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Regional Perspective of Recuay Mortuary Practices: A View from the Hinterlands, Callejón De Huaylas, Peru

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REGIONAL PERSPECTIVE OF RECUAY MORTUARY PRACTICES: A VIEW
FROM THE HINTERLANDS, CALLEJON DE HUAYLAS, PERU

by

Victor M. Ponte

A Thesis Submitted in
Partial Fulfillment of the
Requirements for the Degree of

Master of Science in Anthropology

at

The University of Wisconsin Milwaukee

December 2015

ABSTRACT

REGIONAL PERSPECTIVES OF RECUAY MORTUARY PRACTICES: A VIEW FROM THE HINTERLANDS, CALLEJON DE HUAYLAS, PERU

by

Victor M Ponte

The University of Wisconsin-Milwaukee, 2015
Under the Supervision of Professor Jean Hudson

Archaeological investigations of burial chambers in the north-central highlands of Peru constitute the corpus of this thesis. Most of the stone structures correspond chronologically and culturally to the Recuay Tradition, a time span of 100 to 800 CE. The study area is located in the Cordillera Negra of the Callejón de Huaylas basin (Ancash Department). CRM projects developed in the impact zone of the Pierina mine have contributed valuable information on the mortuary practices of a Recuay agro-pastoral community. This thesis relied on grave goods inventories, osteological analysis, and types of stone architecture in the burial chamber. Data from this community is compared to a sample from the Cordillera Blanca, situated at the eastern side of the Callejón de Huaylas. While the Cordillera Blanca tombs show evidence of high quality tomb construction and grave goods associated with chiefly groups, the Cordillera Negra tombs do not. This thesis investigates the possible explanations of the differences. After 700 CE, both areas suffered transformations with the intrusive presence of Wari-related materials and the increase of interregional interaction. At the same time, cultural change occurred in tomb construction to above-ground mausoleums (*chullpas*). Since the pioneering studies of J.C. Tello (1929) and W.C. Bennett (1944), no other study of Recuay burial practices has been carried out at regional scale. Basic information per burial chamber reaffirm mortuary customs in the area, and help to define the characteristics of Recuay funerary practices.

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Dedicado a mi mamá,

Gloria

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ACKNOWLEDGMENTS

This thesis was due long time ago. Working in CRM made me delay its writing, and also graduate school coursework. To be a parent, have a job, and find time for graduate school requires balance and calculated thinking. This thesis contains the results of the fieldwork I developed in Peru during 1997 to 2002. Many archaeology students in that time collaborated with me. I can mention Henry Tantalean, Carmen “Mamen” Perez, Emma Eyzaguirre, Claudia Grimaldo, Jenny Alcantara, Santiago Morales and Cesar Aguirre. They accompanied me since the beginning of the Pierina archaeological project. After two seasons, arrived Emily Baca, Sergio Anchi, and David Chavez. They became very important members because of their accurate drawings and notes. Many thanks to all of them. I cannot forget the help of Martin Justiniano[†], archaeologist molded by experience instead of; his intuition and Andean views were always refreshing. Florencia Bracamonte analyzed human remains. I have also to thank Holton Burns from Barrick Gold Corp. for trusting us to develop the mitigation program. In those years, the Ministry of Culture had not implemented regulations concerning developing projects, so we conducted research and at the same time working with instead of favored client requirements and permits. Jose Vidarte engineer metallurgist processed the metal samples from our excavations on his personal time while working in “procesos”.

Many thanks to Jean Hudson, my adviser, and committee members, Laura Villamil and Jason Sherman. Their comments have helped to broaden the perspective of this study.

And I cannot forget my family, my mom always push me to get an advanced degree. Nano and Joe, my sons, they had to wait for daddy to come back home. And my sweet girlfriend Jen, she was the first one to help me on finishing this thesis.

1. Introduction

Archaeological data collected from cultural resource management projects in Perú, specifically from the Pierina mine impact zone, provides the basis for the approximations to Recuay burial patterns in a regional perspective. This zone includes the intermontane valley of the Callejón de Huaylas near the city of Huaraz, Perú, at elevations between 3020 to 4043 meters above sea level (m.a.s.l) (Figure 1.1). Tomb inventories from this zone have provided important data for the understanding of Recuay burial patterns.

Recuay was an agro-pastoral society that emerged after the collapse of the Chavín religious tradition (~500 BCE). It flourished in Chavín's core-region, the mountainous area of the Ancash department. Recuay culture does not appear to have shared any of the religious cult and social organization attributed to Chavin such as theocracy. Recuay society, which developed between 100 and 800 CE, was organized around multiple competing chiefly centers. Recuay was a ranked society based on leadership and community life arranged in mountaintop villages. Recently George Lau (2011) has proposed that the term "commonwealth" might characterize Recuay multiple polities. The term does not emphasize hierarchical politics, instead it focuses on the distribution of large and small villages and their resource areas, and the way these were related to each other by common features, such as religious customs, language, community life, economic system and material culture. Commonwealth at the same time suggests a loose political unity of Recuay settlements dispersed in highland Ancash.

The basin of the Santa River divides two mountain ranges, the Cordillera Blanca and the Cordillera

Negra. The Spanish name “Blanca” refers to the snowy peaks and high altitude lakes, whose discharges create tributary rivers flowing to the Santa River. The area has mountain glacial peaks, venerated in the past as sources of water (Zuidema 1989:144) and the best agricultural terraces; there is also evidence of irrigation. Surplus land productivity and pastoral activities promoted the rise of small polities or chiefdoms. Some rich burials investigated in this region have provided clues to evaluate the power of certain Recuay elite groups (e.g., Jancu, Wegner 1988). Recuay settlements are situated on the hilltops above Huaraz, while the mortuary component is comprised of subterranean group burial complexes situated on hill slopes, at some distance from the living place, and next to ancient pathways.

In contrast, the Cordillera Negra gets its name from the black color of the mountains that have less access to water. This area lacks glacial lakes and snow-capped mountains, the terrain is eroded and abrupt, and agriculture is less intensive, although pastoral activities on the top of the mountain chain might support some kind of surplus production (Lane 2006). Small Recuay hilltop villages were situated in the Cordillera Negra, like the ones in the Pierina area. These hinterland agro-pastoral communities remained isolated, a feature reflected in their burial practices. For example, the ridgetop site Marenayoc demarcated living spaces by terraces, with a pattern of chamber-tombs below and above the ridge-site. In general, Recuay mortuary chambers were built underneath boulders, and in a few cases were subterranean. The tombs normally feature a stone chamber lined up with nicely dressed stones and slab fillers. Preservation of organic remains was limited. When it was possible, human remains were identified as collective secondary burials. Grave goods accompanying the burial are quite variable, with kaolinite pottery in some cases, but also utilitarian ceramics, and metal copper pins. In other cases, imported Moche pottery, and remains of corn,

were left inside the tomb, next to large jars or *cantaros* that might have contained *chicha* corn beer. Mortuary contexts include subterranean and above ground stone buildings with single or multiple chambers. The 10 excavated burials present differences in chamber size, number of individuals interred, quality and quantity of grave goods. Disarticulated skeletal remains are a common burial pattern. Post-burial disturbance predominates over most of the skeletons found in the stone chambers. Diverse factors such as tomb revisiting in ancient times, modern looting, soil disturbance, geomorphology, taphonomic process, and tomb re-use by contemporary societies made difficult the preservation of skeletons "*in situ*". The most elaborate mortuary stone architecture is located on the eastern flanks of the Santa River, thus on the Cordillera Blanca side of the valley, above the city of Huaraz, where some subterranean structures remained undisturbed. In this area, secondary burials consisting of body parts were placed in an elaborate complex of stone boxes, which accompanied larger chambers. On the other hand, burials on the western flanks of the Santa River, thus on the Cordillera Negra side of the valley, demonstrated rural and local community patterns reflected in simple tomb construction and burial behavior.

This study is the first attempt at a synthesis of Recuay mortuary practices from a regional perspective. It is based on the description of tomb construction, and the preliminary analysis of human remains and associated grave objects with the aim to develop a cultural, conceptual, and temporal framework for Recuay burial practices. Other studies have focused exclusively on elite tombs directly associated with residential communities on hilltops, like Pashash (Grieder 1978). George Lau's (2011) investigations have greatly encouraged interest in the Recuay society. Lau (2010b) has investigated with great detail the Recuay village of Chinchawas, which has a mortuary

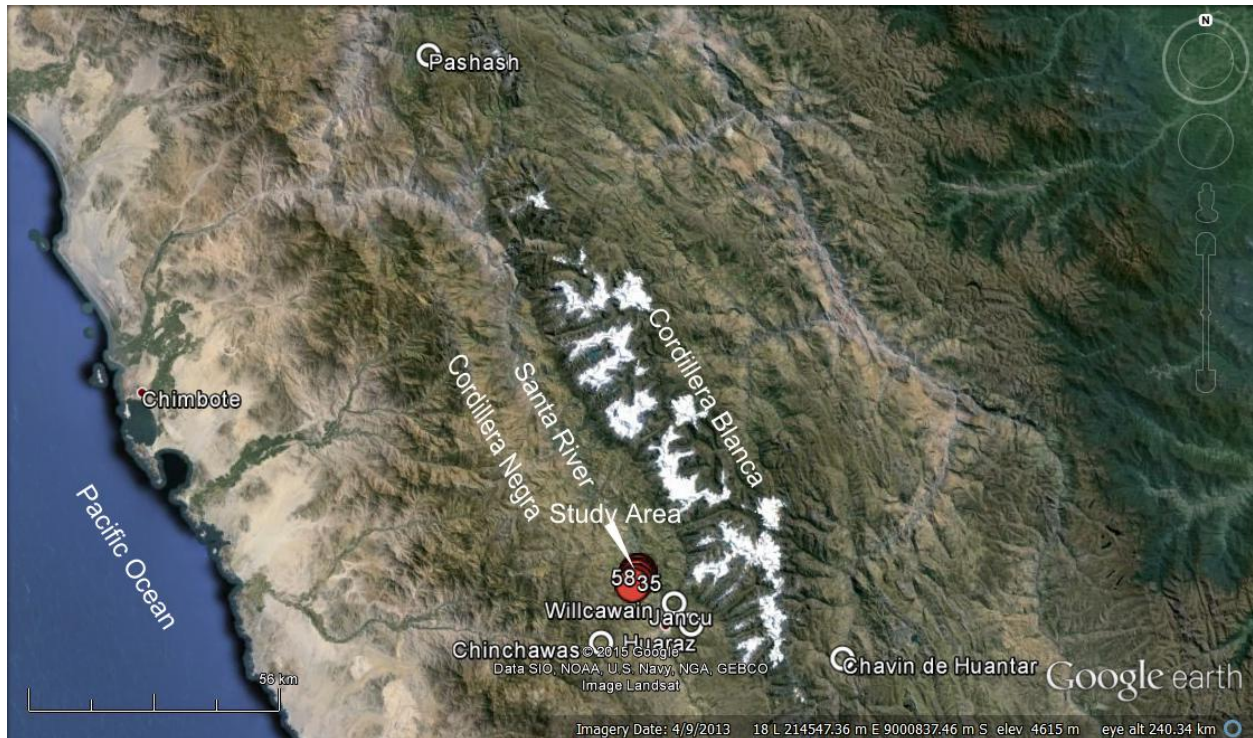


Figure 1.1. Physical features of the Ancash territory.

component on the periphery of the site. His analysis of mortuary constructions is very important due to the *in situ* evidence of superposition of funerary buildings, from subterranean chambers to above ground structures called "*chullpas*"¹ The causes for a change in mortuary customs are still under discussion, but the new evidence suggests a local modality instead of an external explanation based on diffusion, foreign contact or ideological pressures.

Given the poor osteological preservation in highland environment, due to soil acidity and the constant practice of manipulation of human remains as secondary offerings (Millaire 2004), getting an adequate sample size to produce accurate analytical results is difficult (Henderson 1987). In

¹ Although Bennett (1944: Fig.16) already had reported superposed funerary architecture of the same characteristics in Willcawain.

several cases, the finding of sealed or intact chambers resulted in extreme bone decomposition due to natural formation processes (humidity, poor drainage). In other cases, favorable variables contributed to the relative completeness of skeletal remains. Factors that contribute to poor bone preservation need to be kept in mind when dealing with the analysis of demography, and pathologies, and estimating the number of individuals.

An enormous variation of mortuary practices existed in ancient Peru, from simple interments under house floors as shown in the pre-ceramic Paloma site (Quilter 1989), to magnificent royal tombs made of adobe bricks as in the Moche kingdom (Alva and Donnan 1993; Bruhns 1996; Donnan 2011). The mortuary behavior of the Recuay society also shows variability; this is readily discernible given that burial construction is the most visible archaeological structure distributed on the mountain landscape (Lau 2011).

Almost everything that is known about the Recuay society comes from looted collections of fine kaolin ceramic vessels (Moseley 1999:192). Many museums around the world have a display of Recuay pottery due to its elaborated technique and aesthetic elegance. Ninety-nine percent of these white ceramics come from looted tombs either in the highlands or coastal headwaters of the Ancash department. Raphael Reichert has classified Recuay vessels housed in museums and private collections. His analysis only takes into consideration shape and decoration, yet he distinguished over 20 different categories (Wegner 1981). In spite of this fact, few systematic studies on burial patterns of these ceramics have been carried out.

In general, there is a lack of study dedicated to establishing regional patterns of Recuay mortuary

customs. The pioneering study of W. C. Bennett (1944) in the Callejón de Huaylas may be an exception; his excavations uncovered more than 25 subterranean galleries in the Willcawain area. Above ground *chullpas* (burial buildings) like the large Willcawain and Ichik mausoleum complex in the Huaraz area were also excavated. Bennett's investigations served to establish more firmly the chronological position of the Recuay Culture in the Early Intermediate Period before the "Tihuanacoid" influence in the Callejón de Huaylas (Lau 2011). He provided a detailed list of grave goods for stone-lined chambers and stone box graves, which for our purpose have great utility in comparative terms, but lack the bio-anthropological information, in part due to poor bone preservation. In this sense, although Bennett excavated more subterranean tombs than did my investigation, the sample of 10 burial chambers associated with bio-anthropology data adds a new perspective on reuse subterranean mortuary architecture and refutes the "concept of subterranean houses" as that Bennett (1944:38-44) proposed for some of the complex subterranean architecture of Recuay burials.

As I mentioned above, recently site-specific case studies (Lau 2010b) have focused on excavations in habitation sites with ceremonial architecture that has also contained mortuary spaces in which cyclical ancestral veneration rites apparently took place (Lau 2002). While the Pierina data also indicate ancestral veneration, my study adds mortuary contexts that are not associated with centralized ritual. Significantly the Pierina data provide the first documentation of Recuay burial practices in the hinterland rather than chiefly centers. This in turn broadens our view of the region as a whole, and the social and political factors that articulated Recuay society. We must also give attention to the reconstruction of the burial structure in a descriptive and holistic manner.

From this viewpoint it is possible to set a base from which to define Recuay burial practices in the Callejón de Huaylas. Most of the data correspond to the Recuay culture tradition, a time span between 100 and 800 CE defined by G. Lau (2004a) (Table 1.1). The burials are highly variable; some of them are simple interments without any associated architecture, while others portray an elaborated stone-lined chamber with huge slabs functioning as roofs. The human remains analyzed are associated entirely with funerary chambers. In most cases, one chamber contained multiple individuals. However disturbance and poor bone preservation made it very difficult to infer body position and number of people interred. Archaeological surveys located 11 more stone burials that were mapped, but not excavated (Figure 1.2). They will help to reconstruct the distribution of mortuary architecture and its insertion in the landscape in a regional perspective.

Table 1.1. Chronological Chart Area of Study (Pierina)

RELATIVE CHRONOLOGY	ABSOLUTE CHRONOLOGY	ANCASH	CHINCHAWAS	PIERINA INFLUENCE AREA	
MODERN	1800			TARICA	
COLONIAL	1600				
LATE HORIZON	1472	INKA		PIERINA - INKA	
LATE INTERMEDIATE PERIOD	1200 CE	AQUILLPO	CHAKWAS	COTOJIRCA V	
		WILCAWAIN 2			
MIDDLE HORIZON	800	WILCAWAIN 1	WARMI	CHULLPAS YARCOK	
		LATE RECUAY	CHINCHAWASI 2	COTOJIRCA IV ANCOSH	RECUAY TRADITION
EARLY INTERMEDIATE PERIOD	600	↑	CHINCHAWASI 1	COTOJIRCA III	
	400	RECUAY	KAYÁN		
	200			COTOJIRCA II	
	100 BCE	HUARÁS			

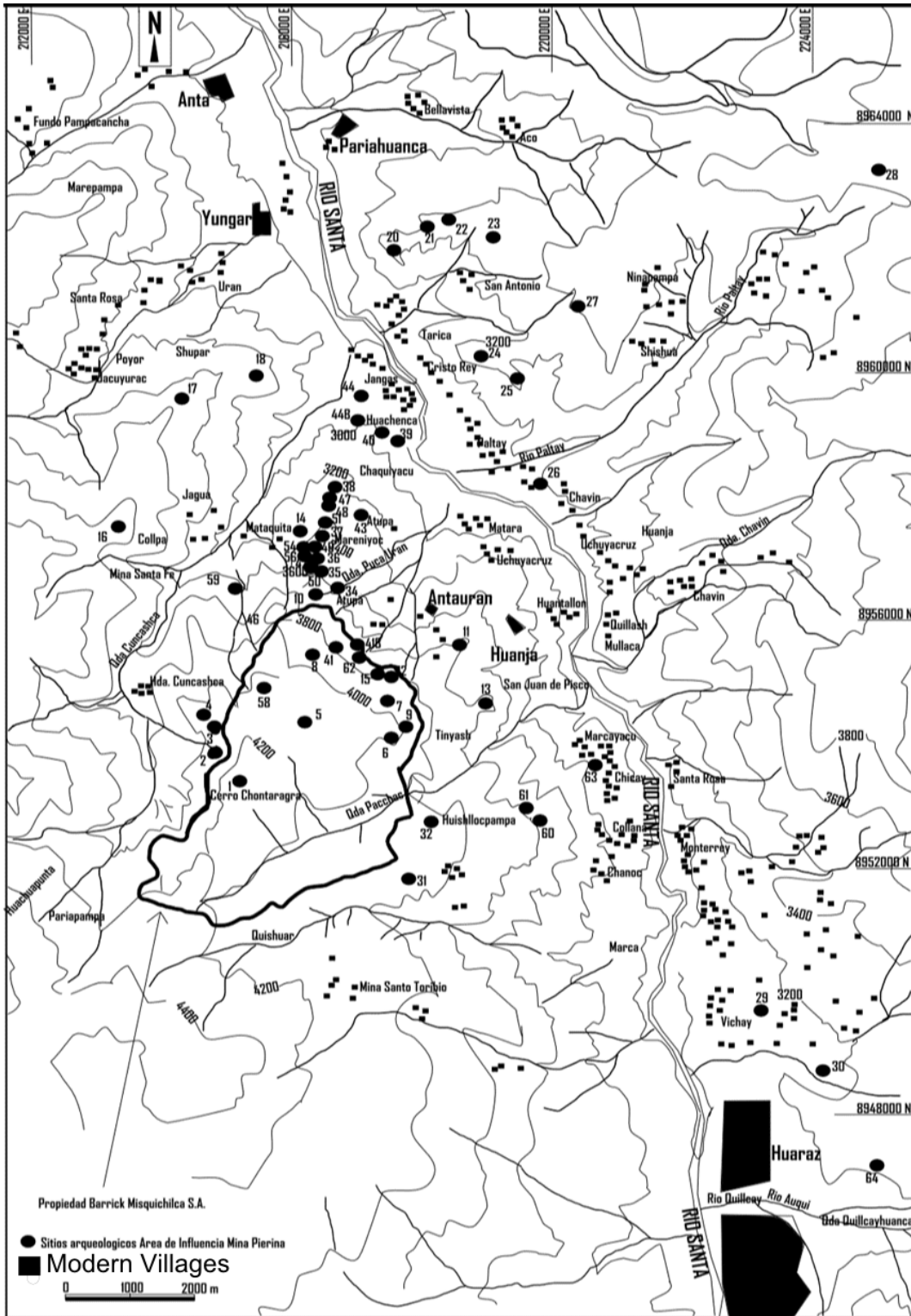


Figure 1.2. The location of archaeological sites in the Pierina Mine impact area.

2. Background

2.1. The Geographic Area of the Recuay Culture

The distribution of the Recuay groups included most of the actual Ancash department in the north-central highlands of Perú. This is a geographic region with several terrain features that, from the west to the east consecutively gain in elevation (Figure 1.1). Briefly, it presents Pacific Ocean shorelines, coastal desert plains and hills, seasonal and narrow river valleys, interandine valleys, *puna* plains, glacial lakes, mountain ranges and snow-peaked mountains. More to the point, the territory forms a compressed set of ecosystems or life zones that are influenced by micro-climatic variations in relationship to the increase of altitude (Earls 2005). For instance, multiple ecological strips are crossed when travelling from the port of Casma (at sea level) to the top of Punta Callan in the Cordillera Negra at 4,200 meters above sea level, a trip that can now be accomplished by car in only 3.5 hours via the Casma – Huaraz highway. But the main geographical feature of the region is the Cordillera Blanca, a range of many glacial peaks, among the highest of which is the snow-capped Huascarán at 6,760 m.a.s.l (22,205 feet) (Figure 2.1). Generally, the Cordillera Blanca runs south to north and the Cordillera Negra parallels it. Together they form a picturesque interandine valley called “Callejón de Huaylas” (Raimondi 2006[1873]:49). To the opposite side of the Cordillera Blanca are the eastern slopes which drain into the Marañón River, a major tributary of the Amazon River.

This mountainous region forms a dramatic natural landscape of majestic mountain ranges, narrow valleys, inter-mountain passes, glacial lakes, *puna* grasslands, ridge-tops, slope terrains, stepped and gradient terraces, flat *pampas*, and highland valleys. The basin of the Santa River, one of Recuay's principal regions, is formed by the mountain range of the Cordillera Negra to the west

and the Cordillera Blanca to the east. The Cordillera Negra parallels the Blanca; it has lesser altitude and is drier, consequently its water runoff is minor. This has potentially significant effects on the agriculture and pastoral productivity of these western slopes of the Callejón. The Santa River gains water by eastern tributaries that descend from melting glacial and lake discharges. Gradually the river descends through the Andes until it reaches the Pacific Ocean after flowing 280 Kilometers (175 miles).



Figure 2.1. The highest mountain peak Huascarán and the valley of Callejón de Huaylas

It seems that mountain landforms predetermine the isolation of settlements. Although Recuay trails connected diverse territories facilitating exchange, the Ancash landscape has geographic barriers, which could have had an effect on the autonomy of the chiefly polities that characterized the

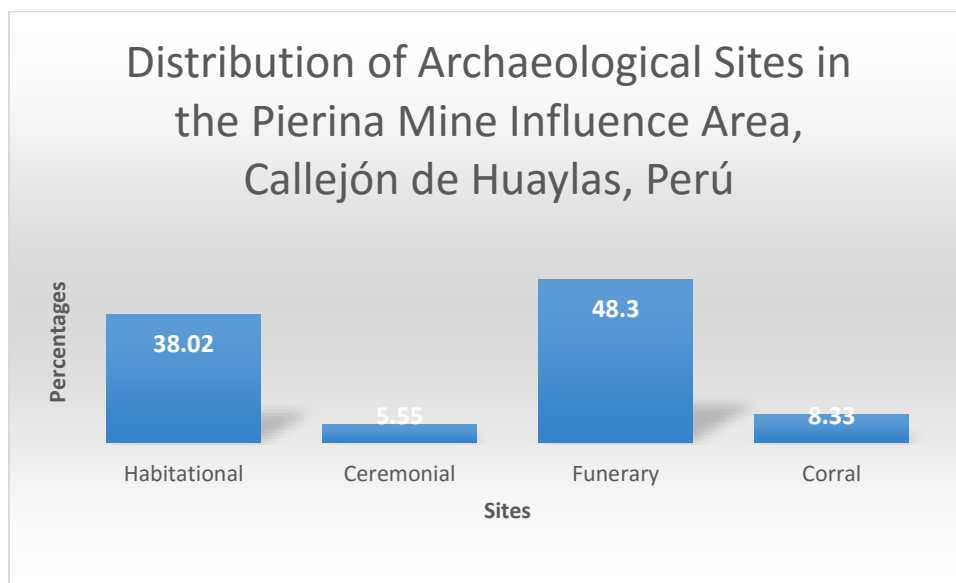
Recuay society. In spite of the adversity of the natural landscape, most of it has been altered by economic human activity. As in the past, current farming techniques in stepped terrain utilize mosaics of terraces and corrals when the conditions of soil and altitude are adequate. However, because of the poor soils and rapid erosion, cultivated fields are mostly located next to river plains and ravines (ONERN 1974). One of the most important characteristic of the Andes is the gradient terrain and the resources that each life zone contains (Lau 2011); Recuay groups adapted very well to the exploitation of high altitude pasture, and to the variety of semiarid vertical landscapes and valley floor. For the latter, the Callejón de Huaylas by itself offers a wide range of resources (Lynch 1980:5). Each ecosystem is determined by variable vegetation and soils in accordance to the ecological elevation (Isbar and Llerena 2000:74).

Two marked seasons occur in the highlands, the wet or rainy season starts out more or less in October and ends by April. Heavy precipitation generally occurs in the afternoon, when clouds and moisture from the rainforest reach the peaks of the Cordillera Blanca. In this sense, the mountain range has a significant role in the transport of moisture from the Amazon, promoting deep convective clouds, and blocking westerly flow from the Pacific Ocean (Insel et al. 2009). Sometimes sporadic hail and thunder take place as the clouds move along to the west. With the daily rain the landscape rapidly turns pastures green, while during the dry season, which goes from May to September, the pastures become drier and yellow. The temperature has a minor oscillation between these two major seasons. The rate of precipitation increases with the altitude, and it seems that more rain is concentrated in the Cordillera Blanca than the Cordillera Negra.

2.2. The Region of the Pierina Mine

Situated on the mountaintop of the Cordillera Negra at over 4,000 meters of elevation, the Pierina mine has been operating in the sierra of Ancash since 1998. This master thesis is based on the fieldwork conducted in the mining influence area. The archaeological survey included the floor of the Santa River (3,000 m.a.s.l) to near the head-water division of the Callejón de Huaylas (4,300 m.a.s.l), and the eastern flanks of the Cordillera Negra that descend to form the western foothills of the Santa River. The survey yielded a total number of 79 sites, many of which had mortuary functions (Figure 2.2).

Figure 2.2. Distribution of Archaeological Sites in the Pierina Mine influence Area



As the altitude increases, the rocky topography turns abrupt with low hills in stepped terrain between ravines and high slopes. At 3,900 m.a.s.l the vegetation gradually changes to open grasslands that become relatively undulate to flat at the top of the Cordillera Negra mountain range (Figure 2.3). At the same time with the elevation gain, the temperature drops drastically. In a normal day at high altitude the temperature oscillates between 30 F early morning to 62 F late afternoon. At the valley bottom it is less variable, between 50 to near 75 F on a sunny day.

The flooding area of the swiftly flowing Santa River offers good alluvial soil for cultivation of potatoes (*Solanum andigenum*), oca tuber (*Oxalis tuberosus*), olluco tuber (*Ollucus tuberosus*), the nutritious leguminous tarwi (*Lupinus mutabilis*), and quinoa (*Chenopodium quinoa*). These crops extend as high 4,000 m of elevation. In general terms the area presents natural vegetation of open xerophyte shrubs, cactus, occasional willow, and alder trees (*aliso*, *sauce*) situated near springs and banks. Forested areas of *Polylepis* (*quenual*) and *Buddleia incana* (*quishuar*), important wood resource in the Andes, were limited to high altitude areas of the Cordillera Blanca near rocky slopes and along streams. Their presence lessens in the Cordillera Negra, and it seems that in the past they did not constitute a major resource, in spite of the lack of natural fuel resources in the Central Andes (Hastorf and Johannessen 1990; Hastorf and Johannessen 1999).



Figure 2.3. At 4,000 m.a.s.l grasslands in the Quebrada Llancash, Cordillera Negra, Pierina mine.

Due to poor soils and high erosion, the current crop production is minimal and almost all of it is practiced intensively on sloping terrain (ONERN 1974). Non-native species such as *Eucalyptus* and *Pinus* have invaded slopes formerly characterized by desert low shrub vegetation, causing an unknown impact to native forest species (Byers 1998). In the study area the best agricultural soils are located in the *quebrada Llancash*, because it presents relatively deep soil, good drainage and moderate slopes (Figure 2.4). In this sector, tuber crops are permanent or temporal and require extensive community labor. The old technique of land terracing is maintained by familial units as small agricultural plots of potatoes, beans or corn in rotational cycles. However due to the proximity of the city of Huaraz, urban lifestyles have rapidly altered the traditional agriculture-based way of life, and now, many young families have migrated to the city with the subsequent abandonment of land.

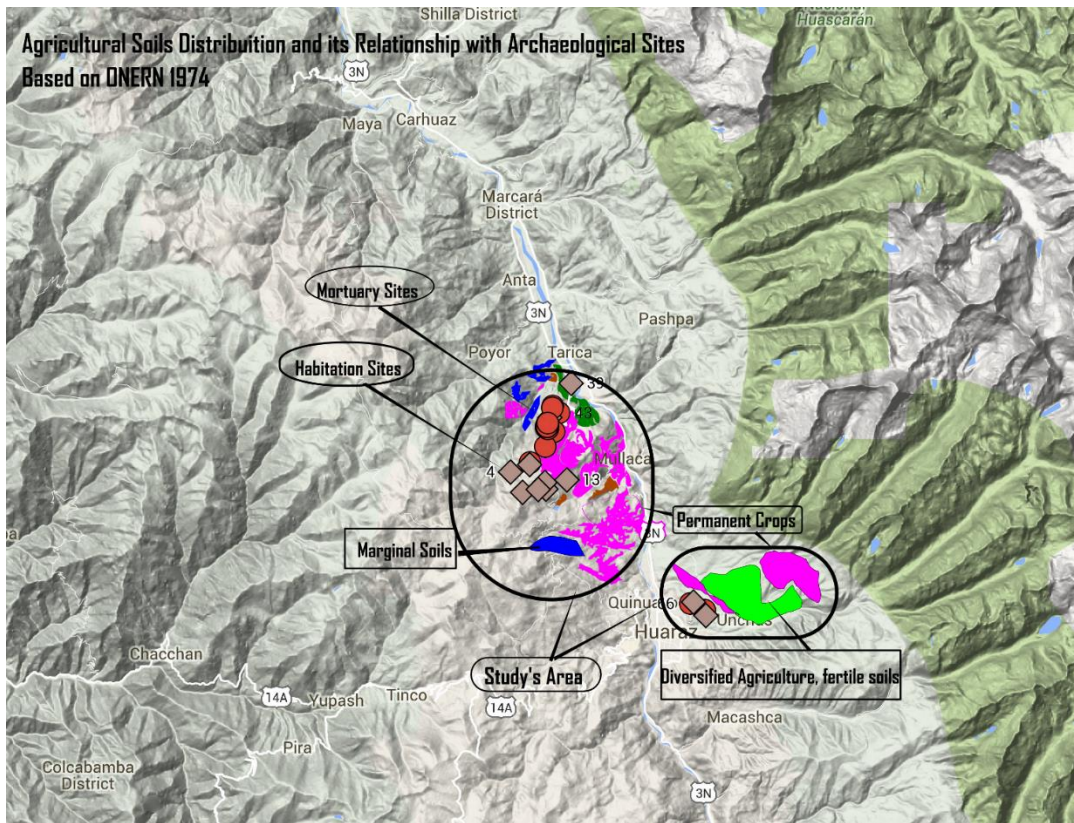


Figure 2.4. Approximation to agriculture zones and its relationship with archaeological sites.

2.3. Recuay Society in the context of Andean Archaeology

Since the first contributions in Peruvian archaeology, the stylistic unity of the Recuay material culture was rapidly recognized as a single culture in a specific time period. It was clear that Recuay had no stylistic connection with its antecedent Chavin, and only the tradition of stone sculpture and monumental architecture continued but in a differentiated style (Kroeber 1944:95). Tello (1943; 1960) shared this opinion but he considered Recuay contemporaneous with or derived from Chavin due to its simpler, realistic, and rustic representations in stone sculptures. Although it might be logical to search for the origin of the Recuay society in the remnants of a Chavin population, new data from the ceremonial center of Chavin de Huántar push back the chronological sequence of the Early Horizon by ending it at 500 BCE (Rick et al 2009; Kembel and Rick 2004), which would have consequences in our understanding of the formation of the Recuay. Considering tacitly Lau's proposal of the Huarás style as an early component of the Recuay Tradition (Lau 2004a), a gap of 300 years still exists between the collapse of Chavin and the emergence of the Huarás period. This time frame had been attributed to the preponderance of the Janabarriu phase in Chavin de Huántar that is immediately followed by artifacts of the Huarás culture (Burger 1992:165). It is very difficult to speculate on how societies transition, specifically from an obscure theocracy such as Chavin de Huántar, to a social political fragmented authority such as Recuay. At this point, Rick and his followers consider the Janabarriu phase as a secular component linked to the abandonment of the temple and non-related ritual activities (Rick et al. 2009). The stratigraphic information from Chavin de Huántar and other Early Horizon centers (e.g. Huaricoto), shows the position of Huarás materials above Early Horizon architecture from which no connection can be established (Burger 1985:125; Lumbreras 1993). Furthermore, the Huarás period masonry resembles domestic buildings formed by rough stones and platforms that seems of lower quality

when compared to previous architecture². New ways of community life such as small hamlets are conceived when we observe the installation of houses above artificial fills that cover the Early Horizon monumental architecture. This observation is not only seen in Chavin de Huántar but in other highland centers such as Huaricoto (Burger 1985) and also from coastal Ancash contexts. Coastal sites did not share the uniform styles of the Early Horizon especially at the end of the Final Formative Period (Ikehara 2008). With the disappearance of the religious cult and possibly the cast of shaman-leaders that maintained ceremonial centers like Chavin de Huántar, unequivocally the region of Ancash witnessed structural social changes. Societies re-emerged in the region but with the foundation of a different cultural tradition, in which low scale non-egalitarian groups and village size settlements marked the difference with the social interaction sphere of the previous epoch. In this context, community size groups integrated in small sociopolitical units as can be suggested for sites from the Pierina region (Ponte 2009), with a distribution of small villages, such as the Maquellouan Punta (see Appendix A Figure 1, PAn 5-4), accompanied by refuge centers or defensive sites (Chonta Ranra Punta, PAn 5-1; Appendix A Figure 5). It seems that fortification was a common form of architectural protection in hilltop places or citadels (e.g. Wilson 1988:100-50)³. This was the time when social connections reorganized around the interest of the community and the status of certain individuals, setting the stage for the surge of Recuay groups in highland Ancash.

2 Nevertheless radiocarbon dates from Chavin de Huántar taken by Lumbreras (1993) contradicts the late expression of the Huarás period.

3 Cayhuamarca and Vinzos Period (Late Early Horizon and Early Early Intermediate Period).

2. 4. Recuay Sociopolitical Organization

The nature of Recuay political structure is debated, including models based on chiefly leadership and commonwealth organization of shared culture with some degree of differential wealth. Elite villages venerated stone sculpture in open spaces (e.g. Chinchawas), utilized fancy pottery and metalwork, lived in fortified sites (e.g. Yaino), and buried their dead in subterranean tombs with complex distribution of grave goods (e.g. Jancu).

The Recuay of the north-central highlands of Perú represents one of the original forms of social complexity in the Early Intermediate Period (200 – 800 CE). Contemporaneous with their northern Moche coastal counterpart, Recuay had a series of agropastoral communities related each other and a principal one, in which political organization based on chiefly leadership and social inequality existed. The social integration of these communities relied principally on shared agricultural and pastoral practices of subsistence. A view from the hinterlands of the Cordillera Negra shows that groups worked together in segments of vertical landscapes or ecological zones, and on certain occasions gathered in a central location, using a stepped platform mound for certain ceremonies and ritual assemblies, such as the site of Marenayoc (Ponte 2001; 2009). This model of a rural Recuay society contrasts with the view of regional emergent chiefs, mostly settled in the slopes of the Cordillera Blanca, near the Santa River (Lau 2011). It is hypothesized that the relative abundance of water due to glacial melt in the Cordillera Blanca could have been a factor promoting surplus production and supporting a non-subsistence group. The economic control of the crops and management of the herds were probably manipulated by a community leader or chief, in a kind of political organization such as a chiefdom (Earle 1999). However, familial, kin-level groups could also manage herds, as the case of the Pierina mine. Some sort of ideological integration around the

Figure 2.5. Stone tenon-sculpture of warrior chief with a club in sitting position. This statue formed part of a wall. (Museo Arqueológico Ancash).



symbolic meaning of water and mountain worship favored political concentration of power. Snowcapped mountains and glacial lakes were sources of water, life, and gods in mythical terms (Zuidema 1989:146). In this context leaders emerged claiming descendency and origins from geographical features, (i.e, springs, and mountains). The most elite Recuay ranked villages were hilltop fortifications suggesting a scenario of warfare as common practice sponsored by powerful chiefs (Lau 2010c). Conflict was a common denominator in these hierarchical societies. Images of personages with military accessories are frequently represented in the stone sculpture and modeled ceramics (Figure 2.5). However, although warfare most likely occurred, we should not put too much emphasis on leadership to explain how the Recuay society functioned. We must consider the mutual interests of followers and leaders, in promoting protection and voluntary cooperation to defend themselves from specific foreign or internal threats (Feinman 2012). Variables like the difficulties of vertical mobility, geographical isolation, exchange networks, access to water, and concentration of resources in different altitudinal floors constitute interrelated aspects of group cohesion that we must take into account in the explanation of the Recuay society.

Recuay material culture and its techniques of manufacture are also unique; most of them emphasized chiefs and/or ranked personages as an imposed value system (Lau 2010a). Exquisite kaolinite ceramics, stone sculpture, metallurgy and textiles constituted the media in which the Recuay art was expressed. Although Recuay pottery workshops have not been found yet, nor kaolinite clay sources, a great deal of skill in the making of artistic objects indicates the presence of artisan specialists. Kaolin pottery was primarily used in distinctive funerary practices as offerings; its demand necessitated specialization in ceramic production. The technological process for manufacturing kaolin wares indicates that Recuay potters masterfully controlled the non-plastic properties of the kaolinite clay body, as well as decorative procedures by alternately utilizing pre- and post-fire resist techniques (Figure 2.6).



Figure 2.6. Recuay kaolinite flask housed in the Milwaukee Public Museum.



2.7. *Crown pin with gold surface found in the chamber of Marca Jirka site PAN 5-64*

Recuay may be the case in which the manipulation of ideology favored the legitimacy of powerful leaders, and its materialization served the institutionalization of warrior chiefs (De Marrais et al. 1996:20). The great elaboration of valuable artistic ceramics and metal works objects necessitated manufacturing facilities and craftsmen specialists, undoubtedly presented in the Recuay's political organization (Figure 2.7). Grieder (1978:80) identified marks on the fine kaolinite pottery of Pashash left by the “artist and its studio”. Most likely, the specialists were attached to their patrons or leaders from whom they received orders to create artistic objects (Earle 1999). These elite objects communicate authority, power and identity (Costin 2013), variables controlled by distinguished personages of the Recuay society.

Clues for the definition of the Recuay as a sociopolitical entity and social distinction come more precisely from the material culture made by chief-sponsored craft production (e.g. Pashash). Although settlement hierarchies might be discerned from the archaeological data (Flannery 1998), there is currently a lack of the necessary survey data. Monumental architecture of the Early

Intermediate Period is present but not studied yet. Numerous cases of monumental architecture, either funerary chambers or stepped platform mounds, can be counted in highland Ancash, although it is unknown whether these represent a “hierarchically organized networks composed of multiple sites and various functions” (Wilson 1988:86). A study of regional Recuay settlement system has yet to be done, however some new information is available from sub-regional surveys that re-address the role of small villages, their functionality and relationship with the altitude floor in a “vertical ecological complementarity” (Murra 1975; Lau 2011:38; Ponte 2009), and also in agro-pastoralism economic land use terms (Lane 2006).

In the most conservative mode, data available from the Callejón de Huaylas indicate at least two types of settlements; the small village and the stepped platform-terraced mound. Based on cooperation as element of integration in sociopolitical organizations (Feinman 2013:43), and the “close-knit web of reciprocity” (Allen 2002:49) that exists in kinship Andean groups (*Ayllus*), communities gathered together to raise public constructions at low level scale. For example, in the area of influence of the Pierina mine, the site of Marenayoc at 3,450 m.a.s.l (Figure 2.8), is a platform terraced mound at which public congregated for certain communal activities, like cooking and feasting. Mortuary structures are distributed below and above this public site. No other domestic structures were observed near to funerary chambers. Mortuary sectors are connected to ceremonial areas, where ancestor cults were probably performed (Ponte 2009; Lau 2002; 2010b:135).



Figure 2.8. The mound of Marenayoc (square) and the location of mortuary chambers (circles).

2.5. Recuay Settlements in the Callejón de Huaylas

Along the the interandine valley of the Callejón de Huaylas exist several Recuay settlements situated in flanks of the Cordillera Negra and Blanca overlooking the valley floor. The sites are mostly located on hilltops and rocky prominences with ample panoramic views. Unfortunately there is no total number of recorded archaeological sites available, only a partial survey in segments of the valley. This give us an incomplete, but potentially useful starting point to model settlement patterns for a Recuay rural population (see Figure 1.2, e.g. Ponte 1999⁴). As mentioned above, small villages with a two-tier type of governance functioned in Recuay times (Lau 2011:41). However, if a more complex system with a centralized polity existed (Steponaitis 1981), then it seems that the area of the modern city of Huaraz is where settlements with increased size might be located. This region presents a special geographic feature, the confluence of the Quillcayhuanca and Santa rivers, which in the Andes has the connotation of magical place with the Quechua word *tinkuy* (Steele 2004:131). So the location of several archaeological remains in Huaraz is not a surprise. The area has been intensively populated, especially on the terraces, ridges, and hills that descend from the Cordillera Blanca. For instance, the large collection of stone sculpture exhibited in the Museo Arqueológico de Ancash comes from Pongor and other areas in the vicinity of Huaraz (Bennett 1944:13; Larco Hoyle 1960). Stone working tradition of statues and decorated lintels have provenience in the Callejón de Huaylas (Isbell 1991). Habitation sites are mostly located in hilltop places (e.g. Marca Jirka PAn 5-64, Quellee Pallanan PAn 5-66), and some domestic units are displayed under big boulders (e.g. housing development of El Pinar above Huaraz). Recuay sites are located in strategic positions for the control of ancient roads and passes to the Cordillera Negra. An example is the Balcón de Judas (PAn 5-F) site, located at the west bank

4 In the Pierina Mine Influence Area, which occupies de Jangas district, Ponte (1999) estimates 39 habitation sites.

of the Santa River over a rocky formation. This site has yielded kaolinite sherds mixed with other types of ceramic pastes and utilitarian forms, which are important steps in the definition of Recuay style ceramics (Wegner 2004:127). One of the richest Recuay burials ever recorded was found in Jancu in the eastern flanks of Huaraz (Wegner 1988), and subterranean galleries and burial complexes also come from this area (Shankaiyan, Marian). Many *chullpa* style constructions are situated along the terrace of the Quillcayhuanca River (Huaullac), and the multi-storied *chullpa* of Willcawain and its surroundings form a very dense archaeological remains from different periods. Last, the artificial mound of Pumacayán is located in the urban center of Huaraz. It is said to contain a multi-component occupation including Chavin galleries and Recuay structures (Tello 1943).

Huaraz was the center of Recuay groups, associated with best agricultural lands, permanent glacial discharge water, and semi-undulated valleys that converge into the Santa River. Near to Huaraz, in the village of Marian, exists evidence of ancient channel waterworks utilized in irrigation farming, and ancient roads. With the precaution of temporal distances, the first impressions of the Spanish when visiting this region were of the wealth of the native population based on maize and herds, and the power of certain lords of Huaraz (Varon Gabai 1980:43; Alvarez-Brun 1970:54).

West of Huaraz, within 6 hours of steady uphill hiking, you can reach the small Recuay village of Chinchawas (3,800 m.a.s.l) at the western slopes of the Cordillera Negra (Figure 3.5). Archaeologist G. Lau (2010b) has extensively investigated the site. He created a detailed ceramic sequence, and found the largest in situ Recuay stone sculpture. The sculpture is associated with public spaces in where ancestor worship celebrations were performed. The sculptures also form

part of houses for certain elite individuals. In spite of the small size, the community that lived in Chinchawas (approximately a population of hundred people) had access to exotic goods from long distances such as the central and north coast, notably during the Late Recuay developments (600 – 800 CE). Camelid consumption also was important due to the large deposits of faunal remains in residential sectors of Chinchawas. Textile production and use of the camelid resource might have intensified during the late Recuay, perhaps related to environmental changes (Lau 2007). Obsidian utilization in the processing of camelid hides also increased during this epoch. This occurred in Chinchawas but also in Ancosh Punta (in the Pierina mine). Both sites had obsidian that came from the faraway source of Quispisisa, located in the south central highlands of Ayacucho (Burger et al. 2006). Certainly, highland Ancash participated in networks of interaction in the central Andes that included trade and products exchange.

Besides the importance of Huaraz as a major Recuay center, the Katak-Recuay region located south of the Callejón de Huaylas has yielded numerous Recuay pottery (Tello 2009). In the region of Carhuaz, J.C.Tello acquired a collection of fine kaolin vessels that were found in funerary contexts (subterranean chambers). It is said that they came from Tullo, near Marcará (Wegner 2004:124). But Bennett (1944:62) mentioned the Copa Grande area as the provenience where *chullpa* complexes, terraces, and open platforms are present. An archaeological program affiliated to the Cornell-Vicos anthropological project studied the area of Marcará. It was developed during 1961 – 1964. Unfortunately, the research leader Gary Vescelius passed away without leaving any substantial publication. The investigations of Gero (1990) in the site of Queyash Alto located on a ridge-top of the Marcará river have contributed to the understanding of the social activities carried on in Recuay small villages, from the perspective of political feasting and the role of women in

the centralization of power (Gero 1999).

Further north along the Callejón de Huaylas, Recuay settlements have been recently investigated. Researchers report that patio compounds and funerary structures are associated to *chullpa* type mortuary buildings, which is a late development of the Recuay groups. Most of the structures are located at the foot of glaciers, such as the monumental *chullpa* of Keushu (Herrera and Aguilar 2009), the multi-storied *chullpas* of Honco Pampa in conjunction with an administrative center (Isbell 1997), and the *chullpa* of Katiamá. Above the city of Caraz, Rebecca Bria from Vanderbilt University is conducting fieldwork at several sites in Hualcayán, an Early Horizon ceremonial center with continued activity through Huarás and Recuay cultures in the Early Intermediate Period (900 BCE-600 CE). Hualcayán was a place of habitation, religious ceremonies, and mortuary rituals. Tomb construction such as *chullpa* and cave like *machay* types are currently under investigation. Many more Recuay sites known but not detailed here, populated the Callejón de Huaylas. Small hilltops villages dotted along the Santa River as independent polities, while large centers as the region of Huaraz aggregated multiple villages in the organization of a centralized polity.

In the eastern flanks of the Cordillera Blanca (Figure 2.9), new research has amplified the knowledge of Recuay settlements. Orsini et al. (2011) investigations in the area of Chacas (Tayapucru, Huacamarca) emphasize that the complex architecture development of patio groups, normally associated with the Wari influence in the Callejón de Huaylas (Schreiber 1992:99-100), may have deep cultural connections to local monumental architecture present in the region since the Early Horizon. The fortifications in Yayno's site, located above the town of Pomabamba,

separate circular and quadrangular compounds, which have minimal communication between them, however they were largely coeval (400 – 800 CE). The tradition of warfare and elite competition of the Recuay culture is greatly synthesized in Yayno (Lau 2010), marked by rooted concepts of hilltop settlements disseminated in highland Ancash.

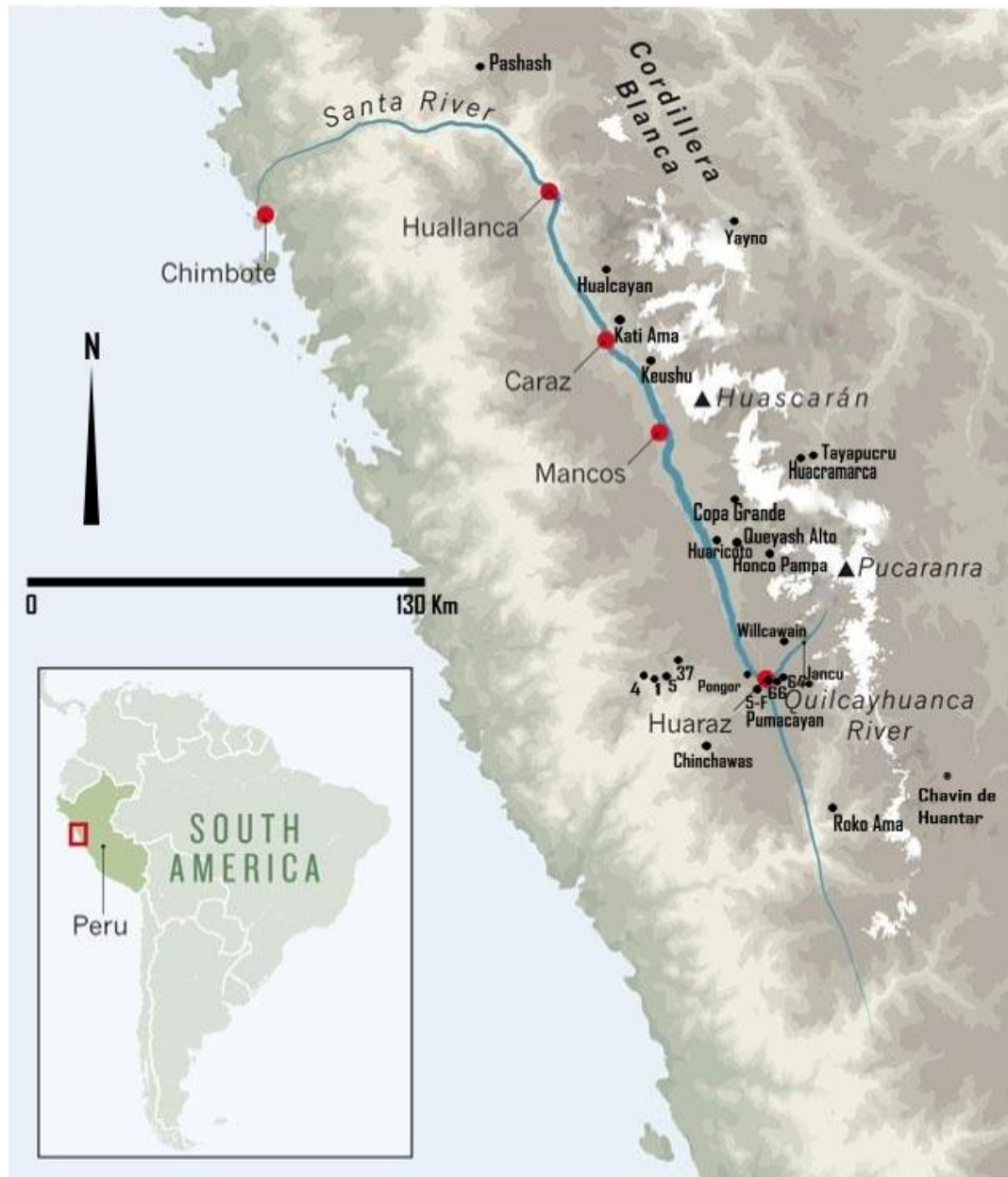


Figure 2.9. Principal archaeological sites in Callejón de Huaylas. Sites 1 = Chonta Ranra Punta, 4 = Maquellouan Punta, 5 = Ancosh Punta, 5-F = Balcón de Judas, 37 = Marenayoc, 64 = Marca Jirka, 66 = Quellee Pallanán

2.6. Recuay Settlements in the Pierina's Mine Area of Influence

Based on systematic survey in the Pierina's mine influence area, a general view from the hinterlands is obtained for the Recuay settlements. By hinterlands I mean the periphery, where non-elite Recuay groups lived. The settlement planning of Recuay sites are quite variable. Although the location is almost always on top of ridges or hilltops, the habitation sites vary in terms of architecture. These include small platform mounds with stepped terraces, small hilltop villages, defensive hamlet sites within perimeter walls, and individual houses within corrals. Isolated architectural forms also include high retention walls, and canals (Table 2.1).

Site Name	Number	Elevation M.a.s.l.	Hectares	Site Type
Maquellouan Punta	PAn 5-4	4,118	1.88	Small Village
Chonta Ranra Punta	PAn 5-1	4,291	2.05	Hamlet defensive
Marenayoc	PAn 5-37	3,445	1.1	Mound with stepped terraces
Shucsha Punta	PAn 5-24	3,286	1.5	Mound with stepped terraces
Quenapun Punta	PAn 5-17	3,771	3.22	Mound with stepped terraces
Ancosh Punta	PAn 5-5	4,190	1.2	House and corrals

In a regional scale, the settlements are integrated by an ancient road, still in use, that connects sites (such as Urpay Coto PAn 5-39) located near the terrace of the Santa River (2,900 m.a.s.l), and goes all the way to the site of Maquellouan Punta (PAn 5-4) near the puna grasslands of Cuncashca, above 4,000 m.a.s.l. At the *Quechua* ecozone (~3,500 m.a.s.l), Recuay mortuary stone chambers are distributed on both sides of the trail, and Marenayoc, a mound with stepped terraces, is located in this intermediate zone of the mountain ridge. The modern village, plaza and school of Marenayoc are installed over the archaeological site. A large profile with a sequence of floors and Pre-Hispanic midden was observed when locals cut the mound to build a modern brick house. Large quantities of ceramic sherds were observed in the immediate proximity of the mound. It seems a multi-component site, with different periods represented, including Inka. Recuay kaolinite

sherds were also seen in profiles and on the surface. Four Recuay stone sculptures in the shape of puma tenon-heads were recovered from an abandoned modern house built on the archaeological site. Tenon refers to the extension of stone in the back of the sculptures that allowed them to be inserted into walls and project from them as decorative elements (Lau 2011:164). This type of Recuay settlement probably had residential areas and open public spaces like terraces. The function of the mound is uncertain yet, although a ceremonial function might be suggested. More detailed information can be found in the appendix A.

