

INTRODUCTION

Jonathan Haas

The origins of states around the world have been the subject of intellectual inquiry since before the time of Christ. Plato pondered the question of why states first developed in the history of humankind, as did Aristotle and other early philosophers. With the discovery of the New World and the intellectual fervor of the Enlightenment, social scientists began to look more systematically at the emergence of states and formal government. It was soon recognized that the very first states in different parts of the world appeared back in the prehistoric past, and what started out as a philosophical inquiry into the nature of government became an archaeological inquiry into the rise of the world's first civilizations. Although the old philosophical debates continue about the role of government in society, archaeologists have turned more to the empirical study of the origins and development of government and the state. In doing so, particularly in the past two decades, they have generated a number of competing and complementary models of state formation and evolution.

The Andean region of South America offers an optimal laboratory for studying the origins and development of state-level societies. With a series of coastal valleys strung out along the Pacific Ocean and the fertile intermontane valleys nestled in between the steep sloping sides of the Andes, the physical setting of the region provided an ample cauldron of the rich growth and efflorescence of prehistoric polities. The papers

in this volume take advantage of this social and environmental laboratory to examine the emergence of the first formal political systems in the beginning of the second millennium B.C. and follow the political development of Andean societies up through the formation and collapse of empires immediately preceding the arrival of the Spanish in the early 16th century A.D. They also encompass the great natural diversity of the Andes by looking at groups living along the coast, in the highland valleys of the north and south, and back in the *montaña* on the eastern slopes of the mountains.

As the papers in this volume reflect the temporal and spatial depth of state evolution in the Andes, they also reflect the broad range of theoretical perspectives on the origins and development of state-level societies. In representing this range of perspectives, it is inevitable that the authors do not all agree with one another. There is disagreement not only over how and why the state developed in the Andes, but also over when the state first appeared and even what a 'state' should look like in the archaeological record. Rather than painting a picture of academic confusion, however, the papers taken together represent a balanced, long-term view of Andean state evolution. While differences arise at the level of interpretation, there is broad agreement on the history and evolutionary progression of political society in the Andean region.

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The notion of the state

The 'state' is a concept like 'culture' and 'tribe' that has been defined in many ways by many scholars. Generally, there are three different ways to look at the notion of 'state.'

1. The state can be seen as *the actual institutions of government* which maintain social order in complex stratified societies. It is the system of government, and as such stands apart and distinct from the society as a whole. This is the most common conception of state in political science (as in 'the separation of Church and State'), though it is not used often in archaeology and is not the direct subject of any of the papers in this volume.

2. In another view, the state is seen as identifying a *particular, bounded social entity*, as in the State of Illinois, or the Inca state. In this case, the notion is used to define a specific polity in time and space. Such state polities will experience their own individual evolutionary sequence, and have their own moment of origin, growth and decline. Individual chapters within this volume discuss the evolution of specific states, such as the state centered in the Casma Valley in the 2nd millennium B.C. (see S. Pozorski), or the Wari state in the Ayacucho Valley (see Schreiber).

3. The 'state' can also be taken to be a *general form of social and political organization* within a broad scheme of cultural evolution. This is the sense in which the term is used here as a focal point for the volume as a whole. In discussing the 'origins and development of the Andean state,' we are not referring to a single monolithic entity that began at 1800 B.C. in one of the coastal valleys and eventually grew into the Inca empire. Rather, we are referring to a particular type of political structure, the state, which arose in different parts of the Andean region at various times, and evolved along discrete historical tracts in those areas. At the same time, there was always significant interaction between the diverse state-level societies evolving in the Andes, and the area must be looked at as a regional system of complex political development.

