal and ritual cures. They can be seen in the markets of La Paz, only an hour's bus trip from ancient Tiwanaku, and in Ayacucho they are also known. Indians from communities such as Chuschi, located about 90 km. south of Ayacucho, still disguise themselves as "jamites" (traveling Callaway curers) on certain festive occasions that commemorate the influence these itinerate medicine men and other outsiders have had on village history (B.J. Isbell 1978).

The medicinal herbs and curing paraphernalia associated with the Niño Korin burial make it absolutely clear that the individual was a shamanistic curer, and there is no reason to doubt that he is an ancestor of the modern Callawaya. What is more, if modern Callawaya travel from the Niño Korin area south to the Tiwanaku region, and north to Ayacucho, it is very likely that their ancient ancestors made similar trips. I suggest that preconquest, itinerate Callawaya shamans invoked mythical beings in their curing rituals -- the front-face deity and profile attendants who were depicted on the curing paraphernalia and perhaps also on the woven garments worn by the ethnic specialists. Since the Callawaya sought to attend persons from all ethnic groups, their curing pantheon must have contained universal cosmic beings free of ancestral relationships to any specific groups. Adopted from the earlier fusionistic Chavin and Pucara religions, the front-face deity and attendants may have been key figures in an incipient universal religion well before either Tiwanaku or Huari had dreamed of a universal state.

A new scenario of Middle Horizon culture change can now be proposed. Tiwanaku was not the precocious center where initial organizational

innovations took place, starting a new adaptive stage in Andean cultural development. Rather, Tiwanaku and the Ayacucho settlements had been experiencing independent development during the centuries immediately preceding A.D. 500. From the information now available it would appear that Tiwanaku had established a hierarchical, theocratic polity, perhaps even a state, administered with the aid of secondary and tertiary ceremonial centers located up to 50 or 60 km. from the capital. In Ayacucho, ceremonial centers were less apparent. Settlement size and distribution suggest a decentralized political structure, perhaps some sort of confederation headed by secular authorities from more or less independent kingdoms. Before the appearance of Tiahuanacoid iconography, Ayacucho settlers were establishing colonies in the coastal Nasca Valley several hundred kilometers away (Paulsen 1980 and this volume). This may reveal a policy or tradition of colonies that exploited ecologically contrastive zones forming a non-contiguous economic archipelago held together by intra-ethnic bonds of reciprocity (Murra 1972).

By A.D. 500, itinerate shamans of Callawaya ethnic origin were offering their services in both Tiwanaku and Ayacucho. Their sophisticated herbal cures were backed by universal religious ideology that focused on a powerful front-face deity with attendant beings. Soon, the new religion, with its iconic symbols and concept of universal order that subsumed ethnic differences, was adopted in both Tiwanaku and Ayacucho.

Reciprocal interaction between the two major cultural centers also accelerated change. Huari experimented with Tiwanaku's hierarchical religious organization, but discarded the more strictly religious officials and ceremonial centers in favor of authorities with more secular functions who resided in well-equipped administrative towns (Isbell 1982). Centralized

control was established over the entire Ayacucho region employing this new governmental form that was sanctioned by the universal religion adopted from the Callawaya. Residents of many of Ayacucho's older centers immigrated to Huari. Bureaucratic state government and an urban capital were born. But change continued. The tradition of colonies located in distant lands was transformed into expansionistic conquest that imposed the single hierarchical political system. Indirect but centralized political control and Huari's new religion were spread throughout much of Peru. Where appropriate local administrative institutions were lacking, Huari constructed carefully planned provincial capitals from which bureaucrats managed state properties and acted as intermediaries between the central authority of Huari and local leaders of the traditional ethnic groups. The first Andean empire was born.

Following the adoption of the new, universal Callawaya religion, Tiwanaku refurbished the temples in its great civic center, erecting many sculptures replete with representations of the front-face deity and attendants. Although its residents cannot be accredited with all the insightful organizational innovations attributed to them in the old scenario of Middle Horizon developments, important changes did take place. While the temples were redecorated, Tiwanaku began to expand its sphere of influence. Ceremonial centers, however, were no longer constructed in newly colonized territories. At Tiwanaku, rectangular compounds with elongated room complexes surrounding open patios were built. The two known examples - the Putuni and Kherikala - have been interpreted as elite residences, most likely palaces. They reveal a trend toward the inclusion of more secular concerns in administration, and the development of architectural facilities for an increasing number of bureaucrats. The addition of more secular functions, the form of the Tiwanaku palaces and the development of distant colonies all

suggest some Huari inspiration. It seems unlikely however that the administration of Tiwanaku's provinces was similar to those of Middle Horizon Huari. Rather, ties based on economic exchange and religious conviction may have held together Tiwanaku's version of an empire without a significant number of bureaucratic elite other than those in the capital itself. The universal religion secured a means of interaction among politically independent, ethnically distinct, but economically complimentary polities among which the elite of Tiwanaku set the standards for consumption and display.

This scenario of Middle Horizon culture change emphasizes the importance of ideology, information exchange, and the reinterpretation of organizational forms from diverse sources. It rejects the diffusionist explanation in which innovation is ascribed to one, or even two precocious centers. Archaeological research that attempts to explain the Middle Horizon cannot concentrate on Tiwanaku alone, or a succession of innovations that moved from Tiwanaku to Huari. Recognition of the distinct but parallel organizational evolution at Tiwanaku and Huari should redirect our attention to the conditions that encourage innovation and change. I contend that Tiahuanacoid iconography and a new ideology introduced to both Tiwanaku and Huari was instrumental in creating a context appropriate for rapid and radical change at both centers. The study of this shared iconography, with its ideology, and the identification of other conditions or cultural features shared by Huari and Tiwanaku immediately before their sudden evolutionary advances should contribute a great deal to our understanding of state and empire origins.

EXPLANATION OF TABLE I

All dates in the Tiwanaku column are from the Tiwanaku Site, collected under the direction of A. Kidder II or C. Ponce S. (See Ponce 1972).

* Dates probably in error.

1. Samples from Huari collected under the direction of W. H. Isbell
2. Samples from Jargampata collected under the direction of W. H. Isbell
3. Samples from Conchopata collected under the direction of R. S. MacNeish
4. Samples from Nawinpukyu collected under the direction of R. S. MacNeish
5. Samples from Cahuachi, Nasca reported by Rowe (1967:29)
6. Average of 3 samples from textiles believed to have been inside Middle Horizon 2A jars from Ocoña. Reported by Rowe (1967:27-28)
7. Sample from Montegrande, Nasca reported by Rowe (1967:28)
8. Sample from Ulluhaya, Callango, Ica reported by Rowe (1967:28)

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Casma Incised pottery: an analysis of collections from the Nepeña Valley

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The title 'Casma Incised' seems to have been coined by Donald Collier (1962) to describe a redware, predominantly ollas with strap handles, decorated with combinations of the following techniques: incision, punctation, zoned punctation with incising, dentate stamping, rocker dentate stamping, stamped circles and dots, applique bumps, welts, serpentine ridges with punctations and small zoomorphic adornos usually applied to the rim, shoulder and handles of the vessel (ibid.: 415). He equates this pottery with Tello's 'Casma Style' and Kroeber's 'Sechin Style' (ibid.). In their report on Chanquillo, Fung and Pimentel (1973) call for a Casma Culture represented by this ceramic type which also seems to have a fairly wide distribution outside of Casma (Figure 1) as far north as the Nepeña Valley and as far south as the Fortaleza Valley. The principal decoration of this ware consists of circles and dots deeply impressed (ibid.: 77).

As a result of an archaeological survey of the Huarmey Valley, Donald Thompson designates a Huarmey Incised pottery type which he describes as "a rather rococo incised and punctated pottery, which is also found in Casma and Fortaleza" (1964: 545). A northern boundary is suggested by Richard Schaedel who writes: "... beginning with the south bank of the Santa ... a rather uniform surface collection pertains, at least of utilitarian ware. This ware is usually unslipped, is extravagantly decorated with reed punch marks, gouge marks and incisions, and presents a high proportion of modeled nubbins, as well as vertical and horizontal handles" (1951: 241). At this point I would like to add that in 1981 I saw Casma Incised sherds at the site of Las Salinas in the

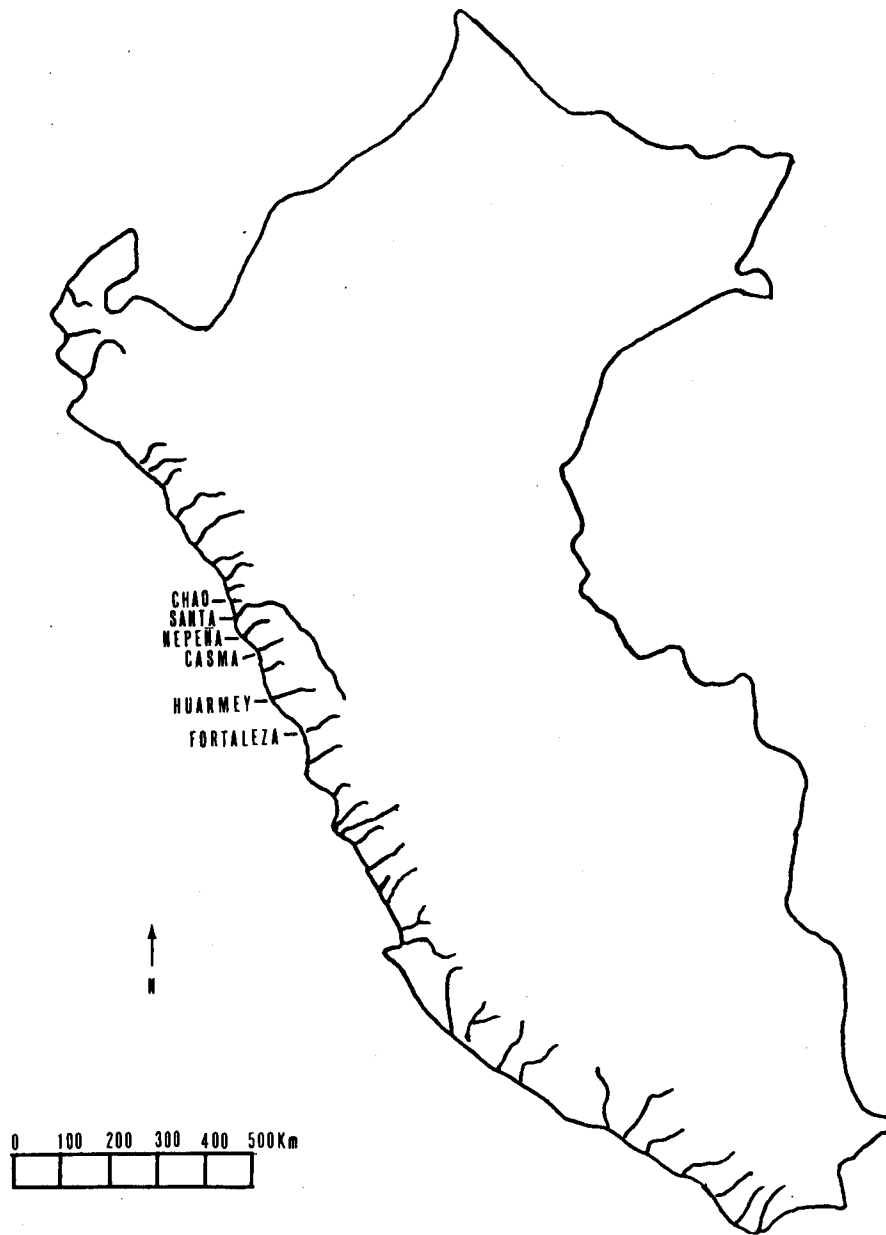


Figure 1. Map of Peru.

Valley of Chao just north of the Santa Valley. This would make the distribution of Casma Incised pottery known to me to be from the Chao Valley on the north coast to the Fortaleza Valley on the central coast, an area roughly 300 km in extent.

From August of 1980 to July of 1981 I helped to carry out an intensive surface survey¹ of the mid and upper portions of the Nepeña Valley². My interest in this 'rococo' or 'extravagantly decorated' utilitarian ware developed as I looked more closely at our sherd collections and noted that all Casma Incised sherds were not as gaudily decorated as was presupposed. From the literature I came to realize that Casma Incised pottery was believed to be an important local ware in a number of north and north-central coast valleys.

In this paper I would like to briefly describe the Casma Incised pottery type as represented in Nepeña collections, noting a distinction between what I am calling Casma Incised (Figure 2a) and a similar, yet quite different, second type which I am calling Serpentine Applique (Figure 2b). I will deal with general shape categories as well as decoration and I will correlate specific decorative techniques to particular parts of the vessel. Towards the end of this paper I will note an association between these pottery types and others thus providing a temporal framework. I will then briefly discuss the distribution of sites where the above types are to be found in Nepeña.

While conducting a preliminary analysis of Casma Incised sherds collected during the 1980-1981 field season and later during my review of slides containing Casma Incised sherds from all Nepeña collections³, I noted two major vessel categories: a necked olla or jar and a large bowl. The more dominant vessel form is clearly the necked jar. Its shape is

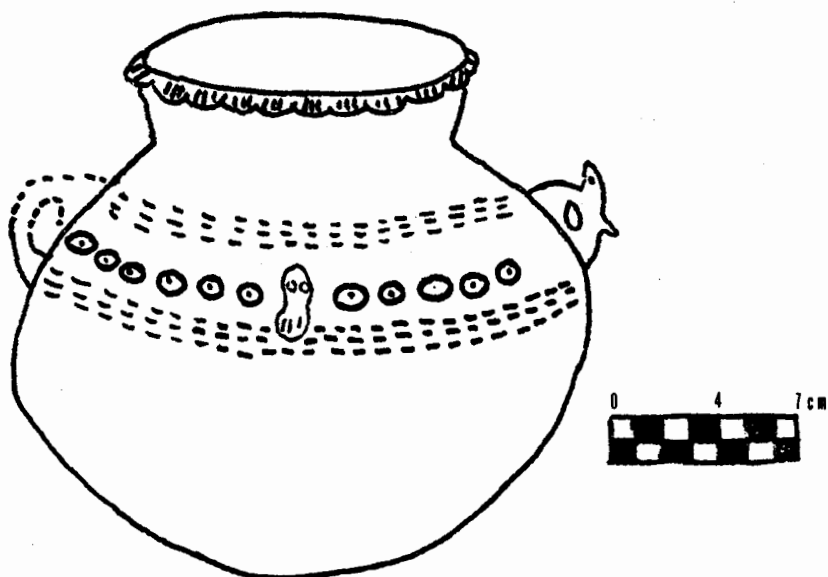


Figure 2a. Casma Incised jar.

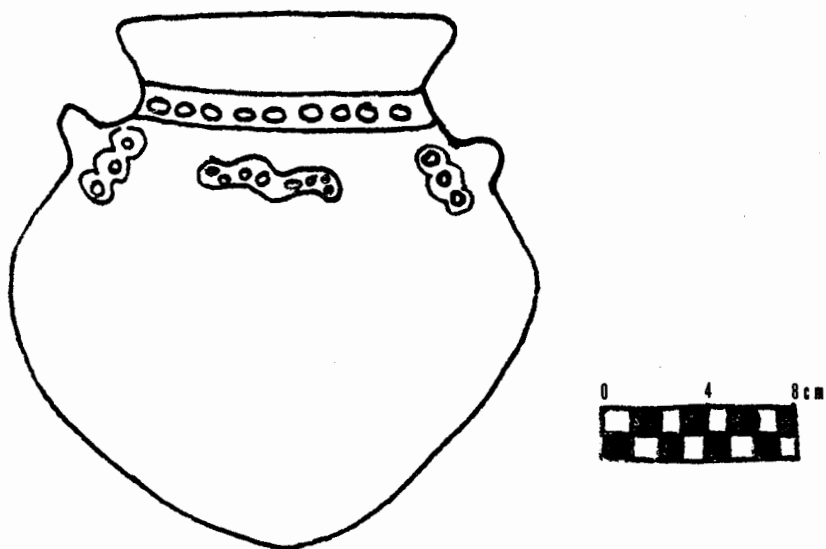


Figure 2b. Serpentine Applique jar.

simple, the body of the vessel being spherical and tending towards squatness. Small, thick handles, almost ellipsoid in cross-section, are attached either horizontally or vertically to the shoulder of the vessel and the overall height of the vessel tends to range between 24 to 42 cm. The major distinguishing feature for these jars was the treatment of the rim.

In my sample of over 200 identifiable rim sherds, the flare rim (Figure 3a) comprised 38% and this makes it the most common rim type. The flare rim rises from the juncture of the rim and the vessel shoulder at a gradual angle and it ranges between 20 and 53 mm in height. The rim edge is usually either rounded or tapered. The diameter of the rim opening ranges between 7 to 14 cm and the diameter of the mouth opening ranges from 6 to 10 cm. The degree to which a vessel flares is not consistent, for the difference between rim opening and mouth opening in some vessels was as slight as only 1 cm while in others it was a prominent 4 cm.

The flare rim is followed in frequency by a lipped-flare rim (Figure 3b) and it comprises 27% of my sample. Similar to the flare rim, it rises from the juncture of the rim and the vessel shoulder at either a gradual angle or, more often, a vertical angle. The rim edge is altered either by a sharp everted turn, which produces a rounded lip on the rim edge, or by a change in the flare angle to a vertical edge, which produces a stand-up lip. This lip is often decorated with applied clay nodules which are then incised with short lines. The diameter of rim openings range from 9 to 14 cm while the diameter of mouth openings range between 8 and 12 cm.