Small hilltop villages comprised another type of Recuay settlement. These can be situated at high elevations and at lower, like the site of Urpay Coto (PAn 5-39) or Shancash Coto (PAn 5-44) located immediately above the modern town of Jangas. Test excavations at Urpay Coto revealed an elongated wall that seem to dissect small rooms. No great quantity of cultural materials have been found in Urpay Coto. One rectangular room (2 x 3 m) was excavated, finding a nice stone-lined wall, and entrance, and a small bench inside room adhered to the back wall. However no indicators of domestic activities nor artifacts were found. There are also segments of perimeter walls that follow the contour of the hill, evidence of some sort of fortification. The site of Chonta Ranra Punta situated at the top of the hill at 4,300 m.a.s.l, clearly shows double fortified walls. This site displays an organizational plan of two slightly raised platforms, and a plaza or courtyard in between. This plan is also repeated in the small village of Maquellouan Punta (PAn 5-4) but without any defensive constructions.

Isolated houses in connections with corrals complete the inventory of Recuay settlements at regional perspective. In this hinterland area the general patterns seems to be one of pastoralism at

the highest elevations, with corrals and isolated houses and hamlets and small villages, some with defensive walls. Where preserved, village layout suggests a pattern of raised platforms with a plaza or courtyard between, as well as houses. Sites with mounds and stepped terraces associated with agriculture occur at middle elevations, in the Quechua zone; tombs are also found in this part of the regional landscape, typically along paths and up or down slope from residential sites.

2.7. Social Complexity of Mortuary Practices in the Andes

Ancient burial customs reflect the symbolic meaning of the world (Beckett 2011). The way the dead were buried in a given society is indicator of the relationship between the individual and the culture in which he or she lived in. The social position of the deceased may be reflected in the mortuary rituals. It is possible to use the burial evidence to infer social distinctions. For instance, the political symbol of the Inka mummies, the retainers or sacrifices in Moche and Maya societies, and the mass graves of Syrian societies, all of them are variations of mortuary practices that inform about their role in the social hierarchy of a given social unit (Binford 1971). Although there are some archaeologists who debate the notion that the quantity and quality of grave goods, and the investment of labor in tomb construction are reliable indicators of distinction between the poor and the rich, there are many more who do consider these as good measures of status distinctions (Ucko 1969). For example, the most elaborate mortuary architecture and grave goods of Recuay society belong to high-ranked individuals (e.g. Lau 2011). The energy spent in the construction of elite subterranean chambers, placed in special geographical locations, implies a great level of material wealth. In the north-central highlands of Peru, distinct mortuary stone construction and grave offerings may be correlated to inequality and social differentiation. In spite of the uniformity of the single sociocultural unit, we should also recognized the existence of a great variability in

burials. This variability can be explained by diversity of factors such as age, social status, gender, worldview, conditions or causes of the death, and broader social agendas in “which the living interact with the dead” (Shimada and Fitzsimmons 2015:3).

Certain social anthropologists claim that no generalizations can be made in the reconstruction of death rites just by following the archaeological record by itself. In the same venue, others argue that due to the high variability of the mortuary data, no generalization is possible (Barrett 1999:394). Old tendencies in anthropology were interested to find affinities or “human universals” on death rituals among diverse cultures. However, now we are more apt to consider the possibility of parallels in the expression of symbolic meaning without assuming universals or direct continuity of traditions (Metcalf and Huntington 1992:10-12).

The use of ethnographic analysis should be employed in concordance “with an ethnic group known to be closely related to the one represented at the site, linguistically, ethnologically or historically” (Metcalf & Huntington 1992:17-19). While Ossio (1999:302), claims it is important “to establish a continuity between the past and the contemporary period”. During the sixteenth and seventeenth centuries catholic priests visited highland Ancash in the process of trying to convert the native population to Catholicism (e.g. Duviols 1986; Hernandez Principe 1923). Detailed accounts of funerary customs, religious practices, and ancestor veneration are described in these early written testimonies. In ancient Peruvian societies life continued after dead in distinct ways. The dead participated actively in many aspects of the communal life. Mummies participated in feasts and ceremonies, they had drinks and were fed and were interconnected with mutual relationships as they were alive. That is why the deceased required grave goods, such as food, clothes, and

offerings, befitted to their social status (Clados and Teufel 2013). Still today, current funerary practices in the Andes include a prolonged mourning process and tomb visitation during certain calendrical festivities, it is when relatives of the deceased approach to the grave with beverages and meals.

The treatment of the dead, the structure or deposit, and the objects associated form a context, a funerary context in which we can reconstruct ritual representations (Kaulicke 1997). Extending more this concept, Gaither et al. (2008:110) observe grave offerings as mimicking literally or metaphorically the world of the deceased with the principle “like with like”. While pottery played an important role, especially as grave containers in specific ceremonies of inhumation and cremation (Rusu Bolindet 2014). As we will see below, most of the Recuay burials and their grave goods are organized in a pattern that clearly show ritual behavior, especially the ones situated on the eastern part of the Callejón de Huaylas, which are related to ranked groups.

2.7.1. Recuay Burial Patterns First Epoch (200 – 700 CE)

Our understanding of the Recuay began with the discovery by a local farmer, Agustín Icaza, in 1874, of a hundred underground burials near the modern town of Catac (Wegner 1988). The tombs were very standardized in construction and produced large numbers of fine white wares. After the discovery, Mariano Macedo, a physician and collector of antiquities, acquired the collection, called it Recuay due to its regional provenience, and brought the ceramics to Paris. The Roko Amá site, the name of the collection’s provenience, is comprised of a group of single subterranean chambers and their adjacent antechambers distributed in a high alluvial terrace on the south side of the Yanayacu River that descends from the glaciers and flows to the Santa River. A modern cemetery

was built near the ancient site. Roco Amá is one of few cases of a burial cluster known for the Recuay culture (Lau 2011). Grave offerings are mostly kaolinite ceramics which number almost 150 specimens most of which are exquisitely modeled and decorated in negative technique. The collection is now housed in the Museum für Völkerkunde Berlin. Probably a high ranked Recuay kin-group buried their members in the Catac area, which was also investigated by Bennett (1944:64-70), who questioned the function of subterranean structures. His excavations added many more variations, like central room connected to small chambers and galleries, but gave few clues to assess the mortuary construction hypothesis. Bennett was not sure if these chambers were burials. In the same token, Tello (1929) had doubts about the function of these subterranean chambers, which he called “soterrados”, but acknowledged the information provided by locals that body parts and ceramics were removed from them. Tello’s work in Catac added more tomb-variation to the below-ground buildings. The masonry of subterranean walls and niches of the subterranean buildings were described as “*huanca-pachilla*” (set of large standing stones filled with flat small stones between them).

This form of underground interment existed along the Callejón de Huaylas, Conchucos, Aija province, and the northernmost provinces of Pallasca and Cabana. The funerary tradition appeared in the whole highland Ancash department, in a time span of the Early Intermediate Period (200 – 700 CE). There are variety of tomb types, variations that might be responses to differences in group locations and changes through time. The most elaborated subterranean burials, with its variant of subterranean galleries, are associated to elite groups and located in the western flanks of the Cordillera Blanca above the modern city of Huaraz. This is the case of the tomb of Jancu. It features distinct funerary architecture built underneath a huge flat boulder. The structure is composed of an

entrance like a circular pit, and five steps stairway conduce to a 5m corridor or gallery connecting to a funerary chamber. The chamber measured 4x5 m divided by granite slabs forming niche compartments. Human bones were observed in these niches. One individual in flexed position portrayed a gold adornment in the parietal bone (Wegner 1988). Grave goods from the tomb consisted of kaolinite ovoid jars, bottles or *pacchas*, modeled vessels, and utilitarian ones (Table 2.2). The fine masonry of the subterranean structure and the magnitude and quality of the offerings indicate for a high rank group burying their dead in the actual farming village of Jancu.

<i>Table 2.2. Jancu Tomb Grave Goods*</i>			
Ceramics (White Ware)		Metal	TOTAL
Big Ovoid Jars	3		
Globular Jars	2		
Modeled Bottles (<i>pacchas</i>)	5		
Double Bottles	3		
Modeled Black Bottle	1		
Utilitarian vessels	2		
Huaras style White on Red	1		
Gold Ornament		1	
TOTAL	17	1	18
*Based on Wegner (1988)			

Although we may think of the region of Huaraz – Willcawain as the major hub of the Recuay society, evidence from Pashash contradicts or at least accounts for another Recuay center. Located near the modern town of Cabana (Figure 2.9), the top of the Capilla Hill is an artificial platform

that enclosed an open area and small domestic structures. There is an access or stairway on the north side of the hilltop. Two burial chambers were found at the base of a “room funerary temple” (Grieder 1978: 45-9). It seems that the mortuary structures were located underneath a surface paved living floor, in which the bedrock was rearranged as a repository of high quality objects. These chambers have provided one of the richest Recuay burial offerings ever recorded. Near three hundred objects were left as offerings for an important personage. An adult male in flexed position wrapped in textiles held fifty gold pins, many of them having their head shaped as tiny hollow cone (Figure 2.10). This dedicated work utilized soldered and repoussé metalworking technique. Two other offering clusters were placed beneath the room temple and consisted mostly on serpent-effigy vessels, male figurines, and fine pedestal cups. The spatial organization of the offerings may corresponds to an elaborated death ritual. Although in Pashash exists monumental architecture attributed to Recuay groups, the lavish display of the tomb offerings strongly contrast to the simple stone work of the chambers when compared to other subterranean buildings near Huaraz.

In the area of ridges and creeks that descend from the Cordillera Blanca, north from Jancu, is the region of Willcawain, a very dense archaeological zone that features a three-level above-ground mortuary structure, and another minor complex called Ichik Willcawain. While I will further discuss the functions of these buildings below, I just need to call attention that the above-ground mortuary structure or *chullpa*, corresponds to a late development of the Recuay mortuary tradition

Figure 2.10. Grave offerings from Pashash. Grieder 1978: plates 3-7.



(700 – 1000 CE). The region of Willcawain is a good case of cultural change from subterranean to above-ground structures. There are numerous subterranean funerary structures in the hills and slopes around Willcawain that were excavated by Bennett⁵ (1944:34-50). These are not uniform and vary between stone box graves, unlined graves, and subterranean galleries. All of them have clear Recuay style grave goods association. I will briefly describe Bennett’s findings because they summarize very well Recuay’s mortuary patterns.

Stone boxes are found under boulders. They show a round or square capstone functioning as a

⁵ In the area of Willcawain Bennett excavated 23 Recuay subterranean graves.

cover of four vertical slabs in a shape of a box with the flatter part inside the container. On average, the cover measures 56 cm of length and stone boxes measures 50.5 cm of depth. In the sample of thirteen stone box graves only six gave positive contents.

<i>Table 2.3. Stone Box Graves Dimensions (cm)</i>						
Site	Capstone	Depth	Human Bones	Metal	Beads	Ceramics
7H-9A	35	50				
7H-9B	50 x 80	70				
7H-9C	70	50				
7H-9D	60	50				
7H-9E	60	50				
7H-9F	60	50				
7H-11A	40	50	yes			
7H-11B	30x20	30				
6H-5	N/A	N/A	yes (adult)			
7H-6	N/A	N/A		yes	yes	
7H-7	70x80	55	yes (adult)			1 (bowl)
6H-3A	40	50	yes (adult)			1 (olla)
6H-3B	80	N/A				8
Mean	56	50.5				
Based on Bennett 1944:34-5						

Unlined graves, do not present much effort in the disposal of the body and offerings. Spaces under overhang boulders were used as graves without placing any visible structure. This simple style of interment remained in use until the last part of the Recuay Tradition (circa 1,000 CE approx.). Interestingly, one unlined grave excavated by Bennett had thirteen Huaras White on Red style ceramics. This fact can tell of the long duration of this tomb type.

Subterranean galleries are more complex. They are composed of an entrance, a sort of shaft lined out with standing stones sealed with a fill that can go all the way to the ground surface. The height of the entryway of the gallery is smaller than the gallery by itself. The gallery is lined with slabs carefully installed with few chinking stones between them. The roof is formed by chosen

rectangular slabs and the floor is a hard packed clay. Associated grave goods were not as numerous as Bennett expected, some galleries were empty, even with the fact that some of them were totally sealed for thousand years. Subterranean galleries correspond to the hegemony of the Recuay style during the early and middle part of the Early Intermediate Period (200 – 500 CE). The tomb of Jancu can be associated to this Recuay burial type (Figure 2.11).

Table 2.4. Subterranean Galleries: Dimensions (m)

Site	Length	Width	Height	Below Ground Surface	Recuay Style Sherds	Powder Bone
7H-5B	20	1.5	1.2	2.2	Yes	
7H-8	5	1	0.9	1	one completed vessel	
7H-10	4	1.1	0.7	0.8	two restored vessels	
7H-12	7.32	0.95	0.9	2		Yes
7H-13	10.1	1.15	0.95	1.75	Yes	
7H-14	6	1.15	0.9	1.15	Yes	
7H-16	10	1.2	1	2.5	Yes	
10H-1	5.27	1.32	0.9	0.95	Yes	
10H-2	5	1.3	0.9	0.95	Yes	
Mean	8.07	1.18	0.92	1.47		

Source: Bennett 1944:43-4



Figure 2.11. View of an unexcavated subterranean gallery located in the region of Willcawain.

Cist tombs are simpler funerary below-ground construction. Of cylindrical shape and reduced dimensions, these have a base diameter of 0.50 m and 0.50 to 0.88 m of depth. Cists are sealed by a flat oval slab and the masonry is composed of small to mid-size flat fieldstones adhered with mud mortar. Due to its reduced dimensions only one individual could have been buried. They appear in pairs or clusters, and in connection with interments under boulders. Grave goods in cist tombs are associated to Huarás White on Red style ceramics. Their distribution includes the area of Mosna Valley in Conchucos (Amat 2004:102; Gamboa 2009: Figure 6), Pomabamba and Carhuaz provinces (Tello 1929:37), the Huaraz area (Bennett 1944), and the upper part of Nepeña Valley near Moro (Samaniego 1992). This tomb's type should not to be confused with later manifestations, which appear in the Huaraz area with increased diameters and depths. Cist tombs also appear during late Tiwanaku and Tumulaca period in the Moquegua drainage, with diameters between 35 to 85 cm and between 50 to 200 cm of depth (Stanish: 2012:214).

We must not consider this short list of Recuay tomb types investigated by Bennett in the Huaraz area as absolute or deterministic. There exist many more variants, more complex and large underground constructions with one, two stories and communicating access stairways (Tello 1929: Figure 13, 16). However, this list gives us a general picture of Recuay funerary pattern, specifically during the early and middle part of the Early Intermediate Period (200 – 600 CE).

2.7.2. Second Epoch (700 – 1000 CE)

In the Middle Horizon period, Recuay mortuary practices underwent a change from underground to above ground *chullpas* architecture. Although the transition appears to have occurred abruptly, Recuay elite groups of the region of Callejón de Huaylas probably interacted with the Wari state.

Changes in mortuary practices already occurred during the late Recuay (600-700 CE). Evidence exists of Wari's related styles in offerings from underground structures. Bennett (1944:21-34) excavated four "deep stone-lined tombs" in the vicinity of Ichik Wilcawain, which appeared in pairs by a common central wall. In general terms these cist tombs have similar Recuay characteristics (large stone cover slab, filled up with dirt and stones, walls lined with large standing stones and small flat fillers, and the floor is hard-packed clay). However, their depth increased to 2.6 meter below surface when compared to Recuay cist tombs from the Early Intermediate Period. More interesting, the style of the offerings changed to more variable ceramic shapes and colors like blackware shallow plates, negative plates with geometric designs, goblets, and redware modeled zoomorphic vessels. Also appeared globular jars painted in black, red-on-orange, flasks painted in white- on-red over black, miniatures, tetrapod, and double-spout vessels connected by a round bridge. The percentage of kaolinite is minimal in the tombs, basically spoons, and shard fragments. These finds reflect the social and political transformations of Recuay groups that have adapted to influences from the Wari state of the south-central highlands. There are an increased frequency of Wari styles in funerary contexts but not in domestic sites (Ponte 2001). At the same time the appearance of above-ground tombs marks a radical change in mortuary practices, spreading-out along the Callejón de Huaylas. Due to their size, some *chullpas* could have functioned as temples or mausoleum. I will describe the above-ground tomb with two goals: to understand what kind of changes occurred to Recuay society; and the extension of mortuary customs.

2.7.3. Chullpas in the Callejón de Huaylas

This type of above-ground building is commonplace in the Andean highland sierra, and was one of the most popular pre-Hispanic building type across the central Andes. The *chullpa* was first

observed in the northern highlands (Cajamarca), and can be relatively dated to the late Early Intermediate Period (600 – 700 CE) due to its association with Cajamarca cursive pottery (Tello 2004; Isbell 1997; Lau 2012). In the Callejón de Huaylas their proliferation began at about 775-800 CE⁶ (Lau 2000:192). The largest *chullpas* buildings (Wilcawain, Ichik Wilcawain, Honco Pampa, Copa, Keushu, Katiamá) are located in the western slopes of the Cordillera Blanca (see Figure 4.3). Because of the size of these multi-room complexes some investigators have called them “temples” (i.e. Bennett 1944:14), while others have questioned about the mortuary function⁷. To have an idea of what kind of building it is, let me detail the architecture of Willcawain.

Figure 2.12. Detail of the masonry of the Willcawain mortuary monument, northwest corner.



Based on Bennett’s description (1944:14-7) Wilcawain is a three-storied building of 9.25 m of height, 10.7 width, and 15.6 m of length. It was built over an artificial platform, which form a terrace of 2 m high. There are three T-shaped rooms in the northern wall as shown in Figure 2.12.

⁶ Based on radiocarbon dating from inside *chullpa* in Chinchawas (Lau: 2000) and in Yarcok PAn 5-41 (Ponte, see Table 4).

⁷ “It has yet to be demonstrated that the *chullpas* all belong to a single category of buildings intended for the burial of human remains” (Isbell 1991:29, 1997).

These rooms are not so deep (~ 0.75 m), and could have functioned as mortuary spaces or receptacles, which agreed with the hypothesis of mummy displays and reuse due to their easy access (Lau 2000, 2012, 2002:299; DeLeonardis and Lau 2004:88). Each floor has seven rooms and a narrow ventilation shaft runs vertically between them. The entrance of the west side leads to a series of rectangular rooms accessed by narrow doors. The third floor is accessed from the east, where it can be observed great slanted slabs “forming a gabled roof” (Bennett 1944:17; see Figure 2.13 below). The masonry of the building’s façade and inner walls utilizes the “*huanca-pachilla*” technique (block and spall). It is more or less of standard size rectangular stone blocks of different colors, filled up between with small flat stones set in a strong clay mortar (Isbell 1991:29), giving a solid architectural composition. It seems that stone-heads in the shape of sculpted felines decorated the façade of Willcawain. Other major *Chullpas* complexes also exhibited this pattern (Lau 2000:196).



Figure 2.13. Image inside third floor of Chullpa in Willcawain. Note the slanted roof.

Technically, all burial monuments are for the living. The dead are dead and could care less. Wilcawain was a burial complex built to honor the dead. The function of the building was funerary, although probably servants and mortuary specialists eventually accomplished tasks in order to take care of the ancestor's needs. Most likely kin-groups gathered to venerate their ancestors in cycles of festivities and public displays (DeLeonardis and Lau 2004; Isbell 1997). This practice could resemble the spectacular festivals of dance and food in which Inka's ancestors actively participated on ceremonies performed in sacred spaces and plazas of Cuzco (Moore 2004).

The materials remains, mostly ceramics found in these *chullpas* are associated to the Middle

Horizon period. In the *chullpa* of Ichik Wilcawain, archaeologists have recently uncovered imported pottery related to Wari styles from the Ayacucho basin in the south-central highlands (Juan Paredes 2012 personal communication). During this time, interregional trade networks increased notably. Local lords acquired prestige items facilitated by routes of exchange and interaction with the Wari state. From the complex of *chullpas* in Honco Pampa have been reported Viñaque style pottery, a style that belongs to the Middle Horizon 2 (700 – 850 CE) commonly found in the city of Huari, capital of the Wari Empire (Isbell 1991). Likewise local styles varied extensively producing imitations and hybrids of Wari styles.

The geographic areas of the Callejón de Huaylas where *chullpas* enclosure are situated (Figure 2.14), conform the same mortuary sacred space where below ground tombs pre-existed. For example in the site of Chinchawas in the Cordillera Negra, a group of small rectangular *chullpas* were built over subterranean tombs, where episodes of drinking and offerings were detected (Lau 2002). Probably the concept of sacredness space continued (Lau 2011). As we are going to see in the next chapters, the mortuary rituals however, did change, and the previous concept of family burials or kin groups practiced in subterranean tombs changed to community-level burials in *chullpa* above-ground buildings, at least from the hinterland perspective.

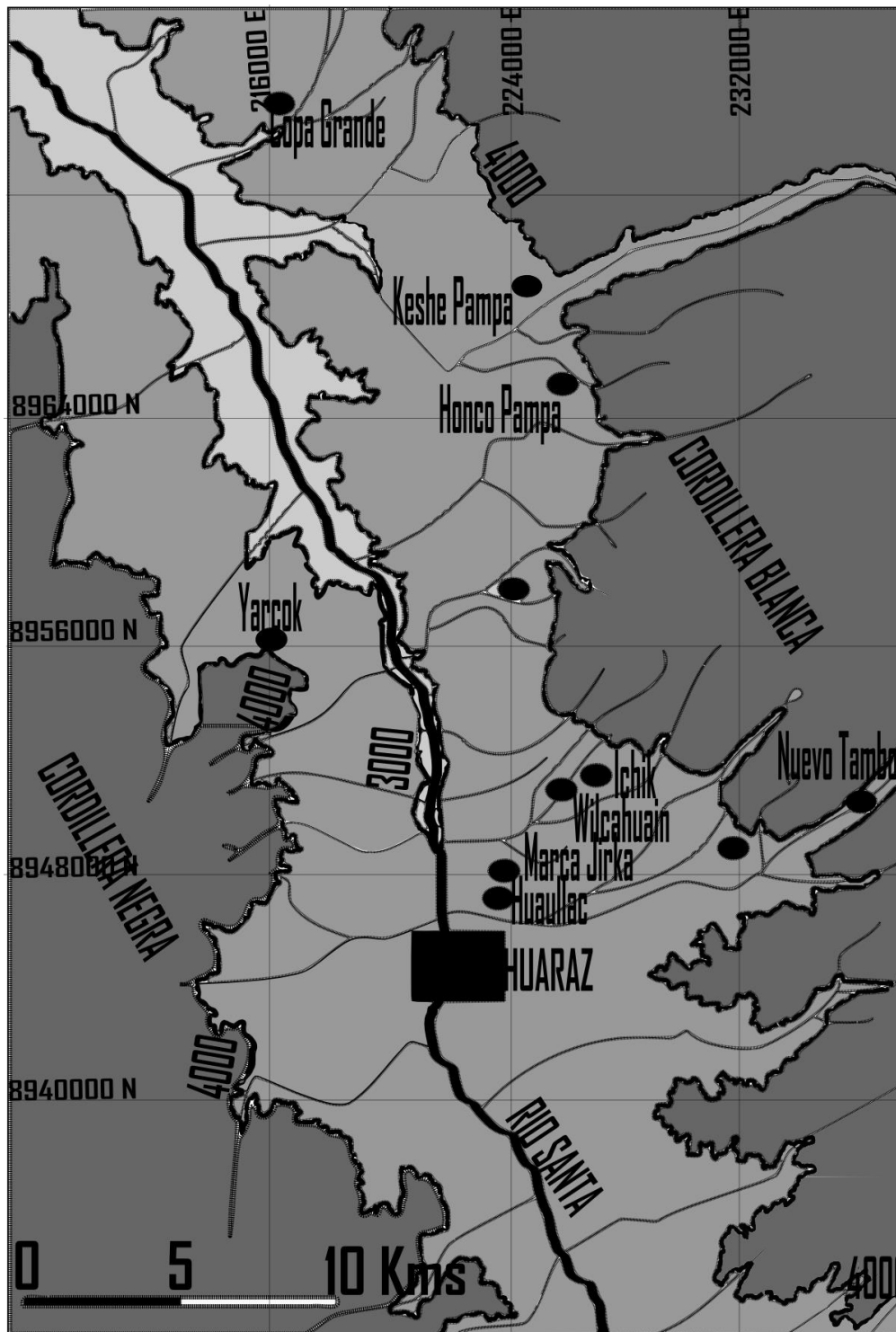


Figure 2.14. Distribution of Chullpa burial construction in the middle part of Callejón de Huaylas.

3. Methods

The aim of this thesis is to compare two groups of Recuay mortuary structures, in the search of establishing differences in the funerary ritual and material culture. The study utilizes archaeological data recovered in cultural resource management (CRM) projects, specifically from the new access road to the Pierina Gold Mine (Cordillera Negra), and from a project of housing development above the city of Huaraz in the Cordillera Blanca. When the archaeological work was developed (1997 to 2002) in Peru, protection strategies of cultural heritage related to CRM were not implemented yet. That is why our projects focus on preservation, and research of funerary structures that were threatened by the access road and housing development. Previous pedestrian surveys detected some funerary structures (PAn 5-49 Amá II A, B, D; PAn 5-35 Quitapampa A; PAn 5-42 Quitapampa B; PAn 5-34 Amá). In a subsequent phase III of intensive excavations 15 more tombs were found. In certain occasions through interview and conversations with locals, it was possible to locate mortuary structures situated in deep drainages and washing slopes. Generally speaking most of the tombs are found in the area of Marenayoc (3,550 m.a.s.l), located in the eastern hills of the Cordillera Negra, towards Callejón de Huaylas in the District of Jangas, Province of Huaraz, North Central Highlands of Perú. Locally the site is between kilometer 10 and 11 of the Jangas - Pierina road about 27 Kms north of Huaraz. The archaeological work had the objective of mitigating cultural impacts in the Marenayoc area because of unforeseen slope instability. The funerary structures were totally excavated, their contents and goods are housed in the Museo Arqueológico of Ancash located in the city of Huaraz.

The other CRM project comes from the hills above Huaraz, in where a project for housing development did not materialize. One of the reasons of this was the uncovering of a large

subterranean complex of mortuary structures, and habitation settlement on the hilltop (PAn 5-64, Marca Jirka). As I argue, these stone boxes mortuary structures were sealed, without any modern intrusion. Association of deceased and goods were found in situ. Their finding constitutes a solid step in the understanding of death rituals in the Recuay Culture.

Although I relied on the archaeological context to interpret events of death rituals, historical descriptions and Colonial accounts, also contain valuable information. In the sixteenth and seventeenth centuries Catholic priests visited the Recuay region in search for the eradication of idolatry acts and ceremonies that honor the dead (Principe 1923; Duviols 1986). Many detailed descriptions of the tomb structure and rites exist on these documents and are very useful in the analysis of mortuary chambers. For instance, Duviols (1973:164) describes the uncovering of a mummy buried in a large jar covered by a capstone, and numbered the offerings or contents inside the tomb. Descriptions of Principe (1923) relates mortuary events, in great detail, like the time of tomb visitation including rituals with guinea pigs blood at the door of the “*amayes*” translated as stone chambers.

The aim of this thesis is to document and describe the variability observed in the burials, and the associated implications for living-dead interaction (Shimada and Fitzsimmons 2015). My analysis of the data suggests that existed two modes of funerary rituals at the Cordillera Negra and Cordillera Blanca. The differences in size and shape of the mortuary chamber, number of individuals interred, quality and quantity of grave goods will be used to evaluate status differentiation of the deceased.

Mortuary monuments are durable materials and excellent texts of the past (Isbell 1997). They constitute a rich source for the understanding of patterned cultural behaviors and the relationship between the survivors and their deceased (Arnold and Jeske 2014:326-8). Data from a rural Recuay community of the North-Central highlands of Peru indicate variability in the forms of the burial, and grave goods. On the North Coast of Peru, detailed burial descriptions and patterns of the Moche have helped establish the ceramic chronology, grave construction, and style change (Donnan 1973; Donnan and Mackey 1978; Donnan and Cock 1986; Donnan 2011). In the case of the Recuay, it is assumed that subterranean funerary construction is associated to high status individuals interred. Stone chambers are more complex, required more labor, and grave goods, mostly ceramics, are artistic artifacts manufactured in kaolinite paste. The aim of this thesis is to explore the diversity and particular differences in tombs of a sample from the Pierina Mine (Cordillera Negra) and compare them to smaller sample from the Cordillera Blanca. I will look for tomb distribution and the different typologies (Beckett 2011).

The majority of the chambers have been looted either in Pre-Hispanic and/or modern times. Because of been so disturbed the information obtained is limited. When it was possible the goal was to rescue information, principally to obtain a complete inventory of the number of individuals interred, number of artifacts, and evaluate the style of the stone construction.

A synthesis of Recuay mortuary patterns is sought through a regional analysis of all the available data in the sample of 10 chambers from the Pierina mine influence's zone, and the Huaraz area, which includes the sample from Marca Jirka site, (PAn 5-64), and the published data from Bennett

(1944). This will help to contribute the understanding of the development of the Recuay society at the local scale in the region of Callejón de Huaylas. The ranking hypothesis consists that the burials were more elaborated on the western flanks of the Cordillera Blanca (Marca Jirka site), when are compared to a sample of burials from the Cordillera Negra (Pierina mine). And if the differences revolve around unequal access to resources and social differentiation in the Recuay society.

Four variables are going to be useful for this task:

1) *Grave goods*; an inventory of the number of artifacts deposited in the chamber, and their physical characteristics in the form of tables will be use in a visual manner. Pottery plays a role here as a cultural and chronological marker. The identification of shape, decoration styles, and material composition when it is possible, would help to situate the tomb in temporal and space relationship within the Recuay Tradition (200 – 800 CE). A preliminary pottery analysis based on morphology, surface treatment, paste, and different tonalities of the vessel's surface using Munsell (1994) are described in succinct manner. Besides pottery and skeletal remains, metal objects, called *tupu* or copper pins were recovered near human remains. Less frequent finds are faunal elements, beads, and botanical remains.

2) *Human Remains*; a clear view of the complete demography of the region is impossible with the sample available, however a preliminary estimated of Minimum Number of Individuals (MNI) per chamber was obtained, along with age, sex identification, pathologies, taphonomy, and osteology variations. The identification of human remains was performed by bio-archaeologist Florencia

Bracamonte with me assisting. Procedures followed the guidelines of Buikstra and Ubelaker (1994). After initial laboratory work of bone cleaning using brushes, evaluation of anomalies, variations, pathologies, and evidence of violence were accomplished through sharp visual observation helped by magnifiers, artificial lighting, and the comparisons to drawings, photographs and descriptions detailed in Bass (1987), Ortner and Putschar (1985), and McMinn and Hutchings (1977). In general terms, the entire collection suffered poor bone preservation. Skeletons were rarely found in articulated positions. Due to post-mortem manipulation, the identification of lesions and fractures was not possible in certain occasions (Friedl 2011). Minimum Number of Individuals (MNI) was accomplished by counting the number of bones in relation to their anatomical parts, and laterality, in addition to complete bones with the number of proximal or distal epiphysis. Sex determination included the observation of the morphology of the pelvis: ventral arc, subpubic concavity, the aspect of the medial surface of the pubis branch, sacrum, and the visual inspection of preauricular sulcus. Age estimation was obtained through the observation of epiphysis fusion in long bones, and the analysis of the symphysis pubis, comparing to Suchey-Brooks (1990) methods. In the case of adults, Todd (1921) and articular surface of the pelvis was used. In the case of infant human remains, the length of long bones was used and compared with the standards studied by Merchant and Ubelaker (1977) in the Arikara Indians from South Dakota.

3) *Architecture*; measurements per chamber, size, (height, width, length) when available from accurate drawings and photographs. Measures of access doors within chambers, and space (areas) in meter squares.

4) *Location in the Landscape*; a tabular description of the built environment and the insertion of the funerary chamber in the local geography was recorded. This was done to better visualize the funerary pattern in a regional scale. Variables like elevation, distance to the nearest known residential settlement, site number, site name, and distance to the nearest known tomb(s) is included.

4. Results

4.1. Recuay Mortuary Chambers in the Cordillera Negra and Cordillera Blanca

Archaeological regional survey in the influence area of the Pierina mine located a total number of 41 mortuary sites, 34 of which were excavated (see Figure 1.2). From them, 24 burials came from the same location, which is the vicinity of Marenayoc, a modern village situated in the Quechua ecozone between 3,500 and 3,550 meters above sea level. This area, which measured 24,965 meters square, was investigated intensively since it was threatened by the construction of the access road to the Pierina mine. This chapter describes a representative sample of 9 mortuary chambers localized around the platform terraced mound of Marenayoc (PAn 5-37), a residential settlement that seems to have congregated funerary structures (see Figure 2.8). These stone chambers were investigated with archaeological investigations. The architecture of the burial informed us the Recuay culture affiliation. Many more burials were found in the area of Marenayoc; they are more modest, and vary from cist-tombs to tombs below overhanging boulders, within and without architecture. Most of them belong to post-Recuay cultural times. Mortuary structures describe below stand out from the rest because of the visible architecture, and quality of stone buildings. The chambers are standardized in size and form, and represent a late period of the history of the Recuay Tradition (550 – 750 CE, Cotojirca III and IV of local styles). On the other hand, mortuary chambers in the Cordillera Blanca is represented by complex of stone boxes at the site of Marca Jirka (PAn 5-64). The style of the ceramic found in the structures are diagnostic elements in the contemporaneity of these two major locations. A synthesis is shown on Table 4.1. Following is a brief description of the mortuary chambers investigated with excavations. Refer to Appendix B with details about the evidence with descriptions of each tomb

and associated grave goods. I have to remark that all the mortuary buildings describe below contained secondary burials, and disarticulated human remains.

*Table 4.1. List of excavated tombs and principal characteristics**

Excavated Tombs	Tomb Type	Grave Goods	Burial Posture	Local Style
PAn 5-34 Amá	Single chambers under boulders	Yes	Flexed?	Late Cotojirca III (500 – 650 CE)
PAn 5-35 Quitapampa A	Single chamber under boulder	Yes	?	Late Cotojirca III (500-650 CE)
PAn 5-42 Quitapampa B	Double chambers and antechamber	Yes	?	Late Cotojirca III (500-650 CE)
PAn 5-50 Quitapampa C	Subterranean double chambers and antechamber	Yes	?	Late Cotojirca III Re-Used during Cotojirca IV (700 – 1,000 CE)
PAn 5-49 Amá II A	Under overhang boulder	No	Extended	?
PAn 5-49 Amá II B	Single chamber with antechamber	Yes	Flexed	Late Cotojirca III (500-650 CE)
PAn 5-49 Amá II D	Single chamber with antechamber	Yes	Flexed	Late Cotojirca III re-used during Cotojirca V (1,000-1,470 CE)
PAn 5-49 Amá II E	Under overhang boulder	Yes	Extended	Cotojirca I (400 – 150 BCE).
PAn 5-49 Amá II F	Cist under boulder	Yes	Flexed	Cotojirca II (150 BCE – 200 CE).
PAn 5-49 Amá II G	Simple Under boulder	No	?	Cotojirca IV (700 – 1,000 CE)
PAn 5-49 Amá II H	Simple Under boulder	No	?	?
PAn 5-49 Amá II J	Simple under boulder	Yes	?	Cotojirca II (150 BCE – 200 CE)
PAn 5-49 Amá II L	Simple under boulder	No	?	?
PAn 5-49 Amá II M	Simple under boulder	No	Flexed	?
PAn 5-49 Amá II N	Subterranean Cist	No	Fetal	Cotojirca II (150 BCE – 200 CE)
PAn 5-49 Amá II O	Subterranean Cist	Yes	Fetal?	Cotojirca II (150 BCE – 200 CE)
PAn 5-49 Amá II P	Simple under boulder	No	Extended	Cotojirca I (400 – 150 BCE)
PAn 5-49 Amá II Q	Simple under boulder	No	Flexed	Cotojirca III (200 – 500 CE)
PAn 5-49 Amá II S	Simple under boulder	Yes	?	Late Cotojirca III (500 – 650 CE)
PAn 5-49 Amá II T	Simple under boulder	No	?	?
PAn 5-49 Amá II U	Small chamber under boulder	Yes	?	Cotojirca IV (700 – 1,000 CE)
PAn 5-38 Horno Jirca A	Subterranean chamber and antechamber	Yes	?	Cotojirca III (200 – 500 CE)
PAn 5-47 Horno Jirca B	Subterranean chamber	Yes	?	Cotojirca III (200 – 500 CE)
PAn 5-48 Horno Jirca C	Subterranean small chambers	Yes	?	Cotojirca IV (700 – 1,000 CE)
PAn 5-43 Cochapampa	Subterranean small chamber and antechamber	Yes	Extended	Cotojirca IV (700 – 1,000 CE)
PAn 5-41 Yarcok	Above ground <i>Chullpa</i> structures	Yes	?	Cotojirca IV (700 – 1,000 CE)
PAn 5-58 Llaca Amá Caca	Cists below rockshelter	Yes	Flexed	Pierina Inka (1,470 – 1550 CE)
PAn 5-66 Quellee Pallanan	Subterranean chamber	Yes	?	Cotojirca III (200 – 500 CE)
PAn 5-64 Marca Jirca	Subterranean chambers and stone boxes	Yes	Flexed	Late Cotojirca III (500 – 650 CE)

*Highlighted are Burial Chambers analyzed on this study.

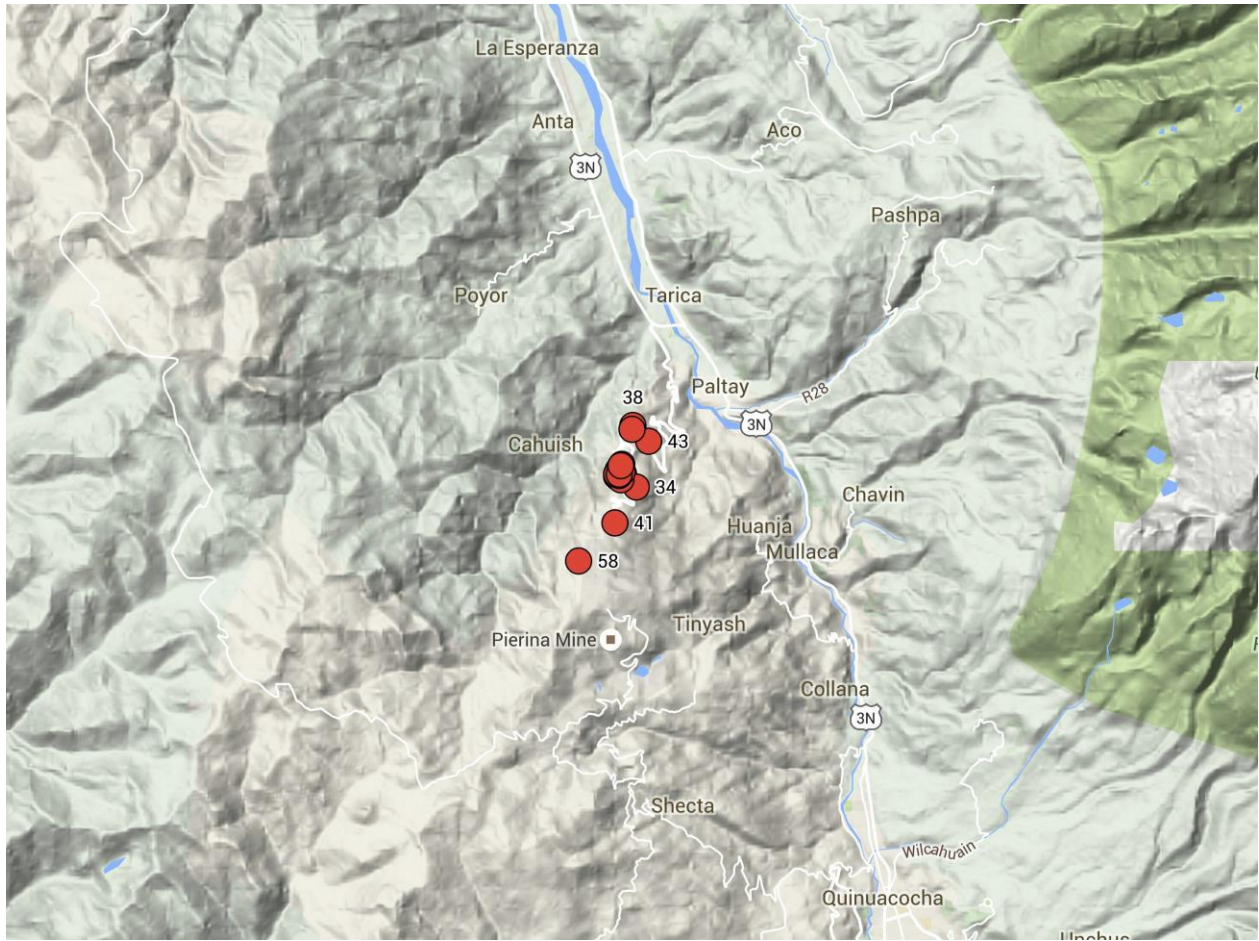


Figure 4.1. Mortuary structures in the Cordillera Negra are located between 3,600 to 3,400 m.a.s.l.

4.1.1. PAn 5-34 Amá

Located on the eastern side of the ridge that conduces to Cuncashca, and separated from the cluster of tombs that are agglomerated along the pre-Hispanic trail. It appears that the tomb builders preferred the location of natural boulders and the panoramic view of the Cordillera Blanca to choose the place for the burials.

Amá is a group of adjacent chambers having large slabs as common roofs. Each chamber is separated and single. Chambers are not totally underground, and have an aspect of a low mound (see appendix B for more details). Three chambers (A, B, D) were partially excavated. Chamber A had evidence of modern ritual activity in the form of liquor glass bottles and coins left inside as offerings. Secondary burials were very disturbed; mixed up with modern trash. Important diagnostic findings were six imported fragments Moche style from the North Coast. Nine individuals were interred on this chamber. Seven adults (4 males and 3 females), one subadult, and one child. Chamber B gave the impression of good condition. The entryway was formed by granite standing stones as jambs and an irregular stone as lintel. The top was formed by a large slab. However, the excavation did not reveal any goods nor evidence of human remains. Chamber D also had evidence of modern disturbance in the form of ritual offerings or “*pagos*”. Skeleton parts were found in relation with the walls of the chamber, but without any organization, like a jumble of bones. Counting and observing human bones in laboratory, it was possible to identify nine individuals. Seven adults (3 males, 2 females, 2 unsexed), one subadult, and one child. Given the coloration, erosion, and exfoliation, it is most likely that the bones were exposed to the environment for prolonged time before the disposal of the body. Four copper objects and a *tupu* made of faunal bone were found in proximity to human bones (see Appendix B: Table 1).

4.1.2. PAn 5-35 Quitapampa A

This is a single stone chamber located at the east side of the Pre-Hispanic trail, and after crossing the access road to the Pierina Mine. Modern adobe houses are located very near the chamber. The area is known as “Quitajirca or Quitapampa” (see appendix A for more details). The stone chamber is highlighted by the huge slab that forms the cover. Underneath it was an excavated a pit, and installed stone walls forming an oval space. The area of the chamber is about 1.75 m by 0.9 m of length. The structure was used as pig pen until recent times. In spite of disturbance, 14 semi-complete and complete objects were recovered from the excavated floor. Human remains were highly deteriorated making it impossible to assess any conclusions of the individuals interred. Recuay kaolinite divergent side bowl, effigy vessel with ring bases, corniform handle cups, and tall cups with flaring rim are between the most important diagnostic shapes of the Cotojirca III local style. Slip surfaces are light brown or red, over which concentric squares in black, and white meanders were painted. The effigy vessel consist on a sculpted head of a bat with a sort of painted moustache around mouth. Bat shows exorbitant eyes, and showing fanged teeth. This vessel reaffirms the funerary character of the structure, and implies some symbolic connotations of the burial. Bats are creatures that transit the land of the living and that of the dead (Benson 1997:53). Bats are not frequently represented in the Recuay imagery. They are more common in Moche burial contexts. Quitapampa A stone chamber did not have re-use or posterior occupation. The stone structure and its offerings are original Early Intermediate Period. The tomb is modest but help firmly to situate the style in chronological space and time. It is suggestive to contrast the quantity and quality of the ceramic vessels with the reduced space and modest masonry of the chamber.

4.1.3. PAn 5-42 Quitapampa B

A semisubterranean double chamber is located at the south side of the Pre-Hispanic trail that follow the ascending mountain ridge. The slabs functioning as roofs are salient features of the above ground structure. The height or depth of the chambers varies between 1.15 and 1.2 m. There is an antechamber as previous space that conduces to the chamber by a small stone door. Another entrance conduces to the next chamber. Both entrances are aligned and formed by nicely carved stones. The space inside the chambers are dark and damp (see appendix B for more details). Human remains were deteriorated, impossible to analyze. The number of grave goods from this chambers was very low (4). It is outstanding the find of another wrinkle face of Moche affiliation. The imported fragmented vessel is exactly the same to the other one found at Amá PAn 5-34. Long distance trade with Coastal societies can be argued. The wrinkle face or Ai apaec, is a Moche deity related to taking heads rituals and sacrifices. The other diagnostic find is an orangeware miniature *paccha* vessel, which resembles like a teakettle. Non-decorated, but presents a dark brown slip. An example of Recuay style associated to the Cotojirca III phase.

4.1.4. PAn 5-50 Quitapampa C

Quitapampa C lies 2 m east of the previous Quitapampa B (PAn 5-42) double chamber. At 1.5 m below surface, and 4.5 m in extent, it is one of the larger double chambers. The site was found by testing the subsurface of a slightly flat terrace, which overlooks the eastern creek of the quebrada Atupa (for more details see Appendix B). The mortuary structure is formed by two adjoining chambers and an antechamber. The masonry of the antechamber comprises standing polygonal stones of 60 to 70 cm high filling in between with smaller stones united with clay mortar. The oval space of the antechamber is non-roofed, and could be a place to deposit offerings (Lau 2011). Excavations inside the chambers were difficult because of the reduced space, and narrow entrance. In contrast with Quitapampa B, Quitapampa C is subterranean and the interior of the chambers were totally filled in with clayish soil. The event of fill in chambers was performed by post-Recuay groups, who reused the structure and left offerings. The goods found inside chambers are related with Cotojirca V local phase (1,000 to 1,472 CE) (Figure 4.2).

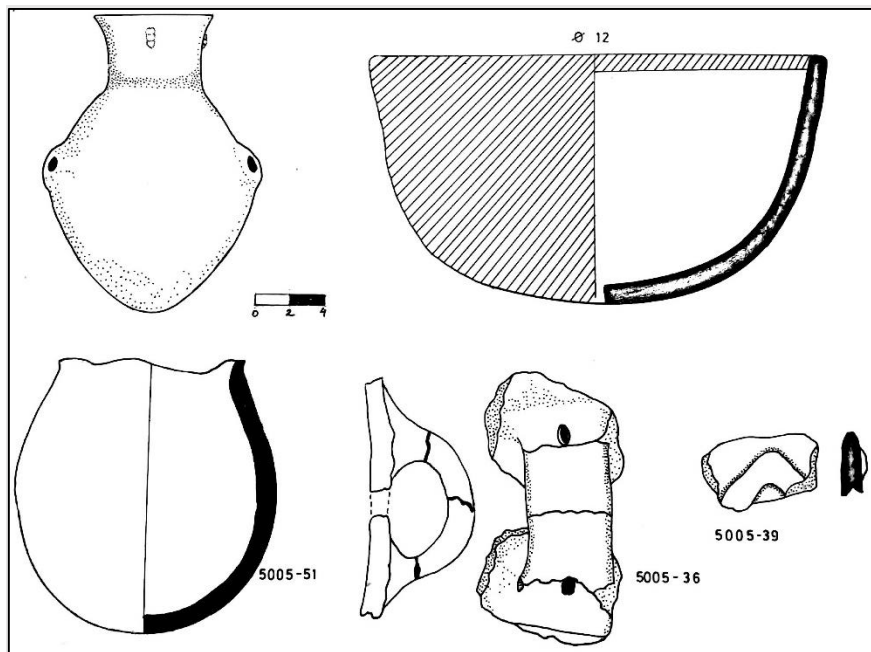


Figure 4.2. Cotojirca V vessel shapes found in Quitapampa C. Hemispheric bowl is Cotojirca III.

4.1.5. PAn 5-49 Amá II A

Above the village of Marenayoc there is an area known as Cotojirca. A burial was place under an overhanging boulder located in the corral or back of the patio of a modern adobe house (Figure 4.3). The interment was found without any offerings or goods. Likewise, no stone wall or structures were observed in relation with this burial. The secondary burial was very disturbed, although the position was extended because of the orientation of the femur and tibia.



Figure 4.3. Imagen of the overhanging boulder. Simple burial Amá II A.

4.1.6. PAn 5-49 Amá II B

The structure lies at the west side of the trail in which an immense Andesite boulder that forms the cover of the chamber could be seen from there. Amá II B is the type of single burial chamber with antechamber. The chamber is oval in plan and inside were discovered the remains of nine individuals. In the laboratory it was possible to establish that seven were adults (4 males, 2 females, 1 unsexed), one subadult, and one child. The skeletons were significantly disarticulated, the bones were mingled, with no attempt to keep parts of any individual together. Limb bones were found in the sediment that covered the entrance. An incomplete skull of an adult was found under a slab and next to femur bone (Figure 4.4). This can indicate the degree of disarticulation observed across all the bodies.



Figure 4.4. The deposition of the highly disarticulated skeleton. Skull and limbs.

Grave goods associated with the individuals interred were found in the upper levels all over the chamber. Among the most important offerings consisted on two Recuay kaolinite hemispheric bowls with ring bases, two round bowls, a pendant with representation of a female, and a small silver disk with a hole (see Appendix B for more details). In spite of easy access, this chamber was not reused after its abandonment. All the goods can be cataloged as Cotojirca III style of the Early Intermediate Period (EIP).

4.1.7. PAn 5-49 Amá II D

The chamber is built under white andesite outcrops that appear naturally on the terraces that overlook the modern village of Mataquita, in the northwest side of the Marenayoc ridge. A large block served as a capstone, and another at the east side as a wall. The open chamber is facing northwest directed to the cliff that delimits a natural terrace. At the beginning of the excavation, at 5 cm below surface was observed loose at ground surface two femurs and four ceramic vessels assembled together. This pottery resembles styles of the Late Intermediate Period (LIP) and Cotojirca V local phase 1,000 to 1,472 CE. Archaeological excavations of the chamber uncovered a stone-lined wall composed of four large standing stones of 70 cm high and 50 cm long that are forming the “huancas”, with small stones filling in between them. The plan of the chamber is oval, and another smaller structure or antechamber is configured on the west side. Almost at the level of the floor a big jar adjacent to the back wall of chamber was found. A *tupu* copper pin with flat head accompanied this jar or *cántaro* (Figure 4.5).



Figure 4.5. Detail of big jar cántaro and metal pin next to it inside chamber Amá II D.

This chamber is another case of reuse or perhaps built by post-Recuay societies. No Recuay style artefacts were observed in this tomb (see Appendix B for more information).

4.1.8. PAn 5-38 Horno Jirca

Two underground chambers situated in an excellent location with panoramic view of the Cordillera Blanca. The location is a difference from the previous ones and another difference is that these chambers were built below ground. Although highly disturbed by modern use, the chambers preserved the masonry of large stone blocks, and few fillers in between. In this case, the stones used as “*Huancas*” are of bigger size than the other ones mentioned above. Horno Jirca chambers (A and B) might be an improved version of the “*huanca-pachilla*” constructive technique. Chamber B measured 4 m of length but had an access that directs to the opposite side of the chamber like a corridor, unfortunately it was not excavated. Likewise, the cultural component associated to the underground chambers are exclusively Recuay style. Kaolinite vessels without painted decoration and neckless ollas conform the majority of the goods. Vessel shapes correspond to known Recuay forms, but lack of slip or finishing. Because of all of these characteristics, these chambers can be situated in the Cotojirca III local style but in the middle part of the EIP (~400 CE). Although easy to spot, there were no cultural reoccupations in the chambers of Horno Jirca. The number of individuals interred per chamber is four. A normal distribution of adults, subadults, and children (see Appendix B for more details). Most of the disturbance observed in the chambers are occasionated by natural and taphonomic agents, and also modern reutilization as corral for pigs. There is no reason to consider social ranking by discerning the energy consumed in the construction of these chambers, nor the grave goods. Existed variability in the local funerary practices, but it might be related to diachronic changes occurred in the Recuay culture.

4.1.9. PAn 5-43 Cochapampa

At about 360 m southeast from Horno Jirca (PAn 5-38) and at higher elevation is located the burial of Cochapampa. The area where the tombs are found is a slope terrain utilized as agricultural plots. The cut of the old dirt road that communicated Marenayoc with the town of Jangas, exposed the profile of subterranean structures. The excavation test set on the top of the terrace and above the profile uncovered the top soil, and sandstone bedrock below it. The sandstone outcrop was the cover of the chambers. We learned that the antechamber was situated on the profile exposed, and then we proceeded with the excavations from this side. Fortunately, the cut made by the front loader did not damage much of the structure, but some looting had been performed. It was interesting to observe how the chambers and antechamber were set in the natural cavity created by the sandstone outcrop. The rocks utilized to build these chambers contrast with the natural sandstone. The antechamber of oval in plan, had bigger size when compared with the other excavated burial chambers. It had the remains of a semi-articulated individual. Many tiny bones of infants were dispersed in the antechamber. Three very small chambers were found facing the antechamber. The design of this tomb varied from the other ones observed. Because of the majority of the human remains belong to child, infants and neonates, it might be possible that the chambers were burials for children. The articulated individual in supine extended position was female and her skull was missing. The great number of children and fetuses interred (N=77), and the fact that the other adults were female (N=11) indicate a ritual involved in female to children relationships. We cannot rule out sacrifices, or maybe some generalized disease, but the evidence is very scant to make a statement at this moment. However, the fact that most of the grave goods are related to Cotojirca IV local phase (Middle Horizon), the new construction modality of the tomb, the extended position of the individual, and the effigy vessel with clear Moche V or Early Chimu

affiliation, all of them are factors that possibly could relate this tomb to North Coastal religious rituals performed “after the fall of the regional polities of the Early Intermediate Period” (Millaire 2015:51). See Appendix B for details.

