Monuments, Art and Social Change in the Formative Andes: Case Study in Tembladera Region, Middle Jequetepeque Valley, Northern Peru

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Throughout the history of the South American continent, the Central Andes is conspicuous in that it displays a variety of domesticated animals and plants and witnessed the emergence of a tradition of constructing monumental architecture since the Late Preceramic Period (ca. 3000–1800 B.C.). The utilization and alteration of the natural environment characterized the Andean Civilization. In the Hamacas Plain, located in the Middle Jequetepeque Valley of northern Peru, there are many civic-ceremonial center sites of monumental scale and large burial towers dated to the Initial Period (ca. 1800–800 B.C.). According to previous investigations and my research, these centers can be divided into eight clusters of architectural complexes and specific time spans can be assigned to each of them: Five centers can be dated to the Hamacas Phase (ca. 1500–1250 B.C.) and three to the Tembladera Phase (ca. 1250–800 B.C.). The gradual change in configuration and distribution of the monumental buildings and tombs from the Hamacas Phase until the Tembladera Phase signifies that social change in the local community strongly influenced decision-making over the alteration of the natural environment and planning of monumental buildings. At the same time, geographical conditions and existing monuments stimulated the establishment of religious thought on ancestors, social difference, and settlement divisions.

Los Andes Centrales es una de las áreas donde se han domesticado varios animales y plantas como recursos comestibles y materiales para artesanía en la Sudamérica. Merece atención la aparición de los centros ceremoniales, cuales son monumentos arquitectónicos con carácter ceremonial, desde el cuarto milenio a.C., lo cual marcó la formación de Civilización Andina en esta zona. Este artículo se enfoca una zona en donde el autor ha investigado tales monumentos prehispánicos y el proyecto "afuera de Eurasia" planifica más estudio para profundizar el tema de formación de ambiente artificial y el rol de los monumentos.

En el valle medio de Jequetepeque, norte del Perú, se ubican gran número de conjuntos arquitectónicos del Periodo Formativo. El sitio arqueológico "Complejo Hamacas" en la Pampa de las Hamacas es una densa concentración de monumentos tempranos correspondientes a la Fase Hamacas (aprox. 1500–1250 a.C.) y a la Fase Tembladera (aprox. 1250–800 a.C.). Según los datos de excavaciones estos monumentos están asociados con áreas residenciales y funcionaron como núcleo de asentamiento humano. La ubicación

de un monumento fue definida considerando el acceso al campo agrícola y la estrategia de evitar desastre causado por alta precipitación. La dirección de eje arquitectónica de construcciones y ubicación de tumbas grandes en su contorno indican que los centros ceremoniales fueron diseñados y colocados para visualizar la memoria de los ancestros en el paisaje.

Sin embargo, en la Pampa de Mosquito que se extiende en la margen opuesta de la Pampa de las Hamacas, existe otro sitio denominado "Complejo Mosquito" que consiste en varios monumentos arquitectónicos más antiguos; datan de la primera mitad de segundo milenio a.C. Ellos presentan otro patrón de ambiente artificial. En la Pampa de Mosquito se distribuyen petroglifos de iconografía religiosa que jugaba rol en el paisaje, pero no podemos confirmar entierros visibles como los casos del Complejo Hamacas. Mientras tanto, la presencia de terreno agrícola cerca de monumentos es una característica común entre Complejo Hamacas y Complejo Mosquito, lo cual sugiere que la economía fue un elemento fundamental en el proceso de formación de asentamiento con monumentos. El estudio comparativo de estos dos sitios nos permitirá discutir el mecanismo y función de los monumentos.

Introduction

In the history of South American Continent, the Central Andes (Figure 3.1) is a conspicuous area because there emerged a tradition of constructing monumental architecture with elaborated design, high visibility and durability. They are considered as civic-ceremonial centers, which are monumental architecture with ritual character and built with large labor investment. The first appearance of centers is dated to the Late Preceramic Period (ca. 3000-1800 B.C.). Especially in the Central Coast and North Central Coast of Peru, numerous ceremonial center sites which correspond to the early part of this period are found.