A rim type comprising 14% of my sample and more commonly found in

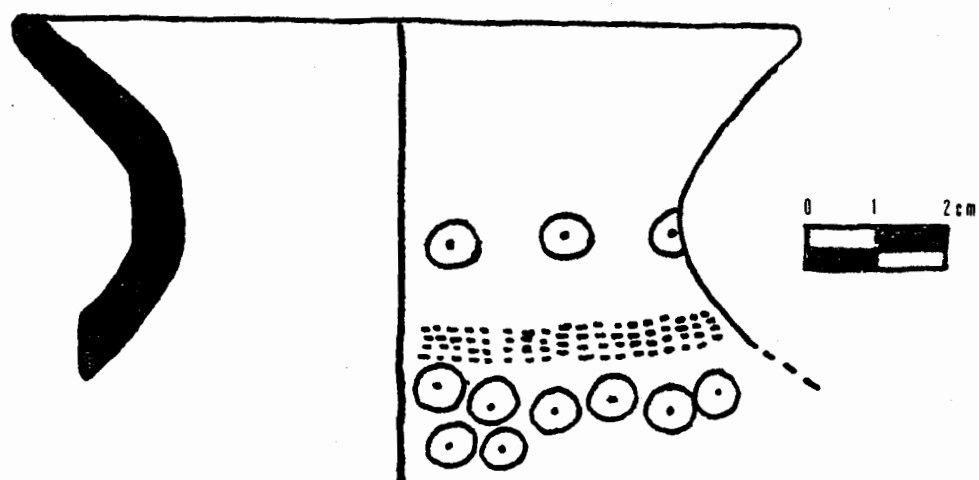


Figure 3a. Casma Incised flare rim.

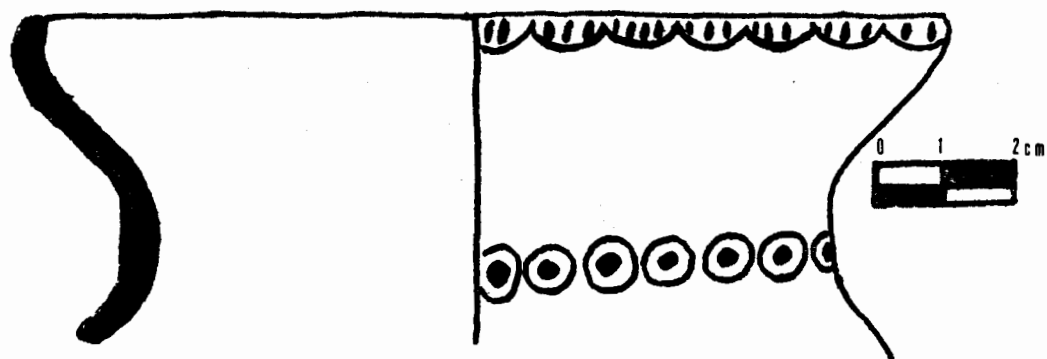


Figure 3b. Casma Incised lipped-flare rim.

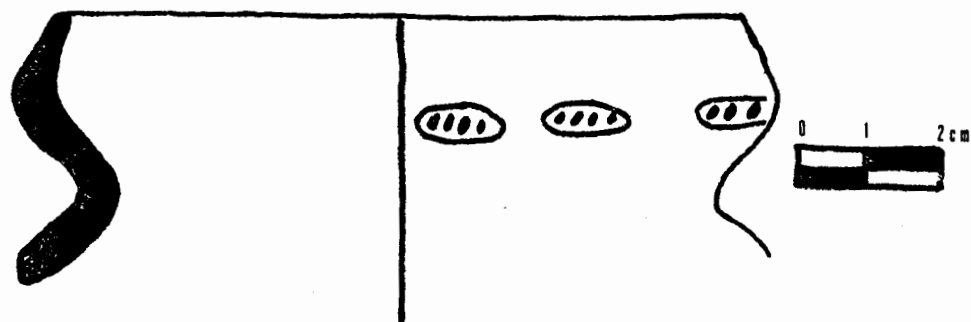


Figure 3c. Casma Incised short, incurving rim.

the middle and upper parts of the valley is a short, incurving rim form (Figure 3c). The rim's distinguishing feature is a point of vertical tangency (Shepard 1956: 224) at its mid-section, thus the maximum diameter of this rim type is neither the rim opening nor the mouth opening. In the few examples recorded, rim openings range between 9 and 11 cm while mouth openings range from 7 to 10 cm, the maximum diameter of the rim being estimated as between 13 to 14 cm.

A variant of the incurving rim is the high-collar rim (Figure 4a) and it comprises 6% of my sample. Generally a thicker ware, this form is most often found in the upper valley. The thickness of these sherds leads me to believe that we are dealing with a large vessel. A larger vessel, too, could proportionately accept the greater height of this rim type, which ranges in this case from 65 to 72 mm. The high-collar rim also has a point of vertical tangency which most often is at a point close to the neck of the vessel thus giving the rim a sagging or baggy appearance. This particular rim is almost always decorated with applique nodes at the point of vertical tangency.

The second shape category for the Casma Incised type is what I surmise to be a large thick bowl (Figure 4b). Although no complete or nearly complete vessels have been found, a combination of the curvature of the vessel's body wall on a few examples, the placement of decoration flush with the rim edge and diameter measurements of the rim edge ranging between 28 and 38 cm lead me to believe that this was a large unrestricted vessel. Because of the applied rim decoration we came to refer to this as a rope-design bowl and I have decided to retain this designation. The rim edge is characteristically flattened and rim thickness varies greatly from 14 to 33 mm. Finally, the body wall decreases

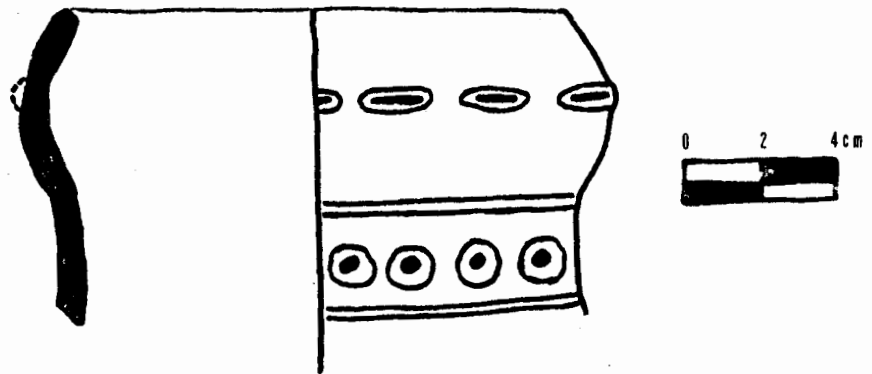


Figure 4a. Casma Incised high collar rim.

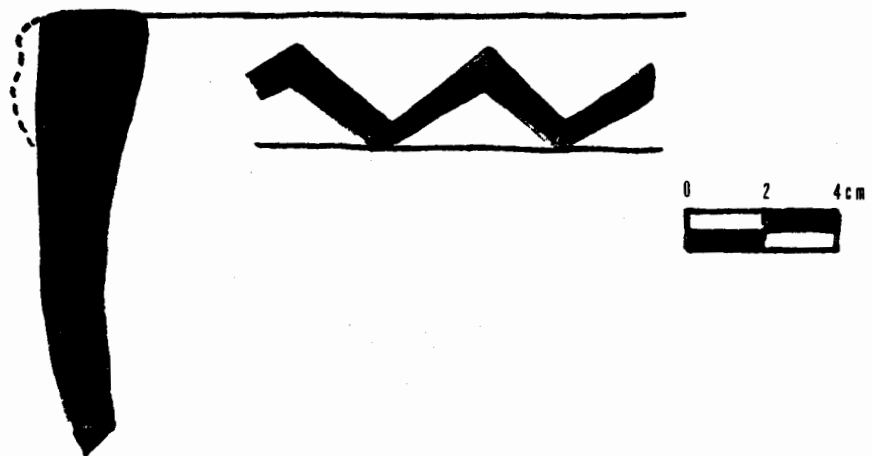


Figure 4b. Casma Incised bowl.

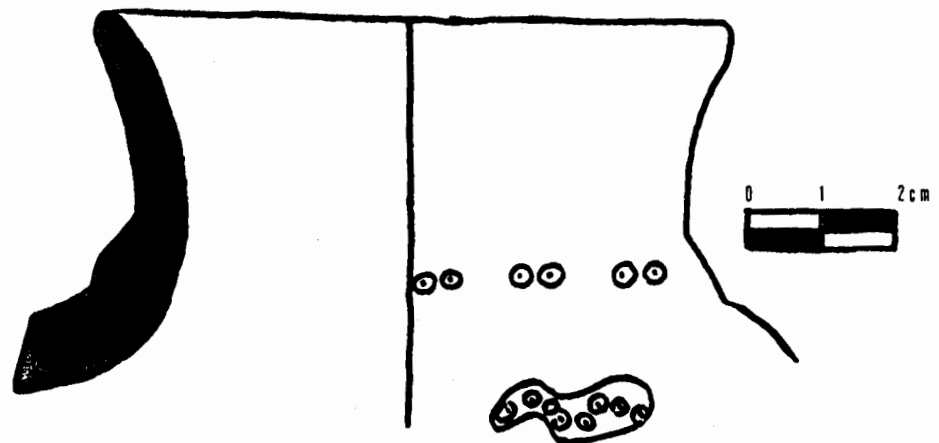


Figure 4c. Serpentine Applique flare rim.

quickly to a thickness of only 10 to 13 mm.

In general, Casma Incised pottery may be described as an oxidized redware. The basic shape is the jar and it was probably made by a molding technique. The paste is medium to coarse in texture and both the interior and exterior surfaces are smoothed. The decorative techniques are plastic and occur as punctation, incision, stamping, combing, applique and modeling. Through my analysis I have noted that certain decorative techniques are executed primarily on specific parts of the vessel.

The rim edge of the jar form is often decorated with applied nodes of clay closely spaced and accentuated with short incised lines (Figure 3b). The nodes protrude from the vessel surface only slightly and the visual impression is of a more sharply defined rim edge. As for the rim surface, applied nodules of clay may also be attached there, this being most common on the incurving and high collar rims (Figure 4a). These nodes average 20 mm in width and they are accentuated by either short incised lines or marks made by finger impressions.

On jars there is a neckband and small fragments of neckbands are what are found in greatest abundance in our surface collections. These neckbands are defined by incised lines or by a change in the angle of the vessel surface (Figure 3b). The width of the neckband ranges between 10 and 15 mm and often it is equivalent to or slightly smaller than the diameter of the circles stamped on it. There is usually a contiguous line of circles with central dot but a few examples exhibit groupings of circles or more widely spaced circles.

The shoulder and upper portion of the body of jars are characteristically decorated with encircling bands of punctation (Figure 2a).

This has been described as combing and the difference in pressure and pull on the instrument causes variations in the depth and length of punctation marks which, upon closer inspection, appear almost rectangular in shape. In most cases the design on the jar body consists of an upper and lower band of combing bordering a pattern composed of the circle and dot motif. This combination is generally restricted to the upper half of the body but in one specific instance the combination of combing and stamped circle and dot extends below mid-circumference of the vessel.

The use of adornos on the vessel body is another decorative technique typical of jars. The most common shape assumed by adornos is that of the bird (Figure 2a). It consists of added clay for the head and tail, the eyes are stamped with circle and dot and the tail is detailed by small incised lines. Modeling of this type is often used to decorate jar handles and the bird and serpentine adornos are the ones most commonly found.

As for large bowls, they too are decorated in a plastic manner. I have previously noted the rim thickness of these bowls and this thickness is due to the fact that wide bands of clay were applied to the rim edge. In most instances long diagonal impressions were spaced at intervals around the applique band. Two examples, however, are more complex in design. The first joins together alternating diagonals to form a continuous pattern (Figure 4b) and the second also includes cylindrical stamps to fill the resultant triangular shaped spaces. Another example exhibits the remnants of applique arms and an obvious place of attachment for a head or a modeled figure on the body of the vessel.

From the Casma Incised collections I have been able to seriate out a second pottery type which I am calling Serpentine Applique. The major

identifiable shape category is the jar and the overall shape of this form is ovoid (Figure 2b). Three rim categories can be identified and these are the flare, lipped-flare and short vertical rim types. Handles, very similar to those found on Casma Incised jars, are horizontally attached to the upper shoulder of Serpentine Applique jars. Again, like Casma Incised, Serpentine Applique is a utilitarian ware.

The sherds collected during the 1980-1981 field season were red-brown to brown in color. The paste was medium to coarse and, unlike Casma Incised sherds, more care seems to have been taken in the manner of finishing for these sherds. There are examples of these latter sherds which have been surface rubbed to a slight polish. Stamping and the use of applied clay nodules predominate in the decoration of these sherds and, unlike Casma Incised jars, decoration of Serpentine Applique jars is not from rim to handle.

Both the flare (Figure 4c) and the lipped-flare rim edges are left plain. At the point where the rim and vessel body come together there may be no decoration or there may be a small neckband defined by incised lines. Small circles are then stamped onto the neckband in either a continuous line or in groupings of two or three. Decoration of the shoulder area of these vessels consists of small pieces of linear applique in the shape of a crescent or squiggle upon which small circles are stamped (Figure 4c). It is quite possible to define two end points for the applique and it is because of the serpentine appearance of these squiggles that the descriptive term Serpentine Applique came to mind.

To summarize, I have shown that there is a utilitarian pottery type known as Casma Incised which extends along the northern Peruvian coast. This type is easily identified by its tendency to be overly decorative. A second type called Serpentine Applique can now be distinguished from

Casma Incised by its tendency toward simple and uncluttered decoration as well as its emphasis on the technique of linear applique.

On the basis of a preliminary analysis of surface sherds collected by him in the Nepeña Valley, Donald Proulx placed the introduction of Casma Incised pottery there during Epoch 4 of the Middle Horizon (1973: 60). This he saw as continuing on through the Late Intermediate Period given its association with Chimú style ceramics (ibid.: 76). My own analysis tends to support these conclusions but it also indicates a heavier emphasis on the latter period than was thought.

In general, Serpentine Applique pottery is to be found in association with a red press molded ware and a red, white and black painted ware. Both of these wares have been identified in the Moche Valley and they are dated there to the Early Chimú period by Donnan and Mackey (1978). The absolute time frame for Early Chimú is given as 800-1000 A.D. and this would include Epoch 4 of the Middle Horizon (ibid.: Chart 1: 6).

A total of 98 sites in the Nepeña Valley are known to include red press molded and/or red, white and black painted sherds in their surface collections. These sites clearly tend to locate in the lower and middle parts of the valley, this being true both in terms of the numbers of sites as well as the size and complexity of individual sites. On the other hand, Serpentine Applique pottery is much more limited in its spatial distribution having been documented at only 16 sites (Figure 5). Three major concentrations of these sites are to be noted, one each for the lower, middle and upper parts of the valley.

In the upper valley Serpentine Applique pottery has recently been discovered in exclusive association with Early Chimú diagnostics. This

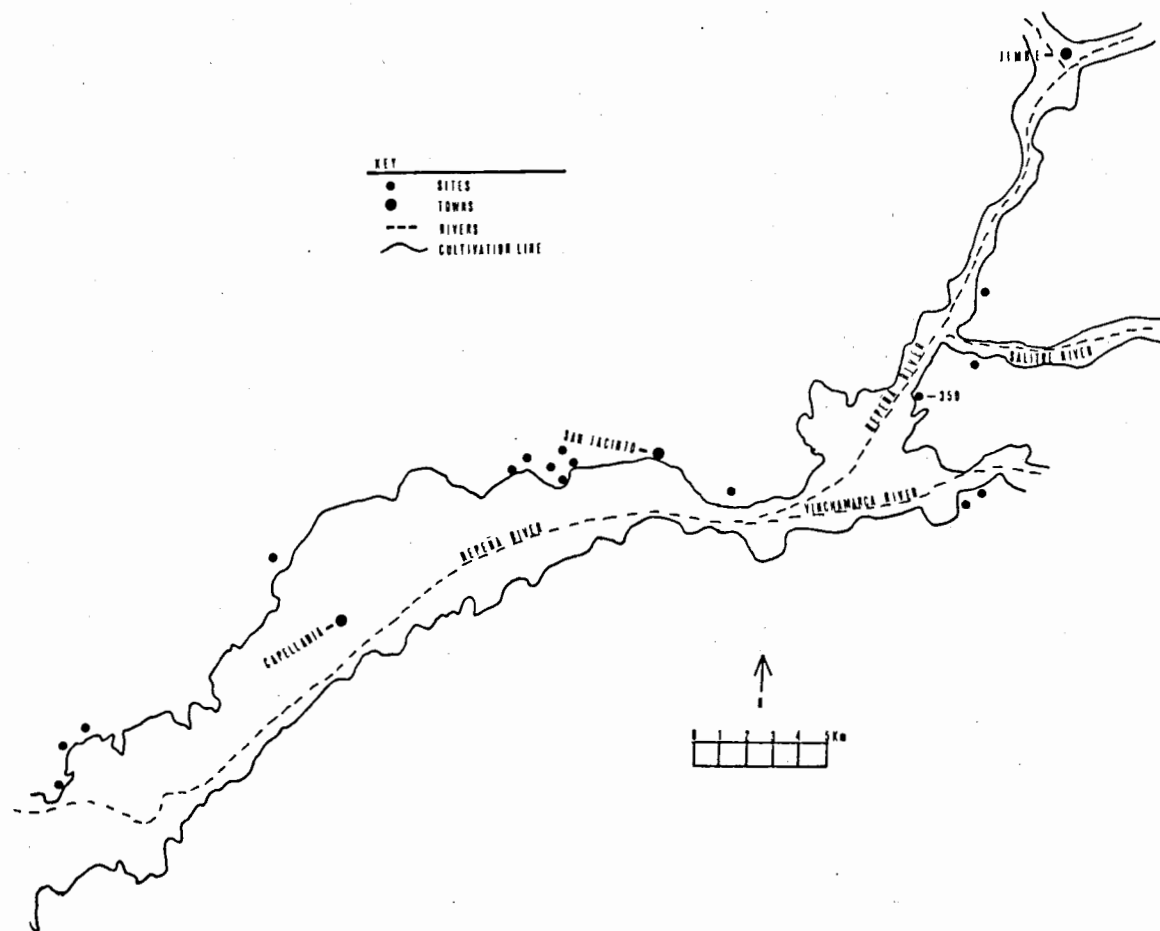


Figure 5. Serpentine applique sites, Nepeña Valley.

site (PV31-350) appears to have been a small village given the remains of low fieldstone structures on three levels and terraces going up the mountainside to the rear. This site is offered in support of the contention that Serpentine Applique pottery was being manufactured at the same time that Early Chimu pottery was.

