

ARCHAEOLOGICAL INVESTIGATIONS INTO THE  
EARLY OCCUPATIONS OF LA TIZA,  
NASCA, PERU

THESIS

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by

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## **CHAPTER 1**

### **INTRODUCTION**

The Nasca<sup>1</sup> region of Peru, home of the famed Nasca lines, has captured the attention of curious minds for nearly a century. Information in the popular media commonly focuses on the sensational lines, their meaning, and the logistics of their creation rather than the lives of the past peoples who resided in this mysterious land. Nevertheless, the last 50 years of archaeology have revealed fascinating insights into the political, socioeconomic, religious, and domestic lives of the Nasca peoples. What is less clear at present is the nascence of the Nasca culture. A cultural florescence occurred during the Early Intermediate Period (A.D. 1-750), but they were not the first substantial population to call the Nasca region their home. The early pioneers are thought to have been members of the Paracas culture, who migrated south between 2,000 and 2,500 years ago. On the south coast, this cultural permutation is often referred to as the Paracas-Nasca interface. My investigations at the site of La Tiza, located in the southern Nasca drainage, were aimed at expounding this elusive transition.

Specifically, I sought ceramic evidence, which would elucidate the cultural affiliation of the first formative pioneers who settled the site. The time period during which the occupation occurred could be deduced through the identification of a diagnostic ceramic style characteristic of a particular phase of a ceramic tradition. Differential architectural structures were selected for excavation in an attempt to expose

any inequalities in social status that may be reflected in the quality or quantity of the residents' subsistence remains, ceramics, stone tools, or other possessions. A final goal of the investigations was to illuminate the possible relationship between La Tiza and a neighboring formative site called La Puntilla.

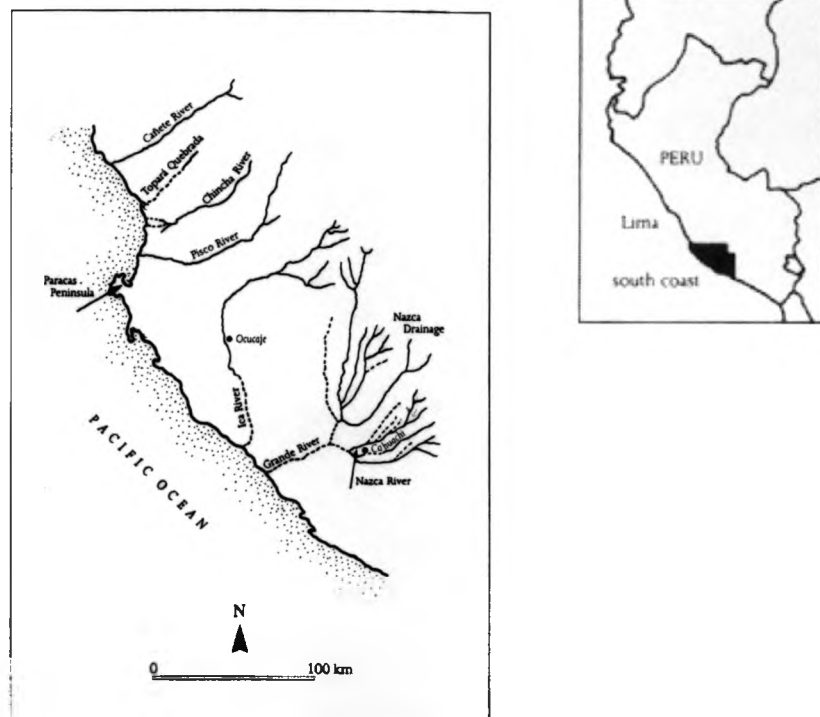
In the present work I will describe the results of excavation, the subsequent analysis of material, and their contributions toward the research goals. I offer a brief description of the regional environment of the south coast in Chapter 2, which is followed by an overview of the Peruvian and south coastal culture history in Chapter 3. Information derived from previous archaeological research on the Paracas-Nasca interface is included in Chapter 4. Chapter 5 presents the methodologies employed and the results of excavations. The data recovered from the analyses of ceramic and non-ceramic artifacts are detailed in Chapters 6 and 7 respectively. I discuss my interpretations of these data in Chapter 8 and final thoughts and conclusions in Chapter 9.

<sup>1</sup> In the literature, especially the popular media, *Nasca* is often spelled *Nazca*. *Nasca*, however, is considered the more indigenous spelling and is thought to be preferred by the locals. Therefore, there has been a trend in recent years to return to this spelling. Helaine Silverman advocates the usage of *Nasca* to refer to the culture and *Nazca* when discussing geographical names. However, most Peruvian archaeologists do not utilize this distinction but rather maintain one spelling throughout. For consistency purposes, I will utilize the *Nasca* spelling exclusively, unless quoting another researcher's work.

## CHAPTER 2

### REGIONAL ENVIRONMENT

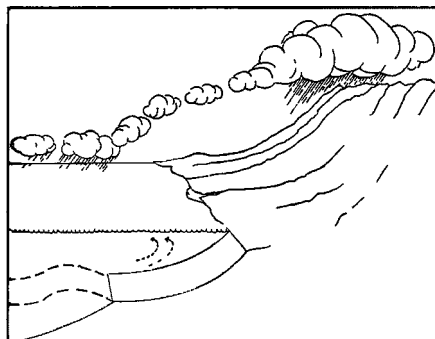
The Nasca region is located within the modern day Department of Ica on the south coast of Peru. As a culture area, the south coast is popularly defined as the land including the Chíncha, Pisco, Ica, Río Grande de Nasca, and Acarí valleys (Silverman 1996; Vaughn 2000). However, the nucleus of Nasca settlements was primarily confined to the Ica and Río Grande de Nasca drainages. Thus, this core area is defined as the “Nasca region” (Figure 2.1).



**Figure 2.1. Map of the Nasca region. (Paul 1991:Figure 1.1)**

The Peruvian south coast is part of the central Andean zone, which is characterized as a wildly diverse ecology with extreme topography. During the tectonic activity that created the Andes Mountains, large quantities of metamorphic rocks were produced in the region and blanketed the terrain with red-brown stone. Concurrently, the structural deformation also lifted a previous bay to 400-500 meters above sea level (Schreiber and Lacho Rojas 2003:22). This coastal plain is now a desert pampa, which stretches between the coastal hills and the rising slopes of the Andes.

A combination of geological and hydrological circumstances is responsible for the extremely arid environment. An upwelling ocean current, called the Humboldt Current, brings cold waters from the ocean depths to the surface off the coast of Peru. This current maintains the coastal waters and ocean air at low temperatures. As moisture-carrying clouds move onto the landscape, they are warmed by the higher temperatures of the coastal terrain. The heated air increases the capacity to retain water, causing the clouds to pass over the coastal plains and Andean foothills without releasing rain. The moisture does not fall until the clouds reach the higher, cooler elevations of the Andes above 2,500 meters (Moseley 1975:8). See Figure 2.2 for a schematic of this pattern.

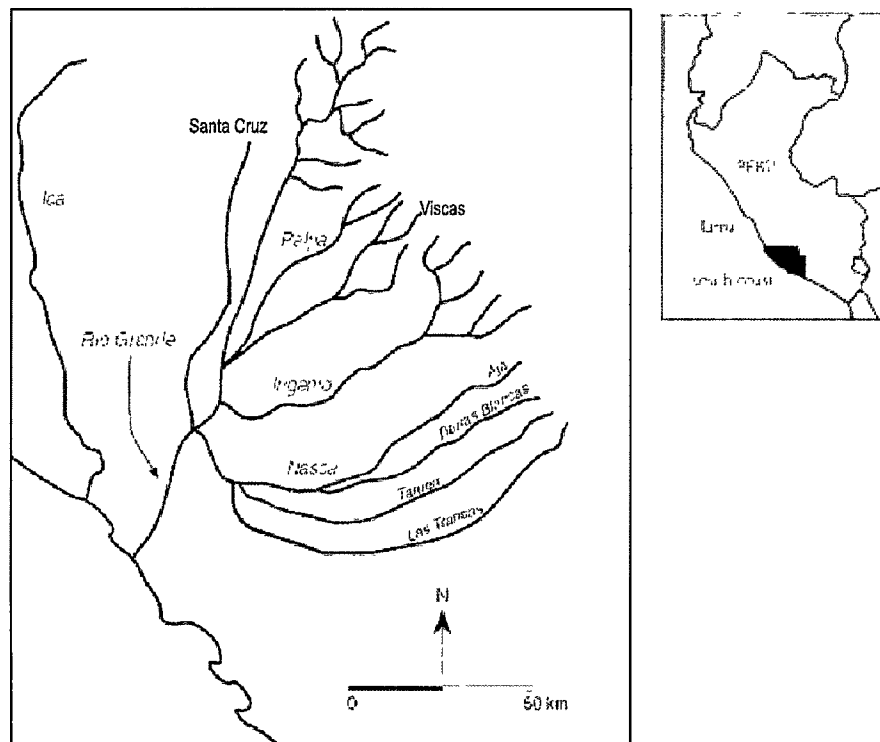


**Figure 2.2. Image of ocean currents and coastal weather pattern.**  
(Moseley 1975:Figure 2.1)

The Peruvian south coast receives minimal amounts of annual rainfall and is considered one of the driest deserts in the world. The tributaries receive the majority of their water from highland runoff. However, due to the porous nature of the volcanic soils, the Andean slopes absorb much of the rainfall and carry it underground in the phreatic layer (Schreiber and Lacho Rojas 2003:25). This zone of infiltration is found between 800 and 1,200 meters above sea level (asl). The middle valley, in which La Tiza is located, lies at the lower elevations of 400-800 meters asl. This zone only receives surface water during times of flooding, which generally occur for two months every two out of seven years (Schreiber and Lacho Rojas 2003:31). Water for domestic use and irrigation is available only during these flooding events or through the utilization of *puquios*, local aqueducts, which tap into the phreatic layer at its shallower levels along the upper and lower confines of the middle valley. The river re-emerges on the surface along the zone of the lower valley below 400 meters asl. However, severe winds, heat, and a narrowing of the valley make this region less desirable for occupation (Schreiber and Lacho Rojas 2003:31). For these reasons, the Nasca drainage was not extensively occupied until irrigation techniques were implemented by members of the Nasca culture, allowing for the exploitation of the middle valley (Schreiber and Lacho Rojas 2003:146).

Other factors cause the Río Grande de Nasca drainage to suffer even further unfavorable hydrological circumstances. Relative to other river systems, it is located far from the coast, which makes marine resource acquisition more difficult, and it possesses narrower valleys, allowing for less irrigable lands. The Río Grande de Nasca is comprised of many smaller tributaries, which converge and flow together into one drainage. They are often parsed into a northern and southern group. The northern

tributaries include the Santa Cruz, Palpa, Grande, Viscas, and Ingenio rivers, and the southern group is comprised of the Aja, Tierras Blancas, Taruga, and Las Trancas rivers (Figure 2.3). The Aja and Tierras Blancas converge into the Nasca River, which is distinct from, and subsequently flows into, the Río Grande de Nasca. It is at this confluence that the site of La Tiza is located. All of the rivers in the Río Grande de Nasca drainage are deficient in comparison to other coastal valleys, but the southern tributaries are especially poor in volume (Schreiber and Lacho Rojas 1995:25). In fact, the Oficina Nacional de Evaluación de Recursos Naturales (ONERN) only recognizes the Grande, Ingenio, Palpa, Viscas, and Nasca as actual rivers due to the intermittent flow of the others (ONERN 1971).



**Figure 2.3. Map of the Río Grande de Nasca drainage.**

There are several other features of the Nasca region that are worthy of discussion. It is this area of the desert pampa that is home to the enigmatic geoglyphs, more commonly known as the Nasca lines. Most are related to the Nasca culture of the Early Intermediate Period, A.D. 1-750 (Aveni 2000). However, a few are thought to be older and bear what may be Paracas iconography, which dates to the Early Horizon, 800-100 B.C. (Van Gijseghem 2004:234; Van Gijseghem, personal communication 2005). Another distinctive feature in the Nasca region is a sand covered mountain called Cerro Blanco, its pale brilliance contrasting drastically against the auburn-hued mounds surrounding it (Figure 2.4). It was created when geologic uplift elevated the ancient coastline, exposing large deposits of sand, which were distributed across the land by extreme winds, locally called *paracas*. It and several other sacred peaks in the region were said to each house a powerful mountain deity, or *apu*. Cerro Blanco in particular is considered to control local sources of water and has subsequently received dedicatory offerings, or *pagos*, for millennia (Schreiber and Lacho Rojas 2003:23).



**Figure 2.4. Image of Cerro Blanco in background.**  
(Photograph taken by Lindsey Stoker)

## **CHAPTER 3**

### **DEVELOPMENT OF CULTURAL COMPLEXITY**

#### **Chronology of Peru**

The chronological scheme that is most commonly used for Peruvian prehistory is made up of alternating horizons and intermediate periods (Rowe 1967). Rowe defines a horizon as a time when ceramic sequences reflect the presence of a particular widespread culture (i.e., Chavín, Tiwanaku/Wari, and Inca). Alternatively, periods are intermediate stages that could be defined by the local sequences of distinct regions. At the implementation of this framework, it was thought that the horizons encapsulated dynamic periods of cultural expansion and interregional integration, whereas intermediate periods were times of stagnation and political concentration at the regional level. Recent research, however, has indicated that the sociopolitical landscape of some regions during the intermediate periods was far more complex than previously thought. Nevertheless, Rowe's cultural scheme remains widely accepted. It includes the following stages: Initial Period, Early Horizon (EH), Early Intermediate Period (EIP), Middle Horizon, Late Intermediate Period, and Late Horizon (Table 3.1). This study focuses on the Early Horizon and Early Intermediate Period.