Beyond looking at the state as a form of political organization, it remains necessary to address the problem of definition. What is a state: What are the definitive characteristics of this particular type of polity? These are questions that cannot be easily answered to everyone's satisfaction, since definitions, sometimes contradictory, abound in the literature. Clearly the authors in this volume are not all using the same definition of 'state.' In my discussion of power and early state development, for example, I see the state as a type of society in which rulers have control over production or procurement of basic resources and as a result exercise coercive power over their respective populations. Isbell, on the other hand, maintains that 'the definitive characteristic of the state is a specialized hierarchical administration that processes information, makes decisions, and enforces compliance' (Isbell, this volume: 83). Thus, while I emphasize the nature of the power relationship between rulers and their populations, Isbell emphasizes the formal and specialized nature of governmental institutions. Such differences affect not only the focus of a

scholar's research, they also have an impact on conclusions about state evolution. If one definition is used in an analysis of state origins on the north coast in the 2nd millennium B.C. and another is used in the analysis of state origins in the central highlands in the 6th century A.D., are the researchers in the two areas really talking about the same thing? Probably not. Is one definition and the accompanying analysis 'right' and the other 'wrong'? Probably not. Will the conclusions reached by the researchers working in the two areas necessarily be contradictory? Again, probably not. The polities themselves remain the same, regardless of the terms that are applied to them, and the validity of the scientific inquiry into the nature of those polities need not be affected by the definition of analytical terms. ('A rose by any other name smells as sweet.') However, conflicting definitions can lead to confusing and unproductive debates over the 'origins' of the *first* state in a particular world area. As with the concept of 'culture,' it is probably not possible to generate a meaningful definition of the concept 'state' which will be universally accepted by all archaeologists, anthropologists, political scientists, and so on. In place of such a universal definition, we must recognise that there are alternative working definitions of the concept which are applied by different scholars to help them in their efforts to understand the evolution and organization of prehistoric polities.

Origins and evolution

In looking at the evolution of the state, it is clear that there are two components to the evolutionary process: the emergence or origins of the first state-level polities in an area, and the subsequent development of those polities over time. Clearly these two components are not totally independent of one another as the causal variables leading to the emergence of a state in one area are likely to influence the long-term evolution of that state and its successors. However, in looking at origins versus development, attention is focused on different aspects of the evolutionary process.

Scholars dealing with state origins are generally trying to explain how and why the state form of organization first arose in a particular area or cross-culturally in different areas. An attempt is made to define the natural and social conditions which are both necessary and sufficient for the emergence of the state. Demography, the environment and local subsistence strategies are the most common variables seen as playing a causal role in state origins. Sometimes these variables are seen as operating alone, but more frequently they are seen as acting together in a complex pattern of long-term change and evolutionary transformation. Within this volume, the chapters by Feldman, Haas, S. Pozorski, Wilson and Daggett all deal with one or more aspects of state origins. Both Feldman and Haas look at that critical moment when the relatively simple societies that characterized the Andean region for thousands of years were undergoing a dramatic transformation to much more complex and centralized polities on the road to statehood. (When they actually arrived at statehood is a definitional

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question as discussed above.) Feldman analyzes the rise of 'chiefdoms' as manifested at sites such as Aspero on the central coast. At these sites, moderate sized artificial mounds appear for the first time in the Andes in the Cotton Preceramic Period. Furthermore this first appearance of political complexity and centralization on the coast takes place in the virtual absence of any large-scale agriculture. Haas goes one step beyond the chiefdoms described by Feldman and argues that the construction of significantly larger monumental architecture in the Initial Period marks the appearance of the first state-level polities in the Andean region. His argument is based on the premise that construction of such monumental architecture requires the exercise of a much higher order of coercive power than is found in chiefdom-level societies and therefore signals a new and different form of power relationship between the rulers and their subordinate populations.

S. Pozorski, Wilson and Daggett investigate the specific causal variables that gave rise to fully developed state polities, in particular coastal valley systems. Interestingly, all three examine the role of warfare in the origin of local states, though they each argue that warfare acted in very different ways in effecting state emergence. S. Pozorski sees the initial stages of state development in the Casma Valley as developing essentially in the absence of conflict or warfare. The warfare, she argues, comes later and transforms the indigenous Casma political system. Daggett, on the other hand, argues a classic warfare/conquest model of state formation. Following Carneiro (1970), Daggett argues that *within* valley warfare ultimately led to internal consolidation and the formation of the state in the Nepeña Valley. In contrast, Wilson argues that in the Santa Valley, just to the north of Nepeña, warfare arose not between valley residents, but between the residents of Santa and adjacent areas. Intravalley cooperation and alliance, in response to aggression from the outside, then led to the emergence of an indigenous state-level polity in the Santa Valley.