4.1.10 PAn 5-64 Marca Jirka

Marca Jirka is a funerary subterranean complex located in the eastern hills above the city of Huaraz and below the Cordillera Blanca (Figure 4.6). At 1 m below surface, our excavations revealed a group of mortuary structures consisting of a burial chamber, and a series of subsidiaries structures ordered by size, called by us “square structures” and “stone boxes”. Some of these structures remained undisturbed. However this was not the case for the burial chamber; it was reopened by post-Recuay societies, they filled in the chamber with gravelly soil and big jars or *cántaros* and miniatures as offerings. The same patterns have been observed in burial chambers on the other side of the Santa River. Miniatures represented cups that might have had symbolic connotation in acts libation when filling in the chamber. When we finished to retired the fill, the floor of the chamber had a slight white coating, but no bodies were found inside. Only pulverized bone was observed. Grave goods of two hemispheric bowls, one black pedestal cup and the top of a crown pin with gold covered. This metal object has an exceptional cast of a feline in profile and at the top a head of feline sculpted. The work of the metalsmith was very meticulous, because the object is very small (2 to 3 cm long, and 1 cm high). Also there must have been deposited more metal objects, a very thin gold foil were found on the floor of the chamber, the copper objects disappeared but the exterior gold covered persisted.

The burial chamber showed three massive granite blocks that functioned as walls forming a perfect stone cube. It had double ceiling, and no fillers was necessary to seal the unions of these massive

rocks. The excavation uncovered a series of square structures, which varies between 0.97 to 1.4 m of depth. Average length is 0.99 and width 0.76 m. This structures contained offerings of skull parts, like jawbone, which only teeth was preserved. Goods of kaolinite pedestal cups, and tupu pins were left in association with jawbones of subadults and children. In one case, a burial square (64357) structure contained skeleton of almost one completed child with skull deformation, but was missing bones of the hand, and feet. From the same square structure was left only the skull of a teenager with evidence of deformation. Stone boxes are the other style of burial structure. They have reduced dimensions. Average: 0.5 m depth by 0.38 m length and 0.33 m width. In these structures were deposited *tupu* pins and jawbones only (see Appendix B for more details).

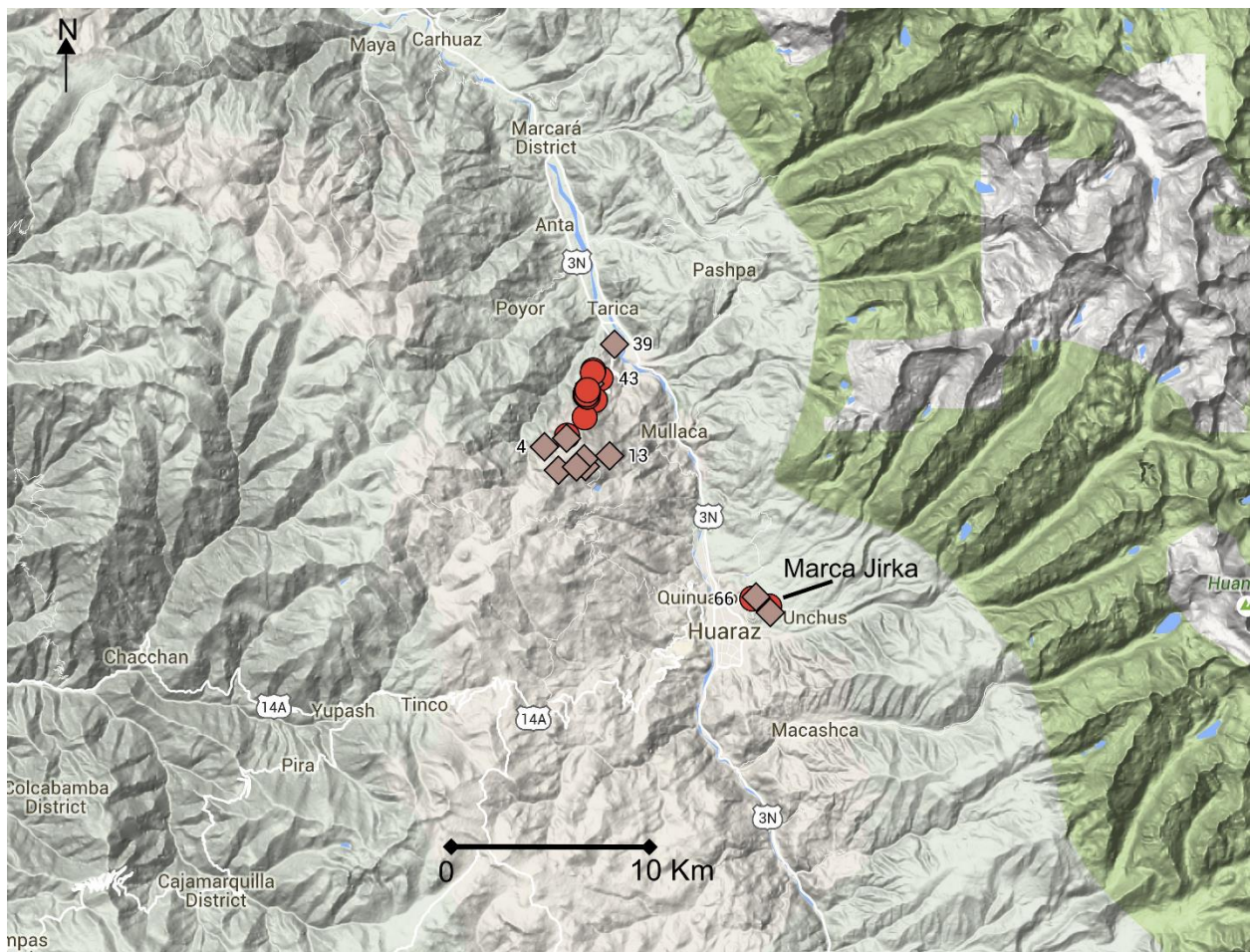


Figure 4.6. Marca Jirka site at the Cordillera Blanca, residential sites = squares, tombs = circles.

4.2. Preliminary Review of the Bioarchaeological Data

Appendix B describes the evidence this is what the data show.

Contrarily to the dry coastal desert and the frozen tundra of the high altitude mountains that preserve all materials well, burial preservation in highland environments is less favorable. In addition to natural post-depositional processes, the human manipulation of cadavers as social practice is the most important factor in preserving human remains. This practice occurred in Pre-Hispanic times but also in modern times, with the use and abuse of the burial chambers as places to leave offerings like liquor bottles, cigarettes, and other contents in plastic bags. Looting is also a common practice. On other occasions, modern rural settlements and farmsteads established near burial chambers used the structures as pens for European animals due to their functionality and solidity. This also tell us about the disconnection of the local community with material remains from their past.

The analysis on this chapter focus on archaeological data, and the accuracy in the osteological identification of human remains, which mostly comprised secondary interments. For full details concerning each burial and its context and associations, see Appendix B. The sample of burials comes from semisubterranean burial chambers and subterranean stone boxes. In the Cordillera Negra, disarticulated skeletons were found highly entangled inside burial chambers. Preliminary analysis found bones highly deteriorated and is interpreted as the result of one or more events of body manipulation in ritualized contexts. Like their coastal counterpart Moche, where bodies were exposed to the elements for prolonged time in delayed rituals (Millaire 2004; Nelson 1998), weathering of the bones and craquelure indicate that bodies were manipulated for extensive time before interment. Not only that, ethnohistoric accounts in the studied area relate multiple tomb

visitation and skeletal removal (Duviols 1986; Principe 1929; Ramos 2010). Only in two cases (Cochapampa PAn 5-43; Marca Jirka PAn 5-64 structure 2/64357) body position of the individual was firmly established. On the other hand, the supposedly undisturbed stone box structures of the Cordillera Blanca yielded only highly fragmented bone. Although underground stone structures isolated body parts from external agents, soils of the Marian community (where Marca Jirka site is located) contain high pH 4.5-5.0 (ONERN 1974), which has an adverse effect in bone preservation (Surabian 2012). This may have affected the preservation of metals as well.

Demography

In spite of much disturbance, a minimum number of individuals per tomb chamber provides a preliminary bioarchaeological profile or approximation of a Recuay population. The results represent the partial remains of 126 individuals (see Table 4.2).

Table 4.2. Minimum Number of Individuals per burial chamber

Burial Chamber	Adults			Sub-adults			Child	Infant	Fetal	Total MNI
	Male	Female	Unsexed	Male	Female	Unsex				
Amá A PAn5-34	4	3				1	1			9
Amá D PAn5-34	3	2	2			1	1			9
Amá II A PAn5-49	1									1
Amá II B PAn5-49	4	2	1			1	1			9
Amá II D PAn5-49	4	1					1			6
Chamber A PAn5-38	2	2								4
Chamber B PAn5-38	1		1			1	1			4
Antechamber PAn5-43		1	6				12	8	4	31
Chamber C PAn5-43		1					9	7	1	18
Chamber B PAn5-43							5	8	1	14
Chamber A PAn5-43			2				6	5		13
S.2/64357 PAn5-64							2		2	4
S.4/64360 PAn 5-64								1		1
S.5/64327 PAn5-64							1			1
S.1/64354 PAn5-64			1							1
S.6/64328 PAn5-64			1							1
T O T A L	19	12	14			4	40	29	8	126

When we consider tombs not analyzed in the studied sample, the total number of burial chambers with bioarchaeological data from the Pierina area reach the number 24 (see Table 4.3). This

original inventory of individuals would provide a better understanding of the demographic profile.

Table 4.3.

MNI And Sex Distribution by Burial Chamber										
Burial Chamber	Adults			Subadults			Child	Infant	Fetal	Total MNI
	Male	Female	Unsexed	Male	Female	Unsex				
PAn 5-34 Ama I A	4	3				1	1			9
Pan 5-34 Ama I D	11	6	3			3	3	2		28
Pan 5-38 Horno Jirca	3	2	1			1	1			8
PAn 5-43 Cochapampa		2	9				10	59	8	88
PAn 5-47 Horno Jirca B			4	1			1			6
PAn 5-49 Ama II A	1									1
PAn 5-49 Ama II B	4	2	2			1	2			11
PAn 5-49 Ama II D	4	1					1			6
PAn 5-49 Ama II E	1									1
PAn 5-49 Ama II F	1									1
PAn 5-49 Ama II G			1							1
PAn 5-49 Ama II H	2									2
PAn 5-49 Ama II J			1							1
PAn 5-49 Ama II L			1							1
PAn 5-49 Ama II M	1		1					1		3
PAn 5-49 Ama II N			1				1			2
PAn 5-49 Ama II O	1							1		2
PAn 5-49 Ama II P	3	1					1	3		8
PAn 5-49 Ama II Q			1							1
PAn 5-49 Ama II S	1						1	1		3
PAn 5-49 Ama II T			2					1	1	4
PAn 5-49 Ama II U	1		1				1		1	4
PAn 5-58 Llaca Ama	1		6				2	6		15
PAn 5-64 Marca Jirka			2				3	1	2	8
TOTAL	39	17	36	1		6	28	75	12	214

A preliminary study has been completed, showing a relatively homogeneous picture in the number of individuals buried together in each chamber. The distribution of adults, subadults and children in a funerary structure or chamber gives an impression of a familial kind of entombment. A general demographic view comprised a total number of 214 individuals. Although 43% (94/217) of the total are adults, 67% (77/115) of the total number of children, infants, and neonates come just from one grave: (PAn 5-43). This great number of minors found in one funerary structure should constitute an outlier (Figure 4.8B). It deserves more attention. Ritual burial practices changed at the end of Recuay Tradition (~800 CE), possibly stimulated by the influence of Wari culture in the Callejón de Huaylas. At the same time, appeared a new tradition in regards to the burials of females

and children, especially in the North Coast (Millaire 2015). Due to the different stone architecture of the chamber, the non-local style of the grave goods, and that the other adults are exclusively females (N=2), an immigrant hypothesis is also plausible in this case.

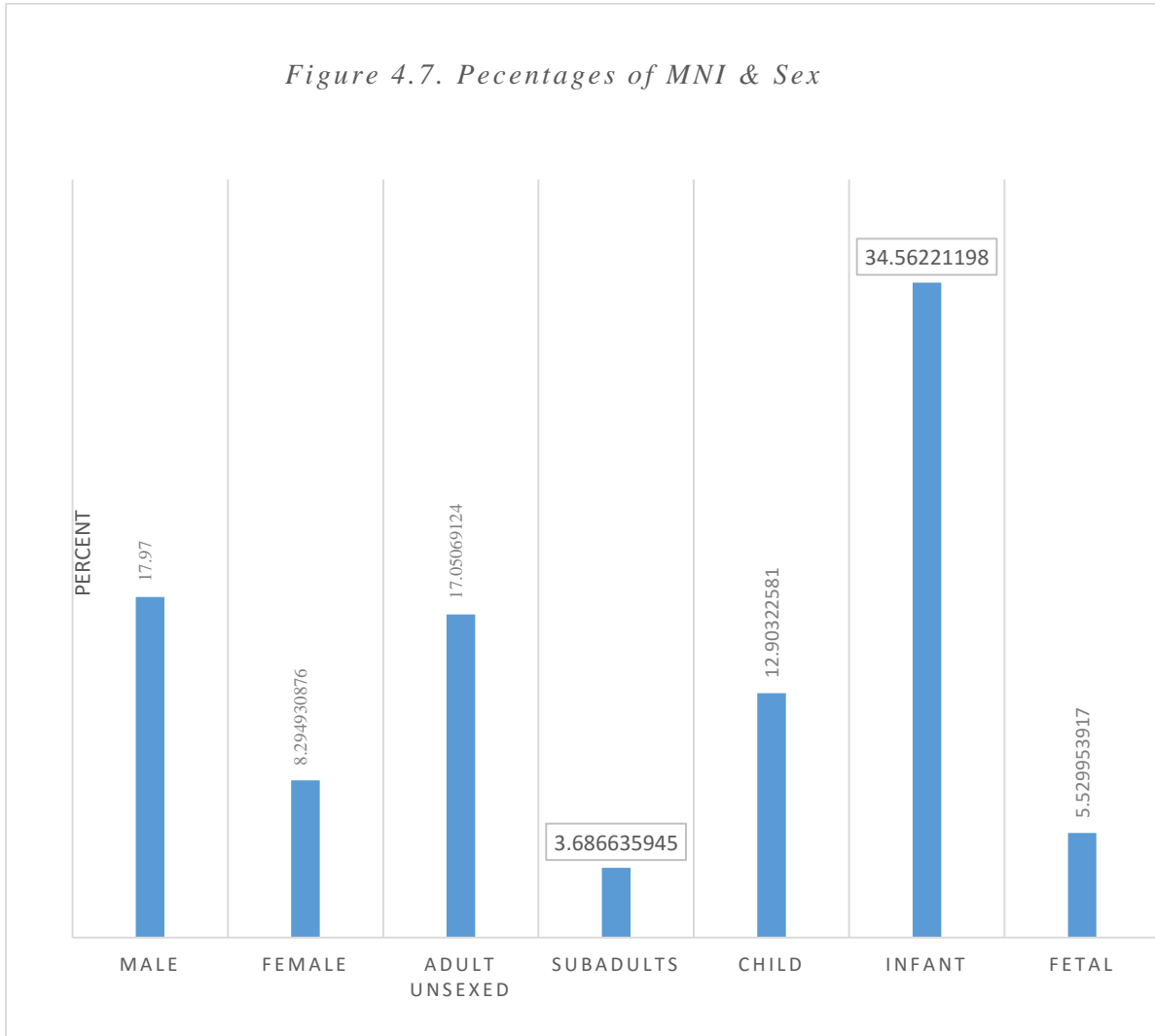
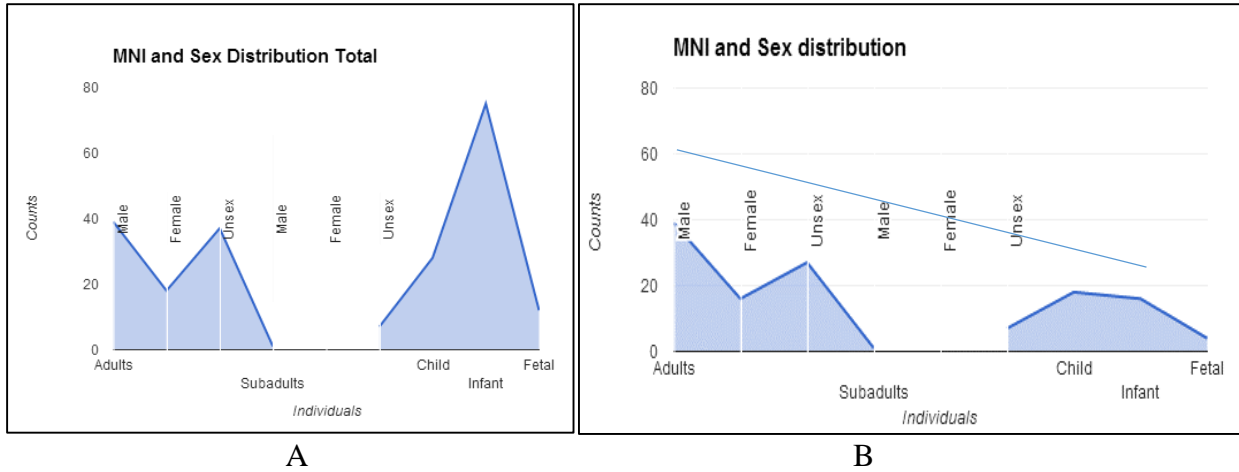
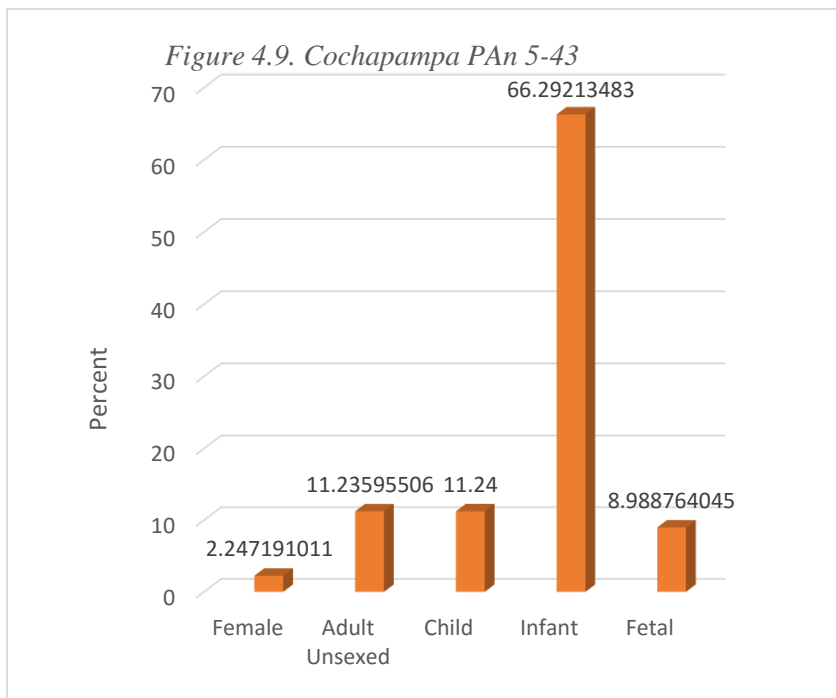


Figure 4.8. A: MNI and Sex Total Individuals. B: MNI and Sex Total Individuals without site PAN 5-43



The high percentage of infant mortality (Figure 4.7) indicates that a specific cultural factor could have had an important role in the structure of the archaeological sample (Chamberlain 2006:7). No evidence of mass epidemics and sacrifices have been identified in the skeletal remains of children. The bones and goods found in the small chambers were highly disturbed, a confounding point in



the interpretation of results. As can be observed on the graph bar, high mortality rate of infants (categorized between 0.6 to 6.5 years old) found in the Cochapampa site, probably was induced by ritual practices. Generally speaking, relative chronology of the tomb by associated style

ceramics, approximates the site to the Middle Horizon Period (700 – 1,100 CE) a time marked by the expansion of the Wari Empire in the Central highlands (Schreiber 1992). Wari influence in the north-central highlands is less intense. Major centers show a mixture of local architectural traditions and Wari ones (Isbell 1991). Ceramic inventory from Cochapampa also exhibit same mixture, a black polished effigy bottle (4306) is related to Late Moche V, or Early Chimú found in Huarmey, in the north-central coast (Lau 2010:251). Recently, a spectacular finding of royal woman of the Wari Empire with sacrifices of children have been discovered in Huarmey (Zorich 2013). The approximate date of these important Wari individuals, 750 CE, is applicable to Cochapampa, and would explain a ritual modality of entombment women-children replicated in the highlands.

Age of Death

When preservation conditions allowed, an age estimation was available for 116 individuals, which is 54% of the skeletal population. 58% of deaths occurred during newborn and infancy (Table 4.4). Our sample presents high mortality population because is having more deaths during childhood and infancy. At the same time high fertility ruled out; children form an increasing proportion of the living population. High fertility populations have the majority of deaths during childhood (Evans and Webster 2001:211). However as it was mentioned above, the population analyzed could have had induced death of children in ritualized contexts.

Table 4.4. Counts and percentage Age of Death

Age (Years)	Counts	%
0-0.5	10	9
.6-4	67	58
5-9	18	16
10-14	1	0.09
15-19	5	4.3
20-24	2	2
25-29	3	3
30-34		
35-39	5	4.3
40-44	3	3
45-49		
50-54		
55-59	1	0.09
60-64	1	0.09
Total	116	99.87

Pathologies

The subsistence patterns of these Recuay farming communities had a diet based on corn, and not surprisingly, the population gives an overall impression of poor nutritional practices. A decreased health condition has been observed worldwide in other groups with the transition to agriculture (Larsen 1995). There is a high frequency of osteoporosis and osteophytes, especially in lumbar and cervical vertebra, which limits individual's range of motion (Killgrove 2010:103). There are few fractures in the limbs of certain male individuals that might indicate interpersonal violence (Amá II D). In one case, an individual male had double fracture, in the frontal and temporal bone of the skull, which was definitively occasioned by combat. Due to its dimension >4cm in length, this major injury in the frontal bone is suggestive of warfare (Andrushko and Torres 2011). The individual successfully survived the surgery intervention with the trepanation technique, but was unsuccessful in a second intervention on the temporal bone. Dental caries is consistent and occur to both adults and children (Table 4.5). Tomasto (2009) suggest that incidences of caries had a peak during the Middle Horizon period in the south coast of Peru. Wari expansion to the central

Andes promoted the consumption of corn, while the region of Callejón de Huaylas interacted with Wari, Recuay people also farmed corn, macrobotanical remains of corn-cobs have been found in subterranean chamber of Quitapampa C (PAn 5-50), Quitapampa B (PAn 5-42), Cochapampa (PAn 5-43), and in the rockshelter deposit of Llaca Ama Caca (PAn 5-58). Dental wear are highly present, mostly affecting molars. In Marca Jirka (PAn 5-64) wearing is so evident that a labor activity might be suggested. Antemortem tooth loss is related to carious lesions. Dental abscess and periodontal disease were frequently observed in molars and premolars. In sum, the population suffered malnutrition, and sporadically interpersonal violence prevailed in the skeletal evidence from the Callejón de Huaylas of Perú.

Table 4.5. Frequencies of recurrent pathologies

	PAn 5-58	PAn 5-43	PAn 5-38	PAn 5-47	Ama II D	Ama II B	Ama II F	PAn 5-34	PAn 5-64	TOTAL
Dental Wear	1	7	14	4	4	2		12	2	46
Labiante		40	1		4			3		48
Kyphosis		1								1
Spicules		5	1		1			1		8
Osteophytes		2			1			1		4
Criba Orbitalia		1							2	3
Skull Deformation									2	2
Caries		7	8	5	1	2		10		33
Arthritis	6		3		1					10
Periostitis			2							2
Hematoma					2			1		3
Lipping					4					4
Abscess					2	1	1			4
Antemortem tooth loss							1	6		7
TOTAL	7	63	29	9	20	5	2	34	6	175

4.3. Tomb Construction, Grave Goods, and Ceramics

In the previous section, and in Appendix B, I describe with detail tomb structure and content of a group of stone chambers from the Cordillera Negra, and stone box structures from the Cordillera Blanca. The goal now is to synthesize local mortuary practices of a Recuay hinterland community, in order to interpret these models or patterns in regional perspective (Dillehay 2011:4). There is no homogeneous expression in Recuay mortuary practices (Lau 2011:110). For that reason, it is very important to document archaeological data from isolated communities, observe differences, and common cultural traditions.

Table 4.6. Comparison Burial Chambers in the Cordillera Negra

Site	Burial Chamber	Length	Width	Height	Volume (m ³)
PAn 5-34	Chamber A	1.7	1.45	1.18	2.9087
PAn 5-35	Chamber	1.75	0.9	0.75	1.18125
PAn 5-42	Chamber A	1.15	0.9	1.2	1.89
	Chamber B	1.2	1.35	1.2	1.944
PAn 5-50	Chamber A	2	1.73	1.1	3.806
	Chamber B	1.45	1.2	1.05	1.827
PAn 5-49 Amá II B	Chamber	1.94	0.97	1.43	2.69
PAn 5-49 Amá II D	Chamber	2.1	1.05	1.2	2.6
PAn 5-38	Chamber A	1.78	0.9	1.34	2.14668
	Chamber B	4	2	1.2	9.6
PAn 5-43	Chamber A	0.75	0.75	1.2	0.675
	Chamber B	0.85	0.6	1.3	0.663
	Chamber C	1	0.9	1.2	1.08
Mean		1.666923	1.130769	1.180833	2.539356154
Median		1.7	0.97	1.2	1.944
St.Dev.		0.800109	0.386453	0.15519	2.219291839

Burial chambers in the area of Pierina (Cordillera Negra), are mostly dispersed between 3,600 to 3,300 m.a.s.l., above and below Mareniyoc (Figure 2.8) a Recuay terraced platform mound over which a modern population is settled now. The major concentration of tombs form a cemetery-like cluster, above Marenayoc. The site is called *Amá* by the local peasants, a *Quichua* name that means prohibitive, and dark, however researchers (Stanish 2012:203; Rowe 2011:28; Isbell 1997)

mention that it might derived from the Aymara language term *Amaya uta*, which means “house of the soul” or “corpse house”. The name probably derives from the shadow created by numerous overhanging boulders (Ponte 2009). Many of the tombs are arranged below these boulders. An anthropomorphic petroglyph called Isabelita from the late Early Horizon period (400 – 100 BCE) is also part of the ritual landscape. It seems that the site was a ceremonial center, tombs from diverse styles are displayed among boulders, without and with architecture (see Table 4.1).

However the most visible mortuary architecture (i.e. Amá II B, D) corresponds to the Recuay Tradition. The chamber plans are oval to circular, of reduced space (~2-3 m²) and organized under natural granodiorite boulders. Most have an antechamber, a kind of oval entrance space, non-roofed and shorter than the chambers. Some burials appear in pairs. For instance, Quitapampa B (PAn 5-42) shows a direct alignment of two consecutive doorways. To enter chamber B, first we have to enter chamber A. Both chambers have similar dimensions, and there is no evidence of salient features of one over the other.

Single chamber is another variant in tomb construction. It has been shown in three sites: Quitapampa A PAn 5-35, Amá II B, and D PAn 5-49. It would seem that when natural boulders had flat underneath surfaces, Recuay grave builders chose them to arrange a burial chamber using the natural landscape to dictate the shape of the tomb. Decisions to build single, double, or more interment structures have to do in part with the availability of granite slabs or boulders, which are found in abundance in the Andes Mountains.

The building process included the excavation of subsoil to install solid standing stones or

“*huancas*” and horizontal slabs or fillers (“*pachillas*”) that formed the lining of walls. Most of the time, the research of these chambers uncovered good looking stone walls. Furthermore, because boulders are mostly situated aboveground level, the structures built underneath were not totally set below ground. When observing under slabs or boulders I was able to find wall sections of six different chambers.

In other cases, subterranean structures were entirely covered by topsoil although some times a large capstone was noticed at ground surface. They are arranged by excavating deeper in the subsoil, and bedrock (i.e. PAn 5-50, PAn 5-38, and PAn 5-43). At the same time these structures have the largest size in the sample.

Table 4.7. Dimensions in meters, funerary structures of Marca Jirka, PAn 5-64

Structures	Depth	Length	Width	Volume (m ³)	
Principal Chamber	1.2	1.2	0.9	1.296	
Structure 2/64305	1.4	1.12	0.64	1.00352	Square Structures
Structure 5/64309	1	0.83	1	0.83	
Structure 7/64311	1	0.77	0.74	0.5698	
Structure 6/64310	0.97	1.1	1.1	1.1737	
Structure 64359	1.07	1.15	0.35	0.430675	
Structure 1/64302	0.45	0.35	0.25	0.039375	Stone Boxes
Structure 4/64308	0.42	0.5	0.47	0.0987	
Structure 3/64307	0.48	0.52	0.36	0.089856	
Structure 64327	0.45	0.3	0.26	0.0351	
Structure 64328	0.52	0.3	0.32	0.04992	
Structure 64354	0.53	0.35	0.27	0.050085	
Structure 64357	0.76	0.51	0.5	0.1938	
Structure 64360	0.41	0.22	0.21	0.018942	

The inventory of tombs also included small subterranean cists associated with Huarás style, an early component of the Recuay Tradition, and many more partial burials below overhanging boulders. Although not directly related to the mortuary sector described, *Chullpa* aboveground

burial structure occurs in the site of Yarcok (PAn 5-41), located 4 km south from Marenayoc, below Pierina's mine open pit. Eighteen rectangular stone structures are distributed on a rocky volcanic tuff slope at 3,784 m.a.s.l. The interior space of the *chullpas* measured between 2.60 to 4 m lengths and by 1.5 m width, and 1.2 m high. The access door had 0.54 m high and 0.50 m wide directed to the east. Excavations on three structures found ceramic offerings at the sides of the entryways. Evidence of human remains was very poor, however enough for radiocarbon AMS dating: 775 to 985 CE 2 sigma range (see Appendix A Table 2). This group of structures correspond to post-Recuay developments associated to Cotojirca IV/V fortified sites located in the property of the Pierina mine at higher altitude (Ponte 2014).

Grave goods are principally orangewares, few whole vessels were found. One of them was a sculpted handle bottle in the shape of supernatural zoomorph carrying a goblet, another one was a press molded central human face flanked by felines in profile, and the remarkable effige bottle of a "Wari prisoner" with both hands tied behind back (see Figure 4.10). The figure wears Wari-style clothing, especially a four-cornered hat, a temporally Wari diagnostic element popular in textiles and ceramics during 7th and 8th centuries (Frame 1990:12).

The surge of above ground funerary construction and Wari-related materials during the 9th century mark the end of the Recuay Tradition in the Callejón de Huaylas (Lau 2004a:187).



Figure 4.10. Frontal and Back view of Wari-related personage found in Yarcok PAn 5-41.

The Cordillera Blanca's funerary structures are represented by the Marca Jirka site (PAn 5-64). In this case, the subterranean complex presented tomb markers in the form of a row of standing stones or *huancas*. In general, the structures are technically more elaborated and differentiated from the Pierina ones. According to their size and contents, we can tentatively classified them in three categories; burial chamber, square structures and stone boxes. The large chamber is situated near to 2 m below ground surface, called "Principal Chamber" is almost completely square and cubic. Tello's description of the famous stone burials of Katak can be used here. The walls are constructed by great boulders on their three sides, "on which set the stones forming the roof" (Tello 2009:293). The walls did not need of fillers or "*pachillas*". The access measured 0.95 m height, larger than the ones in Pierina. It also had double ceiling or capstones. The boulder that appears at ground level contained offerings which consisted of big utilitarian jars or *cántaros*. Below this boulder

and topsoil was setted the original ceiling composed of three rectangular heavy slabs (Appendix B, Figure 61). From the construction point of view, comparing this chamber with ones at Pierina in the Cordillera Negra, it is evident that more energy was utilized to build the chamber: the walls of the chamber are formed by three huge boulders, the floor was prepared with a slight coat of white plaster, the plan is square, dug deeper into the subsoil, and showed a double roof. Technically it has more care, of better quality. The Marca Jirka's stone chamber can be cataloged as monumental in the view of Dillehay (2011:8), due to the labor invested and periodic rituals. The area of Marca Jirka has more of this kind of structures. We only excavated a very small fraction of the underground cemetery.

Square structures vary between 1.4 to 0.97 m of depth, are formed by four slabs cemented by a hard clay found in swamps called "*kapi*". The contexts were intact.

Stone boxes feature four slabs and a capstone to form a box-shaped structure. It is the same kind of structure that Bennett (1944) reported as "stone box graves" in the region of Willcawain. When one compares the depth of stone boxes from Willcawain (Table 2.3), with the ones from Marca Jirka, we can observe the reduced midspread, less variability, and very uniform measurements that center on the median. Dots are the outliers (0.7, 0.55, and 0.3 m). In our case, it is assymetrical, skewed left, more variability. Outlier (0.76 m) is the structure that served as a burial of children. Willcawain stone graves can be included in the Marca Jirka population, with the exception of outliers (Figure 4.11).

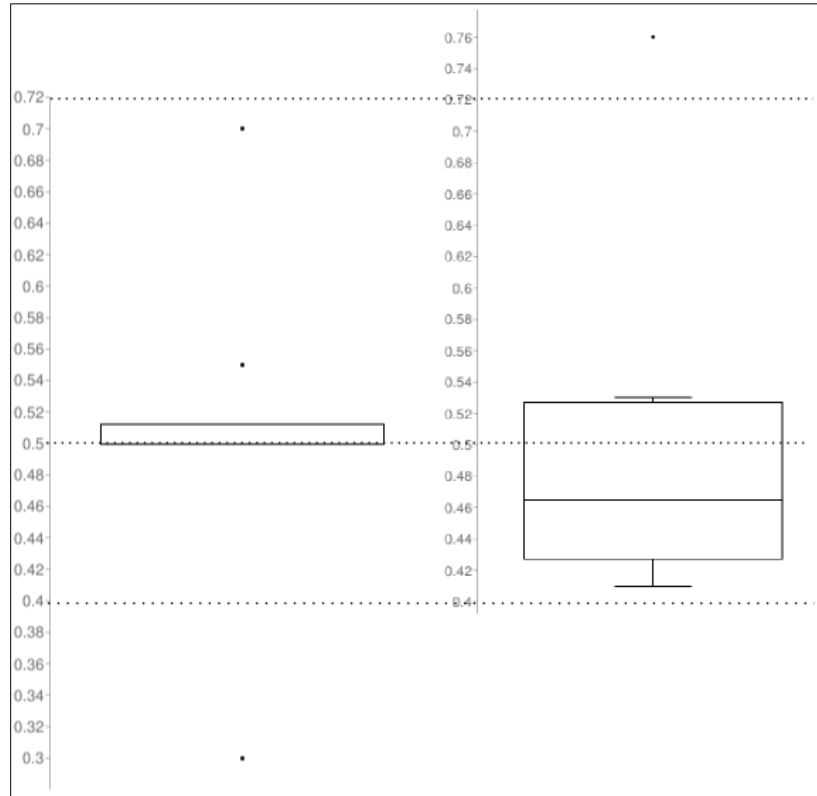


Figure 4.11. Box and-dot plots of depth in stone boxes (meters). Bennett's sites (left) and Marca Jirka (right).

Following the discussion about quantity and quality of grave goods from the Cordillera Negra, and Blanca.

Grave Goods

The total counts of goods recovered from ten Recuay sites is 159 (Table 4.8). Not every burial investigated has yielded goods. Some objects were found pulverized, same as bone, metal, and textiles that did not survive well in highland environments. Because of frequent disturbance, very few times we were able to observe the exact position of goods in the tomb. Most of the burials are secondary, disturbed by diverse agents. Goods mostly comprised ceramics (79%) and metals (15%) to crisocola beads (2%), corn (1%), faunal artifacts (1%), stone spinning whorl (0.5%), and seashell (0.5%). All the burial chambers contained ceramics. Square structures also had ceramic offerings, except stone boxes, which only exposed copper pins.

		<i>Table 4.8. Total Counts Grave Goods from Burial Chambers</i>							
		Ceramic	Metals	Beads	Bone	Seashell	Sp.Whorl	Corn Cobs	
Pierina	PAn 5-34	10	4	1	1				16
	PAn 5-35	15	1						16
Region	PAn 5-42	3						1	4
	PAn 5-50	12	2					1	15
Cordillera	Ama II B	6	1	1		1	1		10
	Ama II D	13	3						16
Negra	PAn 5-38	16	2	2					20
	PAn 5-43	20	3					1	24
	Subtotal	95	16	4	1	1	1	3	121
Marca	Prin.Cham.	15	1						16
	64304		2						2
Jirka	64309	6	4						10
	64311	2							2
Cordillera	64310	7							7
	64354		1						1
Blanca	Subtotal	30	8						38
	TOTAL	125	24	4	1	1	1	3	159

Cotojirca Phase III (400 – 700 CE)

The Cotojirca phase III was securely established on the base of architecture and ceramic association with Recuay styles from other centers (Lau 2004b). The phase corresponds to the development of Recuay Culture during the middle and late part of the Early Intermediate Period (see Table 1.1).

Kaolinite Wares

Recuay pottery style uses kaolinite with three color painting (brown, red and black) combined with resist decoration, hand modeling of sculptural elements, distinct vessels shapes (pedestal cups, vases, open bowl with conical handle and spout, narrow bowls, and jars), painted geometric decoration and a group of iconographic features. When kaolinite white clay was unavailable, cream or white slips covered the red color surface of the terracotta. It is clear an intention for presenting white finished surfaces. Vessels were manufactured manually without use of wheel throwing.

Kaolinite ware accounts for 22% from the total of ceramic goods and occurs with more frequency

in Marca Jirka, making up 57% 17/30 there versus only 12% 11/95 of the Pierina sample. Comparing both areas, it seems that the kaolinite paste did not have the same quality. Kaolinite vessels from the Pierina region show no slip, a porous surface suggesting the use of organic material as temper, eroded surfaces, lack of decoration, and in some cases notable asymmetry (Appendix B, Figure 44 C). Kaolinite sculpted legs of deer or llama were found in Horno Jirca. Since these do have a counterpart made from local paste, they may represent fragments of an effigy vessel from a Recuay center. Painted decoration normally occurs as geometric shapes in the upper zone of pedestal bowls. Recuay style forms are reiterated, but with limits. For instance, no resist technique decoration has been observed in the sample from Pierina. Popular whiteware pottery are: corniform or conical handle cups, pedestal bowls, and *pacchas* (a teakettle like vessel to allow fluid to pour out). These classic Recuay wares are spread throughout the Callejón de Huaylas region (Tello 2009:310-11). The exception is the effigy-vessel of a bat's head found in the burial chamber of Quitapampa A (Appendix B, Figure 10). It does not have a parallel in the Recuay iconography. Although the kaolinite paste, shape of divergent walls, and ring base are manifestations of the Recuay style, bats are not commonly represented. Pottery of bats as mythical beings happen recurrently in the Moche Culture, portraying the role of sacrificers in funerary rituals (Benson 1987). The appearance of this vessel form in the Cordillera Negra is an argument for the interaction with Moche coastal populations.

Whole kaolin vessels from Marca Jirka are mostly fine wares composed of fine-grained clays that probably did not required inclusions because they were present in the clay. The hierarchy of the Recuay people usually is represented in their sculpted ceramic wares. Females are represented twice in Marca Jirka, as part of whole vessels that could not be found. Female attendant effigy

found in the floor of principal chamber appears frequently in Recuay sculpted vessels, in which the central figure is a chiefly male surrounded by females (Gero 2001: Figure 10; Lau 2011: Figure 46). The other female recovered in the fill of square stone structure has different attributes. The head is represented frontally and wears a low head covering (Appendix B Figure 64). Accompanying the effigy head were parts of a globular vessel decorated in black checkerboard pattern, representing a kind of women apparel (Lau 2011: Figure 52). Normally the shape of the vessel is a bridge bottle, slip and resist painted. It is a recurrent image that suggests the role of certain women in Recuay society. Sometimes they are depicted paired with important males.

From the same square stone structure where this vessel was found (64311), comes a deer effigy vessel with lateral bridge bottle. The item was discovered in perfect conditions. It presents resist technique decoration and painted with orange bands. A stepped design and horizontal s-scroll are repeated in frames around vessel (Appendix B Figure 64). These geometric designs appear regularly in Recuay iconography having regional distribution along the department of Ancash. For instance is shown in Jancu's jars from Huaraz (Wegner 1988); Tello's (2009:fig.13.25) *Puto* form from Carhuaz; pedestal cups from Pashash Cabana (Grieder 1978); and Late Suchimancillo bowls from Lower Casma (Wilson 1988:Fig.212).

Cups and bowls with ring bases are the most popular kaolinite ware of Marca Jirka (59%). The find at square stone structure 5/ 64309 presented bowls stacked in a group of six. They portray the same frontal face image probably trophy heads (Appendix B Figure 63, 64309 1-5). Each one illustrates a slight different facial expression, which might be some kind of metaphor that need further investigation. Another important find is the two-headed snake that shows a mix of painting

and modeling (Figure 66, 64310-2 Appendix B). Snakes are standardized in Recuay iconography. Cups and pedestal bowls not only occurs in kaolinite paste but also in polished blackware. Item 64302-3 (Figure 56 Appendix B) shows diagonal incised lines and post fire scratched vertical panels. Bennett (1944:35) suggested to them Chavin affiliations, however the finding of similar pottery in the village of Marian, and in Marca Jirka reiterates the local provenience of the Recuay style.

Orangeware

Nonkaolinite wares from the Pierina area follows Recuay known shapes, in a kind of imitations of the style that is more profuse at the other side of the Santa River. For instance, conical and tubular handles cups show some rusticity, as does the non-slip orangeware goblet showing a coffee grain figurative face (Appendix B Figure 13). A dipper handle cup includes a male modeled face, delineated in cream, which has some correlation with examples from the occidental valleys of Santa and Carhuamarca denominated Santa culture by Gambini (1984). The couple of hemispheric bowls found in subterranean chamber of Quitapampa C (PAn 5-50) resemble Recuay pottery style from Marca Jirka (Appendix B compare Figure 27 5005, 5014-2 to Figure 56 64302-1/2). In a desire to imitate kaolin paste, probably not available anymore in the Cordillera Negra (Lau 2010b), Recuay potters dipped cups in a cream wash, over which was painted in red triangles and meanders (Appendix B Figures 16 3522-83, Figure 49, 4301-4). Ceramic shapes associated to Recuay style are rapidly described below.

Neckless ollas; only rim fragments have been found. Exists with more intensity in Horno Jirca. Utilitarian use, in one occasion showed lineal incised decoration. Related to the early stage of the Cotojirca III phase, (~400-500 CE) and associated to kaolinite vessels. Have not been found in

Marca Jirka. Diameters vary from 12 to 22 cm, and most of the time present an exterior red slip.

Miniatures; develop through different periods. However during Recuay style appear as imitations of *pacchas* vessels (N=2 conical handle and spout). A female pendant figurine resemble Recuay iconographical associations (Appendix B Figure 31 E).

Moche interaction; two items with clear Moche affiliation were found in the burial chambers of Amá PAn 5-34 and Quitapampa B PAn 5-42. Both are showing the representation of Aia Pec or Wrinkle Face, a coastal deity related to burial themes, and mythical combat (Castillo 2001:320). It is also associated with maize (Wilson 1988:452). Narratives of this deity continue until the Phase V (600-700 CE), which marks the end of the Moche society. These finds have some implicancies in the Recuay – Moche interaction (Appendix B Figures 4, 23).

Cotojirca Phase IV (700 – 900 CE)

The manufacture of kaolinite wares reduces considerably and eventually disappears in the Callejón de Huaylas. Forms from residential sites located in the Pierina mine that belongs to this period, (for example, Ancosh Punta) become visible on burial chambers. Plastic decoration intensifies, and new vessel shapes emerge. Relationship with coastal groups continues or becomes more evident. The tomb Cochapampa PAn 5-43 are well represented in this period. A succinct list of new forms continues.

Open Bowls and Plates; appear consistently in the burial chamber of Cochapampa. Orange paste surfaces have red painted decoration of meandering lines, and semicircles in the interior of vessels. Diameter vary from 12 to 25 cm. It is also shown in the Amá II D PAn 5-49 burial chamber (Appendix B Figure 34, I). Similar plates have been found in residential sites of Ancosh Punta, Llaca Amá Caca located in the area of grasslands in the Pierina mine, above 4, 000 m.a.s.l. related to pastoral activities.

Miniatures; orangeware globular jars non-decorated become evident in Cochapampa grave goods. They probably had some specific functions since most of burials were children. An anthropomorph figurine represents a male personage (Appendix B Figure 49, 4304-3). Eyes, mouth, and nose are delineated by incisions.

Tripod; small tripod cups with interior painted decoration, mostly vertical black lines. Not very deep, pods are conical, mouth diameter fluctuates between 7 and 9 cm (Appendix B Figure 49, 4307, 4310).

Bowls; slightly beveling rim, exterior red slip. Lau (2010b: Figure 58, J) presents an identical example in Chinchawasi 2 ware C.

Jars; small jar with upright handle is a new form for this phase, it does not have Recuay antecedents (Appendix B Figure 49, 4311). However, cream slip jar with square concentric decoration is reminiscent of the Recuay style that continues in the Cotojirca IV phase.

Blackware animal effigy; a fancy imported polished blackware from coastal valleys (Figure 49, 4306 Appendix B). Similar material has been recovered Bennett (1944: 25) from deep stone lined tombs in the area of Willcawain. Wilson (1988: Figure 247) presents animal effigies in the Early Tanguche Period (650 – 800 CE) from the Lower Santa Valley.

Cotojirca V Phase (1,000 – 1,470 CE)

The collection of artifacts from this phase is determined by post-Recuay reoccupations of the burial chambers. Probably whole vessels were deposited in a context of ancestor cults. These acts were performed in certain chambers associated with entombing events that covered the chamber. The artifacts are mostly utilitarian wares with thick walls, lack of slip, and become more rustic. When decoration occurs it uses plastic additions, in the form of protuberances, incised lines, stamped

circles, appliques, and zig zags around neck of jars. This type of ceramics has been found in Amá II D, Quitapampa C, and in Marca Jirka. A short list of the typical ware from this period is below. *Cántaros*; these are big globular utilitarian jars associated to an intentional fill event that covered burial chambers. Occurs more consistently in Marca Jirka, (N=9), although has been documented once in the Pierina area at chamber Amá II D (N=3). Mouth diameter varies from 23 to 37 cm, height fluctuates from 24 to 38 cm and weight between 1 to 5 kilograms. Most likely these vessels correspond to post-Recuay tomb intrusions or visitations in a context of ritual to ancestor veneration. Cotojirca V phase groups have occupied the residential areas of Marca Jirka at the top of the hill. Lau (2010b) have recorded the same type of vessels at ground surface without associated architecture in the Chinchawas site during the Chakwas phase (1,000 to 1,400 CE).

Jars with Applique; of ovoid shape, presents plastic stamped decoration and protuberance adornments on neck. Mouth diameters varies from 5 to 6 cm (Figure 28 Appendix B).

Miniatures; have the same function and are symbolically mimicking *cántaros*. Rowe (2011:32) proposes miniatures as substitutes of categories of vessel shapes. Three miniatures found in the fill of the chamber in Marca Jirka are very small (3 cm height), and seems that were made quickly without much care or detail. On the other hand, the jar miniature placed in Amá II D chamber is an exact replica of regular size jars. It could be a toy.

Divergent bowl with ring base; this vessel shape have been found twice, at Quitapampa C and Amá II D. Both show some asymmetrical pattern (Figure 29 C Appendix B).

Globular bowl; of rough finishing and irregular surfaces. Not tall. Diameter of body is larger than mouth. Only found at Amá II D.

Metals

Metal copper artefacts have been found in most of the mortuary chambers. The total number (N=24) is an approximation, given the conditions of preservation. As I have mentioned before that the high pH in soils of the mountains do not favor conservation. Evidence of pulverized metal objects have been noticed several times in burial chambers, the excavation has yielded fragmented pieces, and in the important chamber of Marca Jirka, besides a crown pin, only gold laminates were found. Metals can be segregated on three ample categories: *tupu* pins, spatulas, and discs. The most popular item is the *tupu* pin, a tool in the shape of needle or nail that served to fasten shawls and garments. It is an ornament for clothing basically used by women (Gero 2001:23). In our sample the majority of the *tupu* pins have a nail head, followed by conical head, and two examples of flat-disc head. Pins normally show a needle-like hole near the head (Figure 50, 4313 Appendix B). These pins have been found in proximity to the skeleton, which may suggests that the individual was wearing clothes attached by pins at the time of interment. The other interesting shape is the spatula found in the chamber D of Amá PAn 5-34. In both finds the tool was bent before they were buried. From the same chamber, one T-shaped pin was also found folded twice. The silver disc found in Amá II B PAn 5-49 has a punched hole, probably was attached to somekind of garment.

At the site of Marca Jirka finds of metal objects have secure archaeological context. These were undisturbed, assuring the original position of the artefact. Square stone structures and stone boxes present this feature. Likewise artifacts (N=8) differs from the Pierina region in quality. Nail pins surpassed in size and weight to the Pierina ones (Figure 4.12). In the structure 64309 nails were found in diagonal position below two discs. These findings are associated with pulverized human

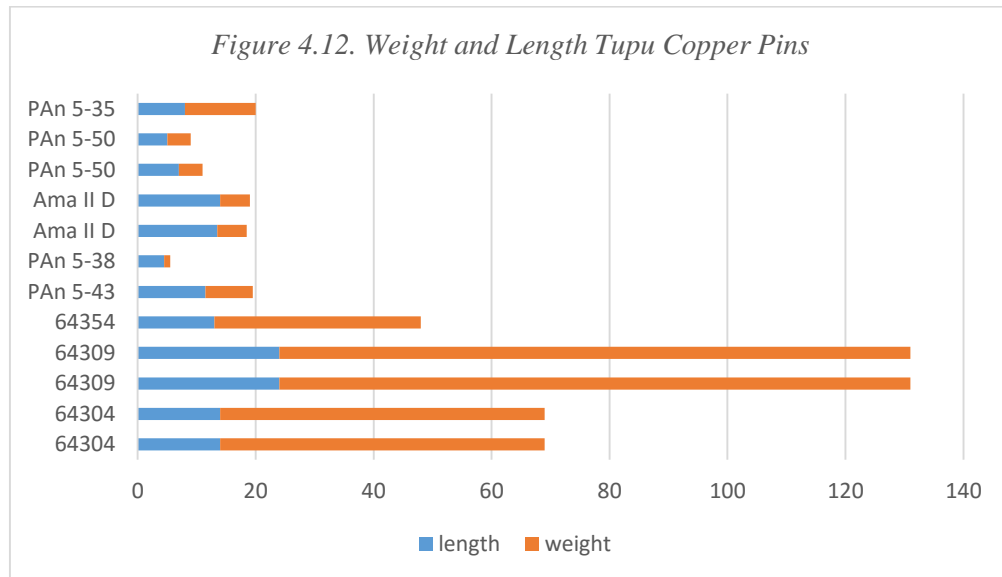
bones and teeth. Discs have 12 cm of diameter, and were used as headdress or chest ornament probably sewn to an indumentary clothing. On the floor of principal chamber was found a crown pin, which had few traces of corrosion. It has a shiny gold coating aspect. The metal object is spectacular due to its metalworking. On the top of the head was cast a feline in frontal view. A diminutive adornment of less than 1 cm. At the sides of the crown head were cast a feline in profile repeated in panels (Figure 58, Appendix B). Identical crown pins were found numerous times (15+) at Pashash, a luxury Recuay tomb. They were made in lost wax casting technique (Grieder 1978:124). The metal objects are usually composed of a ternary alloyed of copper-silver-gold, known by the name of “tumbaga” in South America. By sophisticated alloying and gilding techniques, indigenous metalsmiths altered ternary copper-silver-gold alloy to give the appearance of gold or silver surface with minimal quantities (Cooke, Abbott, and Wolfe 2008). Precisely very thin gold laminates have been recovered from the mortuary structures of Marca Jirka. This might indicate that the artifact made mostly of copper did not survive but the exterior surface did.

To examine the chemical composition of metal artifacts, a minimum sample were submitted to the metallurgy laboratory at the Pierina mine. The sample of metals from the Pierina region has shown very low content of gold, silver, and iron. Copper has very high composition. The sample from Marca Jirka (disc 64309-7) showed 80% copper composition, similar to Pierina, but the amount of gold were four times more from the sample of Pierina (see Table 4.9).

Table 4.9. Percentages chemical composition from metal objects at Pierina sites Atomic Absorption. Test Chemical Elements⁸

Sample	Cu %	Fe %	Ag %	Au%	Zn %
49I41	67.175	0.335	0.276	0.098	0.266
3420-1	68.781	0.030	0.264	<0.03	Non-analyzed
3420-2	80.981	0.059	0.098	<0.03	Non-analyzed
49IV19	76.409	0.010	0.108	0.098	Non-analyzed
49II30	93.189	0.197	0.030	<0.03	0.463
49I76	85.434	0.394	0.030	<0.03	0.098
64309-7	81.149	Non-analyzed	0.440	4.426	Non-analyzed

We can argue that groups from the Pierina region were mining different copper ores, than the ones from the Cordillera Blanca. Probably they did not reach golden surfaces given the low gold percentages. On the contrary metalsmiths from the Cordillera Blanca accomplished the golden appearance of precious objects.



⁸ Source: Metallurgy Laboratory Minera Barrick Misquichilca S.A.

5. Discussion: Recuay Burial Patterns

Data obtained from burials on both sides of the Santa River concur with the notion that complexity in mortuary ritual is directly related to the social status achieved by the deceased person when still alive (Binford 1971). If we define ritual as a sequence established by orderly activities (Bell 1992), then we should be able to reconstruct Recuay mortuary events or rituals based on the archaeological data available. Similar Recuay burial practices exist for both areas under study. There are some common ritualized acts, but also shared patterns immersed in the culture and tradition of Recuay groups living in mountain environments during last part of the Early Intermediate Period (500 – 700 CE). Sites from the Pierina region (Cordillera Negra) and the Marca Jirka site (Cordillera Blanca) share general features, however, sharp differences are also present. Common similarities between these two groups concern with the relationship of burial and settlements.