**Table 3.1. Peruvian Chronology.** (Vaughn 2000)

<b>Horizons &amp; Intermediate Periods</b>	<b>Culture names</b>	<b>phases</b>	<b>Approximate dates</b>
Late Horizon	Inca		A.D. 1476 – 1532
Late Intermediate Period	Ica, Chincha		A.D. 1000 – 1476
Middle Horizon	Loro, Wari	Nasca 8	A.D. 750 – 1000
Early Intermediate Period	Late Nasca	Nasca 6,7	A.D. 550 – 750
	Middle Nasca	Nasca 5	A.D. 450 – 550
	Early Nasca	Nasca 2,3,4	A.D. 1 - 450
	Proto-Nasca	Nasca 1	100 B.C. – A.D. 1
Early Horizon	Paracas		800 – 100 B.C.
Initial Period			1800 - 800 B.C.
Preceramic (Archaic)			9000 – 1800 B.C.
Preceramic (Paleoindian)			12000(?) – 9000 B.C.

An alternative system proposed by Luis Lumbreras is based on an evolutionary scheme with a political focus (1974). His epochs are called Lithic, Archaic, Formative, Regional Developmental, Wari Empire, Regional States, and Inca Empire. The Formative Period (1800-100 B.C.) is further divided into three stages: Lower, Middle, and Upper. The latter two roughly correspond to the Early Horizon. The scope of the present study is concerned with the Upper Formative, which is also commonly referred to as the Late Formative. However, because Rowe's chronology is more popular in the literature than that of Lumbreras, I have adopted his terminology in this work. Below I offer a brief summary of Peruvian prehistory according to Rowe's horizons and periods.

#### *The Initial Period (1800-800 B C )*

Settled lifestyles and complex societies took root in Peru during the Initial Period (1800-800 B.C.). Generally speaking, this period represents the expansion of intensive agriculture and agropastoralism, accompanied by the introduction of ceramics. These

new lifeways fostered the development of monumental architecture, civic-ceremonial centers, and the elaboration of religious ideologies and sociopolitical organization at the regional corporate level (Moseley 2001:131-136). However, this increase in social complexity and technology was not experienced on the south coast as it was in other regions. South coastal sites lacked artificial irrigation, monumental architecture, and comparable population densities.

The first Initial Period sites documented on the south coast were Erizo and Mastodonte, which are composed of shallow middens containing early pottery (Silverman 1996:110). Initial Period components were found at two of the major Early Horizon Paracas sites, Disco Verde and Puerto Nuevo (Burger 1988; Engel 1966; Engel 1976; García Soto and Pinilla Blenke 1995). One of the most significant Initial Period sites, however, is Hacha. Hacha is located on the banks of the Acarí River, 23 km from the sea (Silverman 1996:111). Evidence from this site indicates a reliance on marine resources and local hunting, supported by limited cultivation. Hacha demonstrates two ceramic complexes. The first, Hacha 1, is dated to 3000 to 2700 B.P. and is associated with the site's adobe architecture (Robinson 1986, 1994). Hacha 2, which post-dates Hacha 1, served as the archetype for the Initial Period's central Andes ceramic complex (Silverman 1996:111; see Chávez 1977:1038-1041 and Lanning 1960b:466-467). Reports of pottery resembling Hacha 2 are plentiful and their proveniences fairly far-reaching (see Chávez 1977; García Soto and Pinilla Blenke 1995; Grossman 1983; Lanning 1960b; Silverman 1994). Antecedents to the Early Horizon decorative techniques and fineware bottle shapes have also been recognized in Hacha 2 (Silverman 1996:111).

*The Early Horizon (800-100 B.C.)*

The Early Horizon (800-100 B.C.) refers to the first time period of extra-regional integration in the Andes. This integration is thought to have been stimulated by the spread of a religious cult known as Chavín from the central highlands. The nucleus of the Chavín sphere, a site called Chavín de Huantar, was established during the late Initial Period, but its impact on other regions grew in strength during the Early Horizon (Burger 1992).

Moseley (2001:158,173) proposes that a widespread drought, which began around 900 B.C. and lasted for several centuries, could have been responsible for the expansion of settlements into previously under-exploited niches, such as the south coastal pampa, as well as ideological changes regarding both the natural and supernatural. The pottery associated with many of these new settlements demonstrates iconography reminiscent of the Chavín cult (Patterson 1971). A recent technological and compositional study has revealed that Chavín style pottery found outside its center typically were locally produced imitations rather than imports (Druc 1998). It appears that Chavín designs were widely adopted into local repertoires.

The south coast Paracas society is one example of an Early Horizon culture that borrowed from the Chavín tradition. Incised images on Early Paracas pottery show a strong link to Chavínoid designs. Ceramics from the first permanent occupations of the Nasca drainage demonstrate some Chavín decorative elements, likely introduced through Paracas agency but possibly through other influences as well (see Silverman 1994). The

end of the Early Horizon and the beginning of the subsequent Early Intermediate Period (discussed below) is the focus of this work.

*The Early Intermediate Period (100 B.C. – A.D. 750)*

The Early Intermediate Period (100 B.C. – A.D. 750) saw the decline of the Chavín cult and the rise of independent regional polities. This period is characterized by population growth, economic and political transformations, and the mastery of ceramic sophistication. In the north, the Moche culture reached its apex, while in the south, the Nasca culture emerged, flourished and declined (Silverman and Proulx 2002).

Nasca has been described as a “loosely allied confederacy of chiefdoms with a mixed agropastoral economic base” (Vaughn 2006:8). Most of the population lived in small autonomous villages, linked by commonly held beliefs and socioreligious practices. Yet they achieved an impressive level of expertise and ingenuity in their ceramic production and geoglyph construction.

A great ceremonial center in the lower Nasca Valley, called Cahuachi, was likely the center of religious, political, and economic activity in the Nasca region. Cahuachi appears to have been a focal pilgrimage site of a well-organized mortuary tradition, evidenced by the extensive cemeteries radiating out from the site for nearly a dozen kilometers (Silverman 1993). The site also possesses pyramid mounds, ceremonial deposits, elite residences, and ceramic production areas consisting of kilns, unfired clay, caches of pigments, and paint brushes (Orefici and Drusini 2003:144). Furthermore, an area near the site contains clay that was chemically matched to the polychrome pottery found in ubiquity across the southern Nasca region, indicating its dispersal emanated

from the ceremonial center (Vaughn 2004). It is commonly held that resident elites of Cahuachi sponsored feasts for the pilgrims, utilizing the ceramic vessels produced on-site. This pottery advertised the religious ideologies of the Nasca cult, such as agricultural renewal and propagation, through its painted iconography. These beliefs were communicated, along with information regarding status and social affiliation, across the region as the pilgrims carried the vessels home (Vaughn 2005; Vaughn et al. 2006).

#### *The Middle Horizon (A.D. 750-1000)*

The Middle Horizon is characterized by the development and expansion of the Wari and Tiwanaku states. The Wari Empire expanded across the central Andes to control much of the Andean sierra and the coast. In Nasca, the Wari ceramic style was mistaken as Nasca 8 and was not correctly identified until fairly recently. In fact, it appears that there was no Nasca 8 phase, but rather a replacement of the Nasca tradition by the Wari ceramic style, which is commonly called the Loro phase on the south coast. While the Wari influence may not have been as strong along the coast as the highland regions, there was significant Wari settlement in the Nasca Valley (Schreiber and Lancho Rojas 2003:18; Strong 1957).

#### *The Late Intermediate Period (A.D. 1000-1476)*

Following the collapse of Wari, the ceramic tradition shifted to a new local tradition, but it never again matched the high quality that was attained with the Nasca culture (Schreiber and Lancho Rojas 2003:18). When speaking of the Nasca region, the Late Intermediate Period (LIP) is often referred to as the La Tiza Period, after the large

LIP occupation at the site of La Tiza, where the present investigations were conducted. Sociopolitical organization of the increasing populous during the LIP appears to have operated at the level of regional polities (Conlee 2000, 2003).

#### *The Late Horizon (A.D. 1476-1533)*

The Late Horizon is marked by the Inca conquest and terminates at the point of Spanish arrival. The Inca Empire was the largest empire ever in the New World. In the Nasca region, it appears that the Inca occupation and rule did not greatly change social and political systems. Evidence suggests local elites were often left in charge of the administrative operations (Conlee 2005a).

### **Regional Chronology of the South Coast**

#### *A Discussion of Chronological and Stylistic Sequences*

The scope of this research is concerned with the Early Horizon and Early Intermediate Period, specifically the transition from one to the other as it occurred in the Nasca region. The culture names which are associated with these time periods in the south coast are Paracas and Nasca, respectively. A brief description of both is offered later in this chapter. However, first some attention is warranted to discuss further chronological issues.

While Rowe's cultural scheme is pan-Andean, regional ceramic sequences can elaborate on the local chronologies of specific areas. The relative chronology for the Early Horizon on the south coast was created based on a master sequence of ceramic styles known as the 10-phase Ocucaje sequence (Menzel 1964; Menzel et al. 1964; Rowe

1967). Ocucaje refers to a basin in the Ica Valley, where the fieldwork was centered. The master sequence is made up of Paracas style ceramics recovered from Ica as well as private and public collections. Divisions between temporal stages of the chronology are hinged upon artistic changes in the ceramic assemblage. Ten stages were identified, and the Early Horizon was broken down into ten chronometric epochs, which reflect the Ocucaje phase divisions. Often the Early Horizon epochs are used to discuss chronological time periods, while Ocucaje phases are referred to only in describing ceramic styles. I will adopt this distinction in the present paper, except when the discussion of another researcher's work requires otherwise.

There have been numerous attempts to apply absolute dates to the Ocucaje phases with some difficulty. The problem lies in that there is no consistency in stylistic contemporaneity across the south coast. For this reason, the utility of the Ocucaje phases as chronological markers has been criticized regarding their questionable applicability on a broader scale (Burger 1988; Massey 1986; Wallace 1985). It is argued that the sequence is too localized and fails to sufficiently account for regional variation.

Certain phases over others have proven to be more readily identifiable and are used with more confidence. These are Ocucaje phases 3, 8, 9 and 10 (Massey 1991). Phases 6/7 (expressed as such because they appear so similar) have also been reported by Garcia and Pinilla (1995) and phase 5 by Isla et al. (2003), but their existence still remains less conspicuous than the other phases. Phase 4 lacks archaeological corroboration but has occasionally been lumped with phase 3 (Massey 1991). Phases 1 and 2 have been argued to be neither valid stylistically nor chronologically (Burger 1988; DeLeonardis 1997; Garcia and Pinilla 1995; Massey 1986). Therefore, Ocucaje phase 3

is often described as the first evidence of a true Paracas style. Until research can further elucidate the Ocucaje sequence divisions, phases 3/4, 6/7, 8, 9 and 10 remain the best supported and most useful of the conceived 10. Massey (1986:30-35) proposes that the 10-phase seriation system be collapsed down into four Early Horizon phases. Table 3.2 summarizes the various chronological schemes for the south coast.

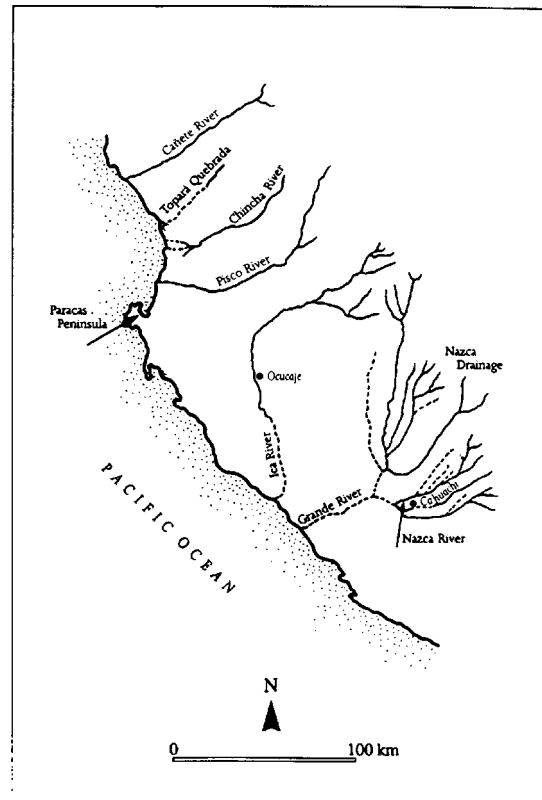
**Table 3.2. Chronological schemes for the south coast.**  
(Paul 1991:Table 1.3; Van Gijseghem 2004:Table 2.2)

	Ocucaje phases	Paracas In Ica	Paracas	Paracas	Topará	Tajo	Montana/ Puntilla	
	Menzel et al (1964)	Massey	Wallace (1962)	Tello (1959)	Lanning (1960a), Wallace (1963)	Silverman (1994)	Schreiber (1998)	
EIP	Nasca 1			Necrópolis	Chongos	Nasca 1		
EH 10 100-1 B C	Oc 10	EH 4 100-1 B C			Jahuay 3	Ocucaje10/ Tajo	Montana	
EH 9 200-100 B C	Oc 9	EH 3 200-100 B C		Cavernas	Jahuay2	Ocucaje 9/ Tajo		
EH 8 300-200 B C	Oc 8	EH 2 350-200 B C	Isla		Jahuay 1	Ocucaje 8/ Tajo	Puntilla	
EH 7 400-300 B C	Oc 7	eliminated						? Tajo
EH 6 5??-400 B C	Oc 6							
EH 5 6??-5?? B C	Oc. 5							
EH 4 6??-600 B C	Oc 4	EH 1 500-350 B C	Cerrillos					
EH 3 600-700 B C	Oc 3						Ocucaje 3?	
EH 2	Oc 2	eliminated						
EH 1	Oc 1	eliminated						



*Paracas (800 -100 B.C.)*

*Definition.* The Paracas heartland was located in the Ica and Pisco valleys along the northern south coast, close to the Paracas Peninsula. However, the entire Paracas region extended north into the Chincha Valley and south into the Acarí Valley (Figure 3.1). On the south coast, the Paracas style dominates ceramic representation during the Early Horizon.



