BREAKING IN-TO POTTERY: AN ANALYSIS OF THE CERAMIC ASSEMBLAGE AT HUACA DEL LORO

by

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I. INTRODUCTION

This thesis investigates the ceramic assemblage at the site of Huaca del Loro in Nasca, Peru and how it reflects local interaction with Wari, the largest empire in the Andes during the Middle Horizon (AD 650-1000). This chapter introduces the major research question, provides an introduction into the physical environment of Huaca del Loro, and presents the chronology of the region. Finally, this chapter also explains the organization of the thesis.

Geography and Environment

The Andean mountain range plays a large role for people in the region (Kerchusky 2018:14). The Andes are home to a plethora of plant and animal species. This region of vast biodiversity is extremely condensed between the Pacific desert coast and the steep mountain range. There is a basic three-part classification system for the region that includes *costa, sierra* and *selva* (coast, mountain and tropical forest; Vaughn 2000:9). Julio Tello suggested further classifications within the mountains that included more indigenous distinctions such as "*suni*" and "*keswa*" zones (Tello 1929).

The physical environment of Nasca is dominated by the arid conditions associated with the Atacama Desert. Because of this, much of Huaca del Loro is blanketed by an accumulation of sand (Conlee 2017:6). However, the proximity to the Pacific and numerous rivers that wind through the region allowed for agriculture (Spivak 2015:3). The Nasca drainage is composed of northern and southern valleys, which encompass various tributaries of the Río Grande de Nasca River. The southern drainage is composed of the Las Trancas, Taruga, Tierras Blancas and Aja Rivers and the site of Huaca del Loro is in the southern most of these rivers, the Las Trancas (Conlee 2015a:216).

In this region much of the population is centered around inland river valleys, which allowed for easier access to water and the possibility of arable land (Conlee 2015a:216). Figure 1.1 below shows the Southern Nasca Drainage area. This area includes the Aja, Tierras Blancas, Taruga and Las Trancas River. Figure 1.1 also shows some of the sites along these river valleys. These sites will be discussed in greater depth in Chapter 2. North of the Southern Drainage Valley is the Northern Nasca Drainage Valley. There are a number of sites throughout the various river valleys that make up this drainage area as well.



Figure 1.1 A map of the Nasca drainage with some Middle Horizon sites.

Regional Chronology

A variety of populations inhabited the southern Nasca region over time, as is shown in Table 1.1. The Nasca and Wari were two major cultural groups that dominated the landscape throughout the entire Nasca drainage valley. However, they were not the first or last group that inhabited the region. Before the Nasca Culture, the Paracas populated the area in the Early Horizon (800 B.C. – A.D. 1). The Paracas people produced fine textiles and pottery and were an early model for the later Nasca (Proulx 2006:31). Changes in the ceramic tradition marks the material transition from Paracas to Early Nasca largely through the identification and use of slip (Proulx 2006:30).

The Nasca culture of the Early Intermediate Period (A.D. 1-650) was the first large civilization centered in the region, leaving a lasting impression through their architecture, pottery and iconography. These populations made use of the drainage valleys and rivers throughout the region for agriculture (Conlee 2015a: 216). The Nasca had wonderfully skilled craftspeople that produced polychrome ceramics (Conlee 2015a:219). These ceramics influenced the ceramicists of the Middle Horizon, including both the Loro and Wari.

Meanwhile, the Wari began from the Huarpa culture of the Early Intermediate Period in present-day Ayacucho (Conlee 2017:1). Once the Wari grew to a place of prominence in the Middle Horizon, they had a variety of sites spanning from their capital city of Wari outward, recognizable by rectilinear compounds, elaborate tombs, and Dshaped temples (Isbell 2004:203). The Nasca-Wari connection goes back as far as Huarpa-Nasca times as Nasca iconography was adopted by Huarpa people (Conlee 2017:2). The Nasca and Wari groups and their histories will be discussed in greater depth throughout Chapter 2 as their individual history and presence throughout the region is examined.

However, the Wari were not the last people to inhabit Nasca. Following the

collapse of the Wari Empire, there was a 200-year period of abandonment in the region (Conlee 2015a:214). After this time, the local Tiza society populated the landscape during the Late Intermediate Period from A.D. 1000-1476 (Conlee 2015a:214). This population remained until the Inca invaded in the Late Horizon (A.D. 1476-1532). The Inca were the last to control the region before the Spanish invaded Peru.

Horizons or Periods	Culture Name	Associated Dates
Late Intermediate Period	Tiza	A.D. 1000-1476
Middle Horizon	Loro, Wari	A.D. 650-1000
Early Intermediate Period	Nasca, Huarpa	A.D. 1-650
Early Horizon	Proto-Nasca, Paracas	800 B.C. – A.D. 1

Table 1.1 An overview of the horizons or periods with their cultural affiliation in this region.

Research Problem

The overall project at Huaca del Loro aimed to evaluate what type of site it was and what its relationship was to the highland Wari state. This thesis uses the ceramic assemblage to investigate three primary hypotheses: whether Huaca del Loro was a local site, a site that local people established to resist the Wari Empire, or a Wari colony. The types and contexts of the ceramic assemblage shed some light on the extent of Wari involvement and interaction with the people of Huaca del Loro as well as local responses to the Wari state.

Following the first hypothesis, Huaca del Loro may have been a local previously

established Nasca settlement. This area was on the southern edge of the region in a rural area, and it may have been of little interest to the Wari. Following this line of reasoning, we would expect to see a "predominance of local practices" where a hybrid Wari-Nasca culture existed throughout the region (Conlee 2017:10). That is, we would expect to find a hybrid of Huarpa, Wari, and Nasca styles, as has been seen at other Nasca sites. An indepth discussion of the similarities and differences of the ceramic styles will be included in Chapter 2. In contrast, we would not expect to find much, if any, imperial Wari pottery, which resembles Nasca pottery in its style but diverges in its iconography (Spivak 2015:xi). There might be a few Wari trade pieces, or locally produced Wari pottery may be associated with elites either in domestic or burial contexts (Conlee 2017:11). Another indicator for this scenario would be the temporal context. If the settlement was an outgrowth from an earlier Nasca village, ceramic styles from the Early Intermediate Period would be present. The overall assemblage would provide a continuation of practices from the previous Nasca culture with some evidence of change from emulation and sharing in a hybrid culture (Conlee 2017:11).

Alternatively, Huaca del Loro may have been a site of resistance to the Wari. If this were the case, the pottery, and entire site, would act as a rejection of Wari styles. Pottery would be local and there would be no Wari-style artifacts. Unlike the first hypothesis, the timing of much of the site would be closer to the Middle Horizon when Wari sites nearby were established (Conlee 2017:11).

The third presented possibility is that Huaca del Loro was a Wari colony, possibly established as early as the Huarpa period as a southern outpost. In this scenario, there would be a mixture of Loro and Wari pottery and ceramic styles. There may be a

predominance of local Loro pottery on the surface, as they would have been the local population supporting the site (Conlee 2017:11). If Huaca del Loro was a colony, imperial styles will be present in greater quantities than expected in the first hypothesis and would include distinctive vessel types such as keros that are associated with Wari feasting (Conlee 2017:12). How these hypotheses compare to the assemblage that was analyzed constitutes the main purpose of this research.

Organization

The thesis is organized in the following way. Chapter 2 presents an overview of the Nasca-Wari relationship, including information about other sites throughout the southern Nasca drainage. Chapter 3 is an overview of the research that was previously done at Huaca del Loro and on Loro ceramics. Then, in Chapter 4 I explain my methodology and the components of ceramic analysis. In Chapter 5, I present the ceramic assemblage that I examined from Huaca del Loro. Following that, Chapter 6 includes an interpretation of the spatial distribution of the pottery at the site. Chapter 7 is a discussion of the results, and a comparison with other Middle Horizon sites in the region. The final chapter, Chapter 8, provides a summation of the Huaca del Loro ceramic assemblage and which of the presented hypotheses these ceramics represent as well as possibilities for future research.

II. NASCA AND WARI

Nasca

The Nasca drainage valley was a hub of cultural activity long before the Middle Horizon. The Nasca culture of the Early Intermediate Period influenced later cultures including the Wari and Loro. In order to understand these later groups, it is important to first examine the development and foundation of Nasca civilization. The Nasca culture spanned and evolved from its initial emergence in 1 AD to 650 AD (Isbell 1997). Nasca polychrome ceramics changed with their society over time. A center of ceramic production is thought to be the large, cultural center of Cahuachi (Vaughn et al. 2006). Extensive excavations at this site have revealed that Cahuachi also played a ceremonial role, acting as a place for pilgrimage (Silverman 1993:300). The ceramic styles that originated here spread throughout the entire region.

Another notable element of Nasca culture is the large geoglyphs which dominate portions of the landscape (Silverman 1993:305). These drawings that have been etched into the desert floor include styles that resemble a variety of animals and geometric designs including a spider, birds, spirals, and other forms. Present researchers believe that these geoglyphs may have acted as "open air temples" that would have been places for offerings and various associated rituals (Conlee 2016:219).

Another ritual aspect of Nasca culture was the practice of producing so-called "trophy heads". The importance of this practice was cemented in the iconography which often shows humans, animals, and supernatural entities with trophy heads. Actual trophy heads have been found throughout the region and are thought to be a part of agricultural fertility offerings and sacrifices for the continuation of society (Conlee 2016:219). The

image of trophy heads continued to be prolific in the late Nasca ceramic iconography (Silverman 1993:324). This practice, and its iconographic depictions, were continued into the Middle Horizon in Wari and Loro cultures (Kellner 2006:101).

By the end of the Early Intermediate Period, population density in Nasca began to dwindle. The ceremonial influence of Cahuachi had diminished, but many cultural practices continued (Kellner 2002:80-81). At the same time, other regional polities grew, leading to the emergence of the Wari in the central highlands.

Huarpa and Wari

At the end of the Early Intermediate Period (AD 100-650), the Huarpa peoples in highland Ayacucho provided a foundation for the Wari empire. The Huarpa are thought to be organized around a number of small groups or chiefdoms that formed and grew during the Early Intermediate Period (Edwards 2010:29). The close relationship among the Nasca and Huarpa is evident as early as the Early Intermediate Period in Ayacucho (Edwards 2010:105). In 1964, Menzel set out to study this Huarpa-Nasca connection. Menzel's hypothesis illuminated the possibility of a Nasca-Huarpa connection "as a result of reciprocal complementary influence from Ayacucho" (Menzel 1964; Paulsen 1983:98). This close relationship, which is still being studied by ongoing research, is also evident through continuation of cultural practices like the taking of trophy heads, iconographic commonalities, and other cultural elements (Conlee 2016:220). By the end of the Early Intermediate Period, three Huarpa communities gradually merged to form the capital of Huari (Isbell and Schreiber 1978; Schreiber 1992).

Two main features of Wari architecture are rectilinear structures and D-shaped structures. As Edwards describes, rectilinear architecture consists of long, narrow rooms

with large patio groups that open onto the patio connected by corridors or alleys (Edwards 2010:462). At the Wari outpost of Pataraya, Edwards noted that the rooms within the rectilinear structures were predominantly subdivided by activity. For example, some rooms were determined to host daily domestic activities and/or food preparation while others were probably sleeping quarters (Edwards 2010:261). There was a larger patio area that Edwards believes was designated for group activities like feasting or other important community based cultural activities.

D-shaped structures hold a place of importance as ritual spaces in the Wari world. In addition to those at Huari, D-shaped buildings have been found at Yako in southern Ayacucho, Cerro Baul in southern coastal Moquegua Valley, and at Honcopampa in the Callejon de Huaylas, which Isbell posits are all sites linked to Wari provincial installations (Isbell 2006:62). Anita Cook (2001) argues that D-shaped buildings relate to the construction of power by emerging kings, providing special contexts for sacrifices to dead royalty. Cook proposes that these temples derive from an Early Intermediate Period antecedent (Cook 2015:298). Cook also suggests that these structures functioned as connectors between the living and dead through the ritual activities that were practiced there and the associated offerings (Cook 2015:306). This is reinforced by Tung's findings at Conchopata where the D-shaped ritual space contained smashed ceramics urns, at least 10 trophy heads, camelid offerings, and ceramic imagery of "a Wari warrior wearing a trophy head around its neck" (Tung and Knudson 2008:921). Thus, D-shaped structures show associated sites have a strong importance to the Wari as monuments to their ritual power. By the end of the Middle Horizon, the Wari had a huge impact on the Nasca region. The empire left their influence through architecture, colonial sites, and material

objects.

Nasca and Wari in the Middle Horizon

By the beginning of the Middle Horizon, the complex Huarpa polity in Ayacucho had transformed into the Wari state. The Wari began to spread their sphere of influence throughout the highlands and into the coastal regions (Isbell and Schreiber 1978; Schreiber 1992). Recent research in the Nasca valley has examined the scope of Wari influence here during the Middle Horizon. Edwards and Schreiber (2014) examined the role that the site of Pataraya played as a Wari outpost in the upper Nasca Valley. However, the level of Wari presence and their degree of interaction with late Early Intermediate Period sites in Nasca remains uncertain. A map of the location of some Middle Horizon sites within the Nasca drainage can be seen in Figure 1.1.

Much of the Wari cultural practices were directly derived from their Nasca predecessors. The Wari had a rich ideological tradition that was intertwined with their power structure. Iconographic themes, coupled with luxury goods, showed the status that elites held as intermediaries between the living and supernatural worlds (Spivak 2015:28). In fact, it has been argued that all elite Wari material culture acts as a display of dominance (Cook 2004). Further, wherever the Wari went they brought their beliefs with them. As the Wari conquered more regions, they superimposed the state ideology over the already existing belief system of the conquered peoples (McEwan and Williams 2012:78). This practice would have helped the Wari while they gained influence in the Nasca region.

The relationship among Nasca and Wari can be seen through some of the sites that were key elements for these societies. Pataraya was a Wari colony that was well

within the Nasca region. Although Pataraya is relatively small in size, it has a fundamental Wari architectural component of rectilinear architecture, although no D-shaped temples. The architectural components of the compounds work together to control access to certain spaces, proving that there were status differences within the society (Edwards 2013:570). Edwards has linked this idea, and repetitive rectilinear architecture to the role that Pataraya played as an administrative bureaucracy within the Wari government (2013:574). Evidence of long-distance trade and exchange networks was present here, as is shown through the presence of *Spondylus*, obsidian, and other imported goods (Edwards 2010:467). These trade goods also support Edwards idea of a socioeconomic differences throughout the site.

Another important Middle Horizon Wari site in Nasca was Pacheco. Pacheco was one of the Wari colonies in Nasca and held a place of great importance as an administrative function throughout the Middle Horizon (Conlee and Schreiber 2006:100). The importance of this site has been shown through the presence of ceramic offerings, llama sacrifices and other offerings that were found in "small, subterranean rooms enclosed by walls" (Menzel 1968:95). Tello described Pacheco as an important point of interaction in the Nasca region as it showed "the connection between Wari and Nasca ceramic styles" (Tello 2002). As the Wari began to expand their influence, Pacheco was constructed as an administrative site in the lower Nasca Valley. Pacheco and Pataraya were both annexed and used for expanding Wari resources like crop production and mineral resources (Spivak 2015:13).

In the Aja Valley in the foothills, east of the town of Nasca lies the site of La Tiza. The La Tiza funerary practices hold a great deal of information about Wari

influence and interaction with other groups in the Middle Horizon. New Wari burial practices at La Tiza do not overtake existing Nasca traditions, which continued to thrive throughout the Middle Horizon (Conlee 2011). This seems to indicate that Wari emergence did not overpower current practices (Conlee 2011:49). Much of the Middle Horizon tombs have Loro pottery associated with them. Additionally, Wari imperial styles, Viñaque and Chakipampa, also appear throughout the assemblage (Conlee 2011:47).