These patterns are summarized below.

Similarities between Cordillera Negra and Cordillera Blanca sites

- *Recuay burials are located in proximity to the residential site*; considering the Recuay settlement of a hilltop site, burials are located at certain distance (a range between 250 to 700 m) from the living place, on low-lying ridges and side slopes. Examples includes Marca Jirka, Pierina, Chinchawas site (Lau 2010b), the fortified site of Wiñaq Punta (PAN 5-16) ((Ponte 1999:42)), and the mortuary sector C at Hualcayán (Grávalos 2014).
- *Multiple burials are organized in a cemetery-like space*; burials organized in clusters occur in both areas. Pierina's burials are dispersed in orbital pattern around the residential site (Marenayoc). However at Marca Jirka the distribution of tombs follows certain cardinal orientation that may represent a preconceived plan.

- *Ancient trails are linked to Recuay burial structures*; in Marca Jirka lines of standing stones mark a path that goes around the foot of the hill of the same name. Buried tombs are located at both sides of the trail. In the Cordillera Negra, there was a trail that connected hilltop sites near floor of the Santa Valley (3,000 m.a.s.l) to high altitude grassland (4,000 m.a.s.l.) corrals. At the intermediate Quechua ecotone (3,500 m.a.s.l) the ancient trail leads west across areas of high ridges where a concentration of boulders and burial chambers are situated. It seems that roads constituted one form of social linkage between the living people and the dead. Mortuary chambers formed part of the natural landscape, in which descendants continued identified with their ancestors.
- *The tradition of underground stone burial chambers are present in both areas*; Pierina's tombs are semi-subterranean, while in Marca Jirka the norm is subterranean mortuary architecture.
- *There are some similarities in ceramic shapes*; hemispheric bowls, *pacchas*, pedestal cups, miniatures, and utilization of kaolinite pastes. However, as I have shown in the previous chapter, differences in quality of pottery are also marked.
- *Some burial chambers were filled with a mix of dirt and offerings by post-Recuay societies*; repeated ritual use after the initial burial is associated with filling of the chambers and the inclusion of certain objects in the fill. This occurred more frequently at Marca Jirka, although the chamber Amá II D also exemplifies this behavior. Big jars or cántaros and miniatures were regularly deposited in the fill and covered with dirt. These ritual acts were performed by post-Recuay societies, as witnessed by the inclusion of post-Recuay types of artifacts. These may have been motivated by lineage descendant families claiming control over tombs and therefore land rights in a context of ancestor veneration (Lau 2002). The

event probably involved the ingestion of chicha (fermented maize beer) given the large size of these pots (Jennings and Bowsver 2008).

- *Empty structures*; this pattern was observed in several chambers and stone boxes. If two or more structures were adjacent, one of them was empty and clean. Perhaps the empty space served a specific function, such as a place to store or leave organic offerings, such as food. Bennett (1944) also excavated several empty structures in the region of Willcawain.

Differences between Cordillera Negra and Cordillera Blanca sites:

- *Architecture*; there is a contrast between carefully constructed subterranean square structures and stone boxes on the one hand, such as those at Marca Jirka (Cordillera Blanca) and oval or polygonal semi-subterranean tombs on the other, such as those at Pierina (Cordillera Negra). Both architectural construction and artifactual contents are evidence of social differentiation. At Marca Jirka the chambers had a square plan; the stone blocks forming the walls were hewn and smooth and the ceiling was formed of slabs and covered by boulders (a double roof). A series of stone boxes accompanied the principal chambers. The mortuary construction followed a linear pattern oriented to the north. In contrast, the Pierina burial chambers had an oval or polygonal plan, the stone masonry of the chambers utilized “huanca-pachilla” technique, and no stone boxes were found. The Marca Jirka tombs resemble those known from other elite Recuay sites. One of the richest such tombs excavated by modern scientific methods is from the site of Pashash (Grieder 1978:45-46). It exhibited similar structure; it measured 0.6 x 0.55 m and 0.90 m high, which matches the dimensions of other square structures (see Table 8.2). Stone boxes are included in Tello’s

(2009:291-2) tomb type descriptions, and I have explained Bennett's (1944) classification of stone box graves in Chapter 4.

- *Grave Goods*; ceramic and metal artifacts associated with the tombs show differential access to elite quality goods. Higher quality and greater quantities of kaolinite pottery were found. Ceramic style differs. At Marca Jirka ceramic vessels show sculpting and iconography associated with high status. At Pierina the kaolinite ceramics imitate classic Recuay shapes but use local clay sources, and there is an absence of resist technique in decorations. Metal objects follow the same pattern. Ternary alloy technique is represented firmly in the Marca Jirka site (see Table 4.9). The amount of gold expressed in the sample from Pierina is minimal, and there is no clear evidence of gilding or casting of metal.
- *Associated rituals*; the excavation of undisturbed square stone tombs and boxes at Marca Jirka provides additional insights into aspects of mortuary ritual. Of special interest is the treatment of body parts rather than whole bodies, the age and sex of the individuals, and the occurrence of certain types of artifacts, especially tupu pins and pedestal cups. Body parts were dominated by mandibles and teeth for both children and adults. In three different structures tupu copper pins were set in pairs diagonally and human mandibles were placed between them. Tupu pins are associated with women, holding clothing in place (Gero 2001:24; Letchman 2005). At Marca Jirka traces of yarn were observed around the tupu, confirming their function, and an associated organic stain might represent decayed fabric. The association of mandibles and tupu is patterned, but its meaning is unclear. At Pashash, Grieder (1978:45-48) reports a similar pattern of body parts limited to mandibles and teeth. Ceramic iconography, including two ceramic representations of women, raises the possibility that Marca Jirka was a burial center for women of high status. Ethnographic

accounts of the role of women in production and Gero's (2001) interpretations of female representation in Recuay iconography, suggest that females held certain types of authority and social status. The structure 64309 shows another aspect of ritual, this one involving pedestal cups, copper tupus and discs, and selected body part representation. Again, the body part is limited to heads, now disintegrated, or teeth. Three adult teeth were associated with red ochre staining. Five pedestal cups have representations of heads, perhaps trophy heads, and each has a slightly different facial expression. Associated metal artifacts were placed in pairs, two copper discs and two copper tupus. The discs might represent the headdress adornment referred to as "double circle headgear" that is typically associated with the llama man of Recuay iconography (Gero 2011: Fig.19).

- *Demographic Structure*; skeletons of individuals identified in the burial chambers at Pierina were disarticulated and incomplete. In few cases articulated limbs bones suggested the flexed position. In those cases where sex and age could be determined, the group resembles a family, with multiple adult males and females and children. An example of this would be a group with four adult males, three adult females, and two or three children. In general there is no osteological evidence of violence of the kind associated with sacrifice. There is, however, one case of an adult male with a double fracture in the parietal and frontal bone of the skull, interpreted as a combat wound. There was evidence of surgical trepanation, suggesting the individual was treated after receiving the wound.

At Marca Jirka the burial population consisted mostly of children (N=6). Two children presented artificial cranial deformation. Their skeletons were incomplete and were found in flexed or seated position, without offerings in a square tomb. These might be

sacrifices, but there are no indicators of this on the bones. Stone structures contained parts of mandible and teeth mostly children, also a few teeth from adults.

- *Cochapampa woman*; this was a unique set of human remains from Pierina consisting of a single adult female and the remains of an estimated 59 children. The woman was buried in the antechamber. Her skeleton was articulated in extended position. Her head was never found. She may have been buried headless or her head may have been removed for burial elsewhere. Her spine exhibited kyphosis, a type of osteological degeneration that may have made walking difficult or painful and would have given her a hunchbacked appearance. There are special Andean beliefs associated with hunchbacks. The extended position of the burial is not typical of Recuay, although it is consistent with Moche burial traditions. The associated sculpted blackware ceramic offerings are also associated with Moche V or early Chimu styles (Bennett 1944).
- *Moche Interaction*; the Pierina tombs show a stronger connection to the contemporaneous Moche society located along the Pacific coast. This is seen both in artifacts and in burial treatment, suggesting that the connection had ideological as well as material aspects. There were representations of the Moche god Ai-paec or “wrinkle face” in the burial chambers of Amá PAn 5-34 and Quitapampa B PAn 5-42. There is a bat motif on a sculpted vessel from PAn 5-35 that also suggests Moche influence. As noted above, the Cochapampa tomb showed Moche influence in both blackware ceramics and the extended position of the burial. No evidence of interaction with Moche are shown in the Recuay population at Marca Jirka site (Cordillera Blanca).

In summary, how do these patterns of similarity and difference come together to give us a better sense of regional mortuary patterns among the Recuay?

In combination, the quality of architecture, the quantity and quality of grave goods, and the artificial cranial deformation of children all suggest that the Recuay population at Marca Jirka occupied higher social status than did the population of the hinterland community at Pierina and that Marca Jirka was more strongly connected to the traditions known for other chiefly sites on the Cordillera Blanca side of the Santa River. The Pierina Recuay population, on the other hand, gives us a unique opportunity to examine how a hinterland community might be connected to the more chiefly Recuay communities. This is the first careful documentation of mortuary traditions in the Recuay hinterlands. It suggests that lower labor investment in tombs but shared patterns of reaching into the ground and locating in an orbit from the residential site and linked to pathways, lower quantity and quality of grave goods but an interesting mix of imitation of high status Recuay artifacts and Moche-style artifacts, iconic themes, and burial positions, one very distinctive tomb devoted to a single adult female and a large number of children all of them are indicators of social inequality between both populations. Mortuary customs and rituals are different but their subsistence pattern based on communal agriculture and pastoralism should be equal. However populations of the Cordillera Blanca have the advantage of permanent water available due to glacial discharges. “Abundant maize fields and camelid herds all over” were the impressions of first Spaniards troops in the Callejón de Huaylas. At the same time, mountain snow peaks were the place of the *apus* or local gods. It was a symbolic privileged relationships that Recuay groups with social status maintained staying close to the gods. These chiefly groups participated in exchange networks along the Ancash department, and manufactured extraordinary stone

sculptures, ceramic kaolinite vessels, and metalworks that seem to have been status indicators. “There is a definitive correlation between wealth, status, and metal in the tomb” (Olsen Bruhns 1996:183-4).

It is important, when making regional comparisons, to be able to hold chronology constant. The Recuay burial structures analyzed in this study are essentially contemporaneous, dating to the terminal part of the local Cotojirca III phase and the beginning of the Cotojirca IV/Ancosh, a span of time between CE 450 to 800, approximately. Post-burial reuse of the tombs contain material from the Cotojirca V phase, inclusive (CE 1000 to 1470). The local sequence overlaps with Lau's cultural chronology for the Chinchawas site (Lau 2004a), located on the western flanks of the Cordillera Negra. Ceramic material from Chinchawas parallels the styles and phases of the Pierina region, especially the Kayan, Chinchawas I and II phases (CE 500 to 900). Ceramic styles from Marca Jirka correspond more with the middle and late part of the Early Intermediate Period, in other words exclusively Cotojirca III.

6. Conclusions

Nine semisubterranean burial sites from the region of Pierina mine (Cordillera Negra) have shed some light in the mortuary practices of a hinterland community. Basic information was obtained; relative chronology, cultural association, number of individuals interred, and use of the tomb by kin-based groups over time. It is clear the importance of the burial chamber had in the collective memory. Rituals were repeated by many generations, from the time the chamber was built, to the reutilization by later societies of the Late Intermediate Period (1,000 – 1,470 CE). The artefacts recovered from the tombs were often dominated by those representing most recent use. Their offerings indicate a mundane concept of the afterlife. Some tombs had food (maize), drinking vessels, bowls, and plates, like domestic houses. Bodies left and re-entered the chamber. This kinship society had socioeconomic independency with farming and herding as a primary means of subsistence. Probably of lower status, it appears that this community remained relatively isolated. Connections to the Recuay chiefly networks which appear concentrated along the Cordillera Blanca seem weak and imitative, with inferior quality metals, local ceramic clay sources, and fewer fine kaolinite wares. On the other hand, connections with Moche culture on the coast appears to have had some importance.

On the other side, in the Cordillera Blanca, a sample of eleven mortuary structures from the Marca Jirka site located at the foot of the Cordillera Blanca gives a different view of the Recuay society. Burial customs and luxury items indicate social complexity. In spite of the undisturbed character of certain stone boxes, the preservation of bone and objects was very poor due to acid soils. Even with this impediment, the distribution of consecutive tombs, quality goods and elaborated stonemasonry confirmed the wealth and status of the individuals interred. Apart from this, it

appears that elaborated funeral rituals were repeatedly performed in stone boxes with the arrangement of body parts (jawbones) in conjunction with copper pins as offerings. There is no evidence of re-visitation in these stone boxes. The entombment in stone boxes corresponds to a single synchronic event. However, larger structures have shown evidence of re-intrusion. Given the small dimensions of the structures, it seems that the funeral rites were restricted for few number of attendees. Local elites of Marca Jirka developed mortuary practices that were restricted to ranked societies. Similar styles of stone boxes are only found in rich burials, as at Pashash (Grieder 1978).

The results of the research indicate the deep relationship between the living and the dead in Recuay groups. The symbolic feature of the burial chamber is believed to be related with the conception of seed germination and its growth. The tomb built below ground formed a dark space with interments placed in fetal position, interpreted as seed that will grow, like a plant. By entering to this dark space, “the visitor vitalizes the ancestor”, in an agricultural connotation (Lau 2011: 114).

Social inequality characterized the Recuay society. Funerary structures shared architectural elements and manufacture techniques, but differences in sociopolitical organization and access to resources generated diversity of kin group communities, which maintained their identity, isolation, land tradition, warfare, and spatial geography.

The study of a hinterland community have added new directions in the Recuay mortuary traditions, more survey in the mountains of the Cordillera Negra and Blanca would confirm different approaches of the Recuay society, since a regional perspective.

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**APPENDIX A: Description of the Recuay Settlements in the Pierina
Mine Area**

1. Mound and stepped platforms

The truncated platform mound is elevated, filled with debris, loose dirt, and construction material to create in the top a public floor, mostly for ceremonial function. It is associated with stepped open terraces, in where the population sporadically held communal activities. Its origins can be traced in coastal traditions since the archaic period. A funerary area is associated with the platform mound, normally in upper and/or lower slopes. The modern village of Marenayoc stands over the mound and stepped platforms of an ancient population. The installation of modern houses have disturbed the mound and have put in evidence a profile, which show several layers of Pre-Hispanic occupation. The importance of the site is suggested by its multi-component character; with cultural material from different periods, Early Horizon to Late Horizon (Ponte 2009). Marenayoc was probably a center place for the Recuay population. Recuay funerary structures surround the center in a dispersed pattern.

Another site of the same characteristics is Shucsha Punta (PAn 5-24) located above the modern town of Paltay (Figure 1.2). In this case four terraces follow the contour of the slope, at the top is the central mound built over a small hill. The northern side of the mound presents a talus, in which it was possible to observe a sequence of floors filled with stones. Recuay kaolinite bowl's shards with brown wavy lines were observed in the ground.

In the northern crest line of the *quebrada* Cuncashca stands Quenapun Punta (PAn 5-17), an artificial platform mound built on the top of a hill. In this case, it has a retention wall that supports a platform. A succession of terraces may be habitation areas, although they have been altered by modern agriculture. An engraved monolith was found in the open terraces and resembles the Early

Horizon lithic art style from Chupacoto, Huaylas (Burger 1992:fig.60). Some ceramic shards are clearly Huarás white on red style.

2. Small hilltop villages

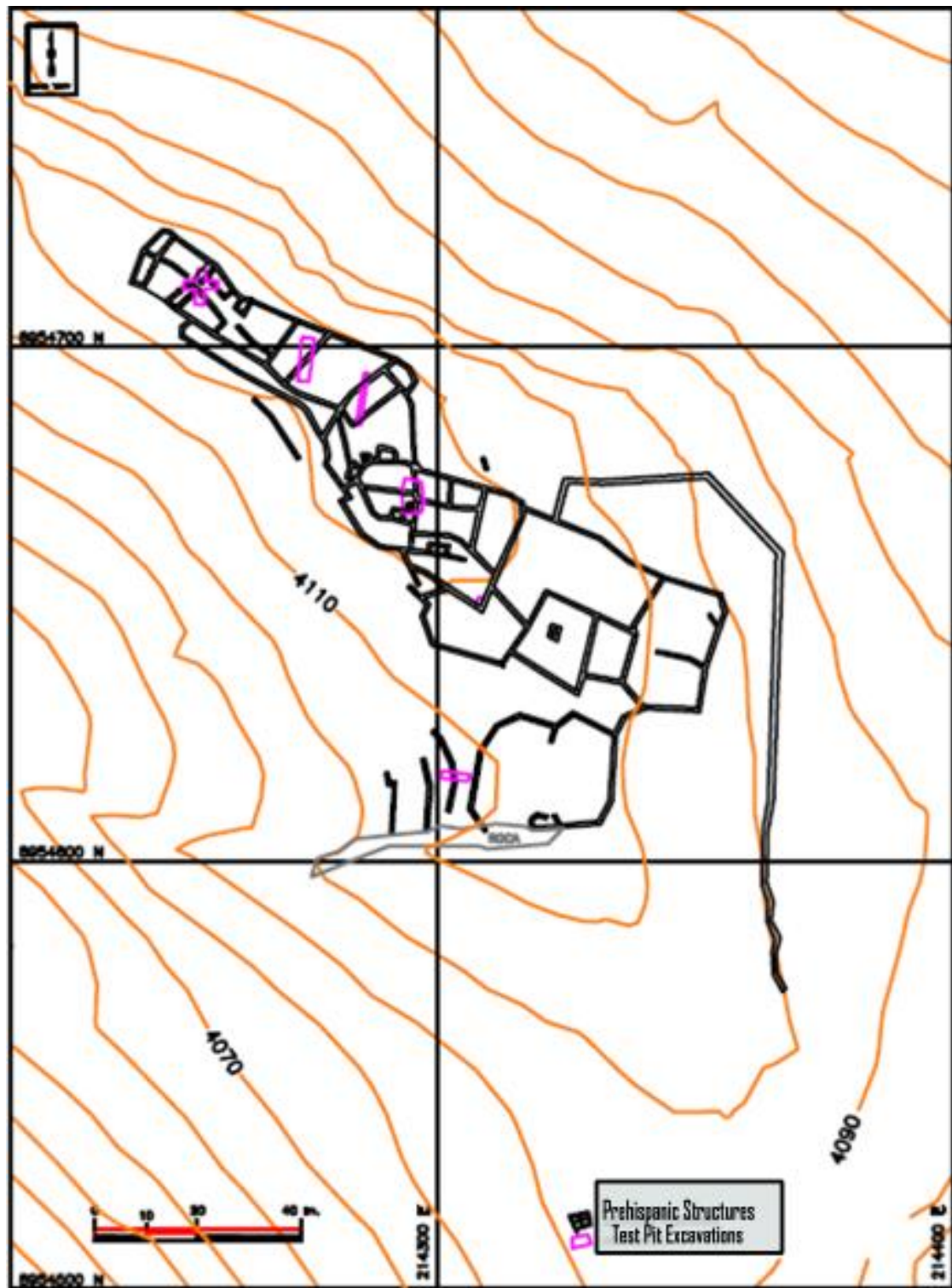
Small hilltop villages are formed by two elevated platforms and an intermediate courtyard. Platforms delineated rectangular rooms and separated precincts. The artificial platform is slightly elevated and utilizes outcrop to gain elevation. In some of these villages, grinding stones were observed. The courtyard contains bigger size rooms, suitable for the congregation of groups of people. Recuay sites like Marcum, near Huaraz, Queyash Alto in the Marcará River, (Gero 1991), Riway in Chacas, and Hualcayán in Caraz display this planning. The site of Maquellouan Punta (PAn 5-4) located in the Pierina Mine, characterizes this type of settlement, its architectural components, and discussion will be detailed below.

3. Maquellouan Punta

At the southern edge of the Quebrada Cuncasha, a limestone formation rises from the bottom of the *quebrada* at 200-meters on this small valley (Figure 1). Maquellouan Punta was built along the eastern slope and top of this limestone rock formation at 4,118 m.a.s.l. Its location, with a good view of the Callejón de Huaylas, could have been a factor in choosing this place for settlement. Maquellouan was connected to the Santa Valley floor by an ancient path. The people lived on terraces, and the summit was occasionally used for special activities. The site plan shows an artificial platform with complex architecture, a central plaza with a rectangular room, and a northern platform elevated by a rock outcrop that supports a residential sector. Retention walls were used at this site because of its very steep cliff, especially on its northern and southern sides.

The site has a multicomponent occupation. A late Early Horizon (400 - 150 BCE), a local Cotojirca phase I is when the site was built. An Early Intermediate Period (Recuay, Cotojirca III phase 200 – 700 CE) and Late Intermediate Period occupation (Cotojirca V phase, CE 1,275 – 1,395) reoccupied the site, ceramic from these phases are found scattered on the surface. The architecture from later periods are less elaborated, the houses are rounded and contrast with the fine masonry of the ancient settlement. The artificial platform is composed of three agglutinated rooms separated by a thick wall that bisects the platform. A 3x3 m test excavation placed perpendicular to the thick wall revealed two construction phases at Maquellouan. Superposed walls indicate at least two Early Horizon architectural episodes. The excavation in one of the rooms uncovered cooking pots, neckless ollas, and charcoal fragments. Burnt camelid and deer bone fragments were distributed in a dark stain soil over the calcite bedrock. The foundation of the platform consisted of a loose refuse fill and large cut stones. Among this fill and near the limestone bedrock, a probably ritual deposit of 13 young camelids was identified. They died from natural causes due to non-violence and non-cut marks observed in the bones (Rofes 1999:155). From this context, the faunal-archaeologist could identified llama (*Lama glama*) because of the incisive teeth and possible metapods of alpacas (*Lama pacos*). Whether young camelids were raised at the site, or were brought for sacrifices in a kind of foundation ritual remains unclear.

Figure 1. Site plan of Maquellouan Punta (PAn 5-4), from Ponte (2009).



The northern platform showed a clear distribution of four rooms in a rectangular plan divided by a passageway; however the frequency of artifacts was really low, and belonged to later periods. One can hypothesize that these relatively empty spaces were dormitories. The lower area of the site consisted of five successive terraces that yielded low proportion of bone weight (five percent camelid and twelve percent deer). Two spoon fragments and domestic cooking ollas were also found in these habitation terraces.

**Popularidad de Especies en Maquellouan Punta
PAN5-4 (Peso en gramos)**

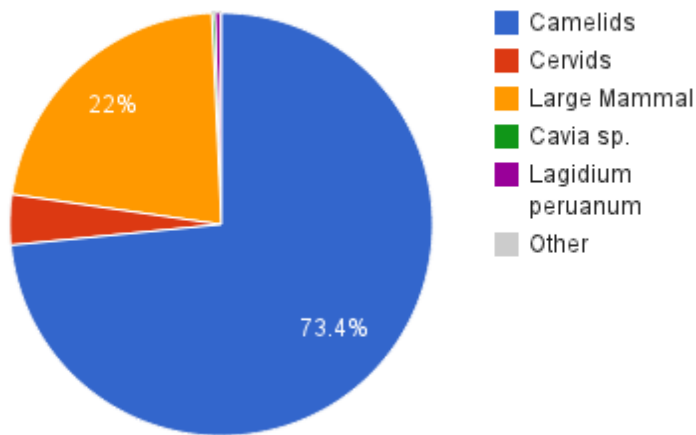


Figure 2. Species popularity in Maquellouan Punta (PAN 5-4).

The rectangular room inserted in the plaza measures approximately 11 x 5.2 meters. It was oriented northeast-southwest and yielded information about ceremonial practices. A 10 x 1 m sampling trench crossing this room yielded a large number of late Early Horizon (Cotojirca I) ceramics as well as deer and camelid bones. Seven rim fragments of globular neckless ollas with stamped circular designs, one neckless olla with a spout, and four carinated bowls were among the diagnostic ceramic shapes found in the rectangular room. All of these ceramic shapes are functionally related to drinking and pouring liquids. Sixty seven percent of the faunal tools

recovered in the Pierina mine area were found in Maquellouan. Although the consumption of camelid meat and deer at the rectangular room make up less than one-fourth of the total of faunal remains at the site, thirty-two percent of total fauna tool artifacts from Maquellouan came from the rectangular structure. The most common tools were made of camelid bones and *taruka* deer (*Odocoileus virginianus*) antlers and modified bones used as engravers for soft pressure lithic flaking. Among others tools observed are spatulas, punchers, piercers. These artifacts formed part of the lithic tool-kit. However, minimal indication of flaking activity was observed in the structure (Grimaldo 1999:216).

A silver round disk was found in the second patio structure next to the northern platform. This item of personal adornment, possible for women, as well as two incised deer or camelid bone fragments, tells us something about the social organization of the people who lived at the Maquellouan site. The bones were burnt and polished. They formed part of a tubular artifact, which could be a musical instrument, possibly a kind of flute. The incisions and two dots form a small simplified face. Wind musical instruments were frequently used in feasts (Gero 1990) and also in special ceremonies, such as *waytakuy* (Flannery 1989:143-182) in which llamas are decorated and offered to the *wamani* or local mountain god to increase and protect llama reproduction. The people who lived in Maquellouan had access to grasslands and pampas located in the Pierina mine. Many abandoned corrals exist in this area. Without doubt, potatoes, llama meat and *chicha* or corn beer were consumed in the rectangular structure of the central patio, perhaps a ritual meal to reiterate the reciprocity in pastoral activities between family members and co-residents of the community of Maquellouan Punta.

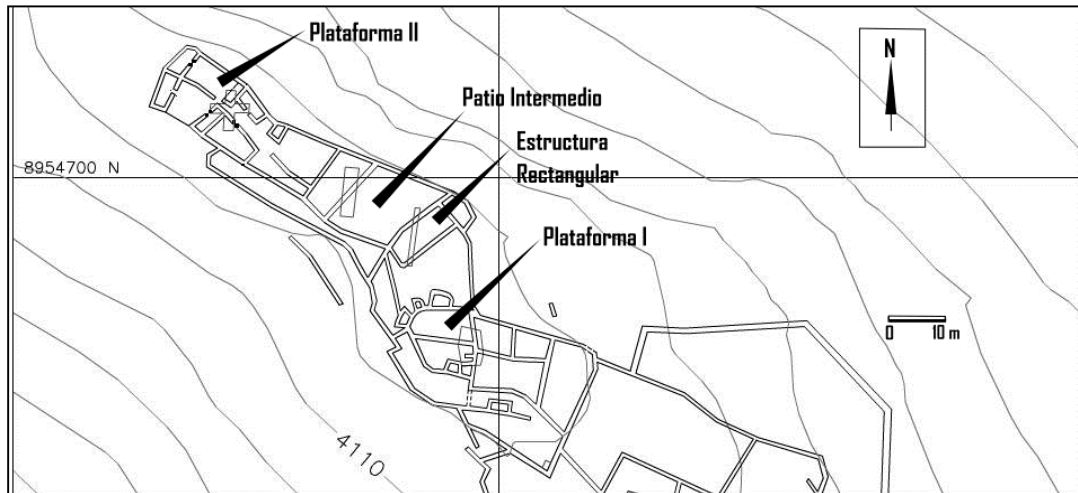


Figure 3. Distribution of architecture areas in the village of Maquellouan Punta

From the central plaza it is possible to have complete domain of the snowy peaks of the Cordillera Blanca stretching along the horizon and the interandine Valley of Santa River below. This sole factor played an important role in the separation of activities and people from the other sectors of Maquellouan Punta. Also from the plaza and northern platform it is possible to see several mountaintop settlements many kilometers in the distance. This is a pastoral settlement practice to stay "within sight" of a neighbor house (Flores Ochoa 1979:46). What we do not know whether the relations with other villages were pacific or hostile.

The reduced space of the plaza (27 x 15 meters) and its rectangular room (Figure 3) inserted probably was reserved for status people who conducted rituals and festivities. Camelids were part of the ceremonials, and one of them could be the initiation rites of young llamas (Murra 2002:315). Festivities with musical instruments, drinking *chicha* corn beer, and consumption of llama meat are recounted by Gero (1992:134) from the nearby site of Queyash Alto. While the attitude at this site is of serving food for elite residents and displays of power, at Maquellouan the evidence is more restricted to rituals in honor to mountain gods or *wamanis*. The sacrifices of young camelids

found at the base of the artificial platform, reiterate the idea of a ceremonial related to annual feasts, maybe a solstice celebration (D'altroy and Hastorf 2001:193). As I mentioned before, these llama bones exceptionally do not show signs of consumption, a case very different from the rest of the faunal collection at Maquellouan.

Figure 4. Fragments of a flute made of camelid bone.



The settlement pattern with the distribution of open spaces as plazas between artificial or natural platforms reflects a desire to congregate people in limited areas. The two platforms likely served different function; in the artificial platform ritualized events were performed there. In contrast, in the northern platform the rooms were empty and clean with minimal dispersion of artifacts. The plaza has similar behavior, while the rectangular structure inserted in the plaza contain large evidence of food and drink, the part of the plaza next to northern platform lacks of refuse, and it is where the silver round disk was found. The separation of public and private areas in the site might imply the presence of ranked individuals living in privileged areas. Duality is also suggested for the spatial organization of the ridgetop. A bipartite space (artificial platform/plaza and northern platform/plaza) reminds one of the Andean cosmological conception of two parts, *Hanan* (up) and

Hurin (down), applied to the city of Cuzco (Zuidema 1989:126). Opposition of external and internal forces, living and dead, upper class and lower class, and summit and terraces are concepts maintained in the planning of the village of Maquellouan Punta. The social activity developed at the Maquellouan site seems to have included ceremonies and rituals where feasts were important to group coherence. Information recovered from Queyash Alto has indicated the role of celebration sponsored by recognized social and political authorities (Gero 1992:18). Our data concurs in that the community organized its collective life around celebration and drinking, thus affirming social relations and reciprocity.

4. Hamlet Defensive Sites: (Chonta Ranra Punta PAn 5-1)

Within the steppe environment of the *puna*, a fortified site, Chonta Ranra Punta (PAn 5-1; 4,291 m.a.s.l.) stands at the top of the hill of the same name. Two-meter wide perimeter wall surrounds the site. Chonta is divided into three sectors: a natural rocky elevation on the north, an intermediate flat open area where storing structures were built, and a rectangular low platform with residential rooms (Figure 5). Although excavations in the rectilinear-to-apsidal rooms did not uncover plant remains or artifacts, these rooms were probably used for the deposit of food products. The isolation of the area, the consecutive linear pattern of structures, the cold environment which naturally preserves food, and the necessity of foodstuffs for the people who remained in the site support this interpretation. The residential area measured 27 by 31 m and was delineated by a low, square platform supporting a rectangular grid comprised of four rooms, each 2 by 3 m in plan, plus a trapezoidal structure standing alone and an apsidal room attached to the platform wall. The rooms are constructed of dressed stone masonry. Test pits in one room revealed scattered ceramics associated with charcoal. The diagnostic ceramics recovered are fine open bowls with red polished

slip on both surfaces. They are related to the Early Horizon styles of the Nepeña (Proulx 1985:341, plate 9B), Casma, and Santa Valleys. In spite of the small number of artifacts found, I suggest that domestic activities took place in these rooms. A radiocarbon date obtained from the charcoal found in the excavated room produced a calibrated date range between 390-210 BCE. No artifacts associated with warfare were found. The lithic inventory is composed of only three projectile points recovered from excavations and two polished slate points collected from the surface. Point 109 (60 mm length) was found in the room associated with ceramics and charcoal. Point 108/119 (41 mm length) comes from one of the probable storage structures (Figure 6). Both are dark gray siliceous. Malpass (1983: figure 43) recorded similar points from Casma sites associated with ceramics.

Two D-shaped structures added to the northeast platform wall may have restricted access to the rooms. The position of this site had strategic advantages because from here it is possible to control the movement of people from the western coastal valleys to the Callejón de Huaylas. Also, the site is near the natural water divide of the Cordillera Negra, between the Santa Valley to the east and the highland puna elevations to the west.

Figure 5. Chonta Ranra Punta site plan (PAn 5-1)

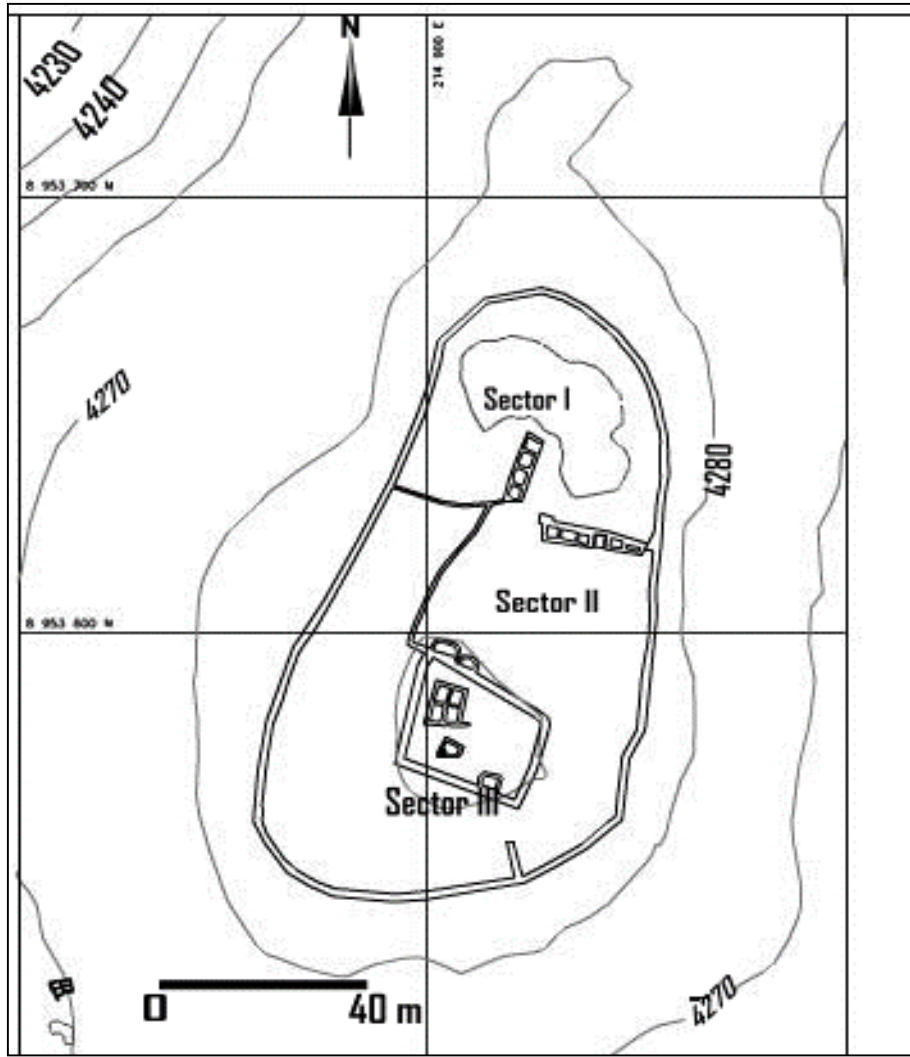
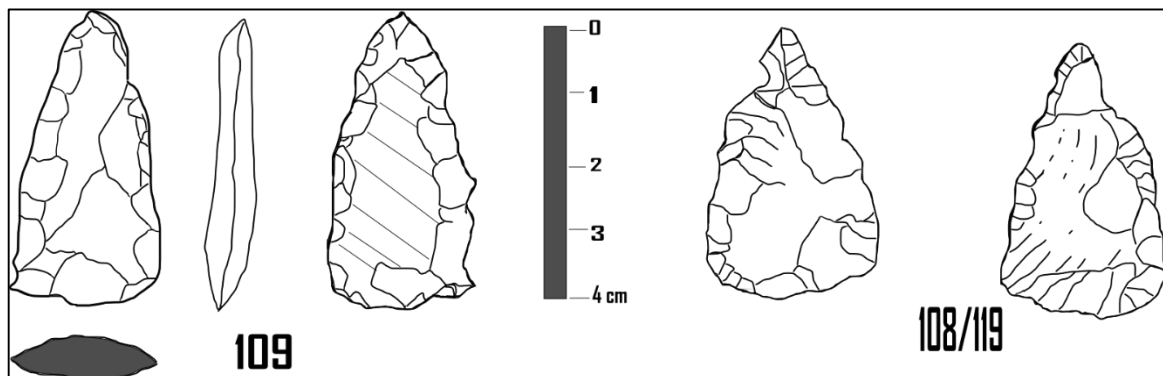


Figure 6. Silex projectile points from Chonta Ranra Punta associated with residential dwellings.



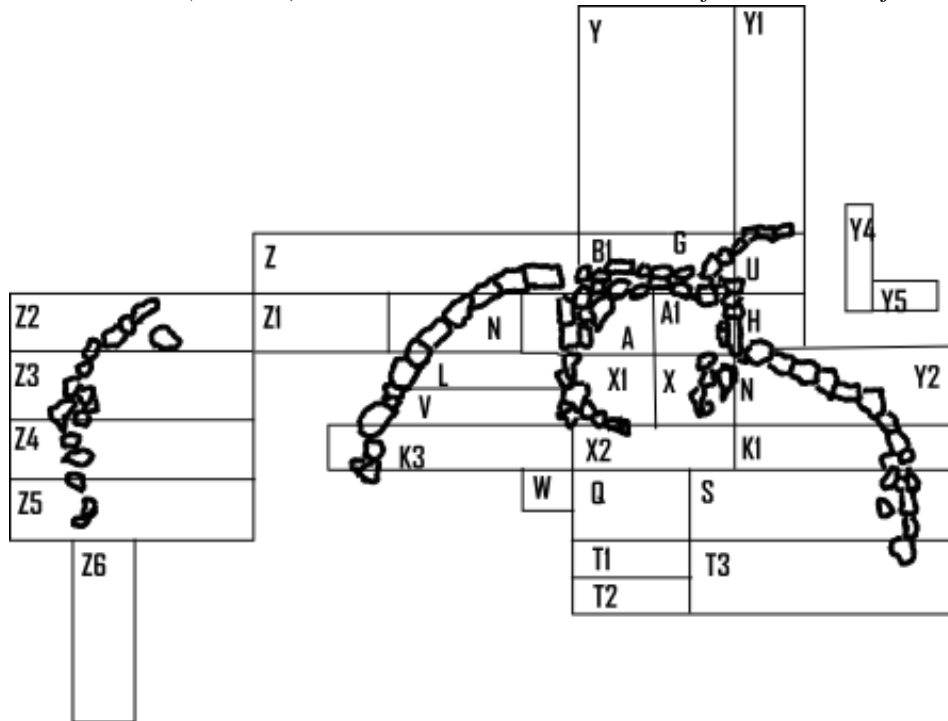
5. Isolated houses and corrals

At elevations over 4,000 m.a.s.l, in the *puna* ecology, and in relatively flat *pampa* terrain, it is possible to see dwellings inserted or near corrals structures. Many corrals have circular or ovoid shape that overpass the 15 m of diameter. They are formed by heavy boulders. Most of them have been re-utilized by modern peasants. One of these corrals showed pre-Hispanic activity, more precisely related to the late period of the Recuay society. The site of Ancosh Punta delineated several modern corrals configured in a semi-flat *pampa* with soft undulating hills. The *pampa* is interrupted by very steep cliffs on the south-eastern side, which overlook the bottom of the Santa River and the modern city of Huaraz. The opposite side of the *pampa* (northwest) is delimited by the deep valley of the Quebrada Cuncashca and Llancash River, which flows into the Santa basin. Ancosh Punta site consisted of a series of 10 to 12 modern-era corrals of 6 x 10 m on average. They had an oval-irregular shape formed with volcanic rock. Some of the rocks that formed the corrals are very heavy, and almost reaching boulder size. It is presumed that these rocks were part of the original structure of the corrals in pre-Hispanic times. The archaeological survey was able to locate a dispersion of prehistoric ceramics fragments within one of these corrals. Observing this corral with more detail, coarse superposed rocks covered foundations of another structure formed by heavier and bigger volcanic tuff rocks with semi-elaborated masonry. The material construction and masonry are chosen parallelepiped stones that served as foundations of a room that might have had adobe mud structures over top. The wall had mortar clay and double face about 0.5 m high. This structure had a rectangular shape, a U-form, measuring 3.5 by 4 m (Figure 7). At the southwest corner, next to the corral wall, was a hearth composed of flat stones. Modern ceramics made by potters of the town of Taricá (Santa River) are associated with this structure as well as stained soil with charcoal dispersion. It is obvious that the structure was used until recent times as

a temporary house. This dark stained soil was extended to the interior and exterior of the structure showing homogeneity and high organic composition. The excavated area was expanded to 132 square meters and the thickness of the floor of 0.16 m was excavated horizontally by 5 cm-arbitrary levels. The floor contained a large amount of prehistoric ceramic potsherds, diagnostic shape-vessels, spinning whorls, obsidian tools, flakes, debitage, shale and lutite projectile points, and very few faunal bones.

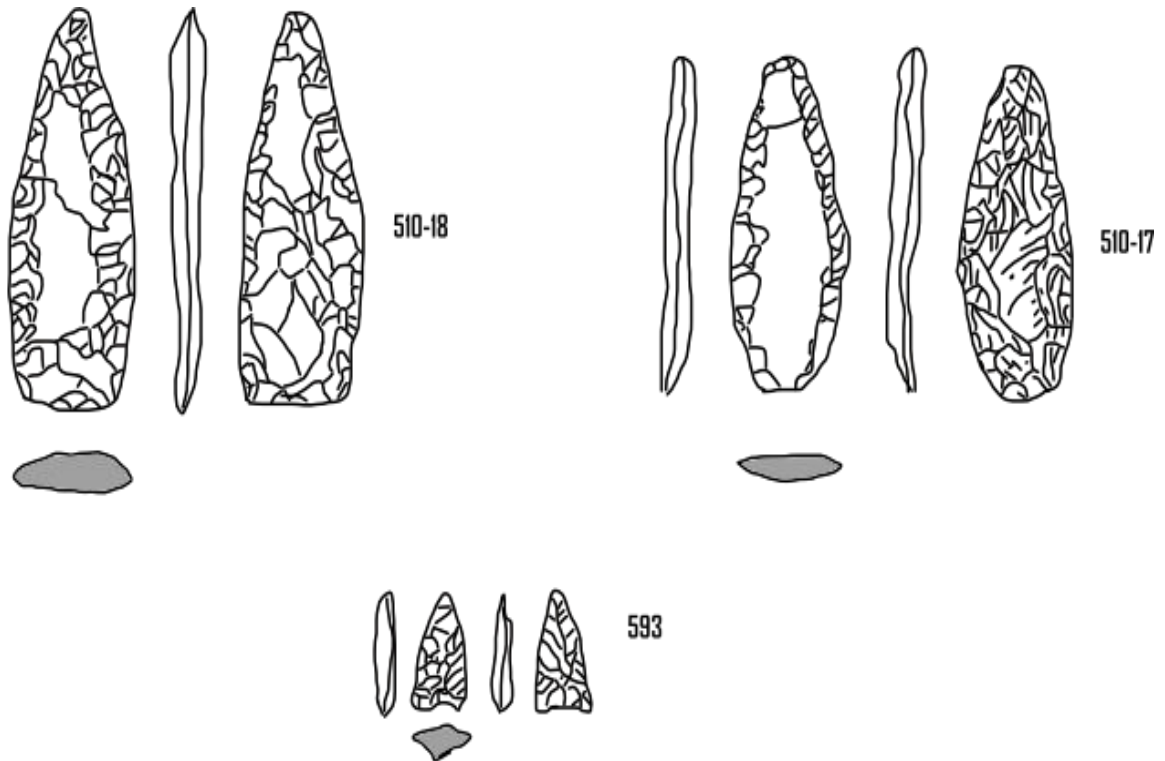
The artifacts distribution in the interior and exterior areas of the household permit inferences about spatial differentiation of activities (Table 1). Most of the diagnostic pottery found on the floor of the house constituted ceramic plates and open bowls. With less density occurred spinning whorls, cooking ollas, jars, curved tall bowls, tetrapod bowls and a couple of spoon fragments. These were distributed in the exterior area of the habitation, next to the door or opening side. The plates and open bowls have a diameter between 18 and 25 cm. The interior of the vessels presented a dark red painted linear decoration (2.5 YR 3/2 Munsell) on an orange colored ground base. In some occasions the bands are painted in dark gray and dark brown. Incurved bowls and spoons are reminiscent of Recuay and/or part of a terminal style. Open bowls and plates with interior decoration, and also tetrapod bowls appeared in the Warmi phase (900 AD) in the Chinchawas site located in the western flanks of the Cordillera Negra (Lau 2002). The jars and cooking ollas have linear punctuated decoration in the neck and/or the intersection of the body/neck. Plastic decoration and protuberances located in the neck and body of the jars vessels, are also part of the local style (Ancosh/Cotojirca IV, 680 - 980 CE).

Figure 7. Ancosh Punta (PA 5-5) house structure and distribution of units. Note adjoining corrals.



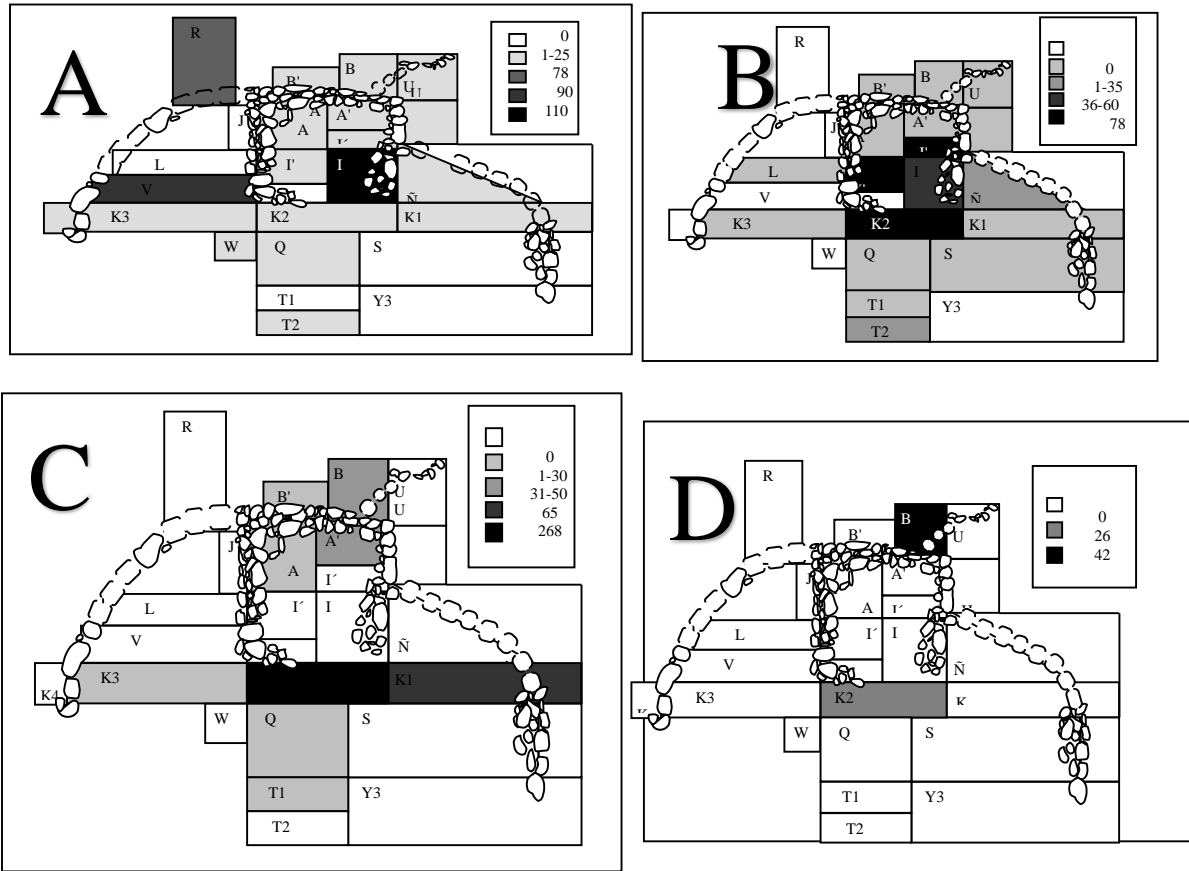
With respect to the lithic artifacts, 80 tools were found dispersed on the floor. Lithic tools strongly contrasted with the counts of debitage flakes (2,257). A case for analysis is the obsidian (Figure 8). Blanks or preforms were probably brought to the site to rework five triangular points and three knives. Burins, unifaces and scrapers are also made of obsidian. The knives were 60 mm in length with a straight base and pressure retouch. Obsidian debitage was dispersed all over of the exterior area of the house indicating reworking, and/or retooling artifacts. Other materials, such as lutite, jasper, dacite, and quartzite also have their counterparts in the dispersion of flaked debitage outside of the house. The obsidian knives also could be cataloged as points. According to Ammerman et al. (1988:134) “they could readily serve as a multipurpose tool”. Similar point of view is expressed by Grimaldo (1999) and Bencic (2000); when they analyzed the lithic tool kit from the Middle Horizon period.

Figure 8. Obsidian bifaces and triangular points from Ancosh Punta.



The distribution of lithic debitage is comparable with ceramics; higher densities always were found around the exterior of the house (Figure 9). A possible dumping area could be the western part of the house, or the back of the house, where scattered bone fragments were found. So, an activity related to serving food and another with re-sharpening lithic tools was carried out in the exterior of the Ancosh Punta's household.

Figure 9. Frequencies of debitage in the Ancosh Punta's house, levels A, B, C, D.



The counts of corrals in the archaeological site of Ancosh Punta (between 10 and 12) associated with one household are roughly equivalent with the counts of contemporaneous corrals per household at Ayacucho (Flannery et al. 1989). However, in this case, all the corrals were not used at the same time, and one or two had ceremonial functions. This particular ceremonial feature was not identifiable in the archaeological record due to the absence of indicators. Furthermore, a pastoral household in Ayacucho had two or more cottages dedicated to the supervision of camelids. In Ancosh we were able to locate just one temporary household. Perhaps in the past, the management of camelids was more specialized and a permanent habitation site was located elsewhere.

	Plate	Bowls	Ollas	Jars	Big Jar	Cup	
Surface Level	11	4					15
Level 1^a	51	24	7	10	18		110
Level 1B	58	28		16	21	1	124
Level 1C	11	17	1	5	10	5	49
Level 1D		5					5
TOTAL	131	78	8	31	49	6	303
%	43.23	25.74	2.64	10.23	16.17	1.98	100.00%

Table. 1. Counts and percentage of ceramic forms found in the floor of the house in Ancosh Punta.

Ancosh Punta's household was functioning from 690 to 980 CE, an epoch in which the agro-pastoral chiefdom Recuay was in demise and Wari surged as a consolidated state, and incorporated the Callejón de Huaylas region under its domain (Isbell: 1988, 1991). However, the material information from the Ancosh Punta's household did not demonstrate signs of foreign interruption or imposition at the household level. The house remained independent in its seasonal herding model. Although only 6.2 grams of faunal burnt bone was found at the exterior west side of the habitation, it is assumed that the house, which was inserted between corrals, functioned as a "chuklla" for camelid control and management. The problem of a lack of camelid bone remains at the site might be explained by the landscape; an open barren area subject to annually heavy rain; a factor that would have promoted erosion for at least a-thousand-years (Kuznar 1995:16). For the same reason, any evidence of animal dung within the corrals has eroded away. The only dung we observed during the initial surveys was from sheep. On the other hand, the possibility that the obsidian knives were used in processing hides might favor our argument of activities of reworking lithic tools in the exterior of the house. Binford (1983) argued about hide working areas that required space being developed outside of the house. This parallels the evidence of flint obsidian flakes concentrated outside of the house of Ancosh Punta. Flannery et al. (1989:83) described with great detail the killing and butchering of a llama using a sharp knife. Future research on use-wear analysis could test this hypothesized function of the obsidian knives. The obsidian triangular points

with a concave base and the bifaces with a straight base are point styles associated with the Wari Empire (Burger et al. 2000:326). As I mentioned, bifaces can also be cataloged as knives and/or multi purposes tools (Bencic 2000:108). All the lithic material analyzed came from local geology except obsidian, the only imported raw material. Eight tiny fragments of obsidian debitage were the subject of further X-ray fluorescence analysis to determinate the geologic source of obsidian. The results surprisingly showed that most of the obsidian used in Ancosh Punta were brought from the Quizpisisa source located 550 km to the south (Burger et al. 2006). One fragment had further provenience, it came from the Alca source situated in the Cotahuasi Canyon in Arequipa (780 km away from Ancosh Punta).