In addition to these papers dealing explicitly with state origins in the Andes, two papers in the volume deal with subsidiary issues. T. and S. Pozorski focus on the 'Early Horizon' and attempt to clarify the place of the 'Chavin phenomenon' in the Andean prehistoric sequence. A Chavin polity, with its center at the site of Chavin de Huantar, has often been considered to be the first state or 'mother civilization' of the Andean region – somewhat analogous to the Olmec in Mesoamerica. The Pozorskis, however, argue from new evidence that chronologically Chavin de Huantar appears very late in the Early Horizon, well after the appearance and widespread distribution of Chavin art and architecture in other parts of the Andes. They ultimately offer a complete revision of the sequence of political development in the northern Andes for the entire period from the Cotton Preceramic through the Early Horizon.

As a counterpoint to the other articles in the volume, Hastings, working in the central and eastern highlands of Peru, addresses the question of why the state does *not* emerge in

certain areas prehistorically. Given the omnipresence of the state in the Andes, a negative case of 'non-emergence,' as Hastings calls it, provides a valuable perspective on the various theories of state origins. He outlines a complex interrelationship between local-level political authority and relative access to nonlocal resources to explain the absence of state development in this region.

Those scholars dealing with state developments rather than origins are not directly concerned with the *appearance* of the state so much as with what happens in the state system *after* it appears – how, for example, states are administratively organized, how production and distribution of goods are managed within these large polities, how states expand to become 'empires,' and what in turn brings about the collapse of empires. In the present volume, these questions are addressed with regard to the Moche, the Wari and the Chimu, all enormous regional states or empires. Shimada examines the internal development and expansion of the Moche and Sicán states on the north coast in terms of the 'vertical' relationships between the coastal valleys and the Andean highlands, and the 'horizontal' relationships between the valleys along the north coast. He outlines a complex evolution of a north coast–highland economic system with the extension of economic ties from the coast to the highlands, and the military expansion state's boundaries up and down the coast. Isbell and Schreiber in turn look at the formation, internal organization and imperial expansion of the Wari state in the central highlands. Isbell draws an extensive and systematic view of Wari political development and attempts to explain that development in terms of pressing environmental and economic variables. Schreiber takes off from Isbell's analysis and looks at why Wari expanded so rapidly after the initial stages of development and became one of the largest empires seen in the Andean region. She ultimately concludes that Wari was indeed a military empire based on expansion through conquest and forced incorporation of conquered areas under Wari hegemony.

Several of the authors deal with the late Chimu Empire, which arose on the north coast some centuries after the decline of the Moche polity and lasted until conquered by the Inca in the 15th century A.D. Klymyshyn addresses the question of how the Chimu administered their vast realm from the capital city of Chan Chan. She finds that the nature of administration changed as the Chimu expanded their empire and that the changes were reflected in the layout and contents of the monumental compounds at Chan Chan. T. Pozorski in turn looks at how the Chimu extended their irrigation systems, initially to provide more resources to support their imperial expansion and later as a political means of maintaining the position of the Chimu rulers. Interestingly, he finds that irrigation and the empire do not expand in coordination with one another; rather, irrigation responds more to the individual dictates of the rulers than to the dictates of demography and subsistence needs. Mackey concludes the Chimu discussion with her analysis of imperial administration of the Chimu hinterlands – those areas outside the heartland of the north coast which

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were incorporated by conquest into the empire during the second phase of expansion. Using data from the secondary administrative center of Manchan in the Casma Valley, she effectively documents the nature of the political and economic relationships between the central government at Chan Chan and the provincial centers in other parts of the empire.

The articles by S. Pozorski and Mackey, both focused on the Casma Valley, take the study of Andean state evolution from its inception in the second millennium B.C. to its imperial expansion in the years just prior to the intrusion of the Spanish

in the 1500s. In the intervening centuries, the Andean region witnessed an incredible array of state-level societies with an equal diversity of culture, art, organization and religion. At the same time, there are broad similarities in Andean states which distinguish them from those polities evolving in the other world centers of civilization. We are only beginning to understand how and why the state evolved in this land of desert valleys and rugged mountains. New and continuing research up and down the coast as well as in various parts of the highlands promises to modify and magnify the current state of knowledge of the origins and development of the Andean state.