**Figure 3.1. Map of the Paracas region.** (Paul 1991: Figure 1.1)

There are several different explanations for the origins of the word “Paracas.” A popular one is the aforementioned sandstorms, derived from the Quechua *para-ako*, or “sand falling like rain” (Paul 1991:1). However, before Quechua spread to the south coast, Jaqaru - related to the Aymara language - is believed to have been spoken. DeLeonardis (1997:39 n.14) suggests a Jaqaru word, *para-aqu*, which means “gente de

frente o cabeza alta” (“people of high head or forehead”) as an alternative derivation. Indeed, cranial deformation was practiced during Paracas times, and different techniques could have been used to distinguish different ethnic groups.

The term “Paracas” signifies the geographic south coastal region, a burial tradition, and a textile as well as ceramic style. Because of its multiple definitions, the use of the term is fraught with complications. When speaking of a ceramic style, it refers to the Early Horizon south coastal pottery. However, the textiles do not fit as neatly into this period type. They span the last three or more epochs of the Early Horizon and the first two epochs of the Early Intermediate Period (Paul 1991:16). Therefore, textiles from late in this sequence could be called Late Paracas, when referring to them stylistically, or Early Nasca, which would instead denote their placement temporally.

The textiles are commonly found in a funerary context, as garments, headbands, or wraps around mummy bundles, which could number in the hundreds at Paracas cemeteries, indicating that a rich mortuary tradition was an integral element of the Paracas culture. By Early Intermediate Period epoch 3, this textile tradition had ended at Paracas-related sites, and a new burial cult, sharing in the customary inclusion of woven textiles, had begun at the Nasca ceremonial center of Cahuachi (Paul 1991:24). Paul (1991:24) comments that these Nasca textiles at Cahuachi “exhibit more differences from Paracas textiles than similarities, and it is appropriate to speak of the emergence of a new textile style on the Peruvian south coast.” However, the noted similarities are not just confined to the textile medium. Some of the images painted on Early Nasca pots bear great resemblance to the embroidered images on the woven Paracas fabrics. Comparison remains difficult though because few textiles have been found in association with the

Nasca pots, and the pottery associated with the Paracas textiles rarely possess painted images (Paul 1991:25). There is reason to believe, however, that the ideologies behind the Paracas and Nasca imagery were related, but perhaps the cultures differed in their preferred media of expression.

While the ceramics varied subtly between valleys, an overarching Paracas style did exist (Donnan 1992:33). The ceramic tradition is characterized by polychrome resin painted (often called crusted) and negative wares. Crusted wares are post-fire resin painted vessels with designs framed by incised lines (Figure 3.2). Negative wares (Figure 3.3) were created by using the resist painting technique, which created a two-toned effect. This was achieved by applying a slip-painted design to the fired surface of a pot and then covering the entire vessel with an organic pigment. The pigment is absorbed only by the surface area that has not received the slip application. After heating, the pigment scorches, darkening the vessel surface, while the slipped design remains a lighter contrast (Donnan 1992:22). Some late Paracas monochrome vessels were painted with a red or cream slip before firing. This distinct monochromatic style is often considered a variant of the Paracas tradition and is called Topará (Paul 1991:25). See Figure 3.4 for an example of the Topará style. This was the first time slip painting was used on the south coast, and it began a trend that was elaborated upon by the Nasca polychrome slip painting technique (Donnan 1992:35).



**Figure 3.2. Paracas crusted ware.** (Donnan 1992:Illustrations 48, 49)



**Figure 3.3. Paracas negative ware in resist technique.** (Donnan 1992:Illustration 63)

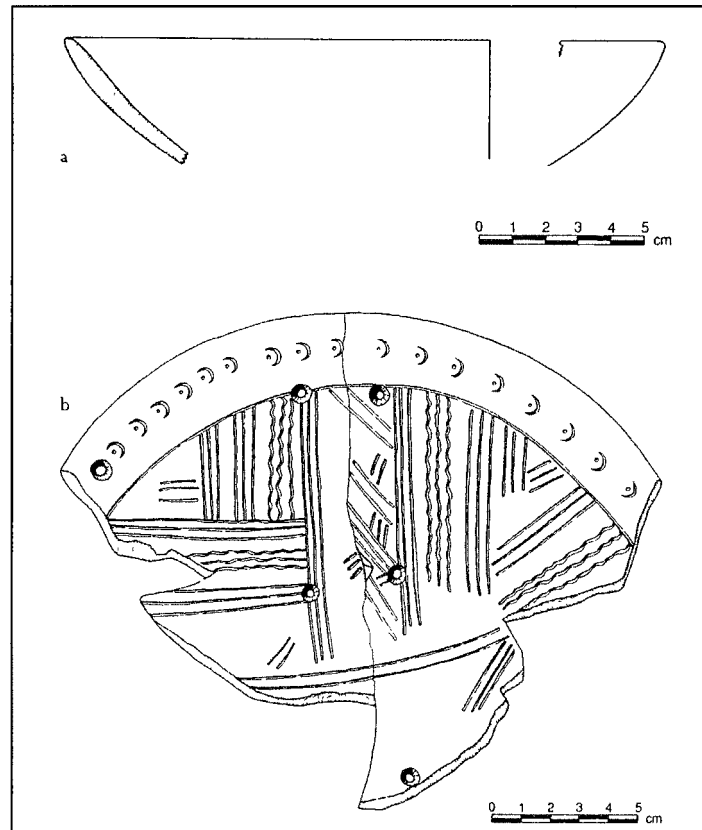


**Figure 3.4. Topará slip painted bottle.** (Donnan 1992:Illustration 64)

Most Paracas pottery was fired in an oxygen reduced atmosphere, leading to the commonly used name to describe it, smudged or smoked blackware (Silverman 1991). It is often dark gray to black with resin painted designs. See Figure 3.2 for an example. During late Paracas, however, some of the Topará monochrome slip painted and resist wares were fired in an oxidation atmosphere. Highly oxidized pottery is the norm for the Nasca tradition and may be linked to this behavioral change. An exception to the Nasca oxidation trend is a Nasca 1 blackware. Occurring during a transitional time, this variant may be rooted in the strong Paracas reduction tradition.

Common Paracas vessel forms were double spout and bridge bottles, spout and handle bottles, plates, bowls, and large ovoid jars (Donnan 1992:34-35). A special type of vessel that is characteristic of Paracas production is called the grater bowl (see Kroeber and Strong 1924:Plate20, Figure 12b). These bowls possess incisions on their interior bases which suggest they were used for the grating of foodstuffs. However, their typical

high quality of material, manufacture, and decorative application suggest they were not just utilitarian vessels (Figure 3.5).



**Figure 3.5. Ocucaje phase 8 grater bowl.** (Silverman 1991:Figure 9.5)

Early Paracas ceramics display a blending of local styles and Chavín iconographic influence. Chavín expressions include the stirrup spout bottle form and artistic elements such as the eagle, hawk, condor, and fangs and eye pendants. These images were replaced over time with new creatures like the fox, swallow, owl and falcon. Late Paracas saw the introduction of three new images: human figures, trophy heads, and a deity referred to as the Oculate Being (Donnan 1992:33-38), all of which carried over into the Nasca tradition.

*History of Research.* The first Paracas materials were encountered in 1900 in the Ica Valley by Max Uhle, who termed them “Proto-Nazca” (Kroeber and Strong 1924; Uhle 1912). The major Paracas discoveries began in 1911 with the unearthing of cemeteries housing mummy bundles wrapped in exquisite textiles with designs similar to those expressed on the ceramic media coming from Ica and other parts of the south coast (Lacham 1912; Uhle 1914). The discovery of these sites is generally credited to Julio Tello (1929) who named the culture according to the location where the large cemeteries were first identified. He and his assistant, Toribio Mejía Xesspe, were also the first to propose a Paracas sequence based on the materials recovered from various sites they excavated on Cerro Colorado on the Paracas peninsula. They divided the burial tradition into two stages: Cavernas and Necrópolis. Cavernas burials were associated with post-fire polychrome wares and negative-painted pottery. An intrusive funerary zone at a Cavernas habitation site, termed the Necrópolis of Wari Kayan, contained monochrome wares. This seriation helped them to establish the relative ages of the two burial traditions - Cavernas being earlier and Necrópolis later. Additionally, over 400 burials were excavated at Wari Kayan (Tello 1959; Tello and Mejía 1979). The cultural context of the textiles recovered from the mummy bundles allowed for the comparison with other textiles in museum collections and a greater study of the Paracas sequence. Tello and Mejía’s research was followed by the detailed excavation of other Cavernas tombs by Eugenio Yacovleff and Jorge Muelle (Yacovleff and Muelle 1932, 1934).

Throughout the rest of the twentieth century, more research on the south coast revealed Paracas remains (Kroeber 1944; Soldi 1956). Many archaeologists began to focus less on the burials and more on the range of Paracas habitations and a better

understanding of chronological aspects (Engel 1957, 1966; Lanning 1960a; Menzel et al. 1964; Rowe 1956; Strong 1954, 1957; Wallace 1971, 1986).

Lanning excavated at a site called Jahuay in the Topará Quebrada. There Lanning recovered monochrome fineware vessels, which he and Wallace named Topará (Lanning 1960a; Wallace 1963, 1986). This term has basically replaced Tello and Mejía's *Necrópolis*. Lanning (1960a, 1967) recognized four phases of Topará: Jahuay 1-3 and Chongos.

Dwight Wallace's assistant, Jorge Esparza, discovered a Paracas habitation site in the upper Ica Valley, which they called *Cerrillos*. Wallace's (1962) excavations there revealed an earlier type of Paracas pottery displaying Chavín characteristics. He recognized two components, which he termed *Isla* and *Cerrillos*. Wallace (1971, 1986) additionally discovered several other Paracas sites and Topará temple mounds in the Chincha Valley.

Engel also found what he considered to be two styles from a pre-Paracas time at a site called Disco Verde on the Paracas Peninsula. He termed the styles Disco Verde and Puerto Nuevo. Like Wallace, he suspected these styles also derived from the Chavín cult. Engel excavated additional Cavernas-related burials and habitation areas in the Pisco Valley north of Ica and the Paracas Peninsula, extending the Paracas boundaries farther north than previously known.

Strong (1954, 1957) was the first to discover Paracas remains as far south as the Nasca Valley. He excavated at Cahuachi, the ceremonial center and pilgrimage shrine on the Nasca River. There he found Paracas related construction and caches of textiles. Strong also recovered ceramics which he called Late Paracas (Early Horizon 10), but



subsequent examination of these materials by others (i.e., Menzel et al. 1964; Silverman 1991:372) has led to their identification as Nasca 1. Similarly, Wallace (1986:35) contends he recognized Topará style sherds among Strong's collections. Some scholars are in agreement that one cream slipped sherd published by Strong (1957:Figure 10F) demonstrates Topará influence. Silverman (1991:337) seems to think Wallace may be mistaking the fine-walled Nasca 1 bowls "that account for about one-third of the Nasca 1 material in Strong's collections" for Topará. As she points out, the distinction between Topará and Nasca 1 wares has not been clearly established. If these ceramics are Nasca 1, as most scholars believe, there is an absolute paucity of Paracas pottery at Cahuachi, even though other Paracas influence there is evident. More information on Nasca 1 is offered in the next section.

#### *The Paracas-Nasca Interface (100 B C – A D. 1)*

Because many of the Nasca styles and icons were borrowed from the Paracas tradition, the transition from one to the other is blurry and difficult to discern. This ambiguity has caused contention regarding how to describe and delimit the Paracas-Nasca interface. *Ocucaje phase 10* is the last phase of the Ocucaje master sequence occurring before Nasca. Many of the new features which developed during this phase became distinguishing features of the Nasca tradition (Menzel et al. 1964:211). Therefore, Ocucaje phase 10 is sometimes viewed as bridging the Paracas and Nasca ceramic traditions.

Nasca 1 is the first phase of the Nasca culture, which marks the beginning of the Early Intermediate Period (EIP). In general, the term *Nasca 1* is used to refer to the

ceramic style, while *EIP 1* indicates the chronological epoch to which it belongs.

However, the stylistic continuity between Ocucaje phase 10 and Nasca 1 materials is such that distinction between the two can sometimes be impossible (Menzel et al. 1964:251).