The Central Andes was an important core of domestication process for various plant and animal species. They supported the rise of complex society not only as food (e.g. potato, llama, alpaca, and guinea pig) and labor force for transportations (llama), but also as materials for craft productions (e.g. cotton, gourd, bone and alpaca wool). Fiber products as fishing net, basket, and textile helped subsistence, and especially textile functioned as media for represent ideas graphically. In the Central Andes, the iconography was highly elaborated by weavers before

the introduction of pottery. Geometrical patterns and geometrically arranged zoomorphic/anthropomorphic designs originated from textile show strong influence on Andean religious art, for instance, ceramic products, ornaments made of a variety of materials, stone carvings and wall paintings/relieves associated to the monumental buildings of the civic-ceremonial centers.

Therefore, the utilization and alteration of natural environment during the Late Preceramic Period characterized the Andean Civilization, and the subsequent periods, the Initial period (ca. 1800-800 B.C.) and Early Horizon (ca. 800-250 B.C.), the civic-ceremonial centers were constructed in a large extent of Peruvian coast and highland, and some part of tropical forest. In this paper I focus on the centers located in a basin of northern Peru where I researched to clarify the formation process of artificial environment during the Initial Period.

The Middle Jequetepeque Valley

The Middle Jequetepeque Valley, northern coast of Peru, there are many civic-ceremonial center sites dated to the Initial Period (Figure 3.2). They are architectural

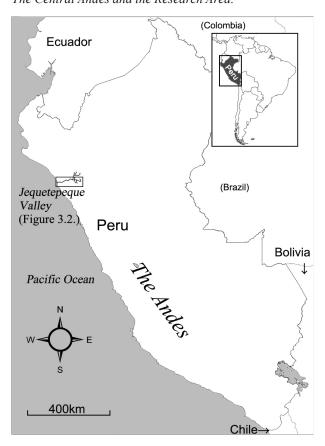
complexes which consist in monumental buildings such as platforms and sunken courts. Especially in the Hamacas Plain (Figure 3.3) which extends along the north bank of the river nearby modern village Tembladera many sites were found and investigated (Carcelén 1984; Keatinge 1980; Paredes 1984; Ravines 1981, 1982, 1985a, 1985b; Tam and Aguirre 1984; Tellenbach 1986; Ulbert 1994). Notably, on this plain there are considerable numbers of masonry burial towers of the same time period. Such a densely clustered concentration of early monumental buildings and conspicuous tombs is uncommon in the Central Andes. I launched an archaeological project in collaboration with Peruvian archaeologists to investigate them in 2003, 2004, and 2005. Also, since 2009 we have investigated on the opposite bank of the Hamacas Plain and detected earlier monumental buildings dated to the Late Preceramic Period (ca. 2000-1600 BC) and later ones of the Early Horizon (ca. 800-500 BC). My study area offers an important opportunity to study the emergence of monument and formation of cultural landscape in the Andes because we can research a long chronological sequence during the Formative Period of the civilization (late Preceramic, Period, Initial Period and Early Horizon) in the valley. As to the geographic setting, Hamacas Plain and the opposite bank of the river presents a relatively closed zone surrounded by mountains and the cultural remains are highly visible.

Research history in the Hamacas Plain

Today many of the archaeological sites of the Hamacas Plain have been destroyed and/or altered by the Gallito Ciego Reservoir and roads constructed during the 1980s. Two archaeological projects investigated them before and during the construction works. One project produced detailed inventory and maps of archaeological sites and carried out test excavations at some of them (Ravines

Figure 3.1.

The Central Andes and the Research Area.



1982, 1985a, 1985b). Another project excavated some architectural complexes intensively. Especially the monumental buildings and the surrounding residential area at the North Complex of Plateau 2 of Montegrande are well known for its discussion on social organization (Tellenbach 1986:295) and detailed analysis of pottery (Ulbert 1994). The sites were believed to have destroyed totally, but Japanese Archaeological Mission in 1999 (Sakai et al. 2000), to which the author participated, rediscovered some sites on the shores of the reservoir. I decided to draw up a new project to reconsider the results of two antecedent projects that had been published independently and revaluate them considering advances of studies on the Initial Period.

Figure 3.2.

Civic-ceremonial center sites of the Initial Period in the Middle Jequetepeque Valley, Peru.