Closer to Huaca del Loro is the site of Zorropata. Kerchusky's 2018 dissertation discusses the interaction of the Las Trancas population with the Wari Empire. Kerchusky determined that local people in this area preserved Early Intermediate Period traditions throughout the Middle Horizon as "consistent with a scenario wherein Nasca peoples ... either reject[ed] or were rejected by the Wari Empire" (Kerchusky 2018:510). Craft production, food acquisition, and distribution of artifacts and features act as preservers of this continuity (Kerchusky 2018:510). Osteological data showed a mix of local and nonlocal diet, which indicate a local and non-local population. Trophy heads in the local style have also been found here. Imported goods such as higher quality clays and Quispisisa obsidian show the extensive trade networks that existed here at this time (Kerchusky 2018:511). Another important element is, of course, the architecture. Adobe compounds and a possible central plaza are present, which has been linked by Kerchusky to a probable regional center for local community activity. Walls have also been found here which may be an indicator for defensive architecture (Kerchusky 2018:520). There is no Wari style architecture at the site.

Kerchusky's 2018 dissertation provides another valuable perspective of the

impact that Wari expansion had on local populations. This dissertation uses the local site of Zorropata as a case study for the impact of Wari encroachment on local Las Trancas populations during the Middle Horizon while also including a discussion of the role that local, Loro, ceramics played at the site. Kerchusky concluded that "Nasca peoples living at this site either rejected or were rejected by the Wari Empire to a large extent" (Kerchusky2018:510). Meanwhile, Early Intermediate Period productive and consumptive traditions or preferences were maintained by local peoples living in the Las Tancas Valley during the Middle Horizon.

III. HISTORY OF HUACA DEL LORO AND MIDDLE HORIZON CERAMICS

Julio C. Tello was the first to conduct excavations at the site that he called Tambo de Kopara, now Huaca del Loro, in the 1920s. He identified three major areas, or sectors of activity throughout the site. Sector A was the area of the principal ayllu, the place that would have been a center for elites. This area included the remains of large, rectilinear adobe compounds and a round temple (Tello 2002:15-17). Sector B, which is where many of Tello's excavations were focused, was the cemetery area. Tello and his team excavated three looted tombs here. Tello documented the ceramics associated with these tombs, which included a variety of large complete and broken vessel types with plain and ornamental decorations. (Tello 2002:22-25). The final area, Sector C, was deemed to be associated with the secondary ayllu. This would have been the area where commoners at the site lived (Tello 2002:15). There was no visible architecture in this sector.

Excavations at Huaca del Loro continued with William Duncan Strong's 1952-1953 expedition, who changed the name of the site. Employing survey and excavation, Strong rediscovered two large rectangular structures, one circular structure, and several burials (Strong 1957:38). The excavations were predominantly centered on the circular structure in Sector A with an additional focus on the cemetery area of Sector B. Strong identified Huaca del Loro as a Fusion period (now called the Middle Horizon) site. This identification relied heavily on the circular structure and ceramics. When Strong and his team excavated, the remains of a small, round temple still stood. This temple area had painted walls, several rooms, thick walls, plastered floor, and items identified as "sacrificial materials" including a mummified macaw (Strong 1957:36). The remains of two large adobe compounds were just to the east of the temple. Whole vessels and a

considerable number of ceramic pieces were recovered from the entire site. Based on these excavations Strong was the first to separate Loro as a distinct ceramic style (Spivak 2015:43).

In the 1980s Paulsen (1983) revaluated Strong's conclusions about the site. Architecture and ceramics are the two main pillars of Paulsen's argument that Huaca del Loro was a highland colony. Like Strong, Paulsen considered the circular structure to be a temple, which she identified as a link to highland presence at the site. She supported this highland link with the ceramic data, noting that the presence of Late Nasca, phases 7-9, represent a transition from the Early Intermediate Period through the Middle Horizon (Paulsen 1983:101). Furthermore, similar ceramics and architectural elements at Nascaarea sites Tres Palos II and Pacheco suggested a pattern in foreign influence. Paulsen posits that Huarpa people built these sites as colonies at strategic points along the valley during the end of the Early Intermediate Period, almost as a trial for colonial expansion.

However, not all have agreed with this analysis. Throughout Schreiber's 1989 article she stresses that Paulsen did not fully prove her conclusions. The central argument that Schreiber proposes delves into the architecture of the circular structure. Using data derived from her survey of the southern Nasca region, Schreiber notes that circular structures and stone construction with adobe walls were common in the region, meaning that the structure was not definitively a highland product (Schreiber 1988:72). The underlying message throughout this critique is the need for more evidence.

Current Research

In more recent years, Conlee took the first steps in providing new evidence. In the summer of 2015, she conducted drone photography, gradiometer work, and Ground

Penetrating Radar (GPR) survey across the site. (Conlee 2015b:3). A total of 21.4 hectares were documented with high resolution imagery; 615 ha of the valley was documented with low resolution imagery, 2.9 ha were surveyed using the gradiometer, and 0.4 ha were surveyed using GPR (Conlee et al. 2017b). The work was divided among three areas of interest, including Sectors A and C which had previously been identified by Tello. Grid 1, in Sector A, revealed a series of large rectilinear structures "approximately 45-55 cm below ground surface, and extend[ing] below a meter in depth" (Conlee 2017:8). Grids 2-4, in Sector C, identified "large square structures with less depth than those in Grid 1" (Conlee 2017:8). This project helped to test how the latter two non-invasive methods fared in the area. These areas would then become the focus for the 2019 field season excavations.

A major focus of the 2019 Huaca del Loro excavations was to evaluate what type of site it was and what its relationship was to the highland Wari state. The project investigated three primary hypotheses: whether Huaca del Loro was a local site, a site that local people established to resist the Wari Empire, or a Wari colony.

Following the first hypothesis, Huaca del Loro may have been a previously established Nasca settlement. The site is situated on the southern edge of the region in a rural area, making it potentially of little interest to the Wari. Following this line of reasoning, we would have expected to see a "predominance of local practices" where a hybrid Wari-Nasca culture existed throughout the region (Conlee 2017:10). That is, we would have expected to find a hybrid of Huarpa, Wari, Loro, and Nasca styles, as has been seen at other Nasca sites. In contrast, we would not expect to find much, if any, imperial Wari pottery, which differs from Nasca in immediately observable motifs such

as chevron bands and elite male warriors (Spivak 2015: xi). If a few Wari trade pieces, or locally produced Wari pottery, had been found they would have been expected to be associated with elites either in domestic or burial contexts (Conlee 2017:11). Another indicator for this scenario would be the temporal context of the ceramic assemblage. There would be a continuation of practices and styles beginning with a presence of Early Intermediate Period pieces. The changes that appear throughout the later periods would act as evidence of sharing throughout a hybrid culture that would have existed at Huaca del Loro (Conlee 2017:11).

Alternatively, Huaca del Loro may have been a site of resistance from the Wari. Hence the pottery, and the entire site, would act as a rejection of Wari styles. Pottery would be local and there would be no Wari artifacts. People may have actively manipulated and changed ceramics by creating differences in the forms and designs of Loro pottery as opposed to other settlements in order to assert their local identity (Spivak 2015). As Spivak has explained, reduced motifs, loose brushstrokes, and the use of voids that are central to the Loro style may be an indicator of rejecting Wari ideals and encroachment (Spivak 2015:95). Unlike the first hypothesis, the site would date primarily to the Middle Horizon when Wari sites nearby were established (Conlee 2017:11).

The third presented possibility is that Huaca del Loro was a Wari colony, possibly established as early as the Huarpa period as a southern outpost. In this scenario, there would be a mixture of Loro and Wari pottery styles present, and possibly some Huarpa. Loro pottery may be profuse throughout the surface layer, as the local population would have supported much of the site (Conlee 2017:11). If Huaca del Loro was a colony, imperial styles will be present including unique vessel types such as keros that are

associated with Wari feasting (Conlee 2017:12). In this scenario the site would first date to either the Middle Horizon or late Early Intermediate Period depending on whether it was established during the Huarpa period or the Wari.

Excavations and analysis at Huaca del Loro were conducted from June-August 2019 as part of Proyecto de Investigación Arqueológica Huaca del Loro (Noriega and Conlee 2019). The site was divided into five sectors and a map with the sectors and 2019 excavation areas is shown in Figure 3.1. Three of the five total sectors were excavated in 2019. These three sectors include Sector I, III, and IV. The sample assemblage that comprises the data of this thesis are drawn from these sectors.

Sector I is the Wari area of the settlement where Tello thought was where the principal ayllu or elite people may have lived. Two Wari structures were excavated in this sector, one of which was a rectilinear compound and the other was a D-shaped temple. Level A was heavily disturbed by modern habitation and a previous goat pen. Thus, no artifacts were recovered from this level. Level B represents a relatively mixed level with some disturbance. Level C in this sector is intact as is Level D. However, there was only a very small portion of Level D recovered from this sector. It is contained within one room of one of the excavated structures that will be discussed in greater depth throughout later chapters.

Sector III comprises the cemetery area of the site. This area has been identified as the cemetery as early as Tello's map (Tello 2002:94-94). However, both Tello and Strong noted that the cemetery had been looted from a very early time. The architecture here consisted of adobe and stone walls and large square tombs. Excavation Units 1, 2, 6 and 7 were included in this area to examine and better understand the people that lived and died

at Huaca del Loro. The top level, Level A, was disturbed. However, some artifacts were collected from this level as they still contain information about the looted graves. When present, artifacts and remains were collected from all levels below Level A as well. Some surface collection was recovered from this sector as goods associated with graves can often yield valuable data. These collections have been noted and are discussed in the discussion section of this thesis.

The final excavation area was Sector IV. This area, combined with Sector V, was thought by Tello to be the home of the secondary ayllu or commoners, and the 2019 excavations in part support his claim. This sector contained Units 3, 4 and 5 as well as Profile 1. Profile 1 was a part of a road cut that revealed *quincha* architecture, which are cane walls that made up square homes (Conlee 2017:10). This was common local architecture in the Middle Horizon. Across most of this sector, the initial layer, Level A, was disturbed. However, artifacts were collected from this level, again as this data can still be used to make interpretations about the site as a whole. There is a greater discussion of all three sectors and what was recovered from each level within each of them that can be found in the data section of this thesis.



Figure 3.1The site map of Huaca del Loro with sector boundaries and excavation units.

Middle Horizon Ceramics

Ceramic assemblages possess a wealth of information about the populations that crafted them. Studies of Middle Horizon Nasca ceramics began with many influential works from archaeologists like Dawson, Silverman, and Strong and Kroeber (Silverman 1993, Strong 1957, Kroeber 1998). In the early 1950's Dawson analyzed Max Uhle's collections at Berkeley to provide a nine-phase sequence of Nasca ceramics. This study has proved incredibly useful over time as scholars still use and reference most of these phases.

Silverman and Strong built upon this sequencing as they argued that neither Nasca 8 nor 9 are part of the Nasca tradition. Silverman takes this analysis a step further to associate Nasca 9 with the Chakipampa style (1993:35). Spivak (2015) has tackled the explanation of Nasca 8. This supposed style was once thought to represent "a shift in the power axis in south central Peru from coast to highland" (Silverman 1988:28). Spivak has

explained that Nasca 8 is now thought to be the Loro tradition, which illuminates just how influenced the style is by both the Nasca and Wari styles. The focus of the present research is on the Nasca 8 and 9 style pottery found at Huaca del Loro today known as Loro and Chakipampa.

Newer data and studies on these ceramic styles provide further foundation for analysis. Whalen's 2015 dissertation discusses how Late Nasca society was impacted by the collapse of Cahuachi, the Early Nasca ceremonial center. As Cahuachi's influence declined, local populations grew in leadership power (Whalen 2015:340). Whalen argues that this localization and regionalism that characterized Late Nasca appears throughout various aspects of life, including pottery. Whalen divides this shift by the stylistic changes and uses of ceramics. Stylistically, regional creativity was inserted into the iconography. However, the overall traditional uses for certain vessels, such as vases, goblets, and other vessels for ritual use, were relatively maintained (Whalen 2015:348). These two factors work together to show that while some new innovations were inserted, much of the old traditions were renewed through regional creativity.

Spivak's 2015 dissertation, which analyzed a variety of Loro ceramic museum collections and sherds from survey and two excavations, gives major insights into the style. This dissertation provides the necessary framework to study and understand iconography of the region and how the interactions among these South Coastal groups left resounding effects on the ceramics. An important distinction that Spivak addresses is the interaction among the Nasca, Loro, and Wari ceramics. Per Spivak, Nasca provided the baseline form from which the Loro and Wari drew their motifs. As Loro and Wari ceramicists borrowed greatly from their Nasca predecessors, they have a number of

shared aspects. These vary from vessel shapes, like face-neck jars, to underlying stylistic elements such as the use of black outlines. Loro and Wari styles have also veered away from certain stylistic aspects of the Nasca in their own unique ways. These differences and the possible reasoning behind them go hand in hand with understanding the interaction that Loro and Wari populations had (Spivak 2015: xi).

However, there are distinct differences among the Loro and Wari styles. Loro renditions are usually far more pared down versions as they often isolated the most basic elements (Spivak 2015:133). Overall, Loro ceramics had a higher predominance of female images, less burnishing, and loose brushstrokes (Spivak 2015: xi). These wares were thicker, heavier, rougher, less colorful, and less polished than the corresponding Early Intermediate Period wares (Silverman 1989:25 in Kerchusky 2018:498). Abstracted symbols were frequently used by the Loro (Spivak 2015: xi). For example, a primary element of Loro motifs are the rays, which had previously embellished Nasca images. Spivak has noted that this is a commonality for the Loro as they chose to emphasize color and shape at the expense of detail (2015:133). This has been exemplified throughout the Huaca del Loro assemblage as is shown by solitary rectangles, nested semicircles and other minimal geometric motifs. Thus, although the Loro potters were utilizing previously established Nasca imagery, like serpentine creatures, they were using them as standalone motifs. This is in direct contradiction or opposition to Wari imagery that was far more codified and mathematical in nature (Spivak 2015:134).

Another similar stylistic root appears through the continued use of polychrome pottery. In Late Nasca pottery, polychrome was utilized for "expressing religious ideology" and helped shape social relationships (Whalen 2015:349). The decline of

Cahuachi helped the profuse diffusion of the polychrome style throughout the Nasca region (Silverman and Proulx 2002:31). Although the Loro did retain the polychrome characteristics, they put their own touch on the slips. Loro potters used an organic black pigment to coat pots or make designs on them. This black pigment is fugitive, applied after firing, and therefore far more susceptible to use, wear, and post-depositional processes (Strong 1957:40; Kerchusky 2018:323). An easier to identify commonality among Loro ceramics is the color of the paste. As Spivak explained, a red-orange color is the most common, while brown-beige is also found throughout Loro works (2015:75). These vessels are commonly constructed through coiling and then paddled to create strong, even surfaces. Another step that Loro artisans usually took when constructing their vessels was the step of polishing, which aided in smoothing the surfaces of the vessel (Spivak 2015:89).

Polishing is not an uncommon practice throughout Nasca as Nasca and Wari ceramics exhibit burnishing as a part of their surface treatment as well. However, the difference comes through the execution among the groups. Loro polishing can be irregular, as visible tool marks and strips of shine showing the polisher's path are present (Spivak 2015:89). Most Nasca and Wari ceramics, however, have a smooth and glassy exterior.

Although Loro and Wari ceramics styles share a common root, they vary greatly. While the Loro followed a great deal of the earlier Late Nasca styles, they formulated their own pattern and pared down these recognizable forms into a creation that is entirely their own. They are often described as a rougher version of their Nasca predecessors with thicker, heavier, less polished pieces (Kerchusky 2018:54). These differences may have

resulted from overt stylistic choices aimed at the creation of a new ceramic tradition (Spivak 2015:85). Whether this new style is aimed at subverting the Wari stylistic variations or is the result of local artistic choices delves further into the question of how these groups interacted.