As for Casma Incised pottery, it has been found at 97 sites (Figure 6), generally in tandem with Middle Chimu blackware and often exclusively so. In the lower valley sites principally fall into the category of cemetery though there are two large habitation areas. Major concentrations of sites with Casma Incised and/or Middle Chimu pottery exist in the upper part of the middle valley and in the lower part of the upper valley. These are indicative of large population centers.

A shift away from the lower to middle valley locational preference noted for the Early Chimu period is reflected by this latter population center as well as by an extensive reoccupation of the upper valley as a whole. In the far upper valley Casma Incised/Middle Chimu sites are ridgetop platform mound in type and the fact that many of these sites are defended by stone walls and ditches suggests that this part of the valley was under considerable stress at this time. Finally, that this stress may have been felt throughout the valley is indicated by the presence of fortified sites in all parts of the valley.

In conclusion, I have identified two distinct utilitarian pottery types, Serpentine Applique and Casma Incised, which I have placed within the Early Chimu and Middle Chimu time frames respectively. Though I have found it convenient to use the Moche Valley terminology I do not mean to imply a northern source of influence only that pottery found in the Moche and Nepeña Valleys is comparable for this time period. This report is based upon data from Nepeña and, until such time when a

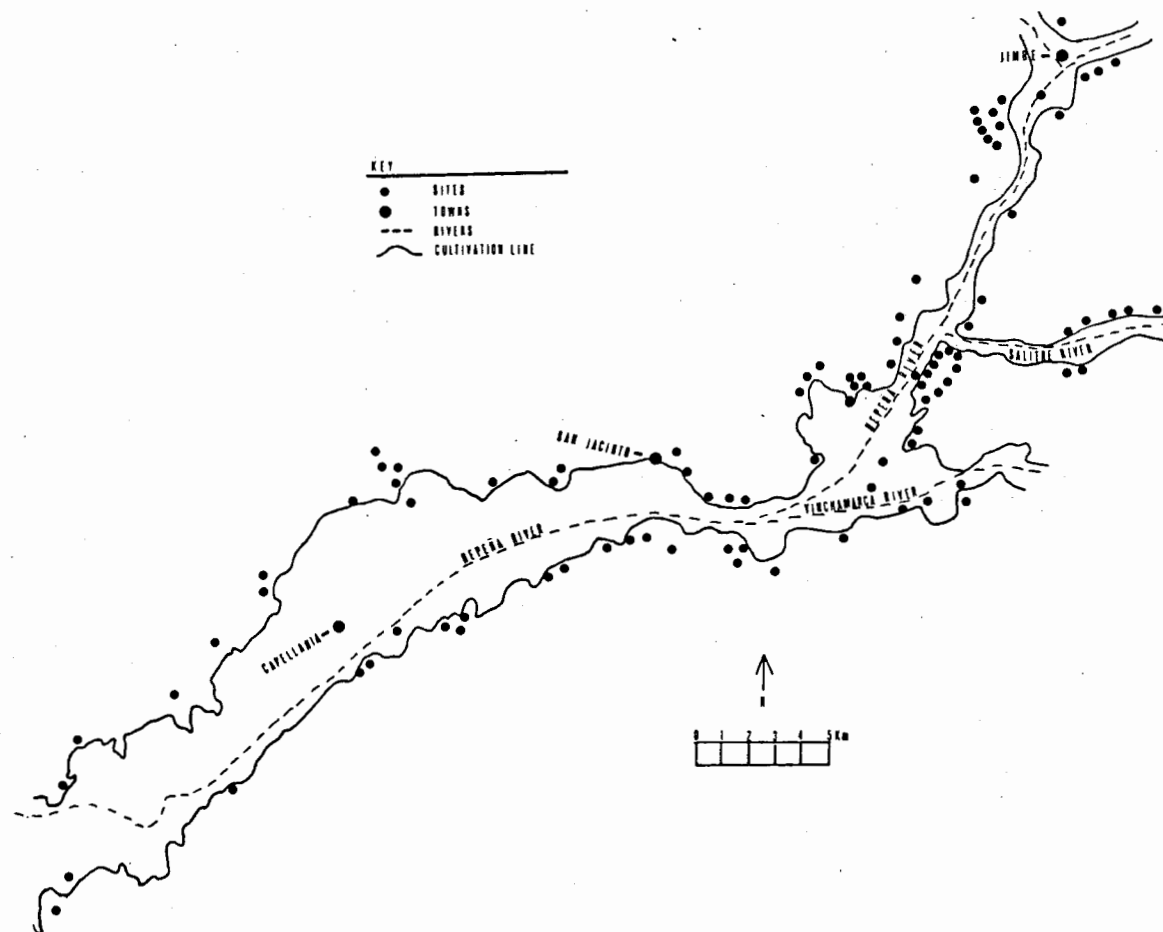


Figure 6. Casma Incised sites, Nepeña Valley.

ceramic sequence has been better defined for the valleys to the south of it, little can be said about the wider context of developments for it.

Footnotes

¹ Dissertation field research was conducted by Richard E. Daggett under the auspices of Credenciales No. 112-80-DTCPMC and 029-81-D-OMA issued by the Instituto Nacional de Cultura. Funding for this research was provided by a Fulbright-Hays grant for graduate study abroad and a Sigma Xi grant-in-aid of research.

² The Nepeña Valley has been divided into lower, middle and upper parts for the purpose of research. The lower valley begins at the shore line and ends at Capellania. From that point to the bottleneck of the valley just above San Jacinto marks the middle valley while the upper valley extends from the bottleneck to above Jimbe (Proulx 1968: 5). During the 1980-1981 field season it was determined that there was a marked break in prehistoric settlement of the valley at about 1550 m in elevation and this was interpreted to mean that the valley proper ended at this point (Daggett 1982).

³ I would like to take this opportunity to express my gratitude to Dr. Donald A. Proulx for the generosity he showed in permitting me full access to his slides of the valley.

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High altitude land use in the Huamachuco area

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Before the Spaniards entered this kingdom, there were in the lands of this province of Huamachuco many flocks of llamas, and in the highlands and unsettled regions a still greater number of wild flocks, called guanacos and vicunas, which resemble the domesticated llama (Cieza de Leon 1959:102).

This is a report of a survey carried out in the summer of 1982 under the direction of the Huamachuco Archaeological Project. The project is carrying out a long term investigation into the pre-history of the Condebamba basin in the north sierra of Peru.

Within the research area, little is known about high altitude land use and prehistoric site location in relation to ecological zone. Our objective was to gather information on prehistoric agricultural and pastoral adaptations in the area. Modern settlement and subsistence strategies were also investigated as an initial step in studying prehistoric patterns. The survey covered portions of upper quichua (3200-3500 m asl), lower jalca (3500-3700 m asl), and jalca fuerte (3700-4200 m asl). The particular areas were chosen as optimal for our research purposes within the limitations imposed by logistical and transportation factors.

Areas surveyed

A continuous transect was done from the upper quichua through the jalca fuerte in the Rio Shiracmaca, Rio Grande Huamachuco and Rio Yamobamba watersheds. Ground distance covered was approximately 21 km, and the transect in the higher areas followed for the most part a prehispanic road.

The upper quichua/lower jalca area surveyed was roughly 4 sq km in the western portion of the Shiracmaca valley, which lies

directly south of the modern town of Huamachuco (Figure 1, Area A). The valley is relatively wide, and ascending from the valley floor at 3200 m asl, the slope rises gently to the ridge base, which at 3500 m asl marks the upper limit of quichua land. Above, the ridge rises steeply, and both the ridge top and eastern slope comprise the portion of lower jalca land surveyed.

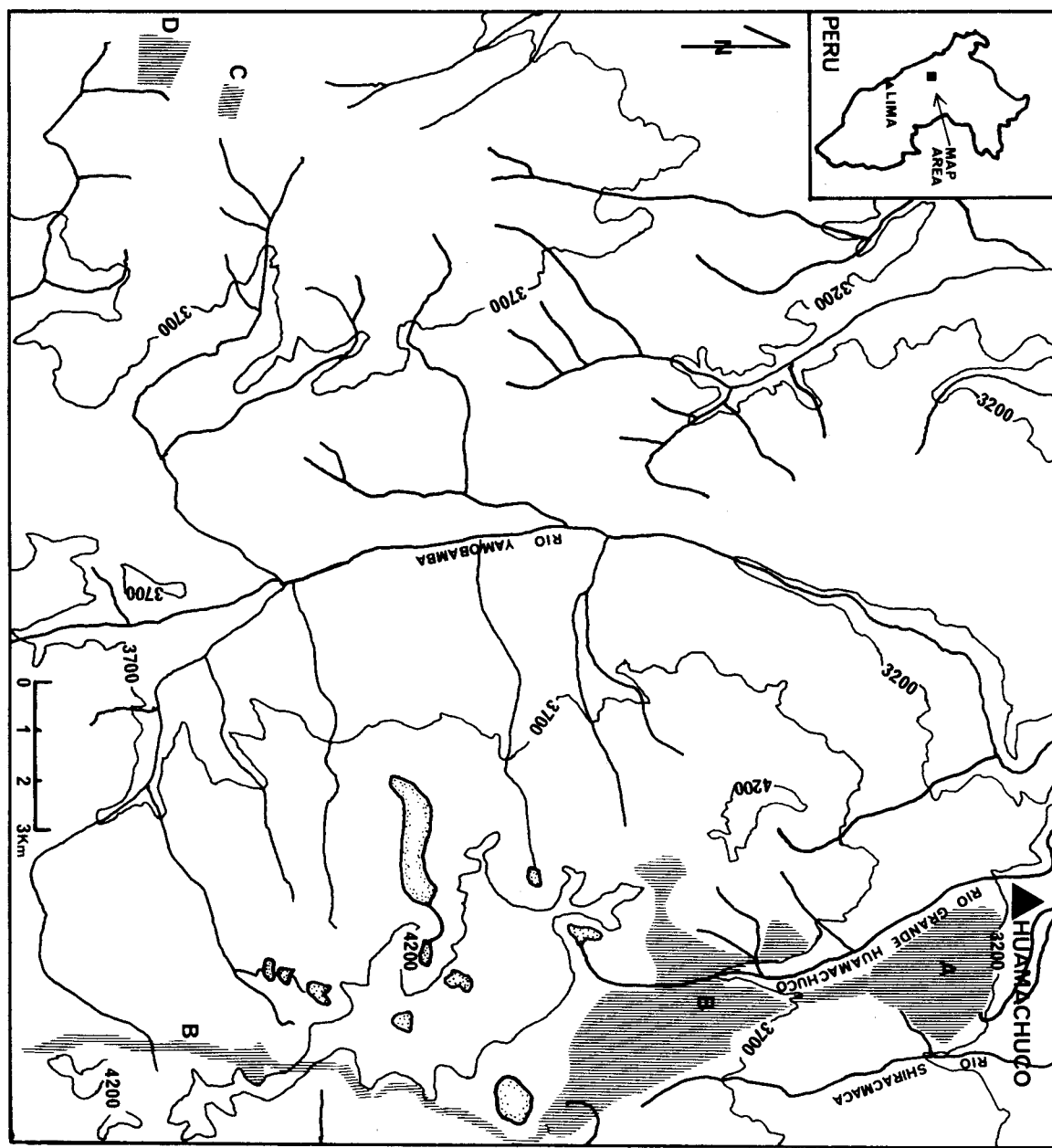
Several spring fed streams flow down the slope of the ridge and valley, and today canals are run off these streams to irrigate the fields. A modern canal fed from Lake Cushuru, a distance of 16 km south, traverses the slope of the ridge and is used to irrigate the upper portion of the valley. The valley slope is heavily farmed today with the exception of areas of introduced eucalyptus. The ridge top is not farmed and vegetation consists mostly of bunch grass, shrubs and herbaceous plants.

Beyond the ridge, between 3700-4000 m asl in the jalca fuerte, the transect area traverses a rolling plateau bounded to the east and west by river valleys (Figure 1, Area B). Water is common on the valley slopes and floors but not on the plateau itself. Vegetation is mostly grass, and both long bunch grass and a short mat grass are present in this area. The bunch grass is generally found in wetter regions often associated with mosses. Trees grow only in the most sheltered places.

Above 4000 m asl the transect passes through an area of mountain slope terrain with glacial features (moraines, erratics, and kettle lakes). Water is also common in this area, and both types of grasses are present. In the jalca fuerte a total of 9.4 sq km in area were surveyed, and all but 2.5 sq km were intensively covered.

In addition to the transect survey, two small areas of jalca fuerte totalling 1.4 sq km were examined in the Rio Yamobamba drainage (Figure 1, Areas C and D). Here, relief is high plateau cut by ravines and steep ridges. Vegetation is grassland and water is common in the lower areas.

FIGURE 1 SURVEYED AREAS



KEY

- ▲ MODERN TOWN
- ▨ SURVEYED AREAS

Modern land use

In the upper quichua/lower jalca the modern agricultural regime was studied for information on factors which condition land use in the present, and in the jalca fuerte information was sought on pastoral land use and herding practices. Modern land use data was gathered from interviews with farmers and herders, teniente gobernadores, Ministry of Agriculture officials, workers from Organismo para el Desarrollo de La Libertad (ORDLIB), and from published ORDLIB reports and finally personal observations. In both agricultural and pastoral areas today, all land is privately owned. The practice of communal land tenure is not known in this region.

In the Shiracmaca valley area, there is some farming on the steep ridge slope, mostly potatoes and barley, but the major agricultural activity takes place in the quichua, i.e. from the ridge base to the valley bottom. Here, every piece of available land is farmed. The farmers recognize two types of soil; tierra negra, an organically rich soil which occurs over 3400 m asl, and tierra pardas, a poorer quality clayey soil, much overused, which occurs below 3400 m asl.

Of the total cultivated land in the survey area, 69.5% is devoted to potatoes, 10% to wheat, 7% to barley, and 6.5% to maize. The remaining 7% is planted with lupin, oca, olluco, linseed, onions, culantro (green parsley), oats, rye grass and quinoa. In the higher portion of the valley slope which is serviced by the Cushuru canal, two potato crops a year are grown. Papa riego, or potato crop grown with irrigation, is planted in May and June and harvested in November and December. Papa seco, or potato crop grown without irrigation, is planted in September and October when the rains come, and harvested in February, March and April. In the lower valley slope area, where the waters from the canal do not reach and irrigation is not possible, this is the only potato crop grown.

Wheat is generally planted in the same fields as, and following, a potato crop from November to January and harvested in July, August, and September. Maize is grown only in the lower area, below 3400 m asl, and is also often planted following a potato crop. Planting takes place from September to November and the crop is harvested in April

and May. Finally, barley is planted in December, January and February and harvested in June, July and August. The crop cycle for the most part is two years of potato, one year of wheat or maize where possible, and four years fallow. Fertilizer is used only on potato and maize.

Pastoralism is practiced throughout the valley and ridge area, and is an important component of the local system. Fields in fallow are used for pasture. In some small areas oats are cultivated; the grain is used for fodder and the stubble for the pasturing of sheep and goats. Pigs, chickens and guinea pigs are raised for food, and cattle are valued as plough animals.

The majority of agricultural products are consumed by the producers, however where there is a surplus, it is sold in the market in order to buy fertilizer. Within the valley there is an exchange of products; people higher up will exchange their potatoes for maize grown only in the lower area. Systems of labour exchange exist; some men, usually those with little land, will exchange seed and labour for a share of the harvest, and minkas, or collective work parties are common at planting and harvesting time.

The area is more populated in the lower valley slope and houses are located primarily along the modern roads leading to and from Huamachuco. There are no houses on the ridge top and the few at the ridge base are located approximately .25 km apart. The houses are not associated with any one type of feature and when not located along roads they are situated in prime agricultural land. The total number of houses in the survey area is approximately 238 and the population estimated to be 1055. Differentiating by ecological zone, the population density in the lower jalca is 1 person per 2.8 ha, and in the upper quichua is 1 person per 0.3 ha.

Very few families have land in both higher and lower areas and most farm lands adjacent to their houses. The average landholding is .5 - 1 ha. While in lower areas most families both farm and herd sheep and goats, higher up around the ridge where the jalca lands begin, the greater quantity of pasture land is used by those who just herd.

This pattern continues in the jalca fuerte where the pre-dominant subsistence activity is herding in all the areas surveyed. The most important species present is sheep, followed by pigs and cattle. Permanent corrals are found mostly associated with herders' permanent residences. These corrals are generally built of piled fieldstones, but occasionally are of adobe on a fieldstone base. In one instance, a portable corral of branches was observed in a potato field in the lower area of the jalca fuerte, but this type is not common in the area. It should be noted that a few permanent corrals are located in areas away from any herder's habitation.

Herders from each area of the survey were interviewed to determine the kind and number of animals they owned; how much land they owned; where they grazed their animals; and how far they would move their animals in one day. Most herders owned between 60-120 sheep, approximately 12 pigs, and approximately 5 cows. One family also owned 70 goats. Property sizes varied between 7-300 ha, with most ranging between 30-80 ha. The population density is low with 5 families of 27 people inhabiting an area of 563 ha yielding a density of approximately 1 person for every 21 ha. Herds are only grazed on the owner's private property. The normal herding pattern is to bring herds out from a corral near the herder's residence in the morning and move them to a desired area of natural pasture for the day, after which they would be returned to the main corral for the night. Free ranging of herds over communal land is not a pattern that occurs in this area. Overnight camping with animals in pasture areas also does not seem common, although some isolated thatch shelters were noted in high pasture areas unassociated with corrals. This daily herding pattern was reported to be the traditional pattern by the persons interviewed. Before the agrarian reform haciendas owned much of the jalca fuerte. Some of the large fieldstone corrals not associated with habitation sites may have been built for their use although the main pastoral adaptation in the memories of the people of these areas was the same as today.

There is some agriculture in the jalca fuerte as well. Potatoes

are grown in sheltered areas of river valleys below 3950 m asl. The owners of the farms kept some herd animals, but fewer than those of the pastoralists and on smaller properties.