Chronology

Shelia Pozorski and Thomas Pozorski

Background: c.1900–1950

The history of scientific archaeology in Peru is the history of horizon styles, each characterized by a wide dissemination of related traits during a relatively brief time. It began with the work of Max Uhle near the turn of the century. As a result of prior work in Germany (Uhle and Stubel 1892, cited in Rowe 1954:2) which defined the Tiwanaku style and established its temporal priority relative to Inca, Uhle was uniquely able to assess the stratigraphic sequence of ceramics at Pachacamac (Uhle 1903a) and other collections from sites along much of the Peruvian coast. Without specifically defining the concept of horizon styles, Uhle established a pan-Peruvian six-phase sequence and cross dated local sequences on the basis of the pervasiveness of the Tiwanaku and Inca styles (Uhle 1903b, cited in Rowe 1963:45).

This initial relative ordering has withstood the test of time, and Uhle's scheme became widely accepted after 1920 as a result of published studies of his collections by Kroeber, Strong, and Gayton (Kroeber and Strong 1924a, 1924b; Kroeber 1925a, 1925b, 1926; Strong 1925; Gayton 1927; Gayton and Kroeber 1927). Significantly, as a result of this effort, Kroeber both defined the concept of horizon style (Kroeber 1944:108) and devised a system of four true periods which attempted to distinguish between style and time (Kroeber and Strong 1924:53; Kroeber 1925a:229–231). In final form the periods in this widely used scheme were called Early

Period, Middle Period or Tiwanaku-Epigonol Horizon, Late Period, and Inca Period or Horizon (O'Neale and Kroeber 1930:24; Kroeber 1930:108–114).

Uhle's sequence was subsequently expanded through the efforts of Tello, who defined the Chavin phenomenon (Tello 1929, 1943) and promoted its acceptance as an earlier third horizon style. Finally, fieldwork during the 1940s sponsored by the Institute for Andean Research led to the discovery of both pre-Chavin pottery and the first Peruvian preceramic sites known (Bird 1948a, 1948b; Strong and Evans 1952), thereby extending the Andean sequence even earlier. Because the earlier portion of the Andean cultural sequence had been so amplified, Kroeber abandoned his period-based chronological scheme in 1943 because of a terminology problem which Strong aptly diagnosed as a 'rising waist line rapidly approaching the neck' (Strong 1948:96).

The Viru Valley Project, sponsored by the Institute for Andean Research in 1946, had tremendous impact, with ramifications beyond the limits of the Andean area. This systematic holistic study of an entire valley was methodologically innovative, especially Willey's (1953) settlement pattern study. Its effect on the Andean chronological scheme was also profound. A cultural sequence from preceramic to colonial times was *stratigraphically* established (Strong 1948; Ford 1949; Collier 1955). This consisted of a series of closely correlated chronological schemes

formulated by different project members (Bennett 1948). These sequences were promoted by project members and their students and ultimately became the basis for syntheses of the entire Andean area (Bushnell 1963; Bennett and Bird 1964; Mason 1969). Although these chronologies were developmental and composed of stages defined on the basis of cultural content, most clearly retained divisions which could be easily recognized as the three horizons.

The Rowe–Lanning chronological framework

The single most systematic effort to refine Andean chronology since the Viru Valley Project was by John Rowe. Since a version of Rowe's chronological framework is followed in this volume, it is discussed in considerable detail. As early as 1956 he proposed the Horizon/Period sequence which is currently widely used (Rowe 1960), and his ideas were crystallized in an article published in 1962 (Rowe 1962a). Arguing against stage-based sequences because of their associated developmental preconceptions and their inadequacy in assessing trait origins and diffusion, Rowe proposed a sequence of six periods which were strictly units of time. Adapting concepts from Kroeber's abandoned sequences, he designated these periods Initial Period, Early Horizon, Early Intermediate Period, Middle Horizon, Late Intermediate Period, and Late Horizon. Critical to Rowe's effort to avoid basing his chronological divisions on cultural content, and thereby keep them distinct from stages, was his idea of linking the system of periods to a well-known local ceramic sequence within a single valley. The Ica Valley of the south coast was selected as the locus of this master sequence because the local chronology was among the most precisely defined at that time.