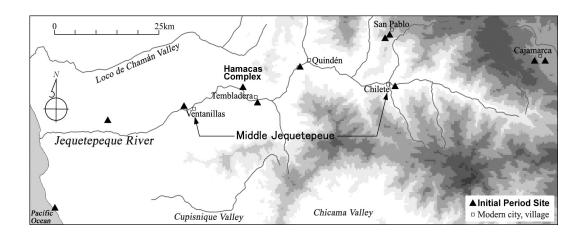
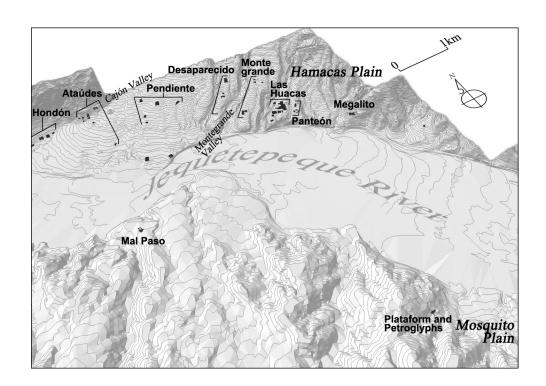


Figure 3.3.

Monumental buildings of the Initial Period in Hamacas Plain and Mosquito Plain.



Chronological study of Hamacas Complex

On starting archeological project of this area in 2003, I posed two research problems; to establish a chronological sequence for such an unusually large number of monumental buildings, and to clarify the functional relationship among them. Five monumental architecture sites were excavated by my project. Among them, Las Huacas site was excavated more intensively because it was the largest in scale and demonstrated the longest sequence of construction phases. Also, I carried out survey inside and around of the Hamacas Plain, including the opposite bank of the river, to detect archaeological remains of the same period.

Based on the results of these researches, I came to realize that the monumental buildings in the Hamacas Plain should be divided into eight clusters of architectural complexes although they had been registered as twenty-three discrete archaeological sites (Ravines 1981). On the opposite bank I found another architectural complex that was chronologically parallel to those of the Hamacas Plain. I have named the assemblage of these nine civic-ceremonial center sites the Hamacas Complex regarding them as remains of a local community that lasted for more than seven centuries during the Initial Period.

Furthermore, I have assigned certain time spans to each architectural complex (Tsurumi 2010:148–154), according to the seriation analysis of pottery associated to each sites, seriation analysis of a wide variety of architectural features (Tsurumi 2010:154–159), and radiocarbon dating. The chronological sequence of the occupation in the Hamacas Complex can be divided into two phases. They are named the Hamacas Phase (early Initial Period, ca. 1500–1250 BC) and the Tembladera Phase (late Initial Period, ca. 1250–800 cal BC), and each of them can be divided in two subphases according to features of architecture and pottery. Based on such a chronological division I reconstructed the history of nine civic-ceremonial centers.

During the Hamacas Phase, five architectural complexes (Hondón, Ataúdes, Pendiente, Desaparecido and Montegrande) were constructed, but all of them did not function simultaneously as civic-ceremonial centers. The earliest center named Hondón was built in the western end of the plain, and the second earliest named Ataúdes was built 700m to the east. Five centers were built sequentially from the west to the east and were abandoned one by one in the same order. I infer that during the Hamacas Phase two centers could have functioned at the same time, assuming a few decades of time lag (Tsurumi 2010, 2014).

In the Tembladera Phase none of the five civic-ceremonial centers built during the former phase continued to function and three architectural complexes (Las Huacas, Panteón, and Megalito) were constructed to the east of them. Las Huacas is the largest site among them because it was renovated more frequently than the others throughout the Tembladera Phase. Furthermore, on the opposite bank of river another center named Mal Paso was constructed in the latter half of the Tembladera Phase.

During the Hamacas Phase, each civic-ceremonial center functioned only for around one century, although those of the Tembladera Phase were maintained for several centuries. In the former phase many centers were built as a result of repeated "location shifts" while the latter phase is characterized by multiple coexisting centers. I infer the background of such a difference of the construction and maintenance activities between two phases as follows.

Frequent location shift of centers of the Hamacas Phase

The process of construction of monumental buildings of Hamacas Complex need to be considered as a result of activities of local inhabitants who had some strategies to convert the natural environment to an artificial one. Utilizing GIS analysis which help us researching ancient topography before the severe destruction caused by

reservoir, I inferred the background of the formation process of Hamacas Phase centers as follows.

