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Sincerely,

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03-09-03
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By

Donna J. Nash
ACKNOWLEDGMENTS

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This research sought to define social administration in the Wari polity through a comparison of common and specialized activities occurring in monumental and nonmonumental households in a Wari imperial colony. The study uses concepts from architectural theory and methods developed by household archaeologists to investigate a provincial settlement in the Moquegua drainage of southern Peru, Cerro Mejia, by examining how the Wari used their constructed space. Information was drawn from the excavation of eight entire Wari house structures representing eleven households. These were compared with an excavated elite household from the colony's provincial center, Cerro Baúl. These data along with information on regional settlement patterns and information about the prehistoric resources available through intensified agricultural systems were used to formulate a model of Wari state administration.
of the Moquegua province. Recognizing that elites controlling an empire may formulate a variety of management strategies for the diverse regions under their control, it is important to emphasize that the examination of space has revealed a number of overarching principles that can be applied to the Wari Empire throughout its realm and also have application to the general study of statecraft.

There is a direct relationship between the design of a space and its intended function. The multiple institutions necessary to maintain power and manage a state level society are designed differently and these spaces are more complex and differentiated at the higher levels of the administrative hierarchy.

Documenting the use of space can reveal the lowest levels of the administrative structure where elaborate architecture is not present. It is important to identify all the nodes of the state, however small. These smallest units maybe seemingly invisible, but provide a wealth of information about the foundations of the society.

Studying and comparing how power is represented and how spaces are designed as places of power at every level of the management hierarchy can provide significant insight toward understanding the archaic state.
CHAPTER 1
WARI STATE AND EMPIRE:
THE PLACE AND SPACE OF POWER

The Wari cultural complex represents the expansion and far-flung influence of a powerful polity. Its iconographic motifs, distributed both on textiles and ceramic vessels, depicted and legitimized the social hierarchy (Cook 1983). The state consolidated in the highland region of Ayacucho and controlled areas to the south in Cuzco (Glowacki 2002; McEwan 1987), Arequipa (Malpass et al. 1997), and Moquegua (Moseley et al. 1991), and to the north in the Callejón de Huaylas (Isbell 1989), and Huamanchuco (Topic 1991; Topic & Topic 2000). These provincial areas were managed through personnel installed in state constructed centers of various sizes. Local populations in these regions were brought under direct control. Other areas located on the coast exhibit contact or influence through material goods pertaining to the Wari cultural complex, yet no large administrative centers reflecting the canons of Wari spatial design have been reported.

The leaders of the Wari state managed a diverse population of occupational specialists and common village folk. They developed institutions to maximize and harness the labor of these people. Through their conquests they came also to administer people of different language groups who conducted their lives in a somewhat different fashion from their own. The Wari also built and
maintained enormous distribution networks and had access to vast stores of staple goods and precious luxury items. They created an infrastructure that facilitated communication by building roads and centers. As a result the Wari grew into an Imperial polity (Doyle 1986; Sinopoli 1994). The Wari cultural complex represents the material remains of an absolute empire that held power over neighboring and far distant societies that was only superseded in the Andes by the emergence of the Inka centuries later.

There are no written records for the Inka and earlier Andean civilizations such as the Wari. There are quipu from Wari times, knotted textiles used to record inventories and perhaps events, however, these have not been deciphered. Historical accounts primarily recorded by Spanish intruders describe the remnants of the great Inka Empire. These biased chronicles are the only sources archaeologists have for interpreting the material culture left behind by institutions of the Inka and other Andean states. Understanding Inka imperial and administrative institutions is of primary importance if we are to elucidate their earlier manifestations in the Andean highlands.

The research that resulted in this work sought to define social administration in the Wari polity through a comparison of common and specialized activities occurring in monumental and nonmonumental households in a Wari imperial colony. The study employs concepts from architectural theory and methods developed by household archaeologists to investigate a provincial settlement in the Moquegua drainage of southern Peru, Cerro Mejia by examining how the Wari used their constructed space. Information was drawn
from the excavation of eight entire Wari house structures representing eleven households as well as comparisons with an excavated elite households from the colony’s provincial center, Cerro Baúl.

The Wari state flourished in the central Andes of Peru between AD 600 and AD 1000 (Williams 2001). Many scholars have suggested that Wari administration was practiced within a residential sphere, in stylized monumental constructions called patio groups (Isbell 1991; McEwan 1991; Schreiber 1992). Therefore I examined the use of residential space in monumental house structures, Wari patio groups. Nonmonumental dwellings were also investigated in order to gain a broad understanding of Wari residential space in general and also to provide a control for recognizing material remains associated with social administration. Monumental architecture is primarily located at the colony’s center, Cerro Baúl, however, some structures on the summit of Cerro Mejia exhibit similarities to the classic Wari patio group form (Nash 1996) and employed some dressed stone in their construction. Investigating these summit structures on Cerro Mejia and monumental residence at the provincial center is important for creating models of statecraft that incorporate Wari administration at different levels in the settlement hierarchy and interaction among social groups.

The Wari was a stratified society, consisting of diverse groups or classes such as administrators, religious specialists, artisans, pastoralists, and farmers. The examination of the use of residential space among these groups was aimed at revealing both the similarities and differences in their domestic activities. A comparative analysis of the activities that occurred in the monumental
administrative residences and the nonmonumental common residences provided an understanding of administration in Wari society.

If Wari administration occurs in a household setting (Isbell & McEwan 1991; Schreiber 1992), it can be classified as a household occupational specialization. The archaeological correlates of political relations and social management should stand apart from standardized domestic activities, which would be present in all households, and other occupational specialties. By comparing activities present in monumental and nonmonumental house structures, it was possible to contrast administrative activities with other productive activities (farming, artisanal crafts) as they occur within residential space. Thus the project’s methodology was designed to construct models of coherent activity sets from household remains and their organization in space.

This study was focused on examining the differences between occupational groups in a society, however, data revealed that the settlement consisted of households significantly different from one another in their basic organization, yet not their activity. The differences in household organization suggest that the Wari colony, specifically the settlement at Cerro Mejia, consisted of different groups pulled from their regions of origin to occupy and labor in a foreign imperial colony. Regardless of this evidence, the lack of occupational diversity at the settlement did not deter the project’s goals. Excavations at Cerro Mejia still provide strong contrasts in the use of residential space between administrators and other individual members of the greater Wari society. Additionally, the data provides for the formulation of models about the nature of
the population in the Moquegua colony and some of the tools the Wari employed to maximize their resources and subjugate the societies they administered.

**Andean Statecraft**

Models of Andean statecraft derive from the ethnohistorical accounts of the Inka Empire. Theories about Wari administration closely follow descriptions of Inka processes in practice, however, the current models ignore the variation in administrative processes and the different spatial settings and scales of these activities. The following is a discussion of current models of Wari administration and these are compared with evidence of Inka state institutions.

**The Current Model of Wari Administration**

The Wari have been investigated through monumental architecture (Isbell & McEwan 1991; Schreiber 1992). The focus of these studies has been large complex compounds at the capital of Wari and provincial administrative centers located in a number of regions. The architectural remains at these sites are very stylized and repetitive in form. One form in particular, the patio group, has received a great deal of attention. A patio group is basically a courtyard house, it has an open patio with long rectangular rooms, which have been called galleries but are not open or have columns in any form. These rooms are sometimes subdivided and enclose the patio flanking one or all four walls of an exterior enclosure wall. Since most of the residential structures excavated in the Wari Moquegua colony had patios, in the following discussions the term ‘formal patio groups’ will correspond to those built in a rectilinear fashion with four flanking rooms. Formal patio groups share spatial organization with previously
investigated patio groups at the Wari capital and provincial centers.

The current model of a formal patio group’s function incorporates both residential activity (cooking, weaving, etc.) and administrative activity (generosity or feasting) for elite occupants (Anders 1986; Isbell & McEwan 1991). Thus the material remains found within these types of structures may be associated with administration or typical domestic activity. These structures are often times found with few artifacts or with materials that appear not to be in primary context. Formal patio groups have been identified and investigated at the capital in Ayacucho (Brewster-Wray 1990) and at several of the provincial centers, Azangaro (Anders 1986) Cerro Baúl (Williams 2001); Honco Pampa (Isbell 1989); Huaro (Glowacki 2002); Jincamocco (Schreiber 1978;1991); Pikillakta (McEwan 1984;1991); Sonay (Malpass et al. 1997); and Viracochapampa (Topic 1991) (Figure 1-1). Hypotheses on the function of these structures are based primarily on findings from the excavation of the Moraduchayoq compound, in the Patipampa Sector at the Wari capital city, referred to in this study as Huari.

Christine Brewster-Wray excavated portions of several patio groups within the Moraduchayoq compound, a walled enclosure containing formal patio groups and a subcomplex with a platform surrounded by small rooms and possibly larger open spaces. No one formal patio group was excavated in its entirety and the nature of the remains appeared to have been greatly disturbed both in prehistory and by more recent looters. The structures had two-story galleries and the deposits were more than a meter and a half deep. Artifacts were found distributed throughout the strata above the floor and were divided by statistical
Figure 1-1. Map of Peru with excavated Wari sites.
methods into deposits of primary and secondary context based on density and artifact types (Brewster-Wray 1990).

The Moraduchayoq complex consisted of several formal patio groups, four of which were rectangular in plan and perhaps three more with a trapezoidal outline. The mapping of the structures was based on wall trenching and some of the spaces remain unclear. Structures were adjoined and could be accessed from other formal patio groups rather than through the use of corridors. Thus it was posited that the structures represented the dwellings of a group of related administrators occupying the compound together and carrying out similar activities within redundant structures. Evidence of feasting was not inferred from materials in primary context but rather was drawn from artifacts said to be in secondary context. The numerous remains of consumption vessels, decorated bowls and cups, and other sumptuary items were found dumped in the formal patio groups as they were successively abandoned. These depositions were concluded to be the result of activities being carried out in the remaining occupied patio groups rather than from outside the complex. Thus these dumps of high quality consumption vessels and other wealth items were interpreted as the remains of feasts being conducted in another formal patio groups within the complex (Brewster-Wray 1990; Isbell et al. 1991).

There are two factors about the descriptions of the excavations and the ways in which the contexts were inferred that are suspect. First, although there is a large platform structure within the complex none of the refuse was attributed to activity that may have been carried out on or around this feature. The other
factor is that the quality of the artifacts were not inferred from their context but rather through statistical methods and logic after they were recovered (See Brewster-Wray 1990). I suggest that in excavating such a midden or dumped refuse the ash and other garbage would have made the nature of the deposits quite clear. The level of disturbance being great perhaps this was not possible. Furthermore, a number of offering caches are now known and have been excavated within several Wari structures (Cook 2001; Isbell & Cook 1987; Lumbreras 1974; Ravines 1977; Williams 2001). Contexts of Cerro Baúl have similar characteristics exhibiting mounds of feasting waste. The detailed study of the placement of these smashed vessels and feasting refuse has revealed that such depositions are the result of purposeful ritual abandonment rather than secondary dumping. Nevertheless, excavating two-story structures is quite a complex undertaking especially when a high degree of disturbance is present. Thus my critique of the interpretation will focus on the importance of the platform within the complex rather than on the potential for a Wari ritual context, which I will discuss further in Chapter 7.

Platforms were central to Inka processes of resource management. In the following section the importance of platforms at the Inka capital and provinces as signifiers of administrative power and venues for receiving tribute and providing feasts. Chapter 2 discusses the patio group architectural form and the potential for misinterpretation when form is equated with function as it pertains to architectural structures and the activities they housed through time.
Inka Modes of Statecraft

The Inka Empire was an incredibly complex society with a wide range of specialized activity areas that accommodated the many institutions that grew as the state developed. The Inka Capac, the absolute ruler of the empire, was also considered a sacred individual, a living deity that was served and worshipped even after his death. Therefore Inka statecraft was seated in the pomp of political ceremony as well as the awe of religious observance. The Inka state was maintained by a multitiered socio-political hierarchy of administrators. Additionally, the centralized government was served by a number of bureaucrats, accountants, and functionaries who advised the emperor of the resources throughout the possessed territories and what should be asked from each province and region in tribute. Functionaries selected the chosen women and carried out many varied tasks for the centralized government. There was also a religious network that promoted the Inka religion centered around worship of the sun, that legitimized the status of the Inka as rulers descended from the sun, Inti. Temples were located in provincial capitals and existing religious centers and oracles (Moseley 1992). A well documented example of which is the coastal oracle and pilgrimage site at Pachacamac (Ravines 1996; Shimada 1991).

The ethnohistoric accounts of the Inka polity describe the public rituals in which the leader himself took part, as well as other social mechanisms that maintained the Inka Capac's access to labor resources from every family within the empire's vast territory. The following is a discussion of important Inka institutions vital to the functioning of this great ancient Andean state and their
archaeological correlates. The Wari state preceded the Inka by several centuries, however, examining the Inka polity and how it managed its resources and manipulated relations of reciprocity will provide insight into the complexities that should be sought in the remains of Wari society.

As the subject of this study is a Wari provincial settlement, Inka provincial centers and settlements are a significant source for interpreting the potential organization of provincial institutions within the Wari state. Huanaco Pampa has been investigated both historically and archeologically and the vast nature of its hinterland is particularly instructive and illustrates how Andean urban centers may be characteristically different from urban centers in commercial civilizations (Morris and Thompson 1985). Understanding how the provinces interacted with the Inka center of Cuzco and the nature of the state’s political hierarchy is of primary importance if we are to build models of Wari state administration based on Inka statecraft.

The Inka Empire was called *Tahuantinsuyu*, “the land of the four quarters”. The capital, Cuzco, the navel or center of the polity was divided into two halves, Hanan and Hurin. The leader of the Hanan, upper portion of Cuzco, was the absolute leader, Capac Capa of the empire (Rostworowski 1999). His second was the head of Hurin Cuzco, lower half, who replaced his primary counterpart in ruling Cuzco when the Capac was away. The second also had specific responsibilities within the city such as overseeing agriculture (Zuidema 1990). The four quarters ideally were each to contain 100,000 tax units or families and were managed by relatives of the ruler. The Inka provinces, in quechua *huamani*
(Santillán [1563]1950), ideally contained 40,000 tax units and were administered by an individual who would have maintained both residence in Cuzco as well as the province under his charge (Morris and Thompson 1985; Zuidema 1990). Beneath this leader were regional leaders often left in place along with the local leaders of villages and kin groups. The next significant level in the ideal Inka decimal system was the leaders of 1000 households, a unit called a huaranga (Julien 1982). Zuidema (1990) describes that the 40 leaders of 1000, the Huaranga Curaca in Cuzco, were called to participate in ceremonies of the first planting. Counting participants in these events 1 emperor and 40 Curaca have a sum of 41, the number of ceques radiating from the Qorikancha or Sun Temple in the religious center of the capital city. This is an ideological model and the actual numbers were likely very different from suyu to suyu and province to province.

The Inka Emperor during the performance of rituals and for administrative purposes had direct contact with the Huaranga Curaca, in Cuzco. Huaranga Curaca in other areas of the empire likely had direct contact with the governors of their respective provinces who provided them wives from among the chosen women of their region. The gift of a wife would have created a fictive kin relationship between the wife giver and wife receiver cementing the relationship of reciprocity between the two individuals. Below the leaders of 1000 households, were minor elites, Pachacha Curaca, who controlled the labor resources of 100 households, and 10 households respectively, Chunca Curaca (Rostworowski 1999). These minor elites received women and gifts from the
Huaranga Curaca and themselves may have participated in local labor projects, serving as foremen.

Based on this documented hierarchy the archaeological record should demonstrate that some level of administration was carried out in every tenth household. The leader of 10 households would be responsible to his superiors for providing a set amount of individuals for local, regional, provincial, and state labor projects. In order to manage the individuals beneath him and legitimize his position, even the lowest elite would have had to provide feasts and or small gifts to those who contributed their labor on his behalf. The leader would have obtained extra resources from the Pachacha Curaca in the same way. Thus the Inka Empire functioned via reciprocal exchanges at many levels that eventually trickled down in some form to the lowest administrators and possibly the head of every household in the Inka Empire. The administrators had direct contact with individual laborers that contributed their energy to provide the Inka state with the resources to keep this cycle going as well as provide surplus to carry out large construction projects and support the highest elites who contributed their energy toward religious performance, political prowess, and administrative skill.

Excavations should reveal small feasting facilities in which the leaders of ten families fulfilled their obligations to the heads of households beneath them in the socio-political hierarchy. This space should be accompanied by specialized vessels for serving and consuming the feast, but may not have exceeded one special cup or bowl at this level because of the Andean tradition of serving and drinking in turn based on rank (Meyerson 1990). Depending on the size of the
settlement there should also be similarly sized structures for the Pachaca Curaca to host feasts and give gifts to their subordinates. These socio-administrative activities likely took place within the residential structure of the leader. The patio space of a local leader would be made large enough to accommodate a meeting or perhaps an extra patio or adjoining plaza would be constructed as a setting for these events. The leader’s wife and other female kin would provide the labor for the feast. Small scale storage was likely required to safe guard extra provisions for the event and to store gifts exchanged to denote the local leader’s marginally elevated status.

Moving up the hierarchy in a decimal system such as this, a particular administrator may only require space within his residential compound to feast nine or ten people providing labor resources on his behalf. The administrators of provinces, however, may have had direct contact with the leaders of 1000 and thus depending on the size of the particular province may have required more space to host feasts for up to 40 lower elites. This activity almost certainly required an additional facility, in the form of a large adjoining plaza.

The occasional event of preparing and hosting a feast was not the primary occupational focus of administrators at the two lower levels. Facilities for the feast were not the primary design focus of the structure. Domestic and labor related productive activities would have still been the essential consideration in the design and construction of the house. This design would have been mitigated by cultural concepts that dictated appropriate behaviors for specific areas of the home and any specific religious practices that may have
accompanied a person’s particular occupation. The leaders of 1000 and certainly those governing larger groups of people or the entire province would likely have been occupied by administrative tasks on nearly a daily basis. The activities of receiving retainers and visiting elites would have been integral to the leader’s administrative position. The residential structures of these individuals were necessarily designed around these activities and specialized spaces that facilitated feasting and social interaction should be easily recognizable in the archaeological record.

Ethnohistoric accounts describe larger more public festivals such as Inti Raymi in which the Inka himself participated and presided over events that included the entire province of Cuzco and visiting leaders from throughout the empire (Garcilaso de la Vega 1966 [1609]). The large dual plaza within the city was a setting for regular religious ceremonies and the kallanka, large wide rectangular halls, flanking the plazas provided spaces for these feasts in inclement weather (Gasparini and Margolis 1980). Portions of the rituals were held in open plazas. In performing the rituals himself the Inka emperor fulfilled his obligation to mitigate between the gods and his subjects and maintained that it was he rather than local lords that was responsible for the fertility and plenty of the crops and animals.

Provincial capitals also had facilities for public events. Huanaco Pampa and other large centers have large open plazas with elevated platforms from which the Inca or his representative could preside over ceremony, accept tribute, or make mandates over the subordinate populations. These simple architectural
features created a space in which a leader could interact with those being led. The elite administrator’s elevated position was symbolized by the elevated platform and provided a graphic display of the society’s social hierarchy. The platforms represented the power of the Inka over the people in the province (Hyslop 1990; See Moore 1996).

Excavations and mapping of Huanaco Pampa, the best preserved and investigated Inka provincial center, reveal interesting details about the nature and diversity of the urban population that inhabited the site. Morris and Thompson (1985) describe the population of Huanaco Pampa as dynamic with a large number of inhabitants likely present during lulls in the agricultural cycle, and necessary personnel such as the aclla women and other functionaries being among the few permanent residents. Excavations below the Inca period settlement reveal no evidence of earlier occupations and thus it would appear that the provincial center was situated in an uninhabited, underutilized zone.

Many of the dwellings were occupied by temporary laborers from different areas of the province working to construct buildings at the site or providing other services such as craft production. These dwellings are built in a variety of forms that represent the diversity of residential buildings throughout the large provincial area. Other larger and more elaborate dwellings were temporarily occupied by administrators of the regions within the province. Local and regional leaders came to receive gifts, feast with state officials, bring tribute, learn of labor requirements to be provided, report on the productivity of state lands, and to represent the interests of their region of origin. Facilities built in Cuzco-style fine
dressed stone masonry likely represented the quarters of the provincial administrator and his staff. The beautiful constructions may have also housed the Inka Capac during his visit to the area (Morris and Thompson 1985). This structure in form and layout appears to fulfill the requirements of storage and feasting facilities outlined above and is directly adjacent to more public arenas of ceremony, the large central plaza and *kallanka* halls. Thus it is clear that in the Inka state both facilities for large public and smaller private personal ceremony were necessary to the functioning of state institutions and social administration.

Based on this brief and cursory examination of Inka statecraft, current interpretations of Wari administration are likely too limited in their scope with respect to both the spatial arenas in which administration was carried out and the variety of scales at which administration apparently took place. Investigations of the Wari colony in Moquegua, clustered around the provincial center Cerro Baúl, has focused on an examination of known Wari administrative contexts—formal patio groups, however, were designed to identify other arenas of socio-political interaction at a number of scales.

**Wari In Moquegua**

Wari people did not originate in the Moquegua study area, but moved into it as foreign colonists. The colony was planned by the Wari state and many structures are built with state directed labor (Nash 1996). The Wari colony in this region consists of seven named sites: Cerro Baúl, Cerro Mejia, El Paso, Cerro Petroglifo, Cerro Trapiche (Moseley et al. 1991), Pampa del Arrastrado, and El Tenedor (Owen 1994). The majority of the colony is in the upper drainage set on
hills overlooking the river basin. Most of the known Wari related occupations range in elevation between 2200 and 2700 masl. Cerro Baúl, Cerro Mejia, El Paso, Cerro Petroglifo, and Pampa del Arrastrado are located in the Torata drainage of the Moquegua River (Figure 1-2). These sites make up the majority of the settlement and are associated with the extensive Wari canal and accompanying terraced agricultural fields (Moseley et al. 1991; Williams 1995, 1997, 2001). The Wari structures at Cerro Trapiche are located far from the other Wari occupations, and have been documented as part of Paul Goldstein’s (1994) survey of the middle valley zone. Many of the Wari sites in the upper drainage have been mapped over the past decade (Isla 1993; Fried 1994; Nash 1996; Nash & Williams 1999; Williams 1997, 2001).

The site of Cerro Baúl is the colony’s center. The architecture reflects activities including religious ceremony, administrative activity, and elite residence (Moseley et al. 1991; Watanabe 1984; Williams 2001). Artisans and service personnel were also present in work facilities and may or may not have lived on the summit. The majority of the architectural remains suggest that the buildings on this site were constructed of double-faced stone masonry.

Cerro Mejia, Cerro Petroglifo, El Paso, Cerro Trapiche, and Pampa del Arrestrado are subsidiary sites that have masonry remains resembling house foundations. These sites have sectors of architectural remains that exhibit similar spatial forms to Cerro Baúl, but are smaller in scale and do not exhibit the same quality of architecture (Nash 1996, 1997). There are also patches of domestic terracing located on El Tenedor, and on the slopes of Cerro Baúl, Cerro
Figure 1-2. Wari Colonial sites in the upper Moquegua Drainage.
Mejia, and Cerro Petroglifo. The domestic terracing initially appeared to have no free standing stone masonry. Excavations of these structures revealed that the walls were made of stone, but they were likely low walls similar to modern indigenous highland structures and in some instances were partially constructed of adobe. No adobe melt was recovered from the domestic terraces on Cerro Mejia, however, it is present in public architecture, a summit top residential construction, and also one structure on the slopes of Cerro Baúl still has adobe preserved on top of a stone wall approximately 70 cm in height. Recent excavations on Cerro Baúl revealed that adobe was used as a later phase construction material in some contexts. Therefore it is clear that a variety of techniques and materials were used to build in the Wari colony. These variations may reflect temporal differences in some instances, however, the majority of the structures on Cerro Mejia have been dated to the same time frame. The construction of structures on Cerro Mejia and their related radiocarbon dates will be discussed in Chapter 7.

The site of Cerro Baúl is interpreted as the colony's center and the surrounding settlements supported this provincial capital. In light of the arrangement of Huanaco Pampa and Cuzco itself it would seem that the cluster of sites together formed the provincial center in Moquegua. Cerro Baúl formed the elite core and the settlements around it on neighboring hill tops and interlacing slopes may have been the remains of temporary work forces and representatives of far flung towns and villages within the greater territory of the province. The area administered may have included a vast hinterland that is
unremarkable because it was not modified to any great extent. The material remains on Cerro Mejia revealed very few clear diagnostic Wari artifacts. Had the site not been located immediately adjacent to Cerro Baúl it may not have been identified as a Wari settlement.

There may or may not have been a province administered by Cerro Baúl. The Moquegua colony is uniquely located within sight of down river Tiwanaku settlements (Figure1-3). The center may have been placed on Cerro Baúl and designed to manage relations with the bordering Tiwanaku polity or to maintain the boundary with a show of power and wealth. Thus there are a number of ways in which the settlement may have functioned and each of these may have had different consequences for the nature of the population, its organization, and the required social hierarchy. The occupants may have been largely temporary like those of large Inka provincial centers. The population may have been permanent colonists from the Wari heartland who were seeking opportunities to gain access to more land in a less crowded environment. The settlers may have consisted of permanent mitamaq colonists garnered from local or distant areas. Forced to live in Moquegua, they worked the land to support the elite ambassadors and produce wealth items for exchange with the Tiwanaku. It may be that a combination of these possibilities is true.

The most significant factor, however, is the permanence of the occupants. If the population was largely temporary then we would not expect to see administrative acts at lower levels carried out between individuals far from home fulfilling their labor obligations. If the population was mostly permanent then
Figure 1-3. Middle Horizon sites in the Moquegua Valley.
socio-political links and hierarchies would form and reflect the relationship between individuals or their region of origin. The relationships would have been necessary to manage the labor force and to build reciprocal obligations between the state, its officials, and the subordinate populations in order to benefit from their productive energy.

First, if we rely solely on the analogy of the Inka Empire and use Huanaco Pampa as an example, then we would suspect that a large proportion of the Moquegua colony inhabitants were temporary. Huanaco Pampa also had a large number of *qollqa* in order to store food stuffs and raw materials that supported the elites, temporary laborers, and any craft production they might practice (Morris and Thompson 1985). Huanaco Pampa is not within a highly productive agricultural zone. Food stuffs and other materials were carried in by llamas or people from the provincial hinterland.

The Moquegua colony is without any conspicuous storage facilities, however, evidence of storage is present within administrative compounds on the summit of Cerro Baúl (Williams 2001). The small storage facilities more likely pertain to the storage of gifts or resources for the administrators to host feasts. Nothing on the scale to support large temporary populations appears to be present. Apparently this was not necessary. The colony was located in a productive zone where maize and other important agricultural products could be grown. The Wari constructed a 13km long canal that supplied water to the settlements and adjacent agricultural fields (Williams 1997). The Wari colony appears to have been self-sufficient and populations likely occupied the area
year round to work the agricultural lands and to carry out construction projects or artisanal work during other times of the year.

If Cerro Baúl functioned as a provincial center then it is likely that elites may have traveled to the Moquegua colony to represent their interests to the Wari state. It is also probable that some temporary populations came to carry out large construction projects or to participate in festivals. Sites in the Wari colony such as Cerro Petroglifo and El Tenedor exhibit very few surface remains and may represent largely temporary occupations. Contrasting evidence including reconstruction, sequential occupations, and obvious surface remains on the slopes of Cerro Mejia suggests that the general population, the agricultural workers, were mostly permanent. As such, in situ relations of hierarchy, reciprocity, and resource management necessarily developed in order to support and legitimize the activities of the colony and its leaders. At many levels material correlates of these social relations are to be found in the residential sphere, however, at the highest level of the hierarchy other venues for social relations, what has been called administration, were likely couched in a more grand and public arena. The research discussed in this volume will describe these contexts of power relations and provide insight into the variety of spaces used and created to cull power from the management of human resources.

In this introductory chapter I have set forth the questions to be explored, how did the Wari manage human resources through administration and where did this take place? Also I have discussed current ideas pertaining to Wari administration and what is known about Inka administration and political
hierarchy. Inka provinces appear from their plans to have been urban areas and in some cases were placed in locations previously unoccupied, but the example presented was only seasonally occupied and very different from urban areas in other parts of the ancient world. The Wari settlement around Cerro Baúl likewise was placed in an area previously uninhabited (Owen 1994) and might have been an urban provincial center with a predominantly temporary population, however, the development of a social hierarchy and the agricultural productivity of the zone around Cerro Baúl suggests that there was a legitimate permanent settlement. It was needed to support the Wari officials that interacted with representatives of the Tiwanaku polity and possibly administered the far southern province of the Wari Empire.

The following chapter discusses ideas about architecture and the use of space. The variation and convergence in form and function represented by Inka constructions will be used to gain a better understanding of known Wari architectural spaces. Chapter 3 focuses on residential architecture and the links between household space and the ideas held by members of that household.

Archaeological processes mediate between what has happened in the past and what remains in the material record. Chapter 4 covers the formation processes that affect the site, Cerro Mejia, and the models and assumptions used to interpret the excavated contexts. Field methods were specifically designed to fulfill the contextual requirements necessary to address the question. These methods and those used during lab analysis are also described in this chapter. Chapter 5 focuses on the interpretation of the artifacts, their locations,
and patterns of repetitive associations. In general, Chapter 5 discusses how
activity areas were identified and other tools that were used to gain an
understanding of how individual rooms were used and organized.

Chapter 6 is a general description of the settlement at Cerro Mejia and a
detailed discussion of the excavated households with figures demonstrating the
distribution of artifacts. Chapter 7 presents a model of Wari provincial
administration for the Moquegua colony and defines the archaeological
correlates for identifying administrative activity at different levels in the state’s
socio-political hierarchy. This model is illustrated by a comparative discussion
outlining common patterns and unique features between the investigated
residential spaces on Cerro Mejia and compares these with recently excavated
contexts on Cerro Baúl. Chapter 8 applies the multitiered model and its spatial
signatures to published descriptions of other Wari provincial centers and the
capital. Overarching principles and significant structures are described in order
to gain a coherent perspective of state sponsored hierarchical administration in
the Wari state.
CHAPTER 2
STATELY SPACE: FUNCTION AND TRANSFORMATION

“Form follows function”, this statement was a mandate insisting that space be designed with the intended use as the central consideration (Sullivan 1947 [1901]; See Moore 1996). Spatial form is typically designed around the activity it is to accommodate, however, space is often multifunctional and there are times when activity changes but the space is slow in its modification (Conklin 1990). Monumental works require vast resources and beautiful edifices are often restructured minimally if their form is particularly inspiring. It is also true that a structure’s original function may be transformed as a socio-political device that creates an institutional symbol or a sacred religious monument. Examples of these processes are prominent in our own society as well as past cultures.

Archaeological interpretations of the Wari cultural complex have focused too often on the forms of the architectural remains. Common structures such as the formal patio group form, also called cellular orthogonal architecture (Isbell 1991), have been over emphasized in their seemingly uniform nature and function. Many other forms have been overlooked or lack detailed description. This chapter will analyze common misconceptions about architectural inference and specifically discuss the functions and diversity in Inka architecture in order to understand the nature of the Wari architectural tradition. There are several similarities between Wari and Inka architecture that are especially instructive.
The analysis includes platforms uncovered at Wari sites and the Wari patio group, discussed reference to form, functions, and arrangement of space in the history of Wari state development. Other common Wari architectural forms will also be described. It is not the architecture or the spatial forms themselves that are used to identify Wari administrative practices, but rather the use and meaning of these spaces.

**Inferring Function from Form**

Jefferson’s residence at Monticello is now a historical monument and museum and although its original function was as a residence in which some administrative functions were once conducted, no one currently resides in the house. A similar but more complicated example is the White House. This institutional construction serves as the residence for the nation’s temporary rotating head of state, as well as containing offices for various administrative personnel who do not reside in the structure, auditoriums, ballrooms, and briefing rooms. The White House was always more than just a house, and this is clear from the floor plan. It is a veritable ciudadel (See Moseley and Day 1982). Furthermore the population of Washington D. C. is partially temporary and rotates following regularly held elections. It is perhaps a democratic version of Cuzco as described by Morris and Thompson (1985; See also Gasparini and Margolies 1980).

The White House is actually a good example of what one might be seeking following the suggestion that administration was practiced within a residential atmosphere. The Ciudadelas at Chan Chan are more appropriate
examples in their relevance to the Wari state. Both the White House and the
_Cuidadelas_ have a well defined residential precinct divided from the areas that
serve administrative functions (offices or _audidencias_), as well as public places
for festivals (the ball rooms and grand plazas). Thus it is clear that at the highest
levels of a complex society the spatial organization of the administrative
institutions will reflect the complexity of the institutions of governance. In both of
the examples, the White House and a Chan Chan _Cuidadela_, a great deal of the
administrative facilities are located outside of these semiresidential structures.
Additionally as the United States has grown the White House and its facilities
have been remodeled to accommodate the changing institutional organization.
Likewise as sequential _cuidadelas_ were constructed the spaces were altered.
The needs of the rulers of Chimor changed over time (See Kolata 1990).
Archaeological evidence from the Wari provincial centers implies that the Wari
state experienced similar changes (Williams 2001).

Understanding the nature of Wari statecraft requires the identification of
the different settings of Wari administration and an examination of how these
arenas of political power changed through time. This may prove difficult.
Administration is a vague term that encompasses a diversity of actions. The
spatial settings of these actions may be equally diverse, especially because in
the Wari state, as in the Inka Empire, they incorporate religion.

Religion in our society or a patriotic desire to monument our nation’s
history, can transform a common structure into something significant, as in the
case of Monticello. Religious transformations are typically linked to historical
events that change the nature of a place or structure from common to sacred. Masada and the Wailing Wall are enduring examples from the Old World. The former location of the World Trade Center in New York is perhaps the most relative to our own frame in history. These structures were symbols that were transformed in an instant to a sacred pilgrimage center or significant place. The significance of Monitcello is less clear and is not related to a particular event but rather the accomplishments of the person who built and dwelled in the structure. There are grander residential structures within our society, but not all of them will be transformed into museums. Archaeology would likely not be able to interpret the significance of these changes without historical records.

A society can also become more secularized over time and hallowed structures can be transformed into commercial space. There are many instances in modern society of old churches being converted into houses and businesses. Such transformations also occurred in the Ancient Classical World. Raper (1979) notes that in Pompei near the city’s forum the building of Eumachia, originally constructed as an important temple, was later used by the Fullers Cooperation, the most influential commercial group in the city at the time of the first century eruption. Demonstrating that perhaps success is the most powerful motive that defines the use of monumental or grand constructions.

This discussion is directly relevant to the known functions of Inka architecture. Fortunately there are historical accounts relating the functions and significance of particular structures and settlements for the Inka. The following
illustrates that as archaeologists we cannot determine a one to one correlation between form and function.

**Inka Constructed Spaces**

The *kancha* is an Inka style residential enclosure, not unlike a Wari patio group. It has rectangular rooms that open onto a central rectangular patio space, surrounded by an enclosure wall. The Inka *kancha* differs from the Wari patio group in that the rectangular rooms are typically not attached and there may be portions of the outer enclosure wall visible from the patio. Some *kancha*, however, closely resemble their earlier counterparts in the Wari culture. One such example is the most famous *kancha* of all, located in the city of Cuzco, the *Qorikancha*, a sacred Inka temple where the mummies of former rulers were served and access was very restricted. Conquistadors were informed that they must fast for a year before entering this most sacred space (Garcilaso de la Vega 1966 [1609]). Gasparini and Margolies (1980: 228-231) discuss the features of the *Qorikancha*,

…it is difficult to imagine it (the *Qorikancha*) as an architecturally exceptional monument once its forms, spaces, and dimensions have been examined. Leaving aside the riches and the mythical and sacred significance of the building, the *Qorikancha* is basically analogous to other *kancha*-type structures. Its outside appearance must not have been very different from that of the Cuzco “palaces” with well finished walls and thatched roofs…The stone reached to the point where we see it today. From there on up adobes were used.

This description is a clear indication that without historical records archaeologists would not recognize the *Qorikancha* as special and significant. The individual that built this residence made it important, it is an Inka version of Monticello.
Figure 2-A. The Qorikancha: The most important kancha in the Inka Realm (After Gasparini & Margolies 1980).
Figure 2.B. The Temple of Viracocha at Raqchi (Redrawn from Gasparini & Margolies 1980).
Hyslop characterizes the problems with assuming function from form based on the ubiquitous but varied presence of the Inka *kancha*.

Identifying a *kancha* in Inka architecture does not necessarily tell us about the activities carried out within it. It is clear that *kancha* were the architectural basis for simple dwellings, just as they could compose the basis for a palace or temple. It would seem that the rooms within a *kancha* should have similar functions, but that is improbable, because sometimes *kancha* are composed of rectangular rooms, some with doors and others that are open-sided type. Much of the central sector of Cuzco was composed of *kancha*, and these groupings around patios served a variety of purposes: residences for kings and persons of royal lineages (*panaqqa*), special production areas, and temples. (Hyslop 1990:17)

Perhaps temples were metaphorically related to the house form in the Inka religion. Other facets of religious worship exhibited very different architectural forms. The known temple at Raqchi dedicated to the worship of Viracocha is one large structure 92 meters long by 25.25 meters wide (Gasparini & Margolies 1980). It is part of a larger complex that includes a row of six *kancha* and a series of round *qollqa* to the south. The *kancha* portion of this complex is unique because five of the six units consist of six niched halls in pairs of two on three sides of a central courtyard. These are constructed with an Inka convention in that the halls to the east and west of the courtyard share a common wall with the hall opening onto the adjacent courtyard. The entrance to the large structure is through two doors in the southwestern wall. The structure is divided in half by a wall that runs lengthwise through the center of the building. The central wall was broken by ten equally spaced doorways, between these there were niches. Additionally, two sets of eleven parallel columns lend support to what would have been a massive roof. The northern end of the structure was said to have a chapel or elevated room but no evidence remains of this construction (Garcilaso
These architectural structures, the Qorikancha and the temple of Viracocha at Raqchi, were both described by the Spanish as temples. Obviously they may have been mistaken and the structure’s only relation may be that both housed activities that the Spanish Conquistadors recognized as religious practice. Nevertheless the contrasting form of these two structures should be a cautionary note in assuming that structures with similar forms housed similar activity. Archaeologists should test several structures of similar types before making assumptions about apparent function.

Another prominent and significant Inka architectural from, the kallanka, warns of another possible pitfall common to archaeology. Kallanka were rectangular structures with their longest axis built along one or more sides of large plaza spaces. Typically they occur in pairs and had many doors opening onto the plaza, although the interior space was continuous and not broken by dividing walls. The interior width of the space was so great that these structures had interior columns to support the roof structure (Morris and Thompson 1985). They were present in Cuzco along the large plazas in the center of the city. Large kallanka are also found in the major provincial centers and smaller constructions are located at some of the minor centers and way stations, called tambo (Gasparini & Margolies 1980; Hyslop 1990).