The modern settlement pattern in the quichua and jalca areas has several implications. The main variable determining settlement location in all areas studied appears to be access to transportation routes to and from the major center, Huamachuco. In the Shiracmaca valley, this means most houses are located along roads in the lower valley area. In spite of the fact that at higher elevations within the valley the soil has not been overused, access to irrigation water is better, and two potato crops are possible each year, the population in that area is sparse. Recently, there has been some recolonization of the upper areas, probably due to land pressures lower down. In the jalca fuerte, while access to modern roads is the most important variable determining the location of pastoral sites, proximity to water and minimization of altitude were also chosen for. Farm sites were located where shelter was available, while water and transportation access were also important.

Agricultural and pastoral adaptations today differ with regard to population density. Herding sites are small with few buildings and people. Agricultural areas in general have greater populations, numbers of sites, and greater site densities than the exclusively pastoral areas.

Archaeological results

The prehistoric survey was conducted as follows in Area A. The area was stratified into two sub areas: the ridge area which at 3500-3650 m asl is located in the lower jalca; and the valley slope spanning 3200-3500 m asl located in the upper quichua. An intensive survey was carried out on the ridge, where 9 sites were located, and the valley slope was surveyed using a 10% random sample which located 6 sites (Figure 2). Of the total, all of the ridge sites and two of the valley slope sites had architecture. The remaining 4 sites were sherd scatters. Surface collections of ceramics and

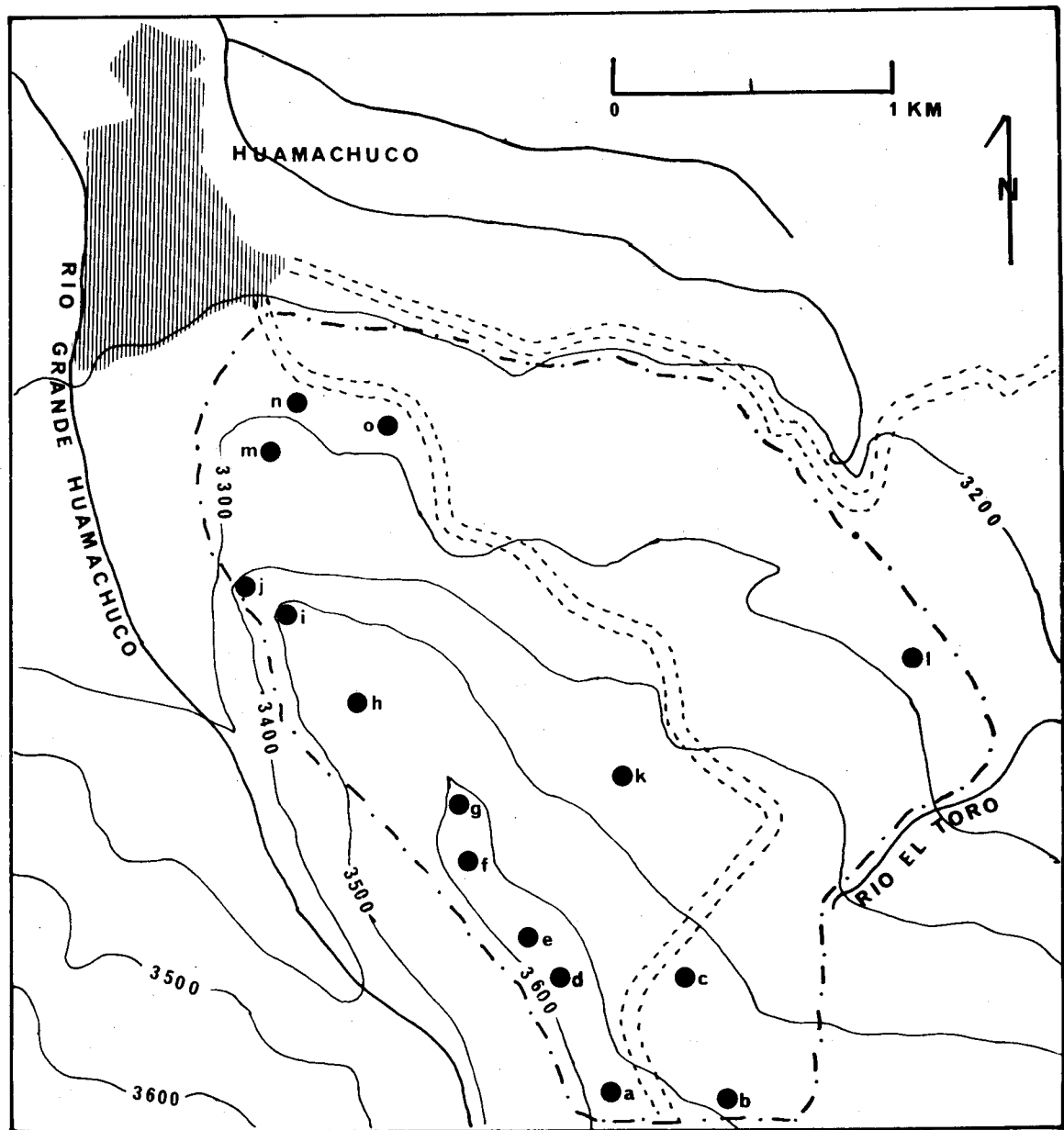






FIGURE 2 AREA A

KEY

-  MODERN TOWN
-  ARCHAEOLOGICAL SITE
-  MODERN ROAD
-  SURVEY BOUNDARY

lithics were gathered and one ridge site was test pitted and radio carbon and soil samples were collected.

The sites with architectural remains were of varying complexity. All of the ridge sites featured circular stone walled plazas, some artificially elevated. Of these, two types were in evidence: plazas enclosed with single circular stone walls, some with a room attached, and somewhat larger sites featuring plazas surrounded with double circular walls enclosing several rooms. Of the latter group, one site, A-h, had two adjacent rectangular plazas bordered by small square rooms; this is the largest site on the ridge. The other double walled circular plaza, site A-g, was situated on a knoll at the highest point on the ridge. At the knoll base stood a 3 to 4 m high and 3 m wide defensive wall bordering a ditch which extended approximately 25 m. These two sites also had stone walled terraces ringing their slopes, and possible ramps leading up to the plaza areas. The construction at both groups of sites had in common double-faced fieldstone wall foundations which stood for the most part 40 cm high with mud mortar. Where standing walls were in evidence, they were approximately 1.5 m high of uncoursed stone, with larger and smaller rocks fitted together in a mud mortar.

The remaining two sites with preserved architecture were located on the valley slope. Site A-o consisted of several groups of badly destroyed wall remains that appeared circular and could be the remains of small houses. The other site, A-c, was a large rectangular stone walled enclosure, possibly a corral, with adjacent badly destroyed wall remains whose configuration could not be determined.

Collections were mostly ceramics, which were almost entirely utilitarian and uniform within sites. Chungos were observed at site A-h, and small pieces of slate of undetermined source were evident all along the ridge. Lithics were found within sites on the valley slope and in one test excavation on the ridge. They were crude, with some chert flakes, but the majority were probably basalt. Of interest were several choppers and reused batons of this material whose function is undetermined but could possibly have been used for

shaping stone. One broken doughnut shaped stone of trachite that could be a digging stick weight was found in a field sherd scatter.

Analysis of the ceramics from surface collections and the architectural data show the ridge and valley slope were occupied by the Early Horizon but the majority of sites date to the Early Intermediate Period. The two large ridge sites with double circular walled plazas show two occupations; A-g has Early Intermediate Period and Late Intermediate Period, and A-h has Early Horizon and Late Intermediate Period represented. No Middle Horizon occupation of the ridge has yet been identified.

These results show a strong Early Intermediate Period presence in the valley developing out of the Early Horizon with a concentration of sites on the ridge top at the interface of jalca and quichua zones. These sites are very likely habitation sites. The presence of rooms, domestic pottery, grinding stones, and the lack of public buildings are consistent with this interpretation. The first phase of occupation at the major regional site in the area, Marcahuamachuco, has been radio carbon dated to the Early Intermediate Period. As the location of these sites is in the immediate sustaining area of Marcahuamachuco, they are probably contemporary rural settlements engaged in a farming/herding subsistence.

The prehistoric settlement pattern is very different from the modern one. While transportation access today is the major variable determining settlement location, in the past it is likely a number of variables were operant. While transportation cannot be ruled out, to date there is no evidence of a major route in the immediate ridge area. The location of the ridge sites is optimal for visibility and/or defensive purposes. More likely the location was chosen to reserve the best agricultural land below for subsistence purposes, and to ensure equal access to the resources of both jalca and quichua zones.

The archaeological survey of the jalca fuerte discovered 29 sites (Figure 3). Twenty of these were in the present day non-agricultural area (see Table 1). Of these sites B-1, B-o, B-s, B-n and D-a are all

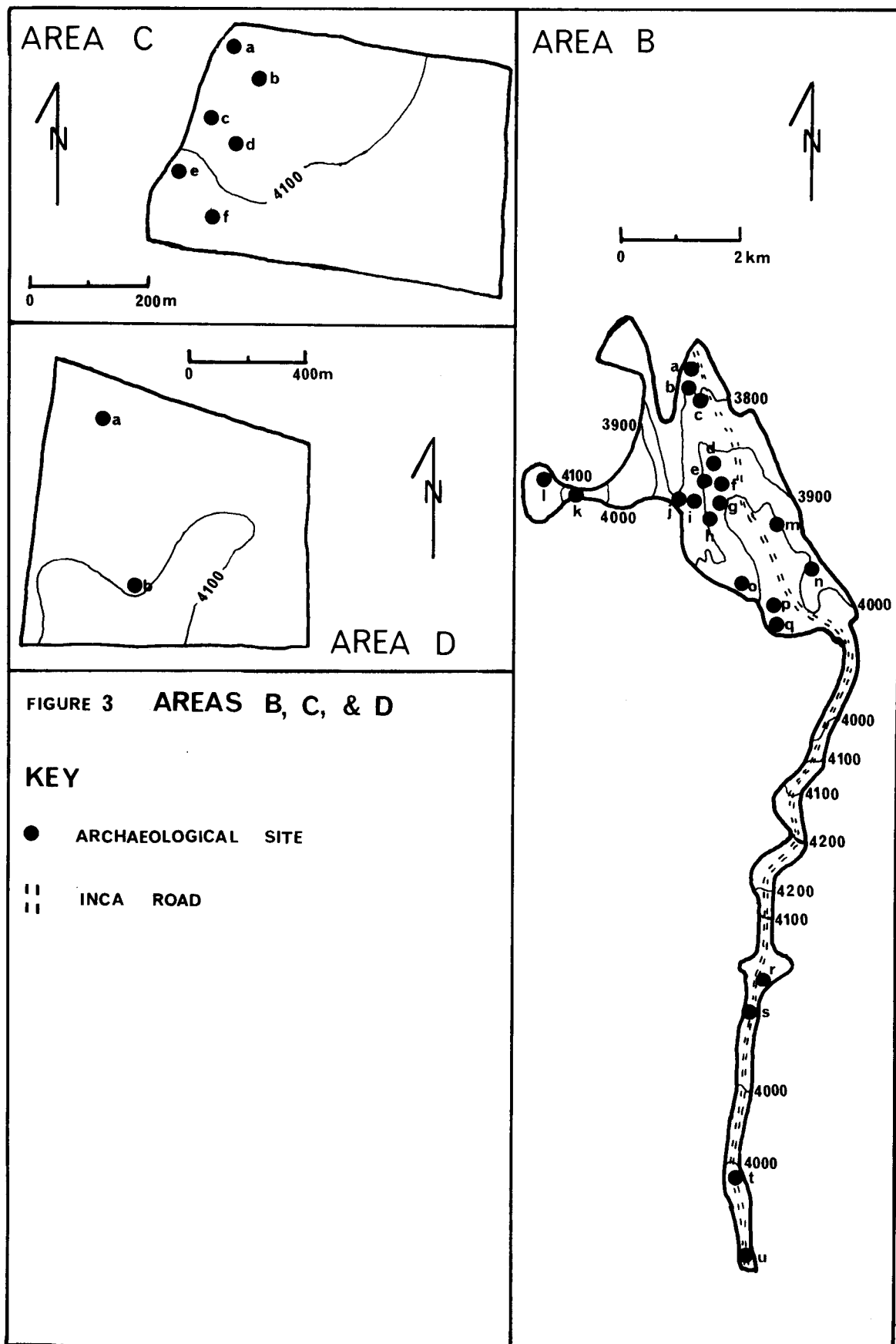


Table 1. Archaeological Sites in the Non-agricultural jalca fuerte.

Site Area and No.	Ceramics Present	Ceramic Date	Architecture Present and Type
B-f	No	Undated	Square room with alcove
B-k	Yes	Modern	Five structures of uncertain form
B-l	No	Undated	Small rectangular windbreak
B-m	No	Undated	Mound with 7 internal pits
B-n	Yes	Modern	One house wall
B-o	Yes	Modern	One circular windbreak, and 1 rectangular windbreak
B-p	Yes	Modern	Two circular windbreaks
B-q	Yes	Uncertain	Mound with rectangular room
B-r	No	Undated	Square room with alcove
B-s	No	Undated	Five small circular windbreaks
B-t	Yes	LIP & Modern	None
B-u	Yes	Modern	Corral, 2 small circular wind- breaks, & 2 small rectangular windbreaks
C-a	Yes	Modern	None
C-b	Yes	EH to Modern	None (rockshelter)
C-c	Yes	Uncertain	None
C-d	Yes	Modern	One rectangular room
C-e	Yes	Modern	Small circular windbreak
C-f	Yes	Modern	Corral, 5 enclosures, & 1 room
D-a	Yes	LIP & Modern	Four windbreak clusters, & 1 cluster of rectangular rooms
D-b	Yes	Late Pre- hispanic & modern	Seven corrals, and one circular windbreak

windbreaks which probably functioned either as traveller restcamps due to their proximity to footpaths, or as herder camps. In this context they are similar to those windbreaks present at the corral site B-u. Site B-r, although undated, appears to be modern as it is associated with a machine cut ditch. Site B-m is located just east of the prehispanic road at the point where the first view appears of Marcahuamachuco from the south and may date to the Early Intermediate Period. Sites C-d, C-e, and C-f all appear to be part of one herding station as C-f is a corral and C-d and C-e are habitations associated with it. Site C-b is a rockshelter with three main shelters present. Lithics were common at this site with probably 12 different sources of raw material present of at least four types: obsidian, chert, chalcedony, and quartzite. In general, lithics were rare over most of the surveyed area. The quantity of lithics at C-b then suggests a preceramic date. The rockshelter is used presently as both a sheep-shelter and a campsite. In the past uses were probably analogous. Site D-b is a corral site, and the one most certain to be prehispanic of those located in the survey areas. Another site D-a situated close by has windbreaks that seem to be contemporaneous with the corrals at D-b. For this reason D-b and D-a are interpreted as prehispanic herding camps.

Nine sites were found in the agricultural area of the jalca fuerte (see Table 2). Batans and chungos are entirely absent from these sites. However sites B-a, B-b and B-g appear to be agricultural sites. This interpretation is based on their dissimilarity to the pastoral sites of the area, in particular their larger size and lack of corrals.

The final prehispanic feature to be addressed is the road, Inca in local lore, which was surveyed in Area B (Figure 3). Only one small structure was found in direct association with the road and it was undated. The road is preserved primarily in the non-agricultural jalca fuerte.

Prehispanic use of the jalca fuerte in this area has left few traces especially in comparison to the lower jalca and upper quichua.

Table 2. Archaeological Sites in the Agricultural jalca fuerte.

Site Area and No.	Ceramics Present	Ceramic Date	Architecture Present and Type
B-a	No	Undated	Seven semi-platformed rectangular rooms
B-b	No	Undated	Two large D shaped rooms
B-c	No	Undated	One rectangular room, & one small rectangular windbreak
B-d	Yes	LIP	Internally divided square building with 4 external large pits
B-e	Yes	Modern	Corral, & 3 small rectangular windbreaks
B-g	Yes	Modern	Corral (?), & 4 rectangular rooms
B-h	No	Undated	One small circular windbreak. & one small rectangular windbreak
B-i	Yes	Modern	Corral, & 2 rectangular rooms
B-j	No	Undated	One small rectangular room

Most of the dated sites in the jalca fuerte are late (Late Intermediate Period and later). If it is assumed that the jalca fuerte is the preferred setting for camelid herding, the lack of jalca fuerte sites is surprising. Either there were very few domesticated camelids until late in time, or the prehistoric herding regime was different from that documented further south in the Central Andes, where remains of permanent settlements of full-time herders are common in the jalca fuerte. Faunal evidence from Huacaloma, Cajamarca, located north of Huamachuco in the Condebamba Basin, shows domesticated camelids were present and predominant at this site by 200 BC (Shimada 1982:311, 325-6). There is no obvious reason why camelids would not be present in Huamachuco by this date as well. A different herding regime is suggested then in which settlements are located in the upper quichua or lower jalca and the jalca fuerte is used for herding on a daily basis on communally held land. Under such a regime, the only herding-related structures that would be expected in the grazing area would be windbreaks for the shelter of herders. Intensive animal care (eg. culling, breeding, tending etc.) would be carried out at lower altitudes in the permanent settlements.

Conclusions

From the results of the surveys and modern land use studies, several conclusions can be drawn about high altitude land use in the Huamachuco area.

In the periods prior to the Late Intermediate Period the pattern seems to be as follows. There is little evident use of the jalca fuerte. The exception is the rockshelter site (C-b) which is an obvious campsite and whose location allows an overview of a very wide area. In the lower jalca/upper quichua area, early sites dating to the Early Horizon and Early Intermediate Period are found on the ridge top and slope. While it cannot be said that the sole determinant of settlement location is juxtaposition to both agricultural and herding zones, certainly the location allows this. No large corrals are in evidence, but faunal remains from other Huamachuco area sites (Cerro Sazon, Marcahuamachuco) indicate that

camelids were in this area from at least the Early Intermediate Period on. The relatively low frequencies of camelid bones suggests that the animals were not kept or managed in large enough numbers to require large corrals; instead, animals may have been kept in household compounds. Modern evidence shows that people both farm and herd in this lower area at short distances from their habitations without the use of large corrals. Also, it should be noted the choice of the ridge top could be tied in with the fact these sites are linked temporally to Marcahuamachuco and this position allows for visibility with the larger site.