Without doubt a complex long-distance exchange network in the procurement of obsidian existed in the highlands of Ancash. But how did the rural community of Ancosh Punta participate in such exchange? An interesting possibility is suggested by Burger's et al. (2006:114-15) discussion of the temple of Chavín de Huántar. During the time of its functioning, obsidian from Quizpisisa and Alca sources were used in regular quantity in the village adjacent to the temple. The presence of obsidian in the village was explained as a by-product from the pilgrims visiting the ceremonial center. In the case of the Middle Horizon household of Ancosh Punta, obsidian has clear economic utility. It does not have a ritual connotation. Perhaps a major distribution center similar to Chavín in the Early Horizon existed a thousand-years later during the Middle Horizon period in the Callejón de Huaylas. However, important monumental centers such as Honco Pampa, denominated as Wari administrative center in the Callejón de Huaylas, have been investigated but have not reported obsidian (Isbell 1991). I suspect that the Wari administration regulated somehow the exchange of obsidian even at the rural level in which the agro-pastoral communities of the Callejón

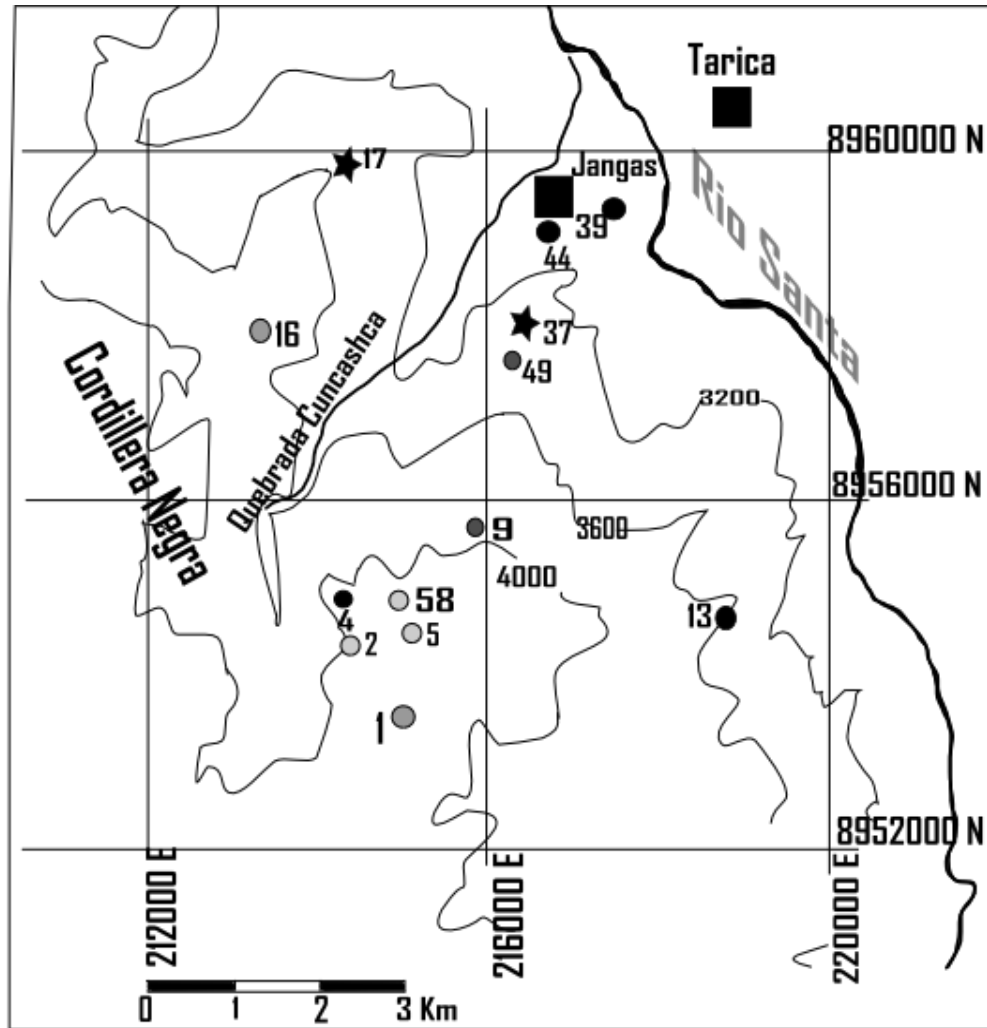
de Huaylas participated in the economic exchange of valuable items. The economic value of the obsidian in the Ancosh's household is reflected in the activities of herd management. Camelids were important in the Andes because of their wool, as packing animals and as elements of sacrifices and ceremonies (Aldenderfer 2001:22; Stone Miller 1992:337). The processing of llama hides and the shearing of their wool could have been one of the primary activities at Ancosh. Although poor preservation of organic material may be a contributing factor, the lack of llama bones on the floor suggests that consumption of camelid meat was not a frequent occurrence. Spinning whorls distributed in the floor of the living space support the interpretation of weaving being carried out in *situ*. During the epoch in which Ancosh was functioning, there was an influx in the consumption of textiles regulated by the Wari administration. Wari style shirts and fine textiles have been found along the coast of Ancash, in the site of Huarney (Prumers 1989:194). These textiles could have been manufactured in the highlands, as it is suggested by Rodman and Fernandez (2000:122) that the center of production was localized in the sierra. Otherwise, raw wool could be transported to the coast and manufactured there. No units of craft production have not yet been found in the highlands, but given the variability it is probable that some textiles were manufactured in the coast and in the highlands. In the area of study, ethnographic accounts from actual villagers of Mareniyoc, Antahuaran and Tinyash, located in the *quechua* ecosystem and with access to the *pampa* of Ancosh Punta, still produce textiles, which are manufacture by males. This information might contribute to a better understanding of past behaviors of pastoral Andean groups during the Middle Horizon period in the Callejón de Huaylas.

6. Discussion

The type of Recuay settlements discussed above reflect the idea of integration or complementarity. There is a tendency to situate the terraces-platform mound in an intermediate zone, between 3,000 to 3,500 m.a.s.l, while defensive sites are located at higher elevations (above 4,000 m.a.s.l, see Figure 10). Small villages can be established below the intermediate zone or above it. This type of system functioned in the sub-region of the Cordillera Negra (Pierina mine influence's area). It is evident the adaptive economic strategies of settlements, and the complementarity of herding and farming is consistent with the location of the sites. There is a tendency of dualism in the planning of certain Recuay hilltop settlements (Lau 2011: 59). Two prominences and an intermediate open space formed the site plan of the habitation sites. Although we may have consensus that this system operated in Recuay settlements, it does not represent the total or the only system in place.

There are many more complex settlements, especially the ones with kaolinite ceramics in non-funerary contexts. For instance, a site like Chinchawas exhibit fine circular “torreón” architecture in the topmost portion of the site, and is associated to Kayán phase kaolinite wares (Lau 2010b: figure 12; Lau 2004: figure 4). The extraordinary Yayno site exhibits two different residential forms; quadrangular and circular compounds enclosed by monumental fortified walls (Lau 2010c). This fact supports the conclusion of strong internal differences at the community level in Yayno. At Pashash, another important Recuay site, the retaining wall of “El Caserón” platform measures 15 m high and 20 meters across (Grieder 1978:14). Many more remains of Recuay monumental architecture are distributed across the landscape of Ancash highland. Their study can help us understand the temporal developments of these monuments and its historical process in the Recuay society.

Figure 10. Recuay settlement system in the Pierina Mine Area.



- 1=Chonta Ranra Punta PAn5-1; 4=Maquellouan Punta PAn5-4;**
9=Piruro PAn5-9; 13=Tapa Punta PAn5-13; 16=Winaq Punta
PAn5-16; 17=Quenapun Punta PAn5-17; 37=Mareniyoc PAn5-37;
39=Urpay Coto PAn5-39; 49=Ama II PAn5-49; 44=Shancash Coto
PAn5-44; 58=Llaca Ama Caca PAn5-58; 5 = Ancosh Punta PAn5-5
2= ? PAn5-2
- Modern towns
 - Small villages
 - Stepped platform mounds
 - Fortifications
 - Ceremonial
 - Corrals and houses

In concordance to the Recuay's chronology proposed by G. Lau (2004a), the Chonta Ranra Punta site conforms an early development of the Recuay culture based on a radiocarbon dating (400 – 170 BCE, 2 sigma), which in the best scenario can be assigned to the Huaras style or the local

Cotojirca II phase (200 BCE – 250 CE). A consecutive pure Recuay style – Cotojirca III (250 – 650 CE) is only present in the Pierina area in platform-terraces. Sites like Mareniyoc (PAn 5-37), Shucsha Punta (PAn 5-24), and Quenapun Punta (PAn 5-17) are also showing associations of kaolinite sherds. Late Recuay developments contemporaneous to the Cotojirca IV/Ancosh local phase (650 – 800 CE) are Ancosh Punta (PAn 5-5) and Llaca Ama Caca (PAn 5-58). Radiocarbon dating is available for this period. This is the terminal period of the Recuay Tradition that witnessed the disappearance of kaolinite pottery and the expansion of the Wari Empire in the north-central highlands of Peru. As we are going to see in chapter VI, most of the offerings in funerary chambers from our sample correspond to this period. The surge of *chullpa* above ground funerary building, like the site of Yarcok (PAn 5-41), marks the influence of Wari styles in the Callejón de Huaylas. Associations to the Late Intermediate Period (Cotojirca V phase, 1,100 – 1,470 CE) can be attributed to fortified hamlets that re-establish the preference of settlements overlooking the Santa basin. Plastic decoration and orangeware are common, very much related to the late regional style called “Aquillpo”. Inka related materials exist in two locations of the Pierina mine: Mareniyoc (PAn 5-37) and Llaca Ama Caca (PAn 5-58). The former had a clear Inka occupation, while the latter served as a ritual deposit of burials and offerings.

Table 2. Radiocarbon Dating from archaeological sites in the Pierina Mine

<i>University of Arizona, 1999, AMS Laboratory</i>										
AA #	Site	No. Reg.	Sector	Unidad Est/N	Material	d13C	F	14C age BP	One Sigma	Two Sigma
AA32480	PAn 5-4	443	Platform I	A	charcoal	-26	0.9211+-0.0044	660+-40	AD 1280-1390	AD 1275-1395
AA32481	PAn 5-5	599.57	I	Z 2-B	1 charcoal	-22.11	0.8618+-0.0058	1,195+-55	AD 730-940	AD 690-980
AA32482	PAn 5-6	641			charcoal	-23.7	0.9356+-0.0061	535+-50	AD 1325-1430	AD 1300-1440
AA32483	PAn 5-7	746			charcoal	-24.6	0.9691+-0.0062	250+-50	AD 1525-1955	AD 1490-1955
AA32484	PAn 5-1	137	3	A	charcoal	-24.1	0.7575+-0.0053	2,230+-55	BC 390-210	BC 400-170
AA32485	PAn 5-58	5835	IV	C1	1 charcoal	-23.4	0.9354+-0.0079	535+-70	AD 1320-1435	AD 1280-1470
AA32486	PAn 5-34	3405			charcoal	-21	0.9375+-0.0066	520+-55	AD 1330-1440	AD 1295-1455
AA32487	PAn 5-42	4210			charcoal	-25.2				
AA32488	PAn 5-50	5025			charcoal	-24.6	0.7504+-0.0053	2,305+-55	BC 480-230	BC 755-205
AA32489	PAn 5-58	5841	II	D	2a(H. 2) charcoal	M	0.8508+-0.0057	1,300+-55	AD 660-770	AD 640-870
AA32490	PAn 5-41	4120		Ch 11	2 bone human	-13.1	0.8695+-0.0056	1,125+-50	AD 785-980	AD 775-995
AA32491	PAn 5-48	4804			bone animal	-13.2	0.9262+-0.0060	615+-50	AD 1295-1395	AD 1280-1410
AA32492	PAn 5-39	3924			ceramic	-23.7	0.6834+-0.0041	3,060+-50	BC 1410-1265	BC 1450-1210

**Appendix B: Evidence of the Funerary Chambers in the Cordillera
Negra and Blanca**

1. PAn 5-34 Amá

Location: At the time of our research, tarwi (*Lupinus mutabilis*) crops were grown on the slopes that descend to the bottom of the Atupa creek (Figure 1). Situated approximately ~350 meters southwest of the known funerary site Quitapampa A (PAn 5-35) and 800 meters from Marenayoc.

Area: 273.74 m².

UTM Coordinates: 216,267.60 E 8'956,527.76 N.

Altitude: 3,533.991 meters above sea level.

Description: The mortuary buildings have an aspect of a small low mound and are composed of four (4) separated semi-subterranean chambers which share a huge megalithic roof. The chambers have a circular to oval plan floor and there is no communication between them. There are large semi-buried granite slabs in area adjacent to the chambers, and perhaps more structures (chambers) are located underground. Unfortunately, some have been dismantled by local farmers with the goal of reusing them the construction of modern houses. Due to the collapse of large slabs in confined spaces, entering into the chambers was difficult. Three chambers A, B, and D were partially excavated.



Figure 1. The location of burial chambers Amá PAn 5-34.

Excavations: *Chamber A* is located on the southeast side of the mound. A rectangular boulder of ~2 x 1 m that formed part of the roof was blocking the access door. When it was removed, we proceeded with the excavation of the top soil inside the chamber. The first layer that had 0.20 m of thickness was formed by a silty clay loam sediment Munsell 7.5 YR 4/6 brown. At the top of this layer we recovered evidence of a modern “*pago*” or offerings to *huacas* in the form of coins, and fragments of plastic bags. Immediately below this modern layer appeared deteriorated human bones, which impeded our observation to establish the articulated position of the individuals buried in the chamber. Pre-Hispanic pottery fragments, a personal adornment (small sphere pendant), and very few faunal remains of domesticated guinea pig (*cuy*) are associated to human bones. Dimensions of the chamber: 1.7 x 1.45 meters.

Chamber B, as opposed to the other chambers, this structure shows a better elaborated access, an entryway formed by three carved stones functioning as jambs and lintel (see Figure 30), in the same style as Quitapampa B PAn 5-42. Chamber B was clean, the excavation did not yield any artifacts, except modern trash. This is a fact that should not be a surprise. Bennett’s (1944) excavations also yielded empty structures. It seems a recurrent Recuay mortuary pattern, especially in cases when occurring several chambers together. It is possibly that one chamber had a different function. Only the scattered remains of a young dog or fox were found inside this chamber, however its presence do not assured association to the ancient occupation.



Figure 2. Entrance of Chamber B.

Chamber D is located on the southern side of the mound. A flat stone of 2.5 x 1.80 m functioned as a roof. The clayish topsoil strata had been disturbed. It seems that a hole was excavated on this sediment, as a matrix where individuals were deposited. Human remains appeared to have been disseminated and mixed with modern material as modern offerings or “*pagos*”. In the second strata more bones were found in relation with the walls of the chamber. Several individuals can be inferred by counting skulls, and long bones, which were all mixed up, making it impossible to observe the orientation of the bodies. Non-diagnostic pottery fragments, and charcoal were found associated to the wall of the chamber. Copper objects also appeared at this level as well. The access of the chamber was very narrow, and making it difficult to reach the bottom of the structure. The evidence shows a communal form of entombment, maybe members of the same family.



Figure 3. Entrance of Chamber D

Grave Goods: Diagnostic elements found in *Chamber A* consisted of depictions of a frontal fanged face in orange crude ceramic using low relief technique (Figure 4). Other five fragments including a tubular spout most likely belong to the same vessel (3403-1, 3408-2, and 3408-3). All of them are associated to the Moche style from the North Coast. This remarkable imported find agrees with the hypothesis of the interaction between highlands groups and coastal ones (Lau 2004b). It was probably a prestigious item, with some kind of significance for the deceased. Besides this, the local pottery was non-decorated, basically a small hemispheric bowl (3405-1), a neckless olla (3408-5), and jar rim with exterior red slip over rim edge (3408-6). Finally, one tiny sphere pendant was also found as offerings (3408).

The best Recuay artistic manifestation found in Chamber D is composed of four copper objects (Figure 6). *Tupu* (3420-1) originally was a T shaped metal pin of 15.4 cm length that was deliberately folded or bent forming a double intertwined adornment. The object (3420-2) is a thin folded copper sheet, while 3420-3 and 3420-4 are very similar personal adornments consisting on hammered spatulas used as clothing clips possible for shawls (Table 2). Both were intentionally folded prior to place in the grave. A similar observation of Moche burials (Donnan 2011:147).

Finally, a phallic shaped artifact manufactured from camelid or deer was found, which could have been used as a clothing clip (Figure 7).

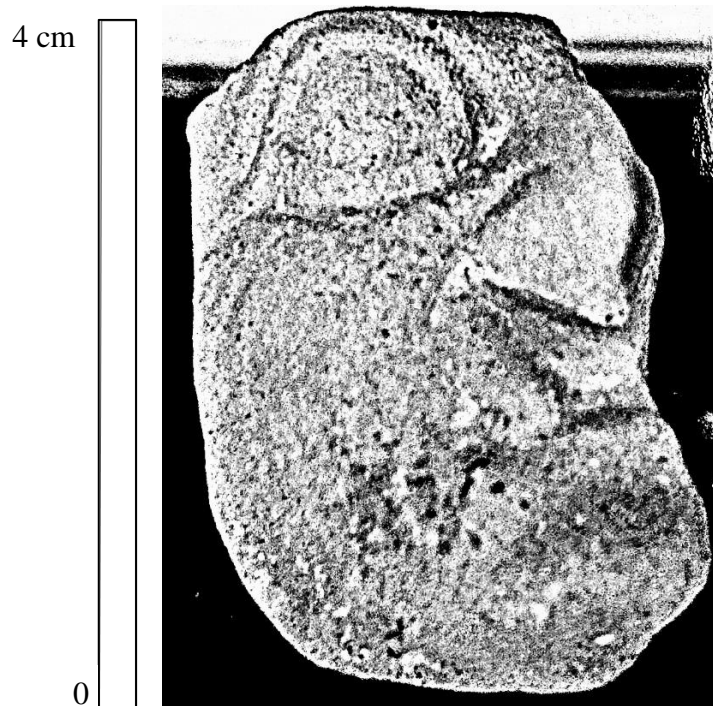


Figure 4. Moche half face found in Chamber A. PAn 5-34.

Table 1. Summary of Grave Goods in Amá PAn 5-34

Diagnostics	Chamber A	Chamber B	Chamber D
Moche Style Ceramics	6 fragments		
Recuay Style Ceramics	3 fragments		1 open bowl
Copper Objects			4
Sphere pendant	1		
Bone Tool or <i>Tupu</i>			1
Total	10		6

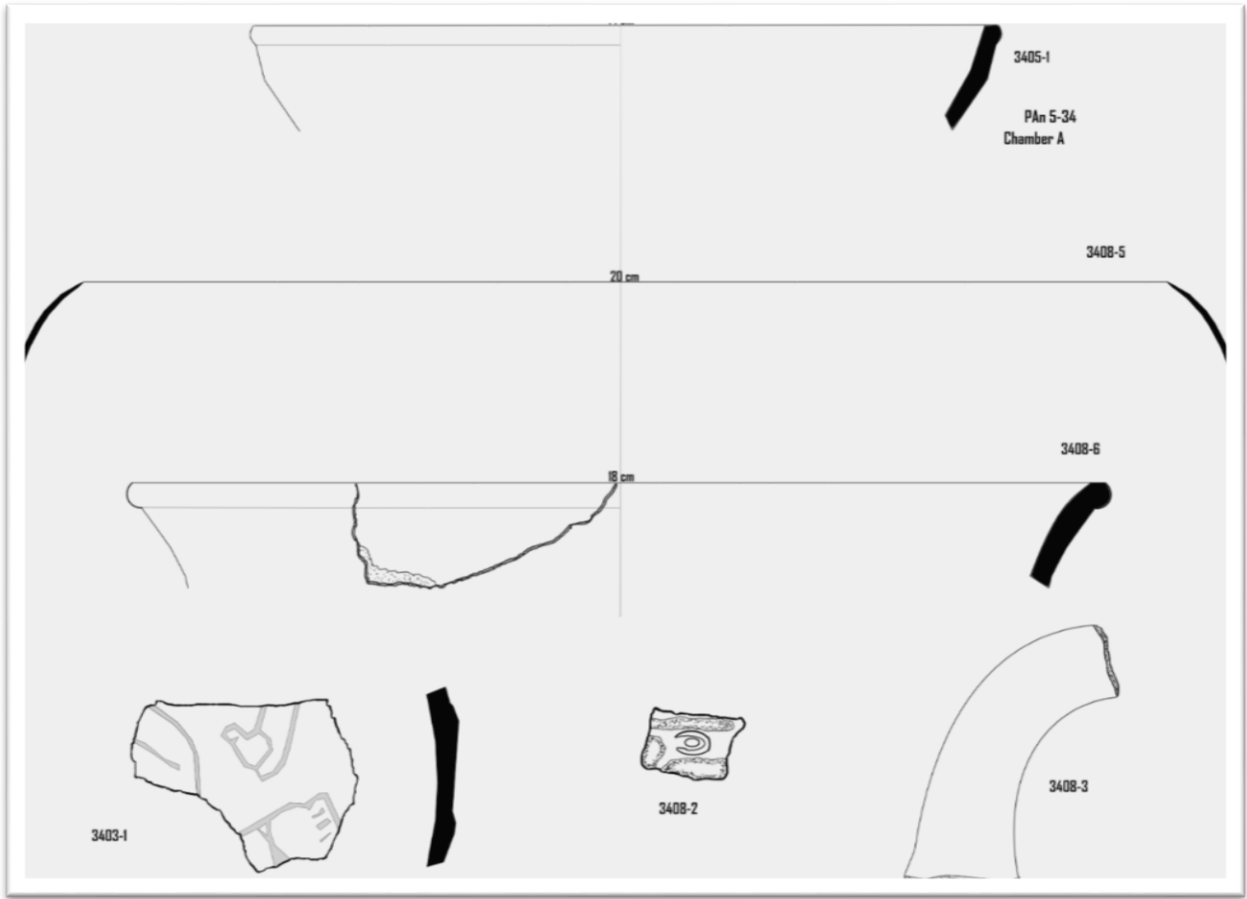


Figure 5. Ceramic shapes from Chamber A. Amá PAn 5-34.

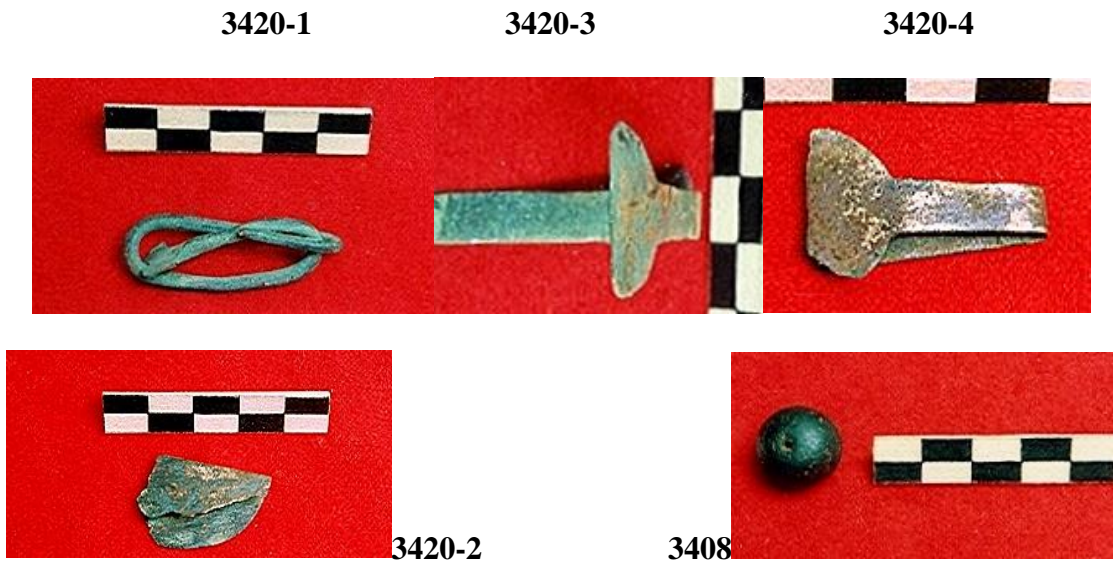


Figure 6. Copper objects recovered in Chamber D, PAn 5-34. 3408 was found in Chamber A.

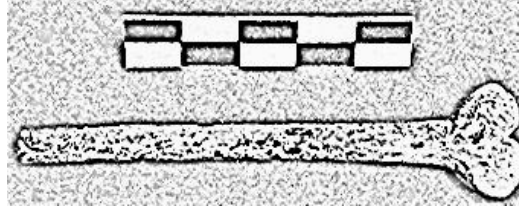


Figure 7. Faunal bone possibly used as clothing pin.

Table 2. Metal Objects and Dimensions PAn 5-34

Chamber D	Type	Length (cm)	Weight (grams)
3420-1	T-Shaped Tupu (Folded)	15.4	5
3420-2	Tupu head fragment	1.1	3
3420-3	Folded spatula	8	4
3420-4	Folded spatula	6.9	2

Human Skeletal Remains from Amá PAn 5-34

The bio-archaeological analysis is presented with the intent to define different number of individuals interred per each chamber. As mentioned above, it was very difficult to assess the completeness of the skeletons due to disturbance of the chambers.

Table 3. Minimal Number of Individuals (MNI), PAn 5-34

Burial Chamber	Adults			Sub-adults			Child	Infant	Fetal	Total MNI
	Male	Female	Unsexed	Male	Female	Unsex				
Amá A	4	3				1	1			9
Amá D	3	2	2			1	1			9

Minimal Number of Individuals

Chamber A: Considering right femur, it was possible to establish the skeleton parts of 7 adult individuals; 1 sub adult, and 1 child.

Chamber D: Contained 7 adult individuals, 1 sub-adult, and 1 children.

Age at Death

Table 4. Age at Death

Burial Chamber	Individuals	Age at Death	Criteria/Method
Chamber A	Sub-Adult	15 years + - 15 months	Third molar has not erupted yet.
Chamber D	Adult Male	23 – 57 years old	Pelvic morphology and comparisons to Suchey Brooks casts.

It was possible to estimate age of death on two individuals. The age of death of the sub – adult in Chamber A is 15 years + - 15 months when taking into consideration that the third molar has not erupted yet. The age of death of an adult male from Chamber D is estimated between 23 – 57 years old (35.2 average) when consider pelvic morphology, and compare it to Suchey and Brooks casts.

Osteological Variations

This was only observed in the skeletons of Chamber A. The right and left incisors were shovel-shaped in one sub-adult, and there was one case of metopic suture that appeared on the left side of the frontal bone of adult male.

Pathologies

Table 5. Pathologies, PAn 5-34.

Burial Chamber	Individuals	Pathologies
Chamber A		Caries on occlusal surface of lower molar
		Caries on occlusal surface of lower molar
	Male	Pre-mortem loss central incisors and right molar of mandible
	Male	Pre-mortem loss of first molar in the process of cicatrization, pre-mortem loss of right third molar; pre-mortem loss of left second premolar, first and third molars.
		Dental attrition premolar
		Wearing inferior premolar
	Male	Wearing left premolar and molar
	Sub-Adult	Attrition right and left molars and canine of maxilla
	Male	Attrition lower molars
	Male	Attrition superior molars
		Sub periosteal hematoma mid-center right tibia
Chamber D		Caries on the neck of incisors
		Caries on occlusal surface molar
		Caries on lower molar and canine interproximal surface
		Caries on left molar interproximal of mandible
		Caries on the neck of lower molar
	Male	Caries on the neck of lower molar
	Male	Pre-mortem loss of left molars mandible
		Wearing incisors
		Wearing premolars
		Wearing on molars
		Wearing on molars
		Wearing on two premolars and molars
		Wearing on left maxillary premolar
		Osteophytes on lumbar spine
		Osteophytes on dorsal spine
		Incipient osteophyte in three dorsal vertebrae
		Osteophytes and osteoporosis lumbar vertebrae
	Male	Spicules in the second cervical vertebrae
		Articular facet of right lunate bone
	Male	Wearing of glenoid bone from right scapula
Male	Wearing articular side of second metacarpal	

Cuts

It was observed evidence of six fine cuts in M 1/3 (central diaphysis) of femur.

Taphonomy

Evidence of exfoliation, craquelure, and erosion on bones suggests that it had been exposed to the

environment for a prolonged time. The first right rib had a greenish aspect. Colors of the bones present different tones; beige, light yellow, dark yellow, light brown and dark brown, and some bones have a dark stain (Table 6).

Table 6. Cases of taphonomy on human bones from PAn 5-34.

Burial Chamber	Individual	Exfoliation	Erosion	Craquelure
Chamber A			Radius surface	
			Left femur surface	
			M 1/3 tibia	
	Male		Left and right femur	
			Right tibia surface	
			Left fibula surface	
		Femur		
		Clavicle acromial end		
		Fibula		
		Right cubitus		Right cubitus
Chamber D	Child			Left pelvis
			Right femur surface	
			Cervical vertebrae surface	
		Right femur surface		

2. PAn 5-35 Quitapampa A

Location: Single chamber located in the place called “Quitapampa”. The landscape conforms a colluvium moderate sloped terrain detached from rocky ridges. Some slopes are cultivated alternately with potatoes, oca, and lima beans. The *pampa* gently descends to the creek (quebrada) Cayhuaruri situated to the east overlooking steep slopes and the floor of the Santa Valley at the bottom. 93 m upslope west from Quitapampa B site (PAn 5-42). 629 meters to the nearest habitation site (Marenayoc, PAn 5-37).

Area: 20 m².

UTM Coordinates: 215,958.68 E 8°956,650.29 N.

Altitude: 3,571 meters above sea level (m.a.s.l).

Description: During the first survey of the Jangas – Pierina road project, the semi-circular stone structure finding was obvious, because it was highlighted by an immense andesite boulder (~ 3 x 2 m) that functioned as roof. In spite of the heavy weight of this flat rock, we noticed that the stone masonry located underneath of the boulder had been so stable for thousands of years. The interior space of the structure had 1.5 m of diameter, oriented to the southeast. The masonry showed characteristics of the Recuay culture. The base of the wall is composed of chosen pentagonal stones set vertically, between them were small flat stones or fillers adhered with mud. This is a local Recuay construction technique called “*huanca – pachillas*”.

Excavations: The inner space of the chamber formed a semi-circle that measured 1.75 m in diameter and 0.9 m of radius. The boulder functioned as roof measured 2.5 x 2.00 m; 0.8 m thickness, and the chamber had 0.75 m of height to the ground level (Figure 8). The top soil presented a compact floor due to the recent use of the structure as pig shelter.

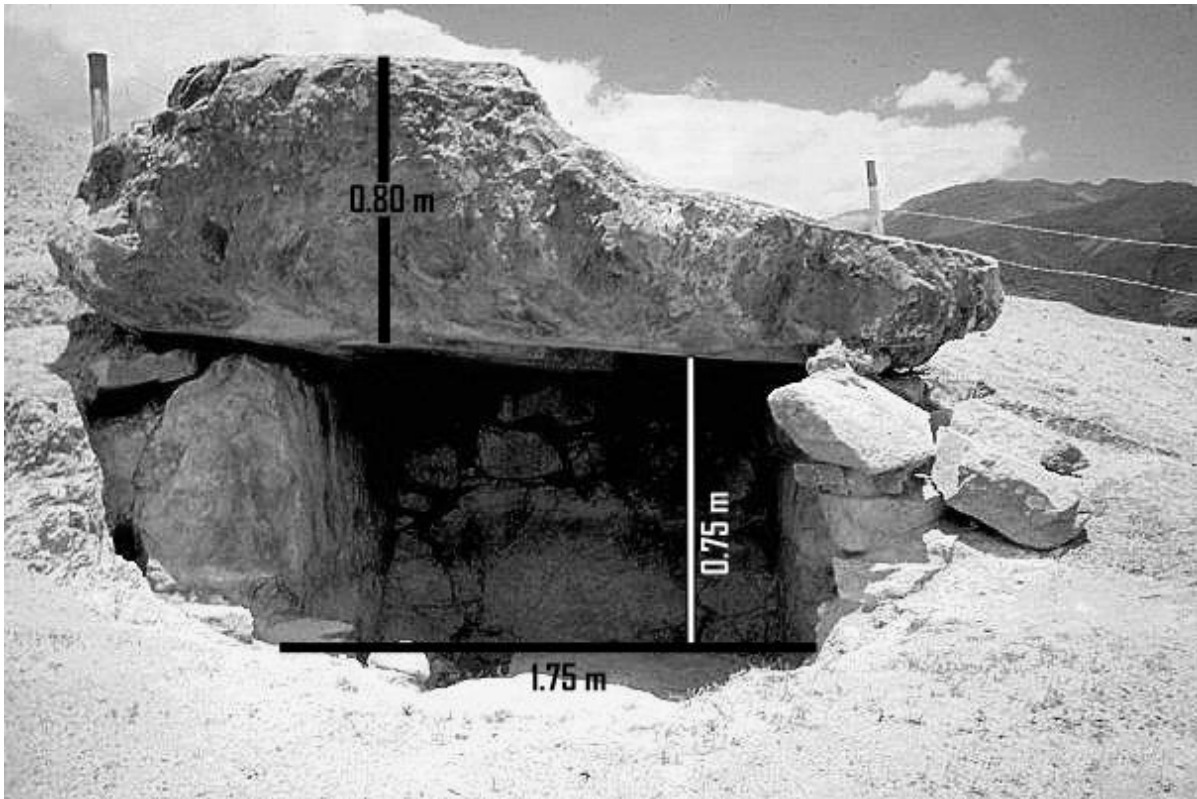


Figure 8. Frontal view of semi-subterranean mortuary chamber *Quitapampa A. PAn 5-35*.

The subsequent stratum uncovered significant Recuay cultural material. In a brown (10YR 4/3) granulated clayish sediment of 20.5 cm of thickness, many diagnostic ceramic fragments of cups with corniform handles, double cups, bowls, goblets, *paccha* or spout vessels, and miniatures were found fragmented, dispersed, and mixed up within the strata. In the subsequent curation phase it was possible to partially reintegrate and restored 14 complete vessels. Third strata was narrower, whitish sediment (10YR 8/2) due to contact with the calcite bedrock. It probably was the matrix of the tomb, in where very disturbed and deteriorated human bone fragments were found in association to a metal *tupu* pin object (3522-91) and faunal bone bead.

To build the burial chamber, part of the bedrock was carved out a pit, in which vertical large stones

filled with *pachillas* were set on the back wall. The south side of the chamber are conformed by a large slab that formed a wall, in which the enormous roof boulder rested. The opposite side, to the north, the masonry of the wall is rough, made by midsize stones. The chamber faces to the east, overlooking the rocky peaks of the Quebrada Ishinca in the Cordillera Blanca.

Grave Goods: Mortuary offerings in the Quitapampa A burial chamber were mostly composed of ceramic vessels. Bowls, cups, and vases occurred with more frequency. A cache of 14 complete and semi-completed items, and some rim fragments of neckless pots (3504, Figure 19) were deposited in the burial. A synopsis is presented below.

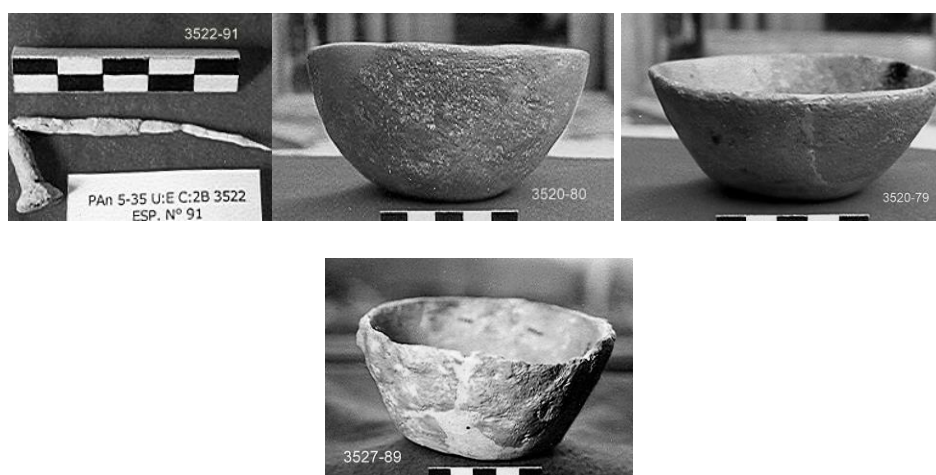


Figure 9. Bowls 3520-79, 80. Kaolinite bowl 3527-89, and nail copper pin 3522-91.

Table 7. List of Grave Goods from Quitapampa A PAn 5-35 Mortuary Chamber.

Shape	Number	Height (cm)	Diameter (cm)	Weight (grams)	Description
Bowl	3520-79	5.85	12	200	Red convex bowl with divergent sides. Non-decorated (Figure 9).
Bowl	3520-80	5.1	11	105	Hemispheric red bowl with craquelure and erosion on exterior surface (Figure 9).
Taza with handle	3522-81	7.1	16	660	Cup with rectilinear walls, flat base, and flanged rim. Rounded lip. Presents a corniform handle (Figure 17). Non-decorated.
Taza with handle	3522-78	11.2	14	548	Cup presents a modeled face and long corniform handle. A slight white wash was applied to the interior flanged rim, and in around the face and ears. Linear incisions accompany white wash around face, a kind of beard representation (Figure 12).
Pedestal base goblet	3522-82	8.6	11	270	Decoration consists on plastic applique at the exterior surface of the goblet. Appliqué designs resemble coffee grain size as clay additions and incisions that form an anthropomorphic face (Figure 13). Ring base or pedestal cup.
Cup	3522-83	7.6	10	182	Exterior surface presents a white wash slip over the red clay body. Two geometric abstract artistic design are observed around the cup. Geometrics concentric square motif painted in red pigment occur over the rim to the upper quadrant, separated by a lineal band. The other painted decoration occupies the base and hemisphere, and consists on a successive triangular pattern joint by a lineal band around bowl (Figure 16).
Modeled Pedestal Base Bowl	3522-84	6.8	12	255	Kaolinite hemispherical pedestal vessel with a modeled bat head, and two zoomorphic impressed faces at the sides as part of the rim. Head is demarked by red pigment, while light brown is displayed at most of the exterior surface. A slight black wash demarks a moustache and ears of the bat (Figure 10).
Double taza with Handle	3522-85	6.7	10	645	Double vessels are composed of two tazas or cups joint by the rim and base. Vessels shared a corniform handle. Rim is flat flanged, tazas have rectilinear walls. Red painted decoration in the lip, and walls by vertical wide red bands. Handle also presents red paint (Figure 15).
Paccha	3525-86	8	10	290	Whiteware with elongated corniform handle and small spout to pour liquids. Rounded body and short rectilinear neck. Red linear decoration over body and interior rim (Figure 14).
Paccha miniature	3526-87	4.6	2.5	73	Orangeware miniature with corniform raised handle. Ovoid shaped, it presents a small cylinder or spout to pour liquids. Red slip on surface (Figure 18).
Small Jar	3526-88	10	9	220	Small jar shows a small handle-like by the neck. The handle at the other side is missing. Convex base, and globular body, straight neck, and rim slight everted. Do not portray decoration (Figure 18).
Bowl	3527-89	5.65	12	150	Kaolinite bowl with divergent straight walls, and concave base. Protuberances in the exterior surface, rough finishing. Non-decorated (Figure 9).
Taza with Handle	3522-90	8.4	15	170	Fragmented pieces of a possible tall cup with flanged flat rim. Cup has a red base color which was painted over with a white wash in certain areas. Horizontal black lines are situated below flaring rim. Concentric squares decoration (Figure 11). A raised like corniform handle is also part of the vessel.
Copper Nail/Pin	3522-91	8.1	1.1	12	Copper object in the shape of a nail, non-decorated, it has been bent intentionally. Exterior surface presents corrosion (Figure 9).

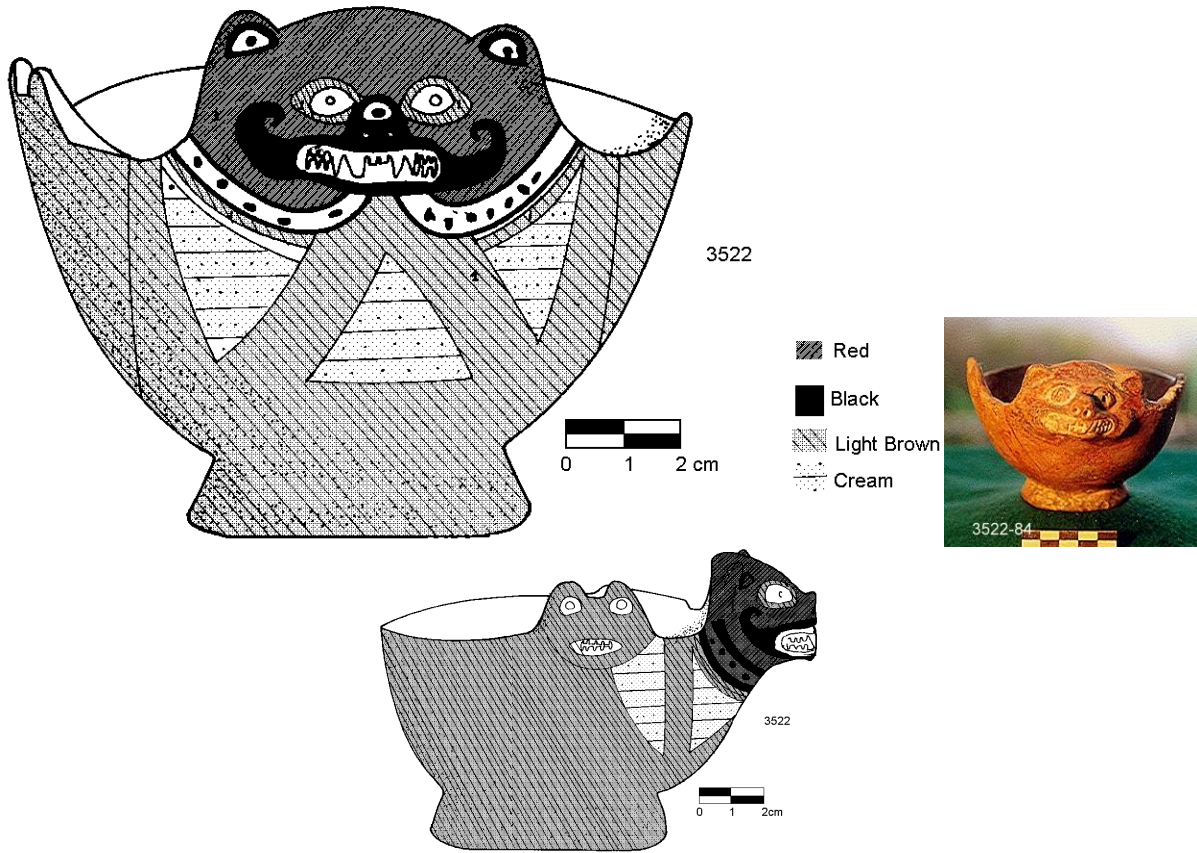


Figure 10. View of frontal and side view of 3522-84. Bat imagery?

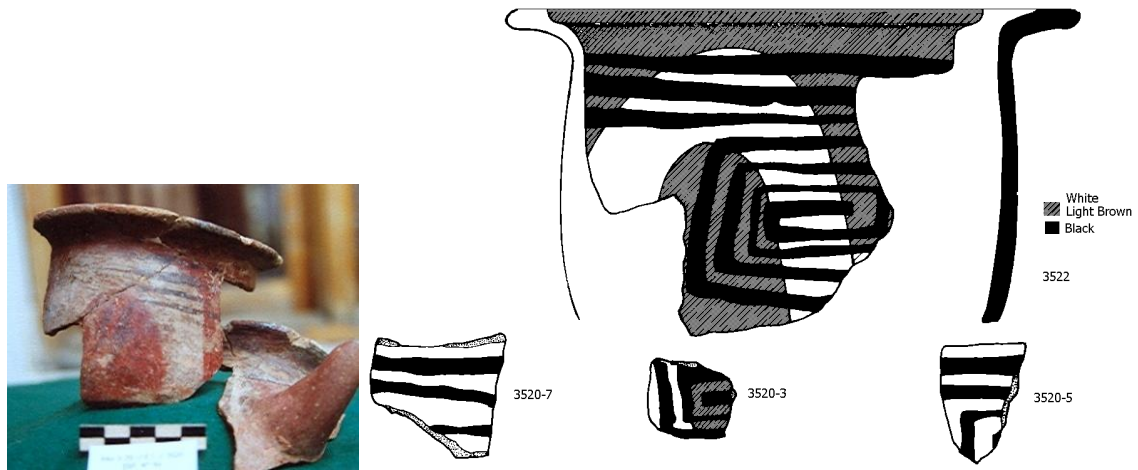


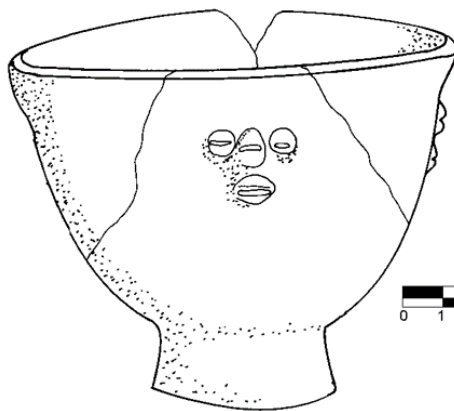
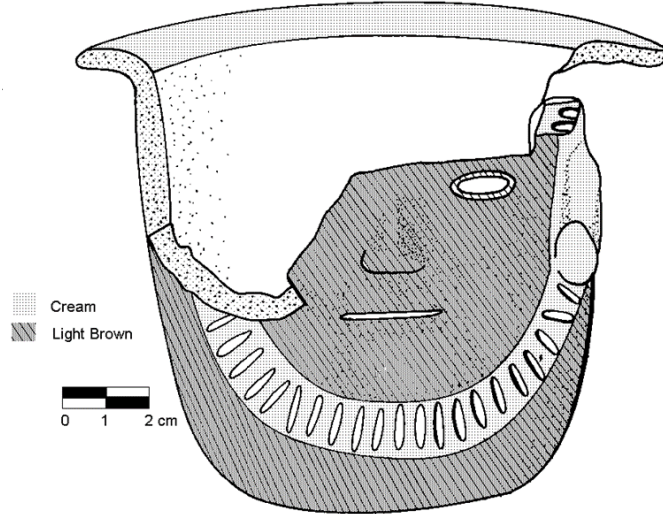
Figure 11. Tall taza 3522-90. Fragmented vessel impossible to restore it.

Figure 12. Taza
3522-78. Sketch
before
restoration



QUITAPAMPA A, Pan5-35

Nº de Reg. 3522



QUITAPAMPA A, Pan 5 - 35

Contexto Funerario

Copa con Diseno

Antropomorfo

Nº de Reg. 3522

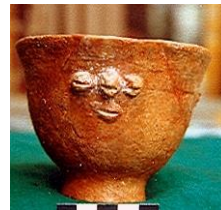


Figure 13. Goblet. Late Cotojirca III. Recuay Tradition (550 – 700 AD).

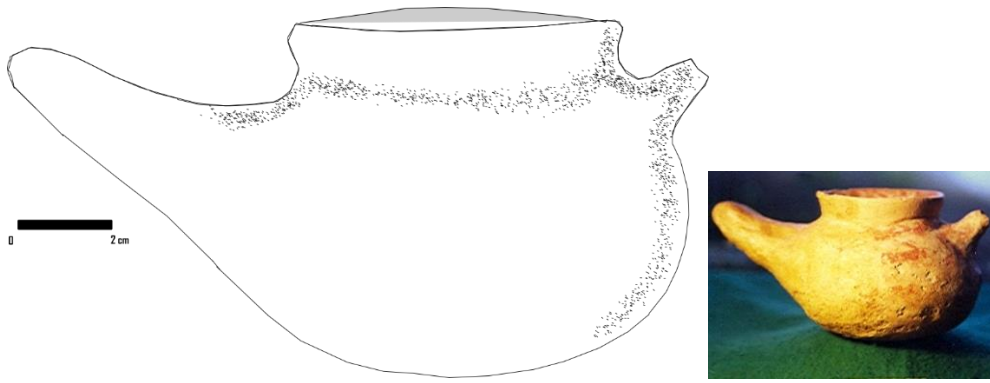


Figure 14. Paccha vessel ceramic style. Whiteware. No. 3525-86.

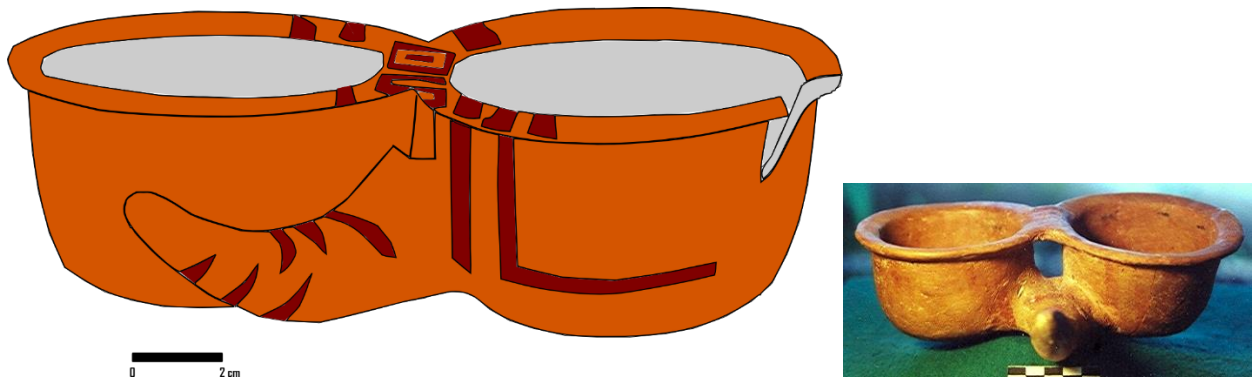


Figure 15. Double taza and tubular phallic handle (3522-85).



red over white cream wash slip (3522-83).

Figure 16. Geometric designs

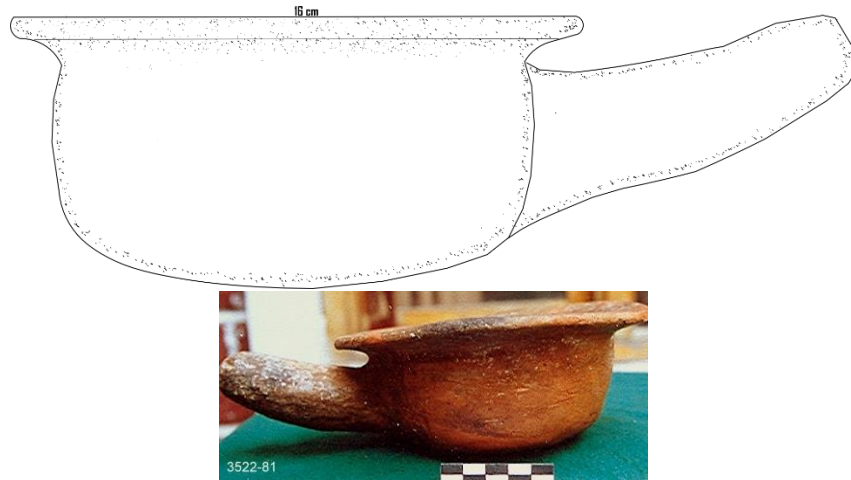
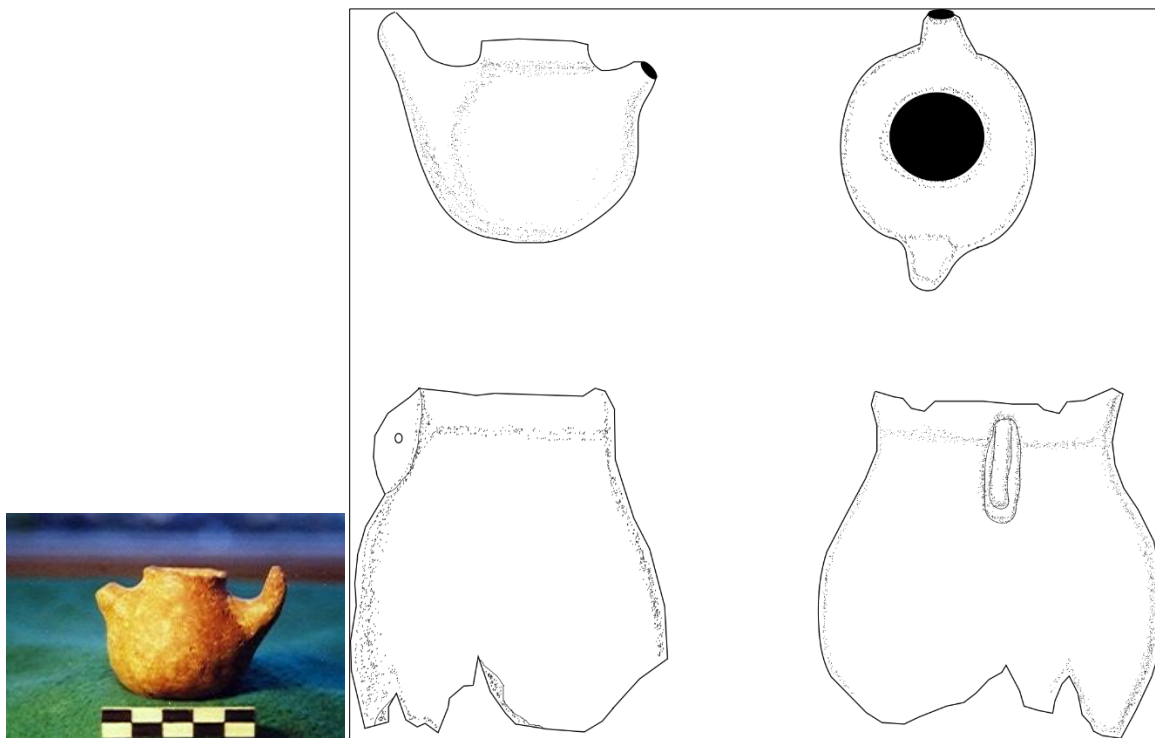


Figure 17. Taza with tubular handle. Vessel has been restored.

Figure 18. Miniature Paccha 3527-87 and small jar 3526-88.



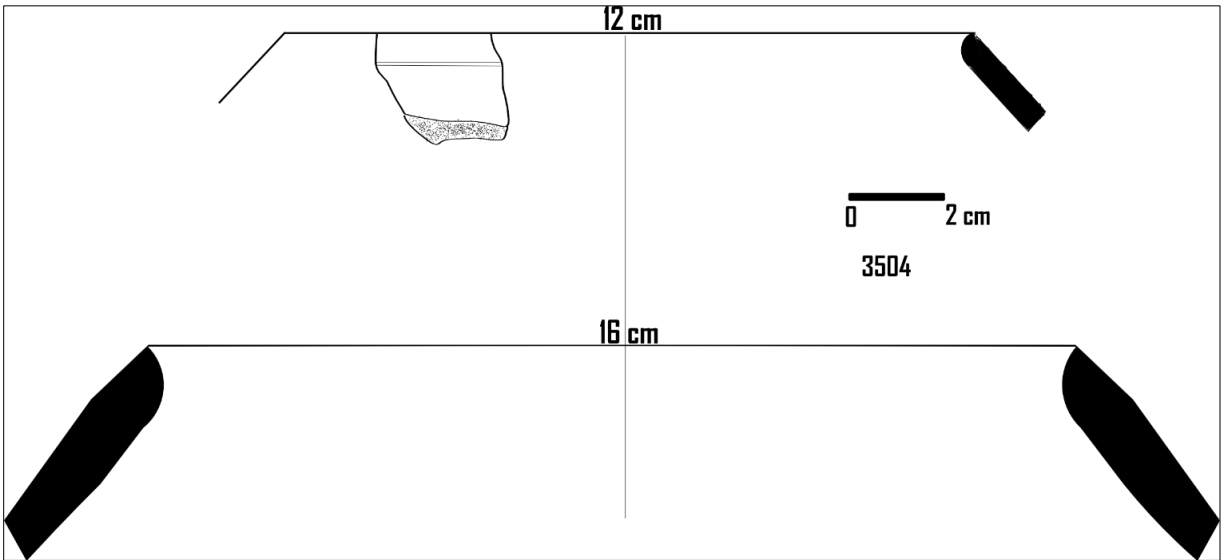


Figure 19. Neckless ollas found in topsoil of the Chamber Quitapampa A. PAn 5-35.