Ethnohistoric accounts describe the kallanka as council houses and places where justice was dispensed. They were also used as facilities for feasting and ceremonial gathering when inclement weather did not permit the
festivities to take place in the exterior central plaza (Gasparini & Margolies 1980). It has also been recorded that they were alternatively used to quarter traveling soldiers, dignitaries, and guests (Hyslop 1990). The Spanish upon their arrival in Cajamarca were housed in *kallanka* structures (Prescott 1942). The formation of the archaeological record in such a multipurpose structure would be problematic primarily because the structures were likely cleaned between alternative uses, but also because the functions were diverse and would have deposited remains that would produce contrasting interpretations.

Multiple functions, metaphorical relations between structures and transformations in function can cloud architectural interpretations of structures and their functions. Ultimately excavations and the contextual material evidence are the most reliable means of understanding the past.

**Wari Constructed Space: Evidence of Function**

As was discussed above, platforms were significant architectural symbols of Inka power. Based on iconographic illustrations of Wari supernaturals, specifically the Front Face Deity, which is often depicted standing on a stepped platform, platforms likely were an important part of religious and possibly political settings (Figure 2-1). In the Inka Empire, platforms were an integral part of administrative practice. Platforms in a large plaza, similar to the Inka *ushnu*, have not been previously described for the Wari capital or any other provincial centers. Of course at the capital these may be difficult to find, because like the Spanish settlers of Cuzco, later squatters at Huari may have filled these empty spaces with new constructions first.
Figure 2-1. The Wari Front Face Deity shown on a platform. Vessel recovered from Conchopata.
The provincial centers have experienced less post-Middle Horizon disturbance, in general, than the capital, yet even so large plazas with platforms have not been described as important features in these centers. The Wari provincial center of Viracochapampa has a large central plaza. This site appears never to have been completed (Topic 1991). Thus it cannot be determined if an elevated platform was to be constructed or if the plaza was to be used in a very different manner. Likewise there is a large open space in Sector 3 of Pikillacta, which McEwan (1998) describes as never being finished. Modern reconstruction of the long wall to the northeast is formed in wide terraces or a set of stepped platforms, but the original configuration of this area is unknown. Plaza platform complexes will be described as they occur at Cerro Baúl and Cerro Mejia in the Wari Moquegua colony in Chapter 7.

Platform constructions have been excavated in the Moraduchayoq compound at Huari (Brewster-Wray 1990) and at Jincamocco (Schreiber 1992). The platforms at Moraduchayoq and Jincamocco were part of a discrete complex of rooms rather than serving as a facility where the entire population of the province could have gathered to celebrate a festival with a high-ranking leader. Nevertheless, in both instances the plaza space was large enough to accommodate a representative group of leaders receiving instruction and gifts or presenting tribute to an administrator or pair of provincial leaders.

At Moraduchayoq the plaza space associated with the platform in Room Block C was perhaps located to the north, Room 128, and was 7.8m by 11.5m. The area to the west of the platform is much larger but could not be defined
Figure 2-C. Moraduchayoc Compound at the site of Huari 
(redrawn from Isbell et al. 1991)
because of the nature of the wall fall in this area (Brewster-Wray 1990). The area west of the platform seems to have been a more probable participation sphere since it would seem unlikely that a platform would be larger than the space provided for the gathering of subordinates, but the open space is large enough to have accommodated at least ten if not more subordinate individuals. Access to this space was from within the compound of formal patio groups. The platform itself was at first 11 by 15 meters and later expanded to 13 by 16.7 meters (Brewster-Wray 1990). It is unclear if there was a room on top of the platform's floor or bisecting the rubble fill that ran through the structure. It is difficult to conceptualize the space from this description, however, it is clear that the monument required a large investment of labor since it was more than five meters high (See Brewster-Wray 1990).

The platform construction uncovered at Jincamocco was associated with fine polychrome ceramic imports (Schreiber 1992). The fronting plaza space was approximately 8 by 18 meters or perhaps larger. The south wall that ran along the back side of the platform exhibited two finely crafted doorways. These entrances onto the platform are from inside the complex and apparently served two parties rather than a single official. The plaza space was directly accessible from outside the enclosure. Some of the patio groups at Pikillacta exhibit platform constructions or bi-level patio spaces, however, excavations at the site have not exposed these features (See McEwan 1987).

Wari patio groups are very similar in organization to the Inka *kancha*. Excavated examples from the capital and the provinces exhibit a variety of forms
Platform construction in the Northwest corner of Jincamocco

Platform constructions and concentric rectangular rooms at Pikillacta

Figure 2-D. Architectural Features at Jincamocco and Pikillacta (redrawn from Schreiber 1991 and McEwan 1991).
including trapezoidal patio spaces (Brewster-Wray 1990; Feldman 1989) and concentric sets of rectangular rooms along one or more of the four sides of the enclosure (McEwan 1986). These constructions are presumed to serve a similar function in that they are the residential structures for elites and were locations where these individuals conducted administrative practices through feasting and gifting. Excavated patio groups seem to support this idea, however, the complexity of the Wari state dictates that governance was more complex than merely seasonal “beer parties”. I suggest that patio groups may have accommodated a great deal of Wari administrative activities, however, at the same time some patio groups were likely just locations of these governmental institutions while others were the homes and occasional locations of political interaction similar to that of a modern cock-tail party. This important distinction may be found in the architectural elaboration of the structures themselves. Some structures were graced with hard white plastered floors and kept very clean others exhibit more rustic treatment and were clearly the location of daily domestic practices (Anders 1986; McEwan 1986; Williams 2001).

Most likely, every tenth household or so within the greater Wari society practiced some kind of social administration and it is important to consider how the heads of ten households and one hundred households were chosen. Feasts and generosity may have been an excellent avenue to acquire these administrative posts. Feasts were important activities in the areas of religion and rites of passage such as weddings and funerals. If there was any sort of community or ayllu land, feasts would have been organized sequentially by each
household in times of intensive labor, such as plowing and harvesting (Mayer 2000; Meyerson 1990). Feasting can be associated with many activities in the ancient Andes and thus it is important to acquire multiply lines of evidence before deciding that every feasting venue represents a state sponsored administrative structure.

Examining the maps of the Wari centers that have been investigated along with reports of their excavations reveals some interesting patterns, most notably that some of the largest patio groups have very few material remains, whereas others are packed with smashed consumption vessels and articles of sumptuary wealth. It may be possible that patio groups represent both the spatial form for elite residence as well as administrative offices. The best example comes from excavations at the site of Cerro Baúl.

As reported by Williams (2001), Unit 3 is in Sector C on the summit of Cerro Baúl (Figure 2-2). It is a large patio group structure with a rectangular room, or gallery, along the east wall and a cluster of four storage rooms near the west wall. It appears that a large plaza is associated with this space and lies to its north. A trench excavation through the door opening of the rectangular room into the patio revealed a wide bench, stair, or platform fronting this structure. The storage structures revealed some botanical materials but very few artifacts. The rectangular room exhibited the same pattern. A small hearth and sparsely scattered faunal remains were among the few finds from this structure. The profile of a looters pit in the patio reveals no strata of material in this area of the structure. On the opposite side of the summit another patio group has recently
Figure 2-2. Cerro Baul Unit 3 with four storage structures and rectangular room.
been excavated, Unit 9. The material remains in this structure were extensive. The floor was made of flags stones and thus would have been easily cleaned if that were to be a common behavior in such a context. Artifacts were collected by a meter square grid. Two to three plastic shopping bags (each approximately 25 cm²) of ceramic sherds were collected from each meter, per strata. The remains included personal items such as spindle whorls, *tupus*, *tumi* fragments, and an array of well formed lithic implements. It was obvious that the structure was residential. Contrasting architectural layouts of Units 3 and 9 may explain the drastic difference in material remains found in these two structures. Nevertheless, both fall within the definition of a Wari patio group (See Isbell 1991). Additionally, it is important to note that some formal patio groups with four rectangular rooms, comparable in organization to Unit 9 on Cerro Baúl, at other Wari provincial centers contain very little cultural remains (See Anders 1986 and McEwan 1987).

I purpose that patio groups, formal patio groups with four rectangular rooms, initially served as the elaborate houses of leaders. As the responsibilities grew and the state developed, more spaces outside of high ranking elites’ personal living quarters were constructed to organize state administrative activity. In these locations, which may have been nearby inside the walls of the same grand palace or in a nearby precinct, assistants, servant bureaucrats, *quipucamacs*, or lower elite administrators gathered to manage the simple day to day activities of the state. These administrative offices may have been built as patio groups to remind individuals that they were still dealing with an elite
authority or to signal the same degree of respect as entering the leaders house. It is also possible that the practice of administration was structured in this spatial arena, the ritual of administration required rooms in four directions and a central patio. The space may have been symbolic or have legitimized Wari power in some way. Lower levels in the hierarchy combined residence and administrative cosmology within the leaders’ dwelling. At the higher levels in the state’s hierarchy this structure was duplicated many times to manage the various facets of the Wari economy but there was continuity in symbolism, space, and administrative function even though it was completely removed from the ruler’s private living space. This idea will be developed further in Chapter 7.

Some Inka kancha were transformed into temples. Wari space pertaining to sacred activity seems to have been located within D-shaped structures. D-shaped structures vary in size but are all characterized by a rounded wall with one flat side. They are usually surrounded by a complex of small rooms in which offerings may be found (Williams 2001) (Figure 2-3). The entrance to the structure is through the flat side and is typically from a patio space. D-shaped structures, when in a better state of preservation, are found to have niches in the curved wall (Bragayrac 1991). Anita Cook (2001) has recently linked D-shaped structures to actual or metaphorical human sacrifice. In many cases these structures are associated with human remains. D-shaped structures are not found at all of the Wari provincial sites, neither Viracochapampa, or Pikillacta exhibits this spatial form. It is also absent from the smaller center at Azangaro. D-shaped temples seem to come in pairs and this reinforces other lines of
Figure 2-3. Cerro Baul Unit 5 D-Shaped structure and associated rooms.
evidence that the Wari Empire held concepts of duality and may have been organized in a similar manner to the Inka (See Nash 1996).

Inka *kallanka* structures occurred in pairs along plazas and had a variety of uses as explained above. Wari niched halls are similar in shape but smaller in size and found in similar and different contexts at Pikillacta (McEwan 1998) and Viracochapampa (Topic 1991; Topic & Topic 2000). They have rounded corners and niches and therefore could be interpreted as a late replacement of D-shaped structures, especially since D-shaped structures are not found at sites with niched halls. Nevertheless, this is likely not the case because although niched halls are sometimes found in pairs in these instances they are located on different walls of large plazas similar to the spatial context of *kallanka*. They also are found in series. Additionally, niched halls are not associated with accessory structures that may have served to store ritual goods or the preparation of sacrifices, foods, or beverages needed for ritual. D-shaped structures have these associated facilities.

Gordan McEwan (1998) has investigated the nature of the various niched halls at Pikillacta and has described their common feature, noting a rectangular shape, the presence of niches, a paucity of material remains on floors, and artifact concentrations in subfloor offering cysts found in the corners and under thresholds of these structures. He interprets niched halls as the location of ancestor worship and notes that the Inka temple at Raqchi was built on top of Wari ruins and incorporates many niched halls as part of the complex. He
suggests there is a great deal of continuity between the uses of Wari nched halls and their later manifestations as Inka *kallanka*.

Inka *qollqa* are round or square storage facilities that are found in rows outside of provincial centers and larger settlements. *Qollqa* are conspicuously missing from the Wari architectural repertoire, however, that does not mean that the Wari were without storage facilities within the various administrative complexes. Before excavations of the site of Pikillacta and Azangaro, it was thought that large portions of the site divided into small cells were Wari storage facilities. In layout these structures more closely resemble *acllawasi*, the compounds in which the secluded women in the Inka realm produced chichi and fine textiles. (Cf. Morris and Thompson 1985). Excavations have shown that many of the cell-like rooms at Azangaro and Pikillacta were residential in nature (Anders 1986; McEwan 1978)

Excavations of the site of Cerro Baúl have revealed two sets of storage facilities as well as more minor storage constructions in specialized and residential kitchens. These are identified because of an obvious lack of artifactual remains or features and in most cases by macrobotanical remains. Unit 3, mentioned above, has storage facilities inside an administrative patio group (Figure 2-2). Unit 12 also has three storage rooms each with its own door located in a remodeled gallery. The affiliation of this particular divided room is still unknown but it is within a sector of large patio groups (Figure 2-4). Storage facilities leave very little trace and are best identified by an absence of artifacts. These structures also exhibit elevated thresholds, but this is common in many
Figure 2-4. Cerro Baul Unit 12 storage structures.
Wari contexts. Botanical analysis, phytoliths, and soil chemical signatures must all be examined to identify these areas at the other Wari provincial centers.

The inventory of Wari spatial forms is not complete. Many of the significant and recurring forms have been noted, but now investigators should try and link the functions of these structures and tease out the clusters of recurrent forms such as patio groups and niched halls to identify larger meaningful complexes such as administrative precincts or palatial complexes. Elucidating larger units within the various centers and at the Wari capital will likely reveal combinations of the known structures encompassing elite residence and elite administration within separate structures of larger walled compounds.
CHAPTER 3
HOUSES, HOUSEHOLDS, ACCULTURATION, AND AFFILIATIONS

Is this where the world began? For surely it had begun in no other place like this. The kitchen, without doubt, was the center of creation, all things revolved about it; it was the pediment that sustained the temple.

Houses for human beings provide one of our basic necessities, shelter. As such dwellings from rock shelters to palaces have great antiquity. They are important in the ways humans have developed. Once humans started to modify their environment by building a part of it, and perhaps even before that, the space where people dwelled had a significant impact on their lives. Foremost, the people one dwelled with, be it in a cave or a house, represented the group one could rely on for help and support. This household group worked together to provide for one another and ensure the group’s survival.

The house provided shelter from the outside world and itself functioned as a world, an environment that could be made to represent ideals and beliefs as well as serve as a model of the way things were meant to be. Houses were built differently by different groups of people. These differences initially may have simply reflected the different environments that came to be occupied, but in general anthropological study shows that houses reflect cultural differences in social organization, resource management, domestic necessity, and cosmology. Houses are built by people and a great deal of evidence demonstrates that
houses also help build the people (Bawden 1995; Geertz 1973; Kent 1991; Lawerence & Low 1990; Moore 1996).

In this chapter I discuss the archaeological definitions of house and household and the ways that the material remains of a house reflect its members. Houses are dynamic, as are human activities and this results in changes over time seen in the houses at Cerro Mejia. Houses have been the subject of much anthropological and archaeological research. This chapter analyzes the role of house structures in society and the assumptions and hypotheses important to understanding Wari households and their associated architectural forms, as well as related examples from the Inka and North Coast Andean societies. In general, this chapter describes theoretical concepts pertaining to houses and households and their role in society as models facilitating acculturation and relics that reflect group affiliation.

**House**

A house represents different concepts to different groups of people. Activities that are carried out in a house structure are defined by a social group's idea of house (Rapoport 1990). Because it is impossible to understand the Wari concept of house or that of any group within the Andean Middle Horizon, the meaning of house and the constituent subcomponents of a house cannot be assumed (Moore 1996). Archaeologically we can study how individuals organized and used the space within structures that are related to our own western concepts of a house, however, we can not confidently use terms like kitchen, or pantry, living room, or bedroom because it is likely that individuals
may have carried out similar activities, such as flint knapping, sleeping, or eating, in several of the house spaces or in none of them. In other words, labels such as bedroom, describe a set of activities, however, spaces used in prehistory can not be ascribed labels because we do not understand the set of activities a room logically contained to its dwellers. Therefore spaces are described based on form rather than in terms that would imply their function.

The study carried out on Cerro Mejia was designed to understand the distribution of activities in household space so that common patterns could be underscored and specialized activities recognized, however, we are likely never to understand the cosmological reasons or practical considerations that led these activities to be grouped together and deemed appropriate to their spatial settings. Neither will we understand the cosmological nuances that dictated the form of the Wari house or the ideological structures that the house represented to those that called it home. There is a great deal of variation in the use, concepts of use, membership, and cosmological meaning associated with residential constructions. This notable variety should be acknowledged in any study that seeks to understand archaeological houses and households (See Lawrence & Low 1990). Nevertheless, a house in western society, as in many cultures throughout the world, typically contains a number of tasks within its space or adjacent and associated spaces. Thus a built environment with certain essential components can be identified as residential.

Contexts of Cerro Mejia were considered to be residential if they contained evidence of a cooking hearth and the remains of food preparation.
Ethnographically cooking, more specifically preparing and serving food, is the basic element that defines familial or coresidential groups that conduct productive tasks together (Goody 1972). Typically in the Andes women control food stores (Skar 1981) and they feed their individual families even though the household cluster consists of a larger group (Weismantel 1988). Mothers, associated with cooking fires, define the simplest family group—consisting of a woman and those to whom she serves food. Nevertheless the group divisions determined by food preparation do not necessarily carry over into other productive tasks that benefit the larger group occupying several structures. Meals may be cooked in separate rooms but prepared food may be sent between structures to maintain ties that coordinate larger labor activities.

Using cooking as the basic criteria each house on Cerro Mejia consisted of two components: an enclosed room that would have provided shelter from the elements, and a patio that provided space for productive activities to be carried out at the household scale. A detailed description of such a house is given in Chapter 4. Some houses may have also included spaces for storage or workshops devoted to production whose consumers were outside the household group. Other structures exhibited characteristics of multifamily dwellings because two enclosed rooms with their own cooking facilities shared a single common patio as the setting for other productive activities.

**Households**

There have been many definitions offered for the term "household", by both archaeologists and ethnographers. Rice (1993:67) defines a household as,
"a group of people sharing a maximum definable number of activities". Goody (1972:106) prefers the term domestic group and describes it as "the dwelling unit, the reproductive unit, and the economic unit," where the, "economic unit is the persons engaged in the process of production and consumption. He also explains the possibilities for its growth and retraction over time, the life cycle of the house. This will be discussed further below.

Since I was examining specifically activities within houses I have taken a materialistic approach and have defined a household based on depositional terms. Thus, for the purpose of this study, a household consists of those who carry out domestic activities on a regular or seasonal basis within a specific house or residential structure. This definition is recognizably broad and potentially may place some individuals as members of more than one household. Nevertheless I suggest it is important to recognize that as investigators of the archaeological record that we are limited in our understanding of specific details of past life ways. At the same time efforts should be made to explore the endless possibilities represented by the material culture of extinct societies.

**Membership**

Household members by my definition include those individuals that conduct productive tasks, eat, or sleep regularly within a particular domestic setting. Members contribute to the archaeological record of a house structure. Thus the size of the household may be quite dynamic depending on the full range of activities carried out by members of the household. Household members may be largely absent throughout the year or in particular seasons,
dwelling apart from the settlement for the purposes of herding, participation in traveling caravans, hunting, or representing the kin group as a laborer in a distant context (Browman 1974; Mayer 1982; Murra 1980).

Houses may not correspond to single nuclear family groups. Households can be divided into subgroups within a greater structure. For this study, the identification of family groups was based on replicative activity patterns within the house (See Rice 1993; Stanish 1989). In this case, I have selected the cooking hearth, however, if more than one hearth was located close together in the same room it was considered one cooking zone and interpreted as representing specialized or intensified activity for extrahousehold consumption. These specialized locales will be described in Chapter 6 and the significance of these activities will be discussed in Chapter 7. Subgroups were represented by individual cooking zones and considered to be individual families within a larger kin group or extended family group.

The house must be defined as the space of one household with no specific term designating areas containing replicated activities if other productive tasks overlapped in space, especially in patio areas and potentially in storage facilities. Therefore there may be a number of families living together in a particular house or a number of wives, cooking apart and conducting productive tasks together as a household. There is some evidence of polygamous marriage in the Andes, as well as attached households that lived as servants, yanacuna, and all of these varieties will express themselves differently in the form of the house structure or larger house compound or cluster (Mayer 1982).
Nevertheless in this study a house structure was not delineated by agglutinated dwellings but must exhibit common access to spaces, therefore structures that abutted one another and shared walls but did not have an interior entrance or doorway were not considered a single house or household but rather a grouping of kin or otherwise related or affiliated households.

**Household Activities**

In dealing with the archaeological record we cannot assume that the remains we find in a particular context are directly correlated with the common activities carried out on a daily basis within the house structure. A number of factors can affect what was deposited in the house in its final days of use, however, by recognizing these factors we can incorporate these depositional processes into our models of past use. Prominent factors that affect preabandonment deposition are, seasonality, calendrical or personal rituals, and invasion or migration. These will be discussed below, postdepositional factors such as normal decay, infestation, or natural disaster will be discussed in Chapter 4.

Seasonality is an important factor affecting the materials in primary context on the floor of a house at the time of its abandonment. It is also important to note that El Niño (ENSO) events, causing dry periods or torrential rains, affect seasonal factors in some years and may lead to further variations in the patterns or potentially alter patterned activities beyond annual seasonal factors.
The lifeways of all the households excavated on Cerro Mejia were affected by the agricultural cycle. The Torata drainage is today the most productive drainage in the Moquegua valley (Williams 1997), and enjoys a rather moderate climate that supports different crops throughout the year (See Dolan 1985). Thus there may have been very few breaks or lulls in agricultural activity. So in the course of a normal annual cycle there would not be a long hiatus bereft of agricultural obligations. Obviously periods of canal cleaning, planting, and harvest require more intensive labor inputs than crop maintenance. Additionally, processing crops for storage likely required great effort in a limited time frame and should be discernable in the archaeological record (Meyerson 1990). Other important seasonal factors may include the mating season and birthing of wild and domesticated animals or the rainy season in higher altitude pasture land (Bolin 1998).

Analysis of residential contexts first focused on looking for aberrant deposits that may have been linked to a specialized event. I did not want to identify a structure as containing a particular sort of occupational specialist when a common seasonal activity was the real source of material differentiation. Therefore it was important to study the ethnographic and ethnohistorical record in the Andes so that archaeological correlates of specific seasonal activities could be identified. The location of the settlement relative to the Andean environment limits the number of activities likely found directly associated with household production at this altitude, 2200 to 2700 masl. Agricultural production and its food processing would be the primary focus of activity. Modern farmers of the
middle valley dry corn and peppers for storage near house structures and sometimes on house roofs. Llamas and alpacas are typically herded at higher elevations but the secondary processing of these resources may have been present. Llamas and alpacas are shorn in the rainy season (Browman 1974). The wool may have been transported to lower elevations for spinning or transported as yarn and woven into textiles in the households on Cerro Mejia. The colony is also close to raw materials such as chrysacolla, onyx, and copper ore. The first two were likely processed during lulls in the agricultural cycle and other seasonally related activities as they do not require scheduling. These items were likely obtained when travel was possible during periods of clear weather. Copper processing as well as ceramic production (See Arnold 1993) are limited to the dry season because open fires are important to these activities.

The ritual calendar was closely related to seasonal events, but not all rituals were related to annual resource production. Personal rites such as birth, name giving, puberty, marriage, or death would also exhibit the material correlates associated with feasting, sacrifice, and related ritual activity. Currently we can not divide Wari ritual into specific categories based on archaeological characteristics, however, based on previous excavations it is clear that ritual activity was carried out both in public and residential spheres and thus may affect the material remains found within an abandoned house.

The death of an important member of the household or the death of an individual within the residential structure itself may be a significant factor that affected depositional patterns within the house immediately before its
abandonment and be the direct cause of the house’s abandonment (Brooks 1993; Deal 1985; Garcilaso de la Vega 1966[1609]; Haviland 1988; Kent 1984). This event may be associated with the ritual closure of a structure or the metaphorical burial of the house. Ritual interment of structures is typically associated with monumental constructions and has been documented in a number of contexts throughout the Andes such as Kotosh (Izumi and Terada 1972), Piruru (Bonnier, et al. 1985), and La Galgada (Greider et al. 1988). This practice was documented for the largest D-shaped structure in the Wari Empire within the Vegachayuq-Moqo sector at the capital in Ayacucho (Bragarac 1991). Ritual interment was also carried out in the small rooms adjacent to the D-shaped structure, Unit 5, on Cerro Baúl. These rituals were both executed by filling the structures with a clean fill. Also on Cerro Baúl Unit 1, an elite trapezoidal shaped patio group structure, was closed with a burning event associated with feasting remains, smashed ceramic vessels, and post fire offerings (Williams et al. 1999). Unit 9, a stone paved patio group in the elite residential sector on Cerro Baúl, exhibits evidence of a ritual feast and smashed vessels, but was not burnt upon abandonment of the latest phase of construction. The earlier phases of occupation in Unit 9 were burnt before being covered with fill and restructured. Such rituals were not confined to ceremonial and elite residential contexts. Unit 7 on Cerro Baúl, a structure occupied presumably by service personnel attached to the adjacent elite residential area, also exhibited burning associated with the abandonment of both occupation phases of this structure. A small terraced dwelling on the southern skirt of Cerro Baúl located
immediately above the agricultural system, Unit 21, was also burnt upon its abandonment.

Abandonment rituals may have also been present on Cerro Mejia and areas that were tested exhibited burning, however, abandonment rituals involving the burning of entire structures or entire rooms were not associated with any of the residential areas and none of the houses excavated exhibited treatment of the structures as a whole. Some evidence of feasting was uncovered. The absence of burning in the residential contexts may reflect that the structures on Mejia were abandoned later in time or by people with a different operational cosmology that prescribed actions other than burning coincident with house abandonment.

Another important factor that may have caused the abandonment of structures on Cerro Mejia, especially with its position on the border of the empire, is invasion. The majority of the settlement of Cerro Mejia lies just above the canal and extensive agricultural fields. The domestic terraces were located outside what has been described as a defensive wall (Moseley et al. 1991) that rings the summit of the hill. Perhaps other groups from the middle valley, either Tiwanaku or Huaracane, raided this agricultural settlement because of their own crop failures (See Williams and Nash 2002). Hydraulic studies demonstrate that Wari fields would have remained productive during times of drought, whereas systems down stream would have suffered greatly from a lack of water. Down valley settlers may have wished to claim this water (See Williams 1997; 2002). Raids or other hostile events may be another explanation for house
abandonment, however, currently there is only evidence to suggest a motive for hostility, evidence of warfare itself has not been uncovered (Williams et al. 1999).

**Space and Acculturation**

Space is defined by action (Rapoport 1990). At the same time, space is designed to permit certain activities to take place (Norberg-Schulz 1985). Thus people shape space and space shapes people. They are interactive and modify each other in a dialectical manner (Bachelard 1964; Douglas 1973; Kent 1990).

Residential space has been described as the "world view writ small...it is the direct and unself conscious translation into physical form of a culture, its needs and values—as well as the desires, dreams, and passions of a people." (Rapoport 1969:2). Public architecture can also represent some elements of a group’s world view, however, the form of expressing them is quite different and manifests itself in different ways depending on the function of the space (Rapoport 1969).

So, if the organization of space within the house shapes people, the organization of the house acculturates children into the household and into the broader community. Space is important because it is designed to accommodate sets of activities. These actions can be residential, administrative, ceremonial, or sacred. Together spaces form spatial systems that interact to accommodate all of human activity. In learning what activities a child can carry out in the house the child also learns what activities are acceptable within the greater society. As children venture out into the other spaces beyond the house, they learn a
complete pattern of behavior, and these behaviors are associated with places and spaces (See Oliver 1990).

In order to define the function of a particular spatial form, it is necessary to understand the classification of the activity set that is permitted within the space (Rapoport 1990). In order to do this one must examine the range of tasks that can occur within a spatial category and understand the concepts incorporated that make this set of activities a coherent set of behaviors. A great deal of cultural variation exists in the types of activities that occur within the residential dwelling and the organization of these activities in space. Tasks that occur within a discrete household in one culture may take place in a more public or special purpose setting in others. Also a feature such as a fire in one context is a hearth, but it can also serve as a vehicle for delivering offerings to celestial beings, a ritual function, in another spatial setting. Hence it is necessary to understand the entire system of activity within a built environment (Rapoport 1990; Shimada 1978). In order to understand the Wari concept of residential space, one must also know what performances and the quality of behavior that would not be included or permitted within the residential sphere.

The realms of human behavior are not all contained within the confines of designed architectural forms. Space extends to any area that serves as a setting for human action. According to Norberg-Schulz (1985), agricultural fields, roads between settlements, and natural areas revered as either sacred or profane, such as far off mountain peaks and highland grazing lands, are all included within the definition of living space. Including these areas, which may be unmodified or
not enclosed, encompasses all spatial realms that have meaning for the humans who interact with them.

These zones of meaningful space must all be included in any study of the relationship between activity and spatial form. In archaeological examinations it is rarely possible to include all of these spheres of spatial meaning, however, it is possible to isolate subsets of human action and interaction to elucidate cultural concepts of spatial spheres (Flannery 1968). In this investigation residential space and its associated meaning will be addressed, through the arrangement and presence or absence of particular activities and patterns of action. However, activity patterns from other spatial spheres will also be discussed as they interact and are complementary with the residential areas. The picture will always be incomplete, but looking for the interaction between spaces and recognizing the overall landscape’s impact on every spatial setting we can approach more complete models of prehistoric life.

The concept of residential space includes spatial organization of activities and the subsets of activity patterns permitted within defined and perhaps divided residential space (Rapoport 1990). These concepts as reflected by features and artifactual remains were compared across classes of individuals of different socio-political status, whether that status be defined by the occupational specialization or the regional origin of the house members. The elaboration of the house structures and the range of artifacts found within them provided for the assessment of relative socio-political status between households. The concept of residential space represented by the arrangement of artifactual remains in the
less elaborate domestic settings under investigation was compared to the range of activities occurring in the more formal patio group structures on Cerro Mejía and Cerro Baúl.

This comparison, discussed in detail in Chapter 7, revealed that the modified residential form—the formal patio group, is related to a formalization and elaboration of activities that take place in lower status multifamily structures—feasting. Modifications also represent the presence of additional activities, large scale feast preparation and supplication, in the case of the formal patio group structures on the summit of Cerro Mejía. These specific modifications—a large feast preparation room and audience platform, however, have not been reported for other excavated formal Wari patio group structures. Thus conclusions about the function of the Cerro Mejía formal patio groups do not apply to formal patio groups that lack these features. It follows that not all formal patio groups may prove to be related to higher levels of state sponsored administrative activities. Rather features with specialized functions that are not present in other residential contexts are more indicative of specialized activity. The use of space cannot be inferred from its form alone.

Formal patio groups at other Wari provincial centers have not been excavated in their entirety and it is possible that these features are present but go undiscovered. It is also possible that at higher levels in the political hierarchy that both the feast preparation area and audience platform are located outside the administrator’s residence, however, this may also place the actual administrative activities outside the residential space. Only when administration
is actually being carried out in the residential sphere, which makes it necessary to modify the spatial form and features because of the increased functional requirements, will the current model stand (Isbell 1991). I suggest that at the upper levels in the hierarchy, such as the administrative centers—Cerro Baúl and at the capital, this differentiation takes place and most of the administration occurs outside the residence of the administrator.

The current model of patio group function incorporates both residential activity and administrative activity (Isbell 1991), yet in order to comprehend Wari spatial systems it was important to isolate spatial features associated with these divergent functions. This helps clarify what administration consisted of for the Wari elites and what component of a patio group is associated with this activity. Variation in form is generally associated with differential function therefore different component parts could be categorized by the spatial arrangement of activities. Nevertheless, the discussion in Chapter 2 demonstrates that the Inka utilized very similar constructions for different kinds of activities. The architectural forms are important, but individual structures must be investigated to find their use within Wari society.

**Space and Affiliation**

Just as households represent close ties between members living in individual dwellings, clusters of dwellings and well defined areas within larger communities probably represent meaningful connections or social affiliations between members of many households. These affiliations may reflect self made choices of individuals to pursue beneficial social relations, actual kin ties, or
groupings actualized by an overarching authority to define and reinforce status differences.

Garth Bawden (1990) has examined the differences in residential space through time in the North Coast region of prehistoric Perú. The study focuses on settlements starting with the Galinazo period in the Virú Valley (500 BC- AD 200), following with residential components at the site of Moche during phases I through IV (AD 200-AD 600), Gallindo during Moche V (AD 600-AD 750), and culminates by examining urban Chan Chan and rural households of the Chimú Empire in the Late Intermediate Period (AD 1000-AD1450). Bawden describes basic configurations of household space and compares these across occupational specialties and status differences based on access to wealth items. He notes that the residential components of house structures with attached workshops or ritual facilities still maintain great similarities in organization and activity regardless of class distinctions. The similarities within each settlement are maintained until the latest time period in which a great deal of variation is noted among the organization of households during the Chimú period.

It is possible that the specialization that accompanied the increase in complexity during the Chimú Empire could have triggered societal divergence. That is the differences between classes within the larger Chimú polity may have allowed for different cosmologies to arise based on one’s position within the society. I suggest that the diversity in the urban center may be the result of an influx of populations from other valleys into the capital. Earlier examples from the North Coast region suggest that individual households involved in specialized
productive tasks still maintain very similar domestic practice and space, however, when groups of people from different regions were incorporated into an overarching political structure and brought together into a large urban settlement, cosmological convergence was slow in its affects on the organization of residential activity and space (See Conklin 1991). Households with different valley origins reflected variant organization and overall these differences suggested a lack of cosmological unity within the urban core at Chan Chan (See Sinopoli 1994). A great variety of house form is apparent at the Inka provincial center Huanaco Pampa and this serves as a graphic example of what should be the expected variation at any provincial center or imperial capital.

A similar phenomenon appears to be present at Cerro Mejia, a colonial settlement on the southern border of the Wari Empire. Initially, it was believed that the apparent variation in residential household structure from surface study represented occupational specialization and their necessary attached work or ceremonial facilities. The project focused on identifying basic residential patterns and specialized productive or administrative tasks so that the house could be divided into domestic and specialized spatial components. In so doing, specialized activities, such as administration could be understood and explained. Further analysis of the material remains and their organization within the residential contexts, however revealed common activities with no great differences that would be suggestive of productive specialization (with the exception of administration), even though, the spatial organization of these similar activities remained differentiated. This differentiation of space as well as
Figure 3-A. Huanaco Pampa (Morris & Thompson 1985).
architectural features such as massive walls dividing the residential sector of the site into distinct barrios reflects that the population at Cerro Mejia consisted of different groups of people, likely from different regions under Wari control, each with a slightly different cosmology, worldview, and thus a slightly different idea about household space. The limited sample of houses that were excavated prevents a definitive conclusion in this regard, but is nonetheless useful in formulating interpretations of site and provincial organization. Evidence of this nature would certainly prove Wari an empire and exploring differences in household organization an important venue for future research at Cerro Mejia.
CHAPTER 4
METHODOLOGY: IDENTIFYING ELEMENTS OF THE HOUSE

“Because of the way our data come packaged in the ground, we pretty much have to deal with all of them to deal with any of them. It’s harder for us to abandon the traditional concerns of anthropology, and we can’t afford sudden fads, or quixotic changes in what’s ‘in’ this year. We need long term stability. And because we kill our informants as we question them, we have to question them in ways that are less idiosyncratic and more universally interpretable. And we have to share data in ways they don’t.” The Old Timer (Flannery 1982:277)

Data Collection in the Field

The excavations on Cerro Mejia were patterned after excavation strategies from previous projects conducted on Cerro Baúl. My experiences at the provincial center were of two kinds, structures filled with material remains and structures devoid of any remains, with very few contexts in between. Therefore I thought it wise to conduct a probe in each residential structure before investing labor to clear the entire surface of an architectural unit.

Unit designations were given in the order they were excavated and do not reflect any sector organization with regards to the southeastern slope, however, summit structures had been given unit numbers during previous architectural studies. The summit structures are represented by unit numbers starting at 101. Thus the unit numbers became 101 to 164 and remain correlated to previous field notes for which they were already numbered S1 to S64 (S signifies summit). Test excavations were one by two meters and excavated to a recognizable floor
surface or to sterile. Units 1, 2, 7, and 12 were abandoned after the initial probe because they lacked sufficient material remains to warrant continuation of the unit. Units 10, 11, 13, 14, and 15, were not abandoned immediately but after extending excavations were determined not to be residential in nature. Unit 9 was excluded because after examining the notes and profiles it was determined that the floor surface was never reached. Unit 16 was a residential structure that was rebuilt and utilized after an initial occupation and abandonment. Unfortunately because the structure was multi-elevational, in that different rooms had different surface elevations it was difficult to distinguish the use surface during one period from another. Therefore I have excluded Unit 16 from this study, however, in the future I would like to return to this unit and others in this area to understand changes through time in Wari residential structures.

Units were assigned numbers and represent discrete architectural structures. They are a series of walls and retaining walls that create a group of interconnected spaces. Rooms and Areas were designated by letters. Rooms consisted of spaces defined by three borders, walls or retaining walls. Areas were typically spaces immediately outside a house, usually near the entrance. Each unit was overlaid with a meter grid, creating quadrangles (quads) one meter by one meter in size. Grids were laid out to correlate well with the spaces rather than being arbitrarily set on a north-south axis. The corner closest to the northeast was designated number one and quads ran sequentially west and started again in a row south of one. Grids were typically larger than the unit with at least two meters in all directions outside the structure. The National Institute
of Culture in Perú requires that excavations be carried out by removing layers of
natural strata rather than using arbitrary levels. These are called caps (*capas*)
and were given letter designations starting with "S" representing "surface" or
*superficie*. The next cap was "A", which conveniently stood for ash, with the rest
of the caps following alphabetical order. At times the caps were divided into
levels, which were given numbers, this provision was provided to separate a
seemingly thick cap of 20cm or more into two contexts, however, in our project
levels were given when one mistakenly identified the floor and was persuaded to
continue a bit further. Features were given numbers and were preceded by an
"R" for *rasgo*. Common features were hearths, ovens, sooted areas where pots
had been stored, vessels sunken into the floor, ash dispersions, and storage pits.
Hearths, ovens, and other ash related features were bisected and drawn in
profile.

At this point my methodology was modified from that of previous projects
to permit the documentation of detailed contextual information. Since I wanted to
gain insight into the arrangement of activities within residential space at a very
fine grained scale I decided to plot any artifact uncovered in situ. This was
achieved by assigning artifacts within each quad and cap of a unit an artifact
number that corresponded to a drawing of the artifact's location and the elevation
of the base of the artifact. Therefore a complete provenience code for any
artifact found in situ would appear as the following:

3A8C#2 = Unit 3 Room A Quad 8 Cap C Artifact 2
In order not to lose any materials we screened all contexts with window screen having an average aperture of 2mm². One liter samples were taken from the center of each quad in each cap. Hearths were sampled by taking a pie slice from center to periphery with a minimal sample of 3 liters. Soil from floor and other use surfaces were taken from the center of each quad for chemical analysis. Field forms were used to maintain consistent data recording between unit supervisors (Appendix A). This field methodology for collecting material remains and documenting their contexts was more time consuming than previous field operations in which I have participated, however, the wealth of data our team was able to collect was required to test the project's hypotheses and hopefully the hypotheses of future researchers interested in the site.