In regard to later periods, as reported by Cieza de Leon, camelids were present in the area in large numbers. There are two late prehispanic corrals, one in the jalca fuerte and one in the upper quichua/lower jalca which give evidence of some larger scale herding. However the evidence still indicates the jalca fuerte is not a major habitation location for pastoralists. Instead, an extensive regime is suggested. This again would predict habitations lower, at the interface of quichua/jalca zones. As the survey results have shown, the two larger sites on the ridge, A-g and A-h, have Late Intermediate Period occupations. One corral on the valley slope, site A-c, and one site with house remains, site A-o, also date to this period.

Tentatively it would appear preferred location for all periods for which we have evidence was at the interface of quichua and jalca zones in order to optimize access to the resources of both zones.¹

Footnotes

1. We wish to acknowledge the Social Sciences and Humanities Research Council of Canada for funding the project and the Instituto Nacional de Cultura de Peru for permission to work in this area. We would like to thank Dr. John Topic and Dr. Theresa Lange Topic for giving us the opportunity to work on the project and for help in the writing of this paper. We owe thanks also to our field assistants Alina Portella Vejarano and Lucio Tito Franco for their valuable help and companionship in the field, and to the people of the district of Huamachuco for their hospitality and cooperation.

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ETHNOHISTORY

La Lengua Pescadora:

The Lost Dialect of Chimu Fishermen

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Johnson Museum
Cornell University

Sometime between the years 1555 and 1560, a young Spaniard in his late teens made a journey with his parents from Quito to Lima. This young man was later to become famous as Fray Reginaldo de Lizárraga, Dominican friar and author of an important geographical description of Spain's South American empire (Lizárraga 1916). For most of their journey, Lizárraga and his parents traveled by the road which ran along the coast itself. The family must have stayed a few days in the Chicama Valley; apparently during this sojourn the youthful Lizárraga met Fray Benito de Jarandilla, a Dominican then actively engaged in preaching the word of God to the Indians of that valley (Lizárraga 1916, I: 66-67; Melendez 1681, I: 558-559). Lizárraga, at any rate, was in the Chicama long enough to have noted the following tidbit of information, which he has passed on to us:

Los indios deste valle tienen dos lenguas, que hablan: los pescadores una, y dificultosísima, y otra no tanto; pocos hablan la general del Inga; este buen religioso [Jarandilla] las sabia ambas, y la más dificultosa, mejor (Lizárraga 1916, I: 67).

The Indians of this valley have two languages which they speak: the fishermen have one, and it is most difficult, and another that is not so difficult; few speak the common tongue of the Incas; this good missionary [Jarandilla] knows both languages, and the more difficult one he knows better. [Author's translation.]

In addition to Lizárraga, three other Spanish colonial sources refer to a special language or dialect spoken by the fishermen of the

north coast of Peru, but Lizárraga's "ear-witness" account happens to be the earliest in terms of the date that the information was obtained. It is important to emphasize that this information comes from the pre-reducción period, that is, prior to the implementation of Viceroy Toledo's policy of "reducing" or concentrating the native populations of the Andes into newly established and more easily administered towns (Malaga Medina 1974). This policy, which was implemented during the 1570s and 80s, had a major impact upon the fishermen and farmers of the north coast, often forcing the abandonment of their former habitations and the consolidation of previously segregated groups. Lizárraga's report of a fishermen's dialect is the most direct testimony we have that such a dialect was prehispanic, rather than the result of social upheaval or changes brought about in the wake of the reducciones.

The three other documentary sources that mention a north coast fishermen's tongue refer to it variously as "la lengua pescadora," "la lengua yunga pescadora," and simply "la pescadora." For want of a better label, I have given the name "Pescadora" to this dialect.

Since Pescadora is the subject of this paper, it is appropriate at this point to address a fundamental question: What is so significant about an obscure and evidently extinct fishermen's dialect from the north coast of Peru? While I would certainly not wish to claim that this subject is earth-shaking, it does have at least three important scholarly contexts.

The first context that should be mentioned is the ongoing investigation of the indigenous forms of socio-economic and political organization that had developed on the Peruvian coast during the late prehispanic periods. Both archaeologists and ethnohistorians have contri-

buted much to our present understanding of this broad subject. The Peruvian scholar María Rostworowski has been in the forefront of the ethnohistorical efforts. In publication after publication, Rostworowski (1970, 1975, 1976, 1981) has presented evidence that both north and central coast societies were organized according to a principle of strict occupational specialization. Indigenous political structure was based on clearly segregated groups of farmers, fishermen, merchants, potters, and so on, each having its own local lord.

With regard to the native Andean fishermen specifically, the documentary information pulled together by Rostworowski (1973, 1975, 1981) and others (Netherly 1977; Ramirez-Horton 1978, 1981) indicates an almost caste-like role for these maritime specialists. Until the reducción policy was imposed--some forty years after the Spanish conquest--the fishermen lived in their own villages along the seacoast, strictly separated from the farmers and others. They did not engage in agriculture. They worshipped their own gods. They maintained their own roads and may have functioned as coastal relay messengers along them (Hoces 1978: 120; Rostworowski 1975: 315-316; Rabinowitz 1980: 96-99). There is even evidence to suggest that endogamous marriages were the rule within the fishermen's subculture (Rostworowski 1975: 315; Rabinowitz 1980: 5, 95-96).

Clearly, the evidence that north coast fishermen spoke their own distinct dialect fits well with the overall picture of a segregated but nonetheless important socio-economic class with its own subcultural identity. Further, it is significant that of all the occupational specialist classes of the north coast, only the fishermen are mentioned by the early colonial sources as having their own speech.

A second context for the present study is the historical linguistic research that focuses upon the aboriginal languages of the north coast of Peru, in particular the so-called Yunga language that was once native to the coastal valleys from Lambayeque to Viru. Unfortunately, by comparison with the wealth of data that exists for the various dialects of Quechua, the amount of information available for Yunga and the other coastal languages is scanty indeed. Nevertheless, some contributions have been made to this field, most notably by the Germans Ernst Middendorf (1892) and Enrique Brüning¹ around the turn of the century, and more recently by Paul Rivet (1949), Jorge Zevallos Quiñones (1943, 1946, 1948a, 1948b), and Louisa Stark (1968, 1972b, 1973).

The field of sociolinguistics provides the third context for la lengua pescadora. An examination of the evidence concerning this dialect is relevant to sociolinguistic studies of jargons, special parlances, speech play, and linguistic creativity. The possibility that Pescadora might have been an example of a highly evolved patois or argot is explored toward the end of this paper.

The Languages of Chimor

When the Incas conquered the coastal kingdom of Chimor around the year 1470, they ended the hegemony of a powerful and highly organized state that had managed to gain control of an incredibly long stretch of coast from Tumbes in the north to Paramonga in the south, and perhaps even further south to Carabayllo (Rowe 1948). The Chimu heartland, however, seems always to have been the Moche valley of the north coast (Anonymous Trujillano 1936), where the capital of Chan Chan was located.

As far as we know, a single family of related dialects was spoken

in the kingdom of Chimor's central or core zone, from just south of the Sechura desert in the north to the Viru valley in the south, and most likely further south than that. This language may be called "Yunga," following the usage employed in the 1644 grammar of Fernando de la Carrera (1939), which is still the single most important source for this now-extinct tongue. The term "yunga," of course, is Quechua, and it originally meant "hot land" or "valley" (Garcilaso 1943, I: 154), but the Incas--and later the Spaniards--applied the word specifically to the coast and to its inhabitants (González Holguín 1952: 371), and by extension, to the language they spoke as well.

In the Piura region to the north of the Sechura desert lived a group of peoples called Tallanes (Zárate 1944: 31), who were ethnically different from their coastal neighbors to the south. A unique 18th century document (Martínez de Compañón 1948) provides evidence--in the form of word lists--that the Piura communities of Colán, Catacaos, and Sechura spoke distinct but related languages (Stark 1968: 32-36, 37). Although the surviving word lists from these towns are meager, they are nevertheless sufficient to indicate that these languages were not genetically related to Yunga (Stark 1968: 32-34, 36).

In fact, all the evidence indicates that Yunga is unrelated to any of its nearest neighbors (Stark 1968; Rabinowitz 1980: 35-36). The most interesting examination of Yunga that has been done to date is undoubtedly that of Louisa Stark, whose extensive comparisons indicate that Yunga is not related to Quechua, Aymara, or the southern Chibchan languages (1968: 40-55), but is distantly related to Araucanian, Uru-Chipaya, and--notably--to the Mayan languages (1968, 1972b, 1973).

The evidence that the Yunga language was actually composed of three distinct dialects (Rivet 1949: 9-10) is contained in an important colonial source for the north coast, the Coronica moralizada of Fray Antonio de la Calancha (1638). Calancha was resident in the Augustinian monastery at Guadalupe in the Pacasmayo or Jequetepeque valley during the early decades of the 17th century. According to Calancha, the native language of the Chimu kings was called Quingnam (1638: 550). This dialect was extended by conquest to the Pacasmayo valley to the north, and as far south as Lima. Another dialect, Muchic, was spoken from Pacasmayo north to Motupe. The term "muchic" and its variations "mochic" and "mochica" are used by several 16th and 17th century sources (including three of the four that mention Pescadora), both as a language label and as a term of reference for the coastal ethnic group of the Lambayeque region of the north coast (Rabinowitz 1980; Espinoza Soriano 1975).² Calancha, however, is the only source to mention the name "Quingnam" (or "Quingnan") as the official language of Chimor.³ Nevertheless, my inclination is to accept Calancha's testimony that such a dialect existed (Rabinowitz 1980: 14, 17, 51-52), as do Rivet (1949: 9-11) and Netherly (1977: 88-89). Evidence that Muchic and Quingnam were in fact related comes from a particular passage in Calancha (quoted below) and from the introduction to Carrera's grammar, which indicates that Yunga was spoken in both Calancha's Muchic- and Quingnam-speaking zones (1939: 7-8).

Documentary Sources for--and against--Pescadora

To Muchic and Quingnam we may now add a third Yunga dialect: Pescadora. Calancha mentions Pescadora twice, each reference coming in the

context of a discussion of the various coastal languages. The following passage is excerpted from a description of the initial attempts to convert the Indians of the Jequetepeque valley:

El P. fr. Francisco de Monroy...fue enbiado por la obediencia para la conversion de los pueblos de San Pedro de Yoco, i Xequetepeque, entonces de gran gentio, i en tributarios de numerosa multitud, es la lengua que ablan la Muchic i la Quingnan [sic], escura i de escabrosa pronunciacion. La pescadora es en lo general la misma, pero usa mas de lo gutural; pocos la an sabido con perfeccion, i destos nuestros Religiosos la an comprendido con eminencia (Calancha 1638: 606).

Friar Francisco de Monroy...was sent by mandate of the [Augustinian] Order, to affect the conversion of the communities of San Pedro de Yoco and Xequetepeque, which at that time had large populations, and a great number of tribute-payers; the tongue they speak is the Muchic and the Quingnan [sic], rough-sounding and of harsh pronunciation. The Pescadora [tongue] is in general the same, but it uses more guttural sounds; few have known it fluently, and of these the men of our religious order have learned it outstandingly well. [Author's translation.]

It is on the basis of this important passage that Rivet (1949: 10) and Netherly (1977: 89) both conclude that Quingnam, Muchic, and Pescadora were related dialects. Unlike Netherly, however, Rivet suggests that the fishermen's dialect was substantially different from the other two, and was particularly difficult to pronounce. Calancha's statement that few individuals--that is, Spaniards--were able to learn it perfectly is reminiscent of Lizárraga's remark that the fishermen's speech was "dificultosísima." Nevertheless, the passage quoted above is unmis-takeable in its assertion that Pescadora was related to the other two Yunga dialects, rather than being a totally alien language.

In another passage, Calancha provides an even more graphic (as well as humorous) description of Pescadora. After describing the other lan-

guages of the Chimu kingdom--in particular the extension of Quingnam by conquest--Calancha says:

La que entre ellos se llama la Pescadora, mas parece language para el estomago, que para el entendimiento; es corta, escura, gutural i desabrida; con estas dos lenguas mas comunes se tenía la correspondencia de los valles, i se manejaba mucho el comercio i contrataciones destos territorios (Calancha 1638: 550).

That which among them is called la Pescadora, more resembles a language for the stomach, than for understanding; it is clipped, rough-sounding, guttural, and surly; with these two most common languages the communication of the valleys was held, and the commerce and business dealings of these territories was conducted. [Author's translation.]

My analysis of Calancha's remarks about the "two most common languages" is that he is referring to Quingnam and Pescadora (Rabinowitz 1980: 49). Thus, we may draw a tentative inference from this passage alone that the fishermen's dialect was used in all the Yunga-speaking valleys of the central portion of the Chimu kingdom--from Viru to Lambayeque.

In both of the passages quoted above, Calancha's use of the present tense in describing Pescadora provides evidence that it was still in use at the beginning of the 17th century. In addition, the very power of Calancha's description of Pescadora's less than sonorous qualities suggests that he himself might well have heard the dialect spoken. Although Calancha's own residence in the Jequetepeque valley dates to the early 1600s, and although his chronicle was written between 1631 and 1633 (Rabinowitz 1980: 145), it can be argued that, in a sense, Calancha is also a source of pre-reducción information (though not as direct a source as Lizárraga is). It is clear from the first passage quoted above that Calancha's predecessor, Friar Monroy, was in the Jequetepeque valley toward the beginning of the colonial period, before the initial

conversion of the Indians and before their numbers had been so greatly reduced by European diseases and other impacts of the conquest.

Calancha is, in fact, the most important of the four sources for Pescadora. Not only does he hint at the broader distribution of the dialect beyond the Jequetepeque valley, but, more important, his two references--meager as they are--provide the most descriptive information thus far available for the fishermen's distinctive speech.

The other two sources for Pescadora are both from the post-reducción period. One is the record of the pastoral visita (inspection) made in 1593-94 by the Archbishop of Lima, Don Toribio Alfonso de Mogrovejo (1920a, 1920b). This document makes three geographical references to la lengua pescadora.

The fourth source for Pescadora is a memorandum (Anonymous 1950) that may have originated in the Bishopric of Trujillo (Netherly 1977: 92). I have named this document after its publisher, Josefina Ramos Cabredo (1950). The document is unique among the four sources in that it is concerned solely with the north coast language situation. Based on internal evidence, the Ramos document can be dated to the year 1630 (Rabinowitz 1980: 61-62), thus making it the latest colonial record known for Pescadora, in terms of the date when the information was collected. In this memorandum, la lengua pescadora is listed as being spoken in various towns of the Viru, Moche, and Chicama valleys.

The 1644 grammar of Fernando de la Carrera is the very opposite of a source for Pescadora, in that it denies that major dialectical differences existed in the Yunga language (1939: 7). Not only is Pescadora

not mentioned anywhere in the text, but Carrera's list of Yunga-speaking towns (1939: 7-8) includes several that are mentioned by other sources as having been Pescadora-speaking communities. Did the gruff, guttural Pescadora dialect completely disappear in the short span of years between the writing of the Ramos document and the composition of Carrera's grammar?

My own analysis of Carrera's failure to discuss the specific dialects of Yunga (Rabinowitz 1980: 72-79) may be summarized as follows: Carrera grew up in the town of Lambayeque, where he learned the Muchic dialect of Yunga, and it is this dialect that is presented in his grammar. It remains open to question whether Carrera expected his Muchic-based grammar to be helpful to priests resident in Quingnam-speaking communities. Carrera's name appears in the Ramos document as a rival for the position of curate of Jayanca, a post then occupied by one Julio Pacheco, who, according to the document, was the only priest who knew Pescadora at that time (Anonymous 1950: 54, 55). It is possible that Carrera may have resented--or wished to belittle--his rival's knowledge of Pescadora (Richard Schaedel, personal communication). In Carrera's letter of dedication to his superior, he offers his grammar as that of "the most general and most elegant language of the Indians of the valleys" of the Diocese of Trujillo (1939: 3). This statement may be a veiled reference to Pescadora, which, as we know from Calancha, was evidently less "elegant" than the other Yunga dialects. Finally, significant gaps in Carrera's list of Yunga-speaking towns often correspond to Pescadora-speaking communities listed in the four sources. In short, Carrera's grammar is neither evidence that Pescadora did not exist, nor is it very good evidence that the fishermen's dialect had died out by the early 1640s.

Distribution of Pescadora

All of the available information concerning the early colonial distribution of Pescadora is summarized in Table 1. The four primary sources are compared in terms of the valleys and towns where they each report that the language was spoken. In addition, the other three Yunga language labels (Quingnam, Muchic, and Yunga) are also listed if a particular source reports that a language given one of these names was spoken in any of the towns or valleys where there is evidence for Pescadora. The Carrera column is added for comparative purposes: his list of towns where Yunga was spoken in the early 1640s is important in terms of how it overlaps with the information on Pescadora derived from the other sources. It is important to bear in mind that the term "yunga," as it is used by both Carrera and the Mogrovejo visita, is essentially a cover designation for one or more of the three related dialects. Although in both sources the term seems to designate the Muchic dialect for the most part, the other two dialects may also be subsumed under this label in certain instances.