Ceramic vessels that accompanied the individual buried in Quitapampa A chamber are an important collection of local pottery that helps to understand the Recuay style in a regional perspective. It is interesting the contrast of the space and dimensions of a single chamber with the quantity and quality of the goods interred there.

Table 8. Summary of ceramic shapes and pastes at Quitapampa A (PAn 5-35).

Shapes	Kaolinite	Orangeware	Total
Bowls	1	2	3
Geometric Painted Cup		1	1
Modeled Pedestal Base Bowl	1		1
Taza with corniform handle		4	4
Plastic decoration goblet		1	1
Paccha	1	1	2
Small Jar	1		1
Neckless olla		2	2
Total	4	11	15

Bowls, tazas with handle, and *pacchas* are the most popular ceramic vessels. In general terms, the pottery assemblage lack of finewares as it can be observed on the other side of the Santa River.

Four cases of decorated pottery contrast to the rest of plain manufacture. Their function correlates with liquid containers, and less with cooking except to the couple of globular neckless rim fragments found at the topsoil. A ceremonial function can be suggested, especially for the modeled bat head bowl with incised faces at the sides. This vessel is a remarkable Recuay artwork charged with symbolic meaning. The shape of *Pacchas* as liquid pourers also has the watering symbolism as stream of water that breaks the soil (Allen 2002), an essential element for farming societies. This vessel shape is classified by Tello (1929: figure 47) as *kushuna*, as a reference to *cucurbita* plant or squash. Overall, the sample from chamber Quitapampa A can be dated to the late Recuay tradition (550 – 700 AD). Cup wares of red dusk over whitish base such as 3522-83 (Figure 16) has been situated in the Chinchawasi 1 phase ware A for the Chinchawas site. The use of whitish cream base imitates the whiteware kaolinite of previous phases (Lau 2010b:157).

3. PAn 5-42 Quitapampa B

Location: A couple of meters off from the ancient trail that goes the crest of the hill to Cuncashca. 584 meters distance to the nearest habitation site Marenayoc (PAn 5-37). Approximately 2 meters southwest from Quitapampa C, in the property of farmer Cipriano Castromonte.

Area: 7.5 m²

UTM Coordinates: 215,921.39 E 8°956,700.02 N

Altitude: 3,565.144 meters above sea level (m.a.s.l).

Description: At the south side and above the trail it is possible to observe a structure, almost near to the ground level, composed of a couple of flat boulders which functioned as roofs of two chambers. A modern “*pirca*” stone wall that divides farming plots is located over the south side of the structure. A modern channel has also disturbed it. No artifacts were seen on the surface, however, there might be some kind of association with the ancient pathway, a trail still in use by local peasants.



Figure 20. Detail of the structure Quitapampa B PAn 5-42 before the excavation.

Excavations: Roof boulders measured 3.2 and 2.2 m respectively. Ceramic fragments were found in the sediment over boulders and the exterior of the structure. The first strata inside the structure was disturbed finding plastic bags mixed with pre-Hispanic sherds. Second strata had a clayish

texture of reddish yellow color (5YR 6/8), in which the frequency of sherds increased in association with much deteriorated human bones. This level also was disturbed due to the finding of coins and plastic together with pre-Hispanic material. The most significant finding was situated at the bottom of the structure, Strata 3 level B. Three incomplete vessels were arranged in the southwest corner of chamber B which had more evidence of grave goods such as the remains of charcoal, and a macro botanical fragment of carbonized maize cob. Few ceramic shards, and badly preserved human bones complete the inventory. Quitapampa B mortuary structure's consists of two chambers linked by an entryway formed by two carved stones as lintel, two carved jamb stones and one slab as threshold. An antechamber or access is situated at the east side (Figure 22). One more time, the masonry of the wall is made by standing carved granite stones, filled between them by flat small stones or fillers, "*huanca-pachilla*" a local tradition masonry (see Figure 21).

Table 9. Dimensions Mortuary Chambers of Quitapampa B PAn 5-42 in Centimeters.

	Depth	Length	Width
Chamber A	115	90	120
Chamber B	120	135	120
Antechamber	80	60	82

Grave Goods: Like in the previous site Amá PAn 5-34, localized less than 800 m from Quitapampa, Moche style ceramic fragments were deposited in the burial. In this case, the same fanged personage is repeated in a modeled orangeware intentionally cut. A handle spout of Moche style, also was found next to the face, a clear imported material. *Paccha* miniature is the most diagnostic local style material. Dimensions: Height 6.7 cm. Mouth diameter: 4.9 cm. Weight: 209 grams.

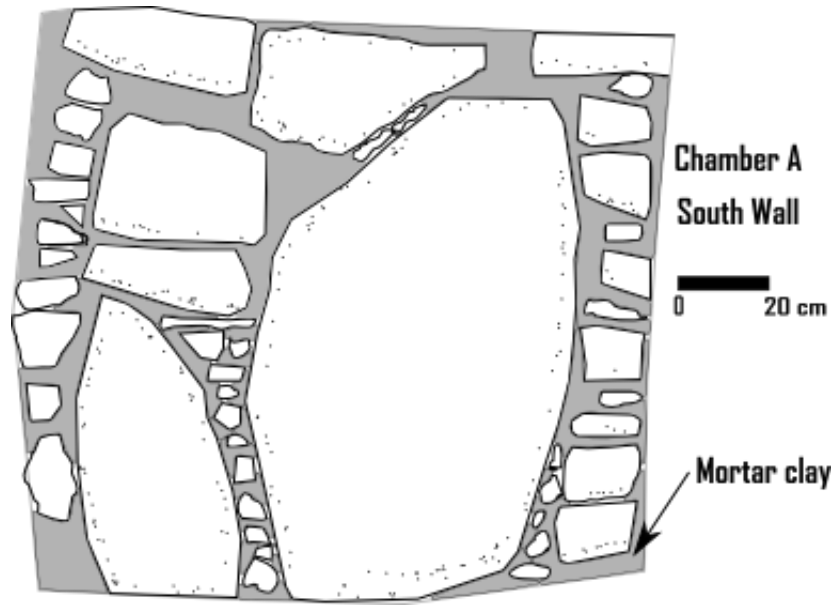


Figure 21. Configuration of the masonry of Quitapampa B. standing stone and fillers

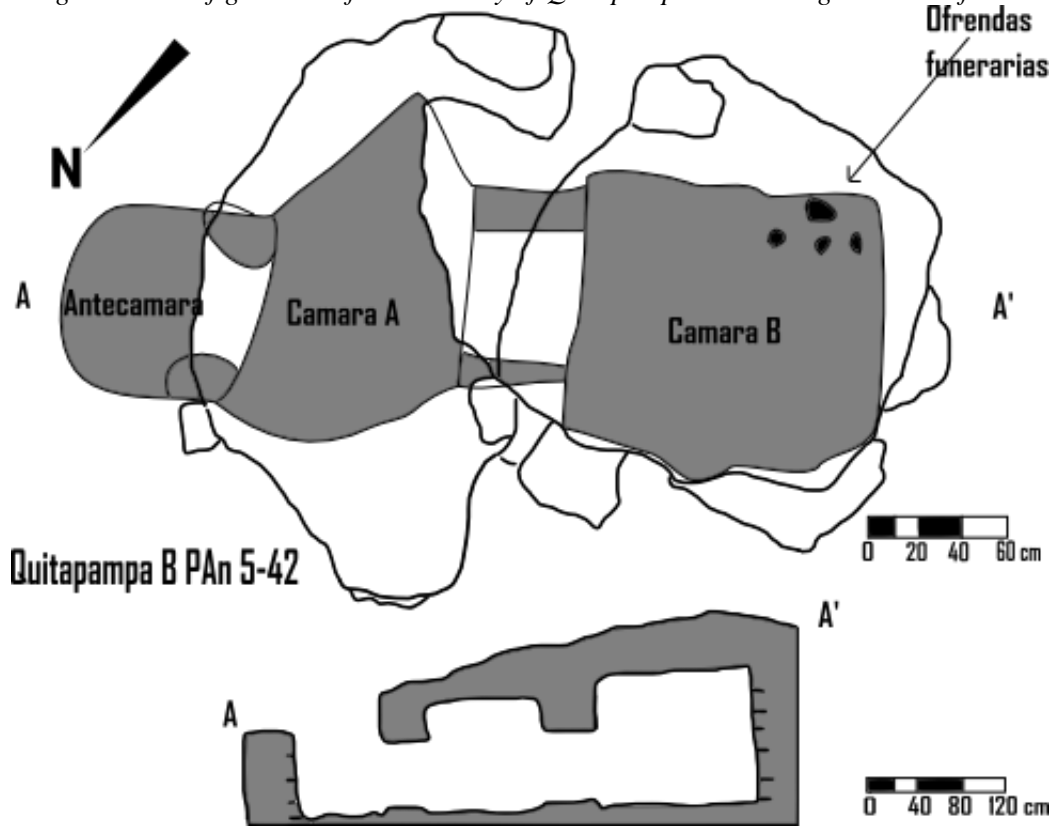


Figure 22. Plan view and elevation of the mortuary structures at Quitapampa B.



Figure 23. Moche half face. See Figure 4 for comparisons.

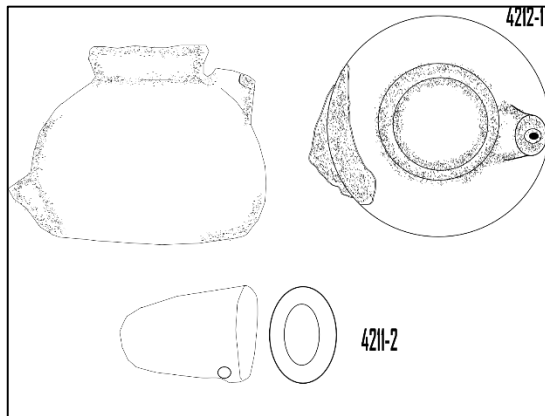


Figure 24. Paccha or pouring vessel.

It seems that part of the Moche ideology coexisted within Recuay populations. Although incomplete, the iconography of the fanged deity is represented twice in mortuary chambers from the Cordillera Negra. Perhaps forming part of a vase, the imported findings also included a handle fragment of stirrup vessels of clear Moche style. Interrelations or interactions between Moche and Recuay groups lacked of friendly encounters, normally are characterized in the context of warfare and conflict (Lau 2004b:164). The evidence depicts a face with wrinkles, exaggerated eyes, and double fanged mouth that probably were part of an effigy vessel Moche style phase IV. This is the representation of the fanged deity called “Decapitator” or Ai Apaec, the supreme male Moche deity (Makowski 2000: figures: 57, 63). It suggests a long distance relationships with the Coastal populations of Ancash and La Libertad.

4. PAn 5-50 Quitapampa C

Location: In the same area of Quitapampa B, just a couple of meters to the east but totally buried underground. A terraced area with crops is located at the east side of the ridge, divided by a dry stone wall, which roughly goes NE-SW (201°). 591 meters is the distance to Marenayoc.

Area: 273 m²

UTM: 215,922.62 E 8'956,692 N

Altitude: 3,566 meters above sea level (m.a.s.l).

Description: Previously to the construction of the Jangas – Pierina road, test unit pits were performed in area of Quitapampa. Due to findings of underground structures, engineering planners had to reroute the road. The area was divided in two sectors. Sector I was adjunct to Quitapampa B chamber, and sector II located at the eastern side of terrace. The area measured 21 x 13 m, limited by a steep slope to the east, the farmer's house to the north, and the trail, and Quitapampa B to the west. To the south is located the berm of the Jangas-Pierina road.

Excavations: I am going to describe in detail findings on sector I, since test units in sector II uncovered non-mortuary elements that do not belong to Recuay cultural components. The limited excavation defined domestic structures corresponding to the previous Early Horizon period.

Excavations in sector I were situated next to the modern-era stone wall that delimited the terrace with bean crops. First strata is composed of silty clay texture, light brown 7.5YR 6/4. It had 22 cm of thickness. The cemented canal situated at the north side disturbed the soil, and was removed. Although no cultural indicators were shown, two flat rocky blocks with rough and irregular surfaces appeared at the end of this layer, obviously calling our attention to it. We decided to continue with the excavation. Second strata characterized by a yellowish red 5YR 5/8 clayish

texture was associated to the antechamber and sides of the construction. This sediment covered the structure. The mortuary structure is composed of two chambers connected by an entryway, and antechamber. This latter one is an oval shaped structure separated by vertical stones, which allowed access to the chambers. Contrary to the other structures, it does not have a roof, measured 0.95 m of diameter, and 0.80 m height. The floor of the antechamber is the simple strata two, without any indicator of special preparation. Plain ceramic fragments were found there. The entrance to Chamber A faced the antechamber. It is formed by two stones set as jambs, and a horizontal block as lintel. Dimensions of chamber A: 2 x 1.73 m, and 1.10 height. The roof is a large slab. Chamber A was totally filled with dirt, distinguishing two layers: clay light brown (same as strata one) of 0.80 m thickness without cultural findings. Next layer had the same characteristics with the exception of dispersed ash lenses. In this feature were found burnt maize kernels, and plain ceramic fragments. Next to the north wall appeared two findings: orange past plate of divergent side and ring base (5006-2), and a jar with applied and incised plastic decoration (5006). Human bones very deteriorated, practically disintegrated due to humidity and acidic of the sediment were observed at the northwest wall.

Chamber B had the same constructive system as chamber A. The difference falls on the dimensions; 1.45 x 1.20 m. The chamber was found filled to a depth of 0.80 m, the same as chamber A, divided by two clear strata. First strata had macro botanical remains of 50 kernels and 14 carbonized maize cobs. In the second strata, beside the ceramic fragments, was recovered a jar with stamped decoration on the neck (Figure 28, 5015). A tupu copper pin, with a hole, like a needle was also found (Figure 29, 5016). These double underground chambers at Quitapampa C constituted one of the biggest structures recorded in the investigated area (Figure 25). When the

project was functioning, this site had many visitors, so tourist informational displays, and signs were available. A traditional Andean thatched roof was also built as protection to cover the site.

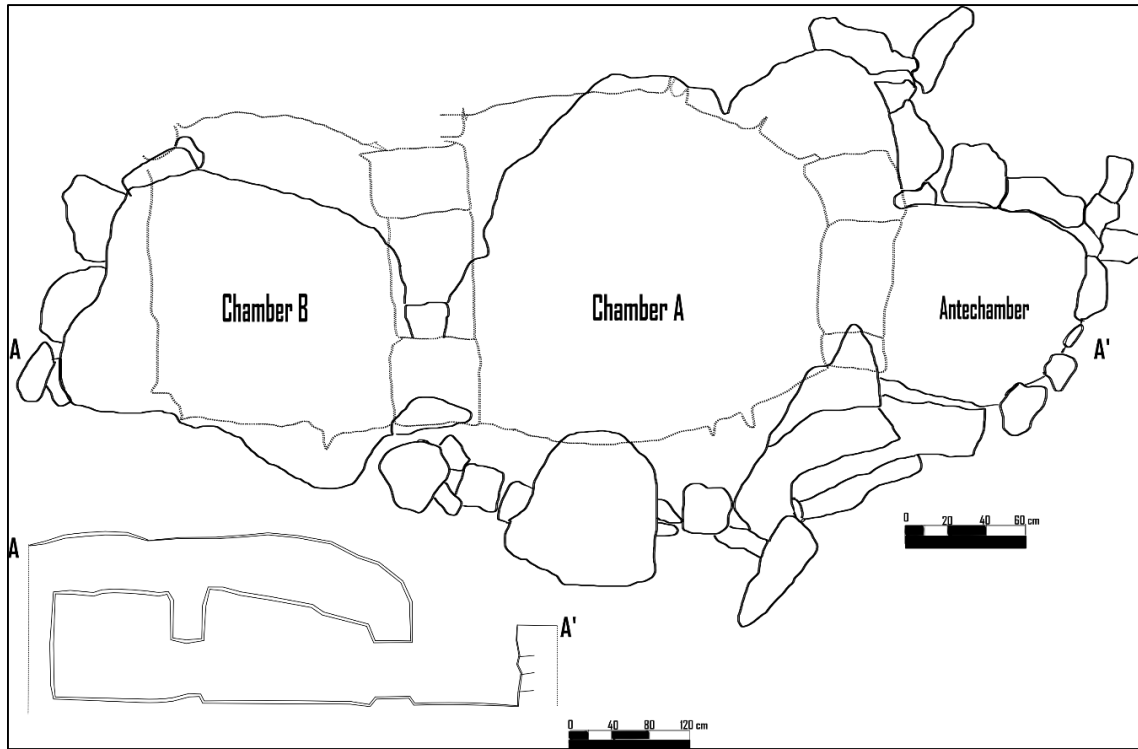


Figure 25. Plain view of the double chamber at Quitapampa C PAn 5-50.

Antechamber		Chamber A		Chamber B	
Area	Height	Area	Height	Area	Height
.92 x .95	0.8	2 x 1.73	1.1	1.45 x 1.20	1.05

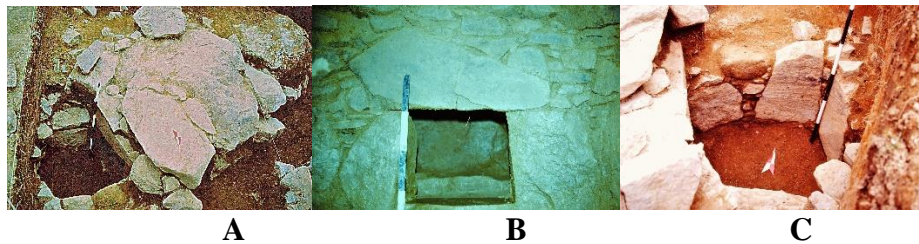


Figure 26.

A. View of the complete mortuary structure, looking south. B. Detail of the lintel, and jambs interior Chamber B. C. Antechamber “huanca-pachilla” masonry.

Grave Goods: The total number of complete items deposited in the chambers was 11. All of them were found at the floor of the structures which correlates with the stratigraphy of level 2. The

ceramic vessels have been restored for curation purposes. The ceramic collection from Quitapampa C has significant importance in the evaluation of the chronology, and cultural association of the mortuary chambers. If we just use this material culture, it would lead to a wrong assessment given the later correspondence of the ceramics. Without doubt the architecture of Quitapampa C continues the Recuay mortuary constructive tradition chronologically situated at 400 to 650 CE during the Early Intermediate Period. However, the material content has a different temporal association, situated at 800 to 1,000 CE in the local sequence of Cotojirca IV/Ancosh – Cotojirca V during the late Middle Horizon Period. The tomb was reused by post-Recuay societies.

<i>Table 11. Grave Goods Inventory Quitapampa C (PAn 5-50)</i>			
	Antechamber	Chamber A	Chamber B
1st Strata	Plain ware fragments	Plain ware fragments	Plain ware fragments
2nd Strata		14 <i>Zea Mays</i> cobs + 50 kernels Hemispheric bowl Open divergent bowl Small spherical jar Plastic decorated jar Open bowl	Plastic decorated jar Hemispheric bowl Plain jar Tupu copper pin Tupu copper pin

Table 12. List of Attributes Grave Goods Quitapampa C Pan 5-50 in centimeters and grams

Chamber	Diameter mouth	Height	Weight	Comments
Antechamber			390	Plain ware.
Exterior			226	Plain ware.
Chamber A	11.3	4.5	185	Open bowl 5005-229 with convex body and yellowish red color 5YR 6/6. Sooting clouds at the exterior surface. It can be observed manufacturing marks as parallel horizontal lines probably due to the coiling process. Finishing is rough irregular. Rounded lip.
			1276	Plain ware.
	5	7.6	170	Small jar 5005-230 of spherical body and short neck. Short applique on the upper side of body, possible an evidence of handle. 2.5YR 4/8 red color surface with granule-like white inclusions.
	13.4	7	310	Hemispheric bowl 5005-231 with convex sides, and base. A slight exterior rounded lip. Exterior slip surface is almost gone, but present evidence of lineal painted decoration in red. Body color 2.5YR 6/8 light red (Figure 27).
	5	17.3	509	Complete jar 5006-232 of ovoid shape, and vertical handles at the maximum diameter of body. Convex neck and rim is everted. Exists plastic decoration in the neck, in the form of applique with repetitive incisions. Color 5YR 7/8 yellowish red (Figure 28).
	18	7	330	Open bowl 5006-233 of divergent sides, and ring base. Irregular rim, lip has disappeared. Sooting clouds at interior and exterior surface. Presents cooling or finishing horizontal marks, sides of vessels are asymmetrical. Color 7.5YR 8/6. Figure 57 (c).
Chamber B			448	Plain ware.
	5.3	12	222	Small jar 5014-234, ovoid shape and neck slightly everted. Beveled rim, and rounded lip. Sooting clouds in the rim and near to flat base. Some burnish finishing. Color 10R 4/8 red (Figure 29 D).
	12.7	7.7	254	Hemispheric bowl 5014-235, exterior surface is eroded but it can be notice lineal painted decoration on upper part of vessel separated by horizontal band. Body color: 5YR 7/8 yellowish red. (Figure 27).
	6.4	21.3	500	Jar 5015-236, with plastic decoration. This complete jar presents ovoid shape body with handles located in the upper part. Rectilinear neck and everted rim thickened to the exterior. Convex base. Decoration located on the neck, as circular impressions organized horizontally. Protuberances are also shown few times in the middle part of neck. Stain in areas of body. Color: 2.5YR 6/8 light red (Figure 28).
	0.3	7.2	4	Incomplete needle 5014-238, copper <i>tupu</i> pin. Lack of the upper part. Affected by oxidation (Figure 29 B).
	0.2	5.1	4	Copper <i>tupu</i> pin 5016-239, with conical head shape. Below head have a perforation Its distal extreme is pointed. Item is fragmented (Figure 29 A).

Both hemispheric bowls 5005-231 and 5014-234 can be cataloged as the earlier expression or being contemporaneous with the construction of the subterranean tombs. Their position in each chamber suggest an intentional arrangement of grave goods. Although very eroded, both vessels present a painted linear decoration in red, a possible variant of bowls “Huaras White on Red style” uncovered by Bennett (1944:fig.12) from unlined tomb near the city of Huaraz. Lau’s excavations in the Recuay village of Chinchawas recovered similar open bowls painted in white over a red background, which is denominated Chinchawasi 1 Ware B (Lau 2010:161). This is a phase contemporaneous to the local phase Cotojirca III at least its later part (circa 550 to 700 CE).

Both jars (5006-232; 5015-236) have a correlation with the fortified sites in the Pierina mine assigned to the local phase Cotojirca IV and V during the Middle Horizon and Late Intermediate Period (700 – 1,400 CE). Interestingly, both were deposited in each chamber, as a mortuary ritual arrangement. The plastic decoration adornments of jars became popular in the Callejón de Huaylas associated to *Chullpa* mortuary buildings, which follows the subterranean Recuay mortuary tradition. A similar specimen of applied decoration in the neck of jars is shown by Lau (2010: figure 76, 1) on his Warmi phase (900 CE).

Post-Death Ceremonies: The only possible explanation of the presence of this material culture that belongs to later periods at the double chambers of Quitapampa C is the intrusion to the chamber by later groups, which re-used the chamber, removing their contents (bodies, original goods) and depositing new offerings. In the region of Ancash existed an ancestral practice to removed human bodies from their tombs and burn them. It is recorded in ethno-historical

documents and manuscripts (Principe 1923:34)⁹. Another historical document that has a correlation with the archaeological evidence of Quitapampa C, is the deposition of burnt maize and jars with *chicha* (corn beer) in the door of the chambers (Duviols 1986:186). The archaeological findings of 14 burnt cobs of *zea Mays* and 50 kernels clearly have intentional purposes of offerings in a ritual contextual relationship of food for the deceased.

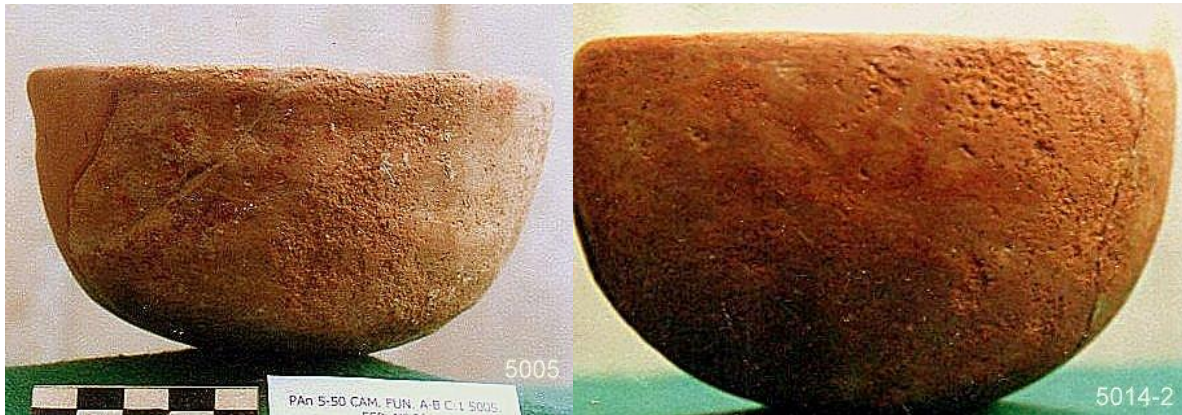


Figure 27. Globular bowls 5005-231 and 5014-235. Imperceptible red painted decoration.



Figure 28. Jars, 5006-232 and 5015-236. Both were found in Chamber A and B at Quitapampa C.

⁹ “Adoraban los huaris, primeros pobladores,cuyos cuerpos y de sus progenitors se sacaron y quemaron” p.34.

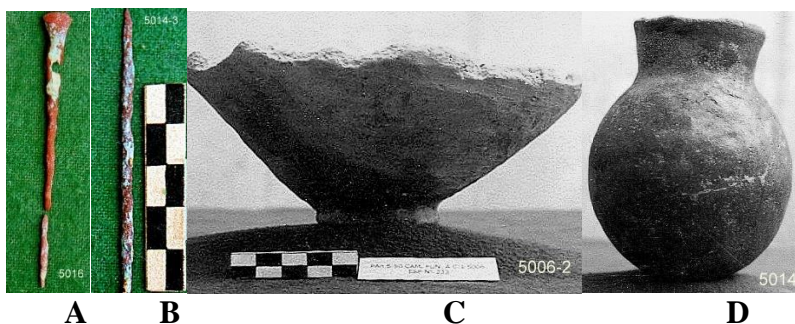


Figure 29. Copper pins 5016-239 (A), 5014-238 (B). Bowl 5006-233 (C) Jar 5014-234 (D).

5. PAn 5-49 Amá II A

Location: In the back of a farmer's house, a patio circumscribed by a rough dry stone wall enclosed an area of overhanging natural boulders in steeped slope terrain. The patio most likely functioned as corral. The area is located on the third terrace, counting down from the ancient trail, and was threaten by a cut made by the Jangas – Pierina road. 355 meters separates to Marenayoc (PAn 5-37). 80 m to Amá II B tomb.

Area: 2 m²

UTM: 215,944.11 E 8'956,785.85 N

Elevation: 3,534 meters above sea level (m.a.s.l).

Description: A disturbed secondary burial was found under an overhang boulder. The small space was used as pig pen until very recently. The area is very abrupt and rocky, a reason why terraces where built to diminish the slope.

Excavations: 1x1 m test unit was performed under the overhang boulder. First layer basically is formed by an accumulation of pig droppings, since the space under boulder was used as a corral. First strata of 10 cm thickness also was disturbed with plastics, and modern trash. Second layer consisted of granule clayish sediment above bedrock that lies at 22 cm below surface. Deteriorated skeletal remains were found between the slabs of bedrock. The burial was left in an extended

position deposited in a small compartment formed by the bedrock. No structures or grave goods accompanied the jumble of bones.

Skeletal Remains: No precise information is available besides the identification of bones of a possible adult male individual in extended position considering the position of hips, and left femur. Bones were not complete, with yellowish coloration, and some dark stains to black spots. Most likely due to post-mortem modification by the contact with the soil and environment. Five plain ware ceramic fragments were also recovered from the excavation but do not constitute offerings or goods to the burial.

6. PAn 5-49 Amá II B

Location: Immediately next to the ancient trail, to the west and to the other side of the dry stone wall that separates the parcel of Marcelo Nolasco. Adobe houses are located at the northeast and east delimited by a concrete canal and pedestrian trail. 16 m distances to Amá II D chamber, and 486 m to Mareniyoc.

Area: 3x3 m

UTM: 215,949.84 E 8°956,790.19 N

Altitude: 3,532 meters above sea level (m.a.s.l)

Description: The tomb is located on a moderate slope of rocky terrain. Many large size andesite boulders are distributed along the terrace. One of the rounded ovoid bluish boulders had stones arranged underneath it, especially on the northeast side. In the cavity underneath and exterior side of this boulder was performed archaeological excavations.

Excavations: This chamber measured 1.43 meters of height, had semicircular plan, of about 3 m². It showed an oval antechamber of 80 cm diameter located at the northeast side, followed by a small

access formed by two jambs of 52 cm height and lintel of 55 cm width. The roof was a big rounded blue boulder. Underneath this boulder was built a wall at the back of the chamber. The chamber had oval shape, which followed the contours of the boulder that functioned as a roof. This back wall had the characteristics of the Recuay masonry technique called "*huanca-pachilla*" using polygonal rocks as standing stones. Either in the entryway and inside the chamber were found many disarticulated and deteriorated human bones, belonging to several individuals. One burial was covered by a large slab, underneath it was found a smashed adult skull, and femur bones, which may indicate flexed position of the individual (Figure 4.4). The east side of the structure collapsed, and only the foundations composed of an irregular mid-size stone alignment built over bedrock was observed. This curved structure formed the exterior of the chamber, and exhibited two rows of stones set with mortar, but none were cut stones and neither showed a high quality masonry. First strata is formed by compacted soil of strong brown color (7.5 YR 5/8) with very few roots and no gravel. It covered the stone structures. The second strata was a reddish yellow clay 7.5YR 6/5 and was associated with human remains. Two kaolinite bowls were also found.

Grave Goods: Two pedestal cups of Recuay style were found associated to fragmented human bones. They were found in strata 2, which is the level in where individuals and offerings were deposited. In the clayish sediment were also found a round silver adornment, and a female figurine. In the exterior of chamber two fragmented bowls appeared in the antechamber. Five fragmented crisocola beads were found while screening soil from strata 2.



Figure 30. The opening is the collapsed wall of west side of chamber B. Antechamber is far left of picture.

Table 13. Grave Goods Ama II B PAn 5-49 dimensions in centimeters

Provenience	Diameter mouth vessel	Height	Weight (grams)	Description
Antechamber	16.4	10.1	426	Red 10R 3/6 round bowl non-decorated globular body, irregular rim. Restored. Manufacture lines and stain marks inside vessel (Figure 31 A).
Exterior W	15.4	10.1	210	Incomplete vessel, globular bowl, rounded base, direct rim symmetrically thinning. Stain at the exterior surface. Red color 10R 5/8 (Figure 31 B).
Chamber	12.7	7.2	145	Kaolinite pedestal hemispheric bowl. Thin vertical rim. Pedestal base has deformed siding. Painted decoration probably lost. Manufacture marks like rings underneath base. Color pale yellow 2.5Y 8/4 (Figure 31 C).
Chamber	12	6.6	185	Kaolinite pedestal hemispheric bowl. Lineal strong brown (7.5YR 5/8) decoration consists of a repetitive motive of five vertical lines, separated by two horizontal lines, which functioned as a superior panel (Figure 31 D).
Chamber	N/A	3.9	2	Ceramic anthropomorphic figurine. It was used as a pendant. A complete specimen, most likely represents a female in sitting position. Arms and hands are laying on her abdomen and lower limbs close together. Presents a headdress that falls to her shoulders. Red color 2.5 YR 4/8. Probably it was made by molded (Figure 31 E).
Chamber	N/A	2.5 (diameter)	1	Personal ornament, earring? Silver small circular disk with a hole near the edge. This was made by perforation and twisting as it can be observed in on side of disk. Possibly made by laminated (Figure 31 F).
Chamber	N/A	N/A	38	Mollusk, sea shell fragment, species non-identified.
Chamber	N/A	N/A	3,590	Orange ware non-diagnostic ceramic fragments.
Chamber		N/A	6	Stone spinning whorl.
Chamber	N/A	N/A	?	Five crisocola bead fragments.



Figure 31. Illustrations of grave goods at Amá II B mortuary chamber.

Preliminary View of Skeletal Remains from Amá II B, PAn 5-49

A total number of 9 individuals were identified in the mortuary chamber Amá II B. Sex could be identified on 7 of the adult individuals. Considering the molars, the sub adult is estimated at an age of death of 15 years. Caries, pre-mortem loss of teeth, and an abscess in the dental and bone pathologies are observed. Some taphonomic observations include yellow to dark stain spots, and erosion on the surface of the long bones, and a green coloration in a molar crown of the child was probably due to contact with the humid soil of the chamber.

Table 14. MNI from Chamber Amá II B PAn 5-49.

Burial Chamber	Adults			Sub adults			Child	Infant	Fetal	Total MNI
	Male	Female	Unsexed	Male	Female	Unsex				
PAn 5-49 Ama II B	4	2	1			1	1			9

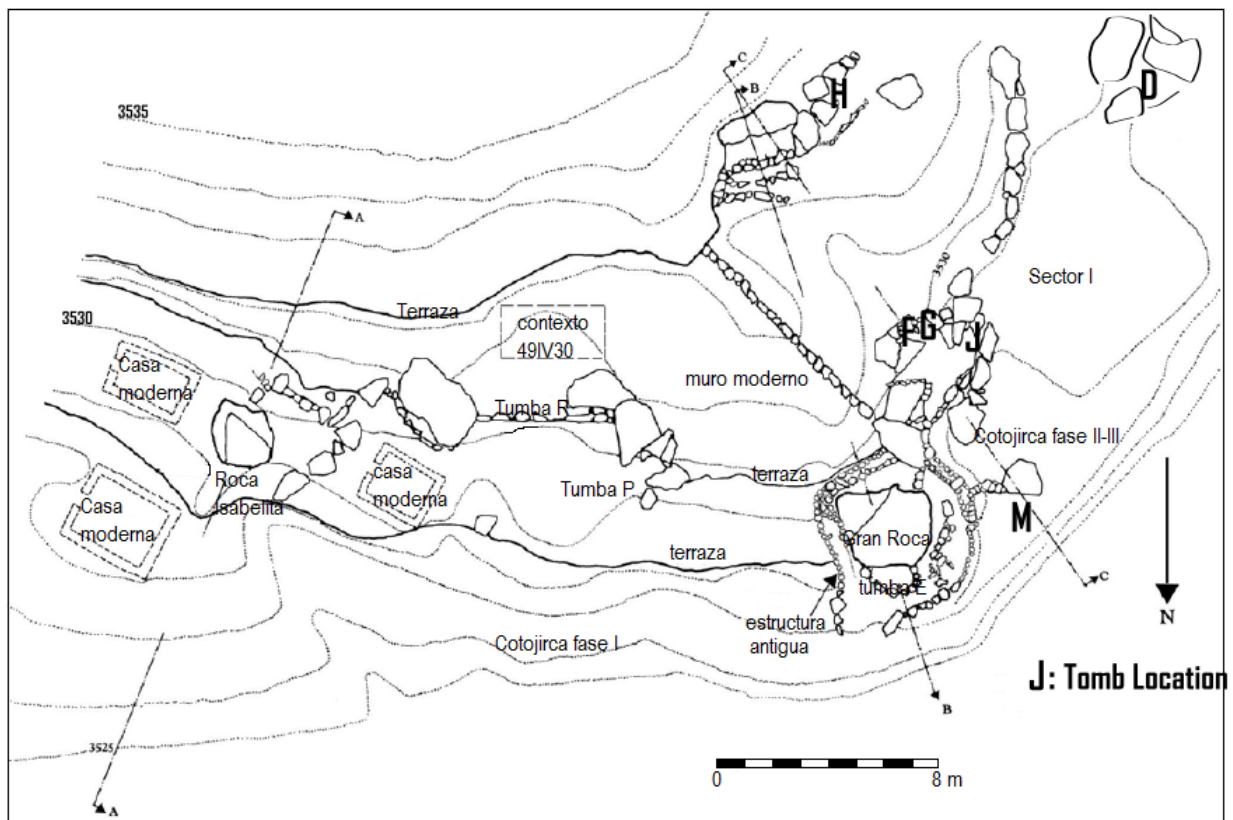


Figure 32. Map of some of the tombs and features at the Amá II PAN 5-49 mortuary site.

7. PAN 5-49 Amá II D

Location: It is the third terrace counting down from the Pre-Hispanic pedestrian trail that goes to the town of Marenayoc. This area was called sector I (see Figure 32). It was limited to the west with a deep rocky slope (> 50%) altered by the construction of the Jangas – Pierina road. Many mortuary structures are located on this terrace. The Amá II E tomb is located at about 10 m. This area has ancient retention walls formed by big boulders and has been reutilized by modern peasants to separate crop parcels. At about 481 m distance from the platform mound of Marenayoc.

Area: 2.10 x 2.10 m

UTM: 215,932.23 E 8°956,773.01 N

Elevation: 3,525 meters above sea level (m.a.s.l)

Description: The mortuary chamber is formed by three big boulders (Figure 33). Underneath the overhanging one was arranged a structure like an oval stone wall built in a pure classic Recuay style. The whole structure was observed only after excavations were performed. Before excavations have begun, survey below the boulders found dispersed femurs, and loose eroded human bones along with three complete Pre-Hispanic vessels that correspond to the local post-Recuay Cotojirca V phase (Late Intermediate Period (1,100 – 1,470 CE)).

Excavations: Amá II D was excavated over two seasons. The first one was dedicated to investigating inside the burial chamber, mostly a reddish yellow (7.5YR 6/8) silty clay fill of 30 centimeters thickness in which human bones were found inserted in the soil in a very disorganized and disarticulated manner. As mentioned above, three ordinary vessels belonging to Cotojirca V phase were found at the top of this layer (4921-1, 2, 3). At 5 cm below surface four more vessels (4921-4, 5, 6, 7) of the same style as previous ones appeared in the disturbed soil. A cranium of an adult individual showing some kind of lesion in the frontal and temporal bone was found at about 15 cm below surface. More bones were associated but disarticulated like an ossuary. At the bottom of this layer, next to the western wall of chamber appeared a red *cántaro* globular jar (4923-1). It was fragmented, and associated to a *tupu* metal pin (Figure 4.5, 4923-2). During the second season of excavating the chamber, another globular *cántaro* jar was found below a stone slab. Two more findings of *tupu* metal pins (49I74, 49I76) and remains of three small bowls were found within chamber in the same reddish yellow filling strata. The antechamber, which measured 60 centimeters of diameter, was incomplete, only the foundations were observed. At the end of the fill, it was possible to observe the red clay color of the floor of the chamber and its whole structure. In summary, this is another case of a mortuary chamber that employs the classic Recuay style of masonry “*huanca-pachilla*” (Figure 35). This chamber had an antechamber but not so well

accomplished like the other ones. A large stone block forms the roof reaching 1.20 height. The access lacks of lintel, or a portion of it is missing, same as the jamb, only one was observed. The orientation of the entryway does not follow a precise geographical pattern, and mostly it is configured by topographic features. This is a case of tomb intrusion or re-visitation event, the chamber was filled with dirt by another group whom removed skeletons and left ceramics as offerings.

Grave Goods: Most of the offerings left in the tomb were found in the reddish yellow fill with the entanglements of human bones. A total number of 16 items were left in the tomb Amá II D as offerings for the deceased individuals during post-death ceremonies. The objects are very variable and do not show very convincing Recuay pottery affiliations. Most likely resemble to post-Recuay societies, between to 1,100 to 1470 CE, during the local Cotojirca V phase.



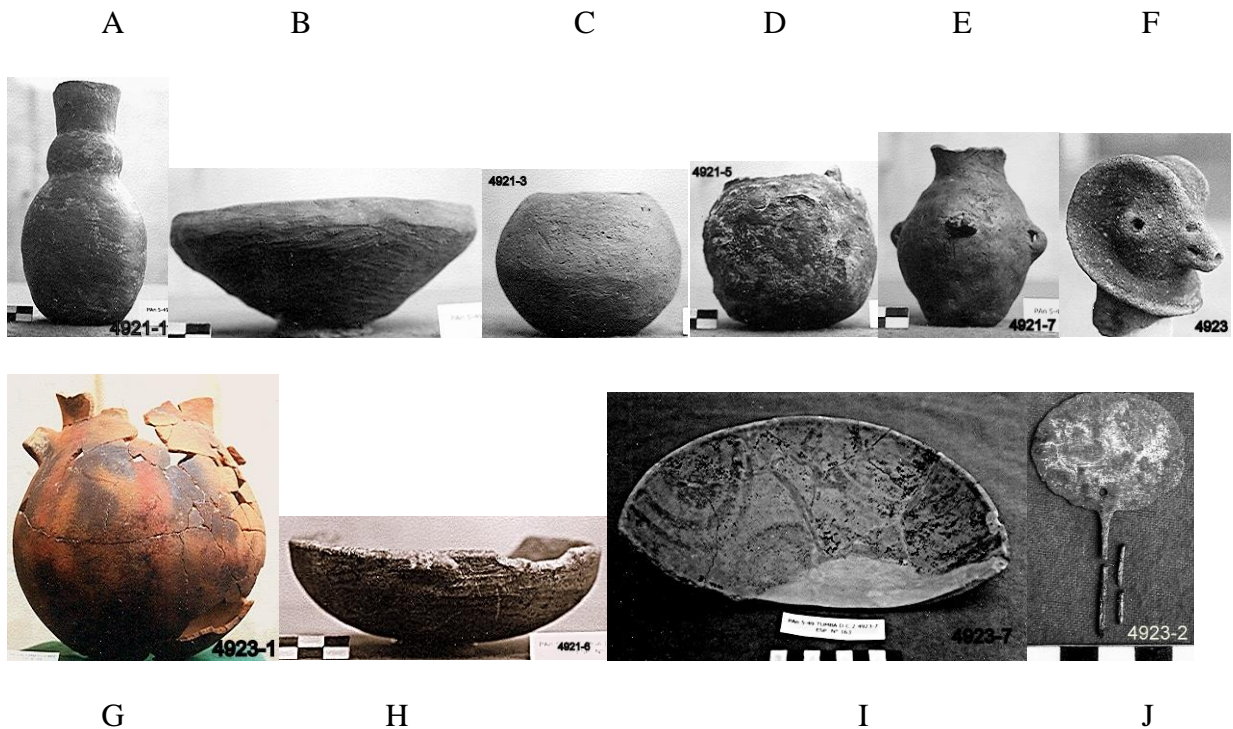
Figure 33. Overhanging boulder formed the roof of the Amá II D mortuary chamber.

Table 16. Grave Goods Chamber Amá II D PAn 5-49 dimensions in centimeters

Provenience	Ceramics	Diameter (mouth)	Height	Weight (grams)	Description
Chamber	Short Bottle 4921-1	4.4	14.7	280	Ovoid body shape with rounded neck. Rim slightly everted, flat base. Reddish brown color (2.5YR 2.5/3) (Figure 34, A).
Chamber	Divergent sides Bowl 4921-2	13.5	5.4	225	Open bowl with divergent sides and small ring base. Inverted conical body shape. Presents manufacture stains. Red color (2.5YR 5/8) (Figure 17, B).
Chamber	Small Globular Bowl 4921-3	4.2	5.8	90	Diameter of body is larger than the mouth. Flat base and convex sides. Black stains on exterior surface due to manufacturing process. Color light red (2.5YR 6/8) (Figure 34 C).
Chamber	Small Globular Bowl 4921-5	5.7	7.7	180	Rough irregular surfaces, eroded, deteriorated, rim is missing. Convex base. Surface color dark reddish brown 2.5YR 2.5/4 (Figure 34 D).
Chamber	Open Bowl 4921-6	13.3	4.6	210	Hemispheric low bowl with stain spots at interior and exterior of vessel. Presents a small applique with three incised lines on the rim. Horizontal lines of manufacture at the exterior of vessel. Reddish brown 2.5YR 3/4 (Figure 34 H).
Chamber	Small Globular Bowl 4921-4	9.5	8.2	70	Fragmented incomplete globular bowl partially restored. It shows rounded base and angular rim. Some areas of the exterior surface exposed the red 10R 5/8 color of clay, which lack finishing.
Chamber	Miniature <i>Cántaro</i> Jar 4921-7	8.6	3.5	95	Replica of <i>cántaros</i> in small scale. It can be a toy. Ovoid body shape, tall rectilinear neck and flaring rim. Flat base, and sharp basal angle. Vertical handles at the sides of body's hemisphere, and applique at the center of jar's body. Incised lineal decoration in the neck. 10R 5/8 red (Figure 34 E).
Chamber	Bird-Head Modeled Ceramic 4923	N/A	6.3	65	Sculpture or effigy of bird head made from clay. Eyes are represented by holes, and beak and nose by punctuations. Appendages in the head may be feathers. The rest of the body and vessel is missing. Only the head was deposited in the grave. Surfaces lack of finishing or painting. Reddish yellow 7.5YR 6/8 (Figure 34 F).
Chamber	Plate 4923-7	25.4	5.7	330	Shallow orangeware open bowl or "plate". It has only been recovered half or less, and very fragmented, but restored. Exists designs at the interior of the vessel consisting on concentric semicircles painted in dark red. A painted circle in the central interior was observed although very faint. Light red 2.5YR 7/6 interior base and painted decoration in red 10R 4/6 (Figure 34 I).
Chamber	<i>Cántaro</i> 4923-1	32.2	38	4,700	Utilitarian jar partially restored, rim and part of neck was lost. Globular body, rounded bottom. Horizontal handles located in upper sides. Presents wide vertical bands as decoration barely perceptible, on the contrary, black marks of stain are very noticeable. Jar is light red 10R 6/6 while painted bands red (10R 4/8) (Figure 34 G).
Chamber	Small Globular Bowl-200	7.1	6	120	Hemispheric bowl with red slip at exterior surface. Rounded rim and base. Eroded surface, and rim. Red 10R 4/8.
Chamber	<i>Tupu</i> metal pin 4923-2	4.1	4.7	4	Copper <i>tupu</i> with fragmented stem but head was in good condition. It seems that the object was fabricated by hammered, and soldered. Presents a hole at the

					lower part of head. Diameter is 4.1 cm (Figure 34, J).
<i>Table 16. Continuation</i>					
Antechamber	Incomplete <i>Cántaro</i> 49I73-2	N/A	N/A	455	Only the bottom part of one <i>cántaro</i> was recovered from antechamber. It was fragmented but restored in the lab. Globular body very similar to 4923-1. Eroded surfaces, stain and soot at base. 2.5YR 6/8 light red.
Chamber	Incomplete <i>Cántaro</i> 49I70	N/A	N/A	150	Fragments of another jar very eroded, upper body parts and horizontal side handles. Everted neck, rim is missing. Light red 2.5YR 6/8.
Chamber	<i>Tupu</i> Metal Pin 49I74-3	3	13.5	5	Long <i>tupu</i> or needle with conical head. Concentric bands below head. A hole possibly for wool fabrics is also located below head. Stem is badly corroded.
Chamber	<i>Tupu</i> Metal Pin 49I76-5	1.5	13.8	5	Conical head <i>tupu</i> , like a nail, long stem bended. Presents a hole below head. Sharp pointed end.
Total	16	Items		6,984	

Figure 34.. Some of the goods that accompanied the burial Amá II D.



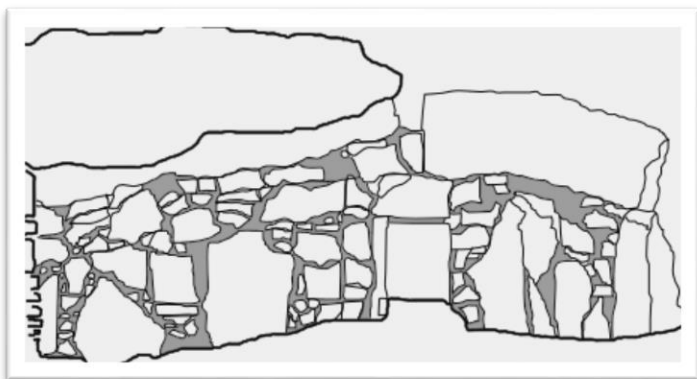
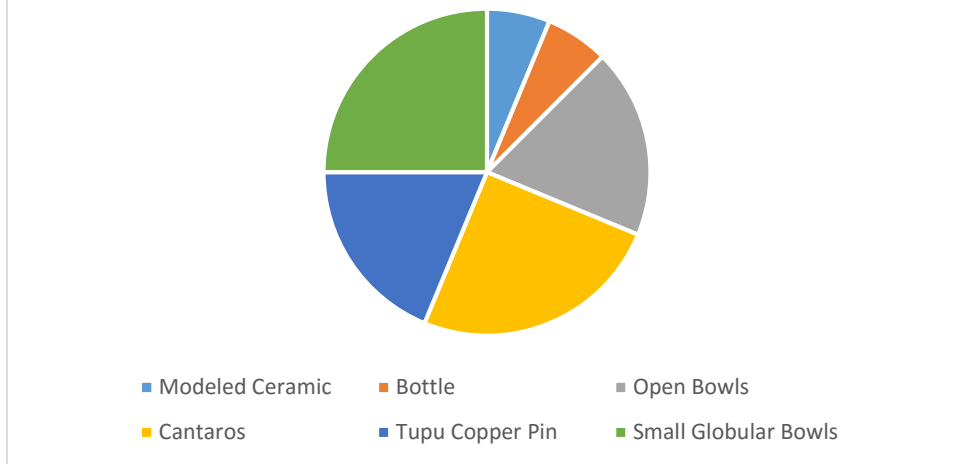


Figure 35. Cross-section Amá II D.

Grave goods found in the burial chamber Amá II D inform us about the concepts and beliefs of the post-Recuay society. Non-durable items such as textiles, foods, and vegetables that probably also were left in the tomb, as ritualized meals for the dead, could not survive for the archaeological record. This chamber had the required kitchen equipment necessary to keep the dead “alive”, basically utilitarian wares employed in different meals. For example, the frequency of cántaros as big liquid containers, might indicate events of libations, most likely “*chicha*” corn beer, a drink and an alcoholic beverage. In the Andes, the consumption of alcohol beverages during festivities and celebrations has a long history of group participation at different socio-economic and political levels (Allen 2002; Jennings and Bowser 2008). Small globular bowls, and open bowls also have the same quotidian culinary meaning of the tomb. Although situated in the same local area, Amá II D do not have much relation with Amá II B chamber, a difference that might be related to tempo-spatial use of the grave. The goods found in Amá II D more likely resemble the pottery of the local Cotojirca IV – V, circa 1,000 CE approximately. Vessel shapes and fabrication techniques do not characterize the artefact types known for the Recuay Tradition. However the architecture of the chamber really complies with the standards of burial construction. This is another case of tomb reuse.

Figure 36.
Frequency Grave Goods Amá II D PAn 5-49



Skeletal Remains from Amá II D, PAn 5-49

Minimum number of individuals identified are five adults and one child. One individual probably female and four male individuals. Considering dentition, age of death of the child is estimated in 10 years + - 30 months. The estimation of age of death of adult individuals was based on the surface morphology of the joint pelvis. One probably male over 35 years of age judging from lipping of tibia. An individual probably a woman, between 50 and 59 years of age and a probable male individual of between 40 and 44 years of age. Considering his teeth, a male individual who was subjected to trepanation, it is estimated an age of death between 35 to 40 years approximately.

Table 17. MNI And Sex Distribution by Burial Chamber PAn 5-49 Amá II D

Burial Chamber	Adults			Subadults			Child	Infant	Fetal	Total MNI
	Male	Female	Unsexed	Male	Female	Unsex				
Amá II D	4	1					1			6

Table 18. Age of Death Individuals at PAn 5-49 Amá II D Mortuary Chamber

Individuals	Age of Death
Child	10+-30 months
Adult Male	>35
Adult Male	40-44
Adult Male	35-40
Adult Female	50-59

Male Warrior

A male individual presents evidence of blunt fracture at the top front and left and much of the left parietal. He shows signs of healing near the front edges and unhealed beveled cuts in the parietal. Likewise a temporal fragment shown in the temporomandibular joint arthritis by way of "callo" that could indicate a problem of articulation with the mandible; the jaw of the context shows a noticeable difference on the left side being thicker than the right. This case deserves special attention and reflection, is the likely warrior, a male individual aged between 35 to 40 years, who suffered several fractures in the skull that tried to be relieved by the surgical technique of trepanation. The evidence lead us to infer that it was a person who suffered acts of violence in certain areas of the body. Given the type of injury incurred by the individual, it is possible to have been a warrior, so underwent surgery for their rehabilitation. The evidence suggests a fracture that probably had trepanation and which showed traces of healing and survival of the patient. It was also observed cuts of a second trepanation in the left parietal, which does not show signs of healing and that probably caused the death of the patient.

Pathologies of Male Warrior

Arthritis in the left temporomandibular joint in male individual, probably related to problems of the mandible (2 int. 4923). Thickening of dimension in the male individual (likely displacement of left condyle of the mandible) jaw and left side. (2 int. 4923). Cervical caries in right upper

premolar. (2 int. 4923) 4 premolars wear, wear 5 of a canine (2 int. 4923) abscess in third upper right molar (2 int. 4923) 5 in left second premolar wear and wear 6 on first molar left (2 int. 4923) abscess in first mandibular right molar (2 int. 4923) activity of alveolar retraction in second premolar right mandibular (2 int. 4923).