**Data Collection in the Lab**

The project's laboratory primarily functioned to supplement data gathered in the field and because preliminary analysis was conducted of all material remains by the individual excavators soon after recovery, lab findings could be incorporated into field notes and field forms. A second phase of more detailed analysis was carried out after the excavations had been completed and focused on ceramics, lithics, and faunal material. Volumetric samples were primarily to provide botanical data, and because of the aridity in this region they were passed through a set of four geological sieves rather than floated. Sediment samples were retained in case phytoliths may be present. The botanical materials are being analyzed as part of the greater project focused on Wari-Tiwanaku interaction and are not included in this report.
Ceramics

Ceramic materials were washed, weighed and counted. The sherds were labeled according to their provenience and placed together in piles by room. Every effort was made to refit vessels in order to learn more about the vessel forms present at the site. Unfortunately the ceramic remains were very fragmentary and no vessel could be completely reconstructed. Additionally little about the specific forms of vessel can be drawn from our efforts, however, comparisons with forms present at Cerro Baúl and published drawings from other Wari sites allowed for general characterization of the vessels present.

Very few decorated sherds were present in the domestic contexts of the site. Ceramic vessels then could only be reliably compared through their difference in form and technique of manufacture. Detailed analysis of the ceramics focused on documenting paste, whether the piece was burnt or not, inside or out, surface finish, degree of firing, texture, and thickness. Diagnostic fragments included rims, bases, handles, nubs, necks, modeled pieces and decoration. These were documented in greater detail in order to determine the general types of vessels present. Artifacts such as spindle whorls and utilized sherds were also noted. Appendix B includes a description of paste types and categories used to classify the ceramic materials.

Lithics

Grindstones, flaked stone and associated lithic production waste was the largest component of material remains recovered from Cerro Mejía. Each piece was bagged individually into a plastic bag and was not washed or brushed. Thus
the items are not going to be damaged by storage and are suitable for future use
wear analysis or residue extraction.

The lithic material was examined in detail and classified into artifact types
based on morphology. The material and weight was also noted for each item.
Bifaces were measured and divided into four types. Appendix C includes a list of
the artifact type codes and materials as well as a description of the forms that
pertain to the different artifact types. The basic nature of the assemblage is
discussed in Chapter 5. Understanding the range and diversity of the lithic
assemblage at Cerro Mejia was important and in some instance allowed activity
areas to be identified, however, the analysis of the lithic artifacts is preliminary
and further work devoted to understanding the function of the different tool types
is vital to gaining a better understanding of the full range of domestic activities
carried out in the contexts under study. Future research will focus on identifying
the sources of residues and fibers visible on the artifacts and extracting
microscopic evidence from stone tools such as, starch grains, phytoliths or DNA.

Faunal Material

Faunal material from Cerro Mejia consisted of both bone as well as shell
refuse. The preservation conditions of the site were not conducive to bone
preservation and thus the most identifiable elements were typically drawn from
hearth contexts. Faunal material was analyzed in two different lots based on
project resources. Material from Units 4, 5, 118 and 145 were examined in
detail. This lot was counted, weighed, identified by family (mammal, camelid,
bird, fish, etc), element, examined for butcher marks, and the degree of heat
alteration was noted by provenience. The second lot consisted of materials from Units 3, 6, 8, and 136. These materials were weighed and examined. Elements that could be identified to species or family were documented in addition to worked bone. This less detailed analysis is appropriate for the purpose of the spatial analysis where the presence or absence of faunal material is noted and its relative concentration is used as the primary mode of considering this line of material evidence.

Primary Context: The Search for the Use of Space

A great deal of work has been carried out focusing on the spatial analysis of the archaeological record. Ethnoarchaeology has contributed a great deal toward understanding the way in which material culture accumulates, is discarded, recycled, and abandoned. Processes pertaining to the formation of the archaeological record include use, the interest of this study, but also include maintenance activity such as cleaning and discard, storage and caching and the changes in these behaviors as a house is suddenly or gradually abandoned. Understanding the way in which ancient peoples used and thought about their residential space requires that we examine all activity within each space. Maintenance activities are not a complete detriment to our understanding of ancient residential contexts.

A space that was kept very clean was obviously conceptually very different from a space where the debitage and detritus of daily life was allowed to accumulate. Spaces that were cleaned regularly played a different role within the society as compared with spaces that were cleaned occasionally. The
importance of a structure can not be inferred from its relative cleanliness, however, within the context of architectural form and quality of construction inferences can be made about the concepts held about a particular space based on the quality of the maintenance contributing to the appearance or neatness of a space.

Based on previous excavations of Wari contexts in Moquegua at Cerro Baúl as well as contexts from other regional centers we expect many contexts to be clear and free of the debris associated with its use. Formal patio group structures have exhibited clean use surfaces (Anders 1986; Malpass et al. 1997; McEwan 1987) surfaces with offering deposits Conchopata (Cook 2000) and Cerro Baúl (Williams & Nash 2002) or secondary deposits from refuse disposal mixed with abandoned primary deposition (Brewster-Wray 1990). This latter possibility was discussed in Chapter 1. These formal patio groups are all located at administrative centers or densely populated areas in the core of the empire.

The formal patio groups at Cerro Mejia were not constructed with the same quality of architecture and do not appear to fit into these patterns of deposition or maintenance. Yet, the formal patio groups are relatively clean with much less refuse in comparison to other domestic use surfaces. This higher degree of maintenance in itself is part of the formation of the archaeological record and provides an additional line of evidence from which to infer the use of space in this structure and the concepts associated with those spaces in the broader social and political context of the settlement.
Formation of the archaeological record is also dictated by the way the house was constructed. The construction of the structure and the building materials control the decay of the building and thus maintains or decreases the integrity of the context as it passes into the archaeological record. Wari structures are typically constructed of stone masonry walls with clean rubble fill and silty mortar with gravel. This mortar was also used to top layers of grass thatch on the roof and as the roof collapsed provided a seal between the floor and materials that were carried down slope in later times due to erosional processes. As the structure decayed materials could be removed and carried away, kicked around, or deposited in a secondary context as refuse. Once the roof collapsed only looting activity and the presence of burrowing animals altered the horizontal position of artifacts on the floor. Natural processes such as sinking or plant activity would have moved objects minimally, maintaining more or less their relative position in reference to the use surface. The fallen walls and collapsed roof protected many structures from erosion, which could carry the use surface away over time. In general the conditions at Cerro Mejia were favorable for preserving the arrangement of some activities in their original contexts.

Unit 118 on the summit of Cerro Mejia was primarily constructed of adobe with only one room being constructed of stone. As the adobe melted any artifacts present in the adobe blocks may have been deposited on the floor before the roof collapsed and therefore the formation of the archaeological record is not comparable to the formation of structures constructed from stone. The organization of household space in Unit 118 cannot be compared with other
residential spaces on the site. Unit 118 was the context that contained the greatest floor deposition, however, this is likely do in part to the deposition of artifacts unrelated to the use of the structure but affiliated with the adobe construction of the structure. Thus I have been more restrictive as to the artifacts that were considered to define the use of these spaces and the elevational span of the floor was reduced to further eliminate artifacts that do not pertain to the use of the space. Nevertheless, only the most general patterns from Unit 118 can be considered when describing the practices and activities of the users of this residential space, especially since the lack of wall fall subjected this structure to the forces of erosion and thus to a greater possibility of later forms of disturbance.

**Site Disturbance**

The site of Cerro Mejia has been abandoned for more than one thousand years, however, the region has been continuously occupied up to the present day. Sites were occupied in the following periods adjacent to Cerro Mejia and the modern villages today are no more than a few hours walk. The site has been subject to scavengers and looters for a long period of time and it is important to recognize the processes that have shaped what remains in the archaeological record of the residential components of this ancient Wari town.

The site is crossed today by people, however, it is not along a major route of travel. Nevertheless as we were carrying out our excavations young men brought their goats to graze on the grass that sprouted on and around Cerro Mejia. The year 1999 was unusual because it followed a significant El Niño
event. The subsequent La Niña effect created wet conditions. The rains started early and were intense downpours that scoured Cerro Mejia, its *quebradas* full of running water. Vegetation covered the surface of the site and made it more difficult than usual to note features based on surface examination. This pattern was not exhibited on the surrounding hills. Cerro Mejia seems to have good soil for grasses, providing a location to graze animals. El Niño events are quite common in the Andes and occur approximately once every seven years. Therefore it is likely that pastoralists have been visiting this abandoned site periodically for a very long time. The remnants of wind breaks, herder camp sites, are common in the El Paso zone of the site.

Cerro Mejia is adjacent to Cerro Baul, an important regional pilgrimage center. Elderly pilgrims who are not able to climb to the top of Cerro Baul will conduct their rituals at lower elevations. El Paso, a sector of Cerro Mejia, is a prominent *pago* site whose payments are intended for the spirit of Señor Cerro Baul. Additionally, Cerro Mejia is said to be the wife of Cerro Baul and thus it is the matron hill for local women. During our project we uncovered an offering in Room C of Unit 145 that included a camelid fetus and other elements of ritual. A local woman also ascended the hill several times with her children to conduct rituals to cure the illness from which she was suffering. Her offerings were homemade and she did not bring a witch or ritual specialist with her. Thus rituals of many kinds have likely been carried out in many areas on Cerro Mejia since the abandonment of the settlement.
Looters' pits are also present in many contexts. Looting via excavation was only noted on the summit of the hill, most commonly in large plazas, especially in the centers of these structures. The largest structure, Unit 136, also contains the most disturbance. Holes were noted next to large boulders on the summit as well. It would seem that Cerro Mejia has been scavenged by looters aware of typical locations of offering caches. Thus a group of educated looters has gotten to the site first. Some one also gathered a number of *metatés* from around the summit and had stacked them neatly in the room of a structure. People also like to collect ancient objects they see on the ground and take them home. Some of our workmen admitted to collecting colorful potsherds and projectile points as boys and even more recently. Then of course we have the most prestigious of scavengers—the archaeologist. The site of Cerro Mejia has been surface collected a number of times and there are piles of diagnostic sherds cached in the corners of structures these have been depicted in a thesis (Fried 1994). I have even discovered an old excavation unit, a 2 by 3 meter probe located in the large plaza of Unit 145. To the best of my knowledge this excavation is not documented in the literature and fortunately it did not interfere with the goals of the project.

Processes of disturbance conducted by populations not living at the settlement are typically clear based on the disturbance of strata above the floor. A neatly constructed *metaté* tower sitting on top of volcanic ash stuck out like a sore thumb. Other processes that pertain to the actual conditions of the
abandonment and the dwellers or their neighbors are less noticeable and likely have a greater impact on the archaeological record present on a house floor.

Patterns of deposition left on house floors can be presumed to be in primary context when not accompanied by mixed ashy sediment, which would indicate that secondary dumping had taken place after the abandonment of the structure, however, cleaning behavior may distort patterns associated with activity areas (Brooks 1993). At the same time one should not assume that the materials left behind reflect normal household behavior nor represent the full range of artifacts used during the course of the house’s use-life (Lightfoot 1993, 1994; Schiffer 1972; 1976; 1985; 1987).

There are specific processes that accompany the abandonment of a house. These processes depend on several factors and include: if the abandonment was planned or interrupted the house’s normal life cycle, distance to new residence, intention to return or not, the speed of abandonment, and if ritual was associated with the process (Brooks 1993; Cameron 1993; Stevenson 1982). The remains at Cerro Mejia are rather consistent and exhibit characteristics that suggest the dwellings were abandoned according to intentional and planned behavior, however, this evidence is circumstantial and could reflect the efforts of neighboring populations systematic scavenging of the site soon after its abandonment.

First, all of the postholes were found to contain no organic material and did not stain the surrounding matrix. The post holes were filled with volcanic ash, from the eruption of Huaynaputina in AD 1600, at the floor surface and appeared
as bright white patches on the floor. The holes were excavated and in some cases wind blown sediments were detected in basal portions of the holes. This suggests that all of the wood was salvaged for use in other constructions or as firewood. It came as no surprise that the small postholes that appear to represent the locations of floor looms revealed this pattern since looms are portable and are often buried with their owners upon their death. Also the ceramic remains are all very fragmentary. In no context were there enough fragments of one particular vessel to suggest that an entire pot of any form was left behind. These two lines of evidence by themselves cannot be taken as conclusive since both situations could be created by opportunistic scavengers of a later time period. Nevertheless, a third line of evidence clearly does not reflect later modifications by scavengers. Stevenson (1982) noted that when residential structures were soon be abandoned, historic miners in the Yukon allowed refuse to accumulate in the house concentrated in use areas rather than following typical patterns of cleaning and disposal behavior. Schiffer (1972, 1976, 1987) describes that often materials that are still usable are purposely left behind, this de facto refuse did not hold enough value to be transported to the new habitation site and the circumstances of abandonment determine the nature of these objects. Both of these kinds of depositional factors pertain to the activity of abandonment and may not reflect normal patterns of household spatial use (Lightfoot 1994).

This phenomena explains the peculiar abundance of material remains, especially lithics, in most of the house structures that were excavated. These
materials vary from debitage and broken flakes to still useful hoes, *metatés*, *manos*, and biface points or knives, often of obsidian. These items reflect labor input but were made in most instances of local lithic materials and thus were left behind because of their cumbersome weight or perhaps because replacements would be easily fabricated in the next location of residence. Tomka (1993) has noted that objects made of locally abundant materials are often among the de facto refuse (See also Joyce and Johannessen 1993).

In planned abandonment items that are valued and have high production costs are transported to the new locale of residence, whereas broken, heavy, or easily attainable objects will be left behind. House abandonment rituals can weigh against these logical patterns and leave a more complete but equally altered material record for the archaeologist (Brooks 1993). The abandonment of structures on Cerro Baúl appears to be affiliated with ritual in some instances. Unit 1 an elite trapezoidal patio group near the center of the summit architecture on Cerro Baúl was burned by fire after the ritual smashing of pots and breaking of grindstones. Unit 9, also on Cerro Baúl but more peripheral in location, is a square stone paved formal patio group with a few ornate polychrome vessels and other elite goods, artifacts that were more abundant in Unit 1. It appears to contain the remains of a great feast and the serving vessels were all smashed, in the structure's patio, but the roof was not burnt. So the current evidence suggests that rituals affiliated with the abandonment of residential structures may or may not involve burning but should include remnants of a feast in the form of broken jars, bowls or cups. The structures on Cerro Mejia do not reflect this
pattern in any overt way or on par with the obvious nature of the events documented for Units 1 and 9 of Cerro Baúl.

In general, the residential contexts from Cerro Mejia demonstrate planned abandonment. Little evidence of recent maintenance activity was present. House cleaning often distorts or removes patterns of artifactual use (Brooks 1993). Cleaning did not leave a preponderance of material along walls, however, some structures were apparently cleaned during their occupation because buried midden deposits were uncovered. It is likely that cleaning was periodically carried out and this may affect patterns of apparent floor use based on the arrangement of material remains. If cleaning was carried out at the whim of the household members, then artifacts may reflect different periods of accumulation. If cleaning was carried out before or after particular seasonal events, then the pattern of disposal may be biased for or against particular household activities. If the majority of the site was abandoned all at once, seasonal activity on the floor surfaces of each house would be more similar to each other than a structure that was abandoned at an earlier point in time. These factors must be carefully considered as comparisons are made between structures and households in the spatial analysis of the floor contexts.

Regional Formation Factors

Prehistoric archaeological investigations are aided somewhat in the southern region of Peru by a ubiquitous layer of volcanic ash. In February 1600 AD Huaynaputina erupted and covered the entire Moquegua Region with a white to light gray ash flecked with small pieces of glass (Silva et al. 2000). This strata
is present in most of the Middle Horizon excavations conducted thus far in the valley of Moquegua. After working in the area for a while, archaeologists typically use the volcanic ash as a tool, however, sometimes the assumptions made about this strata are incorrect. So it may be important to discuss and explain the processes by which this useful, yet itchy cap makes its way into the architectural framework of the archaeological record.

Since the volcanic eruption occurred in AD 1600, we could assume that the ash layer and any windblown sediment superior to it must postdate the event. This basic concept is extrapolated to the construction of structures, any wall, portion of wall, or individual stones with ash beneath them must have been built, placed, or fallen after the eruption. This is not a valid assumption and one must proceed with caution before deconstructing any wall. In fact, the older it is the more likely it is that it will exhibit ash between its stones.

For instance, in the case of Middle Horizon contexts, which were exposed to the elements at least 600 years before the volcanic eruption, one must consider the effects erosion had on these abandoned structures over this time period. The Wari architecture in this region employed mortar made of silt and clay sediments mixed with gravel. As the structures decayed after their abandonment, the sediment portion of the mortar in exposed walls became loose and powdery eventually blowing away. Thus over a long period of time many walls may have had empty pockets maintained by the gravel portion of the mortar that remained. In AD 1600, with the eruption of the volcano, the ash blanketed the landscape and made its way into any open nook and cranny. This would
have included cavities in walls as well as the hollow roots of dead or dying cacti, animal burrows, looters pits, and depressions left by scavenged posts. In open areas of the site and in the middle of large structures, very little windblown sediment has accumulated over the strata of volcanic ash. In contrast the corners of structures and areas immediately beside walls has caught relatively more sediment. These areas also have deeper strata of the ash. Additionally the predominance of fallen wall debris are clustered around the walls with diminishing amounts toward the center of the structures. In the center of large spaces there is very little besides a thin layer of ash covering the ancient floor surface. Therefore strata vary a great deal in thickness throughout the room and preservation of ancient activities is best near walls rather than in the center of rooms. The majority of spaces investigated in this study were relatively small in size and thus only a few spaces were affected by differential preservation in this manner.

Post Abandonment Formation Processes

Down slope erosion is another factor that affected differential preservation within the structures. Many of the houses that were excavated were terrace dwellings. These structures were built on fabricated terraces where the back wall or up slope portion of the house rests on mother rock of the hill, however, the front wall and down slope portion of the structure rests on compacted fill. This is an important factor that has two significant consequence on stratigraphic differences and the state of the structures’ preservation.
No structure excavated exhibited a flat floor. The average slope was 4 cm difference for each meter between the back and front wall. So for a room that was three meters wide there would be a standard difference in elevation of 12 cm between the floor surface of the back and front wall. This could potentially cause problems during excavation. If the floor was found in a central quadrangle and excavators leveled quads on either side the quad near the back wall would be excavated too deeply and the quad toward the front wall would not completely reach the floor. In cases where the terrace was constructed of fill with organic material the subsequent subsidence of the front portion of the terrace becomes more severe. No terraces excavated on Cerro Mejia exhibit this construction, although one room’s floor on the summit in Unit 118 had a floor that was leveled by adding midden mixed with clay. This type of construction as well as Wari terraces constructed with midden fill at other sites in the Moquegua colony have proven very difficult to interpret because of the problems inherent with this type of construction.

In general, down slope erosion has mitigated the accumulation of thick strata near the front terrace wall. Rooms on the terraced slopes have very thick strata near the back wall with the thickness diminishing towards the front wall. Enclosed rooms exhibit thicker strata with sediment deposition near front walls, patio areas have less accumulation. In one case erosion, likely from water action, undermined the integrity of the front portion of the terrace. It appears that water may have carried the compacted fill away through the front terrace wall.
and undermined the floor causing it to sink and crack. Regardless of the floor distortion, the evidence suggests that this space continued to be used.

Wari peoples at Cerro Mejia as well as modern populations do not exhibit any particular fondness for flat floors. In houses and patios with dirt floors common traffic areas become worn while areas with semipermanent furnishings maintain their original surfaces. When spaces are cleaned areas that accumulate productive debris are cleaned more regularly and are swept away, either out of the structure or into a corner, which would add to its height in relation to the original surface. These are but a few mechanisms that create greatly disleveled use floor surfaces.

Cleaning as mentioned above affects the floor surface. It is a human erosional process, however, at the same time it may have modified the surface in a way that allows it to be recognized archaeologically. Women in the Andes today both in the cities and in the high sierra villages throw water on floor surfaces and then sweep it vigorously with a straw broom to clear the surface of filth. It can not be guaranteed that Andean peoples in the Middle Horizon had brooms, however, the desire to clean one’s home is a universal pattern that has been associated with home ownership and pride in ones dwelling (Oliver 1990).

Cleaning in this way creates a patinated surface. Floors in the structures on Cerro Mejia like most structures in the prehistoric Andes exhibit tamped earthen floors. None of the terrace structures discussed in this study had any remains of preserved floor preparation such as a strata of clay or plaster. Wari structures in provincial centers have been found with fine hard white floor
surfaces (McEwan 1987; and Williams et al. 2000), however, this reflects the status of these structures and the correlated labor input into the construction of these elite structures. The residences on Cerro Mejia in contrast exhibit very little planning and only the summit constructions have any indications of belonging to important individuals in the society.

The floor in any structure is the primary surface on which activities are carried out. Thus understanding the organization of activities in these structures depends a great deal on identifying the floor surface. Floors that have merely been tamped are difficult to identify for several reasons. As mentioned above, first of all they are not level, also they are not made of a special material and may resemble wind blown sediment. In the case of Wari architecture it seems that several different kinds of constructions are made with the same material. The walls were built with mortar that consisted of a variable mixture of silt and clay with gravel added. This mixture was also used to coat the walls and to cover layers of thatch on the roof, however, with less gravel inclusions. Thus when a structure collapsed this matrix, which closely resembled that of the tamped floor, melted off of walls and fell from the roof mixed with perishable organic material. Thus underlying the volcanic ash and overlying the floor there is a strata of mortar and field stones. Large field stones upon impact with the floor dented the surface and also may have caused wall coating to be compressed into the floor. All these factors add up to a formidable excavation situation.

Nevertheless, by recognizing these factors of construction excavations can be conducted in a way to overcome these interpretive obstacles. The
methodology of this study knowing the potential problems with identifying floor surfaces was designed to increase the probability of discovering the floor surface intact. During excavations elevations were taken regularly in each quadrangle, 1m². The level of each corner and the center were documented. Additionally, each artifact found in situ had the level of the base of the artifact documented. In some cases there are over thirty elevations for a single quad. These elevations could then be examined. Modes were noted and floor surfaces were profiled.

In recognizing the floor surface some artifacts are more reliable than others. Ceramic sherds especially rims were often found several centimeters above the floor. Obviously this is a direct reflection of the relative size of the vessel, which may have remained standing or intact well into the period of house decay and wall fall. Faunal material was typically nearer the floor surface and at times impressed into the floor surface, however, both carbon and bone draw recent and modern plant material. The organic components of the bone and burnt botanical remains can provide nutrients to the growing plant. The plant twines its roots around the bones or carbon and can displace the material lifting it several centimeters above its original position. Lithics were the best indicator of the floor surface, however, heavier artifacts such as large cores or grindstones are likely to sink in the moderately compacted floor surface. Therefore debitage, retouch, small flakes, and other small stone tools were the best indicator that the floor had been reached.
Compression of a Three Dimensional Structure

In the investigation of residential space, its conceptual organization and the location of discrete activities, the primary goal would seem to be to identify the floor surface and document the dispersion of materials in this stratum. Yet in its original form a house is a three dimensional entity. A simple plot of the floor surface just begins to represent the various functions that occurred within the volumetric space. So in recognition of this fact one must also consider the materials found in the strata preceding the floor, their origin and the significance these materials may have had toward the conception and use of the space under study.

Initially, excavations were undertaken on the hill's slope of small terrace dwellings. The presumption was that the materials within strata above the floor represented erosion from structures higher on the hill's slope. Later, when excavations shifted to the summit of Cerro Mejia and objects, such as projectile points and chrysacolla chips, were found within the wall fall strata, their position was documented in order to potentially calculate the location of wall niches. The question then arose, "did the domestic terraces also have wall niches or some form of super floor storage?". The answer, "well of course they did", obviously the deposition was much more complex than what is typically discussed in the literature pertaining to household archaeology. Therefore I would like to describe my conception of what a Wari dwelling looked like from floor to ceiling. The simplest houses on Cerro Mejia consisted of a patio and one small room. Also it
is important to understand how these structures fell and where in the archaeological record household items might be found.

The outside of a modest Wari terrace dwelling consisted of a small stone masonry structure with a thatched roof topped or layered with a mortar mix of silt, sometimes clay, and gravel. The roof would be angled to match the slope of the hill, and an attached open patio would be shaded partially by the overhang or by a constructed awning in the same manner. The patio space would be demarcated by low stone walls along the front and side. Entry to the structure would be gained by ascending a small ramp parallel to the front terrace retaining wall, and leading into the patio area. Some patios had benches along one or more walls, which functioned as work surfaces and storage locations. In the patio, there would be storage of items such as cooking fuel, water, and perhaps botanical resources. Activities that require light would necessarily be conducted in the patio, such as weaving, spinning, woodworking, and lithic manufacture. The patio also seems to have been the prominent location of food consumption. The floors in the terrace dwellings were not well prepared and consisted of a thin layer of the same mortar used to construct the walls.

The small, enclosed stone room was entered from the patio and had interior walls covered with a thin mud, plaster, or red clay coating. This space was the location where family valuables and ritual paraphernalia were stored either in small wall niches or perhaps in baskets or gourds suspended from the roof infrastructure, sharp lithic tools would also be stored in an elevated position to keep them out of reach from small children, and since the enclosed space
would have kept pests and predators away, dried meat products were also likely suspended from the ceiling until they were cooked. The enclosed room served as the area where food was prepared. Therefore in the vicinity of the hearth there would be cooking pots and the remains of butchered animals. Knives were sharpened over the hearth to keep sharp fragments off the floor. Finally since the enclosed room held the heat of the day in its thick double faced walls (Nash 1995), during cold months this space was likely used with mats or textiles as a sleeping area.

Obviously the preceding description is one of a very simple house. Variations on this form would take place as a family grew. Special function spaces may also be present depending on the dwellers occupation or position within their respective kin or political group.

The preceding description pertained to a house constructed of stones for the walls and a roof of perishable materials, primarily wood and grass. A house of this nature located in this region could have fallen or deteriorated in a number of ways, however, based on the archaeological remains I chose for the purpose of the study to examine two scenarios for house collapse, earthquake and roof rot.

Earthquakes are very common in the Moquegua valley. Recently having experienced the 8.4 quake of June 23rd 2001 on the site of Cerro Baúl, I have some idea what earth movement can do to a stone structure. Surprisingly, there was very little damage to the old Wari walls of our open excavations at the time of the quake, those structures with the highest standing walls suffered the most
collapse. Some Wari architectural works exhibit segmented construction, a technique where laborers build a segment of a wall that is not bonded to the adjacent portions of the wall, such as at Pikillacta, but Wari constructions in the Moquegua region exhibit, for the most part, continuous masonry construction and bound corners. Thus the damage to structures from earthquakes was the falling of individual stones along with some attached mortar, as opposed to entire walls, large segments or chunks of walls. The Wari must have been aware of the danger of earthquakes and incorporated measures into their stone constructions to minimize damage. The appearance of walls on Cerro Baúl reflect differential investment throughout the site, however most are built with a double face stone masonry construction that may have been strong even when put together be relatively unskilled labor or corporate workers with minimal instruction. I suggest this because although the Wari walls stood rather firm, all the walls we had constructed on site to preserve our older excavations and to organize the wall fall coming from current excavations, collapsed to rubble during the quake. This would seem completely reasonable if all the walls had been built by unknowing archaeologists, however, several of our workmen were masons by profession and were shocked that their walls had faired so badly during the quake.

These observations proved helpful in understanding the potential damage an earthquake would cause to an occupied house built of stone walls, obviously I can not directly address what effects a roof would have played in furthering wall collapse and I have no reference to walls above niches or windows, an obvious
point of weakness, except to say that in Moquegua there are no preserved Wari
niches beyond the base of the niche.

It was fortuitous to have witnessed an earthquake of such a large scale on
a site with architecture so directly comparative to that of Cerro Mejia, but in some
cases there are major differences in the quality of the masonry construction and
also it was not directly apparent how such formation processes may transform
through time in the archaeological record. As I will describe in Chapter 6, the
stone masonry on the southern terraced slope of Cerro Mejia exhibits no shaped
stone blocks, and the field stones chosen for construction are much more
irregular in form and variable, generally smaller in size, than the masonry
exhibited in the large elite houses on Cerro Mejia's summit. The summit
structures are comparable to constructions on Cerro Baúl. Additionally, some
constructions that were excavated on Cerro Mejia were partially constructed of
adobe blocks, which are a great deal more vulnerable to earthquake induced
collapse.

A sudden earthquake would dictate sudden abandonment and potentially
immediate collapse of the structure. This would not prevent individuals from
digging around and retrieving needed items, however, this scenario seems
unlikely for Cerro Mejia since no vessels could be reconstructed. An earthquake
strong enough to predicate house abandonment certainly would have broken
vessels in primary contexts that scavengers would not seek to retrieve.

Evidence from Cerro Mejia does suggest slow or perhaps planned
abandonment. Postholes are empty. No reconstructable vessels were found.
Large heavy objects were left behind on cluttered house floors. The structures were not burned, but left to variable decaying processes. It likely took several seasons before the house floor was sealed by roof collapse and the falling of the walls.

For this study, since I am trying to understand the entire house rather than just floor activities, I was particularly interested in how the entire structure would have reacted to a particular formation process. I determined that this would have been dependent on the individual construction, condition, and stability of each structure and this varied a great deal between houses based on their size, the quality of the material used for construction, and the care that the owners directed toward the house structures. The houses that were excavated all exhibited great differences in regards to these variables and so no two houses would exhibit the same qualities even if they had all been abandoned for the same reason. In the future I hope to conduct experiments to aid in understanding some of the patterns of deposition encountered during excavations of the different houses. It will also be important to conduct ethnoarchaeological research among modern Andean habitations in order to document cultural factors that affect the patterns of deposition in residential context.
CHAPTER 5
INTERPRETING ARTIFACTS IN CONTEXT: HOUSEHOLD THINGS

The definition of a residential structure or house for the purpose of this study was based on ideas about domestic activity drawn from recent ethnographic studies (Mayer 2002; Meyerson 1990) and ethnohistoric accounts (Mayer 1982) in the Andes. It is possible that some of the household practices carried out by modern peoples still participating in livelihoods similar to those of the past may have gone without much change over the one thousand years since the collapse of the Wari Empire. It is more likely that practices have changed a great deal with the potential for innovation over such a long period of time and with the influx of western ideas and technologies since the time of the Spanish conquest.

Nevertheless, the ethnographic record was considered a resource for interpreting material remains encountered in the ancient Wari household contexts. Additionally, I found that the local men and women working with us, many of whom still live in structures with earthen floors or with older relatives that live in houses similar to those we encountered, often had insightful interpretations of artifacts and features we uncovered. Finally, I felt it very important to try to examine in the field, as we excavated artifacts and features, common affiliations between tools, their products, and the location of the activity. We also tried to understand the logic behind the placement of hearths and
activity zones with an aim at explaining why things were where they were, factors that may vary based on location as opposed to cosmology (i.e. patterns of wind, light, heat, etc.). These gross patterns, primarily documented in context, proved very important in later comparisons and as such became part of my interpretive tool kit. In this chapter I will discuss these findings and make explicit some of the assumptions I made based on contextual associations uncovered in the archaeological record.

Features

Fire and Ash

Hearths were particularly important to our study because from the beginning the project’s definition of a house hinged on the activity of preparing and cooking food for the household group that occupied the residential space. Methods employed were crafted to ensure that not only did the ash encountered represent the location of the fire, but that some kind of food remains were directly associated with the fire.

Ash features were very common throughout each structure and in some cases large portions of the surface immediately below the floor consisted of buried ash deposits. Hugo Torres Flores an experienced and skillful local excavator described to me how these ash deposits came to be beneath such a large portion of the floor. His mother still lives in a house with a dirt floor and she still cooks with wood she gathers in the traditional way. He described this in great detail and said that when there is too much ash and refuse in the hearth she cleans the hearth by scooping out the ash, digs a hole in the floor sweeps up
refuse throughout the room into the hole and buries it all in the floor. Hugo’s
description corresponded not only with buried deposits but also to patches of ash
in corners or near hearths that were in small piles on the floor. That is they
consisted of ash mixed without any stratification with regard to color or texture
and consisted of refuse, bones, sherds, lithics, both burnt and unburnt. These
features included refuse discarded in the hearth as well as unburnt items swept
from the floor surface of the room.

All ash features could potentially be hearths because the hearths in the
structures on Cerro Mejia for the most part exhibited no specific construction or
structure—no circle of rocks. They appeared as dense patches of ash
surrounded by a lighter dispersion of ash. Therefore all ash features were tested
as hearths and were divided in half. One half was excavated and the cut was
profiled. In the field, materials recovered from the screening of the excavated
half were examined to see if any refuse remained unburned and to make sure
that the materials were associated with foodstuffs. If the feature was a hearth it
was sampled by taking one to three liters of ash from each the center, inside rim,
and outside rim of the remaining half. The rest of the hearth was then excavated
and screened. If the feature was merely ash and refuse a standard one liter
sample was taken and remaining material was screened. Since all floor contexts
were screened with window mesh we were confident that all macrobotanical and
zoological remains were recovered from each ash deposit and hearth with
volumetric samples reserved for systematic analysis of microbotanical and
zoological remains.
In using this methodology two unexpected types of ash related features were discovered. The first type of feature found in several different households, called pot soots, was a small dark thin ash spot typically near the hearth, but also found in patios and in locations removed from the hearth. I hypothesized that these small features represent stains left by placing a sooted pot on the floor or perhaps heated rocks in some cases. This was likely the result of removing a cooking vessels from the fire to serve the food or to allow it to cool, perhaps a step in the production of *chica*. It is possible that heat may have been useful in some productive tasks and so I suggest that perhaps heated rocks may have been removed from the fire and carried to a work location. I describe this possibility because some of the sooted features are associated with discoloration—reddening of the surrounding floor matrix, which indicates a greater degree of heat present than what an earthen pot is likely to transmit.

Earth ovens or stoves were also discovered, but were restricted to Unit 118. The ash features were unusual and since the superior portions had all been destroyed by falling walls it was not possible to determine if it was an earthen structure such as a stove to set pots on the top or an enclosed oven for roasting or heating in an enclosed environment.

The ovens were characterized by an elevated ash deposition. That is typically the ash feature was identified far before reaching the floor. Initially, I thought it possible that they represented later intrusive camp fires, however, the ash did extend down beyond the surface of the floor in some instances and the burnt material remains were consistent with the other fires on the site. The ash
itself varied in color and exhibited no stratification. The major inclusion consisted of small fragments of excessively burnt bone, although small ceramic fragments and lithics were also present. The surrounding matrix was a bright orange red and exhibited a greater deal of heat alteration than other fire contexts. The surrounding matrix also included a high proportion of small unmodified rocks and seemed to lip up around the loose ash. The shape of the ash deposition was not round nor did it exhibit a clear center. Larger rocks were found in association with the base of the ash, however, did not form a clear outline nor were they necessarily present below every portion of the ash deposit.

These features seem to be the remains of ovens constructed of adobe. The opening to the oven was located above the level of the floor, however, the interior of the oven often continued beneath the floor surface. Highly fragmented and burnt bones were the ubiquitous material found throughout the ash deposit, based on affiliated artifacts around the ovens it would seem that they pertain to food preparation, however, the function of the oven should not immediately be assumed to pertain to roasting or cooking and I have made no specific conclusions about their use.

**Niches**

No intact niches were found in walls at the site of Cerro Mejia, however, niches have been identified in a D-shaped structure, Unit 10, from Cerro Baúl. After an examination of the niche constructions it is apparent that the bases of at least two niches are preserved in the walls of Unit 145 on the summit of Cerro Mejia. Niche constructions were also uncovered at Jargampata in Wari
residential contexts of the highland San Miguel Valley in the Department of Ayacucho (Isbell 1978). Therefore it is logical to assume that niche constructions may have been present in the house contexts at Cerro Mejía.

Without direct evidence in most contexts niches were looked for by means of indirect clues. The function of niches is described by Garcilaso de la Vega and other ethnohistoric accounts as locations for the placement of special goods that represent group membership or adornments (Garcilaso de la Vega 1966 [1609]; Mayer 1982). They are basically like cupboards or shelves where special items were stored (Bolin 1998). They may have also functioned like china cabinets, in some instances they were used to display mummy bundles (ancestral rights), or other items reflecting prestige or wealth (Gasparini and Margolis 1980). This latter is the function I have inferred from the placement of the niches in Unit 145, which will be discussed in Chapter 6.

Therefore assuming niches were used to store special items, niches were suspected when a cluster of “special items” were found above the floor surface. These special items might include decorated ceramic wares, lithic points, pigment, metal artifacts, etc. Typically these clusters were mixed in the wall fall strata, the objects in the niche fell with the niche as part of the wall. In some instances, however, these objects were just suspiciously several centimeters above the apparent floor surface and may have fallen from the niche as the wall leaned a great deal before falling apart. Whenever possible, when these special items were found in situ rather than the screen, the exact location of the object was noted and models were created to project which wall the item may have
fallen from and how high the niche was in the wall. The niches in Unit 145 were approximately 110cm above the floor surface and thus it was assumed that the projection that was closest to this figure was the most likely. Not all special items were easily associated to a wall and thus it is also likely that some object may have been stored in baskets or vessels suspended from the ceiling or perhaps placed on rafters or on the ledges where the ceiling met the roof. Realistically there is no way to be certain that the niches were once present in most of the residential structures, however, they were possibly there and the methodology employed was focused at addressing all possibilities that may enlighten our understanding of the function of spaces and their significance to their occupants.

**Furniture**

The houses at Cerro Mejia exhibited a variety of furniture that was constructed with the same materials as the walls. Several benches were encountered, however, only in one instance did the structure function as a bench for sitting. The other examples seem to have been used as workbenches and so I have called them tables. In Unit 145, as well as a probe in Unit 136 there was a small retaining terrace that elevated the floor surface of a portion of the room approximately 20 cm above that of the rest of the room. These platforms were presumed to have been elevated sleeping areas, beds. These features will be described below.

The clearest bench structure was found in Unit 145. It is directly associated with an audience platform that runs along the exterior wall on either side of the staircase. Both the horizontal and vertical surfaces of the bench are
covered with stone. This bench is approximately 50 cm above the adjacent floor surface and likely served as a comfortable sitting location for the supporters of the administrator presiding over activities taking place in the fronting patio. Evidence of possible activities associated with this surface are described in Chapter 6.

Several other bench structures exhibit a lower quality of construction and seemed to have served as activity areas. These tables range in height above the floor surface from between 20 cm and 40 cm. The two lower tables located in Unit 5 and possibly in Unit 4 were both along the back wall of the patio space. Unit 5 was covered with evidence of activity including lithic manufacture and pigment grinding. The table in Unit 4 was greatly destroyed and thus associated activities are uncertain. The higher table in Unit 118 was primarily associated with grinding activities, with a number of smaller ramp shaped grind stones and associated hand held oval and rounded manos. These tables contrast with the aforementioned bench in that the horizontal work surfaces was not faced with stone but rather a compacted mortar surface resembling the floor.