However, how the Wari interacted with the local Middle Horizon population is still unclear. This question has been much of the impetus for this study. The site of Huaca del Loro will be examined in much greater depth throughout the remainder of this thesis in an attempt to answer this question. There is a clear presence of Wari intervention in the Nasca drainage valley as has already been discussed throughout Chapter 2. There were a number of Wari sites within the Nasca region that had a mixture of Wari and Loro presence. Sites such as Pataraya, Pacheco, and La Tiza demonstrate areas where there was both a Loro and Wari presence. However, in the past, scholars have viewed these groups in opposition. The differences between the Loro and Wari ceramics, especially considering their shared Nasca influence, has been a major line of evidence that the Loro rejected the Wari (Spivak 2015). Spivak has argued that the Loro artisans made each material, technical and visual choice to create these overall stylistic trends that deviate so strongly from the Wari styles (Spivak 2015:106). One such choice included the audience that the Loro styles reached. Spivak has argued that the limited imagery and minimal decoration that makes up Loro style is indicative of a "small, localized polity that neither needed nor wanted to influence a broad, cross-cultural audience" (Spivak 2015:140). In comparison, the Wari had a range of substyles that were produced in specific regions showing the artisans willingness to incorporate local systems (Cook 1987:71). The Loro retained some of the earlier Nasca styles but changed the placement and pared down the

motifs in order to separate themselves from the Middle Horizon empire of the Wari (Spivak 2015:107-108). However, the findings of the ceramic assemblage, as well as other aspects, of the 2019 field season at Huaca del Loro question this understanding. I will expand on these ideas in Chapter 7 of this thesis.

IV. METHODS

The objectives of this project were to identify the form, function, decoration and iconography for the ceramic vessels in the assemblage from Huaca del Loro. Each individual objective is addressed throughout the course of this chapter in relation to the methods of analysis used and the overall importance to this thesis. A strong emphasis was placed on the diagnostic sherds as they yield the most information. These fragments hold valuable information and insight into the pottery manufacture and are important when conducting a spatial analysis. The focus of this analysis is on the diagnostic sherds; however, an additional emphasis has been placed on rim sherds. Different approaches have been utilized for analyzing the various forms of sherds deemed diagnostic and are explained throughout this chapter.

All data was first recorded on Excel spreadsheets recording descriptions, measurements, and artifact numbers. These spreadsheets aided in compiling various applicable tables, graphs, and statistical analysis to better interpret the data. Such tables, which show the counts and percentages of different vessel types, are incredibly useful for identifying patterns in the assemblage. Further statistical analyses using SPSS was conducted to better understand the correlation among the vessel types relative to their contexts within the site. Photographs of diagnostic sherds were taken with accompanying scale. In addition to the photographs, some of the diagnostic sherds were drawn. Not all sherds were drawn or photographed, only those that exemplified the variety of types found throughout the assemblage. Sherds with unique profiles, in addition to those typical from the assemblage, were drawn, and those with either unique or typical decorations were chosen for photographs. Thus, with some exceptions, drawings were exclusively

rim sherds while photographs of all diagnostic forms were taken.

Once the sherds were recovered from the site, they were washed and given a unique number. Each number indicates the provenience of the respective sherd within the site of Huaca del Loro. The first number or letter indicates the unit from which the sherd was found, the second letter was the level, while the final number indicates the sherd's arbitrary number. This was the first step to processing and analyzing all sampled sherds from the assemblage.

Due to time constraints, not all diagnostic sherds excavated from this season were examined. A sample of at least ten percent of each level was deemed sufficient for the purpose of this thesis. Depending on the context and size of the strata within the site, this sampling percent ranged. This ensured that at least some information was gained from all areas represented in this field season.

The sherds were then classified by their vessel position: rim sherds, body sherds, and base sherds. Rim sherds are distinguishable by the presence of the vessel lip. Body sherds are less definitive pieces that come from the walls of the vessel. These can aid in analyzing the temper and other manufacture components of the ceramics. Only body sherds with some form of decoration were analyzed for the purpose of this thesis. Base sherds contain some portion of the base or underside of the vessel. These can be combined with rim data to understand overall vessel proportions. Handle sherds were also deemed diagnostic and recorded as such. The final form of diagnostic sherds identified within the assemblage was those with repair holes. These are holes that were drilled into the surface of the vessel, tied together with twine and sealed with resin to repair fractured vessels. (Spivak 2015:105). An example of these repair holes can be seen
in Figure 4.1.



Figure 4.1 Sherd E2-ASO-B-05 shows two full and one partial repair hole.

As rim sherds potentially contain the most information, their analysis was the most complex. The rim sherds were placed against a flat surface to determine the orientation of the original vessel. From there, the sherd was compared against a metric guide for estimating vessel diameters. The chart enabled analysis of the percent of vessel still intact and the original diameter of the orifice. The type of lip and rim were recorded as well.

The following methods were used for all types of diagnostic sherds. Digital calipers were used to record the thickness of each sherd. For certain pieces this was taken a step further to record extra areas of thickness. For example, the thickness of the lip and body of rim sherds were recorded. Figurines often had an additional area of measurement recorded, depending on the size of the piece and variety of thicknesses present. These measurements are useful for differentiating the styles present and act as an additional distinguishing factor among the three main styles that were excavated.

For example, as Whalen (2014:218) explains, Late Nasca vessels have varying proportions depending on whether they were fine ware or coarse ware, and their use. The average rim widths range from 0.9 mm to 7.1 mm with an average of 3.2 mm. Meanwhile Loro ceramics have slightly thicker walls ranging in width from 2.4 mm to 9 mm, averaging 4.2 mm wide (Spivak 2015:77). Finally, Wari ceramics are generally thin walled. The vessel walls that Jennings recorded at Tenahaha typically fell between 0.8 to 1.3 cm (Jennings and Alvarez 2015:127). As these measurements do differ, albeit by small amounts, they will only be used as additionally information to strengthen an argument for any of the three presented hypotheses.

A Munsell color chart was utilized to record the slip and paste colors present. The standardized Munsell color definitions allow for more precise comparison among sherds. If a sherd had any type of decoration, typically some type of painted design, the decoration was also recorded with a written description of any design(s) present. This was in association with a surface treatment category that recorded whether a sherd had any decoration of any type and where the decoration was (interior vs. exterior of vessel).

An additional emphasis was placed on analyzing the paste of the ceramic assemblage. A Dinolite microscope was used to examine and record the inclusions that are present in the assemblage. This allowed for examining the presence or absence of organics in the paste, as well as nonorganic temper. This helped with the comparison of fineware versus plainware ceramics, in addition to a closer examination of figurines and their construction. Again, this information can be compared with other assemblages in the region to see commonality in practices for groups in the area. The microscope also allowed for a better examination of the firing conditions of the vessels. Firing conditions

are especially important to understand as they relate directly to the technology used in creating each vessel. The firing conditions were assessed, in part, with the aid of a firing core chart found in Orton & Hughes 2013 (175). Determining if the ceramics were oxidized or reduced, and the speed at which they were cooled, can tell a great deal about the firing practices used to make the original vessel.

An initial analysis was conducted on the ceramics to determine if they were plainware or fineware. This determination was made predominantly based on the percentage of inclusions and thickness of the vessel and correspondingly reported on the main Excel spreadsheet. From here, the initial analysis was taken one step further to determine whether or not the sherd was Loro. This step was only taken if the sherd was deemed to be not plainware. If the sherd was neither plainware nor Loro, the style was recorded, if known. This analysis was finished at Texas State University and facilitated by the aid and expertise of Dr. Deborah Spivak. The differences among these styles have been discussed in greater detail in Chapter 2.

To gain an additional understanding of the orientation and profile of the sherds, sketches were drawn. The data obtained from the measurements were used when constructing these sketches. Due to time constraints, not every diagnostic sherd was drawn. Only rim sherds with a profile that either reflected one typical of the assemblage or one that differed from the sample were chosen for drawing. Thus, not all sherds were drawn, but there was a drawn representation of much of the 2019 analyzed sample. Photographs were also taken of diagnostic sherds that matched these conditions. Photographs were used to capture any diagnostic sherds with either typical or unique painted designs while drawings helped to demonstrate the profile and orientation of the

original vessel.

The data from the 18 variables that have been explained throughout this chapter were first entered into Microsoft's Excel Spreadsheets. Percentages and counts are also listed for the temper and firing conditions noted within each type. This type of analysis has greatly aided in examining patterns across the site and how the various variables interact with one another. These patterns and connections are examined in greater detail in Chapters 5 and 6 where spatial distribution of the assemblage will be presented and then an interpretation given.

These methods of analysis have provided an initial understanding of the ceramic assemblage of Huaca del Loro, which has then allowed for a deeper interpretation of the site. These steps will greatly aid in the identification of ceramics as Late Nasca, Loro, and Wari. As the data has been recorded, and that recording practice has been noted, it can then also be compared to other data from sites within the region.

V. THE CERAMIC ASSEMBLAGE

A sample of 566 ceramic sherds out of 4111 sherds excavated from Huaca del Loro were analyzed in this thesis. 65.85% of the total excavated sherds were diagnostic (n = 2707), while the remainder were non-diagnostic sherds. A breakdown of the total number of analyzed sherds compared to the total number of diagnostic, nondiagnostic and overall total of excavated sherds from each sector can be found in the Appendix section with Tables A.5 through Table A.7. From this assemblage nearly all of the analyzed sherds were collected from excavation. The few exceptions are pieces obtained from surface collection. Ceramics were analyzed from all excavated sectors. This includes Sector I, where Wari architecture was recovered; Sector III, which contained looted tombs; and Sector IV, the possible secondary ayllu or local domestic place.

Ceramics were divided into categories of fineware or plainware. The types and subtypes of plainware and fineware that were recovered can be seen in Table 5.1. Fineware sherds constitute the majority of the assemblage due to the sampling bias mentioned in the Methods Chapter of this thesis. This bias preferred diagnostic fineware, which held more information than plainware or non-diagnostic sherds regarding the cultural affiliations of Huaca del Loro. Diagnostic sherds were defined as any piece with information as to the cultural affiliation or original vessel shape and included pieces with handles, rims, bases, or decorations.

This chapter will first introduce the spatial distribution of the sample that will be expanded upon in Chapter 6. It will continue into a discussion of the technical aspects of the ceramics focusing on the paste, before entering a discussion of the types of fineware that were present and their distributions. The same discussion is provided for plainware in

the sample. The chapter ends by addressing each of the cultural or temporal styles that

were present in the sample assemblage.

Vessel Type	Count	% of Assemblage
unknown	199	34.98%
bowl	188	33.10%
deep bowl	2	0.35%
cup	1	0.18%
total bowl	191	33.63%
plate	90	15.85%
olla	17	2.99%
collared olla	5	0.88%
necked olla	2	0.35%
total olla	24	4.23%
jar	16	2.82%
collared jar	4	0.70%
spouted jar	2	0.35%
outflaring jar	2	0.35%
necked jar	1	0.18%
miniature jar	1	0.18%
total jar	26	4.58%
handle	10	1.76%
figurine	9	1.58%
vase	6	1.06%
face-neck jar	5	0.88%
misc. base	3	0.53%
misc. form	2	0.35%
flaring goblet	1	0.18%
neck sherd	1	0.18%
double spout and		
bridge	1	0.18%
Total	568	100.00%

Table 5.1. Distribution of counts and percentages of the total assemblage for each vessel

 type

Spatial Distribution

Ceramics were excavated and collected from three of the five identified sectors

across Huaca del Loro. Sector I consists of two types of Wari architecture. Structure 1 is

a rectilinear compound and Structure 2 is a D-shaped temple. These structures can be seen in Figure 5.1 positioned along with the other excavation areas. In this figure Structure 1 and 2 are emphasized. Sector III is a cemetery area, which included looted tombs and excavation Units 1, 2, 6 and 7. Sector IV is the area that Tello identified as the secondary ayllu area or place where the common people of the Middle Horizon probably lived (Tello 2002:14). Within Sector IV were excavation Units 3, 4 and 5 and Profile 1. This profile was along a road-cut and had exposed *quincha* architecture, which has been found at other sites in the Nasca drainage (Conlee 2000:455). These cane walls were utilized for local architecture in square houses (Conlee 2015:10-11). This is useful for cheap, quickly created structures. A more in-depth discussion of the ceramics found within each excavation area can be found in Chapter 6 where spatial distribution is addressed further.



Figure 5.1. Map of Huaca del Loro divided into sectors with excavation units shown and highlighting Structure 1 and 2

Paste

An analysis of the paste was conducted to determine the firing atmosphere, percent of inclusions, and types of inclusions that appeared in this assemblage. These categories are discussed individually below within their respective vessel types and will be summarized here. As seen in Table 5.2, there were an overwhelming number of oxidized sherds accounting for over 98% of the sample. There were only six fragments that exhibited any reduction. The reduced sherds come from a variety of vessel types including a necked olla, plate, jar, and various miscellaneous forms. The majority are from Sector I in or around Structures 1 and 2 with the final piece from a surface collection that was a part of Unit 5. Paste color varied across the Munsell red to brown scale, including shades of red in the 10 R family, yellowish red of 5YR 5/6, 2.5 YR 5/4 reddish brown, 7.5 YR 6/4 light brown. Rates of inclusions varied widely from 5% to 30%. The majority of sherds contained 10% to 15% inclusions, as is shown in Table 5.3. An example of oxidation can be seen in Figure 5.2 below while an example of reduction can be seen in Figure 5.2.



Figure 5.2 This figure shows T2-C-02, an example of an oxidized sherd.



Figure 5.3 shows an example of reduction in Sherd E2-ASO-B-20.

	Sum of	Sum of % of
Row Labels	Count	Assemblage
Total oxidized	557	98.06%
oxidized; no core	433	76.50%
uneven oxidization	68	12.01%
oxidized with diffuse core margins	38	6.71%
oxidized; with firing clouds	5	0.88%
oxidized	5	0.88%
oxidized with diffuse core; uneven		
oxidization	2	0.35%
oxidized, no visible core	2	0.35%
oxidized in two layers	1	0.18%
oxidized; thin core margins	1	0.18%
oxidized with uneven core	1	0.18%
oxidized; possible core	1	0.18%
reduced	6	1.06%
other	2	0.35%
partially reduced; partially oxidized	1	0.18%
Grand Total	568	100.00%

Table 5.2 Table with counts and percentages of oxidization or reduction types across the assemblage

% of	Sum of % of	
Inclusions	Assemblage	Raw Counts
5%	9.54%	54
5-10%	0.35%	2
10%	55.48%	315
10-15%	0.53%	3
15%	24.03%	136
20%	8.13%	46
25%	1.24%	7
30%	0.71%	4
Grand Total	100.00%	568

Table 5.3 Table showing the frequency of each percentage amount of inclusions.

Fineware

Bowls. As is explained by Table 5.1, bowls were the largest represented proportion of the assemblage accounting for over one third of the total assemblage (n =191, 33.63%). There were divisions between bowls, which included deep bowls and cup bowls. Deep bowls (n = 2) follow Spivak's designation of deep bowls, which are bowls with relatively straight sides (Spivak 2015:78). Cup bowls (n = 1) are relatively small in size compared to other bowls and according to Proulx are "bell-shaped vessels with a distinctive flaring rim" (Proulx 1968:12). Pieces defined as bowls were also differentiated by their rim and lip type. Rim types included slightly inverted, inverted, straight, slightly everted, and everted. Lip types were more varied including angled, tapered, rounded, uneven rounded, and flattened. Only seven of the bowls are undecorated and considered plainware. The remaining 200 bowl sherds are from decorated, fineware bowls. Bowls are painted and slipped typically on the exterior, although some had additional painting and slips on the interior. These bowls come from a variety of styles including Loro, Wari, transitional, Late Nasca, and Chakipampa. Additionally, most bowls had good sorting with 10-15% inclusions. Most inclusions included sand, quartz, and mica.

The overall size range for bowls varied in diameter from 7 cm to 30 cm with most bowls falling in the 8 cm to 21 cm diameter range. It should be noted that not all sherds had a big enough percentage of vessel present to determine the original vessel diameter. Thickness of the bowls ranged from 2 mm at the smallest and 6.50 mm at the largest for the lip, and 2.10 mm to 10.70 mm at the body. Most bowls were placed under the general bowl category (n = 146). The highest determined subtype were shallow bowls (n = 59). There were few deep bowls (n = 2), and only one small bowl and one cup. The differences among these subtypes can be seen in Figure 5.4. The profile labelled "g." or Sherd E2-ASO-R1-B-10 is an example of a cup. The profile labelled "f.", Sherd E1-R5-C-15, relates to a deep bowl. All other sherd profiles are under the larger term of bowl.