The advent of radiocarbon dating in the 1950s and its immediate application in Peru has obscured the original theoretical emphasis of Rowe's sequence formulation. Conceived as a *relative* dating system and as a means of bypassing the inaccuracies of early radiocarbon dating, which Rowe clearly did not initially trust (Rowe 1967a), the system of periods defined with references to a master sequence was designed to put relative dating strictly on the basis of contemporaneity. Therefore, the periods of the Ica sequence were defined on the basis of major events which could most easily be correlated with other local Andean sequences. A further indication of Rowe's emphasis on relative chronology is reflected in the division of the Ica periods into as many as ten or more units on the basis of ceramic style changes (Menzel 1977:88–89). These divisions are far finer than the precision of available absolute dating methods. Although Rowe recognized absolute data as the more obvious means of establishing contemporaneity between cultural units, he still placed greater emphasis on the value of repeatedly associated trade pieces and evidence of influence between two local styles.

Understanding the assumptions underlying the Rowe sequence helps both to place his chronological scheme in historical perspective and to understand its subsequent use. Most significantly, the acceptance of radiocarbon dates has

largely converted the Period/Horizon chronological framework into an absolute system. Lanning (1967) modified the Period/Horizon scheme to the extent that it has been referred to as the Rowe–Lanning sequence (see Willey 1971:83). Lanning adjusted the absolute dates correlated with each period on the basis of additional available radiocarbon dates and detailed the sequence of preceramic periods. *Peru before the Incas*, Lanning's widely consulted publication, was instrumental in promoting acceptance of the Period/Horizon framework.

The period-based Rowe–Lanning chronology has been widely accepted and followed, especially in attempts at general syntheses (Willey 1971; Bankes 1977; Moseley and Day 1982; Ravines 1982). Other general texts retain chronologies based on developmental stages (see Lumbreras 1974a; Kauffmann 1980), but no comprehensive attempt has been made to justify this approach. Reports on more localized sequences have employed the Rowe–Lanning system in different ways which generally reflect both physical proximity to the south coast master sequence and availability of radiocarbon dates. Studies conducted in the south highlands or south coast are most likely to contain chronologies closely correlated with the Ica sequence on the subperiod level (see, for example, Isbell 1977 and this volume; Paul 1982). In zones further from the south coast, but which generally lack carbon 14 dates, the sequence is followed at the period level, and date ranges quoted are taken from Rowe and Menzel's (1967:ii) or Lanning's (1967:25) chronological charts (see, for example, Proulx 1973; Donnan and Mackey 1978; Moseley 1983). Where radiocarbon dates are available, the period names are retained, but the date ranges are corrected to reflect local absolute dates (see, for example, Donnan 1982; Patterson *et al.* 1982). Finally, other scholars have proceeded independently of the Rowe–Lanning sequence to establish distinct local period-based schemes using abundant carbon 14 dates (see, for example, Shimada 1982 and this volume; MacNeish *et al.* 1981).

The latter two options provide indications of growing dissatisfaction with the Rowe–Lanning framework (see also Pozorski and Pozorski, this volume). The 'correcting' of absolute dates for a given major period contradicts the basic tenets of the master sequence correlation. Strict adherence to the system would require adjustment of each local chronological terminology to indicate that a single cultural phase spanned two or more of the major periods or horizons. Abandonment of the Rowe–Lanning sequence by some archaeologists is an even stronger indication that the periods as presently defined and correlated with the Ica sequence are no longer appropriate for describing newly emerging local sequences, especially in areas physically remote from Ica. Significantly, these discrepancies can be attributed to the increasing availability of radiocarbon dates.