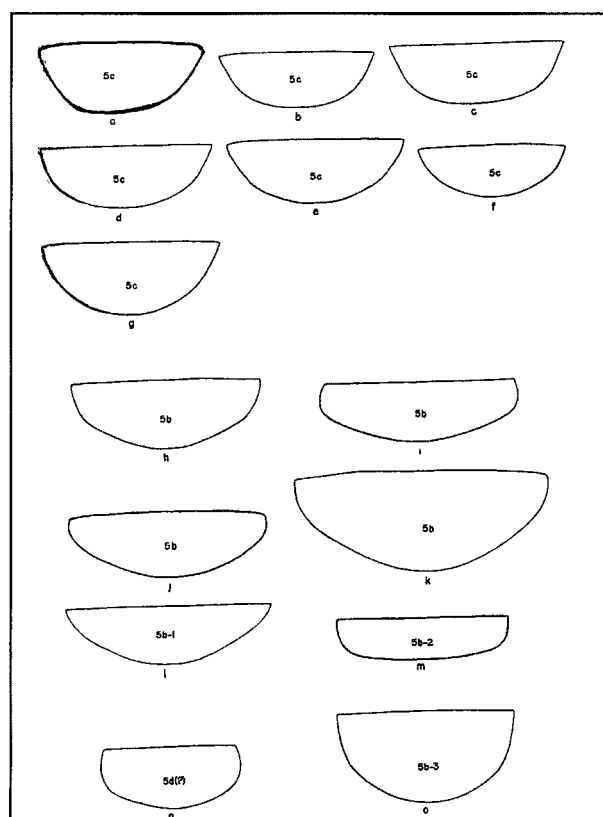
Furthermore, stratigraphic complexity has complicated the understanding of the transition from phase 10 to Nasca 1. While they are often found in association with one another, Nasca 1 ceramics are also found independently at single component sites (Schreiber and Lancho Rojas 2003; Silverman 1994; Van Gijseghem 2004). Therefore, some authors (i.e., Schreiber and Lancho Rojas 2003; Van Gijseghem 2004) have chosen to lump Ocucaje phase 10 and Nasca 1 wares into one category, which they call *Montana*. More recently, however, Van Gijseghem (2006, personal communication) has expressed that he now prefers to reserve the term *Montana* only to indicate a temporal phase (EH 10 – EIP 1) and employ Ocucaje and Nasca phases when speaking of ceramic styles.

The terms *Nasca 1* and *Proto-Nasca* are often used interchangeably in the literature. Sometimes *Proto-Nasca* is used as a more inclusive term, which generally includes Nasca 1 and Ocucaje phase 10 materials. Van Gijseghem (2006, personal communication) sometimes utilizes *Proto-Nasca* to refer to materials that neither fit neatly into Paracas (Ocucaje) nor Nasca 1 categories. *Proto-Nasca* is also used in the literature to refer to the culture while Nasca 1 refers to a ceramic phase (Vaughn and Van Gijseghem 2007). I will maintain the latter usage in the present work.

Nasca 1 bowls are thought to have derived from Ocucaje phase 10 (Silverman 1991:408). Keeping with this tradition, Nasca 1 bowls often have sharp basal angles. Menzel et al. (1964:253) recognize two shapes associated with this type. The first has tall sides that are straight or slightly flaring and concave. The second is a shorter low

bowl with “vertical, slightly flaring or slightly tapering sides which are either convex, straight, or slightly concave” (Menzel et al. 1964:253). (See also Strong [1957:Figure 7A-C] for drawings similar to those just described.) Menzel et al. also note though that a great number of Nasca 1 bowls lack base angles and resemble their common shapes 5b and 5c, a deeper rounder bowl with a curved base and less acute angles (1964:254).

Figure 3.6 of the present work illustrates these shapes.



**Figure 3.6. Common Nasca 1 bowl shapes.** (Menzel et al. 1964:Figure 25)

The main innovation that characterizes Nasca 1 is the pre-fire slip. Rather than using organic-based resin paints after firing or applying a slip post-firing as in the resist technique, Nasca 1 potters applied mineral-based slip paints prior to firing.

Monochrome, most often red, and polychrome slips were used. With regard to the latter,

each color was separated by incised lines, in keeping with the Paracas tradition. The vessels were often burnished and fired in an oxidizing atmosphere (Figure 3.7). Nasca 1 is considered to be the experimentation stage of the pre-fire slip painting technique. The pottery of this phase does not display the skill level that characterizes later Nasca ceramics. The slips of Nasca 1 often exhibit fine cracks, called crazing, and are thicker than those on later Nasca wares.



**Figure 3.7. Nasca 1 polychrome slip painted vessels.**  
(Donnan 1992:Illustrations 71, 72)

While oxidized wares are the trend promulgated in Nasca 1, a reduced variant was quite popular as well. Large numbers have been found at Cahuachi and other sites in the Nasca Valley (Strong 1957; Van Gijseghem 2004). Strong (1957) recognized four types of “Proto-Nasca” (Nasca 1) wares from Cahuachi: (1) Cahuachi Polychrome Incised and Modeled Thin (1957:Figure 7F-G, Figure 10A-I); (2) Cahuachi Polychrome Incised Thick (1957:Figure 10J); (3) Cahuachi Stylus Decorated (1957:Figure 7A-C, Figure 9G-I); and

(4) Cahuachi Polished Black Incised (1957:Figure 7D, Figure 9A-F). The first two demonstrate the aforementioned technique of pre-fire polychrome slip painting decoration with objects divided by incised lines. The latter two are a reduced, polished black ware. On the Cahuachi Polished Black Incised, designs were separated by incised lines, and then portions were polished and left unpolished to create contrast. Designs are usually in the form of geometric patterns and occur on the exterior of the vessel. The Cahuachi Stylus Decorated type is reduced, however about half of the examples have slightly oxidized exteriors, creating a two-toned effect. Decorations were created by burnishing designs onto the unpolished surface with a thin blunt object. Designs are often linear and wavy lines, either on the exterior walls or interior base of the bowl (Strong 1957:21-22).

The majority of Nasca 1 pottery, however, is plainware. Silverman notes that plainware comprises about one-third of Strong's Nasca 1 assemblage from Cahuachi. She describes these wares as fine-walled, sharply convex, plain bowls, sometimes decorated with a red and/or cream slip (Silverman 1991:377). Commonly Nasca 1 bowls are self-slipped or cream-slipped with a red band around the rim.

Although it was generally held that the Nasca cult began during the Early Nasca times (after A.D. 1), recent research strongly indicates an earlier nascence of at least Nasca 1 (100 B.C.) (Vaughn and Van Gijseghem 2007). The initial construction of Cahuachi's pyramids began in Nasca 1 (Orefici 1988), suggesting ceremonial use of the site was well established by that time. Furthermore, Instrumental Neutron Activation Analysis (INAA) of a sample of Nasca 1 blackwares was chemically consistent with the Early Nasca polychromes that emanated from Cahuachi (Van Gijseghem 2004, 2006;

Vaughn and Van Gijseghem 2007). This fact not only supports Cahuachi's early operations but also indicates that its political and economic prestige extends further back than previously believed.

#### *Nasca (A.D. 1-750)*

The Nasca ceramic tradition, typified by elaborate polychrome slip painting, is said to have evolved out of the preceding Paracas. The Nasca chronological sequence is divided into nine ceramic phases. Nasca 1, a Paracas-Nasca transitional phase, existed from approximately 100 B.C. to A.D. 1. Nasca phases 2 through 7 pertain to the Early Intermediate Period, and phases 8 and 9 fall within the Middle Horizon. Phases 2 through 7 are often further grouped into Early Nasca (A.D. 1-400), phase 5 into Middle Nasca (A.D. 400-500), and phases 6 and 7 into Late Nasca (A.D. 500-750).

Early Nasca (A.D. 1-400) culture was relatively complex in sociopolitical and religious nature. The temple mounds at Cahuachi were expanded as the site functioned at its apex. Polychrome fineware produced at Cahuachi was distributed across the Nasca region. Early Nasca ceramics are described as "monumental" and depict the regional plants, animals, sea creatures, and supernaturals from the Paracas textiles (Figure 3.8).



**Figure 3.8. Early Nasca polychrome slip painted pottery.**  
(Donnan 1992:Illustrations 79, 80)

Around A.D. 500 multifarious changes occurred in Nasca. The ceramic style shifted from “monumental” to “proliferous” designs, which are somewhat more abstract and cluttered (Figure 3.9). While burials continued in its vicinity, expansion of Cahuachi’s pyramids ceased. Schreiber and Lancho Rojas (2003) suggest the labor efforts were redirected to the construction of *puquios*, as many of these filtration galleries date to Nasca phase 5. Irrigation allowed for occupation of the previously unsettled, dry middle valley and the sustainment of larger populations.



**Figure 3.9. Middle Nasca polychrome slip painted pottery.**  
(Donnan 1992:Illustrations 86, 87)

Late Nasca (A.D. 500-750) saw an amplification of these Middle Nasca trends. Settlement continued in both the upper and middle valleys. Settlement patterns, however, transformed as the more numerous smaller villages aggregated into fewer but larger towns, and site locations shifted to more defensive areas. The “proliferous” design elements grew more abstract in nature (Figure 3.10). Also, a new focus on warfare encroached upon the religious iconographic themes that emanated from Cahuachi. These transformations occurring during Late Nasca suggest it was a complex time of sociopolitical reorganization and conflict.





**Figure 3.10. Late Nasca polychrome slip painted pottery.**  
(Donnan 1992:Illustrations 93, 94)

## **CHPATER 4**

### **PREVIOUS ARCHAEOLOGICAL RESEARCH ON THE PARACAS-NASCA TRANSITION IN THE NASCA DRAINAGE**

#### **Settlement Pattern Data and General Research**

The Paracas culture was not as strongly felt in the Nasca drainage as it was in other valleys to its north, nor was the scope of Paracas pottery as fully expressed in Nasca, such as it was in Ica. Silverman's surveys in the Río Grande de Nasca drainage have led her to conclude that "Paracas sites and other Early Horizon sites do not show the size, architectural elaboration, wealth, or socioeconomic differentiation of Early Horizon sites in Ica, Pisco, Chíncha, Cañete, or the Paracas Peninsula" (Silverman 1991:401).

Nevertheless, quite a few recent surveys and excavations in the Nasca region have identified occupations dating to the Early Horizon (see Browne 1992; Browne and Baraybar 1988; Mejía Xesspe 1972, 1976; Reindel et al. 1999; Schreiber 1990, 1991; Schreiber and Isla 1997; Silverman 1991:367-375, 1994). Most frequently, these sites have dated to Early Horizon (EH) epochs 8, 9, and 10, as well as Early Intermediate Period epoch 1.

Massey found earlier Ocucaje material, dating to phase 3, in Nasca, however, she notes that not all phases are continuously expressed thereafter (Massey 1991). She

claims that, in Ica, Ocucaje phases 3 and 8 were a time of social and economic stability. Ocucaje phase 8, in particular, saw a noted increase in Paracas habitation sites in the Ica and Nasca valleys (DeLeonardis 1997; Massey 1991). Phase 9, on the other hand, appears to have been more volatile, when intravalley competition spiked. Topará influence made its mark in the Ica Valley during phase 10. Perhaps this influx of Topará peoples into Ica encouraged some expansion farther south into the Nasca drainage.

It is thought that the initial large-scale settlement of the Nasca drainage coincided with the first Paracas population increase in Ica during EH 8. Indeed several surveys of the Nasca tributaries have documented village-sized habitation sites founded during EH 8 (Reindel et al. 1999; Silverman 1994:365-368). These communities were relatively large, suggesting “planned colonization, rather than gradual occupation by single families” (Schreiber and Lancho Rojas 2003:13). Schreiber and Lancho Rojas (2003:13) refer to this period of colonization in the southern Nasca tributaries as the Puntilla Period (400-200 B.C.), after a large site which possessed a substantial Paracas occupation. They employ the term Montana Period (200 B.C. – A.D. 1) to denote the subsequent phase, traditionally known as EH 9/10 and Nasca 1. They chose to compound the epochs under one inclusive name, Montana, because their corresponding ceramic phases often co-occur at sites around this time (Schreiber and Lancho Rojas 2003:14). This period displays a general trend toward continued population growth and frontier expansion, perhaps spurred on by the Topará intrusion into Ica.

Schreiber and Lancho Rojas (2003:14), as well as Silverman (1994:371), have noted that Ocucaje phase 10 materials are always found in association with Nasca 1 ceramics, but the reverse is not always true of Nasca 1 ceramics on Early Intermediate

Period (EIP) epoch 1 sites. Several single component EIP 1 habitation sites have been identified, and they tend to be situated in defensible locations. However, by the end of EIP 1, nearly all Montana Period sites were abandoned (Schreiber and Lancho Rojas 2003:14). The establishment of completely new sites in the next periods marks the florescence of the Nasca cult.

### **Silverman's Research on Tajo**

A survey in the Ingenio and middle Grande valleys in the northern Nasca drainage conducted by Silverman (1994) revealed two to three dozen sites with Early Horizon components. The majority of the Early Horizon Paracas-like ceramics she observed dated to the later Ocucaje phases 8, 9 and 10. The material included polychrome, incised, resin-painted wares, resist (negative) sherds, Ocucaje phase 8 red-rimmed bowls, and some limited Oculate Being iconography (Silverman 1994:367). Silverman notes, however, that fancy wares were rarely encountered, while utilitarian bowls identical to Strong's abounded on these sites (Silverman 1991:405).

Silverman (1994) also encountered ceramics that she believes constitute a new style, which she coined *Tajo*. Tajo pottery was found in isolation and in association with diagnostic Paracas pottery (Silverman 1994:369). Silverman believes Tajo ceramics to be recognizably analogous, while differing distinctly enough from the Ocucaje sequence, to consider them discrete. Some other researchers, however, feel this distinction is unwarranted, and Tajo rather belongs to the category of Paracas plainware (Van Gijsegheem 2005, personal communication).

Tajo pottery, as described by Silverman (1994), is generally brown in color (Munsell 5YR5/3-4) with a micaceous paste and subangular inclusions. Vessels are unslipped or self-slipped with matte surfaces. Vessel shapes include neckless ollas (Figure 4.1a-c), jars with tall or everted necks (Figure 4.1d-e), short-collared jars (Figure 4.1f-g), bowls (Figure 4.1h-i), and bulbous vases (Figure 4.1j-k). While the majority of the pottery is plainware, decorative techniques include appliqué fillets and protuberances (Figure 4.2a-d), fingernail indentations (Figure 4.2e), incised and stamped lines (Figure 4.2g-h), combinations of incisions, punctate designs, and stamped dots and circles (Figure 4.2i-o), and pattern burnishing. Characteristic handles include flat semicircular handles (Figure 4.3a), as well as braided, two-coiled (Figure 4.3b), twisted (Figure 4.3c), and single handles (Figure 4.4d) (Silverman 1994:368).