The western half of the plain where the earliest centers were situated corresponds to the riverbed of the two tributaries (Montegrande Valley and Cajón Valley) of the Jequetepeque River. Consequently, this zone is richer in water resources than the fluvial terraces of the eastern half of the plain. In the 20th century a modern village called Montegrande once occupied this zone and its inhabitants cultivated the riverbed around their houses. Similarly, I suppose that the three earliest civic-ceremonial centers in this western area (Hondón, Ataúdes, and Pendiente) were arranged next to the cultivated field on the riverbed and were surrounded by residential area of the inhabitants. There are many evidences of agriculture during the Hamacas Phase; pottery sherds from Las Huacas demonstrate manioc starch on its surface of (Tsurumi 2010:163) and monumental platform of Pendiente site was accompanied by a terraced cultivation field (Ravines 1985a:133, 1985b:213). I suppose that the earliest centers were strongly associated with ritual of agriculture and, not only physically but also symbolically, functioned as nuclei of local society.

At the same time, the western half of plain is in peril of flash floods (huaycos) in the times of ENSO (El Niño-Southern Oscillation). In Montegrande and Las Huacas sites of the eastern half of plain, there are evidences of buildings destroyed by this disaster, but GIS analysis indicates that the occupations in the western half must have suffered more severely; especially the earliest two centers, Hondón, and Ataúdes. The difference of topographic condition in the plain caused the location shift of the centers as a result of refuge from natural disaster. But the shift from Desaparecido to Montegrande did not make any sense as protection against flash flood because topographic conditions of them are very similar. Furthermore, some of small platforms of Las Huacas dated to the later part of the

Hamacas Phase occupied an even more dangerous location than those of Montegrande.

Through these disastrous events the location shift came to have another meaning. People aimed to create new monumental buildings in relation to ancestor worship. In Montegrande site, after the abandonment of the monumental buildings, some burial towers -probably for deceased local elites- were constructed on them (Paredes 1984; Tellenbach 1986). The other four centers of Hamacas Phase also present burial towers on or beside their platforms (Ravines 1981). During the Hamacas Phase the local inhabitants constructed burial towers near monumental buildings to ritually "close" them. A closed center with burial tower(s) was transformed into a memorial monument to the dead, and a new center offered a view of the anterior one. The earliest two centers (Hondón and Ataúdes) only obtained north-south direction stairway, coincident with the topographic inclination of the plain, while the third (Pendiente) own a platform whose stairway (approximately WNW-ESE) is directed to the former two centers. One who step up to the platform via this stair could see Ataúdes directly ahead. Although Hondón was out of view because it was constructed in a geographical depression, the second earliest center Ataúdes is highly visible and came to be the principal monument to commemorate the ancestors. The fourth (Desaparecido) and the fifth (Montegrande) also equipped the stairway toward the second. As a result, they came to present an almost straight line between the second (Ataúdes) and the fifth (Montegrande)1. Therefore, the local history was embodied in the spatial arrangement of the monuments.

Long-term Coexistence of centers of Tembladera Phase

The inhabitants of Tembladera Phase followed this tradition in constructing their own monumental buildings while their strategy was altered as follows. The three civic-ceremonial centers of the Tembladera Phase (Las Huacas, Panteón, and Megalito) were built to the east of the former five centers and the "straight line" was prolonged consequently. However, these three centers were constructed almost simultaneously, and Las Huacas is the largest complex among them because of more frequent renovation than the others throughout the Tembladera Phase. The coexistence of three centers, their long-term maintenance, and inequality in scale among them, are quite different from the Hamacas Phase centers.

The prominent scale and spatial position of Las Huacas suggest that it had played a special role in the worship for the ancestors of the Hamacas Phase by the people of the Tembladera Phase, and that Panteón and Megalito functioned especially for worshipping the more recently deceased during the Tembladera Phase (Tsurumi 2010:159–161, 2014:214–216). This interpretation is suggested by the absence of tombs inside of the Las Huacas site and the existence of larger burial towers than those of the former phase situated around Panteón and Megalito. From the largest platform of Las Huacas, one can view the closed centers and burial towers of their ancestors of the Hamacas Phase. However, from Panteón and Megalito when one wish to view them, the huge platforms of Las Huacas will inevitably occupy a large area of their field of vision.

Such differences between Hamacas and Tembladera Phases show that the dominant figures of the social organization, namely, elite religious authorities, aimed to reinforce their power by emphasizing continuity derived from worshipped ancestors, possibly on the basis of kinship. By constructing three civic-ceremonial centers, and placing Las Huacas in the principal position among them, they altered the whole of the landscape of the Hamacas Plain. From a broad setting that memorialized their ancestors, they shifted to construct a landscape that represented a more hierarchical social organization. This new approach

functioned over several centuries, at least during the the first subphase of Tembladera Phase, possibly because they intended to maintain such a new order.