However, in the absence of abundant absolute dates, the Rowe–Lanning relative dating scheme is still viable and generally accurate because of the horizon styles. The early definition by Uhle of two of these styles and the proposal of a

Chart 1. Chronology of Andean area and relative placement of chapters presented in this volume

After Rowe and Menzel (1967:ii) 1532	After Lanning (1967:25) 1532	General	North Coast	Central Coast	North Highlands	Central Highlands and Montana	South Highlands
Late Horizon 1476	Late Horizon 1476						
Late Intermediate Period 900	Late Intermediate Period 1000		Klymyshyn T. Pozorski Mackey			Hastings	
4 3 Middle Horizon b a 2 b 1 a 550	Middle Horizon 600		Shimada				Schreiber
Early Intermediate Period A.D. B.C. 400	Early Intermediate Period 200		Wilson		Topic and Topic		Isbell
10 9 8 7 Early Horizon (Ocucaje phases 1-10) 6 5 4 3 2 1 1400	Early Horizon (Early Period) 900	Haas Pozorski and Pozorski	Daggett				
Initial Period 1800	Initial Period 1800	S. Pozorski					
2100	Preceramic Period VI or Cotton Preceramic Period 2500			Feldman			
Preceramic							

third within twenty years enable Peruvianists to place relatively most cultures *as they were discovered*, thereby avoiding the methodologically hindering effects of inaccurately ordered or extremely narrowly defined local sequences. These three 'horizons' have been characterized as both stages and periods, but the distinction has only recently become significant as absolute dates and a greatly increased data base are facilitating the internal refinement of these relatively gross divisions.

Application of the Rowe–Lanning framework to this volume

The Rowe–Lanning chronological framework is followed in this volume because it still best generally characterizes Andean development despite inherent problems (Chart 1). The first period relevant to this volume on state evolution, the Cotton Preceramic Period (2500–1800 B.C.), was the time during which complex polities first developed in Peru. This early development is particularly evident in remains found along the central and north central parts of the coast (see chapters by Feldman and S. Pozorski). The importance of the Initial Period (1800–900 B.C.), which follows the Cotton Preceramic Period, has been downplayed in the past, but increasing amounts of evidence point strongly to the existence of Initial Period states in at least some areas of Peru (see chapters by Haas and S. Pozorski).

The Early Horizon (900–200 B.C.) has been characterized as a time that witnessed the spread of the Chavin art style, purportedly a reflection of a unifying religious cult. However, as is evident in a number of papers in this volume (see chapters by Topic and Topic, Wilson, and Daggett), there was a considerable amount of warfare present, especially in the north highlands and on the north coast, that influenced the development of early states. In fact, there may have been so much discord during the Early Horizon that this time period should not be viewed as a time of relative unification of culture – i.e., a horizon – but rather as a time of cultural diversity – a period (see chapter by T. and S. Pozorski).

The Early Intermediate Period (200 B.C.–A.D. 600) was

again a time of regional cultural diversity. Major cultures such as the Moche on the north coast, Nazca on the south coast, Cajamarca in the north highlands, and Recuay in the north central highlands flourished along with still lesser known cultures. Some of these cultures, such as Moche, exhibited state organization (see chapter by Wilson), apparently on a wider, more regional basis than known earlier cultures (chapter by Shimada).

The subsequent Middle Horizon (A.D. 600–1000) was dominated by the Wari state, which spread from the Ayacucho Basin of the southern highlands over much of Peru (chapter by Isbell). Again, however, as in the case of the Early Horizon, recent evidence indicates that the Wari state was not as widespread as previously believed (see chapter by Schreiber) and that non-Wari states controlled large areas of Peru (see chapter by Shimada).

The Late Intermediate Period (A.D. 1000–1476) was a time of regional diversity, but also a time of highly developed state, even empire, organization, as represented by the north-coast Chimú (chapters by Klymyshyn, T. Pozorski and Mackey). However, not all cultures during even this late time period attained a state level of organization (chapter by Hastings).

Altogether, the contents of this volume exemplify the necessity of employing a chronological and historical scheme based on true periods rather than 'developmental' stages. Only a framework unencumbered by developmental overtones can accommodate such diverse processes as Initial Period state origins and truncation in valleys such as Casma, which ceased to be centers of power by the Early Intermediate Period (chapter by S. Pozorski) or the Middle Horizon expansionist Wari polity which emerged quite late in the Ayacucho area (chapters by Isbell and Schreiber). The accompanying charts attempt to place the respective chapters and historical sequences in relative chronological relationship to one another; unfortunately, the persistent problems with the Andean chronological sequence remain to be resolved.