Figure 5.4 Profiles of various bowl sizes with the sherd numbers included.

Plates. The next highest proportion of an identified vessel type are plates (n = 71). Diameter for plates ranged from 8 cm to 24 cm while their thickness ranged from 2.50 mm at the lip and 8 mm at the thickest point in the body. Plates were generally smoothed on both sides and painted on the interior. There are a few exceptions to this generalization including, notably, one piece that was incised. Nearly all plates were oxidized, with good sorting and between 10-15% inclusions. Much like the bowls, these inclusions consistently consisted of quartz, sand, feldspar, and mica. Most plates were of either

indeterminate style or Loro, with the exceptions of five Late Nasca pieces and one Viñaque sherd. Examples of profiles can be seen in Figure 5.5 below. This figure shows the profiles of six sherds that are labelled at the bottom of the figure.



Figure 5.5 The profiles of a sample of plates with the sherd numbers included

Jars. Jars consist of 4.59% of the assemblage (n = 26). The jar category is comprised of the following jar types: collared jars, spouted jars, out flaring jars, necked jars, and miniature jars. Jar diameters ranged from 4 cm to 16 cm with a prevalence of rounded and flattened lip shapes. All jars exhibited some form of surface treatment including a smoothening on both sides of the vessel across the collection. Some had additional painted exteriors. All jars were oxidized with nearly all even oxidization, though there were a few exceptions with uneven oxidization. Sorting for jars ranged from poor to very good with most falling between the fair to good categories. There was a high variation in inclusion amounts from 5% to 25% with a high distribution in the 10-15% range. Inclusions consisted of quartz, feldspar, sand, mica and possibly shell. The jar category is unique as there are both plainware and fineware jars in the assemblage. Plainware jars such as collared jars will be discussed separately in the plainware section below, face-neck jars will also be discussed separately below. Examples of jar profiles can be seen in Figure 5.6 below. The sherd numbers are labelled at the bottom of the figure. For example, the profile labelled "c.", Sherd E2-ASO-B-22, shows the profile of an outflaring, collared jar. All other profiles in this figure are also of the neck of jars as this is the easiest portion of this vessel to identify.



Figure 5.6 Profiles of sherds showing profiles of jars with their sherd numbers included.

Face-neck jars. Face-neck jars are Loro vessels that held a specific role in Loro society (Spivak 2015:146). In her 2015 dissertation, Spivak established the basis for identifying these vessels throughout the assemblage. Following her specifications, face-neck jars are "one-handled jar[s] with a modeled and painted face adorning the neck part of the vessel." (Spivak 2015:147).

Although no complete face-neck jars were recovered in the 2019 field season at Huaca del Loro, there were a total of five sherds that can be considered face-neck jars. One such piece is the face of a face-neck jar shown in Figure 5.7. All of these pieces exhibit some indication of being a face-neck jar, most notably the fact that four out of five of these pieces including a portion of the face from the jar. The fifth piece had hair painted on the vessel. All of these fragments were oxidized evenly and painted on the exterior with pale brown and black slip on the exterior. Most of the pieces had good sorting with fewer than 15% inclusions of feldspar, quartz and mica (n = 4) (U5-S-86). U5-S-86 is an exception in more than one instance, as it has poor sorting, burn marks on the exterior, and does not have the head of the face-neck jar present. Additionally, this is the only face-neck sherd found in an area other than Sector I. This sherd was recovered from Unit 5.



Figure 5.7 Sherd E2-ASO-B-R1-07 which shows the face from a face-neck jar. Parts of two eyes, a partial eyebrow and nose are shown.

Vases. Vases are described as a type of vessel that is twice as tall as its diameter (Carmichael 1988:222). These are often used as drinking vessels (Spivak 2015:79). Vases are a small proportion of the assemblage, accounting for 1.06% (n = 6). All exhibit good to very good sorting with between 5 to 10% inclusions of mica, feldspar, sand and quartz. Paste for these sherds all fell in the pale red (2.5 YR 6/2) or weak red (10 R 4/4) range to red (2.5 YR 5/6) as is in the Munsell. All pieces had a painted exterior and smoothed interior. The lips of these pieces were between 3.16 mm to 4.49 mm while the body thickness ranged from 2.88 mm to 4.60 mm. Diameters for these sherds were between 8 cm to 11 cm with rounded lips and a mix of straight and out flaring rims. All vase sherds were of the Late Nasca style. Examples of vases can be seen in Figure 5.8 below which has the sherd names included at the bottom.



These show two examples of vases including a: U2-A-1-c and b:U5-S-49.

Figure 5.8 Two examples of vase profiles.

Flaring goblet. There was only one sherd that was positively identified as a flaring goblet. This sherd had good sorting with feldspar, quartz and sand inclusions. There was uneven oxidization with a light red paste corresponding to Munsell color 2.5

YR 6/8. The exterior of the piece was smoothed while the interior was painted a red color. At the thickest point the sherd was 7.41 mm and measured 4.69 mm at the thinnest. This piece was either a Late Nasca or Loro sherd as both have been identified to have produced flaring goblet styles.

Double spout and bridge vessel. There was one sherd from a double spout and bridge vessel. This fragment was too small to determine the original diameter. It was only 2.86 mm thick at its thickest point. The interior had been smoothed and the exterior had polychrome painted bands of red, black and white. It had been evenly oxidized and had few inclusions of feldspar and quartz. The style is dated to either Late Nasca or Wari. The importance and context of this piece will be discussed in greater depth in Chapter 6. The one double spout and bridge sherd that was recovered can be seen in Figure 5.9.



Figure 5.9 Sherd T1-B-35 shows the spout from a spout and bridge vessel.

Figurines. A total of nine figurine fragments are included in this assemblage. These fragments range from pieces with painted designs to those with no surface treatment. Three of the figurine fragments had no form of surface treatment. Two were only leg portions of the figurine that were oxidized with thin to diffuse core margins and included feldspar, quartz and mica in their paste. Of these undecorated leg fragments, one had two legs in a seated position. The other undecorated leg section showed the thigh to foot of a figure in a flexed position. The decoration on the other figurine pieces were mostly geometric in nature with black lines, white dots and red triangles acting as the main decorations. An example of three figurines can be seen below in Figure 5.10. The figurine on the left show black asterisks with large red triangles and white dots. The figurine in the middle displays a pair of legs. The final figurine on the right is a head with eye indentions and a protruding nose.



Figure 5.10 Three figurines from Huaca del Loro excavated in 2019.

Indeterminate. There was a large section of indeterminate fineware recovered in this assemblage (n = 198). These pieces are predominately body sherds with some form of decoration. Due to their very nature as indeterminate pieces, the exact dimensions of these piece varied greatly. Sherds ranged from 2.18 mm to 12.97 mm at their thickest point. Sorting and inclusion rate also varied widely across these sherds from "poor" to "very good", in other words a range of 5% to 25% percent of inclusions that included sand, quartz, feldspar, lithoclasts, and mica. They all exhibited some form of surface treatment on either the interior or exterior. A majority of sherds were oxidized evenly with the exception of some sherds that were unevenly oxidized (n = 30) and one sherd that seemingly exhibited partial oxidization and partial reduction. The styles for these sherds also varied widely including Loro, Late Intermediate Period, Late Nasca, Chakipampa, Wari, Viñaque, and Transitional styles.

Plainware

Ollas. Ollas are the largest group of plainware that were observed (n = 24). Ollas primarily function for cooking capabilities (Kerchusky 2018:279). There were two variations of ollas seen at this site: necked ollas and collared ollas. The major difference among these styles is found in the neck. A necked olla has a short, out-turning rim (Vaughn 2000:340). The collared ollas, in comparison, have short, incurving collars (Kerchusky 2018:314). However, most of the ollas were not intact enough for further classification as many were body sherds or did not contain enough of the neck. Examples of ollas can be seen in Figures 5.10 and 5.11 below. In 5.11 olla "c." shows the profile of a handle of an olla, while "a." and "b." show the rims and lips of other ollas. Figure 5.12

shows the portion of a large olla with burn marks along the interior and exterior. As ollas were often used for cooking, these burn marks are unsurprising.



Figure 5.11 This figure shows three examples of ollas with their sherd numbers included.



Figure 5.12 shows a portion of a large olla corresponding to Sherd U1-C-9_49.

As ollas are plainware, it makes sense that they all had large inclusion amounts of 15% to 20% of predominantly quartz, sand, feldspar, and mica. The size range for the ollas varied greatly as the smallest was 8 cm while the largest analyzed was 50 cm in diameter. The thickness of the vessel body ranged as well from 5.78mm to 15.29mm. All but two sherds were oxidized, though the sherds show a continuum of oxidation levels from evenly oxidized with no core to uneven oxidation and diffuse core margins. Both reduced pieces accounted for 10% or less of the original vessel and were a portion of the neck of an olla. For these reasons it was not possible to determine if the original vessel was reduced or if only a small portion exhibited this trait. Most ollas exhibit some form of smoothing on either the interior or exterior, though this typically included uneven marks that show this was done either quickly or without great attention to detail (n = 17). Three of the artifacts included post-fire burn marks.

Collared Jars. Following Spivak's description of this vessel type, collared jars are round vessels with constricted necks (Spivak 2015:79). As Kerchusky pointed out in the Zorropata assemblage, it is increasingly difficult to differentiate among necked ollas and collared jars when the whole vessel, or at least a significant portion of the neck, is missing (Kerchusky 2018:316). However, these two categories both fall definitively into the plainware category as their uses involved cooking and storage and they are typically not decorated (Kerchusky 2018:315).

There were four sherds positively identified as originating from collared jars. These artifacts included either a significant enough portion of the rim or neck to make this classification. These pieces were oxidized and had inclusions between 15% to 25%. Inclusions included mica, feldspar, quartz, and sand. Two pieces exhibited unevenly smoothed exteriors similar to that described for ollas. The other two pieces has some form of painting on the exterior. They were all associated with Structures 1 and 2 that will be discussed in greater detail in Chapter 7.

Handles. Handles account for 1.77% of the entire assemblage. Handles are from both plainware and fineware. These artifacts may represent unique vessels or may have come from vessels such as an olla, jar, or other vessel that were already counted in the above typology (Proulx 1968: Figure 17; Silverman 1993:247; Vaughn 2000:339-340). A sketch of an olla handle can be seen labelled as "c." in Figure 5.11 above or in Figure 5.12 above or 5.13 below.



Figure 5.13 This figure shows sherd E1-AS-B-11 which is a handle.

Surface Treatment

89.05% of the ceramics of the sample assemblage had some form of decoration or surface treatment. There were a variety of techniques used throughout the assemblage including slips, painted geometric designs, burn marks and one incised piece. These decorations are crucial to determining the cultural affiliations of the people that produced them. From this assemblage an overwhelming majority of the fineware or diagnostic pieces were Loro. However, Wari, Viñaque, Chakipampa, Late Nasca, and Late Intermediate Period styles were also seen at the site. Each of these groups and their characteristic styles will be described below.

Polishing. A large proportion of the assemblage exhibited some degree of polishing (N = 300). Polishing is not an uncommon practice throughout the Nasca drainage as most Nasca and Wari ceramics have a smooth and glassy exterior attributable to highly refined surface polishing practices (Spivak 2015:89). Loro polishing is irregular, as visible tool marks and strips of shine showing the polisher's path are present

(Spivak 2015:89). An example of this uneven smoothing that left marks can be found in Figure 5.14.



Figure 5.14 Sherd T1-C-81_84 shows the two refit pieces that make up sherd with striation marks showing uneven polishing.

Repair holes are another avenue for information about the assemblage. Repair holes show which vessel were repaired by those who utilized them (Edwards 2010:284). These repair holes were created by drilling holes into either side of a broken piece of vessel, tying the pieces of fiber through these holes then filling it with sinew or some other form of adhesive (Edwards 2010:284). There was a total of 34 sherds, or six percent of the sample assemblage, that exhibited repair holes. These sherds were divided across the three sectors and recovered from Structures 1 and 2, Units 2 and 5, and Profile 1. Similar repair holes were noted in small amounts at Pataraya (Edwards 2010:285).

Decoration

Loro Designs. The Loro style is the most prevalent style (58.45%) and found in all excavation units (n = 332). Loro ceramicists borrowed greatly from their Nasca predecessors by using their motifs. However, they diverted from the Nasca by isolating a

motif and placing it on a relatively blank surface (Spivak 2015:133). For example, a primary element of Loro motifs are rays. These had previously been used by the Nasca to amplify iconography (Spivak 2015:135). The Loro however used them as standalone motifs. Other common motifs for the Loro include empty circles, nested semicircles, stepped pyramids or triangles and other minimal decorations. Photos of many of these motifs can be found in the following pages relating to Figures 5.15 through 5.19, which are all labelled detailing the motifs that they exemplify. These motifs make up a large portion of the corpus of Loro style sherds recovered from Huaca del Loro. The Loro sherds found at the site often contained only one or two of the above-mentioned motifs in either a solid color or tricolor. They often had a black band along the rim and a red band on the interior of bowls. Other commonalities include placing these lone or few motifs on a tan background that was outlined by a thin black line.

Although the Loro retained the tri-color pattern that was made famous by the Nasca, they put their own spin on it. This is often shown in what has been called the 'Loro rectangle' (Spivak 2015:129). An example of the Loro rectangle can be seen below in Figure 5.19 below. As is seen in this figure, the rectangle is usually banded and tricolor, though solid color rectangles have been noted (Spivak 2015:129). The formal elements, which require less specialized knowledge, such as applying pigmented slip and burnishing a vessel, exhibit a distinct lack of refinement. These processes seem to have been performed quickly, disregarding time-intensive movements like ensuring an even rim height or purposefully drawing the paintbrush along the vessel in a straight line. Spivak has noted that this is a commonality for the Loro as they chose to emphasize color and shape at the expense of detail which largely explains why these colorful decorations

are often kept to a small number (2015:133).



Figure 5.15 Sherd E1-R1-C-21 shows the semi-circle Loro motif outlined in black on the interior of a plate.



Figure 5.16 Sherd E1-R1-R2-02 shows the stepped triangle or stepped pyramid image on a tan background on the exterior of a bowl.



Figure 5.17 Sherd T1-B-04 shows both the black tick marks and nested black semicircles that are common to the Loro. They are painted on the interior of a plate.



Figure 5.18 Sherd E2-ASO-R1-B-16 shows a single red band on the interior of a bowl.



Figure 5.19 Sherd E1-AS-B-44 showing a red, white and purple Loro rectangle over a white band near the rim of the vessel.

Transitional. Transitional style is used to describe sherds that are neither Late Nasca nor Loro in style but share a number of similarities with Loro and Nasca. This style has been noted by archaeologists throughout the region (Conlee 2000:203). At Pajonal Alto, Conlee recorded this style as sherds that had defining traits of Nasca 7 and Loro (Conlee 2000:203-8). Whalen also used the term transitional to categorize sherds that had a number of Loro slip color, motifs and vessel forms (Whalen 2014:254-70). Spivak has summarized that this style may reflect the choices of the artisan who crafted the vessel (Spivak 2015:97). This style may indicate the style change over time from Late Nasca to Loro (Spivak 2015:97). At Huaca del Loro some of these sherds have been found throughout the entire site in small numbers (n=5). These sherds exhibited an inbetween of style indicators between Late Nasca and Loro.

Late Nasca Designs. There was a total of 56 sherds (9.86%) that were identified as the Late Nasca style. They are found throughout the site, and in smaller proportions in Units 1, 2, 3, 5 and 6, and in higher concentration in Structures 1 and 2. They come from

a variety of vessels including bowls, plates, jars, and vases. All vases in the assemblage are of Late Nasca style. These sherds are characterized by their relatively thinner body, evenly oxidized, "good" to "very good" sorting with 10% or fewer inclusions. Some of the common design elements include fish (Figure 5.20) and flowering staffs (Figure 5.21) similar to those identified by Proulx (2006: Fig. 5:209). Other common elements include black and white stars, yellow curved lines and large red dots.