A cursory examination reveals immediately where there is the strongest evidence for Pescadora: it is the Chicama valley, where three out of four sources provide definite reports that Pescadora was spoken. By contrast, Mogrovejo is the only source to report specifically that Pescadora was spoken as far north as the Lambayeque region (1920b: 238). The distribution shown in Table 1 skips the Zaña valley, for which there is no definite report on Pescadora. However, Calancha's reference to Pescadora as one of the two most common tongues of the Chimu coastal valleys provides inferential evidence that both the Zaña and Lambayeque valleys might have been loci of Pescadora-speakers. Although the village

TABLE 1: DISTRIBUTION OF PESCADORA ACCORDING TO COLONIAL SOURCES

(With comparative information on the other dialects or language labels mentioned for the same areas)

VALLEY PUEBLO	SOURCE:	<u>Calancha</u>	<u>Lizárraga</u>	<u>Mogrovejo</u> <u>visita</u>	<u>Ramos</u> <u>document</u>	<u>Carrera</u>
	WHEN WROTE: DATE FOR INFO.:	1631-33 post-contact to ca. 1625	late 16th c. 1555-60	1593-94 1593-94	1630 1630	1640?-43 1640?-43
Lambayeque		M; P?		Y; M; P	M	Y
Magdalena de Eten				P		Y
Eten				Y		
Jequetepeque		M; Q; P		Y	M	Y
Jequetepeque		M; Q; P?		Y	M	Y
Sanc Pedro de Lloco		M; Q; P?		?	M	Y
Chicama		Q; P?	P; ?	P; ?	P; M	Y
Magdalena de Cao				P	P	Y
Sanctiagio (de Cao)				P	P	Y
Moche		Q; P?		?	P	
Guanchaco					P	
Manciche					P	
Sanc Estevan					P	
Guaman					P	
Moche				?	P	
Viru		Q; P?		?	P	
Guañape				?	P	
Viru					P	

P = Pescadora M = Muchic Q = Quingnam Y = Yunga

Notes for Table 1

1. A blank indicates that the pueblo or valley is not mentioned by the source.
2. A single question mark means that a language is referred to by the source, but no name for the language is given.
3. A letter followed by a question mark indicates that an inference can be drawn from the text that this language was spoken in the designated valley or pueblo.
4. Spelling generally follows that of the Ramos document.

of Chérrepe seems to have been both the pre- and post-reducción locus for the fishing community--or "parcialidad"--that supplied the town of Zaña with maritime produce (Hoces 1978; Zevallos Quíñones 1943: 221), Mogrovejo's visita does not name the language spoken in Chérrepe, which leaves open the question of whether or not Pescadora was used there.

There is simply not evidence that Pescadora was spoken in every ethnohistorically known fishing parcialidad of the north coast during the early colonial period. This is clearly demonstrated by Table 2. In this table, a list of pre-reducción north coast fishing parcialidades is presented. This information is reconstructed from various sources, including unpublished documents quoted by modern scholars. Also listed are the post-reducción towns to which the original communities were relocated; in some cases the names are the same, and occasionally the reducción locations are also likely to have been the same, as was definitely the case with Chérrepe (Ramírez-Horton 1978: 92). It should be stressed that the last column--"Evidence that Pescadora was Spoken"--refers to the original fishing hamlets, not to their relocated counterparts. Thus in the case of Chichi, for example, a good inference can be made that Pescadora was spoken there. Since Chichi was the capital of the old polity or señorio of Guaman (Lozano 1976: 124), its population was almost certainly relocated to the post-reducción town of Guaman, which was a locus of Pescadora-speakers, according to the Ramos document (Anonymous 1950: 336-337).

As both Table 1 and Table 2 clearly show, the evidence for Pescadora is heavily weighted toward the Chimu heartland of the Chicama, Moche, and Viru valleys. Yet one may certainly postulate (based on the same evidence) that the actual prehispanic and early colonial distribution of

TABLE 2: A LIST OF PRE-REDUCCION FISHING PARCIALIDADES FROM LAMBAYEQUE TO VIRU

Valley	Fishing Parcialidad	Reducción Town	Colonial Source or Modern Reference	Evidence that Pescadora was Spoken
Lambayeque	[belonged to polity of Jayanca (no name given)]	Jayanca?	Gama 1975 [1540]	
	Cuchimic Currimic Jencoic Manucuyi Pilcoan	(belonged to polity of Túcume)	Mocchumí (Mochumí)	Zevallos Quiñones 1943 Rostworowski 1975 Netherly 1977
	[belonged to polity of Chuspo (Callan- ca) (no name given)]	Monsefú?	Rostworowski 1975 Zevallos Quiñones 1943	
	[belonged to polity of Lambayeque (no name given)]	San José??	Netherly 1977	
	(Magdalena de) Eten	Magdalena de Eten (Puerto de Eten)	Mogrovejo 1920b [1593-94] Rostworowski 1975	in Mogrovejo <u>visita</u>
Zaña (Chaman River)	Chérrepe	Chérrepe (later to Pueblo Nuevo)	Hoces 1978 [1572] Zevallos Quiñones 1943	
Jequetepeque	Puemape	Xequetepeque	Netherly 1977	inference from Calancha
	Lloco	San Pedro de Lloco	Burga 1976	inference from Calancha
Chicama	Cao	Magdalena de Cao	Mogrovejo 1920b [1593-94]	in Mogrovejo <u>visita</u> and Ramos document
	(Sanctiagó)	Sanctiagó (de Cao)	Mogrovejo 1920b [1593-94]	
Moche	Guanchaco	Guanchaco	Anonymous 1950 [1630]	in Ramos document
	Lloc (<u>mitmag</u>); other?	Mansiche	Netherly 1977	inference from Ramos document and Calancha
	Chichi	Guaman	[Lozano] 1976 [1550] Rostworowski 1976	inference from Ramos document
	Xacon	Moche	[Lozano] 1976 [1550] Rostworowski 1976	inference from Ramos document
Viru	Guañape	Guañape	Espinoza Soriano 1975	in Ramos document

Pescadora was uninterrupted from the fishing villages of the Lambayeque region to as far south as the Viru coast. This possibility may be put in the form of a hypothesis that could be tested if further relevant documents were to surface (Rabinowitz 1980: 85-86). An alternative or competing hypothesis for the distribution of Pescadora might stick more closely to the present evidence by postulating that the fishermen's dialect was originally limited to the Chimú heartland area, and that any evidence for Pescadora north of the Chicama valley (such as we have at present only for Magdalena de Eten) might indicate that the Chimú relocated some of their own fishermen to the more northern coast in order to gain more direct control over the maritime resources of their conquered territory (Rabinowitz 1980: 88-90).

The question of Pescadora's original distribution is connected with the problem of its relationship to the other two Yunga dialects. Again, two alternative hypotheses may be formulated. Netherly (1977: 92) has suggested that the fishermen's dialect and Quingnam were closely related, based on evidence from the Ramos document. This seems to be a much more likely possibility than that Pescadora and Muchic were the most closely related of the three dialects, given the present distribution evidence. A hypothesis that Pescadora was more closely related to Quingnam than it was to Muchic would be a corollary of the second (Chimú heartland) distribution hypothesis mentioned above (Rabinowitz 1980: 88-89). However, we are still left with the possibility that Muchic and Quingnam were reasonably similar but that Pescadora was quite different from both. This idea is supported by Calancha's statement that Pescadora was more guttural than either of the other two dialects. A hypothesis that the fishermen's dialect was quite divergent from both Muchic and Quingnam

fits best with the first (Lambayeque-Viru) distribution hypothesis suggested above (Rabinowitz 1980: 85-86).

The Nature of the Pescadora Dialect

What kind of a dialect was Pescadora? How did it develop? What distinguished it from the Yunga elucidated by Carrera? In the absence of an actual grammar of Pescadora, we can only conjecture about the answers to such questions. Nevertheless, it is appropriate to explore the sociolinguistic implications of this dialect, given that it was exclusive to a particular class of economic specialists, who shared in common a set of cultural traits directly connected to that specialization. Although the descriptive information provided by Calancha is extremely scanty, we may supplement that information with relevant sociolinguistic studies and with inferences about Pescadora that are based on an understanding of the north coast fishermen as an occupational caste.

In sociolinguistic terms, the Chimu fishermen constituted a distinct "speech community" (Gumperz 1968; Rabinowitz 1980: 93-102). The likelihood that fishermen from diverse sections of the north coast interacted frequently with each other is underscored by the fact that the preferred coastal road connected their villages in pre-reducción times (Lizárraga 1916, I: 64-65), and by documentary evidence that the fishermen may have functioned as message runners along this road (Rabinowitz 1980: 96-99).

Given the nature of their work, it is a certainty that the fishermen's patois contained a lengthy lexicon of specialized terms for the gear of their fishing technology, for the many species of fauna that inhabited their maritime environment, and for the meteorological features of that environment. Lexical specialization is the primary defining character-

istic of job-related argots or jargons (Fromkin and Rodman 1974: 272-273); the context of the job situation creates its own speech community within that of the larger society.

The testimony of Calancha and Lizárraga that the fishermen's tongue was exceedingly difficult to learn in comparison with the other Yunga dialects it resembled suggests that there may have been something of a "secret language" quality to Pescadora. Examples of the secret jargon and disguised speech phenomena have been highlighted in many socio-linguistic studies (see the bibliographic survey in Kirshenblatt-Gimblett [1976: 193-195]). A relevant Andean example is the Machaj-juyai secret language of the Callahuayas of Bolivia (Stark 1972b). This elaborate argot is spoken by the Callahuaya curanderos to maintain the secrecy of their curing rituals.⁴ Machaj-juyai is formed by applying the grammatical structure of Quechua, the native language of the Callahuayas, to a vocabulary derived mostly from Pukina, an extinct language that was once spoken in the region. It is interesting that the Machaj-juyai secret language--like Pescadora--is restricted to an occupational specialist group.

Of course, most secret argots are dependent upon standard languages for their derivation. But what if a highly evolved argot were to develop that in time became the native tongue of the members of its speech community? Is such a phenomenon possible? Pidgin languages, which begin as simplified lingos in areas of contact between speakers of different languages, can sometimes evolve into the native languages called creoles (Fromkin and Rodman 1974: 267-269). The evidence concerning Machaj-juyai demonstrates that a supposedly artificial secret language can be

passed on from generation to generation over some 300 years, given that Pukina apparently became extinct by around 1650 (Stark 1972b: 199).

The question of whether argots might conceivably evolve into full-fledged dialects has never really been explored, as far as I know. Perhaps this is because sociolinguists are aware that such jargons, no matter how complex or elaborate they might be, are not only dependent upon a mainstream language for the vocabulary, phonetics, and syntax they alter, but also, if they are secret lingos, they actually require the existence of a standard language around them.

Nevertheless, there is a well-documented case of an elaborate jargon that came exceedingly close to achieving "independence" from its parent language. This is the case of Boontling, the "lingo of Boonville," an English-based jargon that developed in an isolated valley of northern California around the turn of the century (Adams 1971). The mechanisms by which Boontling generated its slang lexicon were highly versatile and creative. Some, such as vowel substitutions, contractions, and the dropping of front- or end-phoneme clusters might have had their parallel mechanisms in Pescadora; it is possible to infer from Calancha's description of Pescadora as clipped, extra harsh, and more guttural than the other two Yunga dialects that these qualities were deliberate. Boontling, at any rate, had become so pervasive by 1910 that youngsters apparently used it all the time outside the classroom (Adams 1971: 25). One informant even testified that when he joined the army in 1917, he had trouble readjusting to standard English (Adams 1971: 23). It is easy to imagine that if the speakers of Boontling had migrated en masse to an uninhabited island, their lingo would have become their native language.

It is my hypothesis that the Pescadora dialect originated as an

elaborate argot that served to reinforce the subcultural identity of its speakers: a fishermen's lingo that could not be understood by non-fishermen who spoke Muchic or Quingnam. The isolation of the Chimu fishermen as a separate speech community led to the development of this argot into a full-fledged dialect that was the mother-tongue of its speakers. It had the following features: 1) an extensive, specialized vocabulary of terms and expressions related to the occupation and technology of fishing and to the maritime environment and its fauna; 2) a deliberate gutturalization of certain Yunga vowels and consonants; 3) additional alteration of Yunga words by some form of clipping, contraction, and/or dropping of phonemes; and 4) other means of generating slang vocabulary.

The Potential for Further Research Concerning Pescadora

The hypotheses that have been presented in this paper are not worth very much if they cannot be tested. Realistically, the only way these hypotheses could be tested would be if additional Yunga grammars and dictionaries were to surface, works that would predate Carrera's grammar and that would shed light on the differences among the three dialects.

Indeed, it is known that several earlier grammars and vocabularies of Yunga were compiled by Spanish priests (Zevallos Quiñones 1948a), but unfortunately these have been lost, or at least they remain to be re-discovered. Although there is no evidence that anyone wrote a grammar of Pescadora specifically, there are very good indications that the earliest lost grammar of "Yunga" is actually a grammar of Quingnam that might also contain information on Pescadora.

The story of this grammar brings us back to the Chicama valley, where Lizarraga first learned that the fishermen had their own separate

"language." Lizárraga's testimony that Friar Jarandilla was conversant in Pescadora is very believable, for by the time of Lizárraga's journey down the coast, Jarandilla had been resident in the Chicama valley for about ten years. According to Fray Juan Melendez, who wrote a history of the Dominican Order in the New World (1681), Jarandilla and a certain Fray Pedro de Aparicio arrived in Peru in the company of the Licenciado Pedro de la Gasca (Melendez 1681, I: 558), which would date their arrival during the year 1547. Both priests were sent to the Dominican Monastery in the Chicama valley.

It is Jarandilla's colleague, Pedro de Aparicio, who is Melendez's main focus of attention, because of his renown as a language expert (1681, I: 558-559). Melendez reports that Aparicio soon became well-versed in the local language, and that although he died only a few years after his arrival in the Chicama, in the time allotted to him he managed to compose "a grammar, and a dictionary, and many sermons, lectures, and prayers [in the native language], which others have since found valuable" (1681, I: 559). According to Zevallos Quinones (1948a), Aparicio's works on Yunga are the earliest known to have been written. They would date well before the Spanish reducciones of the coastal Indian communities, and nearly a century before Carrera's grammar was published.

If Quingnam was indeed the dialect spoken by non-fishermen in the Chicama valley, as Calancha reports, it most likely would have been the dialect explicated in Aparicio's grammar. In light of Lizárraga's remark that Friar Jarandilla knew the fishermen's dialect better than the other one, it is reasonable to suppose that Aparicio would have specialized in Quingnam (thus complementing his colleague's expertise) but would also have been familiar with Pescadora. If that was the case, it is very

likely that his grammar contained some explanation concerning the nature of the dialect differences he found between the speech of fishermen and non-fishermen in the Chicama valley.

In the middle of the 16th century, only two decades after the conquest, the number of speakers of the three Yunga dialects was much greater than in Carrera's day, and the dialects themselves were in a more pristine state of usage than they were to become in the post-reducción period, when they were liable to undergo some merging as fishing and farming populations were brought together in the new towns. Thus, in contrast to Carrera, Aparicio surely would have been anxious to pass on to other priests a knowledge of both of the "languages" he and Jarandilla found in the region. If so, Aparicio's grammar and accompanying vocabulary list would be an excellent source against which to test the hypotheses that have been presented here.

Melendez's information that others later made use of Aparicio's work is evidence that his grammar was passed on, probably among the Dominicans. Several manuscript copies may have been made. Copies of Dominican documents from Peru were regularly sent to Rome (Sabina McCormick, personal communication). Thus, if any such copies survived, they might well be stored today in some forgotten vault of the Dominican archives in Lima or Rome. Although it is apparently next to impossible for a non-member of the order to gain access to its archives, it is not inconceivable that the aid of a friendly Dominican might be employed in the search for Aparicio's lost grammar.

Clearly, a concerted effort to locate this work should be a high priority of ethnohistorians interested in recovering information about the indigenous cultures of the north coast of Peru. It is my belief

that the grammar and dictionary of Pedro de Aparicio--if found--will settle many of the unanswered questions that now surround the lost dialect of Chimu fishermen.

Footnotes

1. The bulk of Brüning's material remains unpublished, in the form of diary and field notes presently housed in the Museum für Völkerkunde in Hamburg. According to Richard Schaedel (personal communication), the Brüning archive includes a Yunga vocabulary classified into such categories as flora, fauna, agricultural terms, and place names. Fortunately, Schaedel has undertaken the task of examining and bringing to light the valuable Brüning manuscripts, including the linguistic data.
2. This ethnic group probably corresponds to the archaeologically-known Lambayeque culture, whose florescence predated that of the Chimu state. As Espinoza Soriano has argued rather too forcefully (1975), these "historic" Mochicas should not be confused with the Early Intermediate "Mochica" or "Moche" culture that was originally centered in the Moche valley, although the existence of Moche V period sites in the Lambayeque area obviously argues for some connection between the two areas and cultures.
3. In his examination of Middendorf's Yunga grammar, Schaedel (personal communication) found the term "kingnäm" as a supine (verbal noun) form of the root "king," which means "to spin." Perhaps as Schaedel has suggested, the Chimu made a metaphorical connection between spinning and speaking, as we do in English ("to spin a tale," for example). "Kingnäm," at any rate, is the best etymology available for Calancha's "Quingnam."
4. For an interesting archaeological perspective on Callahuaya itinerant curanderismo and its implications for the development of Middle Horizon iconography, see Isbell's paper in this volume.

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The Chancas of Angaraes: 1450(?)–1765.

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Ethnohistorical studies, united with an appreciation for the importance of cultural boundaries in the processes of political integration, and ethnographic studies which are guided by ethnohistory, can provide for more than mere historical reconstructions. They can provide important data for the organization of administrative units in political systems whose goal is to include previously dispossessed indigenous peoples. This paper was originally formulated in response to a request from the Ministerio de Vivienda, Huancavelica, which was concerned with the problem of defining subregional project areas.