Pathologies

Hematoma in part medial sub-periosteal D 1/3 of right tibia of probably male individual, also has strong muscular attachments (4921). Hematoma sub-periosteal d 1/3 of fibula right corresponding with the anterior tibia of strong probably male individual muscle insertions (4921). Lipping in facet joint to Tarsus in right tibia, probably male individual (4921). Spicules in dorsal vertebra (4921) Lipping and spicules around the pit of the right humerus of a male individual (4921). Incipient lipping in articular of proximal epiphysis of male right ulna (4921). Osteophytes in right pelvis of probably male individual. Lipping in veneers joint left cuboid of adult (4923).

Fractures

We found fracture scarred left tibia and right humerus of probably male individuals.

Scarred in M 1/3 split rear of left tibia of probably male individual (1 int. 4921) old fracture in male individual right humerus; the trochlea is flattened (see Pathologies) (1 int. 4921).

Post-Death Ceremonies: Indirect ethno-historic sources indicate that the body of the deceased was removed from the tomb “on certain occasions to carry it in procession” (Ramos 2010:28). While this reference is applied to the Chinchaysuyu region, a couple of centuries after the Inka control, it resembles Inka mourning ceremonies. The Amá II D chamber contained more than one occupant, there are six individuals that are more likely related each other as a family group. Whether the family participated in post-death ceremonies or not, the archaeological record of the chamber indicate intense corpse manipulation, many body parts left, others gone, maybe to another

tomb, and many entries in and out of the tomb. Ramos (2010:31) proposed that the intentionality in Pre-Hispanic times to disaggregate corpses and body parts responded to concepts of renewal and tempo-spatial stages marshalled by funeral rituals.

8. PAn 5-38 Horno Jirca

Location: On the ridge of the hills that descend from the village of Marenayoc. The pedestrian road that comes from Jangas, and leads to Cuncashca, in the upper grasslands elevations, goes 5 m from the archaeological site. The distance to the nearest mortuary structure, which is PAn 5-47, is 62.4 m to the west. From Horno Jirca to Marenayoc exists a distance of 1,171 m.

Area: 33 m N-S x 20 m E-W

UTM: 8'957,692.64 N 216,313.28 E

Elevation: 3,319 meters above sea level (m.a.s.l)

Description: A couple of chambers are located in a rocky semi-flat area with ample command of the Cordillera Blanca. Large flat boulders form the roof of the structure, made of a bluish granite rock that does not correspond with the volcanic tuff typical of the area. The two underground graves are 23 m apart from one another. Both are seated on a small rocky plateau that serves as a natural vantage point of the Cordillera Blanca. Burial A has N-S orientation with 25 ° deviation E. Roof rock measured 2.05 x 1.15 m, and the width of entryway average 0.77 m, covered by loose stones. The informant Marcelina Vergara Julca owner of the land says that in times before the earthquake she could see a chamber with remains of human bones. Burial B has NW - SE orientation, same as to the previous one and it was covered with rocks by locals. It is very possible that the huge rocks of the funerary structures are not part of the geological component of the area. The position of the tombs at the ends of the natural terrace and the panoramic view of the snowcapped mountains of

the Cordillera Blanca, must have influenced in choosing this landscape for the construction of tombs.

Excavations: Its exact location has already been mentioned. However, I reiterate the position of the site on a semi-flat area next to the pre-Hispanic road, a main factor that must be taken into account to meet the Recuay funeral system.

Funerary Chamber A

Located on the north side of the natural terrace, lies a large flat boulder of 1.30 x 2.30 m, which corresponds to the roof of a structure whose access was closed off with rocks placed by locals. The excavation of the surface level recovered modern material mixed with pre-Hispanic, animal bone, and ceramic (3802). Mandible, and maxilla bones of sheep found at this level confirmed that the inner space of chamber were used as animal refuge. Two architectural components of the structure are defined: oval inner chamber (1.78 x 0.90 m) and the antechamber that precedes the chamber, also oval shape of 1.60 x 0.80 m. This building may have had a slab roof as withdrawn by the inhabitants of the town. Modern occupation continued in a semi compact sediment of 0.31 m of thickness where it was found together with ceramic fragments, pig manure (3807-3). The chamber was disturbed by being used as a pig pen. Remains of European animals have intruded Pre-Hispanic levels (see Table 20). The next almost sterile layer was poorer in material culture that could leak from the top level.

The walls of the interior of the chamber are composed of large rocks placed vertically of 1.34 m high. Disturbed human skeletal remains were disseminated inside the chamber and did not show a preference location. Fragmented ceramics, and copper (*tupu*) needle were found associated, next to the structure.

Funerary Chamber B

The rock which forms the ceiling is triangular and a small opening under the suggested evidence found pre-Hispanic activity inside.

As in the previous chamber, excavation at surface levels found a set of pre-Hispanic and modern elements (3804-3). The antechamber had a brown 7.5YR 5/4 soil mixed with roots in which it was found disarticulated human bones badly preserved, and the skull of a child associated with fragments of pottery (3809). After removing the modern levels it was possible to find in the strata 1 layer B a context of nearly complete pottery (pedestal taza (cup), 2 small jars) arranged in the interior of the chamber associated with chrysocola beads and small copper fragments (3813). Human bones were scattered in the entire chamber and do not occupy a preferential place. It was disturbed by profaners and further functions of the enclosure. Strata 2 at the lower level was a yellowish brown (10YR 5/8) clay in which it was found 2 beads of chrysocola material, more human bones and copper laminates (3816).

The funerary structure B has an area of 4 m x 2 m approximately (Table 19). Consists of a chamber, antechamber and an entryway possibly leading to a corridor that was not excavated (Figure 38). This structure is notable for having very large stones placed vertically as internal walls, normally polygons placed at the level of sterile floor (Figure 39). Among these large stones are horizontal small slabs or fillers united with mortar forming curved sides and corners. These give the oval shape of the chamber whose height goes from 0.90 to 1.20 m. The roof is a great stone block resting on the wall of the chamber. Access entry is small has 0.68 m high x 0.55 m wide consisting of three stones. It is possible that this entry directs to another room or chamber that was not

excavated. It was perhaps the original entrance to the chamber.

Table 19. Architectural Dimensions Horno Jirca

Horno Jirca PAn 5-38			
	Length (m)	Width (m)	Depth (m)
Chamber A	1.78	0.9	1.34
Antechamber A	1.6	0.8	
Chamber B	4	2	1.2
Access entryway		0.55	0.68

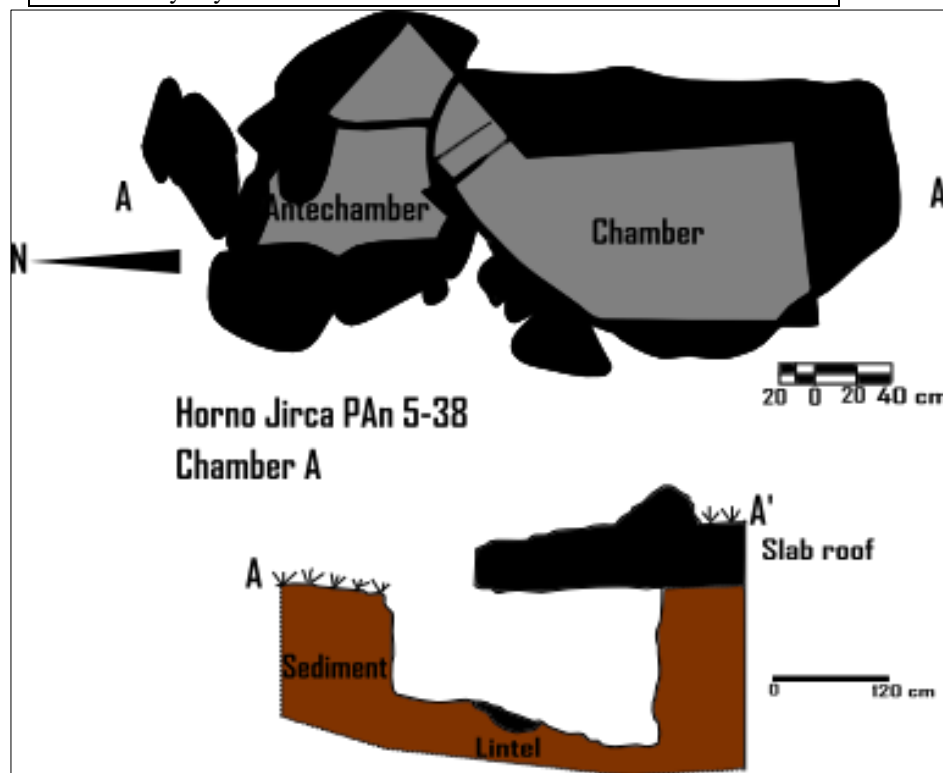


Figure 37. Plan-view and cross-section of the Horno Jirca Chamber A.

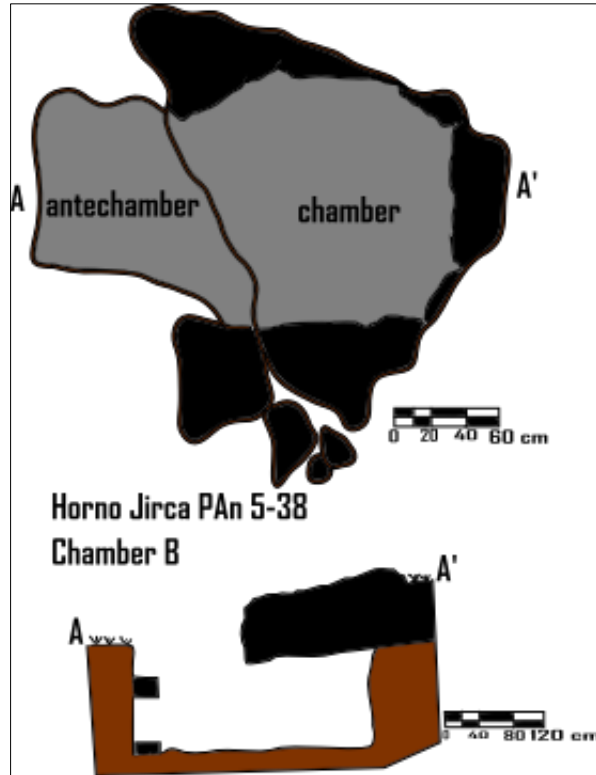


Figure 38. Plan-view and cross-section Horno Jirca chamber B.

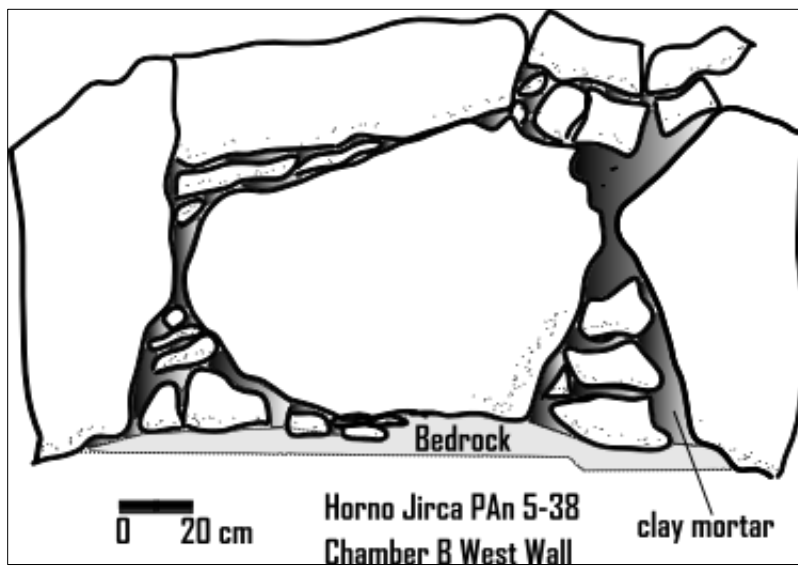


Figure 39. "Huanca-pachilla" (large block and spall). The height of the wall 1.2 meters.

<i>Table 20. Horno Jirca PAn 5-38 - Faunal Remains. Based on Rofes 1999.</i>					
<i>Chamber/Strata</i>	<i>Taxa</i>	<i>NISP</i>	<i>NMI</i>	<i>Weight (grams)</i>	<i>Comments</i>
Chamber A S.1	caprine	2	1	48.6	Left mandible and maxilla
Chamber A S.2	Canid	8	3	8	1 adult, 2 young. Dog or wolf?
	<i>cavia porcellus</i>	1	1	1	Guinea pig
Chamber A S.3	caprine	1	1	18.1	adult, right tibia
	Bovine	1	1	35.5	Fragment of right mandible
	Suinae	1	1	1.9	Pig, tooth of <i>Sus Scrofa</i>
	Large Mammal			1.3	
Exterior Chamber A	Camelid	1	1	5	third molar right inferior adult
					Alpaca size
Total				119.4	
Chamber B S.1	<i>Cavia porcellus</i>	13	2	5.5	Guinea pig
	Suinae	1	1	0.3	Pig
Total				5.8	

Grave Goods: The pottery is representative of Recuay funerary contexts. Bowls with corniform handle are not as frequent as in Quitapampa A, a classic Recuay chamber. Pedestal cups are also not very common, just one case with a very large opening 23 cm. Surprising is the frequency of neckless ollas and globular bowls that can be well grouped together. Three tubular fragments of kaolin (3813-11/12) probably feet of an animal represented in a sculptural vessel have been placed in chamber B. No other kaolin vessels were deposited in the chamber, so it is very likely that only parts of an important vessel were offerings. It seems that the vessels of kaolin were a luxury product, and they have not been found frequently. It was also found a protuberance and incised fragment that may belong to a jar (3810-8).

Table 21. List of Grave Goods found in subterranean chambers of Horno Jirca (PAN 5-38).

Provenience	Item	Diameter (cm)	Height (cm)	Length (cm)	Weight (grams)	Comments
Chamber A, Strata 1B, 3807	3 ceramic fragments	12 and 22				Neckless ollas, utilitarian use. Might have leak from exterior (Figure 40).
Chamber A, Strata 2. 3812.	Nail? metal copper pin			4.5	1	Bent small copper nail or <i>tupu</i> . Flat head, and pointed end. (Figure 44 A)
Chamber A, Strata 2. 3811.	3 ceramic fragments	16 and 24				2 Neckless ollas, and 1 possible taza with everted rim. Orangeware. 3811-1 fragment presents thin incisions on the upper body. (Figure 42).
Chamber B, 3804, 3810.	3 Ceramic fragments	14 and 15				2 Neckless ollas, and 1 fragment incised protuberance that may belong to a jar (Figure 41).
Chamber B, 3813. Strata 1.	3 kaolinite modeled ceramics	2.5		8		Two tubular pieces that belongs to a bigger modeled ceramic that may represent feet of animal. Frequent in Recuay iconography. The other tubular piece is fragmented (Figure 43).
Chamber B, 3813-9. Strata 1.	1 ceramic handle					Fragment of jar's handle or <i>cantaro</i> (big jar) Orangeware (Figure 43).
Chamber B, 3814. Strata 1B.	Kaolinite Cup and handle	14	9		490	Cup with corniform handle, rim totally everted, and flat. Does not have decoration. White paste. Surface eroded. Yellow 10YR 8/6. (Figure 44 B).
Chamber B. 3814. Strata 1B.	Kaolinite pedestal bowl	23	10.4		610	Bowl with ample mouth aperture and pedestal base. It does not have great symmetry. Very pale brown 10YR 8/3. Surface eroded (Figure 44 C).
Chamber B. 3814. Strata 1B.	Small kaolinite Jar	6	7.1		150	Globular base, stretch neck and slight everted rim. Surface eroded. Very pale brown 10YR 8/4. (Figure 44 D).
Chamber B. 3814 Strata 1B	Small kaolinite Jar	4	9		80	Globular base, stretch neck and slight everted rim. Surface eroded. Very pale brown 10YR 8/4. (Figure 44 E).
Chamber B. 3813 Strata 1.	4 chrysocolla beads					Associated with kaolinite feet sculptures.
Chamber B. 3816. Strata 2.	2 chrysocolla beads.					
Chamber B. 3816. Strata 2.	Copper laminates?					

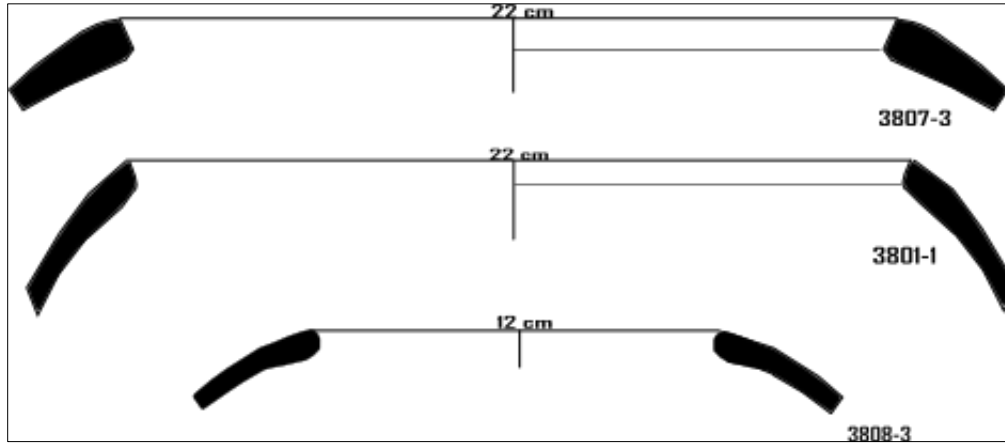


Figure 40. Neckless ollas found at the surface levels of Chamber A. Horno Jirca (PAN 5-38).

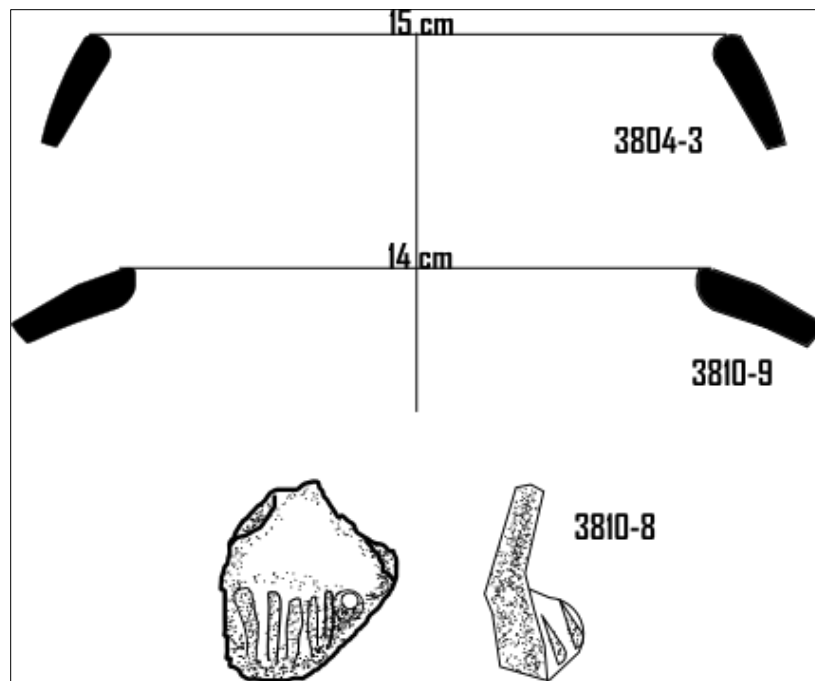


Figure 41. Neckless olla rims, protuberances. Findings of Chamber B.

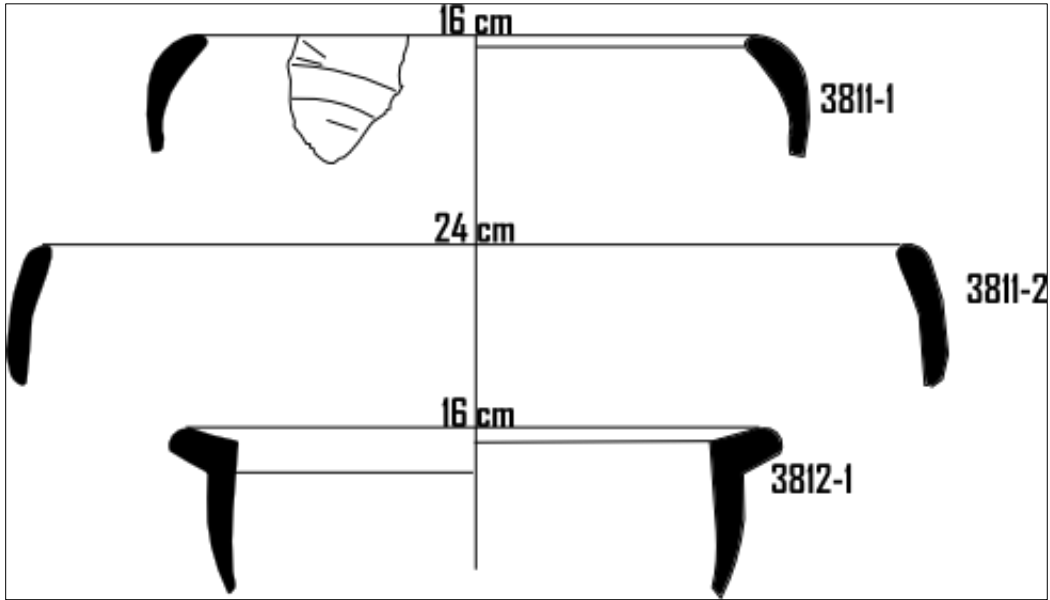


Figure 42. Neckless ollas rim, and taza or bowl with straight walls. Chamber B. Horno Jirca (PAn 5-38).

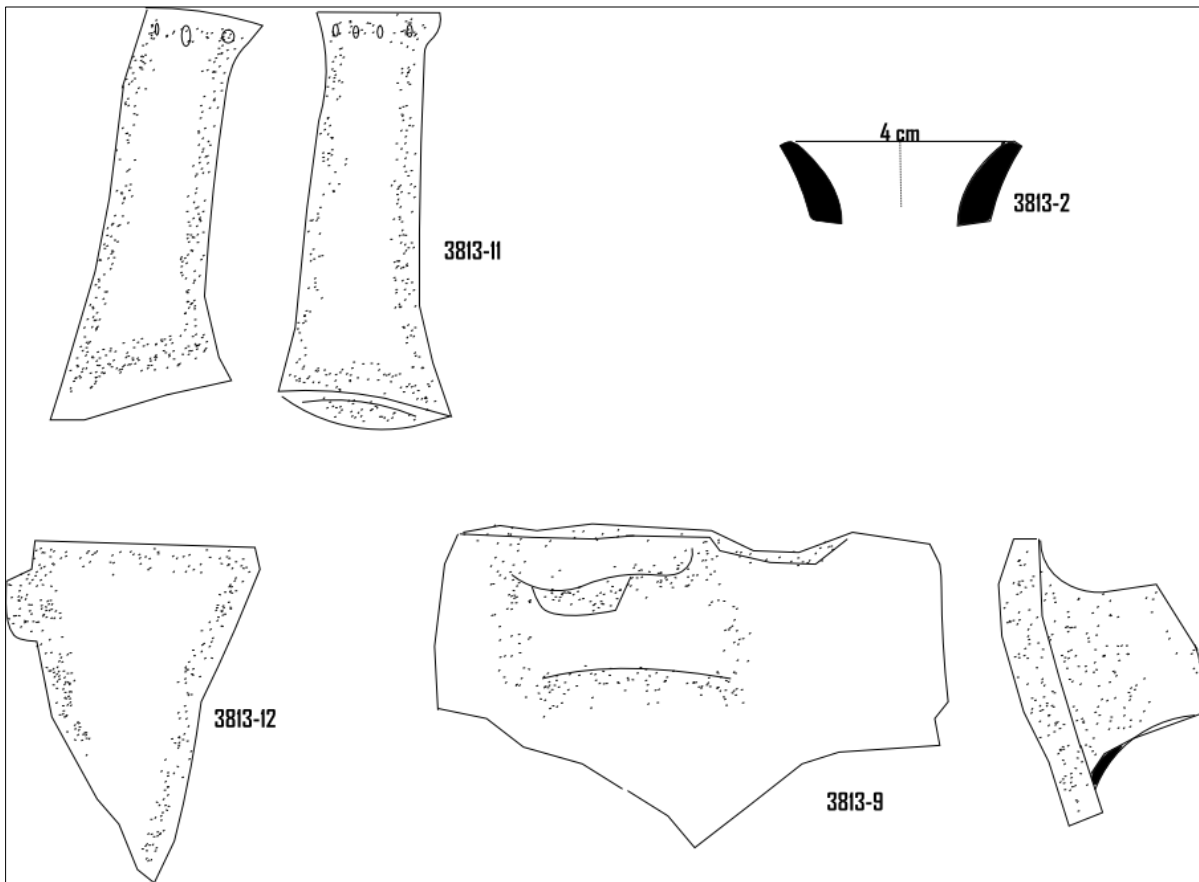


Figure 43. Kaolinite modeled that belongs to a bigger sculpted vessel. Chamber B.

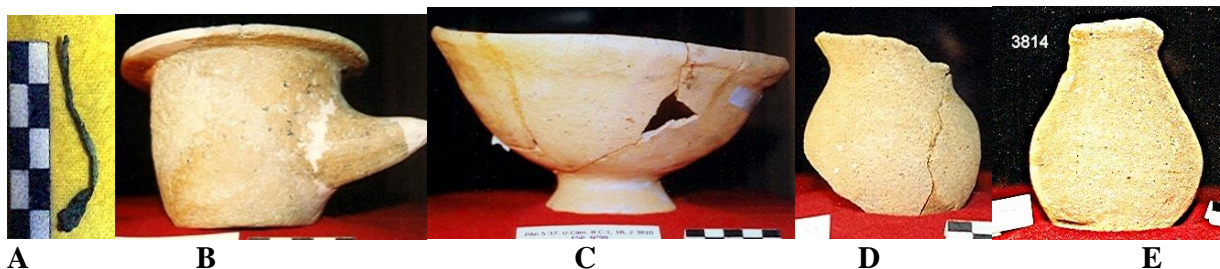


Figure 44. Kaolinite vessels and copper pin found in mortuary chambers of Horno Jirca (PAn 5-38).

Preliminary Analysis Human Remains from Horno Jirca (PAn 5-38)

According to the inventory of skeletal remains, we find a MNI which correspond to a child, one sub-adult and six adults, considering the right talus.

Age

Using the characteristics of the bones to determine the age of death, it was concluded that a child was between the ages of 0.5 to 1.5 years of age approximately. By the characteristics of the fusion of the epiphyses of long bones and the clavicle, as well as the dental formula in the mandible, the age of the individual sub adult is estimated at approximately between 15 to 21 years. In the case of the bones of adults, some show pathologic evidence (arthritic changes), we to estimate the age at death of any of these individuals in more than 35 years approximately.

Sex

In the bones of children sex determination is not possible because sexual characteristics are still being developed. In the skeletal remains of adults we do not have enough evidence to make this determination, however some features, such as a fragment of a surface joint and fragments of pelvis correspond to individuals probably females. A fragment of mandible (chin), and a fragment of central jaw indicate probable male individuals.

Osteological Variations

In the sample we find: incisors "pala", sternal foramen and lateral fragment "missing" on kneecap.

Anomalies

The only anomaly found in the sample is flattening of proximal epiphysis of right first metacarpus of adult.

Osteological and Dental Pathologies

In the majority of the adult bones it was observed labiate, spicules, flange and arthritic growth which are characteristic of early arthritic changes associated with age, features observed in several bone found in Chamber A. An individual from Chamber B was observed inflammation of the periosteum, usually a chronic state characterized by tenderness, swelling and bone pain in right talus and third metatarsal of the left foot of adults. This could be associated with a localized infection, however we do not know if it is the same individual or two people even when they were placed in the same strata 1, level B of Chamber B. It was also observed dental caries in premolars, and molar both in adults and children as well as heavy wear of the teeth.

Taphonomy

Colors and different shades were observed such as: white, yellowish white, yellowish, yellowish beige, beige, yellowish beige, brown, black specks and greys; and green coloration of a crown of molars of child. This indicates an association with a metal object in the mouth. Erosion and craquelure are presented in some skeletal remains. This suggests have been exposed to the environment.

Table 22. MNI individuals at Horno Jirca (PAn 5-38).

Burial Chamber	Adults			Sub adults			Child	Infant	Fetal	Total MNI
	Male	Female	Unsexed	Male	Female	Unsex				
Chamber A	2	2								4
Chamber B	1		1?			1?	1			4
TOTAL	3	2	1			1	1			8

9. PAn 5-43 Cochapampa

Location: The south profile of a cut of the old dirt road Jangas to Marenayoc exposed part of subterranean chamber. Distant about 360 m southeast from Horno Jirca site (5-38). This road leading to Marenayoc has been replaced now by the road that give access to the Pierina mine via Jangas. Multiple chambers were found on the hillside of a long gently inclined surface of a cuesta that descend from the hills of Marenayoc. The distance to the nearest known habitation settlement Marenayoc is 619 m.

Area: 45 x 20 m.

UTM: 216,345.78 E 8'957,488.78 N

Elevation: 3,356.623 meters above sea level

Description: The Cochapampa mortuary structures were found during the first pedestrian surveys in the area of mining influence. They are located on the profile made by heavy machinery used to wider dirt road to reach the village of Marenayoc. A project to widen this road threatened the archaeological site, and so it was decided to excavate it, in the rescue or salvage modality.

Excavations: A 4 x 4 m excavation unit included part of the wheat crops, and also the lower level where the road cut settled (Figure 45). The superficial level did not offer cultural remains while the underlying layer (4302) could locate a large rock and a pit of 0.60 x 0.40 m delineated by aligned medium-sized stones. Inside there were small human bones of infants (4305). North of that context a cremation area of ash and ceramic fragments were exposed.

The excavation over the top of the chamber yielded a sterile soil characterized by white sand and calcium carbonate product of the detachment of the natural sandstone rock. This was the ceiling of the burial chamber located below. More judiciously the burial was excavated from the profile,

cleaning first the looted zone that fortunately did not affect much. It was noted that the burial chamber was built using the spaces of cracks and natural hollows of the bedrock. These spaces were used to erect the walls needed to form the chamber whose roof is a natural rock. The architectural components were three chambers with facade to a common area called the antechamber. The confined spaces of these chambers are not subjected to burial patterns adverted



in other tombs of the area.

Figure 45. The bedrock was used as a roof

The antechamber is the common vital area of the three small burial chambers. It has dimensions 1.80 m long x 1.30 m wide, bounded by a low wall of edged rocks. The topsoil level (4307), was characterized by being a compact grayish brown 10YR 6/2 sediment. The skeleton of an individual placed in supine position with arms crossed over the abdomen and supposedly oriented to the south was found on this strata (Figure 47). Possibly another body was placed behind the individual

described, because there were only articulated the coccyx and some vertebrae. In this context of deposition of bodies in front of the chambers, more fragmented remains and many disarticulated bones were identified. In the next strata characterized by a light brown 7.5 YR 6/4 sediment, A context of broken pottery was found. At least 5 vessels were identified in the field.

Chamber A, was named to the structure altered by looters that toppled the wall north of it. The space is 0.75 x 0.75 m with 1.20 m high. It has a stone veneer overlying the bedrock. Inside was found remains of much deteriorated human bones accompanied by a whitish vessel with geometric decoration, an anthropomorphic miniature, carved bone fragment, fragments of copper sheets and chrysocolla beads.

Chamber B, is located at the center with the same design features as the previous one, although here the roof is composed of stone slabs resting on the walls. Dimensions: 0.85 m length 0.60 m width and 1.30 m high. The entrance consists of simple jambs and an elongated rock placed as lintel. The structure was excavated by natural layers having the following characteristics:



Figure 46. Small chambers or compartments in front of the antechamber. Cochapampa (PAn 5-43).

Surface Level: Is a grayish brown 10YR 6/2 granular soil of loose texture in which found bones of mice who used the chamber as burrows. Cultural materials such as human bone and ceramic fragments were found. Thickness 0.25 m.

Strata 1: Compact clay sediment in where ceramic fragments, disturbed human bones, and burned

corn kernels. Thickness 0.35 m.

Strata 2: Is characterized by the presence of concretions of calcite in a light brown 7.5YR 6/4 clay. Copper sheets and two copper disks with two holes that were probably used as clothes pins, appeared along with remains of human bones and ceramic fragments. This is the floor level of the antechamber.

Chamber C

Located on the east side, this burial chamber has the same design features to the previous ones. Dimensions: 1 m length, 0.90 m wide, and 1.20 m high. The southern and eastern walls are curved while the west side is straight. The stratigraphy is similar to Chamber B, but to isolate findings were given different registration numbers. The findings include a small complete bottle. The rest have the same recurrence: disturbed human bones, *tupu* of copper pin and ceramic fragments.

Sterile level of the three chambers has the same texture and color characteristics of the top layer, because is the bedrock sandstone that appears on the top, and at the bottom. The hollows and cavities of the natural rock were used to build burial chambers (Figure 46).



Figure 47. Skeletal remains of the individual(s) found in the antechamber

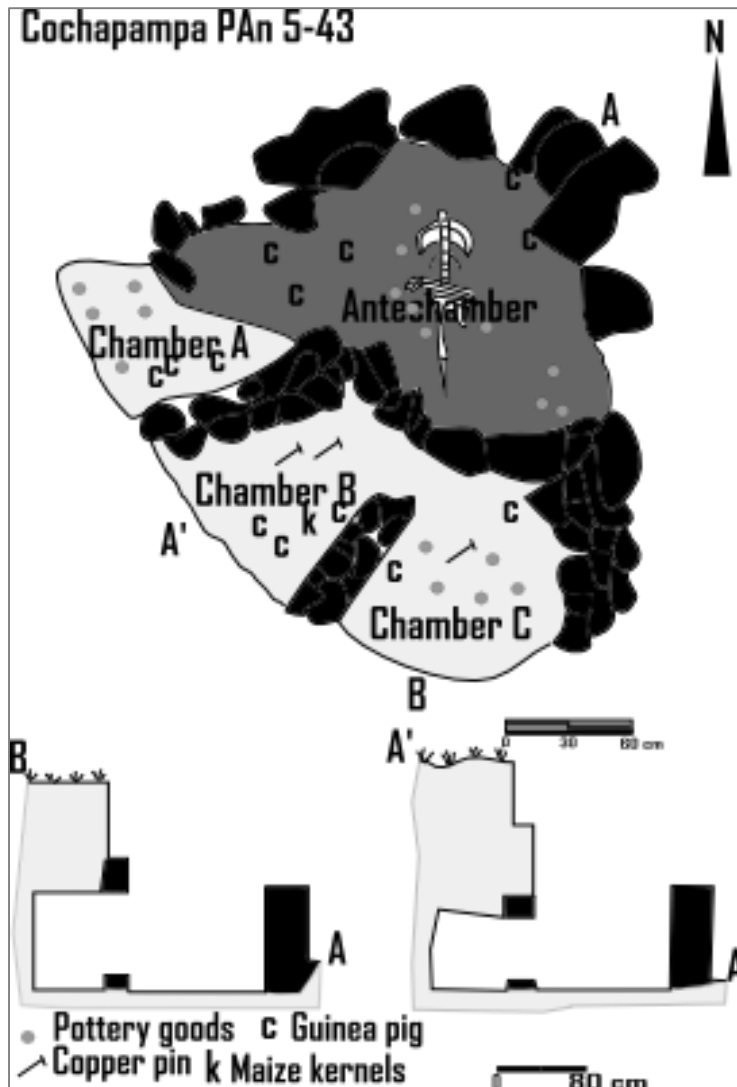


Figure 48. Distribution of chambers, goods, and position of the female in the antechamber.

Grave Goods: The quantity of offerings on these burials, address the discussion to the importance and significance of mortuary practices in the distribution chambers and goods. This requires internal organization analysis and its comparisons to other burial chambers of the region. The total counting of ceramic goods is 21. Mostly are found in the antechamber. Many of these include miniatures of domestic jars, a zoomorphic effigy vessel, and tripod bowls. Chamber B lacked of grave goods with the exception of corn cobs, and guinea pigs.

Chamber C contained the majority of plates (4), and chamber A, a human figurine and two bowls, one of these correspond to a Late Recuay style. Grave goods are associated to the Cotojirca IV/Ancosh local style of ceramic recognized in residential sites. The time period is between 700 - 900 CE at the end of the Recuay tradition, and the influence of Wari styles with increasing interaction with the central highlands.

Table 23. List of Grave Goods and description found in Cochapampa PAn 5-43

Provenience	Item	Diameter (cm)	Height (cm)	Weight (grams)	Comments
Strata 1. 4302	Miniature Jar	5	6.6	80	Small globular jar, round base, and narrow neck. Lack of rim. 7.5YR7/6 Reddish yellow (Figure 49, 4302).
Chamber A 4304-1 Strata 2.	Cup	13	8.3	330	Hemispherical cup with flat base, presents reddish yellow (7.5YR 7/6) wash, over which was painted red triangles and concentric orthogonal decorations repeat around the vessel (Figure 49, 4304-1).
Chamber A 4304-2 Strata 2	Open Bowl	16	5.8	215	Incomplete open bowl painted decoration at the interior consisting on short vertical lines on red. Base 2.5YR6/8. Light Red. Decoration: 10R3/6. Dark red (Figure 49, 4304-2).
Chamber A 4304-3 Strata 2	Ceramic Figurine		4.8	20	Anthropomorphic figurine, possible a male in standing position. Right arm is missing, or deliberately made without it. Left hand is touching abdomen. Eyes, fingers, and mouth represented by incisions. Legs are tied together. 10R4/8 red (Figure 49, 4304-3).
Antechamber 4311-1 Strata 2	Jar	12	12	205	Incomplete spheroid jar. Half of the vessel is missing. Horizontal handle at shoulder. Short straight neck and rim. It presents painted decoration as 3 concentric square designs in reddish brown 2.5YR4/3 over paste brownish yellow 10YR6/8 (Figure 49, 4311-1).
Chamber A, Antechamber 4304, 4311, 4315	Plate	19	5.5	400	Painted lineal decoration is very faint localized at the interior of vessels. Restored vessel (Figure 49, 4304, 4311, 4315).
Antechamber, 4305 Strata 1	Cup	10.4	5.8	125	Complete cup. Exterior surface slipped and polished shiny red 10R4/8. Rim slightly everted, inverted trapezoid body shape near straight walls. Flat base.
Antechamber 4306 Strata 2	Blackware Effigy Vessel		15.8	390	Zoomorphic being in sitting position. It is carrying on a trophy head with right hand. Left arm is missing. Back of this animal being has impressed decoration, and a modeled circle, maybe representing some kind of clothing. Have an application like a tail, and a feline modeled headband (Figure 49, 4306).
Antechamber 4307 Strata 1	Miniature Jar	8.3	8	170	Globular body, straight short neck. Eroded surface (Figure 49, 4307).
Antechamber 4307,4311 Strata 1	Small Tripod Bowl	7	8.4	140	Painted decoration consists on black vertical bands at the interior walls of vessel. Tripod base. Orange paste with white stains (Figure 49).

Provenience	Object	Length	Width	Weight	Description
Antechamber 4309, Strata 2	Miniature Jar	3.8	7.2	150	Orange ware eroded surface, lateral handle is missing, but it goes from superior section of body to the rim edge. Light red 2.5YR6/8 (Figure 49, 4309).
Antechamber 4310 Strata 2	Small Tripod Bowl	9.2	6.7	175	Three pods form the base, each pod has an intentional hole. Vessel walls slightly divergent. Decoration consist on vertical bands at the interior of walls. Dark stain, fungus? (Figure 49, 4310).
Antechamber 4311 Strata 2	Small Jar Vertical Handle	6.5	13.9	410	Globular jar with convex base. Handle is raised vertically. Inserted at the hemisphere body and rim edge (Figure 49, 4311).
Antechamber 4307,4311 Strata2	Olla	16.9	16.3	470	Globular vessel with paint lineal decoration at interior rim (Figure 49, 4307, 4311).
Chamber C 4312-1 Surface	Miniature Jar	3.5	6.6	70	Spheroid body, base convex-flat. Short neck, and rounded rim. Rough surface. 5YR6/8. Reddish yellow.
Chamber C 4312-2	Plate	19.4	6.1	385	Open vessel with slight cream wash decoration, as concentric lines along interior vessel's surface. Red dots are distributed on row along interior rim. 5YR 6/8 Reddish yellow surface (Figure 50, 4312-2).
Chamber C 4313 Strata 1	Plate	12	4.6	440	Faintly washed paint inside vessel consists on a line that limits rhomboid figures on cream color. (Figure 50, 4313)
	Cup				
Chamber C 4314 Strata 2	Plate	12.1	3.9	140	Inside vessel is painted with 10R3/6 dark red slip. Some areas lack of color due to erosion (Figure 50, 4314).
Chamber C 4316, 4314, 4317 Strata 1	Plate	21.9	7.9	575	Meanders dark red (10R3/6) bands inside vessel. Base color reddish yellow 5YR6/8 (Figure 50, 4316, 4314, 4317).
Chamber C 4313 Strata 1	Tupu copper pin	Length 11.5		8	Copper nail wide flat head in the top. It has cylindrical stem with a hole. (Figure 50, 4313).

Table 24. Summary of number of goods per chamber at Cochapampa PAn 5-43.

Provenience	olla	bowl	plate	miniature	Blackware Effigy Vessel	Tripod	small jar upright handle	Jar	Open bowl	Copper Pin <i>tupu</i>	Total
Antechamber	1	1		3	1	2	1	1			10
Chamber A		2	1	1 figurine					1		5
Chamber B											
Chamber C			4	1						1	6
Total	1	3	5	5	1	2	1	1	1	1	21

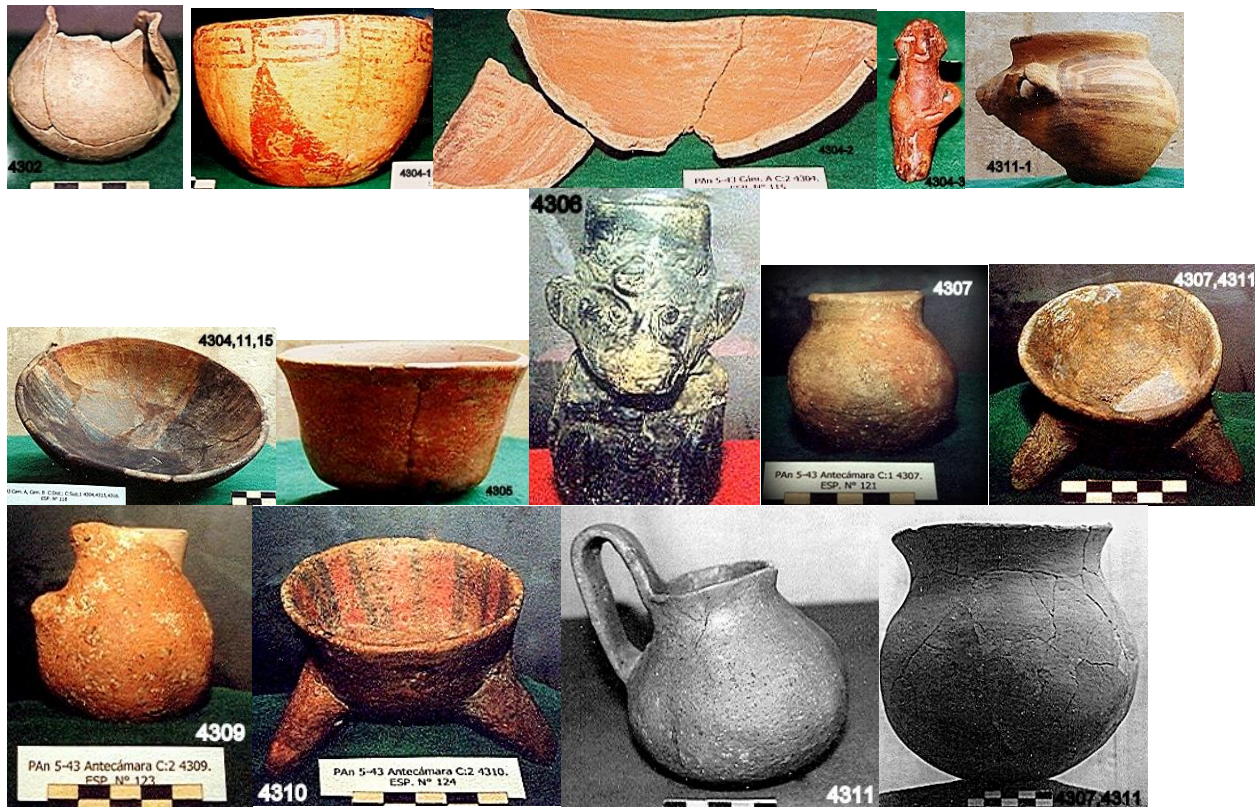


Figure 49. Diverse ceramic offerings in the antechamber and chamber A. PAn 5-43



Figure 50. Goods left at chamber C. Cochapampa PAn 5-43.

Table 25. Summary of Architectural Features at Cochapampa

<i>Cochapampa PAn 5-43 Burial Chambers</i>			
Dimensions in Meters			
	Length	Width	Height
Antechamber	1.8	1.3	
Chamber A	0.75	0.75	1.2
Chamber B	0.85	0.6	1.3
Chamber C	1	0.9	1.2

Preliminary Analysis Human Remains from Cochapampa PAn 5-43

Given the disturbed characteristics of the sample, we made an inventory of all the human bones by presenting the following preliminary osteological analysis results:

Minimum Number of Individuals (MNI) According to the inventory carried out by units and differentiating by age, the following result is obtained: 88 individuals, which are not the full skeletons. In some cases we found a single bone that measurements compared to other samples, and by morphologic characteristics we have placed them in the corresponding ages.

Table 26. MNI of disturbed bones at Cochapampa PAn 5-43

	Fetus	Infant N.B. to 1.5 y/old	Infant 1.5 to 6.5	Child 7 - 12 y/old	Subadult 12 + 18 y/old	Adult 18 +	Total
Disturbed level	1	2	3	1		1	8
Level 1	1	1	2				4
Antechamber	4	8	9	3		7	31
Chamber A		5	5	1		2	13
Chamber B	1	8	5			0	14
Chamber C	1	7	8	1		1	18
TOTAL	8	31	32	6		11	88

Age

To estimate the age at death in children, we find individuals who, according to the length of the long bones, not reached the rank of newborn, corresponding to fetal status; others fell in ranges from newborn to 0.5, 0.5 - 1.5, 1.5 - 2.5, 2.5 - 3.5, 3.5 - 4.5, 5.5 - 6.5, up to 12 years. The range of 0.5 to 1.5 years of age at the time of death is the greater number of individuals contained in the sample, following in second place were infants in the newborn range 0.5 years. In the case of adults, it was possible to estimate age of death between 35 to 44 years approximately.

Sex

In the bones of children sex determination is not possible because of sexual characteristics are not fully developed. The adult skeletal remains found in the antechamber indicate likely a female individual between 35 to 39 years of age. In the case of the pelvis found in the Chamber C and in the Chamber B correspond to a single female person between 40 and 44 years of age.

Anomalies

The most significant anomaly found in the sample is absence of alveolar cavity of lateral incisors.

Osteological Variations

In the sample we found: sternal foramen of the female adult found in the antechamber (4307). Lateral fragment missing in right patella bone from the same female individual (4307). Double transverse hole in cervical vertebra in a child +7 years old from the antechamber. These variations have also been found in some individuals studied in the sample from the Moche sacrifices on the platform of Huaca de la Luna.

Dental and Bone Pathology

Most of the adult bones shows labiate, spicules, osteophytes, and flange, which are characteristic of arthritic changes associated with age. Schmorl's node associated with kyphosis in the female

individual found in the antechamber (4307). Schmorl's node is the output of the nucleus pulposus and embedding in the vertebral body, because of the nucleus pulposus of an intervertebral disk prolapse; Kyphosis is the pathological increase of anterior curvature of the spine thorax. Cribra orbitalia was observed in children: (porosity in the orbital plate of the frontal bone) associated with anemia. Caries in adults as in children were also observed.

Fractures

Fractures observed correspond to two different stages: both healing as healed; of these last we observed in sample one on collarbone and the "colles fracture" that is typical of falling backwards, and damping of the weight of the body with hand causing the lesion at the level of the distal end of the radius.

Cut Marks

The most significant cultural change was observed in the spherical hole at the proximal epiphysis of the right tibia. It was made with knife during postmortem on 1st right rib of a child with months of age. Found at antechamber (4307). A case of cultural change during post mortem is a spherical hole of 10 mm performed in the upper end of right tibia on a child of 0.5 to 1.5 year old of age approximately. No other evidence of cut marks have been observed in the sample.

Taphonomy

The most frequent bone colorations in the sample are yellow, beige and its variants of light and dark. The least common are light brown and greenish tones; many have small blackish spots, brown and grey. Some had beige whitish coloration, craquelure and erosion that are characteristic of skeletal remains exposed to environmental and weather conditions (Behrensmeyer 1978: stage 1). Following the breakdown of soft tissues, with the exposure to the sun, bones become whitish and cracking. The reddish color as well as the pink tone, likely attenuation of the original red

possibly due to rain or water filtration, could be associated with inorganic pigment placed by way of offering on the body. The possible action of carnivores would be represented by the bite in part of the pelvis and diaphysis of long bone; these bones usually contain greater muscle mass. Also some remains of insects have been found.

Female Individual at Antechamber (4307)

This individual was articulated, from the scapula to pelvic waist, with arms crossed on the abdominal cavity. Have been recorded in the inventory: sternum, thoracic vertebrae and lumbar, ribs, both pelvis, forearms and hands. By the characteristics of the pelvis is probably a female individual of an age between 35 to 39 years approximately. It features a sternal foramen; both radius, left ulna, carpals, metacarpals and phalanges. Schmorl's node from the vertebrae thoracic 11 (11 T) until the 4th lumbar (L 4), being more pronounced in the 1 L and L2. It was a difference of 4 mm between both ulnas, being right longer.

Comments

Evidence of the studied remains shows the presence of a female skeleton and another probably woman - in the case of individuals where it was possible to determine the sex-; both adults aged 40 to 44 and 35 to 39 years of age. Child skeletal remains whose dimensions are significantly smaller than those established for Merchant and Ubelaker (1977) for newborn infants may indicate the presence of possible fetuses, and children approximately newborn to 7 years of age. The bone remains of children in the range of 0.5 to 1.5 and newborn 0.5 years predominates. The least representative is the number of bones from 7 to 12 years of age, accompanied mostly by bones of hands and feet of adults. In addition, we must indicate the presence of animal bones, camelids and birds. The latter had a cut, and a femur and tibia from an animal that was not identified was found in Chamber B. The evidence presented suggests that it would be a selection of individuals and age

ranges; possibly considering the relationship woman - child or mother - children; not to mention that the skeletal remains of the quasi-totality of individuals was not articulated nor in the original position postmortem in which were buried, the idea of disturbed is clearer. However one cannot dismiss other hypotheses or probabilities such as offerings or secondary burials.

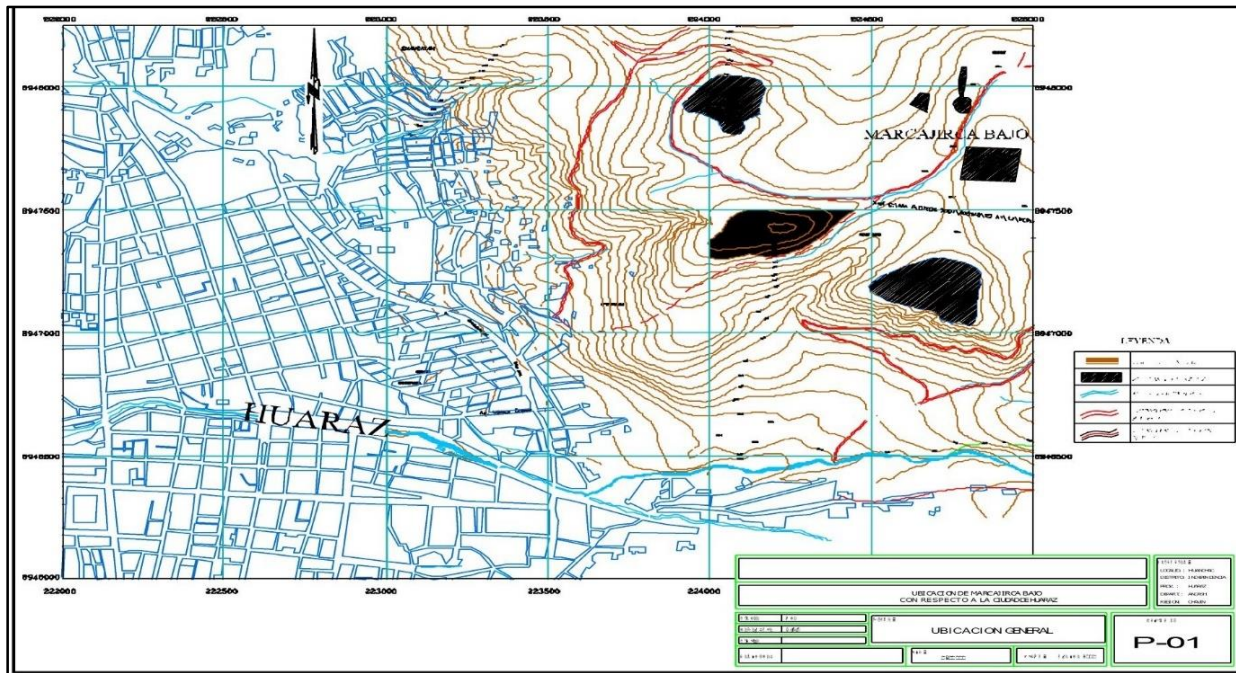


Figure 51. Black spots mark the location of settlement sites, and the Marca Jirka site

10. PAN 5-64 Marca Jirka

Location: On the lower northern slopes of a hill called Marcajirca exist a series of standing stones or *Huancas* aligned east to west approximately. Granite boulders and flat rocky slabs laid at ground level compose the landscape of rocky terrain and low grasses. The subterranean mortuary complex extends to the south and north from these boulders. The area is adjacent to plantations of eucalyptus trees. The Marcajirca hill is located above the city of Huaraz. Access to the site is by the road to El Pinar and further to the village of Marian (Figure 51). From the residential area of El Pinar reach the Huascarán School then turn to the south and walk a trail for about 200 meters.