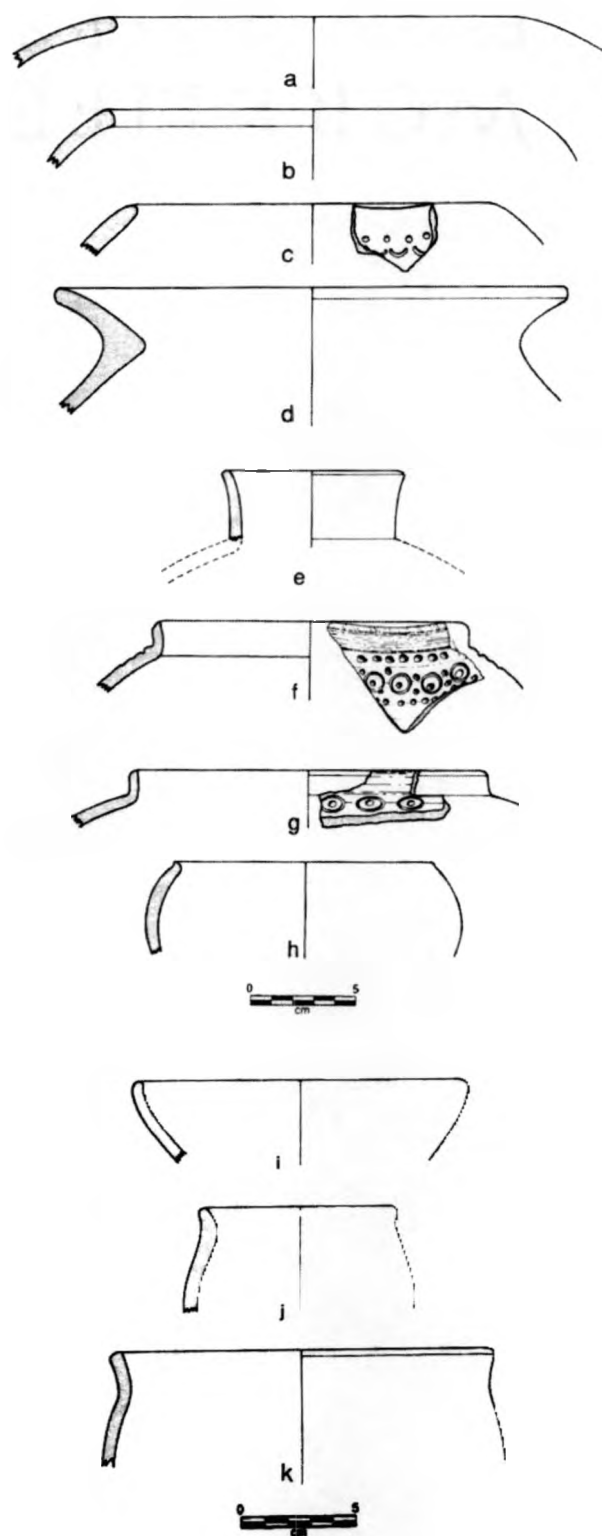
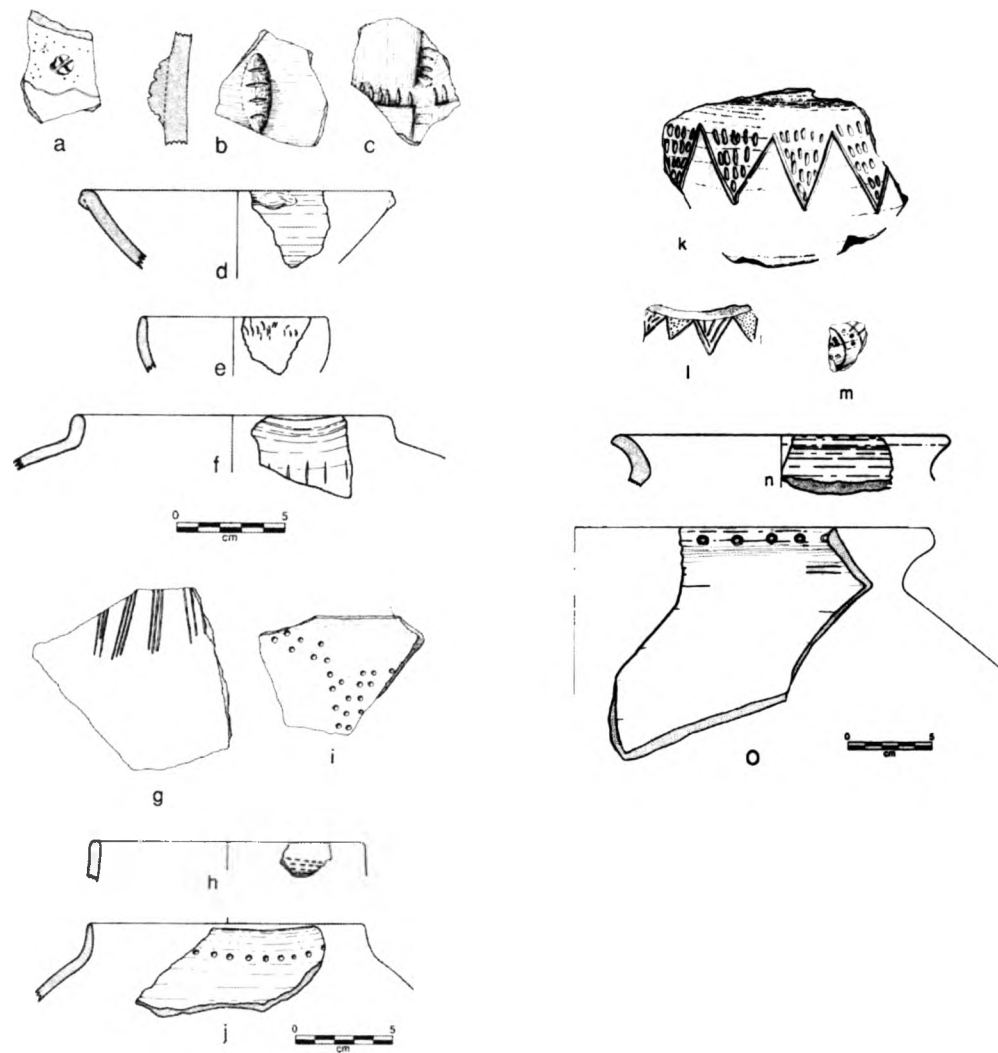
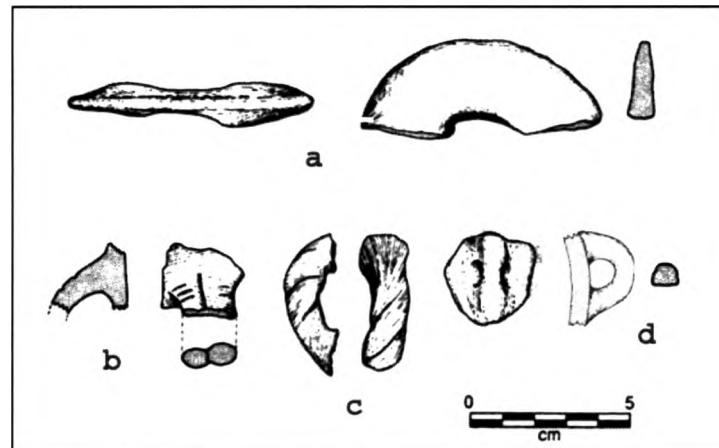


Figure 4.1. Tajo vessel shapes. (Silverman 1994:Figure 7)



**Figure 4.2. Tajo decorative styles.** (Silverman 1994:Figure 8)



**Figure 4.3. Tajo handles.** (Silverman 1994:Figure 9)

Stratigraphic association shows that Tajo dates to the late Early Horizon (Ocucaje phases 8 through 10). Silverman (1994:369) notes a resemblance between Tajo and Janabarriu phase ceramics from Chavín de Huantar, namely the stamped dots and circle designs, and other materials from the eastern highlands of Ayacucho, and Acarí to the south. This wide range suggests the inclusion of Tajo in a widespread Early Horizon ceramic tradition.

Silverman further argues that the Paracas culture was intrusive into the Río Grande de Nasca drainage, where the Tajo culture was already elaborated. It is her opinion that the Paracas-Nasca transition first occurred not in the Río Grande de Nasca Valley but in the Ica Valley, where the fine Paracas wares are more commonly found. She suggests the Paracas-like wares in the Nasca region were products of imitation or importation. She also proposes that this trade was a two-way interaction. While Nasca selectively borrowed Paracas fineware, the Paracas culture incorporated the Tajo style into its plainware tradition (Silverman 1994:369-370). It is true that some Ocucaje phase



8 wares and material described by Silverman as Tajo are for the most part indistinguishable. But it has not been definitely proven whether this style originated with Paracas and was more heavily adopted in Nasca than the fineware counterpart, or if Tajo was a local Nasca innovation that was absorbed into the Paracas-Ocucaje repertoire. Either way, the Tajo style is thought to date to the EH epochs 8, 9 and 10.

### **La Puntilla**

Excavation at the site of La Puntilla by Van Gijseghem and de la Torre Zevallos revealed the largest late Early Horizon occupation in the Nasca drainage to date (Van Gijseghem 2004:152). The settlement is located on a large hill between the Aja and Tierras Blancas river valleys. Three hectares of hillside terraces and stone architecture comprise the site (Van Gijseghem 2004:153).

La Puntilla dates to the Paracas-Nasca transition. The majority of the ceramics Van Gijseghem recovered fall into three types: Ocucaje phase 8, a particular type of polished blackware previously associated with phase 10, and Nasca 1 material (see Figure 4.4 for Nasca 1 bowl sherds and Figure 4.5 for a blackware image). There is a paucity of Ocucaje phase 9 and any other phase 10 material. Van Gijseghem points out that the blackware bears closer stylistic and technological resemblance to the Nasca 1 tradition than to other phase 10 material. In addition, the blackware was found in abundance at Cahuachi during excavations by Strong (Strong 1957; Van Gijseghem 2004). It is Van Gijseghem's (2004, 2006) speculation that the blackware and Nasca 1 polychrome vessels are variants of the same tradition. Therefore, La Puntilla demonstrated a different chronology than that of Ica. Based on the spatial and

stratigraphic contexts of his finds, Van Gijseghem interprets that two distinct populations, Puntilla (Paracas/Ocucaje phase 8) and Montana (Ocucaje phase 10 and Nasca 1), existed and overlapped temporally at the site of La Puntilla (Van Gijseghem 2004:277). He hypothesizes that, during the Puntilla phase (EH 8), a wave of the Paracas population migrated into the Nasca Valley, possibly from the Ica Valley (Van Gijseghem 2004:60), where populations were spiking, and civic-ceremonial centers were constructed in limited, non-irrigable areas (Cook 1999:84). These new Nasca inhabitants held on to their familiar customs and icons of power and prestige, demonstrated by their Ocucaje phase 8 Paracas fineware. During EH 9, 10 and EIP 1, they were followed by smaller streams of immigrants, who were less inclined to acquiesce to the local ruling elites. Influenced by a changing religious ideology and sociopolitical upheaval created by the emerging system centering around Cahuachi, a new culture developed during the Montana phase (EH 10 and EIP 1, 200 B.C. – A.D. 1). These two groups coexisted for a brief amount of time, and then the Paracas culture was supplanted by the growing Proto-Nasca society (Van Gijseghem 2004, 2006).



**Figure 4.4. Montana (Nasca 1) oxidized bowl sherds.**  
(Image provided by Hendrik Van Gijseghem.)



**Figure 4.5. Montana (Nasca 1) blackware bowl sherd.**  
(Image provided by Hendrik Van Gijseghem.)

Van Gijseghem examined the ceramic assemblage for vessel shape, proposed function, and manufacturing technology. His organization of the vessel assemblage is summarized in Figure 4.6. Additionally, Van Gijseghem conducted Instrumental Neutron Activation Analysis (INAA) on select sherds from the La Puntilla assemblage. The chemical analyses suggest that the plainware and grater bowls were manufactured locally, whereas classic Paracas polychrome wares were imported (Van Gijseghem 2004:285-286). Also, the reduced and oxidized variants of the Montana bowls were not chemically related (Van Gijseghem 2004:286). Further INAA studies by Vaughn and Van Gijseghem (2007) indicate that the Montana blackwares share chemical composition with the Early Nasca polychrome pottery found at other domestic sites in the southern Nasca drainage. The authors argue that the vessels are chemically related because they all originated from Cahuachi.

- I. Serving Vessels
  - A. Puntilla Period Bowls
    - 1. Puntilla Grater Bowls
    - 2. Puntilla Plainware Bowls
    - 3. Puntilla Incised Lip Bowls
    - 4. Puntilla Incised Simple Bowls
    - 5. Puntilla Incised Complex Bowls
    - 6. Puntilla Plain Straight Bowls
    - 7. Puntilla Plain Cup
  - B. Montana Period Bowls
    - 1. Montana Convex Bowls
      - a. Montana Convex Reduced Bowls
      - b. Montana Convex Oxidized Bowls
    - 2. Montana Open Bowls
      - a. Montana Open Reduced Bowls
      - b. Montana Open Oxidized Bowls
- II. Plainware Closed Vessels
  - A. Restricted Collared Jar
    - 1. Montana Restricted Collared Jar
  - B. Unrestricted Collared Jar
  - C. Neckless Jar
    - 1. Small Neckless Cup
  - D. Necked Jar
- III. Other types

**Figure 4.6. Hendrik Van Gijseghem's vessel assemblage from La Puntilla (2004).**

## La Tiza

Across the Aja River valley to the north from La Puntilla, lays the site of La Tiza. First documented by Katherina Schreiber in 1989, the site was given the name La Tiza, or chalk, after this area of the valley possessing a large strata of chalk like material in the river cut. Although originally thought to be an extensive Late Intermediate Period site due to surface finds, archaeological investigations by Christina Conlee have revealed a rich history of domestic occupation at the site from the Early Horizon through the Late Horizon (Conlee and Noriega 2004, 2005, 2006). La Tiza was surveyed and mapped by Conlee in 2002 and subsequently excavated in 2004, 2005, and 2006.