Figure 5.20 Sherd E2-ASO-B-R1-01 has a corn or fish motif similar to Proulx (2006:209 Figure 4.5).



Figure 5.21 Sherd E1-R1-R2-04 is a Nasca design with a red band and black curving bands over a white background similar to Proulx (2006:209 Figure 4.6).

Wari Designs. A majority of the 16 Wari sherds come from Structures 1 and 2 (n = 15). There was one additional Chakipampa sherd recovered from Sector III. That sherd is from a surface collection of Unit 2 that probably originated from a looted grave. These pieces exhibit "good" to "very good" sorting with 10% or fewer inclusions of predominantly feldspar and quartz with some mica. Due to timing constraints, not all Wari sherds could be divided among the two fineware styles of Chakipampa and Viñaque. The generalized "Wari" category was constituted of sherds that exhibited Wari characteristics. These characteristics were largely demonstrated in their decoration and surface treatment. Styles on these sherds include the following: red slip on the interior and exterior, the use of finer polychrome paints (seen in the vibrance of the paints) and vertical and/or diagonal lines often in association with small red dots or other geometric motifs. An example of one sherd with these red dots can be seen below in Figure 5.22.



Figure 5.22 Sherd E2-AS-B-04 which shows a Wari sherd with small red dots over a tan background.

Sherds that were clearly placed into the Wari subgroups appeared in the assemblage in very small proportions. There were three Chakipampa sherds and two Viñaque sherds in the sample. An example of the Viñaque style can be seen in Figure 5.23. The main distinguishing characteristic in this piece is the large black dots over tan dots. An example of Chakipampa that was found at Huaca del Loro can be found in Figure 5.24. In this piece a multicolor chevron is shown painted on the exterior of a sherd. This chevron design is one of several geometric shapes that is common to Chakipampa ceramics (Spivak 2015:98).



Figure 5.23 Sherd E1-AS-B-48 shows Viñaque imagery with repeating curved bands that have black over white dots.



Figure 5.24 This Chakipampa sherd, E1-AS-B-01, contains the purple, black and orange chevron that is common to the style.

Late Intermediate Period. There were only four Late Intermediate Period style sherds in the sample. These pieces were evenly fired in an oxidized environment. Two were recovered from Sector I and the other two were recovered from Sector III. In both areas, these sherds were recovered from either surface or disturbed levels of excavation. Their paste falls into the light red/pink categories within the Munsell color chart. They have "good" to "very good" sorting with 5% to 10% inclusions of quartz, feldspar and sand. Each of these sherds exhibited the same or similar black dot on tan band motif. An example of this can be found in Figure 5.25. Simple, black painted designs are common to the Late Intermediate Period and similar examples of this dot and band imagery can be found at sites such as Pajonal Alto (Conlee 2000:175). Another commonality of the Late Intermediate Period sherds from Pajonal Alto is the red painted background.



Figure 5.25 Sherd U2-A-04 is a Late Intermediate Period sherd that shows a black dot over a tan background bordered with a thin black line.

Incised. There was one sherd that exhibited any form of incision. The exterior of this piece, where the incising can be seen, is shown in Figure 5.26. This piece comes from a plate that was originally 15 cm in diameter. On the interior are faded black and white horizontal and curved painted lines. This piece exhibits "very good" sorting with 10% inclusions of quartz and feldspar. This piece has been oxidized and shows diffuse core margins. It has a light red paste color. This sherd comes from Trench 1, a portion of the Structure 1.



Figure 5.26 Sherd T1-B-02 shows the one incised sherd from the sample assemblage, with the incised line running perpendicular to the border or rim of the sherd.

The above chapter has provided an overview of the types and styles present in the sample of the assemblage collected from the 2019 field season of Huaca del Loro. It provided a breakdown of each style and type while also providing the contexts these styles and types are found. The data from the sample assemblage, as presented in this chapter, act as the basis for this thesis. This information will act as the backbone for the discussion and interpretation of how this sample describes the population of Huaca del Loro. Such discussion is provided in the following chapter, Chapter 6.

VI. SPATIAL DISTRIBUTION

This chapter will examine the spatial distribution of the Huaca del Loro assemblage as it appears both vertically and horizontally across the site. A horizontal and vertical understanding of these styles and types are equally important to the discussion of their distribution. As discussed in the previous chapter, there were a number of vessel types present throughout the sample. Of these types, face-neck jars, figurines and flaring goblets are some of the most distinct vessel types.

As previously explained in Chapter 3, three main sectors were excavated during the 2019 field season at Huaca del Loro. In Table 6.1 the various styles are shown with their raw counts, percentage represented in each sector, and percentage within the entire sample assemblage. Profile 1, Units 1 through 7, and the excavation units constituting Structure 1 and 2 were distributed across Sector I, III, and IV. The majority of the ceramics analyzed come from Structure 1 and 2 in Sector I (n = 413). Table 6.1 shows the distribution of styles among all three excavated areas. Throughout this chapter I will discuss each individual excavation sector and the styles that were found within that sector. There are tables for each excavation sector, which break down the excavation units and show the proportion of styles found in each unit.

In the appendix section of this paper, I have included tables A.1 through A.4 which show the distributions of plainware versus fineware across the sectors of Huaca del Loro. These tables, and a detailed discussion of plainware and fineware distribution are not made a focus in this section as the sampling bias favored fineware sherds as they yielded more relevant data to the research question at hand. These tables help tell more information about the total 2019 ceramic assemblage and its spatial distribution.

Sector	Raw Count	% of Sector	% of Assemblage
Ι	368	100.00%	64.79%
Late Nasca	35	9.51%	6.16%
Transitional	3	0.82%	0.53%
Loro	251	68.21%	44.19%
Wari	11	2.99%	1.94%
Chakipampa	2	0.54%	0.35%
Viñaque	2	0.54%	0.35%
Late Intermediate Period	2	0.54%	0.35%
Indeterminate	62	16.85%	10.92%
III	74	100.00%	13.03%
Late Nasca	16	21.62%	2.82%
Transitional	1	1.35%	0.18%
Loro	43	58.11%	7.57%
Wari	0	0.00%	0.00%
Chakipampa	1	1.35%	0.18%
Viñaque	0	0.00%	0.00%
Late Intermediate Period	2	2.70%	0.35%
Indeterminate	11	14.86%	1.94%
IV	60	100.00%	10.56%
Late Nasca	5	8.33%	0.88%
Transitional	1	1.67%	0.18%
Loro	40	66.67%	7.04%
Wari	0	0.00%	0.00%
Chakipampa	0	0.00%	0.00%
Viñaque	0	0.00%	0.00%
Late Intermediate Period	0	0.00%	0.00%
Indeterminate	14	23.33%	2.46%
Total	502		88.38%

Table 6.1 An overview of the frequency and distribution of styles among Sectors I, III, and IV with their respective percentages within the total Sector and assemblage.

Sector I

The majority of the ceramics analyzed from Sector I are fineware (n = 349), but some plainware was included (n = 45). Structures 1 and 2, comprised of multiple trenches and amplification units, were the only excavation areas within Sector I. Level B had the
largest amount sherds (n = 231) or nearly 56% of the sherds from this Sector that were analyzed. A large proportion of these are fineware sherds. Within Sector I, Level B was somewhat disturbed with the artifacts recovered here possibly not *in situ*. However, below Level B, artifacts are probably in their original contexts. Level C has 175 total sherds; again, there is a much higher proportion of fineware as compared to plainware sherds. Finally, in Level D there were only eight sherds analyzed, all of which were fineware. Level D has such a small representation as it was only reached within one feature in Structure 1 known as Room 3. The counts and distributions of plainware and fineware across Structure 1 and 2 within this sector can be found in Table A.10.

Structure 1 is a rectilinear structure common to Wari architecture in the Middle Horizon. Similar examples of rectilinear structures have been found at Pataraya. As Edwards explained of Pataraya, each rectangular enclosed space was utilized for a different function including patio areas for work, food preparation, administrative activities, and elite residences (Edwards 2013:568). The ceramic sample from Structure 1 could reflect similar patterns of use as there were representatives from nearly all present styles (Late Nasca, Loro, Transitional, Wari and Chakipampa) and most of the vessel types discussed throughout Chapter 5. However, all sherds from Level B are from a somewhat disturbed layer. These are still a vital part of this interpretation as they provide useful information but should be regarded with the caveat that they may not be in their original context. Within Sector I, there are 183 from Level C and below.

Structure 2 is a D-shaped structure also common to Wari architecture. As discussed in Chapter 2, D-shaped structures are key Middle Horizon Wari architecture. These spaces were once a hub for ritual activities that were often associated with

offerings and aided in the construction of power for the Wari (Cook 2015:306). The ceramic sample from the D-shaped structure contained all styles from Late Nasca to Viñaque. The combination of all styles in one place suggests the continued importance of this structure. The types of fineware included various bowls, jars and the neck of a vase. Styles of note include figurines and face-neck jars.

In the past, scholars have connected Nasca figurines to a number of ritually important functions including female fertility and offerings to maritime deities (Proulx 2006:128-129). Figurines represent a range of physical realities, including male and female sexes, children, tattoos, the act of birth, and in few cases human deformations (Proulx 2006:129).

There were eight figurines recovered from Sector I. Four of the figurines were from the D-shaped temple, recovered from Level B of the southern amplification. The fifth figurine from this structure was from the nearby amplification known as Amplification South B, also from Level B. The other three figurine fragments were from Structure 1. The legs of four of the figurines were either in a flexed or seated position. All but two of the figurines have some form of surface treatment. There were no complete figurines recovered in the assemblage, thus it was difficult to discern the style of many of them. Four figurines were positively identified as Loro based on the style and positioning of their surface treatment, or lack thereof. These Loro figurines display plain, unpainted sculpted legs and abstract geometric black line, white dots and red triangles. Such imagery is common for the Loro and thought to have originated from Late Nasca influence (Spivak 2015:128). This influence is also seen in the presence of black asterisks (Spivak 2015:128). The human and anthropomorphic figurines are another commonality

of Loro ceramicists, this aspect of figurine is also borrowed from Late Nasca figurines (Spivak 2015:149).

As Spivak has concluded that Late Nasca figurines were the initial precursor to Loro face-neck jars, it should be noted that there were five total face-neck jar sherds recovered from Huaca del Loro (Spivak 2015:150). Four of these were recovered from Structures 1 and 2, two of which were found in the Southern Amplification and Southwestern Amplification of Structure 2, Level B. The two sherds from Structure 1 were recovered from Level C of Structure 1 and Room 1 of Structure 1. The only sherd not found in Sector I was found in a surface collection of Unit 5. The exception can be explained by its proximity to the surface and to Sector III, the cemetery area.

Face-neck jars are potential continuations of Late Nasca figurines that have been adapted to retain the faces while allowing for larger sizes that have the capacity to hold liquids or other objects (Spivak 2015:151). Although the excavation contexts of many of these vessels is funerary in nature, they may have had a range of uses during their lifetime (Spivak 2015:155). Some Late Huarpa style face-neck jars have been found at other sites and are typically restricted to later Huarpa phases (Spivak 2015:152). Knobloch found these face-neck jars within the Ocros style (Knobloch 1983:130). Among the Loro style, face-neck jars appear in standing effigy and face vase renditions. These vessels are predominantly found in Structure 1 and 2, with one additional sherd from a surface collection at Unit 5.

Face-neck jars appear throughout the Early Intermediate Period in the Late Nasca, Moche, and Huarpa (Spivak 2015:152). Spivak (2015:155) has noted that face-neck jars are occasionally found at ritual or ceremonial places. She has explained that future

discoveries in such contexts may shed light on additional functions of face-neck jars for the Loro. This high proportion in Structure 1 and 2 may indicate that they held an additional ceremonial purpose and that they were used by Wari people. As these types commonly fulfill a ceremonial and funerary role, their presence in these areas reinforces their importance and the importance of the structures in which they are found. In the case of Huaca del Loro, this includes Structure 1 and 2, and Unit 5. The overlap in styles among these types of vessels include the following characteristics: facial features, lack of burnishing, few motifs, and overlaps in the present motifs (Spivak 2015:151).

Few flaring goblets were recovered in the sample of this assemblage. This vessel shape is often characteristic of Late Nasca or Nasca 7 style (Proulx 2006:41). It has been defined by Proulx (2006:43) as a vase variant that was used for drinking. Flaring goblets hold a place of importance not only as they are a specialized drinking vessel, but also found with depictions of trophy heads (Proulx 2006:45). There was one flaring goblet sherd recovered from Structure 1 included in this sample. This piece had been painted red on its interior, exhibited 10% inclusions and was oxidized. This form of goblet originated in Phase 6 Nasca from flaring the rim of cups (Proulx 2006:41). The presence of this vessel type is yet another indicator of the Nasca style at Huaca del Loro. Level B at Structure 1 is a slightly disturbed area. This vessel type shows that there was still a Nasca presence possibly within administrative Wari architecture.

There were two Chakipampa sherds from Structure 1 and 2; with one at either structure. In Structure 2, the Chakipampa sherd was from Level B within the southwest amplification. The Chakipampa sherd recovered from Structure 1, was from level C. The two Viñaque sherds were recovered from level B at the Southern amplification of

Structure 2. The remaining Wari sherds were all recovered from Structure 1 and 2. Eleven Wari sherds were recovered from Structure 1 predominantly within level C, with one sherd from level B. Two additional Wari sherds were recovered from Structure 2, level B.

In all, there is a combination of Late Nasca, Late Intermediate Period, Loro and Wari styles found in both Structure 1 and 2. Additionally, nearly all the different vessel types identified at Huaca del Loro are found in these structures. The presence, contexts and distribution rates are shown in Table 6.2. Within this table Sector I has been broken up by level. As Structures 1 and 2 are positioned well within Sector I, this table summarizes the analyzed fineware sherds from the area. As can be seen in the table, Level B contained the largest amounts of sherds with Loro being the highest proportion. As has been discussed briefly already, Level B in this area of the site is somewhat mixed. The next highest proportion of sherds comes from Level C, where some mixing occurred, but exhibits relatively intact artifacts. In Level C, Loro is again the largest represented style accounting for over half of the entire sherds from the level. There were only eight sherds analyzed from Level D within all of Sector I . All eight of these sherds were Loro.

		% of	
Structure	Raw Count	Sector	% of Assemblage
1	204	55.43%	35.92%
Late Nasca	24	6.52%	4.23%
Transitional	2	0.54%	0.35%
Loro	130	35.33%	22.89%
Wari	13	3.53%	2.29%
Chakipampa	1	0.27%	0.18%
Viñaque	0	0.00%	0.00%
Late Intermediate Period	1	0.27%	0.18%

Table 6.2 The distribution of all styles among Structure 1 and 2

Indeterminate	33	8.97%	5.81%
2	164	44.57%	28.87%
Late Nasca	9	2.45%	1.58%
Transitional	2	0.54%	0.35%
Loro	121	32.88%	21.30%
Wari	3	0.82%	0.53%
Chakipampa	1	0.27%	0.18%
Viñaque	2	0.54%	0.35%
Late Intermediate Period	1	0.27%	0.18%
Indeterminate	25	6.79%	4.40%
Total	368	100.00%	64.79%

Sector III

Sector III contains the cemetery area where Units 1, 2, 6, and 7 were located. The purpose of excavating these units was to examine mortuary practices at Huaca del Loro. The distributions of ceramics by excavation unit are shown in Table 6.3. This table shows that Units 1 and 2 had the highest number of analyzed sherds in Sector III. Unit 1 was a two by two-meter excavation area where one human bone was recovered. In addition to human remains, other artifacts present included shells, gourd fragments, corn, and charcoal (Noriega and Conlee 2019: 27). There were 25 sherds analyzed from this unit across three stratigraphic levels. The styles associated with this unit included Loro and Late Nasca, with a significant amount of Late Nasca sherds (21.62%) distributed among Levels A, B and C. There were only two plainware vessels, one from Level A and the other from Level C; the remaining sherds were all fineware.