Elevated platforms in Room C of Unit 136 and Room B of Unit 145 fill roughly 40% of the rooms’ areas. A small stone-faced terrace consisting of two courses is located just left of the door in both rooms. It was concluded that these platforms likely served as beds primarily because they were nearly devoid of artifacts. Sleeping platforms were found only in the elite formal patio group structures, however, areas devoid of artifacts in most houses were identified as likely sleeping spots. These voids will be discussed in the following chapter.
Artifacts and Artifact Sets

Throughout the course of excavations and additionally as materials were cataloged by their provenience a number of patterns emerged. It was clear that activities are represented by consistent artifact associations with only minor variations. Below the most striking patterns will be described others with more tenuous evidence await future excavations to elucidate the activities with which they are associated.

Bones and Obsidian

Obsidian in most prehistoric cultures is associated with sacred meaning or ritual practice. In Andean iconography it has been suggested that spears represented with some beings were topped with obsidian points (Menzel 1977). It has also been documented that offerings to huacas sometimes include this glassy substance (Topic & Topic 2000). Therefore in documenting the Middle Horizon settlements in the Moquegua valley the presence of obsidian was inferred to reflect elite status or ritual activity.

The excavations at Cerro Mejia have changed the assumptions about obsidian and it is now obvious that obsidian was available to every occupant of the Cerro Mejia settlement. It was primarily formed into point like bifaces. Examples that appear at first to have been projectiles were likely hafted implements, like pocketknives, used for a variety of cutting and scraping tasks. Larger examples, much rougher in form and clearly asymmetrical in use, were most closely associated with the vicinity of the hearth and directly with animal bones exhibiting butcher marks. In most instances when a large obsidian knife
was recovered it was found in proximity to the preparation of animal resources. This affiliation does not remove obsidian from a ritual association. It is possible that animal food stuffs were spiritually charged and required that obsidian be used. It is equally possible that obsidian was abundant to members of Wari society and that as the most efficient tool for the task obsidian was used to cut animal flesh from the bone in meal preparation.

The Lithic Production Toolkit

By far the most prominent artifact type recovered were lithic tools and lithic production waste. Since lithic production played an important roll in the process of other productive tasks, the tool kit used to create lithic implements was present in all residential structures. The kit consisted of cores or large flakes with obvious scars, hammerstones for striking flakes from the cores, and polishers or abraders to prepare the striking platform. These latter two implements were often substituted by a combination tool, which exhibited signs of percussion as well as polishing surfaces, although additional polishers were often present. Elements of the tool kit were often found in association with unutilized flakes, broken flakes, as well as reduction waste or debitage. Retouch may or may not be associated with these areas and was typically found more closely associated with the hearth context. Lithic production was carried out both in the enclosed rooms and patios and could not be positively associated with a particular space within the house. See Chapter 7 for a further discussion of the location of lithic production.
Bead Manufacture

Lithic implements may or may not have been the predominant tool type, however, they are the best preserved at Cerro Mejia. This is due to its very acidic soil that fries bones and eats the slip off of decorated vessels. Therefore our best understanding of everyday domestic life comes from the remains of lithic material. Since most of the beads and the tools that made them are both made from stone the remains of bead manufacture were apparent in several contexts.

Beads were made predominantly from a bluish green local stone known as chrysacolla. This raw material can be obtained from the outcrops of copper near the source of the canal in the area of Cuajone. Chrysacolla has the appearance of turquoise, however, is not as soft in texture. Small chips, chunks, whole and broken beads are found of chrysacolla and more rarely of lazurite and onyx in domestic contexts. Beads on Cerro Baúl are most often crafted from shell, however, the preservation on Cerro Mejia was not favorable to these small thin friable objects. Beads are also made of bone, however, only one charred example is present at Cerro Mejia. The remains of beads in domestic contexts typically pertain to broken examples in refuse contexts or on the floor in association with gravers, a drill, or a type of polisher with a smooth concavity, which was presumably used to shape the exterior bead surface. These activities pertained either to patios or enclosed rooms, and may indicate work carried out by part time specialists, however, because it was present in several of the households its more likely that bead production was an off season task.
commonly carried out during lulls in the agricultural cycle or in preparation for a particular ritual event. Beads may have also been produced as a tribute item.

**Adzes and Hoes**

In preparation for this research I reviewed the literature specifically as it pertained to commonly recovered objects in Wari contexts. Since most excavations have focused on provincial centers or the capital and more particularly to elite contexts I suspected that I would encounter several artifacts not currently described in published works. The most prominent of these is the hoe. Hoes were used as agricultural tools and are sometimes found in the household contexts where they may have been used in other ways as well. These artifacts are different from what has been previously called an adze (*adzada*).

Artifacts described as adzes have been associated with both agricultural work (Anders 1986), and pottery production (Possi-Escot et al. 1993). Therefore I thought the best way to determine their function would be to walk through the well preserved agricultural fields associated with the colony and look for broken agricultural implements. An abundance of examples were present, including several large basalt type hoes common in the altiplano, however, the predominant form was made from large flakes of local siliceous material battered along the use edge, exhibiting a sheen on one surface, and roughly ovoid but sometime rectangular in form. Haft wear was typically obvious. All proved to be significantly larger than drawn examples of adzes. Therefore I concur with Possi-
Escot in that these adzes likely held a function carried out in the household or workshop rather than in agricultural practice. 

Hoes are much larger and are typically oval or rectangular in shape. Like most Wari stone tools, it does not appear that a great effort was invested in shaping the tool beyond making it function. There is also a great variation in the raw material used and the degree of ware and effort put into the manufacture of the hoe. Hoes were found in a few residential contexts, however, unbroken examples were found throughout the field system and therefore it is possible that hoes may not have always been dragged home. Additionally, such large chunks of useful lithic material may have been reduced like cores a new hoe being made when needed. Thus the absence of a hoe was not taken to suggest that the household did not participate in agricultural production.

**Flakes and Flaking**

The majority of lithic material is represented by irregular flakes. These unshaped tools exhibit very rare examples of retouch and do not appear to have been curated. Thus one could call most Wari stone tool implements expedient, however, I would like to point out that among the seemingly large range of flake forms there are some common types and that a great deal of effort went into shaping many flakes for a particular function. The most interesting thing about the flakes throughout the site is that individual households exhibit lithic production habits. In other words the flakes from a particular house more or less look alike and that the producer or producers had a patterned template or particular method of manufacture. In the future I plan to examine the flakes from
the colony in greater detail in order to glean more about the methods of their manufacture, the functions of common forms, and the relationship between patterns of manufacture and household affiliation.

**Pot Sherds and Pot Form**

**Pretty Pots?**

Few vessel fragments exhibited any decoration or slip. It is now clear that this is the result of the conditions of preservation of the site and not because decorated wares were not a part of life at Cerro Mejia. It seems that the slip of locally produced decorated wares was removed by acidic qualities of the soil at Cerro Mejia. Cerro Mejia was formed by a different geological formation than Cerro Baúl and the conditions of preservation are starkly different between the two sites. Cerro Mejia exhibits no wooden artifacts and bones are often partially fried or eroded. The soil has a higher clay content and holds moisture thus the occasional rains that fall at this altitude have taken their toll on the material remains at the site.

Throughout most of the excavations less than ten decorated sherds were found throughout the residential components of the site. This was true of even the elite contexts and appeared curious in comparison with the pattern on Cerro Baúl and associated terrace dwellings on the flanks of the hill. Near the end of the season Unit 3 materials were processed in the lab and sherds from Room B were being refit. A unique flask with a chevron decorated rim was a welcomed change from the mounds of plainware and in form was very different from the typical jars and bowls. It was apparent that many fragments of the vessel were
present. A plainware rim strangely had the same profile as the decorated pieces of the flask and sure enough fit.

All is not lost. The lack of decorated sherds focused the ceramic analysis towards identifying different pastes present at the site. This analysis revealed that the decorated sherds all pertain to the same paste composition. This composition also resembles that used on a particular group of decorated vessels from Cerro Baúl. Thus it was discovered that the decorated wares on Cerro Mejia were likely more numerous than we suspected and although it can be estimated what percentage of wares were decorated and their contexts are known the information the iconography carried is gone. Unfortunately, an important piece of data has been lost to the processes of time and weather.

**Pot Forms**

Vessel forms within the Wari cultural complex are as diverse as the designs that often decorate them. No less should be expected from a vast empire. Since the majority of excavations thus far have focused on monumental or elite contexts there is no comprehensive description of plainware forms or the domestic use of pottery. For this study I felt it would be important to identify common forms and describe their functions, however, the remains of ceramic vessels were very fragmentary as well as seemingly variable. Every effort was made to reconstruct vessels from the residential contexts, but with little luck. In many cases rooms and paste categories contained no diagnostic elements to suggest vessel forms. General categories of jars, handled jars, pitchers with a single handle, bowls, and cups were used to loosely infer the types of vessels
present within each room. Additionally evidence of exterior or interior burning, sooting, or residue was noted to determine if any of the vessels present were associated with cooking. Two classes of cooking vessels were noted but there is by no means enough evidence to definitively conclude about the use of pottery as it pertains to food preparation. One cooking vessel appears to have had two or three handles, a narrowed neck as a jar and may have been suspended over the open cooking hearth. Additionally there were rims from a wide mouthed pot approximately 43cm in diameter which suggests that soups may have been boiled and placed directly on the fire. This vessel form resembles the indigenous Early Intermediate Huaracane cooking vessels displayed in Museo Contisuyo, but were likely common throughout the Andes at this time. I hope to expand our understanding of pottery vessel use with comparisons to the Cerro Baúl assemblage and future excavations of the other Wari affiliated villages.

**Artifact Distributions**

The exact locations of artifacts were plotted in the field and lab analysis provided generalized morphological or functional characteristics that allowed the distribution of the artifacts in the residential space to be mapped. Icons were used to represent the different types of stone tools on plots of each room (Figure 5-1). Field observations provided interpretations for looking at the general distribution of certain artifact categories, as those mentioned above. These artifact groupings, coupled with the placement of features allowed activity areas to be identified. Additionally as artifacts were replotted by material type and nonartifacts were discarded patterns of dense use, moderate use, and nonuse
Figure 5-1. Icons representing the lithic artifact types.
were apparent on the space diagrams. Areas of dense use have been termed clusters and represent activity implements and refuse that typically are located in a well lit location, a comfortable work zone proximate to a wall, or in the vicinity of a high use feature such as a hearth. Voids represent nonuse zones that actually do not reflect areas that weren't used, but rather areas that have no material reflection of their use. Areas of depositional voids are interpreted as mat covered spots, sitting locations against walls, or spaces occupied by some object or furnishing that prevented the deposition of material remains. Areas of moderate deposition appear most commonly in zones that may pertain to high traffic paths, are on the edges or in between clusters. These spots are not absent of artifacts, but rather do not represent dense depositions of material remains.

Areas of activity were primarily defined based on the types of lithic remains present in cluster locations. The definition of particular activities is broad and limited. Some activities were directly inferred from the presence of an artifact or group of artifacts, however, many lithic forms were never directly associated with a particular activity. Clusters of variable lithic remains were typically associated with hearth features and thus were assumed to play a part in food preparation. Yet there are many other explanations for an activity to take place near the hearth and many artifacts on their own have no interpretation affiliated with their presence.

**Lithic Evidence for Activity**

Lithic artifacts were divided into 20 types. Many of the types had several forms. The types are sometimes related to their production such as flakes or
debitage. Other types are characterized by their use, for instance hammerstones. Types that have been mentioned in the literature were incorporated to make this study comparable to others. These types include adzes and tablets. Some lithic types have apparent functions, such as grindstones, however, without further analysis what exactly was processed with these household implements is unknown.

Hammerstones (T1) came in many forms, most of which fit easily in the hand. Hammerstones were identified by evidence of percussion and thus a variation of this type was an anvil (T1F9). Hammerstones were typically made of a grindstone like material, however, many materials were used for percussion and very few were rounded, oval, or pestle like in form. Hammerstones are part of the flakemakers tool kit, they are also found in generalized activity areas, and in association with grindstones at times exhibiting residue. Thus they are interpreted as part of lithic production, food processing, and parts of other undefined productive tasks.

Polishers and Abraders (T2) were classed together because they were often incorporated into the same implement. Polishers came in a variety of sizes, shapes, and materials. An unusual but common material was a geode fragment with both cortex and quartz worn down. These implements usually were concave along the quartz surface. Quartz and other high quality siliceous material appeared to be favored for polishing. Concave semicircular polishing surfaces were the most common form of this tool with blockish flat-sided examples also being prominent. Polishers were used to prepare striking platforms in lithic flake
production, however, are found in numerous contexts. Concave semicircular polishers could be used to produce spindle whirls and at smaller scales have been found to be associated with bead production. Polishing or burnishing could be used in pottery production, the manufacture of bone or wooden tools, and many other tasks. Abrading likely lends itself to hide working, may have been useful in processing wool or cotton, and may have been useful in stripping the bark from wood. Polishers are only definitively associated with specific tasks in the case of lithic production or bead making at this time. In both situations the presence of other material evidence was required.

Grindstones called *Manos* (T4) and *Metatés or Batanes* (T5) were found associated with each other primarily outside the residential terrace dwellings along the canal course. Large grindstones were not found in any of the terraced slope dwellings. *Manos* and *metatés* of several forms were uncovered in the summit top structures. Rocking type *manos* were present, however, they were not well formed and the large flat grinding surface that typically accompany rocking *morteros* were not present. The presence of large grinding stones typically was associated with clusters of artifacts. Grindstones were loci of activity and are interpreted as food processing implements.

Combination tools (T5) that incorporated both percussion and polishing surfaces were often present as replacements for hammerstones, but typically were accompanied by other polishers. Combination tools are interpreted in the same fashion as hammerstones.
Debitage or shatter (T6) was often not found in association with retouch flakes (T7). This appears logical in that most implements were expedient and produced in an area located with a core. Lithics that were curated were rare and typically made of obsidian. Retouch flakes are most commonly found in hearths, whereas debitage is predominantly located in patio spaces. Debitage unless located in an ash lense was taken as the location of past lithic production regardless of the location of the core, especially if the debitage was of a different material than the core present. Debitage is something that one would think of as regularly cleared away, however, it was rarely located along a wall, but seems rather to have been easily trampled into the floor. (Apparently the Wari wore shoes.)

Tablets or *tabletas* (T8) are small rectangular polished stones. Many of the polishers were rectangular in form, however, did not have the appearance of a finished artifact. Tablets may be associated with pigment application of some kind and the rare examples found on Cerro Mejia are associated with this function.

Unutilized flakes (T9) are tenuous to identify and it is possible that there may have been a use that left no mark on these flakes so identified, however, in many cases these objects were found in close association with cores and other implements of the flake making tool kit. It may be suggested that this was a biased identification, however, in the lab during the phase of detailed analysis contexts were mixed and all the larger lithics were analyzed last so that I could not know where the cores were located until artifacts were plotted some months
later. Thus all identifications have a low possibility of exhibiting bias problems of wishful association. Unutilized flakes were interpreted, especially when associated with debitage as a locus of lithic production. Some unutilized flakes, however, appear to have been in a storage or ready for use location and are not associated with other elements of the flake makers kit.

Cores (T10) were large chunks of useful materials that exhibited flake scars and platform preparation, but did not exhibit used cutting, scrapping, or percussion surfaces. Some blade cores were identified, however, for the purposes of this study they have not been identified separately. Cores were often interpreted as the focus of lithic production, especially if they were exceptionally large and not of the portable sort. There are a few instances of cores being isolated from other elements of the lithic production kit and thus interpreted in a storage location.

Adzes or adzadas (T11) have been documented in the literature both as ceramic production implements and as agricultural tools. The few adzes present at Cerro Mejia were all relatively small in size. Additionally, I found no examples of similarly shaped objects in the agricultural fields themselves. The presence of adzes was interpreted as evidence for household level ceramic production (See Pozzi-Escot et al. 1993).

Flakes (T12) were by far the broadest category. The only flake form that was given a definitive functional association was the hoe (T12F1). These large flakes varied little in overall form. In some instance it was clear the flake had been modified to facilitate hafting, usually this was done by blunting the sharp
edges that were to be hafted, but many examples have no modification apparent other than the wear they endured. Flakes did take on common repetitive shapes, however, they typically clustered within a household rather than across households in association with a group of other tools or in association with a particular feature.

Bifaces (T13) were incredibly rare and are represented by larger flakes. Most bifaces were shaped into a triangular or leaf like shape and thus were classified as points (T14). Many points, specifically those made of obsidian are little more than modified flakes with minor retouch. Several appear to be blades. The points fall into four basic forms. Large leaf like points are closely associated with butcher-marked bone remains and are interpreted as knives. Smaller triangular points with concave bases are mostly made of obsidian with some examples in chalcedony. These points often exhibit shatter and sometimes retouch and are interpreted as hafted multipurpose implements. Similarly small triangular tanged points often made of chalcedony with rare examples in obsidian exhibit a similar pattern of wear. Small thin concave base points typically made in obsidian demonstrate a variety of use wear along their edges. One example of this type appears to have been used as a drill. Long narrow triangular points with substantial tangs and denticulated lateral edges are made in a variety of materials and are the most likely candidates for a projectile point. This form is the most rare on the site and there is some suggestion from local archaeologists that it is more closely associated with Tiwanaku sites, particularly Omo, located in the middle Moquegua valley.
Gravers or Drills (T15) are flakes or fragments that exhibit a tip of some kind. In some cases the tip was created through flaking but in other cases it appears that sharp pointed debitage was also favored. Gravers and drills exhibit polish on the lateral edges of the tip and at times the tip may have been broken. Gravers or drills would have a wide and useful application, but has only been interpreted when associated with other elements of bead production.

Type 16 was not given a name, but could be referred to as a spoke scraper or concave edged implement. These flakes exhibit a thin sharp concave surface. The adjacent surface at times exhibits a sheen. These implements are sometimes associated with gravers, but to this point are not interpreted as pertaining to a particular activity set.

Beads and bead fragments (T17) were found in many contexts. They were most commonly made of chrysacolla, but one example was made from local onyx. Beads and bead fragments were found in association with gravers or drills and small polishers with concave surfaces as described above. Bead making was interpreted as a common off season productive activity carried out at the household level.

Bead blanks (T18) were relatively rare probably because they were only recognized in association with beads. They were interpreted in the same way as beads and were found in similar contexts.

Polished Objects (T19) were polishers that exhibited a well executed shape and a high degree of polish. The best example of such an object was an
egg shaped piece made of clear quartz. These were interpreted as elite or ritual objects.

Core tools (T20) were very common and exhibited evidence of flake removal or lacked a bulb of percussion, but exhibited a cutting or scraping edge or percussion activity. These implements were often associated with large grindstones and likely fulfilled some food processing activity.

**Ceramic Evidence for Activity**

The ceramic evidence found on Cerro Mejia was very fragmentary. It is likely that no intact vessels were left behind or that vessels that were not broken were scavenged by later groups. The analysis focused on grouping ceramic fragments by paste. Additionally the fragments that did show some diagnostic features were compared with the more complete vessels from Cerro Baúl to ascertain generalized form, from which possible function could be inferred.

It stands to reason that sherds exhibiting the same paste may or may not be from the same vessel, but sherds with different pastes came from different vessels. Sherds were plotted based on paste and as each room was diagrammed the minimum number of vessels was determined by the clustering of sherds dispersed throughout the space. Diagnostic fragments revealed the possible forms of these vessels. Sherds recovered from midden deposits were not considered.

Contexts exhibited no evidence of secondary deposition and thus the fragmentary ceramics were inferred to have been the result of de facto refuse that at some time was used in the room in which it was found. Vessels that
demonstrated exterior burning were typically associated with hearth features and interpreted as the remains of cooking vessels. Some large vessel fragments exhibited a pitted or crusty interior surface and these were interpreted as fermentation vessels based on recent ethnoarcheological research conducted among the Gamo in Ethiopia (Arthur 2000).

Vessel forms were inferred from diagnostic fragments. Identification from such small pieces would have been impossible if there were not more complete examples reconstructed from excavations at Cerro Baúl. Currently there are few sources in general depicting Wari domestic plain wares so it is difficult to know if the forms present in the Moquegua Valley reflect forms used elsewhere in the Wari Empire. Nevertheless, it is important to note that the various vessel types, jars, bowls, bottles, etc are so diverse in size, form, and method of manufacture that it is possible that the assemblage represents the material culture of several groups and that pottery production was likely produced at the household level for domestic use.

**Faunal Evidence for Activity**

The majority of faunal remains were in a bad state of preservation. Fragments of animal bone in small concentrations were embedded in the floor and larger concentrations of bone refuse were found in some locations in patios. These were interpreted as potential consumption zones. Animal bones were also associated with hearth contexts. In several instances bones exhibiting butchering marks were with obsidian knives. Small fragments of shell were in some contexts, but for the most part identifiable animal waste represented the
Figure 5-A. Fermentation damage to interior of ceramic vessel, Gamo, Ethiopia (by courtesy of John Arthur 2000).
remains of camelid or deer. Rodent and avian remains were restricted to the summit residences.
CHAPTER 6
CERRO MEJIA: TOWN AND HOUSE

The Town

Cerro Mejia, the largest Wari residential settlement in the Moquegua colony, is located adjacent to Cerro Baúl and is surrounded by agricultural fields. The site may have been more than a village because excavations have revealed not only evidence of residential remains but production areas, ceremonial, and public structures. The settlement is also divided into barrios and variations in the material remains and household spatial organization demonstrates that these divisions likely were significant ones. Since administrative facilities are present Cerro Mejia is a tertiary center, a town.

The settlement was organized in a meaningful way and understanding this organization was instrumental in the interpretation of the remains in the residential contexts (Figure 6-1). There are two primary zones of residential occupation, the summit of the hill and the terraced southeastern slope facing Cerro Baúl. An irrigation canal runs along the southeastern slope and divides the majority of residences from the agricultural fields below. Along the canal at the base of all the barrios there is a public processing zone for agricultural products characterized by many grinding stones, massive metatés with their manos still close at hand. Near the point where the canal divides, one branch continues along the slope of Cerro Mejia the other crossed over an aqueduct to the slope of
Figure 6-1. Aerial photograph of Cerro Mejia.
Cerro Baúl, there is a low plateau that appears to have been the location of ceramic firing and metal fabrication. In this area large monumental stairs ascend the hill slope and provide access between the summit of Cerro Mejia and Cerro Baúl. South of the workshops on a lower spur there is a complex of plazas known as El Paso. These plazas are a later construction, however, they and the earlier structures in this zone were associated with ritual practices. There are a few isolated structures just above the canal on the northeastern slope facing Cerro Petroglifo, however, these structures were not tested.

The summit of Cerro Mejia is bound by seven thick wall segments, which are located along the steepest drop offs in the terrain. The summit architecture is nearly monumental in nature. The majority of the structures are large multidwelling residential structures. Some of these structures exhibit elaborated architecture that suggests they may have housed families of elevated status. In the summit's center there is a large platform and plaza complex that served as the stage for public ceremony and administration (Figure 6-2). The complex includes two platforms one to the north and one to the south, the platforms face westerly in direction. Smaller platforms are located along the north side of the open space. These structures seem to represent dual organization, likely of a political nature, and may have divided the people living on the summit into two groups or moieties. One large structure was excavated from each of these groupings. Unit 118 is a multihousehold residence from the southern portion and Unit 145 is a formal patio group structure possibly representing the leader’s
Figure 6-2. Cerro Mejia summit structures.
house of the northern part of the summit. The significance of these structures will be discussed below.

The domestic terraces of the hill's southeastern slope are divided by large walls, which run along *quebradas*, into six barrios (Figure 6-3). Barrio 1 on the eastern extent of the southern slope exhibits very large monumental structures that may not be residential. This area was not tested because the walls were made of megalithic stones many of which had toppled and covered the floor surfaces. Barrio 2 contained residential Unit 3 and the monumental stairs leading to the summit. Barrio 3 contained residential Unit 4 and along its western boundary wall there is a modest stairway to facilitate access to residential structures, but it does not reach the summit. Barrio 4 could possibly represent two barrios, but is divided by a deep *quebrada* rather than a wall. Barrio 4A contained residential Units 5 and 6. Barrio 4B contained, Unit 7, a small probe into a low mound that may have been the remains of a melted adobe structure, but the probe revealed no clear use surface. Barrio 5 was not tested because the remains were very monumental in nature, however, just below the irrigation canal of this barrio in the agricultural area a small residence was excavated, Unit 8. Barrio 6 exhibited the sparsest concentration of residential settlement probably as a result of the steep nature of the hill in this area. Unit 9 was located at the highest level in this barrio, but was excluded from this study.
Figure 6-3. The Southeastern Slope of Cerro Mejia.
Unit 3

Unit 3 is a small residential structure consisting of three rooms, two that were enclosed and an open patio in between (Figure 6-4). The length of the terrace is oriented east to west. Room A is the patio, Room B is the room east of the patio and Room C is west of the patio. Two hearths were present, Features 5 and 7, one in each enclosed room. Patches of ash were present throughout the structure and represent garbage pits below the surface of the floor.

**Room A.** Room A is a patio with no back retaining wall. There are several small dispersions of ash present. These contain burnt material that was discarded directly into a hearth as well as other refuse that has not been burnt. Therefore these dispersions represent hearth cleaning as well as general episodes of house cleaning. Since these dispersions occur at or below the floor surface they are probably from the house occupation itself rather than postabandonment deposition.

Ceramic fragments were predominantly from two large necked jars. They are concentrated along the west wall and in quad 25 and 41. Other vessels possibly present are a one handled serving pitcher, a lyre cup, and three bowls of different forms (Figure 6-5). Only two sherds exhibit decorations, however, there are many fragments pertaining to the paste commonly decorated (Paste 4), therefore it is possible that more of the vessels are present but the slip and decoration has deteriorated. See Chapter 4 for a discussion of formation
Figure 6-4. A) Unit 3 room plan. B) Unit 3 Room A ash dispersion.
Figure 6-5. Unit 3 Room A ceramic vessels.
processes. The distributions of all ceramic sherds by paste category are located in tables by room in Appendix D.

Lithic material was abundant in the room especially in the ash dispersions, however, these artifacts will be excluded from the following discussion because they are clearly in a secondary context. Lithic debitage was clustered along the east wall, also the location of the only unutilized flake in the room. Debitage was present in the center of the room and in front of the threshold to Room C. Polishers in quad 40 and a hammer stone in quad 9 complete the lithic manufacturing tool kit. These materials are not found closely associated and there is no core present therefore a specific locus of lithic production cannot be identified. Similar lithic tools are scattered about the room and likely represent two to five individuals sitting along walls carrying out redundant household activities. This will be discussed further below (Figure 6-6). Unique materials include the hammerstone in quad 9 and the grindstone or anvil found in quad 26. It would seem that these large implements were shared by the family group but smaller flakes, gravers, and concave edged implements had individual users. The generalized dispersion of lithics, rather sharp tools, appears odd, "how would one walk through such a space without cutting themselves?." That certainly is a good question. I would suggest that at least some of these tools were likely kept in wall or floor niches or small hollows in adobe walls. Typically the elevational differences could be examined to be more definitive, however, that evidence is not available for this unit. Lithic artifacts and their frequencies are documented in tables by quad. This information is grouped by room in Appendix D.
Figure 6-6. Unit 3 Room A artifacts and voids.
Faunal material from this structure was primarily splintered fragments of mammal bone. Weights of bone in grams are shown by room in Appendix D. The highest frequencies of bone by weight were along the north wall with a sizable amount also being present along the west wall. This pattern may reflect cleaning practices or demonstrate where individuals were seated during consumption of these faunal resources. This will be discussed further in the following chapter pertaining to common patterns since relative bone frequencies can only be established in light of all the residential contexts and in reference to the division of space and its associated concepts. Additionally, interpreting this kind of contextual data is best done in reference to all the materials present as well as their notable absence, voids (Figure 6-6).

The presence of artifactual voids is directly relevant to determining issues like the one discussed in the previous paragraph. Recognizing voids in the space of Room A is made difficult by two factors. In several areas the excavator inadvertently penetrated to levels below the floor. In most structures this would not be a significant problem, however, since there are numerous subfloor garbage deposits in Unit 3 the mingling of floor and subfloor materials makes it difficult to make conclusions with confidence. Secondly, it is clear that at least one wall niche was present. Potentially many materials on the floor could have fallen from various wall niches, hanging baskets, or its storage location on top of the roof. Therefore all of these possibilities may have conspired to cover up voids representing a sitting location during work, consumption, and other
activities carried out in the space of the structure. With these difficulties being made clear, there were several recognizable voids.

Voids were indicated by the lack of mapped artifacts as well as low frequencies of materials recovered from the screen. Obviously if a void straddled several quads and was directly associated with production activities and, or consumption artifact frequencies alone could hide many of these areas. Void 3A1 is located in the northeast corner of the structure. It extends 80cm south of the north wall and is approximately 180cm long. This space would be large enough for a sleeping mat and is directly associated with a high concentration of faunal refuse. Void 3A2 is located just north of the access to Room B and may be related to traffic patterns through the house, however, it is also possible that this small area, 80cm by 80cm, was a sitting location. Void 3A3 is another large area measuring at least 1 meter wide and 180 cm long located near the south wall. A moderate bone concentration is located between voids 3A2 and 3A3 in quads 56 and 57. Void 3A4 is located in quads 10, 11 and 27 it is an odd shape and not directly associated with the wall. It may represent the location of a furnishing or storage that prevented objects from being deposited in this area or the location of a floor loom, it may also be another sleeping or sitting zone. The space is 210 cm at its longest dimension, diagonally southwest to northeast and 80 cm in its narrowest northwest to southeast measurement and 120 at its maximum measurement in this direction. In contrast to the voids previously described there is also a cluster of artifacts just in front of the elevated threshold to Room C. This stoop would have been a nice comfortable spot to sit and carry
out activities such as spinning, with the associated spindle whorl, and eating having a moderate to high concentration of bones as well as lithics in this area.

A special feature that pertains to Room A was a wall niche located in the east wall with a base approximately 100 to 160 cm high. Objects that likely fell from this niche are located in quads 24, 25, 40, and 41, these include fragments of a metal object, two lithic points and a small stone *tableta* coated with a red pigment. It is also likely that the two decorated ceramic vessels may have originated from the niche. The contents of the niche may indicate that the patio not only served as a setting for common domestic activity, such as production, consumption, and sleeping, but also was the setting for family scale ritual practices.

**Room B.** Room B is a small, enclosed room to the east of Patio Room A (Figure 6-7). There is a narrow access between the patio and the enclosed room. Room B also has another access to the exterior in the east wall. Feature 5 in this room was a large hearth. There were other patches of ash present that were possibly pot soots, Feature 2, 3 and 4. Feature 1 was a garbage pit indicated by the presence of bones without burning mixed with the ash.

Ceramic fragments were most densely concentrated around the hearth and are primarily from a large two handled cooking vessel. It is possible that the pot was suspended over the fire in some manner since the majority of hearths at Cerro Mejia have no stones or other structure but rather are ash pits overlying fire hardened concavities. A small flask with a band of chevrons around the neck was found north of the hearth and another chevron motif, although vertical, was
Figure 6-7. Unit 3 Room B features and ceramic vessels.
found on a cup fragment. The flask revealed an important fact, the slip and
decoration was preserved on four of the five rim fragments, but the fifth appeared
to be plainware.

Fortunately the lithic artifacts are relatively unscathed by the formation
processes at the site. Room B has two areas of activity associated with lithic
implements. The majority of artifacts were found around the hearth and consist
of utilized flakes exhibiting denticulated edges with rare examples of retouch
(Figure 6-8). Two points in obsidian were both made in the same form with
concave bases that were likely hafted knives, one on each side of the hearth.
Another point made of red quartz is very anomalous. It appears to be a reworked
base fragment, tanged in form with no evidence of use. This point was located in
quad 22 and may have still been in the process of modification. Lithic production
waste is clustered west of the hearth and is predominantly debitage as opposed
to retouch flakes. There are no cores of chert present in the room, but the
debitage seems to have originated from a large reduced flake in quad 22. This
implement was found in association with a combination tool, as well as a large
percentage of the debitage. Another combination tool was found in the northwest
corner, possibly in a storage location. There are three gravers and four polishers
west of the hearth in association with a small quartz bead blank, a small
chrysacolla core, and associated debitage.

The other zone of production activity is in the east doorway, perhaps to
shed light on the subject. Artifacts are two grindstones, one appears to have
been used as an anvil with the other, which is an ovoid implement with both
Figure 6-8. Unit 3 Room B artifacts and voids.
pointed and flat pounding surfaces at either end. The form of these artifacts suggests that they were used in food preparation and may have been used both inside the enclosed room and outside as well. I suggest they were portable because although they are large relative to the other lithic artifacts in this structure they are small in comparison to the *manos* and *metates* in structures on the summit.

Another significant cluster of lithic implements was found in the strata among wall fall and likely represents implements stored in a wall niche. In quad 5 there were two medium sized adzes, associated with eight utilized flakes and one unutilized flake. These flakes exhibit wear from polishing and one has striations. These adzes likely represent ceramic vessel production carried out occasionally by the members of the household. A broken hoe was found just south of the west doorway and represents agricultural work.

A unique find in the house was the broken blade portion of a *tumi* presumably used as a knife. It was recovered from quad 5 between two fragments of the decorated flask and adjacent to a cluster of animal bone on the floor. The tumi is made of an alloy predominantly copper mixed with silver and is 1.3mm thick. Other metal fragments found in Room A do not match this object. This object as well as the flask may have been located in a wall niche, however, their location in direct contact with the floor surface suggests that they may have been in or near their primary context.

The lithic materials and other tools mapped in this structure do exhibit some duplicity but there are also specialized activities present and thus may
represent the tool kits of two to three individuals sitting and working east, west,
and north of the hearth. The voids in the enclosed room are small and may
represent unprepared work locations as opposed to mat covered sleeping areas.
The largest void, 3B1, and the only one that could be used for sleeping was
along the east wall ranging from 80 to 60 cm wide and up to 2m long. Void 3B2,
which is in close association with the greatest number of implements and a high
bone concentration as well as the hearth, is located just northwest of the fire
approximately 60cm by 80cm in size. Along the south wall of the room in the
path between the two accesses there is a low concentration of artifacts and
faunal refuse, this was obviously a high traffic zone and when the doors to the
structure were shut may have also functioned as a sleeping area.

Room C. Room C is a small enclosed room to the west of Patio Room A
(Figure 6-9). This room has a hearth, Feature 7, just south of the northeast
corner, and two ash features that are garbage pits, Features 6 and 8. Access to
this enclosed room is gained from the patio via an elevated threshold. The
functions of Room B and Room C appear to be analogous, however, there is a
clear difference in the quality of the stone masonry construction between the two
structures with Room C exhibiting a more rustic and irregular quality.

Ceramic vessels are primarily bowls and are located along the east wall.
There are at least three all exhibiting different forms. Many sherds are clustered
along the opposite wall around the hearth, however, there is only one diagnostic
fragment that of a 26cm diameter bowl or neckless olla. There was also a small
Figure 6-9. Unit 3 Room C features and ceramic vessels.
necked jar near the southwest corner, however, this may have been recovered from Feature 8.

Lithic materials are clustered into three activity spheres none of which are focused in the immediate vicinity of the hearth. Retouch flakes are more prominent than debitage and consist primarily of obsidian. In quad 61, the southeast corner and smallest locus of activity, there is an obsidian point found in association with obsidian retouch flakes. The point has a broken base and exhibits no use wear, therefore it may have been damaged in production and is near its primary context. Another activity zone in the northeast corner consists of an obsidian flake exhibiting haft wear and a beveled use edge, a shovel shaped obsidian flake with a cutting edge, and a primary flake in rhyolite with a cutting edge. These materials were found in association with a ceramic spindle whorl. It is tempting to suggest that these implements were in some way involved in spinning or yarn production or at least reflect female tools, however, this can only be suggested after examining all lithics found in association with spindle whorls, which unfortunately were too few to make any confident conclusions.

The third cluster of lithic remains lies in the middle of the room and reflects several activities. An obsidian point recovered in quad 46 exhibits extensive shatter from use and is the distal fragment broken at the haft juncture, suggesting it was used and broken inside the room. A possible core was located in quad 47, however, no clear hammerstone or combination tool was present. Similarities in the lithic assemblage of Room B include a concentration of gravers and drills possibly used to produce the chrysacolla bead found in quad 46. There are
Figure 6-10. Unit 3 Room C artifacts and voids.
numerous flakes, utilized cores, a concave edged implement, and an unutilized flake. Additionally the presence of a hoe located just inside the access parallels its position, handy by the door, in Room B.

The lithic activity in conjunction with artifactual voids and the concentration of faunal refuse presents a pattern of two individuals one sitting along the north wall the other along the south. The northern void, 3C1, is 60cm by 160cm and the southern void, 3C2, is at least 60cm by 120cm. Each person had their own activity area as well as utilizing a centralized zone of common activities. Lithic activity was not concentrated in the immediate vicinity of the hearth, however, quad 47 is the highest concentration of faunal refuse in the structure. Moderate concentrations of faunal refuse co-occur with the presence of lithic material, but is nearly absent from the northern void and minor in the southern artifactual void.

The occupants of Unit 3 had access to several quality products, metal, decorated ceramic wares, chrysacolla, and the relatively rare red quartz. At the same time they practiced farming and bead making and potentially formed their own obsidian points and ceramic vessels. Members of this residential group also participated in many productive activities and rituals together in the common patio they shared.

Unit 4

Unit 4 is a complex set of terraces that were divided into five areas (Figure 6-11). Room A was an enclosed room occupying its own terrace, below it on a lower surface another terrace retaining wall supported room B, Room C an alcove with a curved back wall, and Room D, a patio. Room E is a terrace above
Room C, that was an additional sleeping/storage area or enclosed food preparation room. The goal of the project was to excavate entire structures, however, Rooms C, D, and E were not completed because of time constraints.

**Room A.** Room A has a hearth centrally located along the south wall, Feature1. This space closely resembles a rectangular room from a formal patio group. The enclosed room is 3.2 m wide and 6.2 m long. A doorway with an elevated threshold allows access to the rest of the structure in the east wall. This room appears to have been the first constructed in this grouping (Figure 6-11).

There were many ceramic remains in Room A, however, the only diagnostic fragment was a single handle. Based on paste differentiation there were likely four to five vessels present. All of these exhibit some charred fragments and therefore they all functioned as cooking vessels or came from midden contexts. In quads 23 and 24 there were two fragments of spindle whorls, a whole example, and a sherd exhibiting characteristics that suggest it was in the process of becoming another. These artifacts associated with spinning were found north of the door in an area of light artifact dispersal.