Chapter 1

Architectural evidence for the development of nonegalitarian social systems in coastal Peru

Robert A. Feldman

Introduction

The coast of Peru, which witnessed the ultimate rise of such major polities as the Nazca, Moche and Chimú, also witnessed the emergence of the first complex political systems in the Andean region. Beginning during the Cotton Preceramic Period (c. 2500 to 1800 B.C.), what appear to be centralized polities developed in a number of valleys along the north and central coasts. While archaeologists have been aware of large preceramic sites along the coast for some time, an understanding of their nature and complexity has been slow in coming. It is mainly within the last two decades that research on the organization of preceramic political systems has intensified. The site of Aspero, located near the ocean on the northern margin of the Supe Valley, in particular has been the focus of research directed at elucidating the nature of one of the first nonegalitarian social systems to arise in the Andean region.

The site of Aspero is one of the largest known settlements in Peru prior to the Initial Period. It combines extensive midden deposits extending over some 12 hectares with a variety of large constructions, including ceremonial mounds, plazas, and terraces (Moseley and Willey 1973; Feldman 1977, 1978, 1980, 1985). Excavations at Aspero by the author in 1973 and 1974 revealed a complicated pattern of rebuilt rooms and floors within the mounds. Carbon samples collected from within this architecture dated the latter phases of

contruction to between 4360±175 B.P. or 2410±175 B.C. and 3950±150 B.P. or 2000±150 B.C. (all dates are uncorrected), well within the range of dates from other Cotton Preceramic Period sites on the Peruvian coast.

It is not the purpose of this paper to debate the nature of preceramic subsistence. It is clear from recent studies, however, that the maritime versus agricultural dichotomy exemplified by Moseley (1975a) and Wilson (1981) is untenable. Analyses of midden remains, coprolites, and bone chemistry (such as orally presented by Weir and Benfer and by Pozorski and Pozorski at the Society for American Archaeology meetings in 1985) show that the coastal inhabitants were eating a mixed diet including wild and cultivated plants (such as legumes and *achira*), in addition to the main staples of marine fish, mammals, and invertebrates. Further, as the excellent summary paper by Burger (1985) points out, there was considerable interchange between the coast and the highlands prior to the second millennium B.C.

This paper will concentrate on a presentation and interpretation of architectural and artifactual data from Aspero. Details and overall patterns will be examined for what they can tell us about the nature of the labor mobilization and social organization behind their construction. Comparisons will then be made between the known coastal and highland preceramic architectural complexes. It will be argued that the architectural and settlement evidence from the highlands suggests a simpler,

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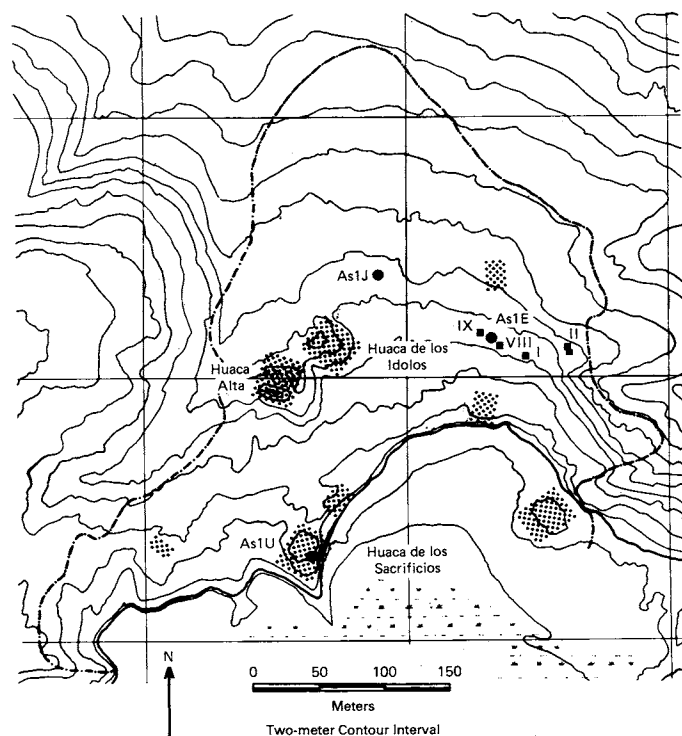


Fig. 1. Map of Aspero showing extent of midden (broken line) and main artificial mounds (dotted areas)

less stratified social organization there than on the coast, and that even with the contacts between the two areas, the locus of population concentration and political development was also in the coastal, predominantly marine oriented, communities.