Conlee divided the site into five sectors, which roughly correspond to the different periods of habitation (see Figure 4.7 for a site map). Occupation at the site shifted westward over time. There appears to have been a preference to build adjacent to older occupations rather than on top of them. The oldest evidence of habitation at the site can be found in its easternmost portion. Sector I and the lower elevations of Sector II have produced late Early Horizon and Early Intermediate Period material. Sectors II and III are predominately composed of Early and Middle Nasca occupations, and Sectors IV and V to the west date to the Middle Horizon, Late Intermediate Period, and Late Horizon (Conlee 2004, 2005a, 2005b).



La Tiza is within visual reach of La Puntilla and possesses a stunning panorama of the river valley and the white sand mountain Cerro Blanco. The site is situated along the foothills sloping toward the river. The elevation of the site undulates perpendicular to the slope due to naturally occurring ridges. Sector I presents some interesting elements for comparison regarding its situational environment and architectural form. Most late Early Horizon settlements are found along low hills near valley bottoms and are defensible from all sides (Schreiber and Lancho Rojas 2003:14; Van Gijseghem 2002). The early occupations of Sector I and II are located on the lower, flatter slopes of the hill. This location would have placed the inhabitants closer to water and fields. However, this proximity compromised the defensibility of the site, leaving it exposed on at least one side. A related characteristic of Sector I is its possession of several piles of sling stones identified along the eastern side of the ridge dividing Sectors I and II. The use of slings and sling stones was the most common type of warfare in the Andes. Perhaps the presence of the sling stones at La Tiza reflect an element of - or perceived need for - defense during the early occupation of the site. See Figure 4.8 for a map of Sectors I and II.



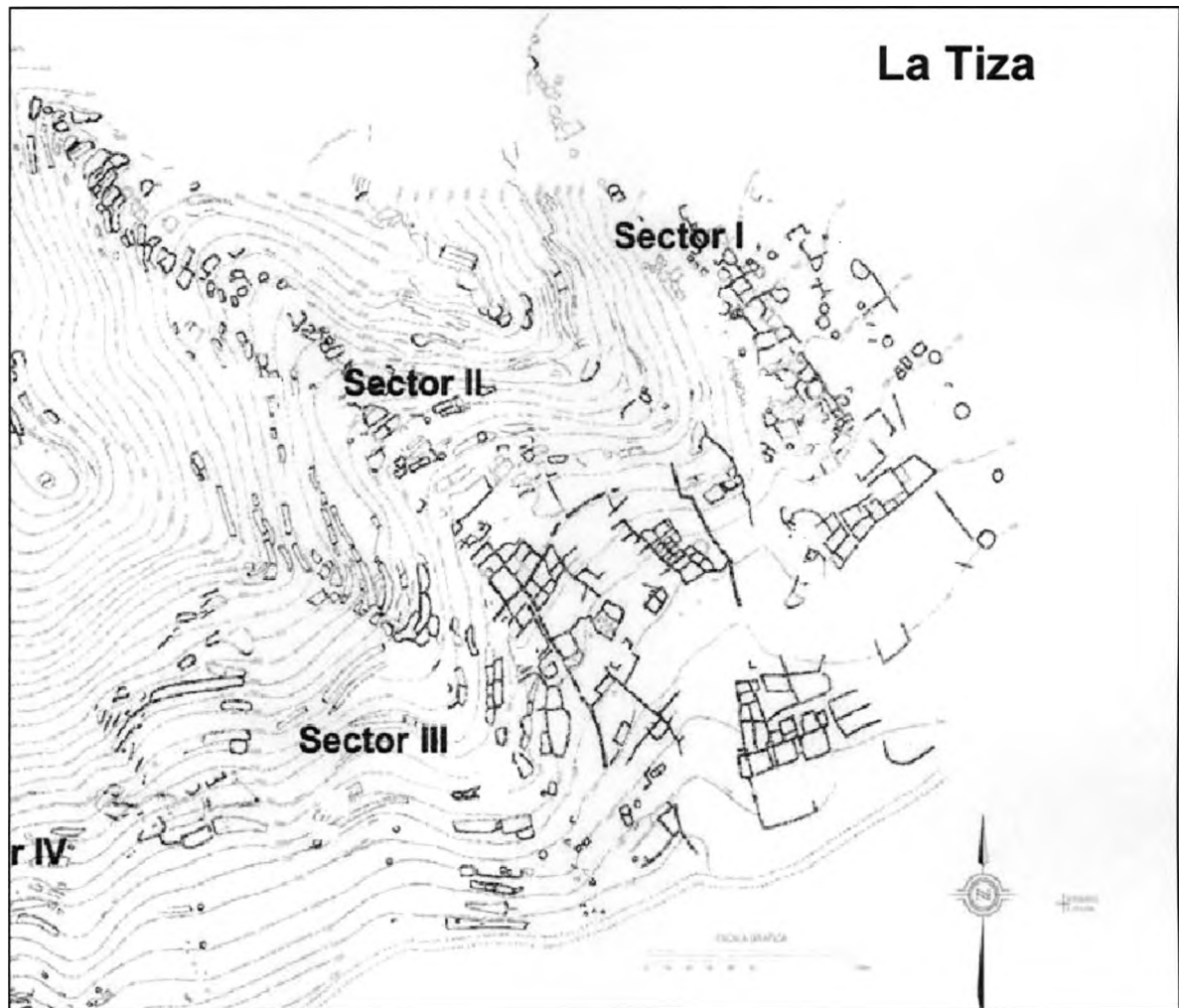


Figure 4.8. Zoomed portion of La Tiza site map with Sector I and lower elevations of Sector II.

The architecture of Sector I is indicative of a Montana Period occupation (200 B.C. – A.D. 1) of the site. Settlement pattern studies have found that these and Nasca 1 sites tend to be composed of agglutinated compounds, while later sites more often contain single, free-standing structures (Silverman 2002; Van Gijseghem 2004:156). This pattern does vary, however, and it is evident that structures were built with geotopic limitations in mind. For instance, La Puntilla dates to the Paracas-Nasca interface, but rather than large multi-room compounds, the majority of its architecture is small, single, crescent-shaped structures, often utilizing the natural face of the hill as one wall and constructed along contiguous and non-contiguous terraces (Van Gijseghem 2004:153). It is important to note though that larger-scale construction would have required a much larger investment of time and energy to overcome the restricted width of the terraces due to the steep slope of the hillside. Other Early Nasca sites located on less restrictive, flatter plains, like the village site of Marcaya, do tend to possess more agglutinated habitation areas (Vaughn 2000). It appears that various factors, including vicinity to water, perceived need for defense, visual attractiveness and perhaps sacred elements, all factored in to their decision-making when selecting settlement locations and construction styles.

Sector I of La Tiza is composed of rectangular and square connected constructions. These compounds usually contain one large room with a several smaller rooms attached. The walls are constructed of angular fieldstone with no visible mortar. Corners are rounded, and the doorways are difficult to distinguish. Sector I contains another note-worthy architectural component. Adjacent to the crest dividing Sectors I and II, a series of circular storage pits was constructed. They range from 1 to 2 meters in

diameter and were also made of local fieldstone. The clustered nature of them outside the confines of the domestic structures suggests they were shared by the community members. They are located at the base of the ridge on top of which the sling stones were found. This would have made the food stores significantly more defensible. Potential robbers would have to approach the base of the ridge to reach the pits, making the thieves easier targets for the La Tiza defenders armed with stone missiles above.

The lower elevation and less-protected location of Sector I have led to greater exposure and degradation of its architecture. While many of the walls are still identifiable, much of what is above the surface has crumbled and sustained notable damage. Structures are most easily identifiable by the contrast in color of the surface. Areas within structures tend to have less surface coverage of rock and are sandier and lighter in color.

Like most archaeological sites in Peru, looter pits occur frequently at La Tiza but are typically recognizable. Areas with looter pits were excluded from excavation when possible. However, their incredible abundance did not always allow for such discrimination. While many of the domestic structures contained one to several pits, their relatively large surface areas still allowed for the majority of their deposits to remain intact. Tombs, on the other hand, are significantly smaller, circular in shape, and easily distinguished by looters seeking their interred fineware grave goods. Disturbance to the tombs is much more damaging to their contents and respective proveniences.

Structures within Sector I were identified and mapped during Proyecto La Tiza 2002. In 2004, five structures were selected for the testing of 2 x 2 meter excavation units (Conlee and Noriega 2004). From these, Nasca and late Early Horizon material was

recovered, suggesting the antiquity of the sector; however, the majority of the latter was plainware and non-diagnostic in nature. The further investigations of Sector I in 2005 are the focus of this research, which was aimed at recovering more data that could elucidate the cultural identity of the site's early settlers and their lifeways.

## **CHAPTER 5**

### **METHODS AND EXCAVATION RESULTS**

#### **Methodology**

Excavation locations were selected based on good superficial integrity of the architecture and structural design characteristics distinct from those previously excavated. When determining the size of excavation units, smaller structures were excavated in their entirety. In the case of larger structures, an area demonstrating the least disturbance was chosen. Units were excavated by natural stratigraphic layers until the deposits were sterile of cultural material. The surface layer, containing collapsed material and wall fall, was named "A." Successive natural or cultural layers were given subsequent letters. Plan views were drawn and photographs were taken of each level. Level forms recorded features and artifacts. Profiles were drawn after reaching sterile soil. Personal journals were also kept by all excavators to document daily activities and findings.

The soil was sifted using ¼ inch screens, and all material was collected and separated according to levels. Features were screened using a finer mesh of 1/8 inch. The material was brought to the laboratory for cleaning and analysis. Ceramics and lithics were washed with water, and organic material was dry-cleaned with brushes. Ceramic material was divided into diagnostic and non-diagnostic categories. Each

diagnostic ceramic sherd was given a unique catalog number, labeled, and photographed. The cataloging system employed included the unit, level, and unique artifact number. All materials were documented, counted (according to Minimum Number of Individuals for malacological and faunal material), weighed, and boxed by analytical category, while maintaining level and unit divisions.

All projectile points and a portion of the diagnostic ceramic sherds were drawn. Because of time constraints, all diagnostic sherds could not be drawn. Those selected for drawing included rim sherds that were large enough to provide an estimate of the diameter and vessel shape, and body sherds that displayed decorative preservation and/or unique characteristics. These sherds also underwent detailed analysis of their shape, width, paste, temper, color, construction treatment, firing technique, and decoration.

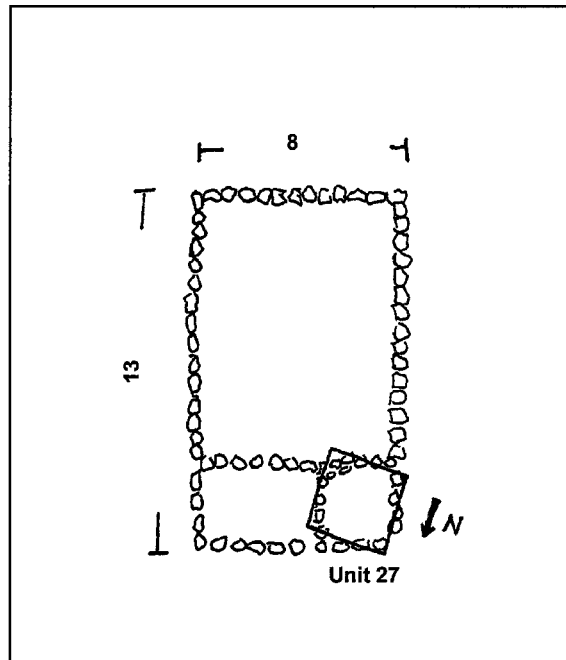
### **Excavation Units**

#### *Sector I, Structure I-A, Unit 27*

The 2004 investigations of the multi-room compounds in Sector I were limited to 2 x 2 meter test units that were excavated in areas of the larger rooms. Structure I-A, one of two small rooms within a multi-room compound, was selected for excavation in 2005 in an attempt to reveal activities that occurred in the confined space. The compound is rectangular in shape and measures 13 x 8 meters. It appeared to possess one large room with two smaller rooms at its northern extent. Structure I-A is the room situated in the northwestern corner of the compound (Figure 5.1). Its walls were in a greater state of preservation than the adjacent room, and it displayed no evidence of disturbance. The southern wall was in the best condition, with a height of 40 cm and width of 75 cm.

Medium-sized local stone, averaging 14 cm in diameter, comprised the mortar-less wall.

Unit 27 was 3 x 3 meters and incorporated all four walls of Structure I-A.