Lithic materials recovered from Room A were limited to obsidian points, flakes, and retouch (Figure 6-12). It seems to be unrealistic that any structure would rely solely on this resource for lithic implements. Therefore I suggest that these findings are based on excavator error. Fortunately, this oversight was quickly resolved by collecting local lithic resources and exhibiting that curated, expedient, and waste were all desirable for collection.
Figure 6-11. A) Unit 4 room plan. B) Unit 3 Room A features and ceramic vessels.
Nevertheless, Room A exhibits a unique character because of the extremely high frequency of faunal refuse present. Just west of the hearth 579.7 grams of bone were recovered from one meter square. Faunal bone is scattered throughout the room, embedded into the floor matrix in various states of preservation. These materials are not associated with ash dispersions that suggest the presence of midden pits nor is there clear evidence to suggests that the bone was being curated for tool production or other processing. I suggest that in association with the function of Room B, discussed below, this large quantity of faunal remains may represent evidence of feast preparation. The scattering of bone material leave few sizable voids that can be clearly identified as a mat covered resting or sitting area, however, because of the dispersion of material along the east wall just north of the door and the presence of several spindle fragments this zone is a possibility. Nevertheless, I suggest the room pertained to the main food preparation venue and do not rule out the possibility of its use as a sleeping area. After all not all of the bones present show signs of burning and therefore with the exception of those embedded into the floor some could have been meat hanging from the rafters or bone refuse discarded on the roof.

**Room B.** Room B is a long area leading to the patio Room D. The width of the wider western portion of the space is equal to Room A. This section is nearly 4 meters long. The space then turns north and is almost 2 meters wide and 2 meters long. This space is not clearly divided, but Room C, a well defined alcove, will be discussed separately. Thus Room B consists of an L shaped area
Figure 6-12. Unit 4 Room A artifacts.
There are several dispersions of ash, however, none of these patches represent hearths. This area is sparse in material remains compared to the other spaces in the structure. A great deal of erosion is present along the south wall, the front of the terrace. This likely reflects the traffic pattern through the structure, from the entrance to the doorway in the west wall, and access to the main activity areas—the enclosed room and the patio.

There are very few diagnostic ceramic fragments, the majority of materials present are slipped ceramic sherds, likely the fragments of serving and consumption vessels (Figure 6-13). There are at least six vessels present based on rim diameters, decorated fragments, and paste differences. Several of these vessels have the majority of their fragments in superior levels and may have been stored in wall niches in the north wall when not in use. Therefore I suggest this was an area used to serve and consume food and drink and may have been an area where those outside the household group were welcomed, one might compare this space to a parlor, but it was likely multifunctional. Lithic remains, in contrast to Room A, include no obsidian implements. Materials were found both on the floor and in the superior strata. Therefore it is likely that wall niches also held implements and were not purely for display purposes. A broken, nearly spherical, combination tool made from a friable material may have not functioned successfully as a hammerstone and was primarily used for grinding. The remainder of the artifacts consisted of small to medium sized utilized and unutilized flakes without retouch. Nevertheless retouch and debitage were present (Figure 6-13).
Figure 6-13. Unit 4 Room B ash features, ceramic vessels, and artifacts.
Bones also are present in the superior levels, however, as was discussed above (See Chapter 3), modern plants derive nourishment from buried bones. Bones are often found riddled with rootlets. The bones in strata S and A may have been lifted by plant action, washed down with fine sediment because of their light weight, or have been transported by foraging rodents or lizards inhabiting the ruins. Bone concentrations only reflect faunal material found near, on, or embedded into the floor. Voids in this room cannot be discussed because of a discrepancy between written notations and mapped materials.

Room C. Room C is a small alcove located immediately west of the entrance into the plaza. It is important to note that the space in this room is not rectangular because it’s back terrace wall is curved rather than straight. The curvature of the back wall and the double construction are the reasons why this space was given a separate designation. Room C was a later addition with the walls adjacent to rather than abutting to the previous wall. An area of 20 centimeters wide along the southern edge of the terrace was not excavated due to time constraints. Therefore this space was not excavated in its entirety. There are few sherds. Lithic materials consist primarily of debitage, but utilized and unutilized flakes and core fragments are present. Bone was recovered in very low amounts with only 1.3 grams being present in the small circular ash patch located in quad 28 (Figure 6-14). This room may have had some significance both because of its curvilinear form and because plaster fragments suggest that the wall was once white. The room was also kept relatively clean and therefore the entire space could be classified as a void.
**Room D.** Room D is an open patio area that likely had a low bench, approximately 30cm in height, along the north wall of the area, however, excessive damage from erosion and falling rocks made it impossible to conclude the presence of the bench with certainty. The patio has no clearly defined back wall, which was common among the patios associated with the terrace dwellings. The patio is more than 3.5 m by 4m in size. Quads along the east and southern edge were not excavated because of time constraints. This room extended beyond the original grid for the unit, thus there are irregularities in the way quads were designated. A number of ash dispersions were uncovered. These were in quads 98, 102, 103, 104, 107, and 108 (Figure 6-15). The stratigraphic level of this ash and the amorphous way it is scattered over the floor suggests that it may be the remains of a burnt roof rather than buried garbage refuse. This structure may have been ritually abandoned.

Ceramic remains are numerous and varied. In the northwest corner of the structure on the bench there were the nearly intact remains of a miniature jar, and the remains of a small serving vessel, the base being 6cm in diameter it likely represents a cup. Several sherds of another cup with red slip, 2.5YR6/6, were just south of the western doorway. Two large jars were located on the floor against the bench or may have fallen from it. A third vessel may have been a serving pitcher or another storage jar. The remains of a fourth jar with handles was clustered in quad 103. Along the east wall of the structure the remains of several slipped vessels, one a decorated cup another a large open bowl with interior slip, a third is unidentified, were found in association with a large ash
Figure 6-14. Unit 4 Room C features.
dispersion (Figure 6-15). The ceramic vessels in the patio represent both storage and consumption activities. The presence of the charred remains of a miniature vessel may represent ritual activity of some kind since these vessels are common in offering contexts.

Lithic materials were found both on the floor and in the level that probably represented the surface of the bench (Figure 6-16). A sizable core with blade scars was found in quad 96, polishers for preparing the striking platforms were in quad 106, however, no hammerstone or combination tool was uncovered. Nevertheless many unutilized flakes, debitage, and retouch flakes were recovered and suggest that the production of lithic artifacts was carried out in the patio space in the vicinity of the core's storage location. Small obsidian retouch flakes also demonstrate that the points curated in this area may have been reworked by its occupants. There were five points in the patio, four in obsidian and one in chalcedony. These artifacts all reflect different forms and labor investments. All showed evidence of use. Two of these artifacts were found in the superior strata and may have been stored in wall niches or other locations in the patio's superstructure.

Other lithic artifacts include a chrysacolla bead blank, a graver, flakes that exhibit sheen, striations, or denticulation, and utilized core fragments. Lithic artifacts were found in all quads, however, their density near the bench area suggests that this area was the primary focus of activity.

Faunal refuse was scattered about the room and present in moderate concentrations on the bench. High concentrations were present among the ash
Figure 6-15. Unit 4 Room D ash features and ceramic vessels.
dispersions in quads 92, 98, 99, 104, and 109. Several elements were identified and all pertain to camelid remains. Teeth located in quads 90 and 109 may represent fragments of the common mandible tools hafted to wooden handles when recovered from more arid regions.

Sitting area within this room may not be clear because excavations did not extend to include the east and south walls. There are two clear voids and additionally it is of note that artifacts are sparsely distributed directly in front of or to the south of the bench construction. There is a void, 4D1, just south of the access in the west wall in quad 90. This area extends 70cm from the wall and approximately 150cm long and is associated with a serving vessel to the south and high concentrations of faunal refuse both to the south and east. Void 4D2 straddles quads 97, 98, 102 and 103. It is 100cm wide and 130 cm long and adjacent to the bench near a moderate concentration of bone, among the majority of lithic implements, and just west of the location of the storage vessels. This void could be the location of an object such as a table, fuel, or storage sack rather than a sleeping area or it may have been a location from which work was carried out.

Room D was a patio where productive, consumptive, and ritual activities were performed. It is unclear how this space differed greatly from the corridor, Room B. The bench in this structure was wide enough to have been used as a sleeping area, however, it appears that this space was used for storage, a location where large jars and lithic artifacts were kept when not in use.
Figure 6-16. Unit 4 Room D artifacts and voids.
Area E. Area E was not excavated in its entirety and it is unclear if it was a portion of a room or an activity area exterior to the structure. A small patch of ash was located in the entry to this room. This space was accessed from room B the corridor possibly via stairs or a ramp, however, neither were clearly identified during excavation. It is possible that a perishable ladder was used to ascend to the higher elevation of Area E.

Ceramic fragments indicate that one cooking vessel with handles was present and several other vessels including a handled storage jar, a jar without handles, and a cup or small bowl (Figure 6-17). The most significant find was a fragment of a polychrome face neck jar, however, so few fragments were found within this paste category that the artifact cannot be definitively placed within the room. Of course since this space was not completely excavated it is possible that more fragments of the vessel are elsewhere in the structure. Based on the vessel assemblage Area E may have duplicated the function of Room A as a sleeping and food preparation area, however, without clear indication of a hearth this conclusion is difficult to make. It may have also served a storage function.

Few lithic remains were recovered, and those near the floor number only five. A sixth item a grindstone, the hand held portion or mano, is visible on the excavation photo but was noted as not collected. This demonstrates that perhaps the excavator was not collecting all the lithic material during the excavation of this unit and therefore no definitive conclusions can be made about the activities that were practiced in this context. Nevertheless moderate
Figure 6-17. Unit 4 Room E features and ceramic vessels.
concentrations of faunal refuse in association with the lithic flakes recovered suggest the processing of animal products in this room (Figure 6-17).

Unit 4 may have housed more than one family. Room A functioned as the enclosed room, an area for food preparation and possibly sleeping. Room B served as an entryway and consumption area, Room C may have had a significant ritual function, but such a suggestion rests on minimal evidence. Room D was clearly a patio that housed a variety of productive tasks. If we conclude that Area E was a second cooking venue then the residence housed an extended family group of two discrete nuclear units, sleeping and cooking apart but occasionally eating or feasting and carrying out many daily tasks as well as ritual together. Alternatively Area E may have had a storage function or served as an added sleeping area, in either case we are likely looking at a structure with a long life cycle that shows evidence of additions and modifications. The layout at the time of abandonment demonstrates that the spaces included areas for the part time social administration of the immediate neighbors or barrio members under the leadership of the senior male in Unit 4.

Unit 5

Unit 5 was a simple structure consisting of a small enclosed room, Room A, and an adjoining patio, Room B (Figure 6-18). Area C a ramp that lead to the entrance into the patio was also excavated. This structure represents the simplest dwelling dating to the Middle Horizon excavated on Cerro Mejia. Excavation of the entire structure revealed an array of common residential activity patterns.
Room A. Room A is 1.8x 2.5 m. The architectural remains, as well as the amount of wall fall suggest that this room was constructed of stone masonry with low walls and was enclosed and roofed. A small doorway in the east wall leads to an ample patio, Room B. The remains of an incurring bowl and a large handled jar were found near Feature 5, a hearth, but have little evidence of burning. A soot mark, Feature 1, suggests that cooking vessels were associated with the hearth, however, evidence of the cooking pot itself remains elusive (Figure 6-18).

This small, enclosed room is notable for the 84, mostly of obsidian, retouch flakes concentrated in and near the hearth. Only one small obsidian flake is present and thus it would appear that the implements that were formed or reworked in this room were not abandoned with the dwelling. There are two hammerstones, a polisher, and a combination tool, as well as several unutilized flakes on the floor. Debitage was limited to the vicinity of the hearth, although there were no cores left in this room, flakes were produced here. An onyx bead blank, gravers, concave edged implements, and a small adze also lend evidence toward understanding the activities that were carried out in this small space, bead production.

Small splintered fragments of bone are embedded into the floor throughout the surface of the room. High concentrations of bone were north of the hearth in quad 23 with moderate concentrations on the hearth edge, quad 33. There are no apparent voids and the room is very small. It is possible that this space was not used for sleeping or perhaps it was employed seasonally for
Figure 6-18. A) Unit 5 room plan. B) Unit 5 Room A features, ceramic vessels and artifacts.
sleeping, during colder months. The seasonal change allowed the accumulation of small artifactual debris in this space. This room clearly is associated with the processing of animal products because of the numerous animal bones present and the association with extensive reworking of obsidian.

**Room B.** Room B is a patio area with a low bench along the north and east borders (Figure 6-19). As with other patio structures there is no clear back retaining wall. The bench structure averages 20 cm above the floor surface and is approximately 70 cm wide along the north wall. This room has a third use surface, that may have functioned as a wide footing for a vegetable superstructure, or more likely served as an irregular, but relatively flat, storage shelf behind the bench. The third surface or shelf area is approximately 50 cm wide and elevated 30 cm above the bench surface, 50 cm above the floor. It is far too rock riddled to have served as a comfortable sleeping platform, but is practically devoid of artifacts, thus may have been an area for storage. Hopefully soil chemical analysis will clarify the use of this space. Likewise the bench, which exhibits the remains of many activities, was not a sleeping location, but rather provided a surface for several varied activities. Together Room B is 2.6 m wide and 3.4 m long.

Several features in this room suggest the variety of activities carried out in the patio space. Features 2 and 4 represent areas that were subjected to heat in such a way that left discolored and hardened clay below light gray patches of ash. These features are similar to pot rests like Feature 1, however, they demonstrate a greater level of heat alteration that implies contact with objects
Figure 6-19. Unit 5 Room B features, ceramic vessels and artifacts.
that could transmit higher temperatures. Feature 2, which is flush with the bench surface, and Feature 4, which is elevated 10 cm above the bench surface, may represent an activity specific to Unit 5. I suggest perhaps heated rocks were important to some activity and were placed in these locations to facilitate some sort of productive task. Feature 3 represents the location where a vessel was sunken into the surface of the bench. Feature 6, a series of small cylindrical voids filled with volcanic ash represents the remains of a weaving loom just west of the door. The patio was entered from the south wall, near the southeast corner via a ramp paralleling the front of the terrace. The ramp, Area C, will be discussed below.

The remains of at least four vessels were found scattered on the floor and bench surfaces (Figure 6-19). A storage vessel was sunken into the surface of the north east corner of the bench and was associated with ash patches and several sooted rocks, however, there is no hearth located in the patio. Another jar was located on the floor possibly in the corner against the bench. Fragments of a decorated cup were located on the east portion of the bench and adjacent floor surface. A pedestal bowl base and associated fragments were clustered in quad 31.

The floor surface revealed evidence for some lithic production and small scale grinding. A small number of retouch flakes was found on the floor and appear to have been in the area of the loom. Other items on the floor include gravers, concave edged implements, utilized and unutilized flakes. A small metaté fragment in quad 31 was found relatively near a combination tool in quad
The bench was used as a work surface. The majority of debitage was found on the bench. There were also polishers, a graver, and two bead blanks, as well as flakes. Also unique was a large irregular tablet on the east bench that was found with the residue of red and yellow ochre. It was similar in size to the *metate* fragment but not as smooth. The associated hand held grind stone has matching red pigment embedded in striations and was found on the edge of the bench surface in quad 19. A flake with red pigment was also found adjacent to the tablet.

Faunal refuse is scattered in small quantities throughout the room and on the bench surface. The highest concentration of animal bone was found in the vicinity of the loom. This may be because bone is the primary material of which weaving implements are made. No obvious voids were notable. There are very few artifacts on the wide elevated zone behind the bench, however, it is a rocky uneven surface. It is possible though that this was used as a sleeping area that was covered with mats, blankets, or other soft material that mitigated the irregularity of the underlying surface.

**Area C.** Excavation of Area C, the ramp revealed relatively large lithics and thus this "front porch" may have been an area utilized for primary lithic reduction, since waste from the interior of the structure is represented by tiny retouch flakes and relatively small pieces of debitage. No hearth ash, and only minimal amounts of bone were present. Ceramic sherds occurred only in the surface levels. Therefore it appears that this area was not used as an area for regular discard. In contrast the adjacent *quebrada* was full of cultural material,
but this area was not tested because of the concentrated erosion that occurs in these gullies.

Unit 5 is extremely significant because it represents a simple isolated structure and therefore can be used as a baseline to understand the basic repertoire of domestic activities. The presence of a bench in this structure also allows comparisons in activities between this low order context and higher order contexts that typically have benches.

Unit 6

Unit 6 is a small terrace dwellings with two rooms, Room A and B, and an exterior area that was filled with midden, Area C (Figure 6-20). This structure is not easily compared with the other structures because the presumed patio was filled with midden and thus provides no primary context for analysis.

Room A. Room A is 2.6 meters long and 2.8 meters wide. A door way in the west wall approximately 70 cm wide has an elevated threshold and connected this room with Room B. Excavation of Room A revealed a very similar general pattern to that of Room A Unit 4. The back north wall was devoid of artifacts and likely represented an area to sit and sleep. Activity was focused around a hearth in the center of the room, Feature 2. This hearth itself was centered in quad 15 with ash being dispersed toward the southeast corner. Feature 1, an ash dispersion was located in the south west corner of the structure and likely represents a subfloor midden that was breached during excavation of the floor (Figure 6-20).
Figure 6-20. A) Unit 6 room plan. B) Unit 6 Room A features, ceramic vessels, artifacts.
Ceramic fragments were most numerous in the area around, Feature 1 and in the area around the hearth, Feature 2. In Feature 1 there were the remains of a large jar, and possibly a serving pitcher with a single handle. These vessels are in secondary context and represent broken vessels previously used in the house. A pedestal bowl base and associated fragments were found in a superior level rather than in the ash and may have been on the floor above the buried midden. The hearth was associated with a single jar with minimal evidence of burning. Also a fragment of a face neck jar with incised tear marks filled with red pigment was found both in Features 1 and 2. Feature 2 also contained many body sherds from this vessel. This suggests that the vessel had been discarded in the hearth and then not all the fragments were removed during hearth cleaning. Refuse from the hearth was then buried in the floor, Feature 1.

Lithic remains were also concentrated in the hearth and the refuse midden. All retouch and debitage was in the features. A drill, two concave edged implements, a graver, three flakes, a combination tool and a point were recovered from the floor surface. This structure is remarkable for the number of points present as well as microblades, which were found both on the floor and the midden contexts. Discarded in Feature 1 was a lithic point. Feature 2 contained two lithic points and a broken chrysacolla bead.

The presence of bone is very low throughout the room. Faunal refuse is completely absent from the area along the back wall and thus this likely was covered with bedding and used as a sitting and sleeping area. The highest concentration of animal bone outside the hearth and midden context is adjacent
to the hearth, but the total weight is low in comparison to similar contexts. In general this room is very tidy and may represent an area that was recently cleaned.

**Room B.** Room B has a back wall and is smaller than Room A, therefore it can not be described as a patio. It also can not be considered a duplication of Room A because it has no hearth. The doorway between Room A and Room B has an elevated stone threshold on which was found two utilized sherds with extensive wear. There are several features in Room B. In the southwest corner is an unusual dispersion of red sediment, Feature 4. In conjunction with the worn sherds this may reflect ceramic vessel production. Feature 6 is a pot soot in the northeast corner or perhaps where hot stones were placed to heat the room. Two depressions, Feature 3 and 5 may have been areas where pots were sunken into the floor, however, there were only 3 sherds present in Feature 3 and no sherds remaining in Feature 5. Features 3 and 5 may just represent storage pits with very little structural preparation.

Room B has very few ceramic remains. The only vessel that was identified was a small exotic incurving bowl made with a fine paste having no visible inclusions. Six lithic points were recovered from Room B along with one flake and an obsidian retouch flake. The points were made in different styles including one long narrow obsidian point with a diamond cross section, three examples with thin cross sections and concave bases all in obsidian, and two tanged points with thin cross sections. All appear to have been made in the same manner with very little work on either face. Edges are worn with shatter
Figure 6-21. Unit 6 Room B features, ceramic vessels and artifacts.
and in several cases have been reworked. All examples show evidence of hafting and were likely used as small knives. Three chrysacolla beads were found in association with the red pigment, Feature 4. A fourth bead made of local onyx was recovered from quad 10.

Faunal refuse was equally sparse in Room B. The highest concentrations were located in Features 3 and 4, however, these both represent weights under 10 grams, a small sum in comparison to other structures. Nevertheless there are no clear voids located against walls in this room. The pattern of ceramic dispersion demonstrates that small fragments of broken vessels were swept toward the edges of the room. Lithic materials were concentrated near Feature 4 and was also located near the doorway to Room C. These two rooms were kept amazingly clean in comparison to other structures excavated at the site. This unusual pattern may reflect the time of year the structure was abandoned, the tendencies of the family that occupied the structure, or an occupational specialty carried out by the members of the household.

**Area C.** Area C was likely the patio associated with this house structure, however, because excavation revealed midden deposits associated with post abandonment activities the entire room was not excavated. The portion of the midden sampled produced refuse very similar to materials present in Rooms A and B of Unit 6. Five lithic points were recovered as well as two beads. Thus it would appear that perhaps temporary disposal was located in front of the door, which is why we concluded that the patio was disturbed by later refuse dumping. After lab analysis it was realized that this midden may have only been a patch of
defacto refuse and the remainder of the patio area may have been clear of debris. Hopefully we can return to Unit 6 to clarify the nature of its formation processes in the future.

**Unit 8**

Unit 8 consisted of a singular room located in the midst of agricultural terracing. This structure was not unique to the area below the irrigation canal. In order to determine if this somewhat D-shaped structure represented a residential structure or an edifice of another function we choose to excavate Unit 8 Room A. An exterior area to the North and Northeast of the structure was also excavated and was designated Area B (Figure 6-22). Radiocarbon dates revealed that this structure was occupied after icons of the Wari culture were no longer present in the Moquegua Region. See Chapter 7 for a discussion of dates from Cerro Mejia residential contexts. I include the description anyway because it demonstrates an interesting contrast to those earlier constructions whose dwellers participated in Wari society.

**Room A.** Room A is 3.8m long and 3.2 m wide. The north wall of the structure is slightly curved, however, this is likely due to the inclusion of a natural rock outcrop in the northern portion of the room. A small break in the stone foundation suggests that the doorway was just north of the southwest corner of the structure. Unlike most structures previously excavated there was not enough wall fall within the structure to suggest that it was made entirely of stone masonry. This structure was likely made of a vegetable super structure as no vestige of adobe melt was present. The hearth, Feature 1, is the focus for most
Figure 6-22. Unit 8 Room A and Area B feature and artifacts.
of the cultural remains in the room, including a spindle whorl in production. Ceramic fragments are few and no diagnostic sherds are present. A waster, fragments of a worn, utilized sherd were reconstructed and originated from quad 26. Perhaps this artifact was being used to form the spindle whorl.

Other material remains within the room include lithic artifacts, rolled pieces of metal foil, and burnt animal bones. Lithic remains are sparse and include the broken base of an obsidian point, an obsidian flake, and four other flakes one of which was unutilized. Obsidian retouch flakes are found in the vicinity of the hearth. Foil metal artifacts were recovered from quads 24 and 25. The largest fragment is obviously a gold alloy. Roughly triangular in form, the fragment has one formed edge and two jagged sides. Three other fragments may all be portions of the same object and appear to be mostly silver in composition. The hearth was full of burnt animal bones. Material in and immediately around the hearth represented a very high concentration, 342 grams.

**Area B.** Area B was the area exterior and superior to Room A of Unit 8. It was excavated because of the presence of a large metate. Curiously no ceramic or lithic materials were recovered exterior to the structure. Nevertheless small fragments of metal, both gold and silver alloys, were found on either side of the metate and just outside the structure's wall in quad 5. A few bones were found in quad 10 immediately west of the metate. Large volumetric samples were taken from the area around the metate with the idea that perhaps microbotanical or phytolith analysis may shed light on the function of this zone.
Unit 118

Unit 118 is a very complex multifamily dwelling located on the southeast portion of Cerro Mejia’s summit. The architecture can be characterized as loosely conforming to the layout of humbler structures from the slopes, however, its size surpasses any of the structures discussed above (Figure 6-23). The structure is somewhat problematic because the majority of the walls were constructed with low stone foundations and adobe superstructure. Therefore the rooms bounded by adobe walls have very high concentrations of stone tools in the upper strata above the floor and it was necessary to select artifacts for consideration based on their individual elevations in relation to the floor surface. Niches can only be discussed for Room B, the only space completely constructed from stone.

Unit 118 consists of two agglutinated houses, House I and House II. These structures are divided into two separate houses because they do not share any internal access, but share a common wall. House I consists of Rooms A—a small patio, Room B—a rectangular enclosed room, Room C—a cluster of spaces that represent both work and residential activity, and Room D—a large plaza that the two families living in House I share as a common activity zone. House II consists of two residential units, the East Household, Room E, and the West Household, Rooms F, G, and H, which have access between their two adjoining plazas. Each household also has its separate entrance to the outside. A smaller third residence, Room I, without its own patio is agglutinated to the
Figure 6-23. Unit 118 room plan.
exterior wall of the East Household. The East Household is the largest residence in House II and may have served as the primary residential facility with the West Household and the Southern Room being satellites containing related families. The form of the Southern Room as well as its location suggests that it may have been the first step in constructing a full-scale household structure similar to the East and West Households.

The West household is Room E, like Room C, it represents more than one space that was interpreted as a single space from the surface remains. The division of this space into two areas is demonstrated by a tracery of a single course of stones that served as the foundations for an adobe wall and a difference in floor surface level. The wall runs east to west and nearly divides the space in half. The space to the south was the enclosed room with two hearths and the majority of common refuse. The area to the north was used as a patio space and accommodated the entrance to the exterior and into the East Household. The East Household exhibits two abutted rooms nearly square in dimension along the north wall. The stone foundations are constructed in the double face style exhibited by House I. Rooms G and H are the enclosed rooms and Room F is an oversized rectangular patio. There are exits to the exterior of the structure in the north and south wall at their intersection with the east wall. The Southern Room, Room I, has dimensions similar to the enclosed rooms of the East Household.

**House I.** Room A is a 3.6m by 5m patio with low double-faced stone walls. There are doors with elevated thresholds leading to the larger plaza,
Room D, to the east and to the small roofed Room B to the south. An oven, Feature 1, was located in the north west corner of the room and is surrounded by heat altered reddish/orange matrix (Figure 6-24).

The floor surface was not well prepared and is not preserved near the north and west walls having been destroyed by the impact of the wall fall. The north and west walls were made partially of stone, but their upper portion was adobe. This is represented by numerous small river worn pebbles and gravel mixed with a silty/clayish sediment. Since these walls form part of the outer perimeter wall, it is likely that the north and west walls of Room A were built to the height equal with the enclosed room, Room B, in order to form a barrier, delineating interior and exterior space of the compound. The east wall is represented by a low, leveled stone wall that shows no evidence of adobe. Room A and B formed the primary constructions of this building cluster and I suggest that the east wall may have been partially deconstructed when Room D, a large plaza, was constructed in order to utilize the adobe bricks or perhaps the wall was allowed to disintegrate and was cleared away before the abandonment of the house.

Ceramic vessels are clustered in the western portion of the structure associated with the oven. A handled vessel and a small bowl or cup with a slightly flaring rim are among the forms that could be identified, however, based on paste categories the fragments of at least four pots were present (Figure 6-24).
Figure 6-24. Unit 118 Room A features and ceramic vessels.
Lithic material is scattered about the room, but was concentrated around the oven and around several cores located in quads 129, 130, 156, and 179 (Figure 6-25). Additionally, a large flake was being further reduced as a core, immediately next to the oven. The cores were associated in most cases with unutilized flakes,debitage, polishers used to prepare the striking platform, and hammers or combination tools for knapping the material. The cores were all of local silicious materials with a small course grain core of lazurite located near the oven, however, no flakes or debitage in this material were uncovered. Grinding activities were located around the hearth. Several pairs of small manos and metatés were found along the edge of the ash. Another metaté was located in quad 132. All the metatés present in Room A were small and portable. Several gravers in and around quad 156 were found in association with a polished and partially perforated red rhyolite stone, however, no other beads or bead fragments were uncovered. Several pigments were found as well as stone implements with residue.

Faunal material was found mostly in the western portion of the room, with the highest concentration coming from the oven context. The amount of animal bone present in this room is relatively small, however, the low weight of bone present may be related to seasonal factors or regular cleaning episodes. Regardless it would seem that all activities associated with food resources are concentrated around the oven and took place in the western portion of the plaza, whereas the eastern portion of the room was dominated with the production and use of lithic materials.
Figure 6-25. Unit 118 Room A artifacts and voids.
Clear artifactual voids are present along the south wall east of the entrance to Room B, 118A1, and along the east wall north of the entrance to Room D, 118A2. Both of the voids are long and wide enough to have been the location of sleeping mats. Another void is smaller and round, just south of the oven, 118A3. This void is immediately associated with the metatés and ceramic vessels, and likely was the location where an individual sat and prepared food in the patio.

Room B is a 2.3m x 4m enclosed room that was roofed. The room was the first room constructed in the structure and together with Room A served as the primary residence in the house cluster. Room B has direct access to the exterior through an elevated doorway in the west wall. The matrix in this room was thick relative to other contexts excavated and clearly was constructed predominantly of stone.

Features include a hearth, Feature 2, located near the northeast corner of the room and Features 3 that appears to have been the area where a cooking pot was stored or placed for serving. This pot soot is represented by a shallow black ash mark on the floor surface in quads 181 and 230 (Figure 6-26).

Ceramic vessels are represented by two clear diagnostic fragments. A large portion of a broken handled vessel was located immediately on top of the hearth and may represent the remains of the cooking vessel. The base of a rustic cup was also uncovered in quad 205 near the hearth. Based on paste differences it is likely that the remains of two other vessels were present but can
Figure 6-26. Unit 118 Room B features and ceramic vessels.
not be identified as to specific form, but the size of the body sherds suggest they were large jars.

Lithic materials are found throughout the room and in higher strata mixed with the wall fall. Thus it is likely that some stone tools were stored in niches above the floor, specifically an adze and other larger retouched flakes were found in a pocket within the wall fall strata near the northwest corner of the room. The exact origin of the niche could not be estimated with certainty.

On the floor surface, three cores were uncovered, two in the western portion of the structure and one in the vicinity of the hearth. Hammerstones and combination tools were found within one meter of all the cores, however,debitage, primary flakes, and polishers, were most prominent in the western portion of Room B. In quad 181 was a cluster of three portable grindstones. A mano was within 40 cm. Two more small metatés were in quad 207 and another mano was in quad 208 (Figure 6.27). Utilized cores that exhibited both battering and cutting wear, as well as small irregular handheld grinders were closely associated with the portable metatés. These core tools and course stone grinders may have been used to aid the processing of food stuffs.

Numerous obsidian flakes and concave edged implements were found in quads 230 and 231. The obsidian was found within a meter of the highest concentration of bone refuse. An obsidian biface knife is more typical in these contexts, however, it would appear that the flakes and concave edged implements fulfilled a similar function and were used to remove flesh from the camelid longbones scattered around the hearth.
Figure 6-27. Unit 118 Room B artifacts and voids.
The greatest concentration of bone was found in association with the hearth in quads 204 and 205. Other concentrations of note are located in quad 181 adjacent to Feature 3A and in the southwest corner of quad 233. These high concentrations of bone not immediately associated with the hearth are associated with voids that represent work areas, locations for consumption, or both.

Three clear voids are apparent from the plot of artifacts and faunal refuse in Room B. The largest void, 118B1 is west of the hearth between Features 2 and 3A. This space, roughly 50 by 80 cm, is adjacent to the serving or resting location of the cooking pot, a high bone concentration oddly situated in front of the entrance to the room, and conveniently positioned within arms reach of many stone implements and a core. Two other small voids, 118B2 and 118B3 are located along the southern wall, in quads 231 and 232. These semicircular voids are located within reach of many tools and debitage and void 118B4 is close to a moderately sized concentration of bone that may reflect working or consumption of faunal resources (Figure 6-27).

None of the voids are large enough to have accommodated a comfortable sleeping area, however, it is possible that sleeping mats or skins were laid down nightly rather than being maintained on the floor throughout daily activities. If this is true then accumulation of refuse would proceed as normal and a void would not leave evidence of sleeping activity. It is also possible that sleeping locations were affected by seasonal weather and at the time the house was abandoned
the activity of sleeping was being carried out under overhangs in the patio Room A or the larger plaza, Room D.

Room C is actually a cluster of three spaces that appeared to be one room from the surface (Figure 6.28). This room is not clearly demarcated from the large plaza, but is open and entrance is at the same level as the plaza. This may reflect a building style recently encountered on Cerro Baúl where three walls of an enclosed room are stone but the wall with the door was constructed from adobe blocks without stone foundations. The fourth wall has stone corners and small portions of stone wall near continuing from the corners, but the majority of the wall and the frame around the door is completely made of adobe. Room C consists of a 2.8m wide by 3.5m long space abuts Room B and has a narrow bench along the north wall (Level A). This area has a continuous floor surface with Room D (Level B), but leads to a small sunken area to the south (Level C). The southwest sunken room is approximately 1.6m by 2.1m in area with two small shallow hearths one against the east wall, Feature 5, and the other against the west wall, Feature 6. A third hearth is centrally located on the upper level next to the bench, Feature 7. This hearth is also small and shallow and was found beneath a dense cluster of artifacts. Its function may have been linked to tool production rather than cooking. A third space is in the southeast corner of Room C (Level B). This alcove is separated from the large common plaza by several large slabs of stone that may have served as a wind break for Feature 4, a hearth. The alcove is approximately 1.2m x 1.7m.
Figure 6-28. Unit 118 Room C features.
A great deal of stone from wall fall filled the spaces of Room C. This area or a portion of it may have been enclosed and roofed. The small alcove has typical double-faced stone masonry construction on three sides and then a slab border for the eastern boundary. This suggests remodeling or the addition of the alcove to Room C after the initial expansion of the house structure.

Ceramic fragments in Room C were predominantly associated with the alcove with scattered sherds of various pastes being located throughout the remainder of Room C. The alcove contains a hearth, however, the majority of sherds in the alcove do not exhibit burning. Therefore some of the vessels were not associated with cooking and were not discarded. The overall pattern of ceramic remains from Room C suggests that no intact vessels were left behind or broken upon abandonment of the structure.

The bench surface and adjacent floor of Room C was the setting of a great deal of lithic production and the use of lithic tools (Figure 6-29). There were three large cores recovered from the floor near the bench, as well as ten utilized cores. These were associated with twelve hammerstones or combination tools and over twenty polishers. The majority of these elements of the lithic production tool kit was located in a cluster in quad 282. Nearly twenty utilized flakes, debitage, and unutilized flakes were also present. The bench surface was dominated with grindstones: small *metatés* and *manos*. At least one of the *manos* collected was an unusual rocking grindstone, typically associated with a large *metaté* made of rhyolite set into the surface of a low worktable when present on Cerro Baúl. This large polished stone was absent, but may have once been
Figure 6-29. Unit 118 Room C artifacts and voids.
present near the eastern portion of the bench where the work surface was not preserved. Many of the utilized cores as well as large flakes, which resemble and were classified as hoes, exhibit brown residue along battered edges and on surfaces that exhibit a sheen.

The sunken southwest portion of Room C exhibits relatively few lithic remains. The majority are retouch flakes ordebitage associated with one of the hearths, Feature 5 and 6. All of the obsidian from Room C was found in this area.

The alcove exhibited all the elements of the lithic production toolkit, however, manos and metatés were absent. Two gravers and four concave edged implements were present as well as a small fragment of clear quartz debitage that may have been debris from ornamental production. The absence of obsidian from the alcove is surprising since the majority of faunal waste was found in this space. All the instances where obsidian is absent from a high concentration of bone are in Unit 118 and may pertain to atypical activities carried out by the craftsmen that lived in this multihousehold workshop residence.

Room C exhibits high concentrations of bone in and around Feature 4, the hearth located in the alcove. Very little bone was located in the other areas of Room C. Thus it would appear that the processing of faunal resources was limited to the alcove. The alcove functioned as the enclosed room for this small and unusual subsidiary residence in House 1 of Unit 118 because although there
are several hearths in this structure Feature 4 is the only one to exhibit clear 
evidence of food preparation.

It would appear that there are several voids located on the northern floor 
surface, however, this may not be the case because many artifacts were 
retrieved from the screens in these quads and could not be plotted. Therefore 
taking artifact density into account only two voids were identified. Void 118C1 is 
located in quads 283 and 284 against the west wall and within arms reach of the 
densest cluster of artifacts. Another possible void with a relatively low density of 
artifacts, 118C2 is in quad 307 against the south wall, also within working 
distance of the dense cluster of tools in quad 282. In the sunken southwest 
portion of Room C there are at least two voids. These voids are larger and linear 
and likely represent sleeping areas for those who cooked and ate from the hearth 
located in the alcove. Void 118C3 is adjacent to the northern boundary of the 
sunken area in quads 308 and 309. Void 118C4 was located along the south 
wall, quads 358 and 359.

The evidence suggests that the bench and northern floor surface 
represent the remains of intense activity, likely associated with a craft or perhaps 
processing of a particular crop. The alcove appears to represent the enclosed 
room where cooking and normal lithic production was carried out. Because this 
area was too small to provide sheltered sleeping area, the sunken portion of 
Room C was used with two small fires to provide warmth in an area that was 
somewhat sheltered from the wind but partially open to the elements, unless an 
adobe wall was present. It would appear that these rustic accommodations as
well as their location adjacent to a workshop may pertain to an apprentice or individuals lacking full family status as opposed to a full member of the household represented by Room A and B. Inferences about the spaces and how they functioned may be further developed by sampling other summit structures in order to understand what class of people occupied the circumscribed summit of Cerro Mejia.

Room D is a large plaza, approximately seven by eleven meters, enclosed by a wall with a low double faced stone foundation and an adobe super structure. Entrance to the plaza from the exterior of the structure lies in the north wall in the north east corner. Access to Room A is via a raised threshold yet Room C shares the same floor surface and is open to the plaza with no clear doorway. There is no direct access to Room B. Room D was not roofed but evidence of post holes suggests that overhangs were present in some areas of concentrated activity (Figure 6-30). Feature 9, the remnants of an earthen oven, was located in the southeast corner of the plaza.

Ceramic remains were sparse in the plaza area. The only concentration of sherds that suggest the presence of a vessel is just outside of Room A in quad 152. This location is adjacent to large grindstones in quads 177 and 178 and represents an area associated with food processing. Other sherds are scattered about, however, do not occur in numbers to recommend the presence of vessels, but rather activities that may have employed the sherds as tools. An area of hardened clayish matrix was found on the floor in quad 224. It was associated with polishing tools or smoothed stones exhibiting white and black residue as
Figure 6-30. Unit 118 Room D features and ceramic vessels.
well as a core tool. I suggest this may have been a locus of pottery production. Obviously such limited evidence makes this hypothesis speculative, however, the great variety of pottery paste and forms at the site suggests ceramic production at the household level. It would then seem logical that such a large house structure would have a locus for annual pottery manufacture.

Lithic materials are quite dense in most areas of the plaza, however, the distribution of particular artifact forms suggests that areas of the plaza were focused activity zones. Lithic production tool kits are located adjacent to grinding activities but do not overlap. It also appears that activity areas are not combined within the context of the greater plaza but rather are carried out in separate locales. Of course evidence of grinding and lithic production in general may be replicated because these broad generalizations may fit into another more complex activity set rather than be replications of identical activities being carried out by members of different households within the multifamily dwelling. Also it is possible that the high abode walls and roof overhangs created different areas, shade, bright sun, dry, wet, warm, cool, that were required for different tasks or may have been pleasant or unpleasant work areas depending on the time of day or season of the year.