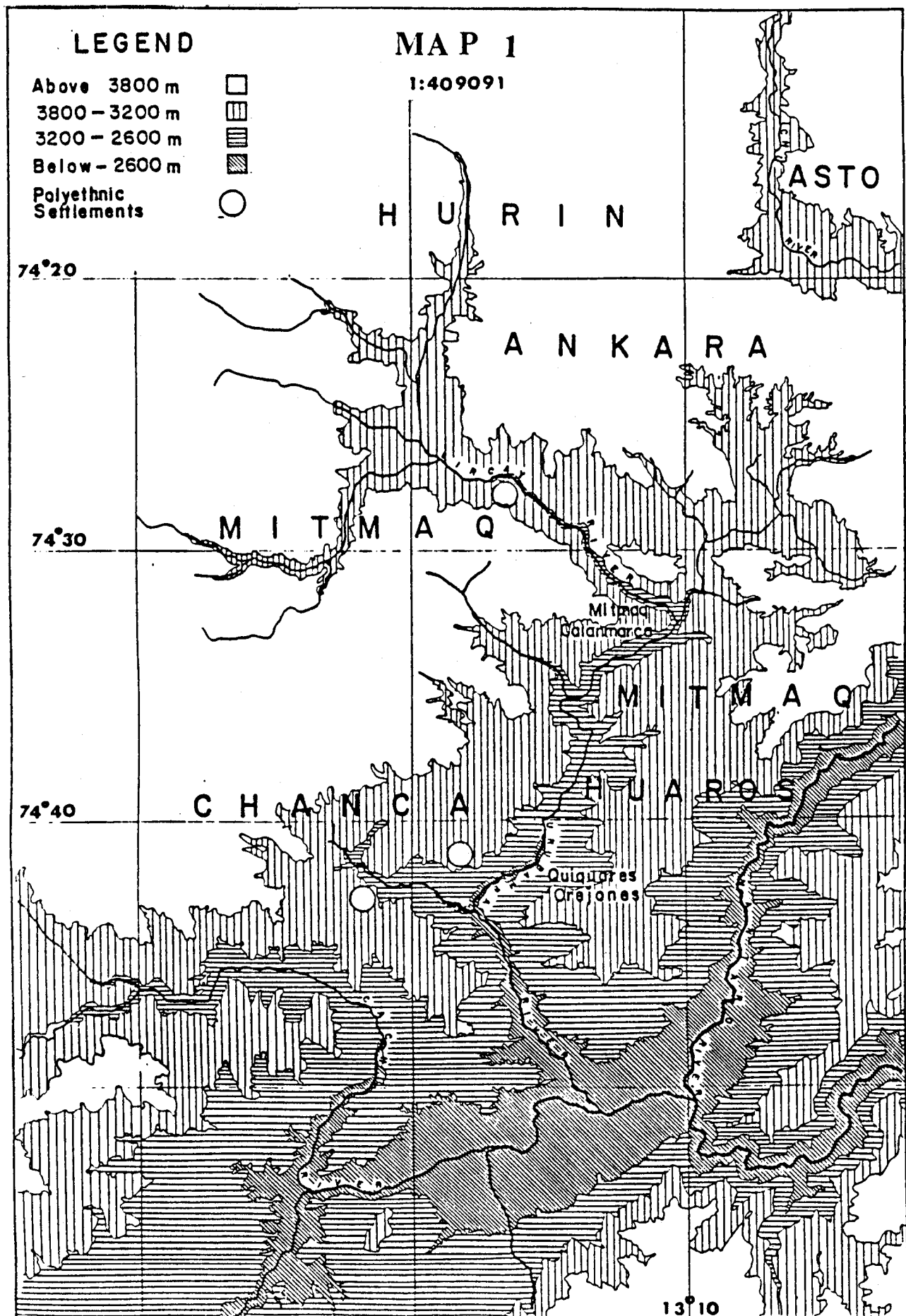
Identification of the Chancas

The Chanca have been described as various things. Generally the term refers to a group of people settled in the central Andes north of the Apurimac river. It has also been used to refer to a confederacy of different groups extending as far north as the Mantaro river. Traditional enemies of the Incas, the Chancas had repeated encounters with their southern neighbors before suffering a final defeat. Between 1430 and 1450 the area which the Chancas are considered to have inhabited was integrated into the emerging Inca empire.

Lumbreras (1974:224) and Earls (1980) see the "Chanca epoch" in the central Andes as an attempt to reconstruct a vision of the Huari empire.

Included in the Chanca confederacy were the Soras, the Aymaraes, the Angaraes, the Wankas, the Chocorbos and other groups of the area surrounding present day Ayacucho and extending into the punas of Castrovirreyna where the pacarina (a mythological place of origin), Lake Choclococha, provided a common point of origin. Two of Waman Puma's drawings show members of this group in common battle, once against the Inca general Inca Maytac, and once against the Spanish conquistador, Francisco Hernandez Giron (Waman Puma 1936: 255, 432).

After the Spanish conquest the regional ethnic groups throughout the Andes were organized into the colonial system of tribute and mita extraction which in general mirrored the pre-existing ethnic relations. The repartimientos, basic administrative units of the Spanish rule of Andean peoples, often bore the names of these ethnic groups. Toledo's Visita General recognized the Soras, the Lucanas, the Andamarcas, the Chocorvos, the Angaraes and others often included as possible members of the Chanca confederacy, but the Chancas themselves figure in no named repartimiento. However, the anonymous chronicler of the province of Angaraes in 1586 did record their presence in the doctrinas of Lircay and Julcamarca where "indios Chancas" de Andaguailas inhabited the pueblos of Lircay, Uchuyguayllay, Angaraes, Atunguayllay, Guancaguanca, Congalla and Julcamarca (Anonymous 1586:286).



Archaeological Considerations

Archaeological data concerning this group is as scarce and as inconclusive as the information given by the chroniclers. Ravines states that it is not possible to correlate the historic group with any single ceramic style corresponding to the late Intermediate in the Huancavelica-Ayacucho area (Ravines 1980:152-153). Lumbreras (1974:221), on the other hand, claims that there existed a "more or less uniform ethnic group that well could be the one that the chroniclers identify by the name Chanca." He bases this judgement on site surveys in the Cachi and Pampas river valleys. Among the material traits he identifies with the group are: (1) small chullpas made of field stone, rectangular in shape with roofs in the form of false domes; (b) two principal types of ceramic which he denominates Arjalla and Aya-orjo; (c) fortified hilltop settlements with circular constructions around 6 meters in diameter; and (d) in at least one site of the Cachi river valley, Lumbreras associated two distinct settlements possibly related in the classic Hanan/Hurin pattern (Lumbreras 1974:195-230).

In 1981 while conducting ethnographic and ethnohistorical research in the Lircay valley I asked an exchange student at the Pontificia Universidad Catolica, Ms. Janine Kramer-Nye, to conduct site surveys in the Lircay valley. This field project was intended to help clarify the relationship of the extensive ruins in the valley to those in other parts of Huancavelica and to provide the material for the interpretation of the relation of the Chancas to the Ankara described by Lavallee (1973). The results of the site surveys and the collections of ceramic remains on the surface reveal some similarities with traits described by

Lumbreras. There are two principle sites: Huayllirqa, located on a ridge and by the side of the Lircay river between the communities of Huayllay Grande and Huayllay Chico, and Teja Wasi, located approximately six kilometers by trail downriver from the community of Huayllay Grande. This latter site is named after a rectangular chullpa located on the cliff face above an extensively terraced area of fields. Ceramics collected on the surface in the first site are similar to those described as Arjalla and Aya-Orjo. Furthermore, Huayllirqa is a dual site consisting of a ridge which separates present day Huayllay Grande and Huayllay Chico and a small hillock, site of the cementery of Huayllay Chico. These two sites stand in an obvious Hanan/Hurin relationship. The mythological history of the residents stresses that the jinkeles or pre-Christian ancestors came from the ridge, while the patron saint of the community was discovered near the site on the hillock. This relationship is expressed in the present day division between the two communities. We did not find any constructions, circular or otherwise, which fit the settlement patterns described by Lumbreras. In general, both of the sites are so disturbed that it is doubtful that such small constructions will ever be located. However, one of the most common characteristics of the entire Lircay valley is a large circular stone structure built on the slopes and ridges of the valley. We counted more than 80 of these structures extending from altitudes of approximately 3800 meters to 3000 meters throughout the length of the valley. Kramer-Nye surveyed 25. Their dissimilarity to any other structures in the Huancavelica area raises questions concerning identification of the group that constructed them. No similar structures have been found in the area surveyed by Lavallee nor

in the Cachi river areas surveyed by Lumbreras. There are, however, some structures of this kind at Huari. Finally, in the church and community house of Huayllay Grande there are two statues which strongly resemble statues found in Wari. Espinoza (1973), following Tello, identifies these statues as images of Apo Con Ticsi Huiracocha Pacha Yachachi. They were present in the community at the time of the anonymous chronicler's visit in 1586. He wrote that they were discovered while the foundations for the first church were being excavated. Believing that they were images of the Spanish patron, Santiago, they were preserved in the sacristy of the church and thus they escaped destruction in the extirpation of idolatries.

Ethnohistorical Considerations

In his discussion of an early document involving a dispute between the cacique of Guayllay and the caciques of a group of Cayampi mitmaq in the area of Mayocc on the Mantaro river, Espinoza (1973) claims that the entire population of the Chanca in Angaraes were state mitmaq, herders of the royal herds of the Incas. Although all of the colonial documents I have been able to locate concerning these groups refer to them as mitmaq, there are a series of reasons for doubting that they were settled in the area by the Inca. In the first place, the mere usage of this term in the documents is insufficient to explain the origin of the settlement. Its usage by the Spanish is inconsistent from instance to instance as is their usage of other native words (e.g. ayllu). One is unsure whether it refers to outliers of regional ethnic groups or to groups displaced by the Incas. Second, the primary ayllu of the community of Atunguayllay, the political and ceremonial center of the

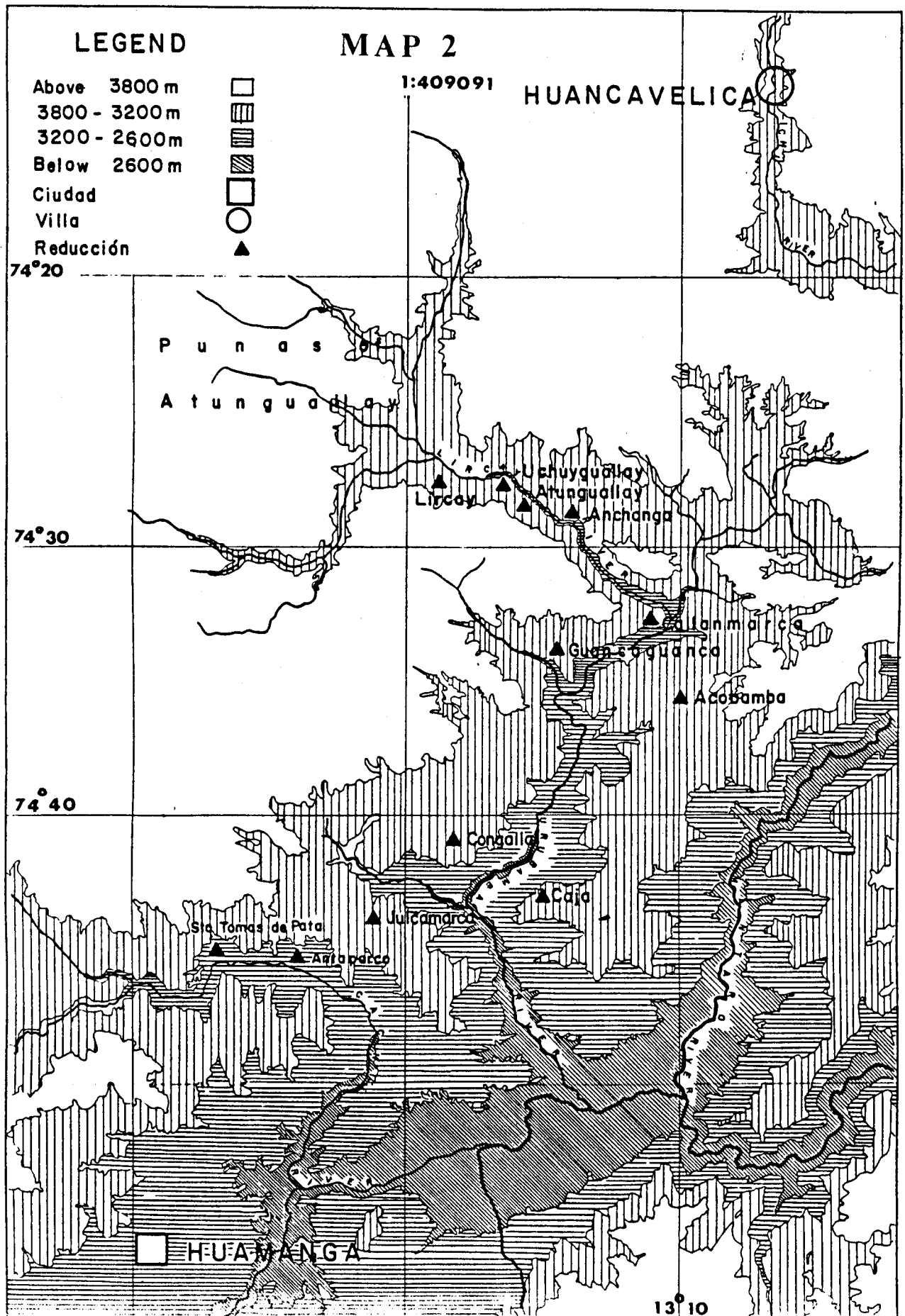
Chancas in the area, were Wasqo, Waraka and Wachaka (BNP 1763 C-2236). Wasqo and Waraka, names still in use for the ayllus of this community, correspond to the names of the Chanca leaders of the 15th and 16th century (Cieza de Leon 1973). Wasqo was the chief of the Lurin Chancas, Waraka the chief of the Hanan Chancas (Waman Puma 1936:432). The bipartition corresponds to the ayllu division today (Dillon 1983: Ch. 6). The survival of both these ayllu names contrasts with the pattern by which both ethnic outliers and Inca settled mitmaqs were named. Ethnic outliers, as Saignes (1978) has shown, were named after the maximal ayllu, for example, the mitmaq of Guayllay in Matipampa were known by the name Guaylas (Espinoza 1973). Inca mitmaq were known by the name of the larger ethnic group from which they were drawn (see Espinoza 1974). The survival of the ayllu names in Atunguayllay throughout the period from the Conquest to the present contrasts greatly with the cases of the Ankara settlements in the area of the Asto (cf Houdart-Morizot 1973).

The Lircay valley appears to have formed a boundary between the Chanca groups and the Hurin Ankara. Lands in the upper Lircay valley, controlled by the ayllus of Guayllay until at least the later 18th century, bordered lands which were controlled by the Ankara (ACAG Titulo de Comunidad). The community on the west bank of the Lircay river, Anchonga, was listed as a Chanca community but was included in the repartimiento of the Ankara (Angaraes de Gadea), suggesting that in fact it was an Ankara community. However, there were non-Chanca ayllus located in the Lircay valley and the repartimiento of Guayllay. The ayllu Guacho (= Guacho Chocorbos) was present in the Lircay valley as late as the 18th century and the ayllu Ankara of Julcamarca and Congalla

is mentioned in various documents of the 17th and 18th centuries (BNP 1763 C-2405, 1723 C-1935, AGN Tierras de Comunidades Leg.5, C.40).

Colonial Transformations of the Chanca Ethnic Group

According to the Peruvian historian, Lorenzo Huertas (personal communication), the history of the entire colonial period in the Huamanga-Huancavelica region can be subdivided into two periods. The first is that which corresponds to the apogee of mercury production at Huancavelica. In this first period the usurpation of land is not significant. This is the reason for which the peasant uprisings are not aimed at recovering land but against the abuses that the powerful committed in the mita, especially in the obrajes and mining. Rebellions also occurred because of the tributes. The second period, corresponding to the decline of mineral production in Huancavelica, is associated with the increasing monopolization of land. These two periods are characterized by the form in which the native groups were exploited by the dominant classes, which in turn reflects the broader history of the articulation of Andean social formations within the world economic system. Mita and tribute depended on the maintenance of the native ethnic groups since it was through these institutions that levies were exacted. Maintenance of the indigenous ethnic groups was a double-edged sword since in general it also preserved a base for indigenous resistance. Nevertheless, the determination of the destiny of Andean ethnic groups was a direct function of the pattern of articulation with the world economic system. The decline of the macroregional economies such as that of the Huamanga-Huancavelica area brought in its wake transformations of the native ethnic groups. When the articulation of the supraregional economy with the world system weakened, the dominant



criollo classes organized their exploitation at the local level and the process of dominance implied a more complete destructureation of the ethnic group.

Throughout the colonial period the Chancas, to a greater degree than other ethnic groups in the area, showed some power to resist exploitation by the Colonial government. One measure of this resistance is the degree to which their population declined in the initial period when the use of local labor power in the Huancavelica mercury mines was depopulating the region. Another measure of their resistance is found in their ability to secure special provisions from the crown with respect to the mita. A third is the transformations of the ethnic groups as reflected in the changes to the repartimientos which often combined two or three previously independent groups. This last measure provides a clear picture of the maintenance of ethnic solidarity.

The impact of the mercury mines at Huancavelica on the populations of the provinces which provided it with workers is well known. Waman Puma wrote " . . . the indians in these pueblos die and are being finished off. They leave the women lonely and the fields stay uncultivated (1936:1048)." Although we have no evidence for the sizes of the pre-1572 populations, with the exception of estimates based on Lavallee's survey of the Asto territory, the Tasa of Toledo provides a baseline with which to measure the demographic change. The changing number of mitayoq subject to the Huancavelica mita provides a general picture of the supraregional variation against which to compare the changes in the particular repartimientos. In 1570 the mita for the entire 12 provinces was set at 3200 tributaries, being one-seventh of

Table 1

Population of the Repartimientos of the Province of Angaraes: 1571 - 1640.

Repartimiento	1570	1580	1590	1600	1610	1620	1630	1640
Amador de Cabrera	1039	-	-	-	-	-	-	154
Angaraes de Hontiveros	910	-	472 ^b	-	-	-	-	-
Angaraes de Garcia	821	-	-	-	-	-	-	-
Guaros	324	-	-	-	160 ^d	118 ^e	96 ^f	
Calamarca	119	-	-	-	89 ^d	-	-	-
Guayllay	668	-	-	-	707 ^d	-	-	-
Quiquares Orejones	187	168 ^g	-	-	149 ^h	-	-	-

Sources: a) Toledo 1570; b) Stern 1979:406; c) ANP Der Ind Leg.7, C.141 Fs. 92-169;
d) Stern 1979: 405; e) *ibid.*; f) BNP B-1079; g) BNP A-314; h) ANP Der Ind Leg 4 C.62.

the total population of over 22,000 (Lohmann-Villena 1949:178). In 1604 this levy was halved to 1600, revealing a decline in the total population of 50% (see Table 1). Such a decline is paralleled in the repartimientos of the Angaraes of Hontiveros and of the Guaros. The repartimiento of Amador de Cabrera, composed of Ankaras and Chocorvos, shows a drastic decline. This decline is greater than that of the other repartimientos and is undoubtedly due to the fact that the Asto group of the Ankara controlled the lands on which the mercury mines were located and suffered the earliest and easiest exploitation in these mines. The repartimientos of Calamarca and Quiqueres Orejones suffered a slower rate of decline between 1572 and 1610: rates of 25% and 19% respectively. The Chancas of Guayllay, on the other hand, actually experienced a population increase during this period. This is confirmed not only by the census figures provided by Stern (1978:405) but also by a mita list for the early 17th century published by Basadre (1937). While I have no ready explanation for this phenomenon, unique in the entire province of Huamanga, it does correlate with the strong and consistent combativeness of this ethnic group and its ability to gain concessions from the colonial administration in later periods.