Area: $750 \times 600 = 450,000 \text{ m}^2$

UTM: 18L 224,527.25 E 8'946,993.89 N

Elevation: 3,276 meters above sea level (m.a.s.l.)

Description: Marca Jirka site is located on lands of the community of Marian. The zone consists of low hills from 3,200 to 3,300 m.a.s.l, divided by streams and tributaries of the Casca, and Quilcay rivers. Several erratic boulders of granodiorite are disseminated along valleys and ridgelines produced by ancient glacial detachments from the mountain range of the Cordillera Blanca. The soil of the area contains gravel and reddish clay, a characteristic of fluvio-glacial deposits. At the current time the use of the land was mostly for agriculture. Crops depend much on seasonal rain, but during dry season canals derived from upstream Quillcay River favor the growth of wheat, lupines, potatoes, corn, and beans. Swampy areas are located at the foot of the hills, and in small valleys, giving variety of grass resources. In this mountain ecosystem, ancient communities preferred to live on top of the hills. Most of the settlements are hilltop hamlets.

Marca Jirka contains three types of archaeological sites: a hilltop domestic component; a ritual area *huanca* or standing stone; and a mortuary area on the lower slopes of the hill. The hilltop currently appears as irregular corrals composed of dry stone walls used in recent times. Potatoes crops were observed next to corrals, however the recent installation of a cellular telephone tower, have deeply disturbed the area next to the *huanca*, and associated structure. Archaeological testing in some areas of hilltop uncovered stone foundations of possible small rooms, and evidence of canals. The northern sector exposed rustic stone rooms of 2 x 3 m associated to orangeware coarse paste with unfinished surfaces (no slip) of jars. This area might belong to later periods (Late Intermediate Period, Cotojirca V phase in the Pierina mine, 1,000 – 1470 CE). A trench in the central top of the hill uncovered many faunal remains, as refuse event, associated to grinding

stones, hemispheric bowls, and plates defined in tombs from the Cotojirca III phase, of the Early Intermediate Period (400 – 650 CE). In the eastern sector narrow channels were found that could be related to rooms, and terraces with retention walls. They are tentatively dated to the late part of the Early Intermediate Period, following the style of ceramic shapes and decoration. Without doubt the area has been intensively occupied during Pre-Hispanic times, and although a precise map of residential structures was not accomplished, because of most of the structures remain buried, the site shares habitation areas that might belong to different cultural periods. A 5 by 3 m rectangular low platform with *huanca* or standing stone positioned in the center, forms a ritual area. No artifacts were found in this area, but a cube shaped medium size stone of 0.5 m high was decorated in one of this sides with pecked holes (20) forming an oval shaped figure. With this brief summary of the findings in the residential area, I will continue to describe the mortuary component, which is the main subject of this research.

Excavations: The mortuary sector, located on the lower part of the Marcajirca hill, comprises of standing stones or *huancas* forming part of an ancient road or path. Scholars mention the role of *huancas* as tomb markers (Lau 2011; Wegner 1988), which might certainly be true in Marca Jirka, but there is no doubt their functionality as components of a road that goes east around the hill towards the village of Marian. Foundations of a modern agro-pastoral house and also boulder size slabs organized in a series of three were observed in an area south of the *huancas*. Thus it was decided that further evaluation was needed. A test unit 2 x 2 m was set east from the largest flat semi-buried boulder. The first level of 27 cm thickness evidenced a rustic cobblestone structure that encircled the boulder creating an inner space underneath, in which a *cántaro* or big jar (6488-1) was found. At 50 cm of depth the excavation uncovered another tabular boulder rock associated with another *cántaro* in a fill composed of large quantity of gravel (6488-2). This boulder rock

formed the lintel of a subterranean chamber.

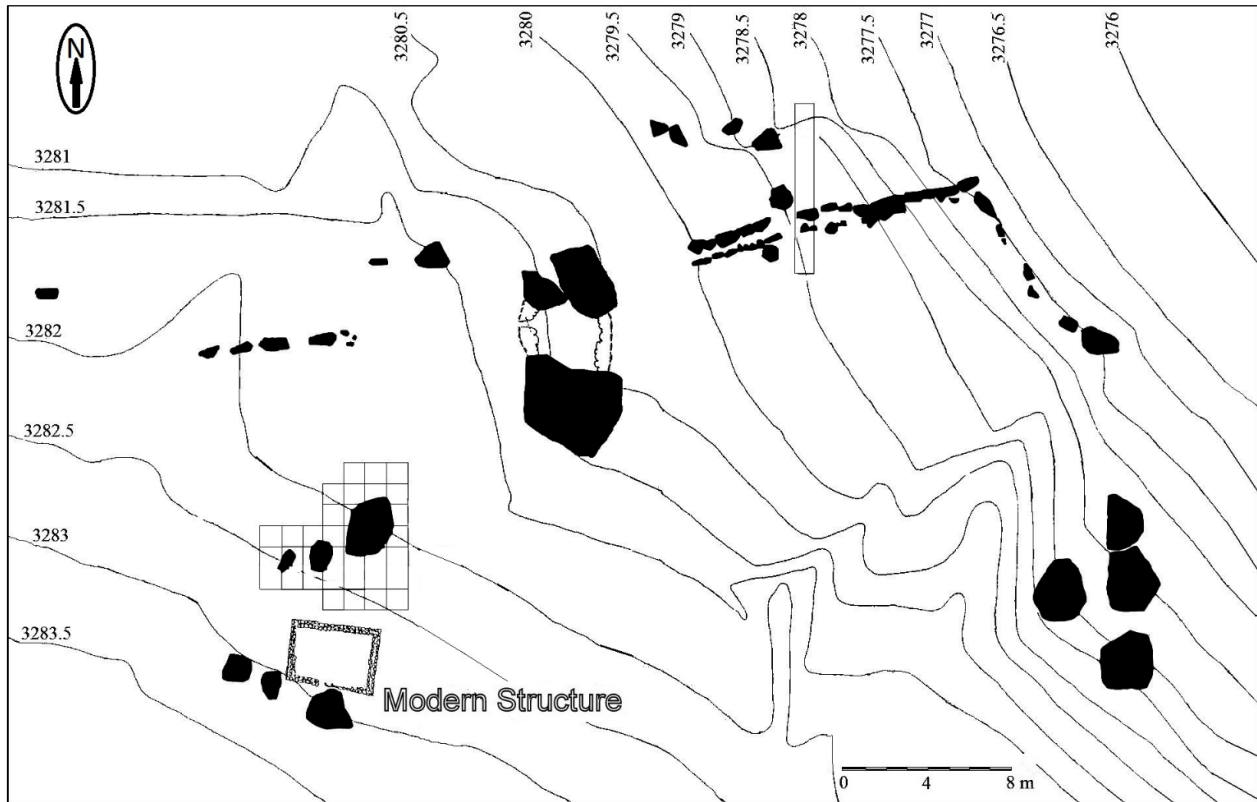
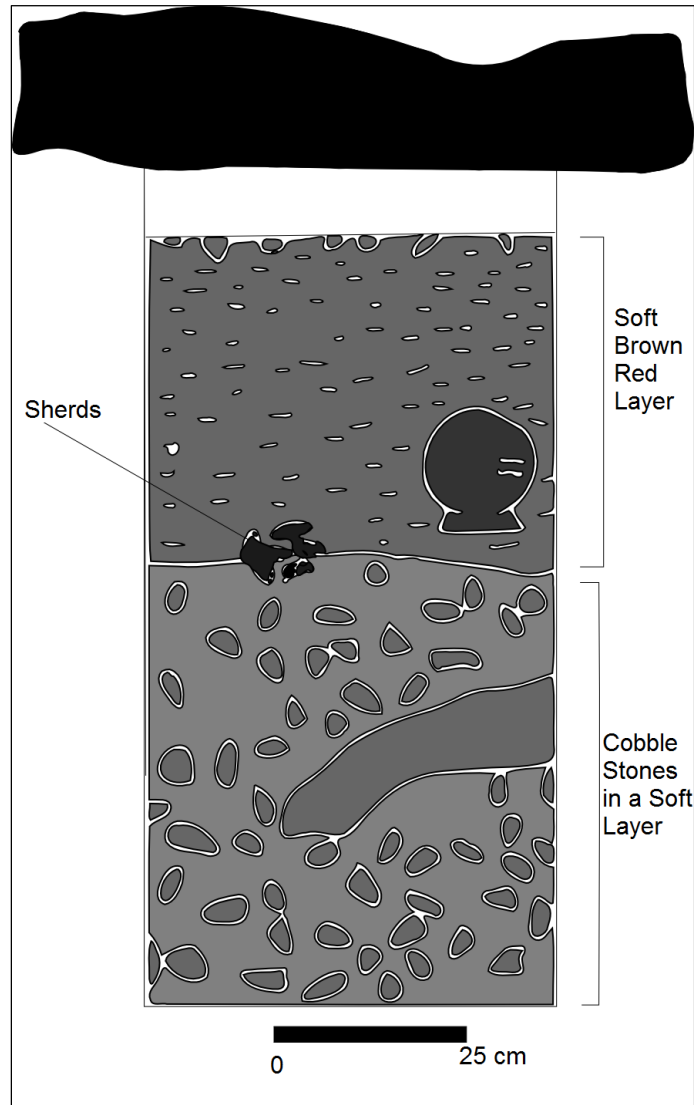


Figure 52. Distribution of boulders (in black) and excavation units at Marca Jirka

Subterranean Principal Chamber

A gravel sediment covered the access of a chamber, which was formed of two jambs and lintel. Access had 0.95 meters of height oriented to the north. The interior of the chamber was completely filled with loose dirt and cobblestones. This fill marks a final event of abandonment or closing. The fill contained tiny human bone fragments, 6 more utilitarian jars, and 3 miniatures mimicking regular size jars placed mostly at the back of the chamber (see Table 27 and Figure 54). The *cántaros* had soot residue, evidence of use, and some of them were almost entirely complete. Probably a ritual of libation with *chicha* beer was performed during the process of filling the chamber. The miniatures were used as a dedicatory offering seen in burials from the Middle Horizon period.

Figure 53. Schematic profile inside chamber.

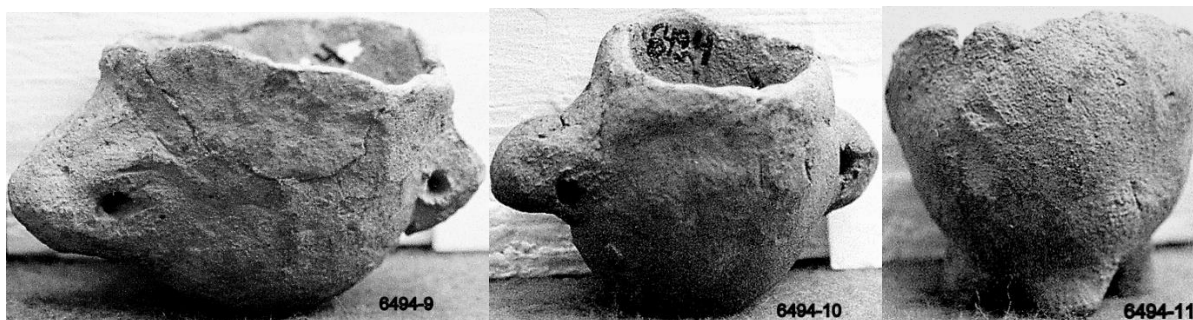


The chamber has a rectangular plan of 0.9 x 1.20 and 1.20 m of depth oriented SW – NE. Three big granite square blocks formed the walls of the chamber. The chamber had the appearance of a perfect big stone box. Interstices between walls were filled with small stone slabs. The roof is composed by three flat slabs, like a ceiling structure. One of these slabs also functioned as lintel. The floor of chamber showed evidence of white plaster, in which were left 2 white paste hemispheric bowls (64302-1, 2) 1 black pedestal cup (64302-3), and a gold metal head of a pin as crown (64302-3). A modeled ceramic fragment of a female attendant (64302-4), human teeth,

charcoal, gold laminates, and fragments of crisocola beads complete the inventory of goods from this chamber.



Figure 54. Cántaros found in the fill that covered the subterranean chamber.



0 1 2 cm Figure 55. Miniatures found inside subterranean chamber

<i>Table 27. Number of finds within fill of subterranean chamber in Marca Jirka Site PAn 5-64</i>					
Jar Dimensions					
Chamber/Structure	Number	Height cm	Diameter Mouth cm	Weight grams	Comments
Subterranean Chamber	6488-1	24	26	1190	Associated to a ring of stones under flat boulder.
	6498-2	36	35.4	3100	Associated to a ring of stones under flat boulder.
	6498-3	33	29	4000	Access to the chamber. Strata 1c.
	64100	32	32.3	3900	Inside the chamber jar found within fill.
	64300-5	35.2	37	4900	Second level of fill at the back of the chamber.
	64300-6	28	29	1490	Second level of fill at the back of the chamber.
	64300-7	37	23	4700	Second level of fill at the back of the chamber.
	6494-8	34	34	3500	Strata 3b, inside chamber.
	6494-9	3	3	30	Miniature inside chamber.
	6494-10	3	3	0.25	Miniature inside chamber.
	6494-11	3	3	0.15	Miniature inside chamber.

Table 28. General Attributes of the items left as offering in the floor of principal chamber. Marca Jirka.

Item	Diameter (cm)	Height (cm)	Weight (grams)	Comments
64302-1 Hemispheric Bowl	12	5.3	80	Kaolin vessel, rounded base has been restored. Light red slip, 2.5YR 6/8. Upper half exterior surface decorated with horizontal black bands that separates painted oval scroll designs (Figure 56).
64302-2 Hemispheric Bowl	11	5.6	110	Kaolin vessel with thin walls, the base was restored, slip is bad preserved light red 2.5 YR 6/8. Lineal painted decoration on the upper half. It is badly preserved, 10R 6/8 red. 3 mm thick horizontal line separates vertical bands (Figure 56).
64302-3 Pedestal Cup	10	6	150	Polished black surface decorated in the upper half. Oval body cup with relative high pedestal (1 cm). Incised lineal decoration of diagonal lines shown in panels (Figure 56).
64302-4 Modeled Ceramic	n/a width 3 cm	5.1	35	Sculpted element of anthropomorphic female with raised hands. Head shows some kind of veil. Face is elaborated with incised lines. Painted dark brown yellowish (Figure 57).
64302-5 Crown pin	2.6	1.7	7	Upper part of pin metalwork of copper-gold alloying. Of conical shape with pointed crown at its edge or rim. On the top of crown head is a cast feline head of 0.5 cm. At the side of crown pin exist a high relief design of a feline in profile repeated three times. At the lower exterior central area present evidence of insertion of the stem that is missing (Figure 58).



Figure 56. Hemispheric kaolinite bowls, and pedestal cup found in the floor of subterranean chamber.



Figure 57. Sculpted pottery of female attendant deposited in subterranean chamber.



Figure 58. Two views of crown pin 64302-4.

Square Structure 2 /64305

The next slab in the southwest area of the chamber measured 1.22 x 1.04 m and was between 33 – 20 cm of thickness. Below this one, another slab formed the roof of another subterranean structure. This chamber was 0.64 m wide by 1.20 long and 1.20 m of high. Of rectangular shape, it was built with boulder size rocks of flat sides forming rectilinear walls on four sides (1.35 m depth). The corners have small fillers between the walls. The entrance is oriented to the west, and was closed

with a slab. It did not have an entryway like the previous chamber, and the entrance more resembles a window that measured 0.33 m high, and 0.64 m width. In this case, the roof was composed of one big slab. No filling was observed inside this chamber and was undisturbed. On the floor was placed a flat stone of triangular shape 27 x 22 cm, over which a concentration of pulverized bones was noted. Structure 2, one of the biggest in size, was intact and contained the remains of perhaps limb bones over a flat stone. Green ash was observed around this flat stone, possibly from a decomposed copper object.

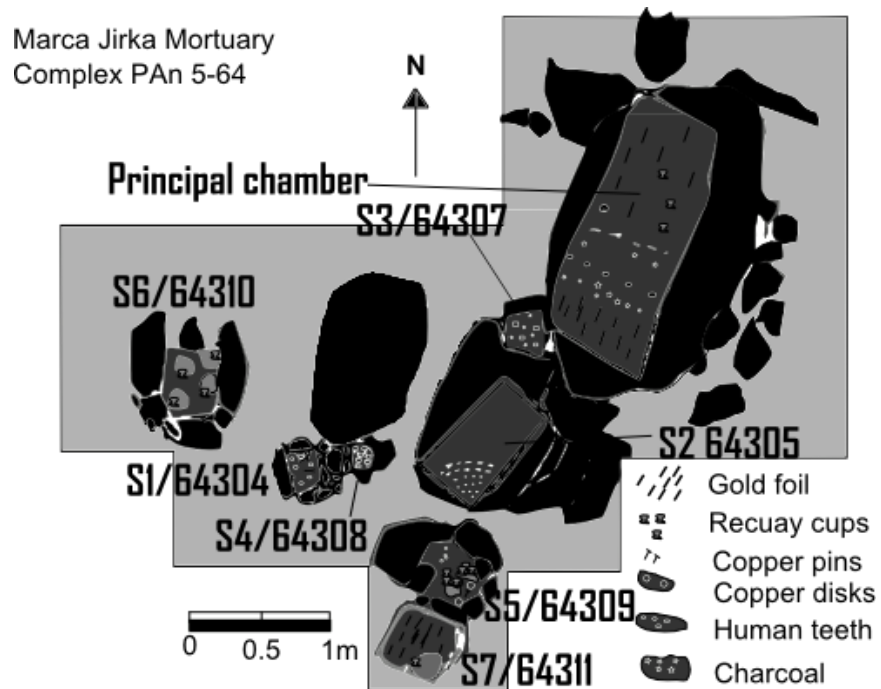


Figure 59. Distribution of mortuary structures at Marca Jirka.

Stone Box Structure 1/64304

A small rectangular compartment of 25 x 35 cm and 45 cm of depth. It is composed of standing slabs and a cover or capstone oval convex of 57 x 43 cm and 15 cm thick adjacent to a big rock located at upper level that functioned in some way as double roof. When the capstone was opened, it was observed the undisturbed find of two *tupu* copper pins of 14 cm in length disposed obliquely

oriented to the west. Teeth of both children (lack of roots) and adults were placed between both pins. This is an example of poor conditions of bone preservation in the findings of the teeth. Due to their U-shaped orientation, it is possible to infer that mandibles were originally left in the structure associated to copper pins. Likewise, teeth might have been placed over a vegetable fiber, which did not survive, but the darker soil might indicate a non-cotton organic material underneath teeth.

Table 29. Tupu pin attributes found in stone box structure 1/ 64304

Item	Diameter (cm)	Length (cm)	Weight (grams)	Comments
64304-1	2	14	55	Copper pin in the shape of nail. It has a wide flat head, and pin has a small hole below head. Distal extreme ends in a point. Observation with magnifier have shown yard remains around pin.
64304-2	2	14	55	This copper item is almost identical to the previous one.

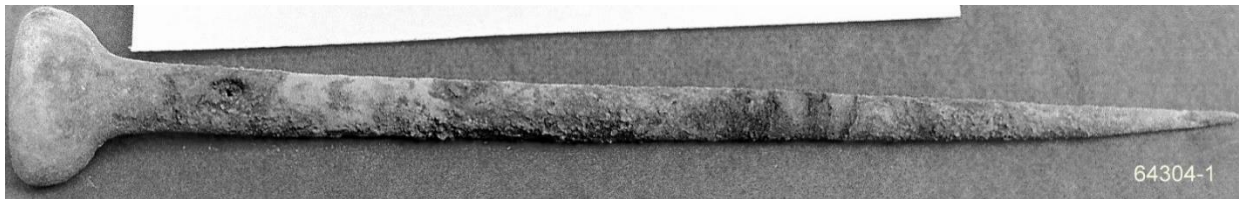
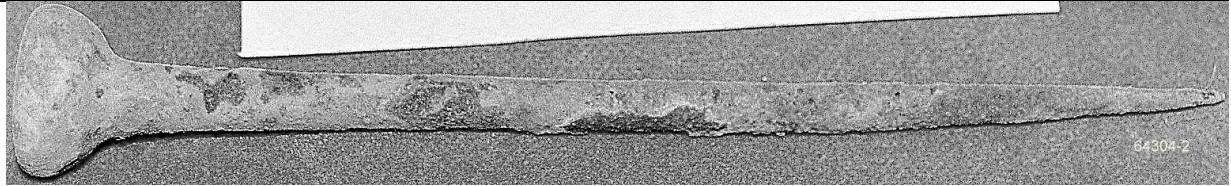


Figure 60. Copper pins from the stone box structure 64304.

Stone Box Structure 4/64308

Next to the west side of structure 1 another stone box similarly shaped was found (see Figure 59). It was 42 cm high and was formed by four vertical slabs that were 47 by 50 cm with a 6 cm thick capstone. The floor was undisturbed without any fill. It contained offerings of pulverized human

bones, possibly the mandible of a child, but only the teeth were preserved. Structure 1/64304 and structure 4/64308 appear in pairs, but the latter is smaller and in a lower level.

Stone Box Structure 3/64307

This one was found west of the principal chamber. It has the same feature as the previous ones. Four stone slabs made the stone box. The measurements are: 52 x 36 cm and 48 cm high. Of small size, like structure 1/64304, it lacked a capstone. In this case the stone box was filled with a light brown soil of fine texture. When the fill was excavated, the only finding was charcoal, and fragment of tooth, suggesting the possibility of an incineration event.

Square Structures

These are almost square structures of greater dimensions than stone boxes, but lesser than chambers. They have been reported in the surrounding areas of Ichic Willcawain (Bennett 1944:34-5). Bennett called them “stone box graves” (see Table 2.3). As we will see, our sample from Marca Jirka has the same characteristics as “stone box graves”. Similar structures also have been observed in the mound of Pumacayán located in the urban center of Huaraz.

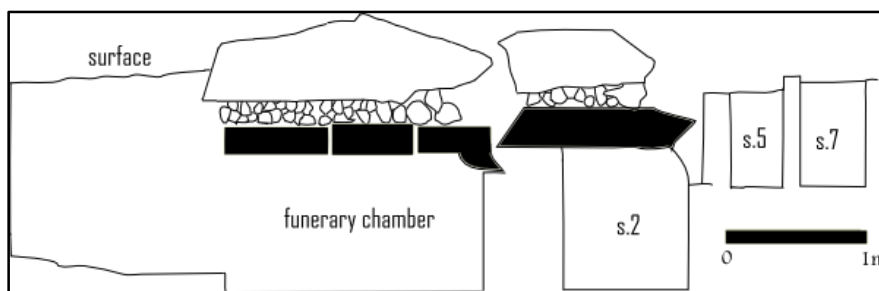


Figure 61. Cross-section chamber, structure 2, 5, and 7.

Structure 5/64309

An undisturbed square structure composed by four standing slabs. In the union or corners of the granite slabs a gray mortar locally called *kapi* was applied. This is a strong clay found in swamps. The structure measured 0.83 x 1 m and 1 m high, totally sealed by a flat capstone. When the

capstone was removed, offerings appeared perfectly intact (Figures 61, 62). Two pairs of kaolinite pedestal bowls and cups were stacked in the northeast corner. Another pair was laid out at the southeast corner. At the center of the structure was left two copper disks, and two long copper pins with their heads placed almost together but pointing different directions (southwest and northwest). Pulverized human bone and three teeth were also found on the floor of this structure, which is a fine brown soil mixed with charcoal bits. It seems like parts of a skull, such as jawbone and teeth of a sub-adult were placed over a sort of vegetable textile. Tiny fragments were recovered, and it is possible that a sort of textile support was used to deposit offerings.



Figure 62. Intact offerings on structure 5/64309. Marca Jirka.

Table 30. List of grave goods from structure 5/64309

Item	Diameter (cm)	Height (cm)	Weight (grams)	Comments
Pedestal Bowl 64309-1	12.2	8	170	Kaolinite bowl with pedestal and painted decoration in the upper half. Two red horizontal bands separate vertical panels, in which the principal design is a frontal face, rounded eyes, nose, mouth and lines that might represent teeth. This design is repeated twice. At the side there are lines that might depict plants (Figure 63).
Pedestal Bowl 64309-2	9.75	7.3	110	Cup with pedestal, inverted trapezoid body shape. Decoration of anthropomorphic face in the upper half of vessel. It has a dark stain. Painted face decoration repeated twice, of quadrilateral shape inserted in panels (Figure 63).
Pedestal Bowl 64309-3	12.8	7.9	180	Pedestal bowl with divergent walls and incurving base. Designs of a face repeated twice inserted in panels. Surface color 7.5 YR8/6. Painted horizontal red bands separate the decorated area in the upper half of vessel. Design is exactly the same as previous ones (Figure 63).
Pedestal Bowl 64309-4	10.1	7.9	140	Kaolinite pedestal cup with slightly divergent walls, and incurving base. The principal design is the same frontal face painted in red, repeated twice and separated by vertical lines in panels (Figure 63).
Pedestal bowl 64309-5	12.7	8.16	185	The body is hemispheric. The design is the same frontal face painted in red. Some surface areas present stains and impregnations. The vertical lines at the mouth are trophy head representations (Figure 63, 64309-5).
Paccha Corniform handle and spout 64309-6	11.4	7.86	260	Globular cup with curve upward handle refer as corniform. It also has a spout to pour liquid in ceremonial context. It presents painted decoration separate in a rectangular panel in which two rows of eyes (4) were represented in red color over an orange slip surface (Figure 63, 64309-6).
Metal Disk 64309-7	12.5	n/a	40	Copper disk with a protuberance in the central part. The edge has adornments of high relieve dots. Four holes determine a quadrilateral that inscribe the central protuberance. Still evident yarn that attached the adornment to possible shirt or textile (Figure 63).
Metal Disk 64309-8	12.1	n/a	50	The same element as 64309-7. Patina of green oxidation cover the object. Traces of yarn still preserved in the holes (4) that inscribe a central protuberance (Figure 63).
Copper pin 64309-9	4.4	23.7 Length	110	Object in the shape of concrete nail with a wide head (diameter 4.4 cm). Pin presents an orifice in the upper section. Remains of yarn still can be seen around pin (Figure 63).
Copper pin 64309-10	4	23.7 Length	105	This artefact is exactly the same as 64309-9. Flat head, and orifice in the pin's upper section, in where it is wider. Traces of yarn are covering pin (Figure 63).



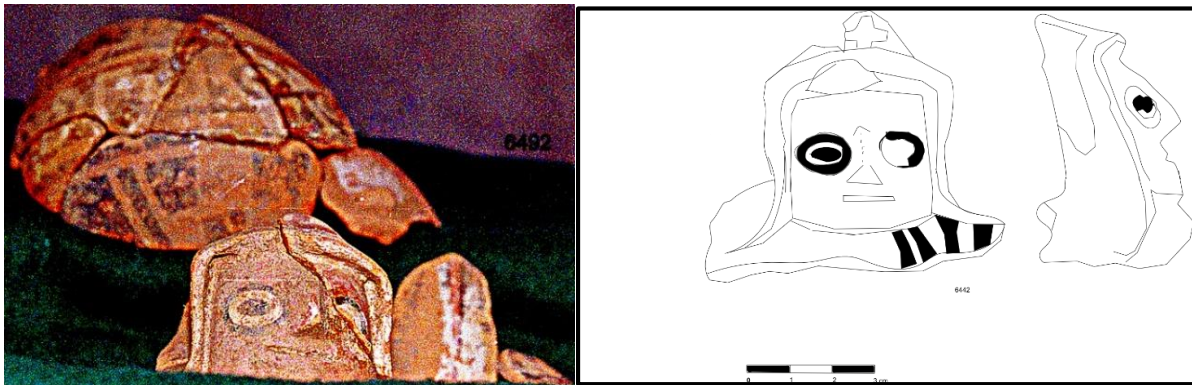
Figure 63. Kaolinite cups, copper disks, and pins offerings in structure 5/64309

Structure 7/64311

Located at the south side of structure 5, this is a square compartment composed of five standing slabs. It measures, 0.74 x 0.77 m and 1 m high. The capstone had oblong form and measured 1 x 0.59 m of width and 0.2 m of thickness. The capstone of the structure was displaced which is why the inside of the structure was found filled with gravel and loose soil. While excavating the red gravel sediment that buried the structure, an isolated find mostly fragments of kaolinite modeled pottery representing a female personage wearing a headdress or veil was found. Several fragmented pieces were partially reintegrated. The vessel's body was globular and painted in black with a checkerboard pattern, stepped and curves designs separated by horizontal bands. The sculpted ceramic head portrays a female frontal face painted with cream eye shadow with a black iris eye (Figure 64, 6492). The nose is modeled, and mouth incised. The modeled head and globular body form parts of the same vessel, probably a modeled effigy jar with spout. A specimen with the same female personage is shown in vessels from museum collections (Eisleb 1987: figure 123,

124; Lau 2011: figure 52).

The excavation of the square structure 7/64311 continued. At 0.9 m of depth was found a complete modeled kaolinite specimen placed in the southeast corner (Figure 64, 64311-1). Besides this one, no other findings were observed, but the floor of the structure had dispersed bits of gold laminates. These gold foil most likely correspond to the exterior surface of disintegrated ternary alloyed metals. Similar pattern was observed in principal chamber and structure 5/64309. This exceptional find 64311-1 consists of a bottle with a bridge handle attached to a modeled deer head manufactured in kaolin ceramic. The deer head was decorated with concentric black bands around neck. The deer representation is very realistic. It can be observed antlers, mouth, eyes, and ears painted in black and orange over the white kaolin surface. A horizontal panel displayed on the vessel's body is delineated by an orange band and panels with a stepped design, and a horizontal S with circles like eyes. Height: 14 cm. Diameter body: 11 cm. Weight: 350 grams.



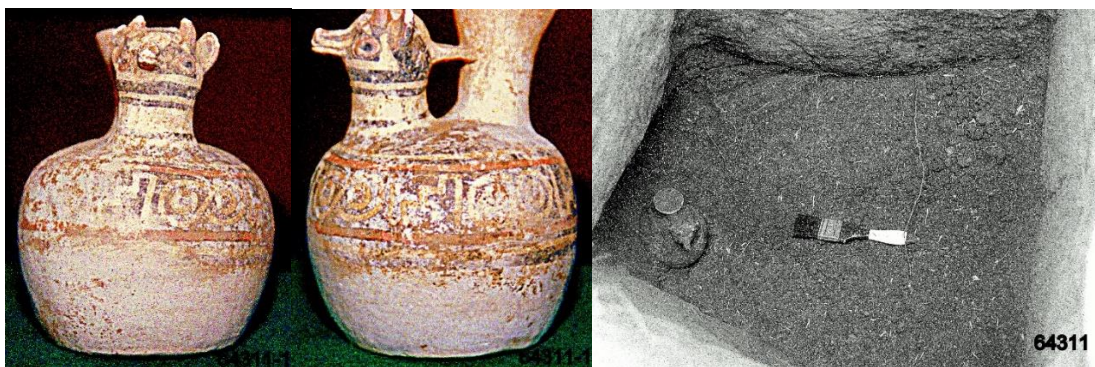


Figure 64. Modeled ceramics recovered from structure 7/64311.

Structure 6/64310

It is the third flat boulder that appeared in the ground surface, at the westernmost part of the excavation. This boulder functioned as roof, which was laying out from its original position. Dimensions of the capstone are: 1.25 x 0.89 m and 0.46 m of thick (Figure 65). Immediately under the capstone ceiling a big utilitarian jar (64310-1) was set upside down. This find or offering was found at the top of the structure within the filling soil. Similar pattern as the principal chamber. The square structure 6 measured: 1.10 x 1.10 m and 0.97 m of depth, and had four slabs, which formed the walls. The interior was filled with loose reddish soil. At almost the bottom of the structure, we had six findings of fine pedestal cups. Finds were distributed on the northeast and southwest corners of the structure. Ceramic finds were fragmented, but it was possible to reintegrate their parts as much as possible.



Figure 65. The location of square structure 6/64310. Important to notice the big size capstone at its side.

Table 31. List of Grave Goods from Structure 6/64310

Item	Diameter (cm)	Height (cm)	Weight (grams)	Comments
Cántaro Big Utilitarian Jar 64310-1	?	34.5	2,700	Ovoid shape body with vertical handles located in the point of tangency. Base is markedly convex, neck and rim are missing. Surface is blackened by being exposed to fire and soot. Small applique decoration on the center of body. Orange-ware (Figure 66).
Pedestal Kaolin Bowl 64310-2	12	6.6	105	Hemispheric body painted and modeled with snake designs. Decorative element repeats three times. Post-fired orange paint and black negative technique. Snake head is modeled as part of rim. Body of snake is depicted in orange and black designs over white kaolin exterior surface (Figure 66).
Plate 64310-3	12.4	3.8	180	Incomplete plate with raised rim. Creamy-orange paste surface in which were painted red designs at the interior of plate. Geometric decoration at the center of plate consists on a circle divided in four quarters. Another concentric circle determined two sets of vertical lines (5) on each side (Figure 66).
Pedestal Bowl 64310-4	11.2	7.1	170	Orange/white bowl with negative paint and thin walls. It shows three small flat handles added at the edge of exterior rim. Polished surface (Figure 66).
Pedestal Bowl 64310-5	12.4	3.8	180	Very similar vessel like 64310-4. The difference is that it is incomplete, there are missing fragments. The technique and decoration is the same as the previous one (Figure 66).
Pedestal Bowl 64310-6	11.7	5.5	90	Fine vessel much eroded, white slip is almost gone. Black lines are very faint, painted over white slip. Walls of vessel are very thin. Orange/whitish paste (Figure 66).
Pedestal Bowl 64310-7	11	5.8	80	Eroded surface, very thin walls, slip and exterior finishing are gone due to bad preservation. Light gray color paste. As the previous ones, small handles or appendages are added at the edge of rim three times in pairs (Figure 66).



Figure 66. Kaolinite pedestal bowls, cántaro and plate deposited in structure 6/64310.

Excavations in Marca Jirka Bajo 2nd Season

Due to unforeseen water pipeline project, which transect cross the mortuary sector, it was decided to excavate the northern area of Marca Jirka site. From the pre-Hispanic road to the north. The presence of many boulders, and the evidence of hidden underground structures below the boulders, made a fair enough solid argument that the subterranean Pre-Hispanic architecture and its setting would not be adversely affected. The explored area is marked by young eucalyptus woods, and big boulders, generally oriented south to north. A preliminary map (Figure 51) shows the two fieldwork seasons in Marca Jirka, and the possible extension of Recuay subterranean structures underneath boulders.

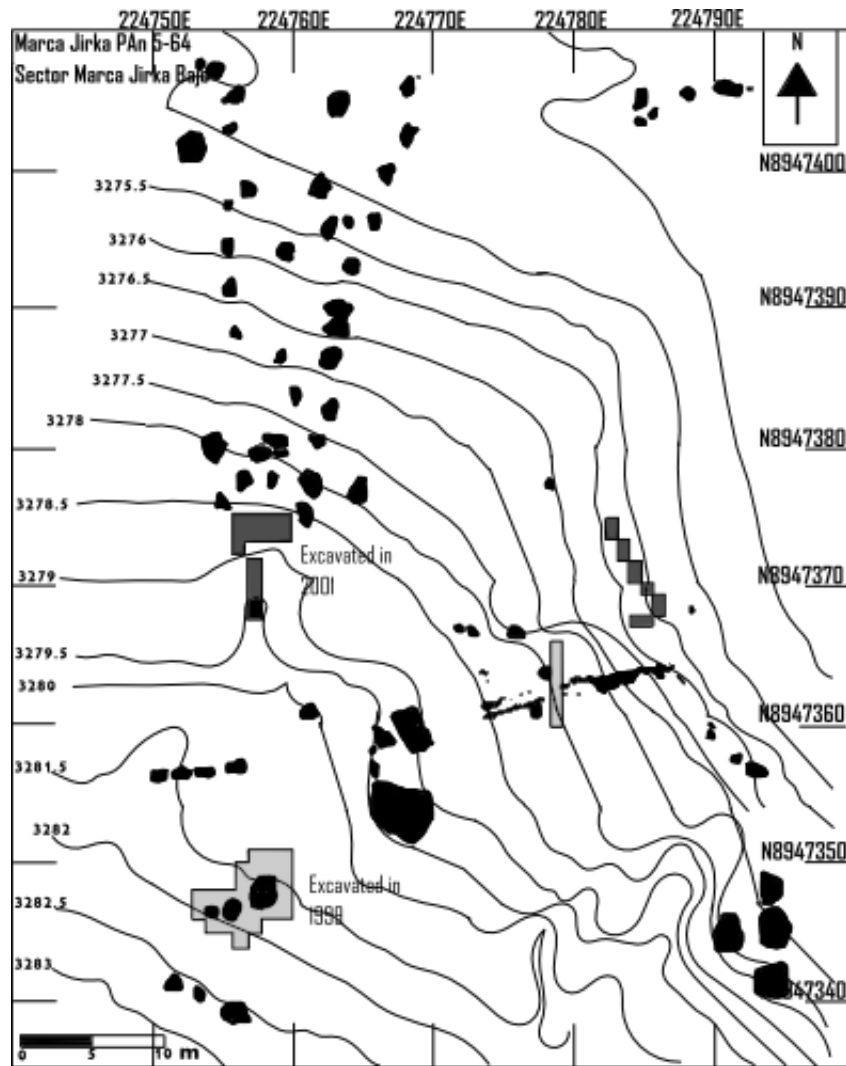


Figure 67. Distribution of boulder (in black). 2001 excavations explored more subterranean structures.

The map suggests that a large underground cemetery still remains intact. Our investigations only covered approximately 1% of the total area mapped. The excavations uncovered six more subterranean structures (see Figure 68).

Structure 1/64354 Stone Box

A 2 x 2 m excavation unit called Unit 40 was set adjacent to the extreme south of a boulder. Ground surface mostly consists of low grasses, and low bushes called “anis del campo” translated wild

anise. *Collcha* is a tall grass sporadically present. The excavation followed the sequence of natural strata. Sediment of strata 1 is a loose silty loamy soil with little gravel and roots. At the NW corner appeared a stone that might be part of a structure. Color Munsell soil is 10YR 4/6 dark yellowish brown. Thickness of strata was 5 cm. Strata 2 had a change color, the texture is soft and lacks of gravel, mostly in association to the boulder located on the NW corner. At the SE corner of unit appeared three stones aligned W-E. Color of soil was Munsell 7.5YR 5/8 strong brown. Thickness of strata 2: 17 cm. At 28 cm below ground surface was found a structure situated next to the boulder previously observed in the NW corner. The capstone consist of a whitish tuff volcanic rock, porous and irregular with flat sides. Interstices of capstone and structure's wall were covered with small stones and mud. It seems that to build the structure, they cut the compact soil of strata 3, and formed a hole. The stone box type structure measured: 0.35 m (N-S) by 0.27 m (W-E). Depth is 33 cm and is composed of four slabs. The floor of the structure was formed by a blue slab. A *tupu* copper pin with flat oval head and hole in the center of 1 mm was left as offering. Length is 12.6 cm. It was totally covered by copper oxide. This find was associated with pulverized human bones. Molar and canines were recovered when screening the soil, they might belong to adults.

Structure 2/64357 Stone Box

In the same 2x2 m unit 40, southeast from structure 1, a conglomerate of rocks exposed in strata 2 were covering another structure. The capstone is delineated by small rocks and mud, and associated to a soft soil. This soil does not belong to the local stratigraphy, it is foreign, probably used in the installation of structures. The soft soil color is 5YR 5/8 yellowish red, and forms part of the matrix that contours the capstone. Compact subsoil of strata 3 was disturbed by the builders, whom excavated it, to set the stone structures. The capstone was found at 34 cm below ground surface. It has 26 cm of thickness and has the exterior shape of a mushroom. However underneath it is flat.

Once the capstone was removed, the structure was found filled with medium-size rocks, which had approximated 30 cm of thickness. Below this, in the rock fill was observed skeletons of at least two individuals. The skulls were fractured produced by filling process. One individual is located in the SE corner of the structure, and oriented to the west, in flexed position. It seems a complete skeleton. The other one located in the NE corner only the skull, which appear to have a deformation, was observed. The floor of structure had a brown sediment of strata 2. On this one were found two small objects of cylindrical shape, with size of a tooth. It looks like a mineral (pyrite? gold?). The stone structure is square 0.5 x 0.51 m and its height reached 0.76 m. It is composed of four slabs, very homogeneous. Between them there were small slabs or fillers, “*pachillas*” set all the way to the top of the structure. The clay between fillers is very hard, and was used to adherer slabs and fillers. This clay comes from swampy areas. Color: 5Y5/6 olive.

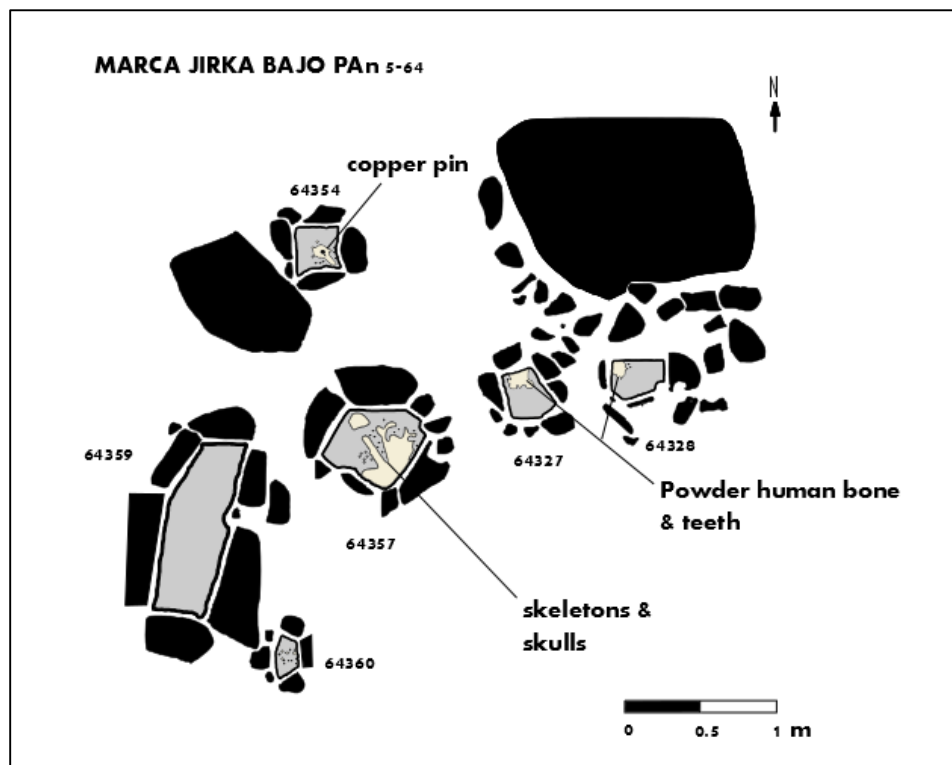


Figure 68. Distribution of mortuary stone squares and boxes at Marca Jirka, 2nd season.

Structure 3/64359

A fill of rocks was uncovered in the southwest corner of the 2 x 2 m unit 40. Two elongated big size stones were firm in the ground and oriented N-S. The space between these two stones was filled with rocks. When the fill was removed, it was clear the rectangular shape of a structure that continued into the south profile. A 1 x 1 m expansion unit to the southwest was excavated to observe the whole structure. Abundant small and medium size rocks composed the fill that only had four kaolinite sherds. The solid stones (0.55 m length average) were cut straight. The interior of the structure was filled with soft soil of strata 3 related to the construction (see Figure 69). The floor was located at 1.07 m below ground surface. In contrast with the solid aspect of the structure, no artifacts were displayed on the floor. The only element or find was a 10 cm (approximate length) of a dark sediment that might be some kind of decomposed organic material. The structure measured 1.15 m (N-S) x 0.20 m (W-E). Height: 0.67 m. It is not surprising to find an empty subterranean structure. W.C. Bennett (1944:34) excavated many empty ones, and felt disappointed with the results.¹⁰

Structure 4/64360

The 1x1 m expansion unit opened to the southwest of the original 2x2 m unit 40 uncovered the structure 3, but also uncovered another structure in the southeast corner. At 41 cm below ground surface, the capstone was associated to the soft sediment of strata 3. This structure is above or higher to the previously recorded structure 3 (see Figure 69). Structure 4 is the type of stone box, it measures 0.22 x 0.21 m and 0.41 m of height. Capstone was 12 cm thick. The offerings consisted of small and very fragile human bones of a child, and molars.

¹⁰ “Certainly more could have been found had the contents of those excavated justified the effort”.

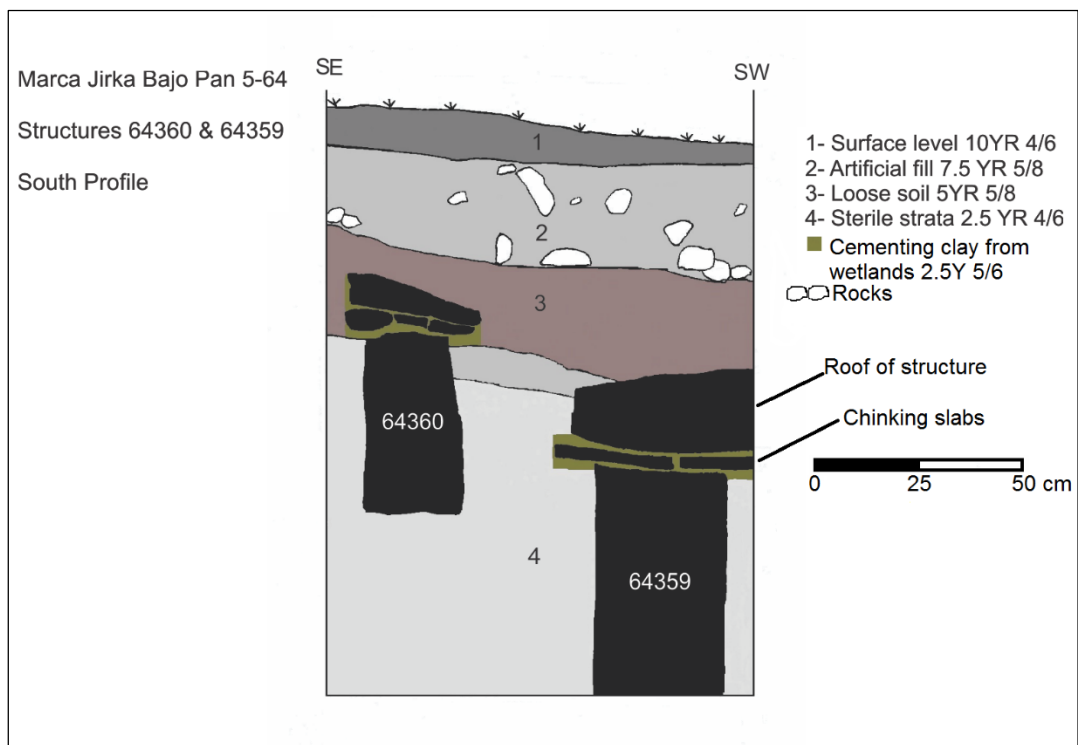


Figure 69. Strata 4 is a compact clayish subsoil intruded by the tomb's builders.

Structure 5/64327

In the east profile of Unit 40, was observed a slab that could be a capstone of another structure. Unit 49 of 2 m (W-E) x 1 m (N-S) was opened to explore this structure. At 30 cm below surface, a layer of loose soil and gravel characteristic of strata 2, covered the capstone of structure 5. It measured 0.55 x 0.42 m surrounded by small stones and mud, as a collared seal of stones that protect the structure from filtrations. The stone box type of structure is small, dimensions: 0.26 m (N-S) by 0.30 m (W-E) and 0.45 m of depth. The structure is formed by four granodiorite standing slabs. At first look no ceramics neither human bones were observed. However, excavating the soft sediment inside structure were found human teeth, but they do not show a position comparable to a mandible. Two teeth showed red paint (cinnabar?), and one incisor had “shovel-shaped” form.

Structure 6/64328

In the same unit 49, at about 0.30 m northwest of structure 5/64327, was found structure 6/64328. Its capstone was located at 24 cm below ground surface. This structure is very similar to the previous one. Stone box type, it measures 0.32 m (N-S) x 0.30 m (W-E), and 0.52 m of depth. Formed by four standing slabs of granodiorite. The corners had small slabs as fillers. Above standing slab had eight small slabs forming a rustic circle, and a flat surface for the capstone. This one was 0.55 by 0.55 m. Inside the structure soil was only present in minimum quantity, bones of possible mandible, and isolated teeth were found in this structure. The process of construction of these stone structures dealt with the excavation of big holes in the subsoil. A bigger size capstone located in the extreme north of unit 49 was not excavated. As the other ones, it had a ring of small stones and mud mix as a collar that isolated the tomb from possible intrusions (Figure 70).

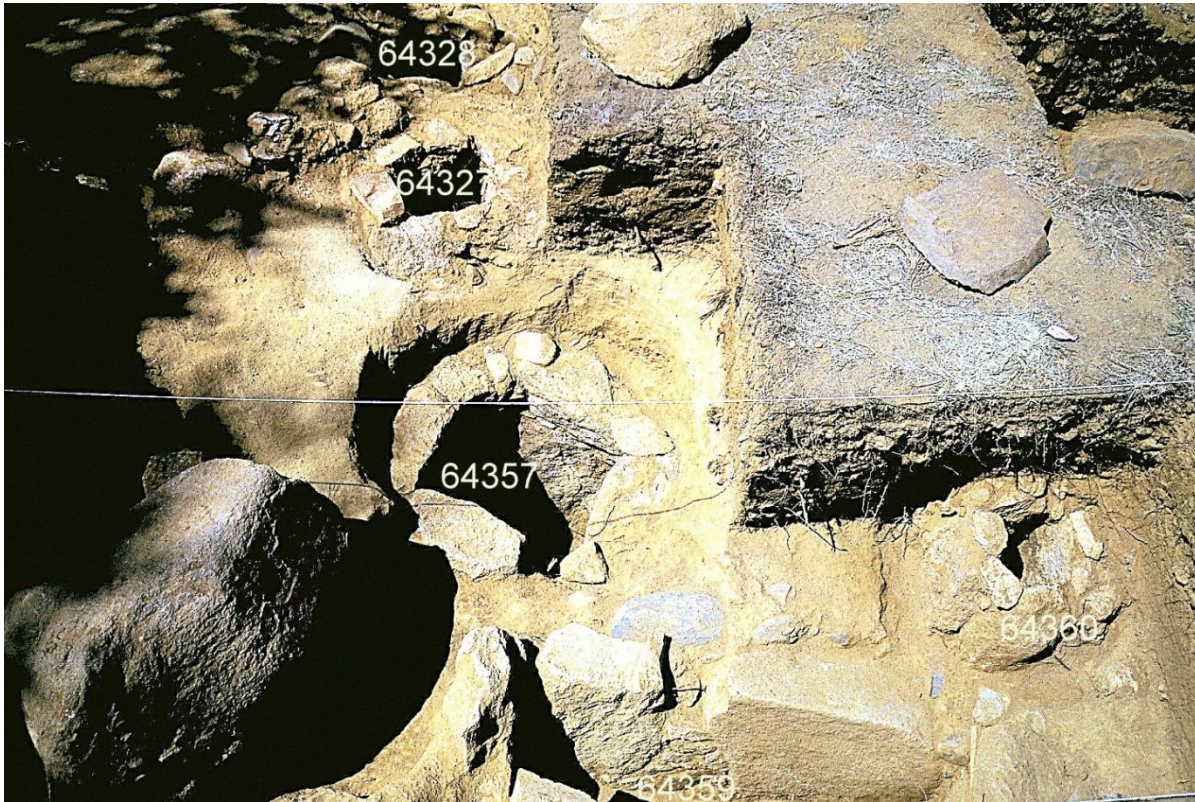


Figure 70. Distribution of mortuary stone structures looking from the east to west.

Preliminary Analysis of Human Remains from Marca Jirka Bajo PAn 5-64

Structure 2/64357

In this structure we have two children with cranial deformation. Individual one is of 4 to 8 years old had an incomplete skeleton, and found in flexed position. Age is estimated by the measurements of the long bones (femur, humerus), and dentition. However long bones are eroded and incomplete, that is why age is an approximation. The bones of the hand (phalange, metatarsals, and carps), and feet (tarsals, phalange, and metatarsals) were missing. Also missing the right clavicle, ulna, radius, and fibula. Deciduous teeth are present in molars, and only 1st molar is permanent and 2nd did not erupt yet. Child presents active cribra orbitalia on the frontal left lateral bone with large and medium porosity. The deformation affected horizontally half of frontal, and in the superior part of parietals near the coronal suture. It is notorious the mark of the element that caused the deformation. Existed pressure in the frontal bone and back reaching the external occipital crest. Both parietals suffered strong pressure; observing deep depression near the coronal suture. Individual two; 12 years + - 36 months, diagnostic realized based on dentition. 2nd molar does not have wear, and 3rd molar only is observed the crown without root development, and eruption. Individual presented depressed fracture in the right central frontal. As pathology is shown cribra orbitalia manifested with low intensity. A little fracture observed in the left lateral of upper left incisors. Maybe related to a quotidian activity executed diary. Some labor activity? Upper incisors have shovel-shaped form. The cranial deformation has produced a horizontal depression in the frontal squama, and a major depression in the superior part of parietals near coronal suture. Individual three; long bones (humerus, femur, and tibia) correspond to neonate around 8 to 9 months.

Individual four; humerus from another individual of the same age.

Structure 4/64360

Correspond to teeth of children around 6 month old. Temporal bone fragments are also shown.

Structure 6/64328

Contained upper canines, and upper and lower incisors with strong wear. Incisor crown of shovel-shaped, molars and premolars all of them from adult. Curiously crowns show apparent cuts.

Structure 1/64354

Teeth correspond to 1 individual adult. 2 upper canines, 4 premolars, and 7 molars. Another 2 upper canine's show enamel hypoplasia.

Table 32. MNI in Marca Jirka Bajo Subterranean Mortuary Structures

Burial Structure	Adults			Sub adults			Child	Infant	Fetal	MNI
	Male	Female	Unsexed	Male	Female	Unsex				
S.2/64357							2		2	4
S.4/64360								1		1
S.5/64327							1			1
S.1/64354			1							1
S.6/64328			1							1
TOTAL			2				3	1	2	8