Clear evidence of grinding activity occurs in four locales around the plaza. As has been noted before utilized core tools are found in association with grindstones and together likely represent the processing of foodstuffs. Large metatés with associated manos were found to the south of the access to Room A, another area was located south of the opening to Room C, in front of the alcove.
Another grinding area with large grindstone tools was located west of the entrance to Room D from the exterior of the structure. A fourth area of grinding was characterized by more portable grindstone implements and was affiliated with Feature 9, the oven in the southeast corner of the plaza. This fourth pattern is similar to that which was uncovered near Feature 1 in Room A and likely is associated with the use of the oven. A *metaté* fragment was located in quad 200 but was not associated with a *mano* and appears to have been affiliated with a specialized activity described below.

Evidence for lithic production in the form of debitage is located in most areas of the plaza and suggests that the location of this activity may have moved over time throughout the use life of the plaza space (Figure 6-31). The highest concentration of debitage is not located along the walls and therefore cleaning does not appear to be a major factor that would skew understanding patterns of activity use in this particular room.

Six large cores and associated tools such as hammers establish the most recent areas or lithic production zones in Room D. Two cores are located together adjacent to the grinding area west of the entrance to the structure. A core is located in quad 228 fronting Room B and was affiliated with the largest number of unutilized flakes. Nearby in quad 278 another core is in front of the opening to Room C. A fifth core is located in the middle of Room D and was associated with two bifaces, which are relatively rare at Cerro Mejia. This core may have been affiliated with specialized lithic production rather than production of expedient domestic implements, although the evidence of retouch flakes in this
immediate area is lacking the highest concentration of polishers and a *metaté* fragment was located in this zone. A final core was located next to the east wall in quad 222 and was curiously located adjacent to a *mano* and orange pigment. The cores were all found with one or more combination tools with a few hammers also present. Combination tools are located in areas without cores and may represent the location for the reduction of large flakes, however, were likely used in multiple ways.

Patterns and associations of other activities utilizing stone tools are less clear. A partially perforated stone was within one meter of two different gravers and suggest that bead making was carried out to some degree within the plaza. The location of most gravers is along a north-south axis running through the center of the plaza. Some, but not all concave edged implements are similarly located. This axis crosses the location of the specialized lithic production associated with the core in quad 200 as well as the high concentration of polishers, the bifaces, a *metaté* fragment and two *tableta* (Figure 6-31). It appears as though the cluster of artifacts in quad 200 represent a particular unidentified activity area.

The axis of gravers as well as the location of the unidentified specialized activity may not be centrally located but rather their position may be the result of seeking the necessary conditions to carry out the activities. Postholes along this axis suggest that this area may have been a favored zone of activity because of the combination of light and shelter. I have noted above that bead making may have been a seasonal activity and so the edge of an over hang may have been
Figure 6-31. Unit 118 Room D artifacts and voids.
one of the few locations that provided light for this activity while staying dry and sheltered from the wet season rains. Alternatively it may have been an ideal spot in the winter where one could stay out of the hot bright midday sun, but still have enough light to work. Another activity, which similarly requires light—weaving, is represented by smaller post holes in a square pattern north of the access to Room A in quad 126. A small concentration of bone in this quad may represent the remains of a tool affiliated with this activity, however, the bone from this structure was in such a bad state of preservation that weaving implements are not likely to be identified. Another possible location for weaving, exhibiting a similar pattern with small ash filled post holes was uncovered in quad 250, however, it is unlikely that this area was also sheltered by an overhang.

Reflecting on the location of the grinding and lithic production zones in light of the suggestion of an overhang or sheltered area (no pun intended), it would seem that each family had two such zones one within the sheltered area and one located in the sun. Perhaps these two areas reflected seasonal use or the desire to be sheltered in some way for certain activities while sunlight or the need to dry certain objects required that both zones be employed.

Bones are present in relatively small concentrations in the plaza. The bone recovered does not suggest that a great deal of faunal remains were consumed or processed in this area. It is possible that the bone remains in this room may be the fragmented remnants of tools or that occasional processing of faunal resources or their consumption was relatively rare and left little to be
uncovered. I would note that the few obsidian retouch flakes were all located within a meter of bone refuse.

Voids are many in this large open plaza, however, because of the nature and size of this area I will not suggest that each represents the location from which any individual sat and worked. It is likely that the plaza, especially because it was enclosed with a high adobe wall, was used for storage at least during some part of the year. Items stored in woven sacks would leave no artifactual signature. Additionally, a portion of the plaza may have also been reserved to receive guests. The area most conspicuous on both accounts would be along the east wall in the northern portion of the structure. This area is practically devoid of any material.

There are many voids associated with clusters of artifacts. Void 118D1 is located just inside and west of the door. It is approximately 60 cm in diameter and is affiliated with both grinding or lithic production zones. Void 118D2 is a similar size and located against the west wall in quads 102 and 127. This void is west of the postholes that represent a loom. Void 118D3 is roughly 80 cm in diameter. Located in quad 177, this void is adjacent to two metatés and a core. A mano lies in the middle of this empty space, however, since the mano would be in use with the metaté during processing it seems a likely sitting location during work. Void 118D4 and 118D5 are located in quads 203 and 227/228 on either side of a rocking mano stained with orange/red residue and a core. It is possible that one of these voids represents the missing metaté, while the other represents the location where the processor sat and worked. Void 118D6 is also
associated with small postholes that appear to represent a loom. The void is at least 70cm in diameter and is south of the loom in quad 250. Void 118D7 is against the south wall in quad 252/253 and is adjacent to a metate. It is also possible that this metate was worked from someone seated to the east, however, this large void is more suggestive of a storage location. The oven, Feature 9 exhibits concentrations of artifacts and was obviously a locus of activity. Two small voids are located on either side of the oven. Void 118D8 is located in the southeast corner of the structure and is roughly 60 cm by 100cm. It is affiliated with hammers and manos as well as flakes, core tools and an hoe. Void 118D9 is north of the oven and is at least 60 cm in diameter. The void is within arms reach of a variety of tools including a hammer, several combination tools and flakes.

Artifacts are densely concentrated near the center of the room where the border of an overhang may have provided an atmosphere of shelter and light. No voids associated with these areas are large enough to note, however, it would appear that the work areas in this patio likely shifted a great deal on a seasonal basis and were not affiliated with a permanent mat or textile covered seating area. Thus it should be concluded that most of the patio was utilized for one activity or another most of which left artifactual residue that may have been swept aside on an ad hoc basis when one sought an area to sit and pursue another activity, however, the preponderance of materials in the plaza may be the result of defacto refuse, processes of abandonment and thus not reflect normal frequency of cleaning. This makes the voids more significant.
Some voids are present, but are not directly associated with activities. These areas are immediately against walls but are not associated with artifacts within arms reach of a person sitting against the wall. I suggest these may have been the location of storage sacks, which may have been present throughout the year or on a seasonal basis. Void 118D10, 11, 12, and 13 vary in size and are all located against walls (Figure 6-31). Of the four areas mentioned only void 118D12 is not closely associated with a food processing zone. It is possible that other activities such as hide production or a furnishing such as a wooden table or bench, and of course mats or textiles of any kind would have left an equally clear void. Hopefully future soil chemical analyses and phytolith studies can clarify the use of these particular areas within the plaza's spatial system.

**House II.** The West Household was excavated as a single room, Room E. After excavations were well underway it was discovered the space was subdivided. The space of Room E was built first with larger more substantial double-faced stone foundations the divisions within the space were added later with a lower quality construction style. The south half of Room E contained an enclosed room. Water action has rippled the floor in the eastern portion of the structure and several stones were removed from the foundation, which only formed a single course, before it was recognized as a wall. The patio was rectangular in form, the northern portion of Room E. Access to the exterior was clearly from the patio in the west wall and an opening in the east wall stepped down into the East Household.
The enclosed room is approximately 2.15 meters wide and 5.6 meters long (Figure 6-32). The north wall has no real foundation and may have been constructed purely of adobe. The space was delineated by its lower floor surface, which was most pronounced in the west. The entrance cannot be identified. There are post features filled with volcanic ash, they are linear but slightly curved. This feature, Feature 8, is associated with the hearth, Feature 10. The water erosion in the eastern portion of the structure combined with the fact that the structure was built primarily of adobe blocks makes it unwise to discuss the arrangement of artifacts in this half of the room. It is likely that all but the heaviest lithic objects were moved from their original location of deposition. Features such as hearths and ash patches do provide some general information as they can not be shifted by water action. The primary cooking hearth, Feature 11, for the West Household was located in the southeast corner of the structure in the patio. The enclosed room also had a smaller hearth, Feature 10, located in quad 481. The volcanic ash filled depressions may be associated with the structure of the hearth. Large grindstones are associated with both of the hearth features.

In the patio, Feature 12, located in quads 429 and 430, is a shallow hearth with heat altered orange matrix underlying and surrounding the dark ash accumulation. Feature 13, located in quads 380 and 405, and Feature 14, located in quads 383 and 384, were discard areas for hearth refuse, however, no unburnt material is mixed with the ash. These patches of refuse do not represent cleaning episodes of the entire structure.
Figure 6-32. Unit 118 Room E features and ceramic vessels.
The west portion of the enclosed room and open patio provide some incite into the function of the space. Ceramic vessels include an incurving bowl and the bases of three indeterminate vessels. All the diagnostic fragments were associated with Feature 10.

Lithic remains in the enclosed room are clustered around a medium sized *metaté* in quad 456, it is accompanied by a mano, combination tools and polishers (Figure 6-33). Utilized cores, debitage, flakes and gravers are also clustered in this area, which appears to be an area for the processing of food. Two smaller *metaté* fragments are located in quads 455 and 506. Between these two grindstones is a scatter of artifacts, most notably a small obsidian leaf shaped point. Other activities were located in the southwest corner and consist primarily of combination tools. Another obsidian point was found against the wall in quad 458 and may have been in a storage location. A third point was on the western edge of Feature 12. The western portion of the patio space was also a locus of grinding. A dense cluster of flakes located in quad 423 reflects the intensive use and production of lithics throughout the structure.

**The East Household.** Room F presented the most complex excavation context encountered. In the western portion of the room, South of the entrance to Room E, there was a cluster of large and small rocks embedded in the floor. Initially I suspected that the context represented a row of stone lined pits in the floor. Then it appeared that it may have been the partially deconstructed wall foundation of a previous occupation strata. This hypothesis seemed logical because a number of clear artifacts were found near the cluster of rocks at lower
Figure 6-33. Unit 118 Room E artifacts.
elevations during our investigation of the primary hypothesis. Finally, a number of 25cm by 25cm probes were excavated in every other meter in the western portion of Room F. The probes were excavated to the depth of natural rock when possible. Examination of the profiles revealed that the floor was made of a mixture of high content clay barrow and refuse. The refuse exhibited the same characteristics as subfloor midden pits, mixed ash, charred, and uncharred artifacts. The refuse was not present in concentration, but was well mixed with the clayish matrix that required a pick to excavate. The probes also revealed that there was a natural *quebrada* running north south through this area that made it much lower than the northwest corner of Room E or the eastern portion of Room F. Both these areas exhibit outcrops of the natural hill right below the floor surface.

The constructors of this house leveled this area with the natural rock outcrops by filling the *quebrada* with field stone and garbage cement. The lowest zone was filled with stone. Some of these turned out to be *metaté* fragments and other large discarded artifacts. During heavy rains water flowed between the artificial fill and the natural contour of the hill and undermined the stability of this surface. After its abandonment erosion continued and rippled the surface. Sediment was carried away from between the rocks and they started to emerge as the jumble they are. Artifacts carried by water action were caught and deposited between the cluster of rocks. Room F contains the portion of the structure most severely affected by water erosion, but only the portion leveled by fill was affected. Thus only a portion of Room F was excluded from study.
Clearly, the East and West Households of House II can not be compared with other structures because the complete spatial pattern was not recoverable, but understanding some patterns of residence that emerge from these structures lends to an understanding of spatial use in general in this sector of the site.

The east portion of Room F exhibits dense activity typical of a patio space. Room F has an irregular shape because of the placement of Rooms G and H against the north wall, which are centered, neither room is flush against the east or west wall. This configuration leaves a narrow corridor along the east wall and a wider space west of Room G. It appears that a plaza of 12 by 8 meters, very close in size to plaza D, was reduced by the construction of the two enclosed rooms. The undisturbed space that will be described in this section is approximately 4.5 m by 8 m with the additional corridor space, 1m by 2m.

The patio space has direct access to the exterior via two openings in the eastern end of the north and south walls. There was a clear doorway with elevated threshold into Room H through the corridor, but Room G appears to have just been open along its south wall into Patio F. A doorway with an elevated threshold was also located in the wall between Rooms G and H. There was clear access between patios E and F but the doorway was not well constructed (Figure 6-34).

Several small hearths were present, all of which were placed against a wall. Feature 16 was just east of the doorway to Room G. Feature 17 had two concentrations one against the west wall the other against the east wall of the corridor with a shallow deposition of ash between so that it initially appeared as
Figure 6-34. Unit 118 Room features and ceramic vessels.
one feature. Feature 18 was against the east wall south of Feature 17. Feature 19 was a shallow ash dispersion, located in quad 493, that consisted of medium gray ash and obsidian retouch flakes. This may represent an area where refuse was temporarily left before discard outside the structure or where pots were placed outside the nearby hearths for cooling or serving. This remains unclear because although there are artifacts in the ash, they are very small and the ash dispersion in very thin. Feature 20, also an ash dispersion located in quads 469, 470, 494, and 495, is similar in color but deeper and larger and thus is likely an area of temporary garbage placement.

Ceramic remains were concentrated around Feature 16. In front of the entrance to Room G were the remains of a large cooking vessel. The remains of other vessels are scattered, but include fragments of a decorated Ocros bowl, with cream slip, an undecorated incurring bowl, the base of a kero with no apparent decoration and the fragments of an undefined vessel with a straight rim profile, likely a tall necked jar.

Elements of the lithic production toolkit were found in quads 473, 498, and 523, but no core was present in the undisturbed portion of the room (Figure 6-35). Since these quads lie on the edge of the disturbance it is likely that the core was one of many found in the disturbed zone. Cores were present elsewhere in the room in association with numerous flakes and debitage in quads 418, 466, and 470. Thus it appears that there were four loci of generalized lithic production in this portion of the patio. These activities may likely have had divergent
Figure 6-35. Unit 118 Room F artifacts and voids.
associations but until the lithic assemblage can be examined in more detail the
descriptions of patterned activity must remain broad.

A large grindstone, visible when excavations began in this area, was quite
large and not portable, however, I remained skeptical about its location until it
was shown to be well entrenched within the patio floor and was found to be
associated within 50cm of a mano located to its southwest as well as
combination tools and other polishers. Thus it seems that the metaté is in its
original location and that it was likely the focus of much activity. This metaté’s
grinding surface was angled and was home to colorful lichens. The placement
and size of the stone is reminiscent of the modern day ushnu located in the
courtyards of pastoralists' homes I have visited. Today they are used as a focus
of ritual activity and receptacles of libations directed at Pachamama and named
mountain spirits. This metaté is near the location where the consumption vessels
were found in this room. On the other hand, it may have been a welcomed
change from bending over one’s grinding tasks. It is quite possible that it served
both functions. Grinding was also carried out between Features 16 and 17
against the north wall.

Grindstones are typically assumed to be associated with the processing of
food stuffs, however, the numerous grindstones located on the bench in Room C
and the numerous grindstones we will see in Room G point to perhaps other
activities beyond typical food preparation. In quad 471, both a polisher and a
combination tool were found with the residue of an orange pigment. Thus it is
possible that some of the grindstones were dedicated to the processing of pigments for use with textiles, ceramics, or body decoration.

An unidentified activity area is represented by a high concentration of utilized and broken flakes, a utilized core, and combination tools. The artifacts are clustered adjacent to a projection of the low wall into the room that likely was a table type construction that is now eroded.

Several large flakes that resemble hoes were centrally located, but scattered in the room. These artifacts were battered along their use edges and exhibited evidence of haft wear. Most had residue that appeared dark yellowish brown. It is unclear if these implements were agricultural tools because the wear pattern differed, but morphologically they fell well within the size and shape of artifacts observed in the abandoned Wari fields.

The presence of faunal remains throughout the room are highly varied. The highest concentration are near the hearth features. Surprisingly, there is another high concentration in the southeast corner of the patio in the vicinity of the door. The weights in the area are elevated because of several nearly intact camelid longbones, which may have been cached for tool manufacture, but exhibited nothing in the way of modification. Moderate concentrations of bone were associated with Feature 20 and near the large metató in quad 447.

Voids in this area of the patio are present in high traffic areas in a north-south swath leading in from the door in the southeast corner, 118F1. A similar but smaller void is located between the entrance in the northeast corner and the door to Room H, 118F2. Curiously the remainder of the so-called corridor is filled
with Feature 17, two small hearths located against either wall, and much in the way of lithic debris and productive activity. The entrance into Room G, Void 118F3, is relatively clear even though Feature 16 is partially in the opening. It is likely that the continuous ash shows us where the door was, whereas the other area was blocked by an adobe wall. Several areas of concentrated activity are present as described above, many of these are associated with voids, likely representing the seating areas for those who conducted the activity. Void 118F4 is associated with the ushnu/metaté and is roughly one meter in diameter southeast of the grindstone.

The cluster of artifacts associated with the table, quads 495 and 520, has only a small void, 118F5, however, it is my interpretation that many of the artifacts were once on the table and slid off along with the mortar like surface that coated the table like projection. So although most of the artifacts are now east of the projection the void to the west of the table, 118F6, should also be considered. Just west of this area is an ovoid void, 118F7, and this spot may have enjoyed shade of some kind if Room I was roofed and thus would have been a more comfortable work area in the heat of midday.

Work areas associated with the hearth features would have been similarly sheltered by overhangs provided from the enclosed Rooms G and H. Feature 16 has very little other than ceramic sherds clustered around it and an individual could have tended the hearth seated in front of the entrance to Room G or to the south of the fire. Feature 17 has a clear void to its southwest, 118F8, that is conveniently located within arms reach of grinding and lithic production tools.
Feature 18 has an associated void located south and southwest, 118F9, within arms reach of the same lithic production kit as the two small hearths of Feature 17. These features together are considered a single cooking zone that are too small and too close together to be considered individualized activity areas. Likewise Feature 16 is rather ephemeral as hearths go and it would seem by the division of space and activity that no more than one nuclear family resided in the East Household. It may be that seasonal changes in wind or other environmental factors dictated the rotational use of several small hearths rather than a focus around one large feature.

The enclosed space Room G opens onto the patio, Room F, they share the same floor surface. An elevated threshold leads into Room H and the floor surface in Room H is higher than Rooms F and G. Room G is roughly 2.8 meters by 2.3 meters in size (Figure 6-36). A large oven, Feature 15, dominates the northwest corner of the room and was used in conjunction with high temperatures because the underlying and surrounding floor shows the greatest degree of heat altered matrix of any of the other features excavated on Cerro Mejia. It is also notable that several grindstones were clustered south of this feature.

Very few ceramics were recovered from this context a small cluster of sherds was among the large stone tools south of the hearth but the remains are fragmentary and none were diagnostic. Faunal remains were also only present in low concentrations. The highest numbers were recovered from Feature 15. These figures are still considerably lower than typical weights recovered from
Figure 6-36. Unit 118 Room F. A) Feature. B) Artifacts and voids.
other fire contexts. It is possible that this feature was related to activities other than food preparation or related primarily to botanical foodstuffs.

Two sets of specialized artifacts were located south of the oven feature. A well smoothed anvil with the texture of a wetstone exhibited percussion marks on both sides. It was located 80 cm south of the feature with a well formed hammerstone sitting 15 cm away. Just northwest of the anvil, a *metaté* is located near the west wall a large rocking grindstone was recovered just south of the oven in quad 397. The hefty mano's use surface was not a long semicircular smooth edge, but rather a flattish abraded surface with very little range of movement, approximately 30 degrees or less. Additionally, the rocking motion was not achieved side to side in a motion along the long axis of the implement but rather back and forth along the short axis. This peculiar implement as well as the nicely formed anvil and hammerstone suggest a unique activity area, especially in conjunction with such a hot oven. Hopefully, soil chemical analysis or perhaps microscopic residues on the grindstones themselves may lend clues to understand the specialized activities carried out in this space.

Other seemingly normal artifacts may have been utilized in the special function of Feature 15 or be associated with typical domestic activity pertaining to Feature 16 located in the opening to the patio. There were no cores present, but a few pieces of debitage, primary flakes, unutilized flakes, and combination tools suggests that some lithic manufacture took place in this space at some time. Nevertheless, one of the combination tools exhibits a dark yellowish brown
residue and its close association to a similarly stained core tool suggests that the combination tools may have been used for tasks other than flake production.

A small void along the west wall just south of the oven, 118G1, would have placed an individual in a hot spot, but it is likely this area was used to work with the metaté and anvil when the oven was not in use. Alternatively it may have been an area where fuel was stored. A larger void, 118G2, is located in quads 396 and 421. It is in line with the entrance to this space, however, would have been an ideal locale in regards to lighting and is not too far from the grindstone cluster or Feature 16.

The adjacent enclosed room, Room H, has a rounded northern wall reminiscent of Unit 4, however, it is a well defined space rather than what could only be described as an alcove in Unit 4 (Figure 6-37). The room is approximately 2.5 meters by 2.5 meters and exhibits a higher degree of masonry quality than other walls in the structure. The space could be entered from Room G or the corridor portion of Room F.

Ceramic fragments indicate there are at least two vessels, one of which appears to have been a small jar with a thin flaring neck. Fragments of this vessel are clustered in the northeast corner of the room. The other vessel was sooted but is of an indeterminate form and was located near the center of the space.

Lithic remains include two pieces of obsidian a large leaf shaped biface in quad 393, used and retouched as a knife, and a small flake in quad 394. A small core was located on the threshold between Rooms G and H and thus is likely not
Figure 6-37. Unit 118 Room H. A) Ceramic vessel. B) Artifacts and voids.
in the location of its use. There are no other elements of the flake maker’s toolkit near the threshold in Room H, and although there are combination tools relatively close to the doorway in Room G there are no other elements such as debitage or unutilized flakes to suggest a locus of activity near the door. The residue of yellowish orange pigment is present on a small polisher in quad 369 and on a larger mano in quad 368. Flakes are scattered about the room, but there is only one small fragment of debitage and no retouch flakes present. Several combination tools are along the south wall and two gravers are present one in quad 369 the other in 393. Artifacts in this class are rather scattered and no clear cluster of remains leaves evidence of focused areas of activity in this space.

Bone is present in very low concentrations, but is highest near the entrance in the west wall. The fragments of animal bone present were not well preserved. It is likely that food consumption or animal processing was rare in this space. This stands in contrast to the typical association of obsidian with faunal remains. It is possible that obsidian was used in a variety of tasks beyond animal butchery. The majority of artifacts are relatively distant from the walls in Room H. There are voids along the central portion of the south wall, 118H1, the north wall is completely clear of debris for at least 60 cm, Void 118H2. There are also empty spaces along the west wall, 118H-3, which may coincide with traffic at this entrance. A smaller void is just north of the door along the east wall, 118H-4. These voids are likely large enough to accommodate sleeping individuals, but it
could equally indicate the presence of storage. From most of these voids lithic implements could be used to carry out productive tasks.

Room I is a small enclosed room attached to the south wall of Room F. It was easily accessed by exiting the patio through the door in the southeast corner and entering through the opening, 1.3 meters wide, in the east wall of Room I. This too may have been partially filled by adobe blocks. The space is approximately 2.4 meters by 3.5 meters (Figure 6-38). There is a small oven, Feature 21, located in quad 574 with heat alteration to the surrounding matrix and an ash dispersion that surrounds the feature. Numerous lithic artifacts were clustered along the south wall. This structure appears to be the start of a new residential structure and perhaps was a transitional phase before a new patio was constructed. Presumably the inhabitants of Room I were closely related to those of Patio Group F and shared this common open work area whereas cooking activities were separate.

Ceramic remains were clustered in and around quad 576 and represent the remains of a two handled flared neck storage jar. At least one other vessel was present, but the fragments were not diagnostic. Quad 576 is a clear void in the room as it pertains to tools or refuse and thus may have been a storage area with materials in this large vessel and perhaps also in cloth sacks.

Evidence of grinding activity is not focused in a particular local. A small metate in quad 598 and two manos in quads 549 and 601 exhibit a dispersed pattern. Lithic production is clearly centered around a core in quad 600 that is surrounded bydebitage, primary flakes, combination tools, and a well formed
Figure 6-38. Unit 118 Room I. A) Feature and ceramic vessels. B) Artifacts and voids.
Other cores in quads 573 and 574 are each associated with combination tools but are lacking in regards to debris associated with flake manufacture. Another potential area of lithic production is in quad 598 where a dense cluster of flakes and debitage as well as a hammer and combination tools are centered around two large flakes, presumably hoes. These hoes do not exhibit flakes scars that are not worn through use and thus it is likely that these tools may have been involved in a percussive activity or one which may have created shatter in a process other than lithic manufacture.

The density of artifacts along the south wall of the space includes numerous hammers, combination tools, hoes, utilized cores, flakes, debitage, obsidian, and a fragment of chrysacolla. It may be that the restricted space for the lack of a patio has created a pattern of densely packed activity with these clusters representing several overlapping activities.

The concentrations of bone throughout the room are highest in association with the oven, but are moderate in scale. An obsidian biface, which is not formed into a leaf or triangular point, as well as a utilized unmodified flake and retouch flakes are scattered in quads 598, 599, and 600. These only loosely correlate with the weights of animal bone throughout the room and suggests that perhaps only the large leaf shaped obsidian points are directly correlated with faunal processing.

Voids are present in the northeast corner of the room, along the western portion of the north wall and centrally located along the west wall. It appears from the presence of a two handled flaring neck jar that void 118I3 maybe
dedicated to storage. Void 118I1 is in the zone of ash dispersal and may represent an area to sit and tend the oven or carry out other productive tasks, but was clearly not covered with a mat or textile. Along the north wall, Void 118I2, a semicircular void 1.6 meters long and 80 cm wide, is large enough to accommodate a sleeping person, however, the eastern portion of this space is also covered by a light dispersal of ash. In light of this and the fact that large voids suggestive of sleeping areas in House II are nearly absent may pertain to the season of last occupation or reflect that bedding was not a permanent locus, but placed on top of the day’s activity debris and removed the next morning before productive activity resumes.

**Unit 145**

A large formal patio group was located just north of the center of the Cerro Mejia’s summit top architecture. This structure, Unit 145, consists of four rectangular enclosed rooms all opening unto a central patio area. This structure does not completely conform to patio groups described for other areas of the Wari realm because it is not enclosed, the galleries do not touch each other, and the patio is neither, rectangular or square. Nevertheless, because of this structure’s features and associated high status artifactual remains I suggest that Unit 145 represents an early form of a Wari patio group and as such may lend clues to the early state administrative practices. Alternatively, it is possible that Unit 145 demonstrates a local adoption of Wari cosmological schemes about elite and or administrative space. These concepts not being completely understood or executed in conjunction with local pre-existing notions of social
power and cosmological organization. Close correlations with structures excavated in and around the capital at Huari hint that the former hypothesis is the more probable (Ochatoma & Cabrera 2001)

Room A lies to the south, Room B to the west, Room C is to the north and Room D an elevated open stone paved room has an angled orientation eastward. The central patio, an elongated trapezoid, was designated Room E and could not be excavated entirely do to time constraints (Figure 6.39).

Attached to the formal patio group was a large rectangular plaza area to the south. This area was not tested and will not be discussed. A corridor that leads from the patio to the plaza was excavated and designated Area F. Overall this structure exhibited a higher quality of stone masonry used in its construction and a number of cut blocks were recovered from among the wall fall. In comparison to Unit 118 the contexts were deeply buried, typically the floor was encountered more than a meter below the surface strata. This structure appears to have been primarily constructed of stone.

Room A. Room A is a rectangular enclosed room 2.6 meters wide and 7.6 meters long. It contains a hearth in the southwest corner, Feature 1, and two ash dispersions one along the south wall in quad 67, Feature 2, the other along the north wall in quad 115, Feature 3. An empty stone lined storage pit was uncovered in the northeast corner, Feature 5. Erosion had affected the floor in the middle of the room and revealed evidence of earlier walls running north-south on either side of the door. These constructions were investigated as Feature 4.
Figure 6-39. Unit 145 room plan.
The threshold is elevated and the door is located 50 cm east of center in the north wall (Figure 6.40).

The remains of ceramic vessels are clustered around the hearth in the southwest corner. Diagnostic fragments reveal that a flaring necked jar was among the vessels possibly used in food preparation as many body sherds were sooted. At least one other vessel was used around the hearth but no diagnostic fragments were associated with this paste category. The single fragment of a red slipped lyre cup was found in quad 143. The majority of sherds were located in the west half of the room in the vicinity of the fire. This pattern follows for all the materials found in this space.

There was no evidence of grinding or flake production in this structure. Lithic manufacturing waste was restricted to obsidian retouch flakes. Several obsidian flakes were present in quads 64, 67, 70, 92, 93, and 117. An obsidian point was also found in quad 117. A small adze and a graver were recovered from quad 118 and a polisher from quad 93. A somewhat spherical combination tool was located in quad 95. Overall lithic remains were sparse. It would seem that production was not a common activity in the enclosed room contexts of Unit 145 or that this structure was cleaned regularly in order to facilitate a very different kind of economic activity.

Faunal refuse was also mostly restricted to the west half of the room. As one can suspect the highest concentrations were associated with the hearth, Feature 1. In the opposite corner of the structure, Feature 5, is a subfloor stone-lined cyst, presumed to be a storage pit. It was completely empty and very few
Figure 6-40. Unit 145 Room A. A) Features and ceramic vessels. B) Artifacts.
artifactual remains were found in the surrounding quads that would lend clues to its possible contents. It is possible this area was reserved for storage, but the storage of what? There is no trace of any possible stored good. It is likely that this open space was reserved for consumption or an area of rest. The storage pit may have held the remains of some perishable item, which has been completely eaten by rats. Perhaps phytoliths or soil chemical analysis can shed light on the function of this feature and the eastern portion of Room A.

Room B. This rectangular room is 2.7 meters wide and 8.2 meters long. Just south of the door a small retaining wall 24 cm high forms a platform 3 meters in length, which as the east half of Room A, reflects very little material remains. A hearth, Feature 6, is located in the north portion of the room against the wall centered in quad 298. Most ceramic material in the room is focused around this feature (Figure 6-41). There is also evidence that the structure may have been cleaned as much of the faunal refuse not located around the hearth was found along the east wall.

Ceramic remains are abundant, however, it is surprising that out of 182 sherds only one was diagnostic. This rim pertained to a short necked cooking jar located near the hearth. Other vessels were also located near the hearth along the north wall. Analysis of the pastes present suggests that there were at least 2 large vessels present or perhaps several smaller ones from two paste types. Smaller numbers of sherds represent portions of four smaller vessels. Many of the sherds had thicknesses under 6 mm and are likely from small bowls or other consumption vessels. In contrast to other structures excavated on Cerro Mejia a
Figure 6-41. Unit 145 Room B features and ceramic vessels.
larger portion of sherds were slipped or exhibited a wash of some kind. This is likely indicative of the inhabitants' relative socio-political status. The slip present in this context may reflect higher quality production or the neutralizing effect of plastered floor and/or walls that have deteriorated.

Lithic remains were less abundant and were not clustered in a way that revealed much about activities or activity areas in Room B. A combination tool and rocking mano that had secondary use as an anvil are the only implements that pertain to potential food processing. Debitage appears to be scattered throughout the room, but is somewhat located around two utilized cores in quads 245 and 297. Obsidian flakes and retouch were present in the room as well as a small fragment of chrysacolla. Gravers and concave edged implements were also uncovered. The variety of artifacts is not uncommon and reflects that many activities were taking place in the room. What is unusual about the lithic remains is that there are no clusters of artifacts or lithic refuse that clearly indicate a pattern of use. Even in the immediate vicinity of the hearth the evidence is dispersed. This may be because of recent cleaning. Evidence of cleaning is most prominent when examining the distribution of faunal refuse (Figure 6-42).

Animal bone is highly concentrated in and immediately around the hearth, Feature 6. Another high concentration was located just north of the door along the east wall. Moderately high concentrations occur in the northeast corner of the room and in the corner formed by the retaining wall and the east wall in the small portion of quad 220 and 221. These areas do not reflect the collection of other kinds of refuse, nor ash dispersions that would indicate that the faunal
Figure 6-42. Unit 145 Room B artifacts and voids.
material originated from the hearth. These areas may reflect common consumption areas of animal products, the caching of bone for the production of artifacts, or areas of immediate disposal preceding carrying the remains outside the structure for dumping. If these areas represented a location where these materials were processed or fabricated into some form of object, lithic implements would be directly associated with these materials. This would seem likely in reference to other contexts discussed thus far, however, the elite class may have operated by a different esthetic, storing objects in specialized locations when not in use and cleaning more regularly to facilitate the reception of guests and necessary feasts carried out in order to maintain the social order and community production. Thus rules that we have noted thus far may not apply to elite space, where space facilitates social relations rather than activities resulting in the production of material products and wastes. The remains of food products, the provision and consumption of food and drink, may be more significant in this structure as opposed to lithic implements as indicators of productive activity.

The light dispersion of artifacts has left much of the platform area open for social gathering, storage, or sleeping, or it may have been recently cleaned. In the northern portion of the room, Void 145B1 is in quads 295 and 296 in front of the hearth. Void 145B2 is in the northwest corner. Both these areas were likely locations from which one could carry out activities associated with the hearth. Additionally, an area against the west wall across from the door and adjacent to the platform may have been an area at which the anvil was used, Void 145B3. Given the nature of the entire structure it is probable that activities were regularly
cleaned up and may not have been carried out consistently in one location over time. As such it is very difficult to ascertain the organization of space other than to describe it as more controlled or regimented than what is exhibited in the other structures.

**Room C.** Room C is a specialized context that reveals the nature of Unit 145. It was a space for the intensified preparation of food for large groups of people. The room is 2.8 meters wide and 8.5 meters long and contained seven hearths, Features 8, 9A, 9B, 9C, 10, 11, and 15, of two different kinds and numerous remains of cooking vessels, storage jars, and faunal refuse. It is notable that once again nearly half of the room is devoid of artifactual remains. This is particularly curious in this case because four stone lined hearths are located east of the door, but the eastern portion of the room exhibits very few material remains (Figure 6-43).

Ceramic vessels were not apparent through direct evidence of clearly diagnostic sherds but rather large body sherds and the presence or absence of exterior burning allowed inferences to be drawn pertaining to the size and function of the vessels present. Clusters of pot sherds sorted by paste allowed an approximate number of vessels to be plotted in their general locations.

Cooking vessels were the most numerous type present, although there were many large sooted sherds, there were few rims from which to infer form. Cooking vessels were located around the hearths, Features 9A, 9B and 9C. Sherds of one vessel were north of Feature 9A, another was resting on top of Feature 9B and three different sooted ceramic clusters were northwest
Figure 6-43. Unit 145 Room C. A) Features and ceramic vessels. B) Artifacts.
of Feature 9C. The remains of one other possible cooking vessel was clustered in quad 387. One of these did have associated rim fragments that revealed it was a short necked cooking jar. Two other vessels, likely storage jars, are closely associated along the north wall in quads 413 and 414. The only other identifiable vessel appears to be a bowl equal in form to numerous examples uncovered in the Vegachayoq Moqo temple compound at the Wari capital (Gonzalez Carre et al. 1996). This is also a common form on Cerro Baúl. It is slipped red and was also near the north wall in quads 412 and 413. Several paste categories have too few sherds to suggest that an entire vessel was present, however, they exhibit both interior and exterior burning and were not recovered from the immediate vicinity of the hearth. These sherds may have been used as tools or may have been used as large fragments to roast certain foods, similar to sherd containers uncovered in the Southwest United States (See Lightfoot 1994). Future refit efforts will examine this and other possibilities for the recycling and reuse of large pottery fragments.

Once again lithic materials were relatively sparse in the room space. In this case, clearly an intensively utilized food preparation area, the low frequency of stone implements is rather unusual. Most lithic remains were associated with the hearths, Features 8, 9A, 9B, 9C, 10, 11, and 15. The remainder was located along the north wall in the western portion of the room, apparently clustered as if in a storage location. No grindstones were present (Figure 6-43).

A hammerstone was associated with Feature 11. Flakes are associated with all of the hearths. A few gravers and concave edged implements were
found near Feature 10. The largest number of flakes, used and unused, was centered in quad 361. They were seemingly in a pile and thus may have fallen from a storage location, perhaps a wall niche opposite the door. Other flakes are stored along the wall with the core tools, a hoe, and a graver. There are two cores present one in quad 386 the other in quad 388. There is very littledebitage in the room and it is likely that this space was cleaned on a regular basis. Among flakes and other chipped stone tools, obsidian implements made up a high percentage of the flaked material. An obsidian point in quad 408 was a typical large knife with clear evidence of asymmetrical use and reworking. It is not surprising that obsidian was present in this space since there was an exceedingly high number of faunal remains, clustered near the hearths in this structure.

The hearths in Room C are of two different constructions. Features 9A, 9B, and 9C were hearths typical of Cerro Mejia in that they were rounded pits of stratified ash with no clear definition. The features are named A, B, and C because initially the ash dispersion surrounding them made it appear as though they were one large cooking hearth. Profiling revealed three separate pits that served as the foci for different fires. These three features were full of well preserved camelid bones that suggested the meat had been roasted. Additionally, some of these bones consisted of cut and discarded ends of long bones. Evidence that the shaft portion had been reserved for some function. There was also a perforated thin section of bone, a broken artifact of some kind.
The hearths on the east side of the door were quite different. Features 8, 10, 11, and 15 were small stone lined circular pits full of large chunks of burnt wood. It is presumed that these hearths would have served well to boil liquids in ceramic vessels and were probably instrumental in the production of *chicha* (See Meyerson 1990 for modern methods of preparing *chicha* near Cuzco). Very few ceramic fragments were associated with these hearths, however, a hot kitchen would not be the best place for the later stages of *chicha* production. The *chicha* vessels were probably allowed to ferment in a cooler location, such as Room A in the south. Features 8, 10, 11, and particularly 15 also had faunal remains associated, but these amounts were significantly smaller and likely represent a different means of preparation such as additives to soups.

Room C is a significant space in which large meals could be prepared. Four hearths were unique among the others that were excavated at Cerro Mejia. The design of these features may have facilitated the preparation of *chica* or large pots of soup, and were likely used to do both. The other three hearths contained and were affiliated with over two kilograms of charred bone, predominantly camelid. This substantial quantity, in light of the fact that the room otherwise appeared to have been cleaned regularly of other sorts of garbage, likely is the remains of a large feast. The features and material remains in Room C provide direct evidence of feasting and represent tangible material correlates of Wari administration at its tertiary level. The architectural features of Room D and Room E reinforce this interpretation and together provide a glimpse of the everyday relations of power between leaders and those being lead.
Room D. This rectangular room is not enclosed as are the other roofed spaces in Unit 145. Room D is an open room that seems to have functioned as a platform to hold audience, elevated above the patio floor surface by 110 cm, a platform and three stairs lead up to a large opening, 4.2 meters wide, in the west wall. The area in front of Room D is lined with a bench. This feature will be described in detail as part of Room E. The east wall exhibits the bases of two niches that would have been visible from the patio they are each approximately 47 cm wide (Figure 6-44).