**Figure 5.1. Structure I-A.**  
(Unit 27: room attached to a larger compound)

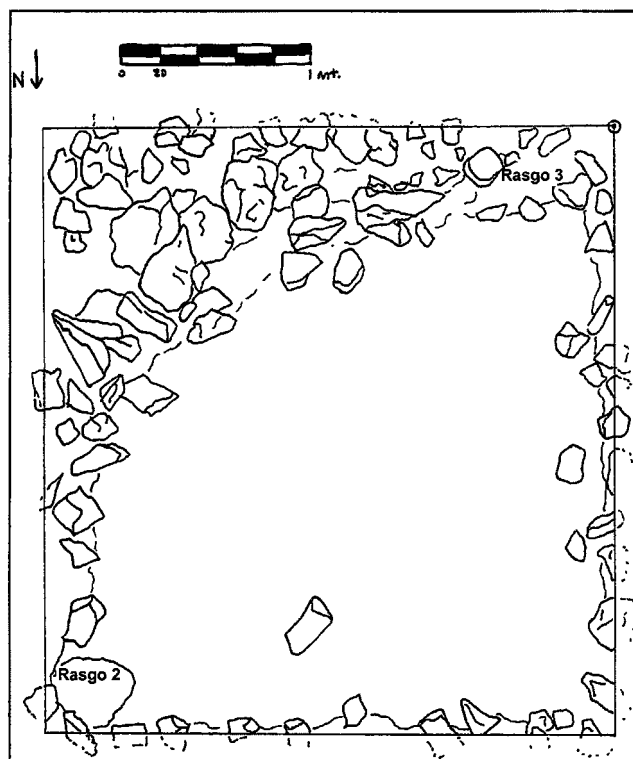
*Level A.* The surface layer was composed of a loose, brown sand (10YR 5/3 on the Munsell color chart). Material recovered included an andesite flake, Late Intermediate Period and Nasca ceramic sherds, faunal bone, and wood. An accumulation of ash containing small pieces of charcoal was encountered near the eastern wall and documented as Rasgo (Feature) 1.

*Level B.* A thin, firmer compaction of a more silty sediment indicated a new level distinction. The compaction and the loose sediment below were lighter in color (10YR 6/3 pale brown) with a more silty texture than Level A. Level B contained Nasca and late Early Horizon ceramic sherds, an obsidian flake, grinding stone, bone, and wood. In the northeastern corner, a large quantity of charcoal was unearthed (Rasgo 2), however, it did

not appear to be a permanent hearth feature. In the southwestern corner, a feature (Rasgo 3) produced small amounts of charcoal, chalk, and camelid coprolites.

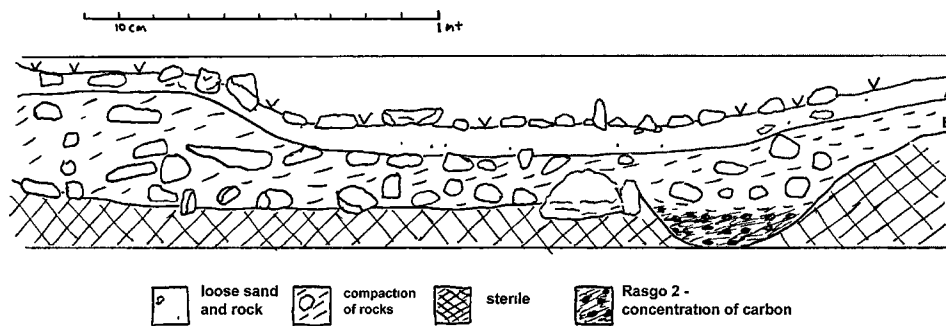
*Level C.* Level C was composed of the same texture and color of sediment as level B but with a great concentration of rock fill throughout the unit. It contained only one non-diagnostic ceramic sherd, a ground stone, and a malacological artifact.

Based on the features and materials recovered from Unit 27, Structure I-A appears to have been an attached room of a larger domestic structure. This room was perhaps utilized for various, unrestricted domestic activities. The charcoal deposit from Rasgo 2 and the ground stone (a probable *mano*) suggest some cooking activities may have occurred in this area, however, the lack of more substantial botanical remains make this claim less certain. See Figures 5.2 for a plan view map and Figure 5.3 for a profile of Unit 27.



**Figure 5.2. Plan view map of Structure I-A, Unit 27, Level B.**

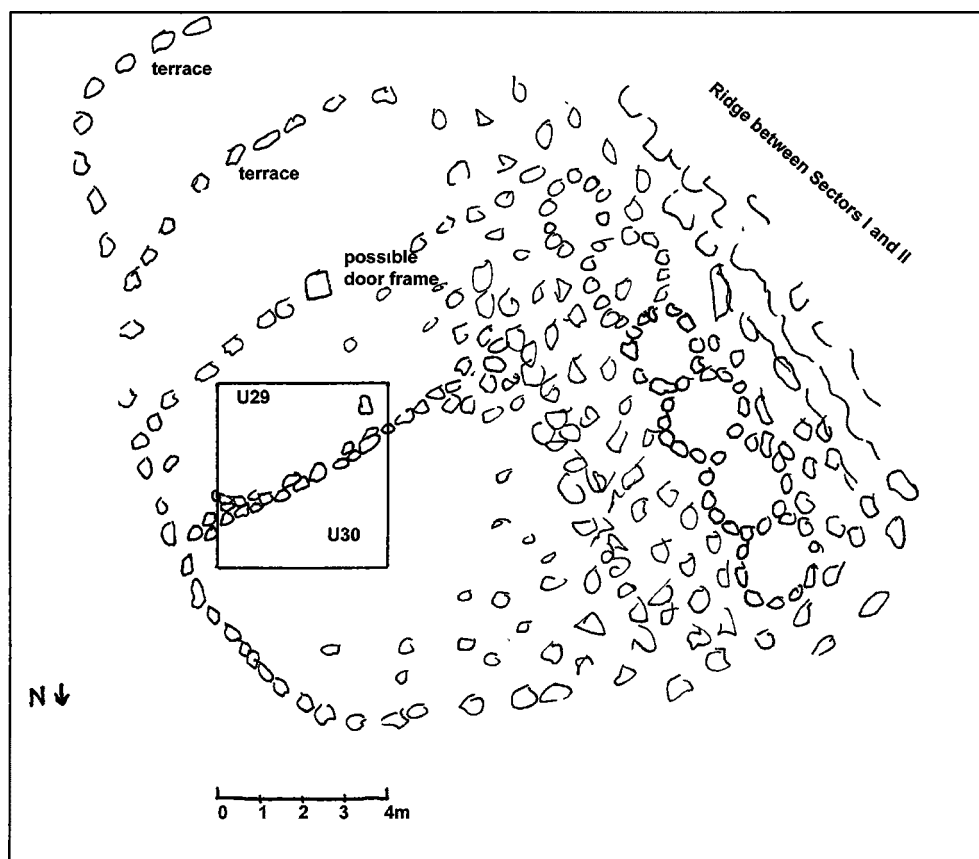




**Figure 5.3. Unit 27 north profile.**

*Sector I, Structure I-B, Units 29 and 30*

Units 29 and 30 were excavated within Structure I-B, a 15 x 8 meter D-shaped structure. The southern wall of Structure I-B contains a large rock standing in a vertical position, which could be part of a door frame, however, it lacks a counterpart. There are two terraces to the south of the structure. To the west of Structure I-B are six circular, connected structures, probably communal storage pits, with diameters of approximately 1.5 meters each. They form a line running in a general SE-NW direction and are adjacent to the lower slopes of the ridge dividing Sectors I and II. It is atop this ridge that the sling stones were found. See Figure 5.4 for a map of Structure I-B, Units 29 and 30, and the surrounding area.



**Figure 5.4. Structure I-B, Units 29 and 30, and the surrounding area.**

Structure I-B possesses an interior standing wall running in a SW- NE direction. Medium-sized angular rocks with no mortar comprise the wall. The combined units formed a 4 x 4 meter square, incorporating the inner wall in an attempt to capture possible variations in the activities that may have occurred in the two rooms. Unit 29 was the portion of the excavation square south of the wall, and Unit 30 was the area to its north.

*Level A.* Level A of both units contained a pale brown sand (10 YR 6/3) with small angular stones. This superficial layer possessed little cultural material, which

consisted of shell and ceramics sherds, one of which from Unit 30 appeared to be from the late Early Horizon.

*Level B.* Level B was composed of a compact layer of sandy sediment found in both units. The color varied slightly from a light gray (10 YR 7/2) in Unit 29 to a light brownish gray (2.5 Y 6/2) in Unit 30. A few ceramic artifacts, including a Nasca 1 vessel sherd and a pan pipe fragment from Unit 30, were found within this level.

*Level C.* This level was distinguished for its layer of rock fill. Both units contained pale brown (10 YR 6/3) sandy sediment. Unit 29 contained many medium-sized fieldstones with loose sand below, followed by a gravelly layer. Unit 30 contained a more consistent layer of smaller-sized stones and gravel. Both units contained lithic artifacts in this level. A projectile point made from obsidian was recovered from Unit 29. Unit 30 possessed a quartzite flake, obsidian projectile point, a ground stone and grinding stone made from river cobbles. Unit 29 also contained late Early Horizon and Nasca 1 ceramic sherds, unworked faunal bone, and small accumulations of ash and charcoal throughout the unit. After the gravelly layer produced no more cultural material, the units were considered to be sterile.

Structure I-B appears to be domestic in nature. Sterile rock fill was used to create the flat terrace on which it was constructed, probably because this location nearer to the ridge has a steeper slope than the flatter ground to the southeast where the majority of the Sector I domestic structures are located. Being backed by the ridge, which is topped with sling stones, makes this structure more defensible. Also, the close proximity to the storage pits suggests its residents may have monitored and protected the stores. However, because the structure was made of the same materials and did not contain

greater food quantities or fine ceramics, there is no indication that the residents controlled the distribution of the food stores or possessed any differential access to them.

Units 29 and 30 within Structure I-B both indicate a domestic use of the structure. The function of the interior wall is unclear. The artifacts recovered from both sides do not hint at any restricted use of the areas or particular activities reserved for their spaces.

*Sector I, Structure I-C, Unit 31*

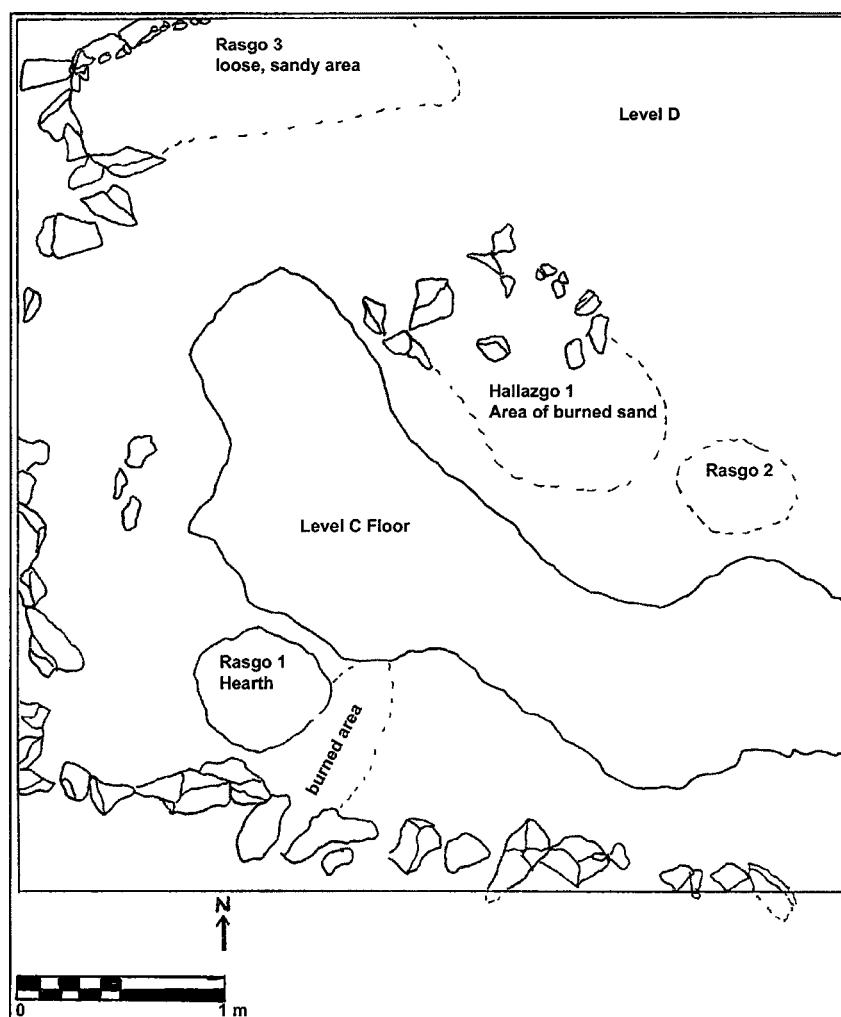
Unit 31 was a 4 x 4 meter excavation area located in the southwestern corner of a large quadrangular structure. The southern and western boundaries of the unit incorporated the respective walls of the structure. The walls were in a state of deterioration and were largely removed with their surrounding sediment during the process of excavation. The surface of the unit was relatively flat, displayed no evidence of looting, and contained an abundance of ceramic fragments.

*Level A.* The superficial layer contained a very fine, loose sand, pale brown in color (10 YR 7/3), and small and medium-sized angular stones. Cultural material included Early Horizon, Early Intermediate, and Late Intermediate ceramic sherds, a spindle whorl fragment, and malacological material.

*Level B.* Level B was identified by the presence of a sediment compaction. While it presented the same color (10 YR 7/3 very pale brown) and fine texture, the sand in this layer changed from loose to semi-compact and contained small angular rocks. Faunal bone, malacological, and ceramic material was recovered. Cultural affiliations included late Early Horizon, Early Intermediate Period, Middle Horizon and Late Intermediate Period.