In 1618, on the macroregional level subject to the Huancavelica mita, 7 of the 12 provinces were temporarily relieved of their duty, due to the surfeit of mercury already produced (Lohmann-Villena 1949:252). In 1625 all of the tributaries of the province of Angaraes were removed from the mita in repayment for having revealed the location of the mercury mines to Amador de Cabrera. In fact, a member of the Asto group had done this and his direct lineal descendants continued to enjoy exemption at later periods (AGN 1643 Der. Ind. Leg. 7, C. 141). The

collective exemption continued until 1680 when the Duque de Palata reinstituted the mita for these groups. Seven years later, the communities of Atunguayllay, Uchuyguayllay, Guangaguanca, Lircay, as well as the mitmaq communities of the Guaros were liberated from the mita for a period of two years or three years in order to repair churches damaged in the earthquake of 1687 (ANP 1688 B-546). This pretext of using religious motives to substitute for the service in the Royal mines was repeatedly used by the groups of the region. Santo Buono, viceroy between 1711 and 1717, accorded the inhabitants of Angaraes an exemption in which he singled out the mitmaq from the Ankara "originarios." The use of the term "originarios" is not clear here, but seems to indicate a mere distinction of convenience since it is normally contrasted with the term "forastero." The mitmaq were only to serve in the event that the mines caved in whereas the Ankara were to serve in the periodic cleaning of the shafts (BNP 1731 C-1619). This treaty was challenged by the miners of Huancavelica in 1729 and 1731. Shortly thereafter, the lieutenant general of Lircay was charged with failure to provide the required mita assignments. In his defense he claimed to have been constructing and repairing the churches of the region. The caciques of the mitmaq Guaros and Chancas collectively wrote to defend the lieutenant general. Individual letters from the caciques and segundas personas of the repartimiento of the Chanca were also sent (BNP 1731 C-1619). In short, throughout the period of the principal activity of the Huancavelica mines, the Chancas, individually or in coalition with the other ethnic groups of the area, managed to avoid the mita much of the time. On the basis of the figures presently available they served only 76 of 160 years.

Table 2

Ethnic Groups and Colonial Administrative Systems in Angaraes: 1570 - 1760.

<u>Repartimientos</u>		<u>Doctrinas</u>	<u>Principal Towns</u>
<u>16th Century</u>	<u>17th Century</u>		
Amador de Cabrera	Asto	Acoria	Acoria, Guando, Pallalla, Chupaca, Anancusi.
		Conaica	Vilcas, Moya, Cuenca, Conaica.
Quiquares Orejones			Espiritu Sto. de Cajas,
Guaros	Guaros	Acobamba	Acobamba, Todos Santos,
Hontiveros			Andabamba.
Callanmarca		Lircay	Lircay, Uchuyguayllay,
	Collana		Callanmarca.
Elvira de Gadea		Julcamarca	(one ayllu in Julcamarca)
		Lircay	Atunguayllay, Huancahuanca
Guayllay	Chancas	Julcamarca	Julcamarca, Sto. Tomas de Pata, Congalla, Secclla.

Sources: see text.

The decline of population in the area during the period led to the reorganization of the affected ethnic groups into multiethnic repartimientos (see Table 2). Nevertheless, the Chanca configuration described in 1586 (Anonymous 1586:287) remained basically intact throughout the period. The fact that this group extended across two parish districts (doctrinas) and contained Ankara groups within it led to problems for the royal officials who attempted to compare censuses and determine population changes, but for the purposes of ethnohistory the retasas do provide a way to document the political boundaries of the groups. In 1723 an enumerator complained that the Visita General of 1683 had used the doctrina as its census unit and hence did not distinguish between the repartimiento of the Collana (which by this time contained the previous repartimientos of Calamarca and the Angaraes of Gadea) and the repartimiento of the Chanca. The latter contained the pueblos of Lircay, Jesus de Guayllay, Uchuyguayllay, Guancaguanca, Julcamarca, Sto. Tomas de Pata and corresponding haciendas (BNP 1730 C-2061). As can be seen in Table 3, the assimilation which affected all other groups in the area left the Chancas untouched in spite of the fact that their tributary population dropped to a low of 157 in 1711. It should be noted that this decline should be attributed to epidemics in the light of my previous argument concerning the reduced level of their participation in the Huancavelica mita.

The transformation of the regional economy of colonial Huamanga which occurred as a result of the decline of mineral production in Huancavelica and the corresponding disarticulation of the region from the supraregional productive systems, Huertas' second phase, had two types of consequences in the Lircay and Julcamarca areas of the

Table 3

Population of the Repartimientos of the Province of Angaraes: 1680 - 1779.

Repartimiento	1680	1711	1730	1739	1760		1765		1779	
	-	Tributaries	-	-	Trib	Total	Trib	Total	Trib	Total
Astos	3203 ^a	562	784	689	1144	4082	933	4625	-	4993
Collana	473	435	360	446	585	2973	780	3309	-	3323
Guaros	-	466	-	485	879	3779	692	3541	-	3989
Chancas	-	157	-	172	431	2642	403	1734	-	2420

Sources: BNP C-2001, C-1951, C-2061, C-4410, C-2236, C-2405, C-2294, C-2516, C-2232, C-2230, C-1607, C-1767.

repartimiento of the Chanca. Pressure on the land increased and haciendas expanded, sometimes converting entire communities into haciendas as occurred with Quilcaray in the Cachi river valley or Anchonga in the Lircay valley (BNP 1763 C-2236, 1763 C-2405). Atunguayllay, political center of the ethnic group, maintained extensive puna lands until the end of the 18th century, but began to lose some portions of these lands in 1730 (ACAG 'Atos de Cascabamba'). However, in spite of the fact that communities previously included with the Chanca passed to the Collana repartimiento, the repartimiento of the Chancas stayed free of haciendas until as late as 1760. A retasa made at this date showed that the three core communities were still related in the same tribute structure: Guancaguanca, Atunguayllay, and the mitmaq ayllu of Julcamarca (BNP 1763 C-2236). Nevertheless, processes are observable in the period 1730-1760 which indicate the institutional disintegration of this group. This occurred on two levels: the assimilation of the principal shrine of the political center by the Spanish colonialists and the dismemberment of the ethnic base of the repartimiento and its corresponding substitution by a territorial base.

The shrine at Atunguayllay, whose miraculous cross had been noted by the chronicler of 1586, was taken over by the local Spanish elites. The cofradia which developed around this saint contained members of the Spanish and mestizo castes from the entire region of Angaraes but, judging from the lists of the Libros de Cofradia (ACAG 1760-1830), no indigenous peoples. The patron of this shrine, the Senor de Atunguayllay, is one of a group of six saints considered to be brothers and sisters, saints in churches extending from Ayacucho to Castrovirreyna to Acoria. Furthermore the symbology of his cult and its

ritual cycle is directly related to the agricultural cycle and the integration of ecological zones within the valley (Dillon 1983 Ch.7).

In 1765 the ethnic basis of the repartimiento was eliminated entirely. The new repartimientos of the Chanca and Collana conformed directly to the areas defined by the respective parishes of Lircay and Julcamarca. The implications of this action, beyond the direct dismemberment of the Chanca ethnic group as a tributary base, are still not clear but it is possible to relate the general social transformation to the declining importance of the mita and the increasing importance of the local level exploitation of the indigenous groups. The emergence of local elites containing priests, local officials and the hacendado class would require a greater need for political control at the local level, which would have been difficult when the political organization of the native Chanca group extended across the areas of two subregional administrative domains.

Conclusions

My goal in this presentation has been to document the existence of the Chanca ethnic group in the province of Angaraes during the period from the Late Intermediate up to the mid 18th century. On the basis of the materials which I have been able to find, little more than a skeleton of the group has been delineated. This framework contributes primarily to an understanding of some of the processes of regionalization which are typical of different stages of articulation between the Andean ethnic groups and the supraregional economies generated by the world economic system. The importance of ethnic continuities is not often apparent, especially when they are obscured

under 450 years of external domination.

Within the more limited scope of colonial history, the documentation of regional ethnic groups can provide an important aid for the interpretation of the long cycles of Andean history as well as of events which are often interpreted in supra-historical categories. Pease (1972) has published a document from the period 1811-1812 in which an uprising of the members of the community of Atunguayllay is described. He attributes this event to a pan-Andean messianic pattern. The leader of the movement, Pedro Alanya, was from Carhuapata, the punas of Atunguayllay, and his wife was from Guancaguanca. Alanya had been a cobrador de tributos in 1791. At this time he had joined with other tribute collectors to protest the high rates and the suffering they imposed on the indigenous peoples of the area (BNP 1791 C-3529). In 1811, Alanya prophesied the return of Santiago, often interpreted to be a fusion of the Spanish saint with the Andean god Viracocha or alternately Inkarrí (Pease 1973:83). In the case of Atunguayllay and Guancaguanca it is more likely that the figure referred to is not a pan-Andean deity, but the local deity discovered before 1586 and whose statues are still found in the community. Furthermore, the intercommunity connection between the groups constituting the Chancas appear to have still been strong at this time. In 1814 colonial officials in the company of a man described as a "cacique of Cuzco" had to halt their trip from Huancavelica to Ayacucho because the entire region of Julcamarca and Lircay was in a state of rebellion (BNP 1814 D-6033).

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1643 B-1079

Expediente sobre la peticion presentado por el Procurado de Naturales de la villa de Acobamba en nombre del cacique de Huaros para qe se envie revisitadores (20-2-1629).

1688 B-546

(Expediente concerning the earthquake of 1687 and the release of certain groups from the mitas).

1723 C-1935

Padron de los indios originarios y forasteros que al presente ay en el ayllu anansaya del pueblo de Julcamarca.

1730 C-2061

Provision de retasa del tributo que deben pagar los originarios y forasteros del repartimiento de Collana de los Angaraes.

1730 C-1951

Provision de retasa del tributo que deben pagar los originarios y forasteros del repartimiento de Collana de los Angaraes.

1731 C-1607

Provision de retasa del tributo que deben pagar los indios originarios y del repartimiento de los Mitma, Huaros de Acobamba.

1731 C-1619

Memorial que se presenta el Escmo. Sr. Virrey D. Jose de Armendaris, . . . , en nombre de varios caciques de los partidos de la provincia de Angaraes sobre no haberse cumplido en revelar a

dichos indios en los trabajos de las minas de Huancavelica conforme habia decretado el Principe Santo Buono.

- 1731 C-2059
Cuentas de Angaraes del don Francisco de Tejada.
- 1732 C-2029
Cuentas de Angaraes de Sr. Dn. Gaspar Perez vuelta desde 1732 hasta 1735 años.
- 1739 C-2001
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- 1763 C-2236
Provision de retasa del tributo que deben pagar los indios originarios y forasteros del repartimiento de los Chancas de Cajamarca de la provincia de Angaraes.
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- 1763 C-2405
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- 1763 C-2561
Provision de retasa del tributo que deben pagar los indios originarios y forasteros del repartimiento de los Astos de Conaica.
- 1769 C-2230
Provision de retasa que deben pagar los indios originarios y forasteros del repartimiento de Collana de los Angaraes.
- 1767 C-2231
Provision de retasa del tributo que deben pagar los indios y forasteros del repartimiento de los Astos de Conayca de la provincia de Angaraes.
- 1767 C-2232
Provision de retasa del tributo que deben pagar los indios originarios y forasteros del repartimiento de Chancas de Cajamarca de la provincia de Angaraes.
- 1779 C-2508
Padron de las nueve doctrinas que comprende el gobierno y jurisdiccion de Huancavelica.
- 1791 C-3529
(letters from the cobradores de tributos of Angaraes protesting the high tributes.)

1813 C-6033

Expedientes sobre tributos en las comunidades de Huancavelica
(containing a description of the rebellions in Julcamaraca and
Lircay in 1813).

Archivo General de la Nacion

Derecho Indigena, Leg.4, C.62

Padroncillo y Tasa de los indios del repartimiento de los Quiqueres
Orejones, Provincia de Angaraes.

Derecho Indigena, Legajo 5, C. 40.

Autos que Nicolas Leon Tito, Cacique y Gobernador principal . . . y
los principales y segundas personas de su jurisdiccion . . .
siguieron contra Francisco Ocharan, Cobrador de tributos.

Derecho Indigena, Leg. 7, C.141, Fs. 92-169

Autos que siguió D. Jose Yanamissa, Cacique Principal del
repartimiento de Acoria y gobernador de la provincia de Angaraes
contra Baltazar de Aguilar sobre el amohomamiento de las tierras
denominadas Ambopampa, Llata-guico, Yacuy, Illasalla, Guampichay y
otros.

Tierras de Comunidades, Leg. 5, C.40

Autos formados sobre el alboroto y resistencia que hizo el ayllu de
Angara del pueblo de Julcamarca.

Archivo Comunal de Atunguayllay

Titulo de la Comunidad de Atunguayllay (1713).

Libros de la Cofradia.

FIRST ANNUAL
NORTHEAST CONFERENCE ON ANDEAN ARCHAEOLOGY AND ETHNOHISTORY
NOVEMBER 13-14, 1982
CORNELL UNIVERSITY
PROGRAM

Friday, November 12, 1982

8:00-11:00 p.m. An evening of ethnographic films from South
America
165 McGraw Hall

Saturday, November 13, 1982

All talks will be held in
Hollis E. Cornell Auditorium,
First floor, south end of
Goldwin Smith Hall

- 8:00-8:30 a.m. Coffee and registration (no fee, no advance
notice required)
- 8:30-9:00 a.m. Anita Cook (Colgate)
"Aspects of State Ideology in Huari and Tiwanaku
Iconography"
- 9:00-9:30 a.m. Christine Brewster-Wray (SUNY-Binghamton)
"Spatial Patterning and the Function of a Huari
Architectural Compound"
- 9:30-10:00 a.m. Lynda E. Spickard (SUNY-Binghamton)
"Square Pegs in Round Holes: An Architecture of Sacred
Power"
- 10:00-10:30 a.m. William H. Isbell (SUNY-Binghamton)
"Ideological Antecedents of Empire"
- 10:30-11:00 a.m. Break for informal discussion
- 11:00-11:30 a.m. Cheryl Daggett (U. Mass., Amherst)
"Casma Incised Pottery: An Analysis of Collections from
the Nepeña Valley"
- 11:30-12:00 noon Richard E. Daggett (U. Mass., Amherst)
"Virahuanca Bajo: On Understanding Megalithic Sites in the
Nepeña Valley"
- 12:00-12:30 p.m. Donald A. Proulx (U. Mass., Amherst)
"Moche and Recuay Relationships in the Nepeña Valley,
Peru"
- 12:30-2:00 p.m. Break for lunch
- 2:00-2:30 p.m. Joel Rabinowitz (Johnson Museum, Cornell)
"La Lengua Pescadora: The Lost Dialect of Chimu Fishermen"
- 2:30-3:00 p.m. Paul H. Dillon (Cornell)
"The Chancas of Angaraes: 1450(?) - 1765"
- 3:00-3:30 p.m. Craig Morris (American Mus. of Natural History)
Research at Chincha
- 3:30-4:00 p.m. Break for informal discussion

- 4:00-4:30 p.m. Michael A. Malpass (U. Wisconsin, Madison)
"Preceramic Subsistence Technologies of the Casma Valley, Peru"
- 4:30-5:00 p.m. Joan M. Gero (U. Mass., Amherst)
"Stone Tools in Ceramic Contexts: Edges, Actions, and Shapes"
- 5:00-5:30 p.m. Anthony F. Aveni and Gary Urton (Colgate)
A Preliminary Investigation of Order in the Nazca Lines"

There will be a wine and cheese reception following the talks at the Lynchs' house, 115 Kelvin Place, from 6:00 to 7:30 pm.

Sunday, November 14, 1982

- 8:00-8:30 a.m. Coffee
- 8:30-9:00 a.m. Tom McGreevey and Roxanne Shaughnessy (Trent)
"High Altitude Land Use in the Huamachuco Area"
- 9:00-9:30 a.m. John R. Topic and Theresa L. Topic (Trent)
"Viracochapampa--New Information"
- 9:30-10:00 a.m. John Hyslop (Institute of Andean Research)
"Results of an Archaeological Survey of the Inka Road System"
- 10:00-10:30 a.m. Susan A. Niles (Lafayette)
"The Shape of Things that Were: Landscape and Waterscape near Inca Cuzco"
- 10:30-11:00 a.m. Break for informal discussion
- 11:00-11:30 a.m. Daniel H. Sandweiss (Cornell)
"Ecology and Analogy: A Revised Model for the Origin of Complex Society on the Peruvian Coast"
- 11:30-12:00 p.m. Allison C. Paulsen (Hartwick)
"Huaca del Loro Revisited"
- 12:00-12:30 p.m. Thomas C. Patterson (Temple)
"The Evolution of Andean Social Formations on the Central Coast of Peru, 5000 to 1000 B.C."
- 12:30 -2:00 p.m. Break for lunch
- 2:00-2:30 p.m. Warren DeBoer (CUNY-Queen's College)
"Sierra, Selva, and Salt: The Case for a Central Huallaga Prehistory"
- 2:30-3:00 p.m. Rebecca Stone (Yale)
"The Uses, Roles, and Meanings of Chavin-Style Painted Textiles"
- 3:00-3:30 p.m. Richard L. Burger (Yale)
"Two Villages in the Chavin Heartland: Pojoc and Waman Wain"

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FIRST ANNUAL NCAAE

CORNELL UNIVERSITY

NOVEMBER 13-14, 1982

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