Room D is approximately 2.7 meters wide and 8.3 meters long. The floor is covered in patches with flags stones and in the southwest corner of the room there is a square stone lined pit, Feature 16. The bases of two wall niches were recognized in the east wall. They were positioned so that they could both be viewed from the patio. Two ash dispersions were located on the floor surface. The larger of the two, Feature 14, was located on top of flagstones, however, a thin layer of burnt earth, potentially the remains of a plastered surface, suggests that this feature is in situ. It is perhaps the remains of a burnt offering. Feature 17, a much smaller patch of ash has similar contents to its larger counterpart and also appears to have been burnt in situ. These features do not appear to be hearths because they are not stratified ash features and do not appear to have been located in a prepared depression, they are located directly on the floor surface.

The special nature of this structure is evident by its architectural features. The structure belonged to an elite leader that received subordinates. The
Figure 6.44. Unit 145 Room D Features, Ceramic and Artifact Distribution
architectural plan of the overall residence was designed to manipulate social relations. The elevation and orientation of Room D reinforced the administrator's power. The status of this administrator is evident by the artifacts found in Room D.

Ceramic remains were mixed with the ash dispersion and appear to be the fragments of a fine thin walled flaring neck jar. Near the south east corner several fragments of a flaring neck bowl were uncovered. The fragments were not slipped and this vessel may be a rustic variation of a flaring sided bowl commonly found in Vegachayoq Moqo and in later Wari settlements on the flanks of Cerro Baúl.

Lithic remains can be divided into two categories, the latter consisting of precious stone. Common lithic material was numerous and predominantly consisted of flakes. A number of gravers and concave edged implements were also present, as well as utilized core tools and a small adze. Obsidian flakes, retouch and a point were also uncovered. The point is a smaller flat faced knife but is notable because it appears to have been made from a blade. Several other flakes resemble blades and suggest that the lithic production in Unit 145 may have been more advanced or produced by specialists serving the leader.

Since the ash dispersions are being interpreted as offerings, it is unlikely that primary activities are represented on the floor by lithic remains. It is more likely that the dispersion of artifacts represent some abandonment activity such as a feast or series of offerings. The exception may be that near the storage pit a number of different tool types are clustered and were likely stored in this
location during the normal use of the structure. Alternatively they may once have been stored in the stone-lined pit but were removed by the activity of scavengers or looters of the site. The presence of precious stone near the cyst supports the later hypothesis. A large cluster of lapis lazuli and chrysacolla chips was located in quads 105 and 130. Small bits of these materials are scattered about the room, but it appears there were once cores present because entire flakes of both materials were uncovered. Obsidian is typically not considered a precious stone, however, a polished flattened fragment suggests that its use was extraordinary in this context either as a mirror, pendant, or large bead blank. The quantities of these materials are not great in reference to caches found on Cerro Baúl, however, in reference to the other contexts investigated on Cerro Mejia, the administrator that dwelled in Unit 145 was a relatively wealthy individual, especially since what was left behind was probably considered waste.

Faunal remains are predominantly associated with the two ash features. Bones in these contexts exhibit burning. A small amount of bone was also associated with the storage pit that exhibited no burning and thus was very poorly preserved. Relatively low frequencies or the complete absence of bone along the structure’s walls suggests that the space was cleaned on a regular basis or that animal resources may not have commonly been consumed in this area.

Room E. The patio space between the four enclosed rooms is not well defined as in most patio groups because there is no enclosure wall and the enclosed rooms do not meet to form the boundaries of the central space. The
patio is trapezoidal because the orientation of Room D is different from the other three enclosed rooms, and averages 9 meters wide and ranges from 14 to 16 meters long (Figure 6-39). This space was not excavated completely, but was tested in areas fronting the different enclosed rooms to determine if benches were present and also a 2m wide swath was excavated west of Room D to define the stairs. In this excavation near the center of the space was an ash feature, Feature 18, resembling those in Room D (Figure 6-45).

The areas tested in front of Rooms A, B, and C, were small. Often they were less than one meter wide because these areas typically consisted of the remainder of the quad in which the wall was contained. Therefore little can be said about the presence or distribution of ceramic sherds or types of vessels present, however, lithic remains may add clues to activity areas located in the shade from overhanging roofs, likely an area of intensive use. Additionally if the last activity to have taken place before the structure's abandonment was a feast or ritual that gathered people together, they were likely to have been seated along these walls as the ceremony was performed.

The area in front of Room A is characterized by a small cluster of ceramic remains pertaining to paste 6 in quads 139, 140, 141, and 142. This may be significant in that the small semi complete ritual vessel found on the threshold of Room D is of the same material and exhibited some burning like the sherds found in this area, also in front of a door. This vessel and its context will be discussed further below. Lithic material likely reflects normal activity, flakes were the most numerous, a graver, obsidian retouch, debitage, and two utilized cores,
Figure 6-45. Unit 145 Room E bench, stairs, and platform. Ceramic vessels and artifacts are also indicated.
were also present (Figure 6-40). A small smooth red stone may have been a significant part of some ritual or this fragment may have been a polished fragment being worked into a pendant or large bead. Bone was recovered from most quads along the wall. The frequencies are in the low to moderate range and do not demonstrate anything other than ordinary deposition.

The area in front of Room B is a very narrow strip averaging less than 50 cm wide. Few artifactual remains were present. One pot sherd, and one flake, does not reveal much about the activities in this area, however, a small clump of what appears to be lime suggests that coca may have been chewed in this structure. Faunal remains were clustered in quads 170 and 195. This may reflect refuse that was swept to one side, however, since this is the area directly facing the audience platform it may reflect the remains of the feast and the locations where visiting leaders or subordinates sat during this ceremonial activity.

The area excavated in front of Room C only encompasses the space in front of the door and to the east. It is approximately 50cm wide. The remains in this zone suggest that the shaded area outside of Room C was utilized for a variety of tasks. A cluster of ceramic sherds, possibly of one or two consumption vessels because of the thin sherd thicknesses, were located just west of the door. Accompanying these vessels were flakes both utilized and unutilized, a graver, an implement with a concave edge, and retouch flakes (Figure 6-43). A very low frequency of animal bone was also present. East of the door, there are a few sherds, none of which cluster in a way to denote the presence of a vessel.
A small fragment of chrysacolla was recovered from quad 332 associated with it were two gravers that may have been used as drills, a small polishing stone, a concave edges implement and two utilized core fragments. Together these materials are suggestive of bead production. Immediately outside the door there is a moderate concentration of animal bone with lower values along the remainder of the wall to the east.

The area fronting Room D was lined by a bench an average width of 50 cm. Below this an elevated floor surface corresponds with the elevation of the lowest stair. This raised area extends beyond the bench approximately 2.8 meters. A posthole was found in the southeast corner just below the bench and suggests that an extra large overhang may have covered both the bench and the platform area. The bench is elevated 50 cm above this platform. Beyond this area the floor surface is another 40 cm lower, a total of 1.1 meters below the elevated threshold of Room D. Between the threshold and the platform surface there are several levels (Figure 6-45). The bench acts as the first stair, it is followed by three evenly spaced stairs, the same width as the bench. After the third stair there is a gap of more than a meter before the platform descends to the surface found in the center of the patio (Figure 6-46).

The surface of the bench was only uncovered to the south of the door. A profile cut extended from Room F revealed the elevation of the platform and lower floor. Therefore only the south half of the bench, the area in front of Room F, and a trench 2m in width, centered in the opening to Room D was excavated to the occupation surface. This provides us with an incomplete picture of the
Figure 6-46. Unit 145 Room E Floor features, ceramic vessels and artifacts.
activities carried out on the various levels, but sufficient evidence to compare material remains with similar contexts found elsewhere on the site and within residential compounds on Cerro Baúl.

The most complete ceramic vessel present on the site was found broken near the center of the opening just at the border between the threshold and the bench. This vessel is shaped like a small saucepan with incurving walls and a hollow spout for the handle. The vessel is not decorated, but was made with a fine grain compact paste and exhibits thin walls and exterior burning on the vessel’s base.

The bench was presumably a location where the kin or close supporters of the leader could sit showing their allegiance or bolstering their prestige, however, a small number of lithic remains suggests it was also used as a production area. In quads 131 and 132 two small smooth bead blanks were recovered, one red the other of chrysacolla. These were found in association with two gravers and three concave edged implements. Several flakes and two utilized cores were also found in this area. A sizable flake of lapis lazuli was associated with a similar cluster of tools, debitage, and retouch in quads 181 and 206. Only low frequencies of bone were found in some areas of the bench.

Little of the platform area was excavated and presumably the portions that were uncovered were directly in either a traffic area or potentially a specialized space where tribute was offered and gifts were exchanged between social groups or individuals. The fragments of a large long necked flaring rimmed jar were found broken on the edge of the platform in quads 410 and 435 and down
onto the floor in quads 411 and 436. Some of the fragments of this vessel exhibited burning, however, neither of the two fragments found of the vessel's base exhibited burning. It was likely not a cooking jar but may have come in contact with burning material in some other way. No ash or evidence were found in the immediate area.

Lithic materials are numerous and represent varied activities in two areas of concentration. In quad 133 a small cluster of 21 obsidian retouch flakes were found. On the stairs and platform are a core, debitage, unutilized flakes, utilized flakes, and utilized core implements with evidence of percussion. These remains indicate that lithics were recently produced in this area. Evidence of lapidary work with chrysacolla is also present on the platform. In quad 233 there is a broken fragment of an obsidian point. A moderate level of bone was present on the stair in quad 231 other quads show very little faunal remains if any at all.

The remainder of the room is at floor level. Ceramic remains are few, but include a decorated fragment in quad 210 and a portion of a short necked storage jar in quads 214, 239, and 240. A number of obsidian flakes and retouch is scattered along the floor along with chert flakes. A flake of blue cortex found in quad 231 is presumed to be manufacturing waste from the reduction of a lapis lazuli core. Two gravers were located in the adjacent quad, 206. Faunal remains are largely absent being located in low quantities only in quads 238 and 240.

From the bits and pieces of the patio floor revealed it appears that typical activities included bead production, the making and using of flakes, and food
consumption. What is atypical is the materials used, lapis lazuli and chrysacolla, the quantities of these materials present, and the large quantity of obsidian throughout the patio space and entire structure.

**Area F.** A corridor is located south of Room D and was designated Area F. The corridor ranges between 1m and 1.2 meters wide and is 6.2 meters long. It leads onto the platform surface of the patio, Room E. A narrow door in the southeast corner opens into the northeast corner of the large attached plaza (Figure 6-47).

A few scattered sherds likely represent refuse or wall fall with no cluster suggesting the presence of a vessel. Lithic material was found throughout the space, however, many of these items were several centimeters above the floor and may represent the remains of cached tools located in wall niches of Room A or D. Items found near the floor are divided into two activity areas. In quads 54 and 55 in the northeast corner of the corridor there are two adzes, a utilized core, a polisher exhibiting bright orange pigment, a chunk of biotite mica, and a few flakes. These special items may also represent a cache of some sort or may be representative of activities that spilt over from the adjacent plaza space. Likewise, the materials found adjacent to the platform surface in Patio E may be more reflective of activities that took place in the patio space as opposed to those that were carried out in the corridor. These items include a concave edged implement formed from obsidian and three others of local silicious material, a large primary flake resembling a hoe in general shape and size, two gravers, several flakes, retouch, and debitage. Low concentrations of bone in several
Figure 6-47. Unit 145 Room F artifacts.
quads suggests that there may have been use in this zone beyond traffic, however, if the plaza served as a major venue for large feasts it is likely that the bone represents consumption around this area or the ad hoc disposal of faunal refuse in an out of the way spot.

Unit 145 overall shows stark contrasts in patterns of use compared with the other residential structures at Cerro Mejia. In general the rooms were kept much cleaner than its more common counterparts. Cooking and consumption was carried out in two different enclosed rooms at a normal level, Room A and Room B, however, the food preparation in Room C exhibits an intensification that stretches beyond members of the larger household. Storage is also built into the facilities of this residence. The largest spatial features, an audience platform (large open elevated Room D) and lower platform construction, clearly set this residential structure apart from the others in the sample and demonstrate together with the other unique attributes of this dwelling the archaeological correlates of residential administration.

The organization and features of Unit 145 contrasted so greatly with the other residential structures at Cerro Mejia I was curious if these patterns would be equal in the other formal patio group construction on the site’s summit. To verify the association of these features and artifact dispersals as representative of a generalized pattern of Wari administration rather than a unique context, probes were made in Unit 136 the larger formal patio group structure on the summit of Cerro Mejia.
**Unit 136**

Unit 136 is a large complex of rooms attached to two large plaza structures. In this complex there is a formal patio group structure very similar in form to Unit 145. The central patio is trapezoidal rather than square and there are four galleries arranged around this open space. The eastern rectangular room does not appear to be elevated, but the largest plaza to the west has a platform construction along the east wall and may have served as a larger venue to hold audience. Since this structure is larger it is presumed to belong to the primary leader and as such administrative space may have been more complex or further stratified than that in the house of the secondary leader.

The formal patio group portion of this larger complex was tested with three probes. Test excavations of 2 by 2 meters were made in selected zones to reveal if features exhibited in Unit 145 were present. The rooms corresponded to Rooms A, B, and C. Room D was not tested because a large looters pit left little intact of this context. These features were all uncovered, a storage pit, a sleeping platform and a food preparation venue, however, the location of the intensive food preparation room was located in the west rectangular room and the elevated floor surface presumed to be a sleeping platform was located in the north rectangular room. In other words the functions of Room B and Room C were reversed. This placed the food preparation room closer to the area in which these meals would have been served, the large plaza with audience platform or may have been more practical with regards to wind or light. Unit 136 includes
many looters pits, but the probes were located in intact contexts. Nevertheless, the spatial organization of this structure would likely reveal more details about Wari administrative practice and as such is a top priority for future investigations at the site.
CHAPTER 7
DESIGNING SPACES FOR POWER IN A RESIDENTIAL CONTEXT

The goal of the investigation at Cerro Mejia was to identify and explain
administrative practice within the Wari Empire as it was organized and conducted
in residential space. In exploring this course of study it has become clear that
the spaces affiliated with administration at some levels were designed to convey
the state’s political hierarchy and to legitimate differential power relations
between social classes in the greater Wari society. Furthermore political activity
is represented by different architectural spaces and associated features at
different levels of the power hierarchy. Some of these spaces are combined with
residential activity in household dwellings, but others are outside the house in
special purpose administrative facilities or in public areas designed to incorporate
a large group of subordinate participants. These different spaces will be
reviewed below as they occur at the different sites in the Moquegua drainage,
specifically at Cerro Mejia and Cerro Baúl.

The nature of the administrative activity cannot be inferred from
architectural forms alone. Based on the excavation and analysis of the
residential structures on Cerro Mejia a number of patterns have emerged that
reveal the archaeological correlates of state sponsored socio-political
administration contained in residential space. The artifacts are important for
identifying socio-political activity, however, the association of features and the
organization of space is crucial to defining administration and understanding its purpose. The overall context of these architectural forms, features, and artifacts are important for identifying the motivation of these activities. Feasting was a common occurrence used to maintain equal as well as asymmetrical exchanges of labor and goods. Assessing the sponsor or the source for the materials required to conduct feasting and gifting is key to identifying venues of political administration motivated by state goals. Therefore it is crucial to understand the entire system or at the very least to include what remains available in the archaeological record when constructing models of political interaction and manipulation. In other words having a basic understanding of the organization of the settlement and production at Cerro Mejia, its relationship to Cerro Baúl in this regard, as well as its access to natural resources such as water, agricultural fields, animal products, and raw material resources have aided this study immensely toward the formulation of a well founded model of Wari strategies of political economy. All these factors will be reviewed as they are in evidence from the work conducted at Cerro Mejia.

Before discussing and comparing the different households on Cerro Mejia and their space within Wari society it is important to establish that the households were relatively contemporaneous and represent structures operating at the same time within the same political structure rather than different times and different phases in the development of state institutions. Six radiocarbon dates pertain to the household contexts. As mentioned previously, the hearth in Unit 8, which was an anomalous residence located in the agricultural fields, does not date to
the Middle Horizon, but the domestic remains in this structure may be reuse of a special purpose structure. The remainder of the radiocarbon dates falls well within the early Middle Horizon. Unit 3, a date taken from the hearth in Room B is the earliest and somewhat of an outlier in respect to the other four dates, AD 637±58 (uncalibrated), this date may reflect use of reused wood, however, it is not unrealistic to accept that this structure was occupied and then abandoned within this time frame. Earlier dates have been taken from contexts on Cerro Baúl. The other four radiocarbon assays from Cerro Mejia Units 5, 118, 136, and 145 all produced results within a twenty year range, AD 692±40, AD 691±42, AD 711±41, and AD 702±54 (uncalibrated) (Figure 7-1). The tight clustering of the dates from these contexts permits us to make valid comparisons between these contexts. These results also are significant because they suggest that Cerro Mejia was occupied in the earlier period of the Wari state. The residential structures that will be described on Cerro Baúl are from this same period, but Unit 3 on Cerro Baúl dates to a postreorganization period sometime after AD 850 (Williams 2001). Thus the following discussion may be relevant to the development of state institutions as well as a comparison of structures at different levels.

A Model of Wari Provincial Administration

The model of Wari provincial administration is based on archaeological and ethnohistoric accounts of Inka institutions and material evidence drawn from the excavations of the residential contexts on Cerro Mejia as well as an overall understanding of the other settlements and the available resources and
Figure 7-1. Calibrated Radiocarbon dates from contexts on Cerro Mejia.
production areas within the Wari colony. Recent excavations have sampled residential contexts at the sites of Cerro Baúl, El Tenedor, Pampa del Arrestrado, and terrace dwellings on the slopes of Cerro Baúl. Maps of the settlements around the provincial center and its agricultural system provide a broad perspective of the scope of the Wari population. The documentation of surface remains and the excavations that have been conducted allow Cerro Mejia to be evaluated within a contextual framework rather than as a site in isolation outside its place in the greater Wari colony in Moquegua.

An administrative hierarchy was necessary in order to harness the labor of permanent settlers living on the slopes of Cerro Mejia. The productivity of the rich Torata tributary would have allowed crop production throughout the year and primarily would have been limited by water availability (See Dolan 1985). The house plans of Cerro Mejia exhibit the most variability in organization and architectural elaboration. Other settlements exhibit more ephemeral material remains and may have been areas where temporary laborers stayed to participate in construction projects or to contribute labor during planting and harvesting periods. These temporary visitors would have been fed in exchange for their work. These meals may have been carried out to the fields themselves or may have been consumed in the vicinity of concentrated cooking facilities at the end of the workday.

The administrators appointed to manage agricultural production along the more than 10 km Wari canal would have been occupied by this activity almost on a daily basis. These managers would have organized large numbers of people
to participate in canal cleaning, planting, and harvesting, while scheduling crop
maintenance among local groups to guard sprouting and ripening plants,
weeding, and other turns of crop maintenance. They would have scheduled
irrigation rotations, planting times, assigned plots to the permanent villagers on
Cerro Mejia and settled disputes between these groups in regards to land
boundaries and water usage.

Administrative activities would have been achieved at two different scales,
however, all contributed labor would have been paid for by "feast" meals and
minimized gift giving, likely represented by the wide distribution of obsidian. The
permanent population was managed through contacts and exchanges with head
men or the lowest level administrators. There was probably one such individual
for each barrio on the slopes of Cerro Mejia. Unit 145 represents a venue for the
gathering of these approximately four to six individuals, but could have
accommodated more. The Chunca Curaca of each barrio were invited to feast
with the administrator and given gifts to legitimize their elevated position over
their barrio neighbors. They were also given resources to feast the households
under their management in order to cull and organize labor as it was needed for
daily maintenance of agricultural production. These barrio leaders served as
foremen and probably participated in the labor projects themselves, oversaw the
labor, and were responsible for completing the task. The administrators on the
summit of Cerro Mejia probably checked on these projects and may have had
specialized knowledge about irrigation or scheduling for planting, watering, and
regimes of proper cultivation for different crops.
More labor was required in some stages of agricultural production, especially if local farmers were given their own small plots to support their households. Temporary laborers were drawn from far-flung populations that are just beginning to be recognized by the identification of plainware vessels from the Middle Horizon period. *Chunca Curaca* from these other tributaries would have feasted with the administrators in exchange for laborers from these other villages. Depending on the distance they traveled they may have received more portable items as gifts rather than resources to conduct feasts among their followers. Presuming a sizable hinterland, large labor parties could be coordinated through socio-political interaction with foreman in the entire provincial territory.

Large labor projects involving numerous participants required a large area as venue for the obligatory feast as well as a facility large enough to prepare food for many individuals. It would have been more difficult to provide visiting leaders with individual facilities to prepare meals for smaller groups. The plaza and platform complex was a facility that would have accommodated these large groups and was the appropriate atmosphere that structured the asymmetrical exchange between the administrators seated on the platforms and the mass of individuals required for large labor projects. Together the two administrators could produce a feast of great magnitude. Both patio group structures, Units 145 and 136, have large rooms with intensified food preparation facilities. They were able to utilize the labor of their female kin as well as females related to subordinate administrators to prepare the food and drink. The barrio foremen
may have participated by serving the meals and were likely given a special location of prestige during these events in exchange for the contribution of their labor in preparing the feast (Figure 7-2).

Higher level administrators on Cerro Baúl, of which there may have been only one, but probably two based on dual architectural facilities, managed everything at the level of the province. They coordinated with the leaders on Cerro Mejia in charge of agricultural production, but also managed craft production, religious practice, and would have interacted directly with elites from the Tiwanaku settlements to maintain trade relations and boundary issues. The administrative facilities of Cerro Baúl are diverse and represent the practice of a more formalized political institution. As mentioned above this formalization may be because these structures are later in time, but it is just as likely that these kinds of spatial divisions were long standing because of the complexity of the administrative institutions at higher levels in the political hierarchy.

The remains of Cerro Baúl have been greatly altered by ritual abandonment practices. Thus it is impossible to determine whether feasting was affiliated with administrative interaction or was only carried out in elite residential contexts based on religious ritual or calendrical observances. Obviously any feast is used and can be framed as an administrative activity as it creates social obligations, reinforces social relationships and can be practiced in a way to establish social hierarchies. In modern times the social hierarchy can be established by the order in which people are served. This order represents a person's relative rank within the group (Bolin 1998).
Figure 7-2. Administrative Facilities on the Summit of Cerro Mejía
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Residential structures on Cerro Baúl are extensive, specialized locations for the preparation of *chicha* are attached to these structures and productive activities for the most part occur outside the patio group. In comparison to Unit 145 on Cerro Mejía, Unit 9 on Cerro Baúl has even less lithic implements present and no clear food preparation areas are evident. Cooking and *chicha* production occur outside the leaders' immediate dwelling. Nevertheless, the structures are designed to facilitate interaction because they have large square patios with wide benches lining all four walls. The design of the structure also allows for asymmetrical interaction because instead of a rectangular enclosed room to the east there is an open platform, similar to, but somewhat different from Unit 145's eastern elevated room. These elite residences have several associated plazas some of which served as the gathering location of larger groups. Such a structure, Unit 25, is a large plaza with four entrances all from different corners and a bench along all four sides. In the west a platform is recessed into the wall and would have given the leader presiding over the activities in this structure a specialized seat of prestige. Outside the residential sector of the site there are patio groups with very different organizational principles. The Unit 3 complex consists of at least a large patio group and larger affiliated plaza. The large plaza may have functioned as a grand waiting room as there appears to be no features is this space. The patio group has one rectangular enclosed room along a portion of the east wall. Fronting this room is a bench and stairs. The patio size is of a larger scale than the residential patios. Therefore the space within
this structure allows for more people to gather or perhaps is larger in order to create a sense of monumentality. Unit 3 also contains a block of storage rooms. This space was likely used as a distribution facility or perhaps as a location to receive tribute. Also, some of the unroofed patio space in the large patio may have been used for the storage of certain goods.

Two D-shaped structures provided venues for political interaction through participation in restricted religious rites. These actions may have been limited to the highest levels of the Wari elite, however, both structures are situated with plaza spaces fronting the temples. Therefore, like religious practice pertaining to the Inka Qorikancha, lower administrators were allowed to witness or participate in some acts in the plaza space, but they were not allowed to enter or participate in the activities located inside the D-shaped temple itself. Nevertheless it may be important to note that being allowed to participate in some way may have encouraged local elites to participate in Wari society. The privilege of participating, although limited, in sacred Wari imperial religious rites may have been a powerful mechanism for promoting cooperation of non-Wari administrators. By creating a "Wari by privilege" status, local elites had a vested interest in the success of the state as their source of prestige and power.

There is also a platform plaza complex on the summit of Cerro Baúl, but there is only one platform. It is much larger than the platforms on Cerro Mejia and is constructed in a style that more closely resembles stepped ushnu structures of Inka provincial centers. Until the discovery of platforms on Cerro Mejia it was thought that the platform on Cerro Baúl pertained to the later Inka
conquest of the region (Lumbreras et al. 1982), however, recent investigation, associated ceramics, and a radiocarbon date place it in the Middle Horizon (Williams personal communication). The associated plaza space with this area is not as large as that on Cerro Mejia. The common agricultural laborers were never given free access to the summit of Cerro Baúl, however, on some special occasions the Chunca Curaca from barrios on Cerro Mejia and villages throughout the province may have been allowed interaction with the provincial elites. This may have been in order to present tribute, swear allegiance to the Wari state, and receive a small token of elevated political status. These interactions may have involved gatherings as we know them from the ethnohistoric accounts describing Inka practices such as the gifts of wives or other exchanges that would have created fictive kin relationships between the higher and lower levels of the administrative hierarchy (Zuidema 1990).

The previous model is a descriptive one and is based directly on the archaeological remains evident at the sites in the Moquegua valley. As we know from the work of Schreiber (1992), the Wari and Inka may have used different strategies in different regions to manage local population and utilize resources from diverse environmental zones (Also see Menzel 1959). What I have described above is presented in the context of a working hypothesis that should be tested in other provincial areas. In order to test this hypothesis with the material remains in other regions it is important to define the archaeological correlates used to devise this model so that comparison can be made based on equivalent evidence.
Archaeological Correlates of State Sponsored Administration

In the formal patio groups on Cerro Mejia socio-political administration is clearly demonstrated by the architectural features, platforms that demonstrate the social hierarchy and patio spaces that accommodate social interaction by providing the sufficient space to carry out political relations. Units 136 and 145 were designed around social administration. Correlated evidence is provided by the remains of feasts, the facilities to prepare these feasts, and vessels from which to serve the feast meal and drink. Additionally, small portable wealth items such as precious stone, lapis lazuli, obsidian, and perhaps chrysacolla, are also present as materials only obtained through state channels.

Contextual information based on patterns from the entire site support these lines of evidence in that residences with evidence of administration are cleaner than common residences and contain less evidence of daily productive tasks. The relative cleanliness of Unit 145 suggests that some residential production was carried out by people outside the residence and presented to the administrator as tribute or labor service or more attention was paid to keeping the structure tidy because guests were regularly visiting. Finally, the organization of the settlement as a whole provides us with an understanding that the formal patio groups were located at the center, adjacent to public facilities where the administrators could pursue other strategies of political power production.

Administration at the lower levels on Cerro Mejia is more difficult to identify because clear features signaling asymmetrical interactions are lacking. As discussed above, feasting is prevalent in abandoned structures at Cerro Baúl as
an activity that closed the house. Therefore the remains of feasting in a structure cannot be directly inferred as overt socio-political administration, but rather as a practice that reflects a shared Wari cosmology in which members participated and in so doing reaffirmed the hierarchy of social relations at the scale of the individual.

In residential compounds feasting was associated with administration at lower levels in the political hierarchy, but it was also a necessary part of everyday life as ritual. Births, changes in age grade, weddings, and deaths are all determined by individuals, but were celebrated to reinforce group membership and create bonds of reciprocal exchange. It is important to decide where these individual-centric feasts would have taken place. Would the individual's immediate family preside over such an activity or would the barrio leader act as godfather, and cosponsor such an event, thus, maintaining his residence as the primary locale to receive feasts with his generosity being the motivating factor in the behavior of other members within the group. Favors such as hosting a wedding feast would reinforce the asymmetrical relations between the leader and the other members of the barrio and increase the power and resources of this Chunca Curaca through the debt others owed him. It is important to note that there were terms in the Inca hierarchy for those responsible for preparing feasts, Huallpani, in Aymara the term is Taani. This term is synonymous with fieldmaster or foreman (Rostworowski 1999).

Feasting or preparing special meals for those that contribute labor in agricultural fields would be necessary if households were allocated usafuct
rights to plots for their own sustenance. It is possible that fields were allocated to barrios rather than to households, which would reinforce the power these fieldmasters would have over members of their barrio. The archaeological record will likely never reveal such details of land tenure, however, identifying where foodstuffs were stored can provide significant clues toward understanding administration and redistribution in the Wari state.

In modern times, households provide meals or feasts to those who contribute agricultural labor when need exceeds the resources of the household, such as planting and harvesting. These are prepared by women in the household but are consumed in the fields rather than in the residence. Therefore such feasts may not be part of the archaeological record in houses.

Evidence of feasts remain an important archaeological correlate of socio-political administration, however, when such remains are encountered it will be important to note if these are the result of structure abandonment rituals or represent activities that were regularly carried out in the residence as a politico-economic activity. It is also very significant that future research be aimed toward identifying the locations of storage within the larger community as no sufficient facilities were noted in the residential structures.

Archaeological evidence of feasting includes consumption wares, bowls, and sometimes cups. These vessels are hard to identify without diagnostic fragments, however, generally consumption wares as well as some serving pitchers exhibit thinner vessel walls than storage and cooking vessels. They also are made from finer more compact pastes. Thus these two characteristics may
be able to contribute to our search for evidence of administration. It is important to note that small vessels are easily transported and decorated heirlooms reinforcing one’s social status are not likely to be abandoned even when broken. Many such heirloom vessels have been encountered during excavation of other middle horizon contexts that have been mended several times. Such wares are more likely left in tombs rather than on abandoned house floors. Therefore the ratio of decorated wares, even if the slip was preserved (which it is not on Cerro Mejia) was likely very low and thus our primary line of evidence is this study of rustic plainware serving vessels that could have been used in everyday consumption.

Anita Cook (2000) has conducted analysis of ceramic wares from the Wari capital and provincial centers and has noted that consumption vessels often have postfired incised markings. She interprets these as owners’ marks rather than makers’ marks. Such marks suggest that at some events participants were expected to bring their own consumption vessels. Clever individuals marked them so that there would be no question as to the ownership of a vessel. So the number of consumption vessels found on a house floor may only reflect the number of adults in a particular household. Therefore administration at the lower levels may not be easily identified by an abundance of consumption vessels.

On the other hand, if the feast was prepared solely by the members of the Chunca Curaca’s family in his residence then the number of serving pitchers or cooking vessels may be a better indication of who was providing feasts for others. Additionally, since access to maize may have been strictly controlled, it
may be that only fieldmasters had access to resources that allowed them to produce *chicha*. The fermentation of *chicha* leaves its mark on the interior of large jars by pitting the interior surface (Arthur 2000). Vessels for *chicha* production were presumably large and may have been left behind. Alternatively, it is said that the chichi brews better as the vessel ages and thus an old pitted jar may have been an item of value (Umire personal communication). Lightfoot (1994) also suggests that large vessels are good containers to carry small items when a move is planned.

Faunal remains representing the consumption of meat are not typically a daily occurrence, whereas *charki* or bones may be added to some soups. The consumption of large amounts of faunal resources would likely be associated with feasts. Feasts could have been provided in the form of a rich soup, however, evidence from Unit 145 suggests that meat may have also been roasted. Of course feasts provided by administrators at different levels in the state hierarchy were likely different with feasts being richer at the higher levels of the hierarchy. It is also true that the feast may consist of different elements based on who was the guest. Obviously, a more sumptuous meal would be served to a visiting leader from the capital than would be provided for the subordinate *Curacas* of one's own settlement. Nevertheless, it is important not only to document how much bone is present but also to note the relative condition of that bone. After all, bone was used for many tools and other purposes and may have been curated and allowed to accumulate over long periods of time. The frequencies of bone may be deceiving. The identification of
bones by element may help differentiate the faunal remains, however, the preservation at Cerro Mejia provides an obstacle to comparative analysis.

As mentioned above the house structures of the administrators living on the summit of Cerro Mejia were designed to permit social interaction. In contrast a foreman’s house initially started as a small, one room structure adjoined to a patio. As the individual grew in prominence and his family grew in size he altered the structure to accommodate more family members and eventually social administration. Socio-political interaction would be important to his new status, however, he and his family were still conducting normal economic activities with some but marginal help from others in the group and from the foreman’s direct superior. After all, the Chunca Curaca was appointed. He was probably selected because of his family’s ability to successfully produce a surplus. Local chiefs and important men in modern times never sit on the floor but typically sat on a wooden stool (Mayer 2002). Similar stools called tiyana were a symbol of rank in Inca times and have been recovered from Late Horizon tombs in the Ica Valley (Menzel 1977). It is possible that the only thing a minor elite had to denote his office was a perishable wooden stool.

Nevertheless, if a household structure was to provide for social interaction then it must have had an appropriate amount of space to facilitate this activity. Therefore another archaeological correlate of administration is an appropriate amount of space. Bawden (1982) noted that in his analysis of the different classes present at Galindo that the relative status of an individual based on the presence of wealth items could be correlated with the relative size of the ‘sala’.
The archaeological space he describes as a 'sala' is functionally equivalent to a patio and often had benches along all four walls, however, it is unclear if these structures were roofed or open. He describes that the largest ‘sala’ contained a dais with ramp, which is a feature conceptually equal to a platform and stairs in its ability to reinforce social inequality. Therefore structures with larger patios are more likely to have participated in the political hierarchy (Figure 7-3).

Other important features that were noted for Unit 145 may also be present in the residences of the lower administrators. These would include the intensification of food preparation areas, as well as the generalized cleanliness of a structure. This cleanliness may only be present when the low level administrator is about to serve a feast since this activity would not have been as common to his house as it would be to that of the full time administrative specialist.

Another significant feature of social administration is gift exchange. The subordinates may contribute some produced lithic implements, objects of wood or bone, and common objects that allowed Unit 145 to exhibit less in the way of daily productive activities. Unit 4 exhibited a wide variety in manufactured point morphology these items may represent a form of tribute to the Chunca Curaca. In exchange, administrators would distribute items controlled by the state. This may explain the ubiquitous appearance of obsidian, as well as the presence of chrysacolla and other precious stones in some of the household structures. The relative weights of these materials may contribute to our understanding of who had more access to these resources and thus who was receiving gifts and who
was giving them. It is important, however, that only items in use be counted, debitage can accumulate. It is also significant to recognize that craft specialists may possess more of these items than higher-ranking members of society that do not manage artisanal production. For instance, note that Unit 118 has more obsidian, more lapis lazuli, and more chrysacolla than Unit 145 (Table 7-1 and 7-2).

Based on this finding and the overall size of the patio spaces it would appear that Unit 118 exhibits many of the important archaeological correlates associated with social administration, leaving cleanliness aside. Unit 118 is located on the summit of Cerro Mejia and as such must have enjoyed some kind of elevated status, however, there are no clear architectural features to suggest that this household participated in socio-political administration at a scale practiced at the level of those in Unit 145. As production was an important focus of activity throughout the structure, perhaps the relatively cleanliness of Room H demonstrates a special clean space that facilitated gatherings for social interaction among members of the crafting group. Unit 118 probably represents the remains of a craft specialist's household and workshop. As an artisan this individual may have participated in a separate socio-political hierarchy apart from that which managed agricultural labor and unskilled work projects.

In the Aztec Empire, it is well documented how groups of craft specialists formed guilds, managed their own members, and interacted with elites separately from generalized farm and unskilled laborers (Smith 1996). In the Andes archaeological contexts at Chan Chan (Topic 1982), Pampa Grande (Shimada
1994), and Tiwanaku (Janusek 1999) suggest that artisans worked in enclaves and may have participated as a group in society with elevated status, having their own socio-political hierarchy. Perhaps one of the artisans that lived in Unit 118 was a leading member of a craft guild, whose members came to this facility to carry out productive tasks as well as to participate in parallel practices of socio-political interaction and occupation specific religious rituals in Room H. It is possible that everyone participating in this particular craft lived together in this cluster of dwellings. The similarity between the shapes of room H and the alcove Room C in Unit 4 suggests that individuals in a particular group may have participated in the political economy and religious practice, both under the leadership of lower elites. Therefore it is possible that in Wari society specialized household shrines may also be particularly prominent in the houses of lower elites.

The evidence that was presented above demonstrates that there was socio-political administration at two levels at the site of Cerro Mejia. This settlement is large enough and has the appropriate facilities to be at a level above the village as it would be defined within a site settlement hierarchy. This town or ones like it could exist under the control of a middle range society, sometimes called chiefdoms. A state does not need to be present in order to support these levels of socio-political interaction. Other features at Cerro Mejia, qualities of the overall colony, and the links between Cerro Baúl and the Wari heartland represent the evidence that places the activity at Cerro Mejia within the context of state control.
The organization of the settlement is well defined at Cerro Mejia by walls that divide the residential areas into several zones. The most prominent division of the site is between individuals that live on the summit of the hill and those who live on the slopes. It is curious that there were no large manos and metatés found in the terraced slope dwellings. These implements were found along the border of the agricultural area just above or below the canal. The state obviously controlled not only the food stuffs produced in these fields but also the processing of these resources as well. Either the crops represented products that needed to be processed immediately upon harvesting or the crops were stored and utilization and processing of these materials were strictly controlled by placing the processing of these products out in the open. The excavation of Unit 8 was to determine if this type of structure was used as a storage facility for these products. The ephemeral domestic remains and late date obtained from the hearth may represent the secondary use of this structure and perhaps future analysis of soil chemicals or phytoliths will reveal that its initial use was for storage. Nevertheless, the near absence of formal storage facilities in structures on the terraced slopes suggests that the Wari had strict control over the consumption habits of these people.

Reinforcing evidence is suggested by the pattern present in the animal species utilized in this same zone. No cuy bones were present in these structures. Normal screening processes may well have failed to reveal remains of this animal resource, however, the use of window screen would have recovered these small bones. It may well be argued that the preservation on the
site did not allow these bones to be preserved, yet they were uncovered in ritual contexts at El Paso as well as on the summit in Unit 145. Additionally, the bones of *cuy* certainly would have been preserved in hearth contexts as part of the charred refuse, if present in the numbers they appear on Cerro Baúl.