Architectural evidence

Whatever the nature of the subsistence system at Aspero and other late preceramic settlements of the central Peruvian coast (cf. Moseley 1968, 1975a; Pickersgill 1969; Feldman 1977; Moseley and Feldman n.d.; and Osborne 1977a, 1977b; Raymond 1981; Wilson 1981), it is clear that the 150,000–200,000 cubic meters of cultural deposit at Aspero are indicative of a large, stable resident population. The most prominent features of this extensive midden are its irregular, pitted surface and a number of large artificial mounds. Fully one-third of the site is occupied by some type of construction, including domestic structures, small stone-lined pits, broad low terraces, plazas, and monumental mounds.

The most substantial constructions are the mounds (Figure 1). There are at least seven recognizable mounds and an additional six mound-like structures. The mounds are formed of interconnected rooms that were eventually filled in, either partially or completely, to form a raised platform for a new phase of wall and floor construction.

Major excavations were undertaken in two of the mounds, Huaca de los Idolos and Huaca de los Sacrificios, and a profile exposed by looters through a third, Huaca Alta, was cleaned and recorded. These excavations revealed that the

Table 1. Radiocarbon dates

Lab no.	Field no.	Age, B.P.	Corrected age
Site As8			
GX-3863	As8A-14 = 25	6085 ± 180*	6914 ± 190; 4964 B.C.
Huaca de los Sacrificios			
UCR-242	AsIU-5 = 26	3950 ± 150	4483 ± 217; 2533 B.C.
UCR-243	AsIU-5 = 62	4060 ± 150	4624 ± 217; 2674 B.C.
UCR-244	AsIU-8 = 5	4150 ± 150	4740 ± 217; 2790 B.C.
GX-3862	AsIU-8 = 5	4260 ± 150	4880 ± 225; 2930 B.C.
Average of UCR-244 and GX-3862			4205 ± 106
Huaca de los Idolos			
GX-3861	AsIM-10 = 263	3970 ± 145	4508 ± 210; 2558 B.C.
GX-3860	AsIM-10 = 200	4360 ± 175*	5005 ± 211; 3055 B.C.
GX-3859	AsIM-10 = 198	4900 ± 160†	5658 ± 220; 3702 B.C.

* δC^{13} corrected.

† Rejected as too old.

Dates are based on a half-life of 5570 years.

Corrected using tables in Damon, Ferguson, Long, and Wallick (*American Antiquity*, 39(2):350–366).

All samples collected by Robert A. Feldman.

mounds are composed of successive phases of stone-walled rooms and are not simply earthen platforms supporting surficial summit structures as had been previously suggested (Moseley and Willey 1973). The larger walls, typically the outer terrace faces, are built of large angular blocks of basaltic rock set in ample amounts of mud or mud-and-grass mortar with the result being a smoothly aligned outer face. Smaller, typically internal, walls are built of oblong boulders about 30–50 cm long, which are set perpendicular to the wall in mud plaster. Both types of walls have plastered faces, which occasionally are painted red or yellow.

In Huaca de los Idolos, individual rooms within the excavated levels vary considerably in size, with the largest being 11 m × 16 m (Figure 2). This room, or more likely open court, is the main entry area of the complex, reached by a stairway leading to a two-meter wide doorway at the top of the mound's highest or eastern face. From this first room, passages lead back to smaller rooms at the rear and sides. The central room of the rear group, measuring 5.1 m × 4.4 m, is divided in half by a low wall, with a clapboard-like frieze on its eastern side. This wall is broken in the middle by a narrow doorway in the shape of a double-topped T. The walls of this room, as well as those of the rooms to the north and east, contain niches.

The central rooms of Huaca de los Idolos quickly underwent a series of refloorings and rebuildings that ultimately buried the level associated with the friezed wall under five floors. In the later phases, the fill placed on the old floors was clean quarried rock held in loose mesh bags made of cane, sedge, or cattail stems, a construction technique referred to as