Unit 2 contained two amplifications: one to the southeast and one to the east of the original unit. These additions were added as looted remains of several human bones were discovered. These remains were scattered around two architectural features: the remains of two walls; Wall 1 and Wall 2. Other artifacts recovered from Unit 2 included animal bones, gourd fragments, textile fragments, carbon, maize, seeds, and other plant materials (Noriega and Conlee 2019:31). There was a total of 43 sherds analyzed from Unit 2. Of all the cemetery excavations, Unit 2 has the most diverse range of cultural and temporal styles from Chakipampa, Late Intermediate Period, Late Nasca, Loro and indeterminate. A majority of the sherds were Loro (n = 18). Loro is the only identifiable style that is found in Levels A, B, and C. The single Chakipampa sherd was recovered from a surface collection. The two Late Intermediate Period sherds, along with the three Late Nasca sherds were found in Level A of this unit and its amplifications.

Unit 6 was established in the corner of an adobe wall enclosure with the hope of identifying funerary contexts. Few human remains were recovered from this unit and only seven ceramics were analyzed. One was collected from Level A, two from Level B, and the final four were from Level C. One sherd was Late Nasca, four were Loro and two were of indeterminate style. These pieces were either too small or had too few distinguishing characteristics to determine the style. The vessel types all come from either bowls or indeterminate vessel shapes.

Unit 7 was the final excavation area within Sector III at Huaca del Loro. This unit consisted of 13 levels and one feature that was part of Level C. The feature in Level C consisted of fragments of *huarango* logs in poor condition (Conlee and Noriega 2019:62). This unit helped provide insight into the stratigraphy of the cemetery contexts. There was a total of nine sherds analyzed from Unit 7. These pieces came from Level B, C, and F as these were the only excavated levels of Unit 7 that contained ceramics. All sherds are either Loro (n = 6) or indeterminate style (n = 2). The sherds all come from either bowls or indeterminate vessel shapes.

A total of 84 sherds were analyzed from Section III. The majority of the sherds across the sector (n=43) were Loro. This amount is followed by Late Nasca (n = 12), then Late Intermediate Period (n = 2) and finally one Chakipampa. The Late Nasca sherds appear in multiple units and at various levels. While these levels have likely been disturbed, their presence is noted in a consistent amount. Meanwhile, Chakipampa and Late Intermediate Period style sherds appear in very small amounts only in Unit 2. When they do appear, it is only in highly disturbed contexts, as through surface collection and Level A. That is not to say that these pieces are completely thrown out of the analysis, so much as to stress the importance of provenience.

An overview of the styles found within this sector can be seen in Table 6.3. This table shows the distributions of each style in comparison to the total number of fineware in the sector and total sample assemblage. The table is broken up by excavation unit. The highest proportion of sherds analyzed came from Level B where the styles were mostly Loro. This is a common trend throughout the sector where there is a highest amount of Loro at all levels. Within all levels in the sector, Late Nasca is represented. There are also Late Intermediate Period style sherds found sparingly in the top two levels, Level A and B. Table A.11 in the appendix depicts the distributions of plainware and fineware sherds analyzed across the sector and as represented in the sample assemblage.

Unit	UnitRaw Count of Fineware% of Sector		% of Assemblage
1	23	31.08%	4.05%
Late Nasca	7	9.46%	1.23%
Transitional	0	0.00%	0.00%
Loro	15	20.27%	2.64%
Wari	0	0.00%	0.00%

Table 6.3 This table shows the distribution of styles among all units in Sector III.

Chakipampa	0	0.00%	0.00%
Viñaque	0	0.00%	0.00%
Late Intermediate Period	0	0.00%	0.00%
Indeterminate	1	1.35%	0.18%
2	35	47.30%	6.16%
Late Nasca	3	4.05%	0.53%
Transitional	0	0.00%	0.00%
Loro	19	25.68%	3.35%
Wari	0	0.00%	0.00%
Chakipampa	1	1.35%	0.18%
Viñaque	0	0.00%	0.00%
Late Intermediate Period	3	4.05%	0.53%
Indeterminate	8	10.81%	1.41%
6	7	9.46%	1.23%
Late Nasca	1	1.35%	0.18%
Transitional	0	0.00%	0.00%
Loro	4	5.41%	0.70%
Wari	0	0.00%	0.00%
Chakipampa	0	0.00%	0.00%
Viñaque	0	0.00%	0.00%
Late Intermediate Period	0	0.00%	0.00%
Indeterminate	2	2.70%	0.35%
7	9	12.16%	1.58%
Late Nasca	0	0.00%	0.00%
Transitional	0	0.00%	0.00%
Loro	6	8.11%	1.06%
Wari	0	0.00%	0.00%
Chakipampa	0	0.00%	0.00%
Viñaque	0	0.00%	0.00%
Late Intermediate Period	0	0.00%	0.00%
Indeterminate	3	4.05%	0.53%
Total	74	100.00%	13.03%

Sector IV

Sector IV consisted of Units 3, 4, 5 and Profile 1. This area was thought to be the secondary ayllu or residence of commoners according to Tello. There were not many

ceramics analyzed from this area (n = 70). The ceramics from this sector primarily consisted of Loro sherds with some Late Nasca. There was a majority of fineware sherds throughout every level within Sector IV. Table A.12 depicts the distributions of plainware and fineware sherds analyzed across the sector.

Unit 3 was a 4x2m excavation unit with a 2x2m amplification. The original unit and amplification area only reached Level A. Across these two-unit sections for Level A, there were lithic materials, shell fragments, animal bones, carbon and twenty-four sherds recovered. All of these sherds were analyzed. Loro was the largest identifiable style (n = 11), indeterminate sherds accounted for eight sherds or a third of the styles, and Late Nasca style sherds were less common (n = 5). There were a mix of bowls, vases, jars, plates and one indeterminate plainware vessel. This may provide a basis for the belief that local Loro people populated these areas. This is shown through the near overwhelming presence of Loro pottery with a complete lack of Wari imperial styles. These sherds are summarized in Table 6.4, which shows the distributions of styles present throughout the levels, sector and assemblage. However, a bulk of these sherds came from the top excavation layers that were from heavily disturbed contexts.

Unit	Raw Count of Fineware	% of Sector	% of Assemblage
3	19	31.67%	3.35%
Late Nasca	3	5.00%	0.53%
Transitional	1	1.67%	0.18%
Loro	11	18.33%	1.94%
Wari	0	0.00%	0.00%
Chakipampa	0	0.00%	0.00%
Viñaque	0	0.00%	0.00%
Late Intermediate			
Period	0	0.00%	0.00%

Table 6.4 This table shows the distribution of all styles among the excavation areas of Sector IV.

Indeterminate	4	6.67%	0.70%
4	3	5.00%	0.53%
Late Nasca	0	0.00%	0.00%
Transitional	0	0.00%	0.00%
Loro	3	5.00%	0.53%
Wari	0	0.00%	0.00%
Chakipampa	0	0.00%	0.00%
Viñaque	0	0.00%	0.00%
Late Intermediate			
Period	0	0.00%	0.00%
Indeterminate	0	0.00%	0.00%
5	12	20.00%	2.11%
Late Nasca	1	1.67%	0.18%
Transitional	0	0.00%	0.00%
Loro	5	8.33%	0.88%
Wari	0	0.00%	0.00%
Chakipampa	0	0.00%	0.00%
Viñaque	0	0.00%	0.00%
Late Intermediate			
Period	0	0.00%	0.00%
Indeterminate	6	10.00%	1.06%
Profile 1	26	43.33%	4.58%
Late Nasca	1	1.67%	0.18%
Transitional	0	0.00%	0.00%
Loro	21	35.00%	3.70%
Wari	0	0.00%	0.00%
Chakipampa	0	0.00%	0.00%
Viñaque	0	0.00%	0.00%
Late Intermediate			
Period	0	0.00%	0.00%
Indeterminate	4	6.67%	0.70%
Total	60	100.00%	10.56%

Unit 4 consisted of a 4x2m excavation unit. There were stone alignments on the surface that were thought to be indicative of possible architecture (Noriega and Conlee 2019:41). Although there was a total of eight levels and one feature, Level A was the only level to contain ceramics, or any other artifacts. Of the sherds, there were three Loro sherds and one plainware sherd. The plainware sherd was a handle; most likely from an

olla. The three Loro sherds were bowls, with one being a shallow bowl. Much like Unit 3, all of these sherds were from the uppermost excavation layer and are thus out of their original context.

Unit 5 was 2x2m in dimension. There was only one excavated level of Unit 5, Level A, and it was all disturbed. Throughout Level A there were few artifacts found including some carbon, shell, animal bones, and few ceramics. A total of 15 sherds were analyzed from the Unit 5 area. However, unlike most units, a majority of the sherds attributed to Unit 5 are from surface collection (n = 10). Of these surface collection sherds, two were plainware sherds from ollas. There were also two Loro sherds from a shallow bowl and a face-neck jar. This face-neck jar is the only one of that style that is not found in the cemetery or Sector I. The reason for this difference is probably because this sherd was collected from a surface sample and the original provenience cannot be determined. However, the sherd likely came from a looted context nearby. As discussed in the face-neck jar section, these jars are of great importance. There was one identified none-Loro sherd which was Late Nasca. The other sherds from the surface collection were all of indeterminate style.

Five sherds were recovered from Level A of Unit 5. Three of the five of these sherds were Loro and the remaining two were of indeterminate. One indeterminate and one Loro sherd exhibit either partial or complete repair holes, which may indicate some elevated level of importance of these sherds. Nearly all of the identifiable sherds from Unit 5 were of the Loro style. This data backs that of Units 3 and 4, which places predominantly Loro people with some Late Nasca people in the main population of Huaca del Loro.

The final unit in Sector IV was Profile 1. The profile was part of a road cut that was created after some modern construction work was carried out on the road at the base of the site (Noriega and Conlee 2019:140). From the surface, some *quincha* architecture was visible. Once this profile was cleaned, eight stratigraphic levels were recorded and examined. Cultural materials were collected from Levels 3 through 7 and included ceramics, shells, textile, animal bones and other organic materials (Noriega and Conlee 2019:141). Levels 3, 4 and 5 all had diagnostic ceramics totaling a combined 28 analyzed sherds. Twenty-one of these sherds were Loro. This style is across all three levels with ceramics present. There was also one Late Nasca sherd from a bowl in Level 3. This final profile cleaning reinforces what was found across all other units in Sector IV.

Excavation units were placed across Sector IV in an effort to study and better understand who the common people were at Huaca del Loro and how they lived. The excavations were a successful first start at achieving this goal. The excavated units of 3 through 5 coupled with Profile 1 yielded a mostly cohesive result. The data from these areas were predominantly Loro with some Late Nasca sherds. This idea reaffirms the idea that a local Middle Horizon populated much of the site.

CONCLUSION

This chapter has provided an overview of the spatial distribution of plainwares, fineware, and styles present within each level and sector at Huaca del Loro. Within the fineware category, Loro, Late Nasca, and transitional sherds were found across the sample assemblage, whereas Late Intermediate Period, Wari, Chakipampa and Viñaque styles were only found in areas of specialized importance. Loro was found in the highest proportion at every level within every sector. The implications of these findings will be

discussed further in the following chapter. Comparisons of this assemblage with other Middle Horizon sites will also be included in the following chapter.

VII. DISCUSSION

The following chapter will provide a discussion of the data that has been presented over the course of this thesis. The purpose of this study is to consider a sample of the 2019 Huaca del Loro ceramic assemblage as one indicator of the site's cultural affiliations. By analyzing a sample of the ceramic assemblage and examining its horizontal and vertical distribution at Huaca del Loro, I will identify patterns across space and time and provide reasonable interpretations. This discussion will provide an interpretation of the sample of Huaca del Loro's ceramic assemblage for future researchers to better understand and interpret as more data becomes available.

Initially, there were three main hypotheses about the nature of the site of Huaca del Loro and what the ceramic assemblage might represent. As discussed earlier in this thesis, the first of these hypotheses stated that Huaca del Loro was a local settlement, probably emerging from a previously existing Nasca settlement. The second hypothesis viewed Huaca del Loro as a Wari settlement, a site that was within Wari control and populated by the Wari. The third and final hypothesis viewed Huaca del Loro as a local Middle Horizon site that was in direct opposition to the Wari. The actual sample had its own story to tell. As will be seen in this chapter, conclusions from this chapter begin to answer the research question while leaving room for future inquiry.

Before I evaluate the ceramic sample from Huaca del Loro, I will first reflect on other Middle Horizon sites nearby and their ceramic assemblages to achieve a more comprehensive understanding of the Huaca del Loro assemblage. There will be a brief discussion of other important features of these sites that have allowed the researchers there to make positive identification of the temporal and cultural associations of the sites.

One such comparison comes from the site of Zorropata, a site only 5 km away from Huaca del Loro, which had a predominance of Late Nasca and Loro pottery in the diagnostic assemblage. There was a total of 515 diagnostic ceramic sherds analyzed consisting of both plainwares and fineware with fineware constituting a majority of the assemblage (79.8%) (Kerchusky 2018:294-296). Fineware were made up of bowls, jars, dishes, bottles, goblets, and plainwares were ollas and handles. Throughout the site, Kerchusky (2018:318) identified the distinct contexts of ceremonial/mortuary spaces and habitation spaces. It is important to note that over 90% of the sample from the ceremonial and/or mortuary context yielded fineware pieces (Kerchusky 2018:318).

Additionally, the architecture from Zorropata is incredibly important to the discussion of Zorropata and possible Huaca del Loro interactions. There were two types of stone walls, adobe structures and habitation terraces noted at Zorropata (Kerchusky 2018:127). One type of wall was a single layer of fieldstone typically used for walls and structures. The second type of wall was composed of two layers of fieldstone filled with gravel. This second type was more commonly used in the construction of larger walls (Kerchusky 2018:127). Both types were used to construct perimeter walls around the western, southern, and southeastern parts of the main habitation area (Kerchusky 2018:128). The presence of stone walls, and sling stones, show that the population at Zorropata felt the need to protect themselves from some neighboring group or population. Kerchusky concluded that Zorropata people were probably not incorporated into the Wari empire. She attributes this conclusion in part to the high prevalence of Loro and Late Nasca pottery, and the lack of Wari styles (Kerchusky 2018:495).

Another Middle Horizon site for comparison and consideration is that of Pataraya,

a site located far from Huaca del Loro in the Tierras Blancas Valley, and a direct contrast to Zorropata. While both sites were Middle Horizon, they had very different occupants since as Edwards (2010:459) argues, the site of Pataraya was a Wari colony. The rectilinear architecture present at Pataraya acts as a clear example of Wari administrative presence. Edwards (2010:467) further explains that this site most likely held a provincial administration function for elites to fulfill imperial roles in Nasca. To use his words, Edwards argues that Pataraya was a "small colony of people culturally and politically connected with the Wari state" (Edwards 2010:345). This site also played a crucial role for the Wari as it acted as a middleman for the highlands trade thus increasing their access to resources. A Wari presence in Nasca greatly aided their Middle Horizon prevalence throughout the South Coast. This site is even more relevant to this study as it is a definitively Wari site with a majority of Loro ceramics (Edwards 2010:296).

Another important Middle Horizon site for consideration is La Tiza, located on the Aja River. An examination of the mortuary practices here reveals a mixing of cultures. New burial practices show the impact of Wari influence and its expansion in Nasca (Conlee 2011:52). These burials and their associated grave goods indicate a Wari emergence that did not overpower current local practices (Conlee 2011:49). Many of the Middle Horizon tombs have Loro pottery associated with them. Additionally, Wari imperial styles, Viñaque and Chakipampa, also appear throughout the assemblage (Conlee 2011:47). In this regard, La Tiza is an important site to keep in mind as it reinforces the idea that when the Wari entered the Nasca area they did not completely overthrow the status quo. This notion allows for the possibility that non-Wari ideals could continue to thrive as a part of the Wari empire.

The data from the sample assemblage from the 2019 field season is laid out in depth in Chapter 5 Data and Chapter 6 Spatial Distribution wherein I have explained the styles and vessel forms and the horizontal and vertical distribution of these sherds. Here, this discussion turns to what these distributions mean for each sector of the site and for the site as a whole.