Also of interest is the fact that no avian remains were identified for the commoner contexts. Lithic remains suggested that some points were projectiles may have been present at the site. If these were for hunting it seems as though these resources may have gone to tribute and were not utilized by the hunters themselves. The predominant meat resource present was camelid. Faunal remains consisted primarily of the long bones, toes, and knees of camelid species. Rare exceptions included mandibles, which are associated with a particular tool type identified by Bermann (1994) at Lukuramata (See Asociación Contisuyo 1997:88). The majority of the faunal remains at the site suggest that meat was consumed as *charki* (See Marcus et al. 1999) and probably supplied through state sources. Similar patterns have been noted for the Chimú (See Pozorski 1982).

Chrysacolla is locally abundant and could have been obtained by taking a day trip to the mine located up valley in Cuajone. Lapis lazuli (lazurite) and obsidian, however, could only be obtained from broader trade networks. These materials, specifically the obsidian and its sources, were being controlled by the Wari Empire during the period the site was occupied. Therefore the only means to obtain these particular kinds of obsidian, especially in the quantities present on Cerro Mejia, would have been through interaction with the Wari polity.
Currently there is little evidence to understand the botanical resources utilized in the houses on Cerro Mejia or the crops that were growing in the fields immediately below the settlement or throughout the enormous irrigation system. Future analyses will flesh out more details about the Wari economy in this regard and allow the ideas about resource control to be further developed.

The remains at Cerro Mejia are definitively linked to the Wari state, not only by the few fragments of decorated pottery, but also through the Wari controlled sources of obsidian present at the site. Additionally, architectural features closely resemble those of the orthogonal cellular architecture (Isbell et al. 1991) or formal patio group structures documented in the well defined provincial centers and the capital precincts in Ayacucho. It is possible that the formal patio groups on the summit of Cerro Mejia were occupied by local leaders adopting selected features from Wari state institutions, however, these features so closely correspond to other Wari architectural spaces and to ideas conveyed by Wari iconography that I suggest these leaders were imported to manage the extensive Wari agricultural system in the valley. The houses they dwelled in reflected their relative status in the state hierarchy as more rectilinear forms are contemporary on Cerro Baúl.
CHAPTER 8.
COMPREHENSIVE MODEL OF WARI ADMINISTRATIVE SPACE

The examples of Wari elite residences at the provincial center on Cerro Baúl and those on Cerro Mejia share qualities that link them conceptually. Yet there are important characteristics that demonstrate that these structures represent different levels of power within a continuum of Wari state institutions. They both exhibit spatial organization that can be categorized as a Wari patio group, what William Isbell (1991) has called cellular orthogonal architecture. Nevertheless, these structures are not redundant in their use, merely their form. As I have discussed form and function are not equal. Patio groups on Cerro Baúl functioned differently and even the residential elite patio groups function differently depending on their position within the administrative hierarchy.

Therefore in this case it may be the features that allow the place of administration to be identified, however, the form of the patio group may have remained important because it was originally the place of administrative activities. It is likely that the formal patio group residence structure originally was the place of all administration as well as domestic activity, but as the Wari polity grew into a state and later an empire the complexity of the social institution grew and became more specialized in practice. The growing complexity of the institution and institutional activities required more space, more complex spatial organization, and this space likely became differentiated into individual
structures. Yet because both elite residence and elite administration had its origin in the formal patio group structure it is possible that both these activities ended up in structures that resembled the original form. Patio groups and their associated material remains on Cerro Baúl suggest this kind of formal divergence with residential and administrative structures separate but resembling each other in form but not features and not function. These differences may also be present at other Wari state centers.

Viracochapampa was not finished. Some of its patio group structures are quite large, having central patios more than 30 m². The largest examples occur in a series of three, smaller patio groups, also in series, may have been designed for lesser officials. These patio groups are different from those that have been presented before because they have a niched hall flanking one side of the patio. This arrangement emphasizes the function of these structures as locations where large groups gathered to feast. In this instance perhaps the niched halls are functioning much like later Inka *kallanka* by providing a location for feasts in inclement weather.

In the center of the provincial center complex, Viracochapampa, there is a large rectangular plaza. Niched halls face each other on the north and south sides of this open space. The west side of the plaza has what Topic describes as a mound feature. This mound is elevated 2 to 3 meters above the plaza and has a small construction on top that is further elevated (Topic 1991). The descriptions of Viracochapampa suggest that the preservation is limited and may prevent archaeological investigation from ever understanding the use or exact
form of the constructions at this site. Nevertheless, the site demonstrates some
important patterns that incorporate niched halls into administration and a possible
platform plaza complex like those found on Cerro Mejia, a tertiary center, and
Cerro Baúl, a secondary center on the opposite periphery of the empire.

It is curious that the site of Viracochapampa was never finished. It may
have been a second phase construction, representing a remodeling of Wari state
institutions or perhaps construction ceased because some agreement was struck
with local elites so that provincial governors were not needed. Another site,
Cerro Amaru, supports the hypotheses that the region of Huamanchuco and
demonstrates evidence of storage facilities, religious practice, and mortuary
construction seemingly affiliated with an early Wari presence in the area (Topic

Pikillacta is the Wari provincial center that most resembles
Viracochapampa in size and formal planning. Located near Cuzco, this site is
characterized by the most elaborate of the Wari patio group configurations. The
preservation of the architecture, some of which is still standing more than 12m
high, gives a very good indication of how a complete set of provincial Wari state
administrative spaces were organized. The agglutination of these structures has
prevented a comprehensive understanding of the functioning parts present at
Pikillacta.

The duality represented on Cerro Mejia is clearly demonstrated by the
map of Pikillacta (See McEwan 1987). There are two large plaza structures each
flanked by two niched halls, as the structure described from Viracochapampa.
The size of these constructions represents their importance reflecting the possible number of subordinate administrators managing this productive and extensive province. The plans of these structures are not equal, but rather reflect the asymmetrical relationship one would expect if there were a primary and secondary governor. The largest patio group is to the east and the larger niched hall is on the east side of this huge patio. This structure is special because it can be approached via two corridors that correspond to the directions of the niched halls, Avenue 3 from the north and Avenue 7 from the east. McEwan (1996) noted the significance of the two larger patio groups suggesting that one may be secular while the other served a religious function. Based on the arrangement of galleries it may be inferred that these structures functioned in different ways, however, galleries function in different ways even when they are oriented in a similar fashion. Therefore, the organization of these galleries cannot be used to suggest that these constructions were significantly different. Without excavation the function of galleries cannot be assumed.

In contrast the incorporation of niched halls in both constructions are known to have functioned similarly since McEwan (1998) has tested all four of these structures and uncovered related material remains. Nevertheless, I would add that based on access it may be that the eastern patio group may have served as a public court or administrative facility whereas the western structure nested between smaller and more typical patio groups may represent the more private residential quarters of the governor. The surrounding smaller patio groups were for relatives and/or subordinates. Only through excavation can
these issues be resolved. It is significant to determine at what levels of the political hierarchy dual leadership was practiced. It may not have been present at the highest levels at the capital or provincial capitals.

The site of Azangaro close to the Wari heartland has very large patio groups in the northern sector of the site (See Anders 1991). It is significant to note that there was relatively few remains found in these large classic Wari patio group constructions. Instead, elite goods, were found in less rigid residential architecture, located in the south sector and outside the complex itself. These dwellings do not include large areas designed to promote social gathering and thus it is possible that these residences housed the administrators and the formal Wari architecture was the setting for administration, an area that was routinely cleaned. Anders (1986) identifies four groups of people living in and around the complex, but does not describe the large patio groups as serving a residential function. Additionally, she contrasts permanent and temporary populations. The lowest level individuals, temporary corveé laborers dwelled in the small numerous rooms of the central sector. Many of these structures have flagstone floors that reflect a great deal of labor investment and thus it may be that these laborers enjoyed a special status or constructed their own homes with flagstones and transferred that tradition to their temporary dwellings. Investigating the architecture and settlement forms before Wari intrusion would flesh out the significance of the unique characteristics of this Wari planned center. The presence of flagstone floors in elite Wari dwellings in the Moquegua valley
demonstrates that this type of structural elaboration was associated with individuals of elevated status.

Jincamocco (See Schreiber 1992) has a platform structure, but how it connects with other architecture is unclear. There are also a number of patio groups and from the plan they fall into two size ranges. The site was in a bad state of preservation and thus there is a general idea of the architecture, but probably not enough to discuss the levels of administration present at this regional center. It is clear, however, that the Wari had established a local hierarchy as Jincamocco was accompanied by at least three smaller planned sites in the Carahuarazo Valley (Schreiber 1992).

Honco Pampa is located on a tributary of the upper Santa River overlooking the Callejón de Huaylas. The published plan of the site shows (See Isbell 1989) that its patio group architecture falls somewhere in between that of Cerro Mejia and the other agglutinated provincial centers. The patio groups are surrounded by other dense remains and are not isolated from other activities. The size of the patios in these structures is suggestive of their role as the remains of a lower level of administration rather than a center managing a large province.

Figure 8-1 may imply that this is a structure-specific site settlement hierarchy. In concept it is. Site settlement hierarchies allow us to relate groupings of people as they are aggregated on the landscape. The space size hierarchy allows us to examine how many subordinates could be administered in any one socio-political setting. As such, it is a useful frame of reference as long
Figure 8-1. Space size hierarchy of Wari administrative architecture.
as it is used to formulate hypotheses for testing rather than being applied as a universal law.

Finally, the size of patio groups in the Moraduchayq complex at the Wari capital, can be compared to the provincial structures in order to gage where it lies in an administrative hierarchy. Looting in antiquity, and more recently, has tampered with the contextual evidence. The artifacts were obviously of high status providing evidence supporting the presence of leaders, storage of gifts, feasting in the presence of numerous specialized consumption wares. Although, no intensive food preparation area was found, the excavators point out servants could have done this and there are other rooms within the complex that may have held these facilities (Isbell et al. 1991). The facilities for the preparation of food and chicha are located outside the patio group of Unit 9 on Cerro Baúl. The remains uncovered at Moraduchayq were so churned up there is no way to be certain that they do not represent the remains of a large ritual abandonment. These rituals are very clear from the detailed excavation of less disturbed venues on and around Cerro Baúl. This is certainly not to say that feasting did not take place in these patios and it certainly could have been important to the residents’ social and political capital, but a platform was present within the greater Moraduchayq complex. Contextually there is no clear evidence that feasting within the structure was hosted in the patio group structures as an administrative activity.

The platform in the Moraduchayq compound was more important for asymmetrical interaction as it denotes elements of hierarchy. The area around
the platform actually has a higher concentration of feasting vessels than does the patios (Brewster-Wray 1989). The interconnectedness of the patio groups appears to signify that these people were members of an administrative house, together occupying a large complex. It is possible that one of these patio group structures was the residence of a patriarch or principle administrator and this space, I suspect, has some feature that would denote this elevated status. Nevertheless, the complex had a reception area to receive people needing aid or being managed by the principle. This leader could have participated in the staple finance segment of the administrative hierarchy and been in charge of 1000 or more households, however, it is just as likely that the member of this house may have participated in a specialized craft or knowledge hierarchy, which presumably existed for architects and engineers. The current evidence does not suggest a specific conclusion because the material remains do not point to a particular craft and the size of the platform is unclear. Nevertheless, the relative size of this space can be compared with other contexts at the provinces. This administrator was not in charge of a significant portion of the Wari realm. How this group of people fit into the complex system of the Wari political economy remains unclear.

The provincial model presented above describing the Wari management of the imperial state is incomplete. Well documented historical examples of empires exhibit multiple strategies for different regions under state control. It has been shown that the Inka were equally creative in their management of the diverse groups under their administration. Thus it is possible that a unique model
of management will be found for each of the numerous Wari provinces, however, there should be basic principles that may be applied to them all. Here based on spatial similarities between the disparate administrative centers I suggest these overarching principles

1. There will be more than one strategy and thus more than one place where administrative political social interaction is located. Scholars examining Wari state institutions should be looking for locales of power beyond the ubiquitous patio group. Other important architectural spaces include but are not limited to patio plaza complexes, features resembling the audience platform described for Unit 145, niched halls, presumably religious constructions such as D-shaped structures, and Vegachayoq Moqo in particular at the capital should be re-examined in this context.

Patio groups are obviously omnipresent at each of the identified Wari administrative centers since that was how they were identified. It is important to note that the patio group spatial form itself cannot be taken as evidence of social administration. Architectural forms should always be accompanied by the identification of collateral material evidence such as features suggesting feast preparation, feast residual remains, and architectural features—platforms or other structures that could be used as a metaphor for elevated status. Whether formal patio groups were synonymous with the leaders' residence is yet to be determined and may provide us with information about the status of the lord and if he was local or imported to the province. For instance, a site the size of Cerro Mejia may be found far from its affiliated administrative center, however, the
The spatial organization of administration may indicate that it was subordinate to a secondary center rather than being such a center itself. The differentiation between house-based administration and the creation of a special venue for this activity may also relate to the chronology of the developing state. Earlier provinces may never have experienced a separation of house from administration and office patio groups may not be present. Administrative centers without specialized nonresidential administrative buildings may have fallen out of use before the reorganization described by Williams (2001) or may have been declining in importance when the reorganization occurred.

It is possible that administration never is completely removed from the leader's house or Capac's palace. After all a lot of the United State's business is conducted in the White House. Nevertheless, the purposeful creation of specialized spaces is a clear material correlate of a complex governmental institution and as such investigators should be looking for these other places in the Wari Empire if we are to understand how it functioned at any one time or developed over its entire history.

Multiple venues were clearly necessary to accommodate the different strategies administrators used to maintain power. Any state or empire incorporates a number of institutions to manage people and resources. The different venues of administration or the built environment were designed to facilitate these institutions. In this way architecture does represent the material manifestations of statecraft. The different venues of socio-political interaction may reflect different sources of power, political, economic, or religious or a
difference in political strategies. Quiet negotiation, overt presentations to aggrandize the position of subordinates, and pronouncements to large groups of followers happen in very different spatial settings.

The diversification of spatial settings may also define the responsibilities impressed upon leaders at different levels. In essence the leader may wear many hats and may use different spaces to execute different facets of his position. The Inka provide a good example for Andean strategies of statecraft from an examination of the ethnohistoric records. The Inka ruler performed religious ritual necessary to maintain order in the cosmos in front of the Qorikancha for all to witness. Other plazas and kallanka were used for feasts depending on the scale of the political interaction and the seasonal weather conditions. Ushnu or platform plaza complexes were constructed at many of the provincial centers to symbolize the power and legitimate the elevated position of the Inka and his representatives. Presumably the Inka also had another kind of administrative venue that was located in his palace, where he could consult with his advisors, plot military strategy with his generals, and make decisions pertaining to the provisioning and movement of people about the vast empire. The Inka Capac certainly had an audience platform of imperial scale that signaled to all supplicants their position in relation to the leader elevated above them. The architectural features of Unit 145 suggest a modest version of such a structure. Wari iconography as mentioned before supports the idea that platforms were very important in Wari pantheonic hierarchies. Thus where ever such architectural structures are located may be a potential place of power.
2. There will be more than one level of administration at any Wari site larger than a hamlet. The Inka hierarchy near its end was being transformed into an ideal and rigid decimal hierarchy to better manage the people and resources in the vast empire. It is clear that this was a late development and thus it is likely not present in the Wari Empire. Nevertheless, the scale and levels of this new decimal system are instructive in modeling the number of strata present in the complex Wari state and the relative number of households assigned to the smallest productive group.

Cerro Mejia had two levels of administrators in the staple hierarchy. Material evidence for the lowest level came in two forms. The most obvious clues did not require excavation. The site was segmented into barrios by massive walls. The site was also clearly divided, again by massive walls, into a summit with large structures and the northeastern slope that consisted mostly of smaller less elaborated residences.

It is not clear if there was one leader for each barrio or if each barrio had multiple managers. Excavations showed that low ranking leaders had houses that could serve as part time venues for social administration. Further excavations can address questions pertaining to the organization of individual barrios at the site and aid in estimates of how many households were controlled by each leader.

The organization of artisans in archaic states is reportedly often separate or outside the realm of typical hierarchies managing staple resources in the form of guilds (Smith 1996). There is evidence for the familial organization of craft
specialization in modern Andean ethnographic studies (See Arnould 1993). Also archaeological data demonstrates that artisans may have utilized specialized facets of the Tiwanaku iconographic repertoire (Janusek 1999) to signal their independence, which suggests that craft specialists likely operated in a separate hierarchy from staple producers, although still under the control of regional administrators. In the Inka Empire some craft specialists enjoyed elevated status, being relieved of normal *mita* contributions. This status may have placed them above the barrio leaders. On Cerro Mejia, Unit 118 was presumably occupied by specialists who were living on the summit rather than the side of the hill, however, this may just represent physical proximity to their work. Research pertaining to categories of attached and unattached specialists is sorely needed in order to better understand the management of the wealth finance facet of Wari administration.

Complex societies have more than one political hierarchy. Architecturally, similar spaces may represent the households of leaders participating in a political hierarchy, but they may not be participating in the same institution. At the same time individuals participating in the same state hierarchy, but affiliated with different institutions, may dwell in significantly different structures. Elucidating how different socio-political systems were structured and at what level they came together is a significant line of future research. In Wari state this information may lie outside of the patio group setting.

3. Administration extends beyond the walls of Wari compounds. By the same token, as in the case of Huanaco Pampa, the reach of Wari power from a
particular center may go beyond the drainage in which the center is located. The size of the administrative facilities on Cerro Mejia suggests a larger population of leaders under the site than the current settlement pattern would provide. In current archaeological study research territories are divided by river drainage or overall valleys, however, there may have been ancient coherent social spheres the Wari perceived as meaningful units, placed under the control of one administrative center.

It is difficult to know how far the control of a center like Cerro Baúl reached, especially because it was also involved in interactions with the neighboring Tiwanaku state. Nevertheless, there should be more than one site on the scale of Cerro Mejia under its control. Similar sites, with hints of patio group structures, are located in the department of Arequipa. Yet settlement survey of the area surrounding these sites and the intervening areas is needed before the Cerro Baúl province can be defined. This direction provides a fascinating next step in creating a better model of Wari administrative structure. States and empires function at different levels and have institutions to manage different segments of the economy, as well as religion. These institutions are organized hierarchically with nodes at different levels. The size and scope of these different units can be inferred by the function and distribution of these nodes.

This study examined the role of residential contexts in Wari statecraft. A comparative examination of the use of space layered over regional information was used to formulate models of household activities and socio-political
interaction at many levels. Wari houses did not incidentally incorporate administrative activities into the residential sphere, but were purposefully designed or restructured to accommodate these activities and to facilitate this type of productive action. In any complex society, administration is an occupational specialty, full time or part time, it provides economic benefit and as such it is reflected in the material record by its toolkit. This study has shown that these tools go beyond portable artifacts. They also cannot be directly correlated with specific kinds of spatial venues or architectural ruins. Administrators designed places of power that established their elevated position and contained the appropriate facilities to manage it.

Evidence of administrative action has been teased out of the archaeological record by examining patterns in the use of residential space. The use of space has been explained through a comparison of features and the arrangement and frequency of artifacts within architectural space. Comprehensive research including: survey of settlements and local resources, horizontal excavations in a variety of structures at multiple sites in the hierarchy that details the intricacies of contextual remains, and multidisciplinary lab analyses are required to build models of administrative practice for the prehistoric state.
APPENDIX A
CERRO MEJIA FIELD FORM

PROYECTO ARQUEOLOGICO AREAS RESIDENTIALES DE WARI

Iniciales:______  Fechas:________  Paginas de cuaderno corresponde:_____

Numero de datum:_______  numero de bolsas de artefactos: _______

Prov.—sitio:_____unidad:_____ capa:_____ quad:_____esquina:_____

Rasgo:___________________________________________________________

Munsell:_____________ (toma una muestra)

**Noticia toma una muestra para saranda fina:_________; Ph_______

Fotos:___________________________________________________________

Dibujos:__________________________________________________________

Efecto de erosión:____________________  Es un cala?_________________

terrazas o plano            interior o exterior

Bolsas de material:

Cerámica:________________________________________________________

Huesos:__________________________________________________________

Botánicos:________________________________________________________

Liticos:__________________________________________________________

Otros:___________________________________________________________
Artefactos especiales (tipo y posición) __________________________________

____________________________________________________________________

Descripciones: ______________________________________________________

____________________________________________________________________

Relación con otro quad: _____________________________________________

____________________________________________________________________

____________________________________________________________________
APPENDIX B
CERAMIC MATERIAL ANALYSIS

Ceramic sherds were individually numbered and documented based on the following traits.

1. Burning. The presence or absence of sooting on the interior or exterior of the fragment. Codes: 0 none; 1 interior; 2 exterior.

2. Surface Treatment. Codes: 1 smoothed; 2 burnished; 3 wiped – an irregular form of burnishing with noticeable striations on the exterior surface of the vessel.

3. Slip Color. Finer vessels often have a color added to the exterior surface and interior rim. If present these colors were documented by noting the color as it corresponds to a Munsell Color Guide.

4. Paste. Each vessel is made from a fabric that represents the component clay and substances added as temper. The paste categories were drawn from a preliminary examination of vessels from different contexts before systematic analysis was started. The first four paste types are based on descriptions of ceramic pastes present on Cerro Baúl and analysis conducted by Ann Cordell. Paste categories coded 1 to 10 and will be described below.

5. Diagnostic Sherds. Fragments from which the vessel form could be determined were extracted from the sample for more detailed
documentation. This will be described below. Codes: 1 handle; 2 base; 3 rim, 4 neck, 5 decorated, 6 modeled.

6. Degree of Firing. The firing of a vessel is not always complete and lend clues to the production of the vessel. Codes: 1 reduction present, 2 oxidation present.

7. Fragment thickness. Each sherd was measured with calipers to document its thickness. This information was helpful when assessing clusters of sherds to ascertain the possibility that they may belong to the same or different vessels. It also can be used in a general way to determine the type of vessel. For example serving pitchers are thinner than cooking and storage jars, but both produce large sherds and have similar base characteristics. This measurement was noted in millimeters.

8. Texture. The texture of the vessel was a qualitative score describing the relative quality of the vessel and particularly pertained to the paste and its inclusions because these could vary within some of the paste categories. Codes: 1 fine, 2 medium, 3 coarse.

Diagnostic sherds were documented in more detail. The additional information recorded is described below.

1. Vessel diameter. Using a standard chart rims, bases, and neck diameters were estimated from each of these types of diagnostic sherds. This measurement was documented in centimeters.
2. Rim shape. Rims noted exhibited three standard shapes with some irregular morphologies also present. Codes: 1 rounded, 2 planed rectangular rim, 3 beveled, 4 other.

3. Vessel form of the superior opening. The rim of the vessel at times was allowed for it to be placed in standard categories used to describe classes of ceramic pots. Codes: 1 incurving, 2 flaring, 3 straight sided, 4 other.

4. Handle orientation. Wari vessels include vessels with handles that are oriented both horizontally and vertically. Some handles provided information about their orientation of the vessel. Codes: 1 horizontal, 2 vertical.

5. Base morphology. The exterior surface of a Wari ceramic vessel is typically flat, however other forms were present at the site. Codes: 1 flat bottomed, 2 other.

6. Location of decoration. Decoration on vessels is typically found on both the interior and exterior surfaces at the rim, however general categories vessels exhibit more elaborate decoration either on the interior, the exterior or both. Bowls are typically decorated on the interior or exhibit decoration on both surfaces, cups, jars, and pitchers on the exterior. Codes: 1 interior, 2 exterior.

Paste categories were devised before the analysis was carried out with some additions as unique vessels were encountered. Each paste category, in most instances, was represented by at least five sherds in a comparative
collection, which is serving as a base line for future analysis of Wari contexts in the Moquegua Drainage. The following is a translation of the categories as described by Ana Miranda the Licensed Peruvian archaeologist that conducted the ceramic analysis.

1. This paste exhibits a lot of biotite mica and small inclusions of quartz. The surface of these sherds sparkle as if they contained flakes of gold. Textures range for this type from fine to coarse.

1.1. This paste also exhibits biotite mica but less than category 1. Textures range for this type from fine to coarse.

2. This paste exhibits a lot of biotite mica and large inclusions of quartz. This paste typically is of a medium texture but also is present in fine and coarse qualities.

2.1. This paste exhibits less biotite mica than category 2 and has large quartz inclusions. Textures range for this type from fine to coarse.

3. This paste exhibits a small quantity of biotite mica and more inclusions of quartz relative to categories 1 and 2. This paste typically is found in vessels of medium and fines texture with few examples of coarse texture.

3.1. This paste is similar to paste three but includes inclusions of volcanic material.

4. This paste exhibits very little biotite mica and has fine inclusions of quartz and a light gray material. This paste is very compact and is fine in texture. This paste corresponds to the majority of decorated fragments.
4.1 This paste is similar to paste 4 yet is finer and the inclusions are smaller. These sherds also are typically decorated or slipped.

5. This paste contains some biotite mica. The quartz inclusions are of a medium size as are the volcanic grains. The paste is grainy and not compact. The texture is typically medium or coarse with few examples of fine sherds.

5.1. This paste has little to not biotite mica with few quartz but many volcanic inclusions. The texture is medium or coarse with no examples of fine.

5.2. This paste has little to no biotite mica, few quartz inclusions but numerous black volcanic particles. The texture is typically fine or medium with rare examples of coarse.

6. This paste has fine to very fine inclusions of quartz and volcanic material. It is typically of a fine texture.

7. This paste is fine and has very regular or homogeneous inclusions mostly of volcanic material but also of quartz. The texture is medium as it is not very compact.

8. This paste is medium with inclusions of volcanic material and a little quartz. Inclusions vary in size some are quite large. Some sherds include a small percentage of biotite mica.

9. This paste is cream to gray with some biotite mica and inclusions of volcanic material and quartz. The texture is medium and not compact.
10. This paste exhibits a large percentage of quartz and volcanic material with a small percentage of biotite mica. Some inclusions are quite large. The paste is compact and of a brown color. It typically exhibits a medium texture.
APPENDIX C
LITHIC MATERIAL ANALYSIS

Lithic artifacts were divided into 20 types. Many of the types had several forms. Forms allowed some specific implements to be identified but are currently temporary categories toward formulating a more specific terminology for future analysis.

<table>
<thead>
<tr>
<th>Types</th>
<th>Forms</th>
</tr>
</thead>
</table>
| 1 Hammerstones | 1 Spherical  
 2 Oval with oval crosssection  
 3 Square or pie shaped crosssection  
 4 Oval with semi-circular crosssection  
 5 Rectangular length with square cross section  
 6 Irregular  
 7 Cylindrical  
 8 Circular with oval crosssection  
 9 Anvil  
 10 Flake shaped |
| 2 Polishers     | 1 Spherical  
 2 Oval with oval crosssection  
 3 Oval with flattened oval crosssection  
 4 Oval with semi-circular crosssection  
 5 Circle with rectangular crosssection  
 6 Irregular  
 7 Something polished / pendant  
 8 Rampshaped  
 9 Rectangular with rectangular crosssection  
 10 Pieshaped with base smoothed  
 11 concave edge implement with a polished edge  
 12 Quarter of a circle with squared crosssection  
 13 same as 12 but ovoid linearly  
 14 Triangular  
 15 Semi circular with flattened |
<table>
<thead>
<tr>
<th>Category</th>
<th>Types</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metaté</strong></td>
<td>1 Flat grinding surface</td>
</tr>
<tr>
<td></td>
<td>2 Sunken grinding surface</td>
</tr>
<tr>
<td></td>
<td>3 Rampshaped grinding surface</td>
</tr>
<tr>
<td><strong>Mano</strong></td>
<td>1 Spherical</td>
</tr>
<tr>
<td></td>
<td>2 Capsule shaped</td>
</tr>
<tr>
<td></td>
<td>3 Half a capsule shape (mecedor/rocker)</td>
</tr>
<tr>
<td></td>
<td>4 Irregular but well worn</td>
</tr>
<tr>
<td></td>
<td>5 Irregular and not well worn</td>
</tr>
<tr>
<td></td>
<td>6 Rectangular</td>
</tr>
<tr>
<td><strong>Combination Tools</strong></td>
<td>See forms for polishers</td>
</tr>
<tr>
<td><strong>Shatter or Debitage</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Retouch flake</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Tablet</strong></td>
<td>1 Rounded edges, square flat with uniform width</td>
</tr>
<tr>
<td><strong>Unutilized flake</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Nucleus or core</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Adze</strong></td>
<td>1 T-shaped</td>
</tr>
<tr>
<td></td>
<td>2 Muffin shaped</td>
</tr>
<tr>
<td></td>
<td>3 Trapizoidal with shaped edge along the length</td>
</tr>
<tr>
<td><strong>Flake</strong></td>
<td>1 Hoe</td>
</tr>
<tr>
<td></td>
<td>2 Pointed Hoe</td>
</tr>
<tr>
<td></td>
<td>3 Tumi Shape</td>
</tr>
<tr>
<td></td>
<td>4 Ramp Shaped</td>
</tr>
<tr>
<td></td>
<td>5 Other</td>
</tr>
<tr>
<td><strong>Flake w/retouch on both faces</strong></td>
<td>1 Tiwanaku denticulated</td>
</tr>
<tr>
<td></td>
<td>2 Leaf shaped with concave base</td>
</tr>
<tr>
<td></td>
<td>3 Triangular, flat cross section with tang</td>
</tr>
<tr>
<td></td>
<td>4 Triangular with tang &amp; semi-circular crosssection</td>
</tr>
<tr>
<td><strong>Graver</strong></td>
<td>1 Flat flake with nips on two sides to create pt</td>
</tr>
<tr>
<td></td>
<td>2 Angular with point extending from one edge</td>
</tr>
<tr>
<td></td>
<td>3 Perforator, drill like long pointed flake</td>
</tr>
<tr>
<td><strong>Concave edged flake</strong></td>
<td>1 Rectangularish nip out of straight edge flake</td>
</tr>
<tr>
<td></td>
<td>2 Rectangular nip in the middle of a flat flake</td>
</tr>
<tr>
<td></td>
<td>3 Nip and flake formed to look like a hook</td>
</tr>
<tr>
<td></td>
<td>4 Flake with a semi-circular flake scar</td>
</tr>
<tr>
<td><strong>Bead</strong></td>
<td>1 Flat sided, round, with round perforation</td>
</tr>
<tr>
<td></td>
<td>2 Anything with a partial perforation</td>
</tr>
<tr>
<td><strong>Bead blank</strong></td>
<td>1 Bead blank</td>
</tr>
<tr>
<td></td>
<td>2 Oval with flat cross section</td>
</tr>
<tr>
<td></td>
<td>3 Square or rectangle with flat cross section</td>
</tr>
</tbody>
</table>
4 Triangular with flat cross section
5 Rectangular with square or rectangular cross section
6 Semi circular with flat cross section
7 Flat cross section but irregular in form
19 Rounded possible polisher but unclear
20 Utilized core or large shatter fragment

Material was based primarily on color and secondarily on texture. Many of these classification can now be combined through the recent examination of many types of locally occurring lithic raw material.

Material
1 red fine (ryolite)
2 red poor
3 Obsidian black and transparent
4 Obsidian w/ tiger stripes
5 Obsidian red and black
6 Chrysacolla
7 Lapis or lazurite
8 Light grey silicate with the appearance of fiberglass 2.5Y7/1 or 2.5Y6/1
9 Milky quartz
10 Medium grey chert, solid color 10YR5/1
11 Obsidian black and not really transparent
12 Local striped, gray stripes are darker or solid, sometimes slightly purple
13 Mustard color chert
14 White cream/ looks like gum,
15 Quartz/geode fragment
16 Dark red to purple (medium grade) 7.5R3/1
17 White with purple swirl or stripe 7.5R6/1, or with darker purple too
18 Raspberry color with white cream inclusions
19 Obsidian light gray/ smoky almost clear
20 Red colored quartz
21 White w/chalky appearance may or may not occur with pink
22 Cream to peachy or pink with black inclusions or stripes-med texture
23 Finer side of rhyolite pink/red with quartz crystals
24 White to yellowish quartz/ "flint" someteimes w/black
25 Medium gray quartz
26 White to gray chert, grainy medium texture sometimes with black
27 Black chert or onyx
28 Cream to peach with red stripes opaque chert "FLINT" like substance
29 Pink/orange/biege color 2.5YR6/3 fiberglass texture (variety of 22)
30 Poor quality red with white and pink inclusions or stripes
31 Cactus resin/ commonly mistaken for lithic
32 Very grainy large quartz inclusions white/lite grey/yellowish orange
33 Course dark grey with white inclusions-not chert
34 Mica
35 Modeled pink chert, mauve, or purple
36 Dark purple/grey chert
37 Strawberry chert-fiberglass texture
38 Light pink chert
39 Grayish pink with white inclusions. Course texture
40 Yellowish/orange looks like cortex
41 Fine grained not chert with no inclusions in grey or, purple, or pink red
   grind stone stone textured rhyolite
42 Black with red inclusions
43 Purple quartz with a sandy texture
44 Lime green, medium texture, not chert
APPENDIX D
ARTIFACT DISTRIBUTION PLOTS

Figure D-1. Unit 3 Room A. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
<table>
<thead>
<tr>
<th>Grindstones</th>
<th>Utilized cores</th>
<th>Debitage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Flakes</th>
<th>Gravers</th>
<th>Concave edged impl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 2 1</td>
<td>1 1</td>
<td>5 1 1</td>
</tr>
<tr>
<td>3 2 3 2 4</td>
<td>2 1</td>
<td>2 1</td>
</tr>
<tr>
<td>2 2 2 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tablets</th>
<th>Retouch</th>
<th>Hammerstones</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 1 2 1 4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2 1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Polishers</th>
<th>Points &amp; bifaces</th>
<th>Metal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1</td>
<td>2</td>
<td>1 2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ochre</th>
<th>Obsidian</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Figure D-1. Continued.
Figure D-2. Unit 3 Room B. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
<table>
<thead>
<tr>
<th>Hoes</th>
<th>Hammerstones</th>
<th>Combination Tools</th>
<th>Cores</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Polishers</th>
<th>Retouch</th>
<th>Points &amp; Bifaces</th>
<th>Beads &amp; Blanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 1 3</td>
<td>5 2 3</td>
<td>1 1 1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Obsidian</th>
<th>Metal</th>
<th>Chrysacolla</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1</td>
<td>1</td>
<td>1 2</td>
</tr>
</tbody>
</table>

Figure D-2. Continued.
Figure D-3. Unit 3 Room C. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
<table>
<thead>
<tr>
<th>Paste 1</th>
<th>Paste 2</th>
<th>Paste 3.1</th>
<th>Paste 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>1 2 2</td>
<td>3</td>
</tr>
<tr>
<td>1 10 1</td>
<td></td>
<td>2</td>
<td>12 28 2</td>
</tr>
<tr>
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Figure D-4. Unit 4 Room A. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
### Figure D-5. Unit 4 Room B. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
## Figure D-6. Unit 4 Room C.

A) Grid layout.  
B) Plot of animal bone by weight in grams.  
C) Plots of ceramic sherd counts.  
D) Plots of lithic artifact counts.
Figure D-7. Unit 4 Room D. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
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Figure D-9. Unit 5 Room A. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
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Figure D-11. Unit 6 Room A. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
Figure D-12. Unit 6 Room B. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
Figure D-13. Unit 8 Room A. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
Figure D-14. Unit 118 Room A. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
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Figure D-17. Unit 118 Room D. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
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**Figure D-17. Continued.**

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  - 1

- **Points & bifaces**
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- **Retouch**
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Figure D-18. Unit 118 Room E. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
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Figure D-18. Continued.
Figure D-19. Unit 118 Room F. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
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Figure D-19. Continued.
Points & bifaces

Obsidian

Hoes

Figure D-19. Continued.
Figure D-20. Unit 118 Room G. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
Figure D-21. Unit 118 Room H. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
Figure D-22. Unit 118 Room I. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
Figure D-23. Unit 145 Room A. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
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Figure D-24. Unit 145 Room B. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
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Figure D-24. Continued.
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Figure D-26. Unit 145 Room D. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
Utilized Cores

Debitage

Unutilized fl.

Flakes

Gravers

Concave e imp.

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Figure D-27. Unit 145 Room E.  A) Grid layout.  B) Plot of animal bone by weight in grams.  C) Plots of ceramic sherd counts.  D) Plots of lithic artifact counts.
Figure D-27. Continued.
C

Figure D-27. Continued.
Figure D-27. Continued.
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Figure D-27. Continued.
Figure D-27. Continued.
Figure D-27. Continued.
Figure D-28. Unit 145 Room F. A) Grid layout. B) Plot of animal bone by weight in grams. C) Plots of ceramic sherd counts. D) Plots of lithic artifact counts.
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Figure D-28. Continued.
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Santillán, Fernando de
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Williams, P. R. and D. J. Nash

Williams, P. R. and Ruales, M.

Zuidema, R. T.,
I began to pursue a career in archaeology as a junior at the University of Florida after participating in a field project, Year of the Indian II at Pine Island in South Florida. In the following two years I experimented with different specializations through volunteer work. I prepared materials for curation and conducted preliminary analysis of faunal material, specifically on shellfish and stone tools at the Florida Museum of Natural History. I also analyzed chipped stone materials from Africa under the supervision of Steve Brandt. I completed my B. A. in anthropology in May of 1993.

This same year I traveled to Peru where I excavated at an archaic coastal site, K4. This visit sparked a great interest in the prehistoric societies of the Andean coast and sierra and I returned the following year to conduct research for my M. A. thesis in the upper Moquegua Drainage. This work documented the architectural remains of a Wari village called Cerro Petroglifo and cultivated my interest in studying the relationship between prehistoric cultures and the spaces they create to contain their daily activities. I received my M. A. in 1996.

The remains of the Wari Empire are extensive in the Moquegua drainage and it was the farthest southern province under their direct control. The center of the colony is at Cerro Baúl and I have excavated structures and studied architecture at this monumental site in 1997, 1998, and directed the field
operations in 2001 and 2002. I am also the lithic specialist on the Cerro Baúl research team. In addition, I mapped all of the modest settlements around the provincial center in 1998 with funding from the Center for Latin American Studies at the University of Florida and conducted excavations at the town of Cerro Mejia in 1999 and 2000 with funding from the National Science Foundation. The work at Cerro Mejia, as well as excavations at Cerro Baúl, are featured in this doctoral dissertation.

As a graduate student at the University of Florida I have been an officer in the Florida Anthropological Student Association and have organized symposia and fundraisers for the Department of Anthropology. I was a teaching assistant for four semesters. I have taught excavation techniques in Peru for the past five years and supervised two undergraduate honors theses in association with my dissertation research. I continued to work at the Florida Museum of Natural History and was Assistant Curator of an Exhibit, Down Like Lead: Four Hundred Years of Florida History. Currently, I am continuing to work in a museum setting and am a Post Doctoral Research Scientist at the Field Museum where I am the content specialist on the Ancient Americas Hall Renovation.

I plan to continue my research of state level societies through documenting and understanding the architecture they left behind and incorporating multiple scales of collected data to construct models of ancient administrative systems. I also enjoy reaching out to the public and teaching a broad audience about the fascinating field of archaeology through museum exhibits and hope to continue with this work throughout my career.