Not only public buildings, but also the residential area changed. In Montegrande site of the Hamacas Phase, a few comfortable dwellings were found built on the low platforms next to the monumental buildings, and many more simple dwellings constructed directly on the natural plateau surface surrounded them. The former is more resistant to precipitation than the latter. Such a difference is one of the reasons to believe that the local society of the Hamacas Phase was organized hierarchically (Tellenbach 1986). However, dwellings associated to architectural complex of Las Huacas of the Tembladera Phase only correspond to those for the elites. I suppose that the Tembladera residential area was divided geographically by the steep cliff between plain and riverbed; only a few small human groups had lived near the monumental buildings, whereas other community members were distributed among the cultivated land in the bottom of the valley, just like the farming villages of the twentieth century.

Furthermore, the establishment of Mal Paso, the ninth civic-ceremonial center, is an interesting phenomenon in the second subphase of the Tembladera Phase. Mal Paso was intentionally placed in the southern bank to have a direct view of the Hamacas Phase centers on the northern bank and it is reasonable to suppose that the founder of this center shared a special interest to the ancestors with the people of contemporaneous centers (Las Huacas, Panteón and Megalito). However, unlike the hierarchical distribution among three centers on the northern bank, its architectural axis is simply directed toward Ataúdes not considering the presence of Las Huacas. Las Huacas owns two sunken courts with peculiar configuration -the four sides are delimited by two unevenly parallel walls like a bench with a back- and no other centers do not obtain

similar court, excepting the one of Mal Paso. Considering such features, I suppose that Mal Paso insisted on an equal role with Las Huacas in the landscape. These architectural evidences can be considered an "idiosyncratic architectural practice" (Bandy 2004:325) that the founders of Mal Paso derived from the original community controlled by Las Huacas after a fissioning event of occupation.

Concluding Remarks

In this article I attempted to explain the process by which the cultural landscape in the Hamacas Plain developed during the Initial Period. The gradual change of configuration and distribution of monumental buildings since Hamacas Phase until Tembladera Phase signifies that the social change of local community strongly influenced on decision-making on the alteration of natural environment and planning of monumental buildings and, at the same time, the geographical condition and existing monuments stimulated the establishment of religious thought on ancestors, social difference and division of settlement. The extraordinarily dense cluster and wide variety of Initial Period remains in the Hamacas Plain permit me to infer such a process based on archaeological evidences although it is not so simple in other archaeological sites of this period. Therefore, further investigations are needed in this area to complete the local history from the earlier period to the later ones in search of clues to understand the characteristic of artificial environment in the Andes.

Especially, the remains of the previous period are important because in the case of Hamacas Complex we can see the repetition of construction of monumental buildings considering the view of the older ones sequentially. I have mentioned to the Hondón site as the "first" center of the Hamacas Complex, although it does not mean the "first" in this section of the Jequetepeque Valley. Motivated by such an interest, I am carrying forward investigations in

Mosquito Plain on the opposite bank. In this plain, Peruvian archaeologists and I have detected, at least, six units of architectural complexes which are considered to have functioned as civic-ceremonial centers. The absence of pottery sherds in their filling suggests that they correspond to preceramic period. According to excavations at these complexes we elucidated that the largest buildings date to 1900-1650 BC, the late Preceramic Period (Tsurumi and Morales 2018). Although from Hamacas Plain one can view a broad part of Mosquito Plain and vice versa, the sequential process of Hamacas Complex cannot be applicated simply to them because the environment and cultural remains are different. In the Mosquito Plain we see no tombs with monumentality like the burial towers of the Hamacas Complex, and clusters of rocks with petroglyphs including very large images with ritual theme, is taking part of the preceramic occupation. Also, earlier exploitations of natural resources than the Hamacas Plain are expected to be detected in the Mosquito Plain. The further researches in Mosquito Plain and landscape analysis will be conducted as a part of the Out of Eurasia project.

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¹The presence of stairway in Desaparecido site is a hypothesis (Tsurumi 2010: 167) based on an assumption that the Platform 12.16 of this site had possessed such architectural feature although this place had been altered by later constructive activities (Ravines 1981:25-26).