The majority of the analyzed ceramic assemblage came from Structures 1 and 2, the Wari architecture. As will be discussed in the following pages, this area contains the most variability in styles as compared to other sectors in addition to an overall higher proportion of ceramics. Before this can be discussed though, it is important to consider the entire trends throughout the entire assemblage. As has been explained throughout this thesis, there was a bias for fineware sherds in the sample. With that bias understood, the sample contained 33.63% bowls, 15.85% plates, 4.58% jars and 4.23% olla and over 88% of the assemblage contained some form of surface treatment, through the techniques of slips, paints and smoothening. In an effort to understand the break-down of this sample assemblage, it will be compared to other Middle Horizon sites.

The common vessel forms at Pataraya included the following: plates or open bowls (58%), restricted bowls (15.4%), ollas (15.5%) and jars (10.3%) (Edwards 2010:288). Although these percentages presented from Pataraya seem to differ widely from the 2019 sample of Huaca del Loro, some of the overall trends are still present among these two sites. The plate or open bowl category at Pataraya, also called "*tazón*", is a typically Loro vessel that is either a plate or a small bowl that has an open or outflaring rim (Edwards 2010:279). At Huaca del Loro, this style was not specifically recognized as there were sherds that corresponded to the plate category or the bowl

category. However, both sites share the same common vessel forms in varying proportions.

The vessel form distribution at Zorropata is more even more similar to Huaca del Loro. The assemblage from Zorropata yielded a majority of 79.8% fineware (Kerchusky 2018:296). Of these, a majority of 44% were bowls which were broken into several subtypes (Kerchusky 2018:296). Other vessel forms included: jars (17.1%) and ollas (19.0%) (Kerchusky 2018:292). The frequencies of these vessel forms are similar to those recovered in the Huaca del Loro sample assemblage. This is somewhat unsurprising as Kerchusky has shown that these frequencies are common for other Nasca assemblages (Kerchusky 2018:301).

When turning the comparisons to style however, there are marked differences. At Zorropata, a majority of the ceramics were Late Nasca style (n = 342) followed closely by Loro (n = 295) and a small number of Transitional style sherds (n = 56) (Kerchusky 2018:111). However, there were no Wari ceramics recovered from any context at Zorropata (Kerchusky 2018:113). Based off of the ceramic styles and local architecture, Kerchusky concluded that Zorropata was a local site that was not a part of the Wari empire (Kerchusky 2018:495). When comparing Huaca del Loro and Zorropata, the major difference can be seen in Wari intervention. Huaca del Loro, as will be discussed in greater below, has a strong Wari presence. Zorropata does not. While Zorropata acts as a local, non-Wari site, Huaca del Loro is the Wari counterpart. Furthermore, the Wari presence at Huaca del Loro may have been the reason that Zorropata people constructed stone walls and needed sling stones.

From here, the discussion will turn to a further examination of Huaca del Loro

and the distributions across Sector I and the entire site of Huaca del Loro. The largest proportion of the ceramics at Huaca del Loro were recovered from Sector I (n = 413). that contains two forms of Wari architecture, a rectangular compound (Structure 1) and a D-shaped temple (Structure 2). A map outlining Structures 1 and 2 is shown below in Figure 7.1.



Figure 7.1 A map focusing on the outlines of Structure 1 and 2 within Sector I.

Structure 1 is comprised of rectilinear architecture similar to that of Pataraya and other Wari sites. At Pataraya, the assemblage contained mostly Loro sherds with Chakipampa and Viñaque recovered in small amounts in important contexts (Edwards 2010:281). This relates very strongly to Huaca del Loro, which had a majority of Loro sherds across the site with some Wari, Chakipampa and Viñaque sherds at important architectural components and one possible looted grave. Structure 1 possessed Chakipampa and Wari style sherds as well as Late Nasca, Loro, Transitional, and Late Intermediate Period styles.

Face neck jars, figurines, and a flaring goblet were also recovered from Structure 1. One third of the figurines from the total sample were recovered from Structure 1 (n =3). Two of which, both depicting legs in various positions, were found in Level B. The third figurine from this structure was from the more intact Level C. The figurine from Level C also only contained the leg portion of the figurine. It is important to note that the other six figurine fragments were from Structure 2. Looking more into Structure 1, other important patterns among artifacts and architecture are uncovered.

There was one collection of sherds recovered from Structure 1, specifically from Room 2 that closely resembled a vessel recovered from Pataraya (Figure 7.2). The five sherds recovered from Huaca del Loro can be seen on the left as compared to the right from Pataraya (Edwards 2010:328). The description accompanying this figure in Edwards' dissertation was the following "Small MH bowl recovered from cache in north gallery D" (Edwards 2010:293). Edwards intentionally left the cultural affiliation of this vessel vague as he was unsure if the style could be categorized as "Fine Loro" or if it related more closely to Wari styles (Edwards 2010: 328).

The vessel from Pataraya was recovered as a part of a cache found in a small room at the west end of the north gallery in patio group D (Edwards 2010:324). There were two other similar sized vessels found with this bowl, one of which was Loro style and the other was described as "Middle Horizon: Other" but Edwards concluded likely Loro (Edwards 2010:330-333). At Huaca del Loro, the vessel was found at the southwest

end of Structure 1 within a room. There were eleven other sherds from this area consisting of Loro bowls (n = 10) and one face-neck jar sherd.



Figure 7.2 Top: Sherd grouping E1-R1-R2 showing five pieces of a Loro bowl. Bottom: Figure 99 from patio group D in Edwards 2010:328.

As Edwards (2013:570) observed at Pataraya Wari rectilinear architecture was used to control places and manipulate residential spaces. There was controlled access to certain rooms, which prohibited non-elite individuals' access to such spaces. With this understanding of controlled spaces, the distribution of Wari ceramics may be explained. If Structure 1 acted as a similar form of controlled space, then it would make sense that the Wari style was found only here within the site. Future excavations may show that the sherds resembling the Pataraya vessel, E1-R1-R2-01, and the accompanying bowls and face-neck jar were associated with a patio group, a recognizable form of Wari architecture. Edwards (2013:568) posits that Wari spaces were positioned to best divide functions of spaces across various patio clusters. Thus, future excavations into Structure 1 may reveal further rooms and divisions within the architecture.

The other structure within Sector I, Structure 2, is also indicative of Wari presence. Structure 2 is a D-shaped Wari temple as is shown in Figure 7.1. As discussed in Chapter 2, these D-shaped temples are Wari places of ritual importance as seen at Conchopata, Honcopampa and other Wari sites. In the case of Conchopata, the excavated D-shaped temple contained trophy heads, camelid remains, smashed ceramic urns and other objects associated with ritual importance (Tung and Knudson 2008:921).

The D-shaped temple at Huaca del Loro contained bowls, figurines, face neck jars and other vessels in Loro, Chakipampa, Viñaque, Wari, Late Nasca, Transitional, and Late Intermediate Period style. It is the only place within Huaca del Loro where Viñaque sherds were recovered in the 2019 season. The two Viñaque sherds were recovered from Level B within the Southern Amplification. Seven figurines were recovered from this structure, including those in a seated position, extended legs of a figurine, the head and neck of a figurine and other parts of a figurine. Both the Viñaque and figurine pieces are specialty pieces. The presence of these pieces in their highest concentrations further shows that this was a place of importance.

Late Intermediate Period, Late Nasca, Chakipampa, Viñaque and Wari sherds are some of the most distinct styles found in Sector I. As the previous chapter discussed however, none of these were found in great abundance. Late Intermediate Period style pieces were only found in Structure 1, Structure 2, and Unit 2. Within these excavation areas, they were only found in Levels A and B. This placement indicates their proximity

to the surface and introduces the probability that these styles likely were not in their original context. As mentioned above, Chakipampa, Viñaque and Wari sherds were found in Sectors I and III. However over 90% of the sherds were found in Structures 1 and 2, while one Chakipampa sherd was recovered from Unit 2. As discussed earlier, this outlier sherd was recovered from a surface collection.

Although most of these ceramic styles may not have been found in their original contexts, their horizontal and vertical distributions still reveal an important pattern. Nearly all of the stylistically distinct, non-Loro, styles were found in either Structure 1 or 2. There are a few exceptions to this, as discussed above, including a face-neck sherd in Unit 5, and Late Nasca styles across Sectors III and IV. However, the face neck jar from Unit 5 was probably from a looted grave. The overwhelming majority of Nasca and Wari sherds are from the two main Wari structures. This pattern highlights the importance of these two structures as these areas held elite objects used for important ceremonies.

Within the current sample data from the site, there is a clear Loro presence and strong Late Nasca presence throughout Sector III, the cemetery area. The presence of these styles in a funerary context is incredibly important, however all of these sherds were found in a heavily looted and disturbed context. Their presence may mark cultural affiliation of all the aforementioned groups; however, it is impossible to say which of these groups are tied to the human remains that were recovered. Future data would be required to definitively make such claims. While this information may show potential Loro and Late Nasca burials with a possible Chakipampa and Late Intermediate period association, it is impossible to make the claims definitively with the current, disturbed sample.

The final area, Sector IV, was thought to be where the common people would have lived at Huaca del Loro. The excavated units, in addition to the cleaned profile, may support this conclusion, but further research here is necessary. As discussed in earlier chapters, this sector had the least amount of ceramics from the entire sample. The ceramics were mostly Loro with some Late Nasca and indeterminate sherds and one Transitional sherd. There were no Wari sherds. This is somewhat similar to Patio Groups A and C at Pataraya, which were the common areas of the site where a large proportion of Loro sherds where recovered (Edwards 2013:569).

The differences among Huaca del Loro and Pataraya may be the role that they played within the Wari empire. The sherds from Sector IV coupled with the *quincha* architecture from Profile 1 and Unit 4 indicates that this could be the area of the local people. However, as there was a relatively small sample from this area, this statement cannot be made definitively. More excavations from Sector IV need to be completed to better understand the population from this area.

The 2019 ceramic assemblage, architecture, and other artifacts found at Huaca del Loro represents a strong Wari presence with a Loro population living there. Interestingly, Loro sherds are found across the entire site including the Wari architecture. This suggests that Wari people were using local Middle Horizon ceramics in addition to their own imperial styles, which are found sparingly across the site. Loro was also the majority style found throughout Sectors III and IV. This may indicate Loro burials and a population of Loro people living at Huaca del Loro. In addition, there is evidence of a mixed, looted cemetery area.

Such data points to a hypothesis that Loro people were living and populating a

Wari administrative and ceremonial site. The presence of distinctive Wari administrative architecture, coupled with the presence of Wari and Loro ceramics in the Wari architecture, reinforces this hypothesis. However, as has been stressed throughout previous chapters, the sample data comes from some disturbed levels of excavation. Although some levels exhibited different levels of disturbance, they all yield relevant data. Thus, future research and additional lines of evidence would be necessary in order to fully or adequately prove this hypothesis.

One future possibility would be to test whether the Loro were a subgroup of the Wari. Although Loro has been thought of as a local style, and perhaps the rejection of the Wari empire, instead they may have been a subgroup of the large empire. This possibility has been derived from different lines of evidence that are explained here. Both at Huaca del Loro and Pataraya, there is evidence of definitive Wari architecture in the form of rectilinear architecture and, in the case of Huaca del Loro, a D-shaped temple. Within the Pataraya assemblage, Edwards noted that one of the Loro sherds in the south patio of Group A had "obvious Viñaque influence" (Edwards 2010:309). The influence leaves room for the possibility of mixing cultures and a two-way exchange of ideas. There may have been a more open flow of communication and ideas among the Loro and Wari than has been previously thought.

As has been compared throughout this chapter, Pataraya and Huaca del Loro have a number of similarities while holding different roles within the Wari empire. Pataraya had a strong administrative role, whereas Huaca del Loro may have also held a religious or ceremonial role. Chakipampa and Viñaque ceramic sherds further support the presence of Wari at both Pataraya and Huaca del Loro. Additionally, the Loro style is the most

predominant style at both sites. This is even the case within the present Wari architecture, as can be seen in Table 6.1 in the previous chapter. Huaca del Loro seems to have been a place where the Wari and Loro cohabited. However, other future lines of inquiry at Huaca del Loro may yield other conclusions and interpretations.

VIII. CONCLUSION

At the start of this thesis I presented the research question of testing a sample of ceramics from Huaca del Loro to see what this would tell of the temporal and cultural affiliations there. Three potential hypotheses were presented to address possible data. The first hypothesis stated that Huaca del Loro was a local site. This hypothesis went along with assumptions that the site had been established by the Nasca and inhabited into the Middle Horizon by local people, the Loro. In this scenario, the local people were not a part of the large Middle Horizon empire, the Wari. The second hypothesis stated that Huaca del Loro was a site that local people established to resist the Wari Empire. This scenario pushed the start of Huaca del Loro into the Middle Horizon when the Wari had reached their larger status. This hypothesis drew heavily on the idea that Loro art and iconography was, by definition, in rejection of the Wari Empire. Following this scenario, there would be an expected lack of all things Wari. The third and final hypothesis stated that this site actually acted as a Wari colony. This scenario posited that Huaca del Loro acted as a site similar to Pataraya, a Wari administrative site. Had Huaca del Loro been a Wari administrative site, the ceramic assemblage would reflect this through a high presence of Wari styles including Chakipampa and Viñaque styles.

With this focus in mind, certain parameters were put into place to help achieve an answer to the research question. These parameters included sampling the entire assemblage and focusing on fineware sherds. A sample of the entire site was important to consider, especially once excavations began and revealed two Wari structures. It was then of extra importance to consider not only what those structures contained, but if the same forms and styles were found throughout the remainder of the site. The other two sectors

of the site that were excavated during the 2019 field season contained other possibly important aspects of life at Huaca del Loro. Sector III had the looted cemetery area. As many Nasca scholars have stressed, cemeteries, even looted ones, hold a wealth of information. This belief did not disappoint as the ceramics and other artifacts recovered from this sector yielded important data. The final excavated area, Sector IV, was the theorized secondary ayllu or home of the common people. This area contained *quincha* architecture an architectural form that was common to local people of the Middle Horizon.

The sample assemblage that was collected at Huaca del Loro indicated that there was a strong Loro and Wari presence. Loro ceramics are found as the majority throughout the entire site. This is even the case in the Wari rectilinear architecture and a Wari D-shaped temple. This mixing of Loro at such important Wari spaces indicates the value that this style had. Important Wari styles of Chakipampa and Viñaque are also found here. There is a small presence of Chakipampa in the looted cemetery area. Other styles like Late Nasca and Late Intermediate Period are found in the Wari architecture and in certain parts of the cemetery area.

These trends have highlighted the importance of the two Wari structures through the ceramics that were recovered there. It shows that these structures, that were places of ceremony and administration, were highly valued additions to life at Huaca del Loro. The prevalence of Loro style sherds within these structures shows that the Wari used Loro ceramics in addition to their own. The looted cemetery area shows the possibility of mixing cultures as there are Chakipampa, Loro, Wari, Late Nasca and Late Intermediate Period styles present here. Further excavations in this area may reveal the remnants of

more looted graves, or hopefully, an intact grave. The trends also indicate the presence of Loro in the possible commoner area. There was a near total lack of non-Loro styles recovered there. However, the sample from this sector was small so no definitive conclusions can be made from Sector IV. As excavations continue, they may shed more light on life for the inhabitants of Huaca del Loro.

The current sample assemblage of Huaca del Loro indicates that Huaca del Loro was a Wari colony at one point. There is a strong Wari presence in Nasca with a Loro population living there as well. This idea posits that Wari were using local Middle Horizon ceramics in addition to their own imperial styles. The presence of Wari architecture reinforces this belief.

Future Directions

Previous chapters have addressed the sample of the ceramic assemblage at Huaca del Loro from the 2019 field season with consideration of the architecture and other elements of the site. However, additional analysis of other artifacts is necessary to provide other lines of evidence. Further sampling of Sector I, Sector IV, and Sector V are needed to provide a better understanding of the ceramics at Huaca del Loro. These areas will shed more light on the level of presence of a local population living in the secondary ayllu/commoner area. Further excavations in Sector I could yield intact levels of Structure 1 and Structure 2. Information on these structures could provide future researchers with greater data on the presence of Wari elites. However, it is also important to continue to investigate the local population living at Huaca del Loro. A deeper investigation into Sectors IV and V will provide information regarding the presence and size of this population in addition to their timing. It is possible that not all sectors within

the site date to the same time period. This would drastically change the way we understand the populating of Huaca del Loro. For example, Sector I could be an episode of later occupation than the rest of the site. If it were later then it may show evidence of the Wari establishing a colony and forcing the local people out. However, if the timing of the site is contemporaneous, then the local people may have worked for or been a part of the Wari.

Additional data would obviously allow for either new lines of evidence or new possible explanations for the assemblage. Further, these lines of evidence may either strengthen or challenge the interpretations that emerged from this thesis and its data. As more Middle Horizon sites are investigated, and as Huaca del Loro is further excavated, more data will become available to better our understanding of the Middle Horizon and how the populations of this time interacted.

APPENDIX

Sector	Sherd Count	% of assemblage
Ι	413	72.97%
plainware	45	7.92%
fineware	368	64.79%
III	84	14.79%
plainware	10	1.76%
fineware	74	13.03%
IV	71	12.50%
plainware	11	1.94%
fineware	60	10.56%

Table A.1 The distribution of plainware and fineware sherds among the three excavated sectors as well as the corresponding percentage of the assemblage.

	Raw	% of	% of
Structure	Counts	Sector	Assemblage
1	238	57.63%	41.90%
plainware	34	8.23%	5.99%
fineware	204	49.39%	35.92%
2	175	42.37%	30.81%
plainware	11	2.66%	1.94%
fineware	164	39.71%	28.87%
Total	413	100.00%	72.71%

Table A.2 The distribution of plainware and fineware among Structure 1 and 2.

Unit	Raw Count	% of Sector	% of Total
1	25	29.76%	4.40%
plainware	2	2.38%	0.35%
fineware	23	27.38%	4.05%
2	43	51.19%	7.57%
plainware	8	9.52%	1.41%
fineware	35	41.67%	6.16%
6	7	8.33%	1.23%
plainware	0	0.00%	0.00%
fineware	7	8.33%	1.23%
7	9	10.71%	1.58%
plainware	0	0.00%	0.00%
fineware	9	10.71%	1.58%
Total	84	100.00%	14.79%

Table A.3 The distribution among all units within Sector III.

Unit	Raw Count	% of Sector	% of Assemblage
3	24	33.80%	4.23%
plainware	5	7.04%	0.88%
fineware	19	26.76%	3.35%
4	4	5.63%	0.70%
plainware	1	1.41%	0.18%
fineware	3	4.23%	0.53%
5	15	21.13%	2.64%
plainware	3	4.23%	0.53%
fineware	12	16.90%	2.11%
Profile 1	28	39.44%	4.93%
plainware	2	2.82%	0.35%
fineware	26	36.62%	4.58%
Total	71	100.00%	12.50%

Table A.4 The distribution of plainwares and fineware among all excavation areas in

 Sector IV.

Sector I						
Unit	Level	Total Number of Excavated Sherds	Total Number of Non- Diagnostic Sherds	Total Number of Diagnostic Sherds	Total Number of Analyzed Sherds	Percentage of Analyzed Diagnostic Sherds
T-1	В	172	96	76	16	21.05%
T-3	В	130	70	60	30	50.00%
T-4	В	27	0	27	20	74.07%
T-6	В	404	207	197	23	11.68%
E1-R1	C	183	108	75	67	89.33%
E1-R1	Rasgo 2	151	48	103	12	11.65%
E1-R2	C	175	87	88	15	17.05%
E1-R2	D	2	0	2	2	100.00%
E1-R3	C	148	106	42	10	23.81%
E1-R3	D	55	0	55	13	23.64%
E1-R4	С	41	10	31	31	100.00%
E1-R5	C	57	29	28	6	21.43%
E1-R6- R1	C	4	0	4	4	100.00%
E2	С	15	3	12	12	100.00%
AS	C	539	131	408	51	12.50%
AS	C	71	60	11	9	81.82%
ASB	C	4	3	1	1	100.00%
ASA	С	252	6	246	0	0.00%
ASB	В	283	50	233	21	9.01%
ASO	В	149	0	149	26	17.45%
ASO	С	147	0	147	0	0.00%
AO	В	118	0	118	23	19.49%
ASO	Rasgo 1	202	85	117	21	17.95%
Total		3329	1099	2230	413	18.52%

Table A.5 The total number of excavated sherds, total number of diagnostic and nondiagnostic sherds as well as the total number of analyzed sherds and the percentage of diagnostic sherds that were analyzed within Sector I.
Sector III Total Total Total Total Percentage Number Number Number Number of Unit of of Nonof Analyzed Level of **Excavated** Diagnostic Diagnostic Analyzed Diagnostic Sherds Sherds Sherds Sherds Sherds 1 21 1 20 5 25.00% А В 25 10 15 7 46.67% С 21 12 9 4 44.44% Α 29 15 14 14 2 100.00% 29 14 14 В 15 93.33% С 4 3 1 1 100.00% 13 10 3 3 А 100.00% 3 В 4 1 3 100.00% 3 4 1 1 А 100.00% 6 3 3 3 100.00% В 3 А 4 1 1 100.00% 4 3 В 1 1 100.00% С 12 2 2 10 100.00% 2 1 1 1 6 А 100.00% 2 В 8 6 2 100.00% 4 С 40 34 6 11.76% 2 0 0.00% D 2 0 F 2 2 0 0 0.00% 7 В 5 2 3 3 100.00% 3 С 13 7 6 50.00% F 12 9 3 3 100.00% G 8 0 8 0 0.00% Η 7 5 2 0 0.00% 2 2 Ι 4 0 0.00% 75 279 Total 130 149 50.34%

Table A.6 The total number of excavated sherds, total number of diagnostic and nondiagnostic sherds as well as the total number of analyzed sherds and the percentage of diagnostic sherds that were analyzed within Sector III.

Sector IV							
Unit	Level	Total Number of Excavated Sherds	Total Number of Non- Diagnostic Sherds	Total Number of Diagnostic Sherds	Total Number of Analyzed Sherds	Percentage of Analyzed Diagnostic Sherds	
Profile 1	Nivel 3	22	12	10	10	100.00%	
	Nivel 4	9	0	9	9	100.00%	
	Nivel 5	10	0	10	9	90.00%	
Unit 3	А	121	16	105	12	11.43%	
	A- Amp	32	17	15	12	80.00%	
Unit 4	А	41	23	18	4	22.22%	
	В	38	25	13	0	0.00%	
	С	17	12	5	0	0.00%	
	D	9	5	4	0	0.00%	
	E	38	22	16	0	0.00%	
	F	8	6	2	0	0.00%	
	G	35	21	14	0	0.00%	
Unit 5	S	92	0	92	5	5.43%	
	А	31	16	15	9	60.00%	
Total		503	175	328	70	21.34%	

Table A.7 The total number of excavated sherds, total number of diagnostic and nondiagnostic sherds as well as the total number of analyzed sherds and the percentage of diagnostic sherds that were analyzed within Sector IV.

Sector I	Raw Counts	% of Sector	% of Assemblage
Level B	231	55.93%	40.67%
plainware	21	5.08%	3.70%
fineware	210	50.85%	36.97%
Level C	175	42.37%	30.81%
plainware	26	6.30%	4.58%
fineware	149	36.08%	26.23%
Level D	8	1.94%	1.41%
plainware	0	0.00%	0.00%
fineware	8	1.94%	1.41%
Total	413		72.71%

Table A.8 The counts and distributions of plainware and fineware sherds from the sample as they are represented within the Sector and the entire sample assemblage.

Table A.9 The distributions of styles across all levels of Sector I including the percentages of total fineware in the level, total sherds from the sector and from the total assemblage.

	Raw	% of Total	% of Total	% of
Sector I	Counts	Level	Sector	Assemblage
Level B	210	100.00%	50.85%	36.97%
Late Nasca	13	6.19%	3.53%	2.29%
Transitional	1	0.48%	0.27%	0.18%
Loro	152	72.38%	41.30%	26.76%
Wari	5	2.38%	1.36%	0.88%
Chakipampa	1	0.48%	0.27%	0.18%
Viñaque	2	0.95%	0.54%	0.35%
Late Intermediate Period	2	0.95%	0.54%	0.35%
Indeterminate	33	15.71%	8.97%	5.81%
Level C	149	100.00%	36.08%	26.23%
Late Nasca	21	14.09%	5.71%	3.70%
Transitional	2	1.34%	0.54%	0.35%
Loro	90	60.40%	24.46%	15.85%
Wari	9	6.04%	2.45%	1.58%
Chakipampa	1	0.67%	0.27%	0.18%
Viñaque	0	0.00%	0.00%	0.00%
Late Intermediate Period	0	0.00%	0.00%	0.00%
Indeterminate	26	17.45%	7.07%	4.58%
Level D	8	100.00%	1.94%	1.41%
Late Nasca	0	0.00%	0.00%	0.00%
Loro	8	100.00%	2.17%	1.41%
Wari	0	0.00%	0.00%	0.00%
Chakipampa	0	0.00%	0.00%	0.00%
Viñaque	0	0.00%	0.00%	0.00%
Late Intermediate Period	0	0.00%	0.00%	0.00%
Indeterminate	0	0.00%	0.00%	0.00%
Total	368		89.10%	64.79%

	Raw	% of	% of
Sector III	Counts	Sector	Assemblage
Level A	28	33.33%	4.93%
plainware	5	5.95%	0.88%
fineware	23	27.38%	4.05%
Level B	34	40.48%	5.99%
plainware	3	3.57%	0.53%
fineware	31	36.90%	5.46%
Level C	19	22.62%	3.35%
plainware	2	2.38%	0.35%
fineware	17	20.24%	2.99%
Level F	3	3.57%	0.53%
plainware	0	0.00%	0.00%
fineware	3	3.57%	0.53%
Total	84		14.79%

Table A.10 The distribution of plainware and fineware sherds across all levels of the sector and assemblage.

Sector III	Raw Counts	% of Fineware in Level	% of Total Sector	% of Assemblage
Level A	23	100.00%	27.38%	4.05%
Late Nasca	6	26.09%	7 14%	1.06%
Transitional	1	4 35%	1 19%	0.18%
Loro	11	47.83%	13 10%	1 94%
Wari	0	0.00%	0.00%	0.00%
Chakinamna	0	0.00%	0.00%	0.00%
Viñaque	0	0.00%	0.00%	0.00%
Late Intermediate		0.0070	0.0070	0.0070
Period	2	8.70%	2.38%	0.35%
Indeterminate	3	13.04%	3.57%	0.53%
Level B	31	100.00%	36.90%	5.46%
Late Nasca	2	6.45%	2.38%	0.35%
Transitional	0	0.00%	0.00%	0.00%
Loro	20	64.52%	23.81%	3.52%
Wari	0	0.00%	0.00%	0.00%
Chakipampa	0	0.00%	0.00%	0.00%
Viñaque	0	0.00%	0.00%	0.00%
Late Intermediate				
Period	1	3.23%	1.19%	0.18%
Indeterminate	8	25.81%	9.52%	1.41%
Level C	17	100.00%	20.24%	2.99%
Late Nasca	4	23.53%	4.76%	0.70%
Transitional	0	0.00%	0.00%	0.00%
Loro	10	58.82%	11.90%	1.76%
Wari	0	0.00%	0.00%	0.00%
Chakipampa	0	0.00%	0.00%	0.00%
Viñaque	0	0.00%	0.00%	0.00%
Late Intermediate				
Period	0	0.00%	0.00%	0.00%
Indeterminate	3	17.65%	3.57%	0.53%
Level F	3	100.00%	3.57%	0.53%
Late Nasca	0	0.00%	0.00%	0.00%
Transitional	0	0.00%	0.00%	0.00%
Loro	2	66.67%	2.38%	0.35%
Wari	0	0.00%	0.00%	0.00%
Chakipampa	0	0.00%	0.00%	0.00%
Viñaque	0	0.00%	0.00%	0.00%
Late Intermediate	0	0.00%	0.00%	0.00%

Table A.11 The distributions of all styles at every level within Sector III showing their distributions across the level, sector, and assemblage.

Period				
Indeterminate	1	33.33%	1.19%	0.18%
Total	74		88.10%	13.03%

	Raw		
Sector IV	Counts	% of Sector	% of Assemblage
Level - Superficial	10	14.08%	1.76%
plainware	2	2.82%	0.35%
fineware	8	11.27%	1.41%
Level A	33	46.48%	5.81%
plainware	7	9.86%	1.23%
fineware	26	36.62%	4.58%
Level 3	10	14.08%	1.76%
plainware	1	1.41%	0.18%
fineware	9	12.68%	1.58%
Level 4	9	12.68%	1.58%
plainware	0	0.00%	0.00%
fineware	9	12.68%	1.58%
Level 5	9	12.68%	1.58%
plainware	1	1.41%	0.18%
fineware	8	11.27%	1.41%
Total	71		12.50%

Table A.12 The distribution of plainware and fineware sherds among the levels present within Sector IV.

	Raw	% of Total	% of Total	% of
Sector IV	Counts	Level	Sector	Assemblage
Level - Superficial	8	100.00%	11.27%	1.41%
Late Nasca	1	12.50%	1.41%	0.18%
Transitional	0	0.00%	0.00%	0.00%
Loro	2	25.00%	2.82%	0.35%
Wari	0	0.00%	0.00%	0.00%
Chakipampa	0	0.00%	0.00%	0.00%
Viñaque	0	0.00%	0.00%	0.00%
Late Intermediate Period	0	0.00%	0.00%	0.00%
Indeterminate	5	62 50%	7.04%	0.88%
	26	100.00%	36 62%	4 58%
Late Nasca	20	11 54%	A 23%	0.53%
Transitional	1	3 85%	1.41%	0.33%
Loro	17	65 38%	23 9/1%	2 99%
Wari	0	0.00%	0.00%	0.00%
Chakinamna	0	0.00%	0.00%	0.00%
Viñaque	0	0.00%	0.00%	0.00%
Late Intermediate	0	0.0070	0.0070	0.0070
Period	0	0.00%	0.00%	0.00%
Indeterminate	5	19.23%	7.04%	0.88%
Level 3	9	100.00%	12.68%	1.58%
Late Nasca	0	0.00%	0.00%	0.00%
Transitional	0	0.00%	0.00%	0.00%
Loro	8	88.89%	11.27%	1.41%
Wari	0	0.00%	0.00%	0.00%
Chakipampa	0	0.00%	0.00%	0.00%
Viñaque	0	0.00%	0.00%	0.00%
Late Intermediate	0	0.000/	0.000/	0.000/
Period	0	0.00%	0.00%	0.00%
Indeterminate		11.11%	1.41%	0.18%
Level 4	9		1 410/	1.58% 0.190/
			1.41%	0.18%
Iransitional			0.00%	0.00%
	/	//./8%	9.86%	1.23%
wari	0	0.00%	0.00%	0.00%
Chakipampa	0	0.00%	0.00%	0.00%

Table A.13 The distribution of styles across all of Sector IV, all present levels within that sector and all of the sample assemblage.

Viñaque	0	0.00%	0.00%	0.00%
Late Intermediate				
Period	0	0.00%	0.00%	0.00%
Indeterminate	1	11.11%	1.41%	0.18%
Level 5	8	88.89%	11.27%	1.41%
Late Nasca	0	0.00%	0.00%	0.00%
Loro	6	66.67%	8.45%	1.06%
Wari	0	0.00%	0.00%	0.00%
Chakipampa	0	0.00%	0.00%	0.00%
Viñaque	0	0.00%	0.00%	0.00%
Late Intermediate				
Period	0	0.00%	0.00%	0.00%
Indeterminate	2	22.22%	2.82%	0.35%
Total	60		84.51%	10.56%

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