*Level C.* The next level was distinguished by what appeared to be a cultural floor. The thin, compacted clay layer contained small gravels and was light gray in color (2.5 Y 7/2). Cultural material included Early Horizon ceramics.

*Level D.* Level D presented a semi-compact, sandy sediment containing fine gravels. It was generally pale brown (10 YR 6/3) with burned areas very dark gray in color (5 YR 5/1). Several features were present in this level. Rasgos 1 and 2 were circular burned areas, or possible hearths, containing a large quantity of ash and small pieces of wood charcoal. Hallazgo (Feature) 1, a probable hearth, possessed similar characteristics but also contained medium-sized angular rocks positioned in a ring. Rasgo 3 was recorded as an area of sand in the northwestern corner of the unit. Its color (10 YR 6/2 light brownish gray) and consistency is indicative of sand from the riverbed. The cultural affiliation of the ceramic material from level D was Early Horizon and Nasca 1. Sterile sediment was encountered below. See Figure 5.5 for a plan view map of this unit.

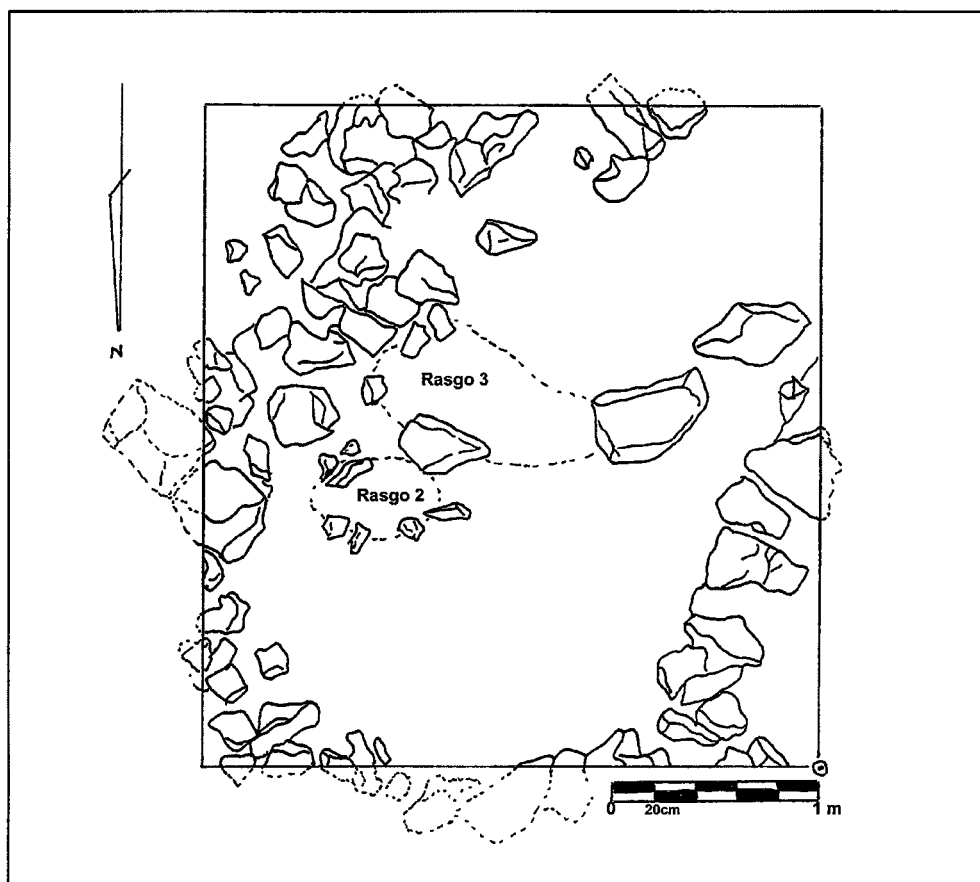


**Figure 5.5. Plan view map of Structure I-C, Unit 31, Level C and D.**

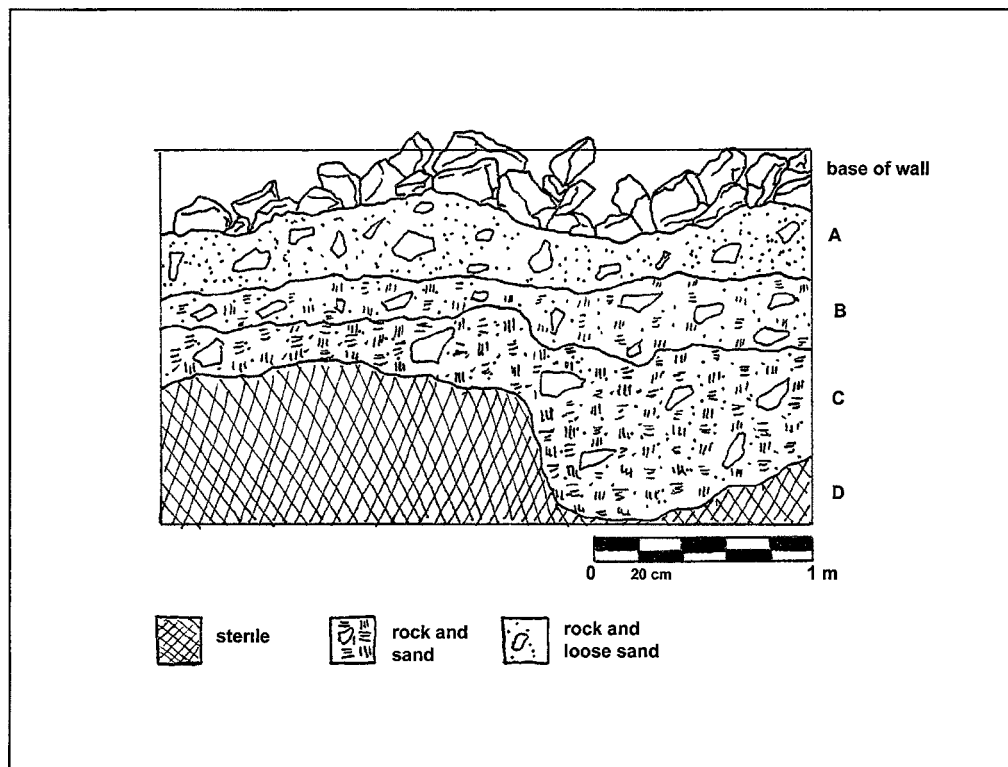
Structure I-C also appears domestic in nature. The possible hearth features indicate cooking activities occurring within this southwestern corner of the structure. The quantity of these features suggests that perhaps this structure was inhabited for an extended period of time or housed multiple families or generations of the same family.

*Sector II, Structure II-F, Unit 28*

Excavation of a structure located at the foot of Sector II also produced early cultural material. Structure II-F was semi-circular in shape, 2.6 x 2.2 meters, with walls constructed of small to medium-sized angular fieldstones (Figure 5.6 and 5.7). Like the other structures, it also appears to have functioned domestically. It contained ceramic sherds dating to the Late Intermediate Period, Early Intermediate Period, and Early Horizon in all three excavated levels. Many sherds of the latter period displayed incised designs congruent with the style defined as Tajo by Silverman. Some other material also appeared related to the late Early Horizon and EIP 1. They were included in the present study for comparison with the Sector I ceramics.



**Figure 5.6. Plan view map of Structure II-F, Unit 28, Capa C.**



**Figure 5.7. Unit 28 north profile.**

### **Conclusions**

Structures I-A, I-B, I-C, and II-F all contained evidence of an Early Horizon and/or Nasca 1 occupation. Excavation Units 27, 28, 29, 30, and 31 within the interiors of the structures contained similar cultural materials from all: small quantities of lithic debitage, utilitarian ceramic sherds, and limited faunal bone, malacological and botanical remains. These findings indicate domestic uses of the structures and activities related to meal preparation and daily life.



## **CHAPTER 6**

### **CERAMIC ANALYSIS**

Units 27, 29, 30 and 31 from Sector I and Unit 28 from Sector II produced ceramic artifacts including vessel sherds and a variety of ceramic tools. Excluding the few tools, the ceramic assemblage was entirely made up of broken pottery sherds. The vessel sherds were divided into the categories of diagnostic and non-diagnostic pottery. Diagnostic sherds included rims, body sherds bearing decoration, and handles. No base sherds were present.

The number of vessels represented was quantified using a Minimum Vessel Count (MVC), in which a discrete rim sherd denotes a complete vessel. Because it cannot be concluded whether handles or body sherds were part of a vessel already accounted for in the rim calculation, they were not considered in the MVC. The vessel count then may be more conservative than the unknown actual vessel quantity.

As the goal of this study was the elucidation of the earliest residents of La Tiza, I focused my attention on the earliest pottery present: the Early Horizon and Nasca 1 ceramics. Temporally, these ceramics represent a transitional time and a cultural shift. The differential ceramic styles could possibly indicate two distinct populations inhabiting the site.

The Early Horizon and Nasca 1 pottery constituted 56 percent ( $N = 48$ ) of the entire ceramic assemblage. Of these 48 sherds, the MVC was 30. The remaining 18 sherds were made up of 13 decorated body sherds and five handles. Besides Early Horizon and Nasca 1 pottery, other recovered sherds dated to later Nasca phases and the Late Intermediate Period, and were mostly confined to the first stratigraphic level. Unit 28, however, was unique. It contained Early Horizon, Nasca, and LIP sherds in all three excavated levels. Although this unit has probably undergone some mixing, I felt the material should be included in the present study because it possessed such a great amount of diagnostic Early Horizon sherds.

I chose not to classify the assemblage into fineware and plainware. The application of these terms is not consistent and has been used to describe both wares that are decorated versus undecorated, and wares that are elaborate versus simple. Of the Early Nasca assemblage at Marcaya, all bowls were fineware - made of a fine paste and painted, while all storage vessels were plainware - made of a thicker, coarser paste and undecorated, with the exception of *cantaros* (Vaughn 2000:289). Vaughn (2000:289) described these *cantaros* as “vessels bearing thick walls and coarse fabric...crudely decorated with simple paint splatters,” but chose to categorize them as fineware because of their possession of decoration. In contrast, while Van Gijseghem did not classify fineware and plainware separately, he (2004:Figure 5.24) offered an illustration of “incised plainware,” or storage vessels made of a paste consistent with plainware yet possessing incised decoration. Van Gijseghem (2005, personal communication) further explained that he considered Silverman’s incised Tajo wares to be Paracas plainware. Such distinctions are understandable when considering assemblages such as his, which

display a wide range of manufacturing quality and decorative technique. The La Tiza assemblage, on the other hand, is consistently of a lesser quality and contains none of the highly decorated Paracas wares. There is, however, a use of monochrome painting and incising, which would probably be considered plainware by the La Puntilla standard, but could be deemed fineware in relation to the rest of the La Tiza assemblage. Therefore, to avoid the ambiguity of the terms *fineware* and *plainware*, I instead employed the terms *decorated* and *undecorated*.

Vessels are often parsed into two functional types: serving and storage/cooking. The former is described as an open dish, such as a bowl or plate, while the latter is considered to be of a constricted shape, more conducive to cooking or storage. Further distinguishing whether a constricted vessel was used for cooking or storage can be difficult. The presence of sooting on the vessel exterior is a good indication that the vessel was heated under a fire for food preparation. However, it does not exclude the possibility that the vessel was also used for storage. An ideal method for determining vessel function is the identification of the substances which it held. This can be achieved by submitting samples for various chemical organic residue analyses; however, such analyses were beyond the scope of the present study.

Rather than using the aforementioned functional terms, I divided the vessels into the morphological classes of *open* and *constricted* forms; however, a discussion of the probable functions of these vessels is included in the form/function analysis. As no plates were recovered, the only type of open vessel form present was the bowl. The constricted vessels, on the other hand, varied significantly. Therefore, I further

subdivided this class into several different jar types based on shape, technology, and style. These subcategories will be discussed in more detail in the next section.

All of the EH/Nasca 1 pottery appeared to be utilitarian in nature. Without diagnostic decorative styles to indicate a particular ceramic phase, utilitarian pottery can be particularly difficult to link into a seriation scheme. Many of the cooking/storage vessels served versatile purposes whose functions span multiple time periods. Additionally, the Early Horizon material appears to be from the later Ocucaje phases and was in association with Nasca 1 wares, suggesting some contemporaneity. Therefore, this analysis focuses more on the general morphological classes than distinguishing between the Early Horizon and Nasca 1 materials. In some cases, such discernment was not possible. However, when certain characteristics (e.g., decorative style, shape, paste, body width) allowed for temporal recognition, this information was included and discussed.

Most sherds in this assemblage were relatively small, and rim sherds contained a limited extent of the body or neck. Without the ability to approximate entire vessel forms, a deduction of the shapes was based on comparisons with previous works (e.g., DeLeonardis 1997; Menzel et al. 1964; Silverman 1994; Strong 1957; Van Gijseghem 2004; Vaughn 2000). Vessel shape could not, however, be correlated with rim diameter, unlike the restricted and unrestricted collared jars of La Puntilla, which clustered into two groups of narrower and wider rim diameters respectively (Van Gijseghem 2004:255-257). Nor could La Tiza vessel shapes be correlated with the presence/absence of decoration, such as the aforementioned Early Nasca assemblage of Marcaya, in which the

bowls were all decorated and the storage vessels undecorated (with the exception of the *cantaros*) (Vaughn 2000:289).

In this chapter I first offer an analysis of the vessel forms and suggest some possible functions. When possible I distinguish between the Early Horizon and Nasca 1 wares and describe their differences. Secondly, I discuss observed patterns in the manufacturing technology and decorative elements of the vessels. A distributional analysis of the materials is provided next, and in the final section I compare the La Tiza pottery with other local ceramic assemblages and offer some conclusions.

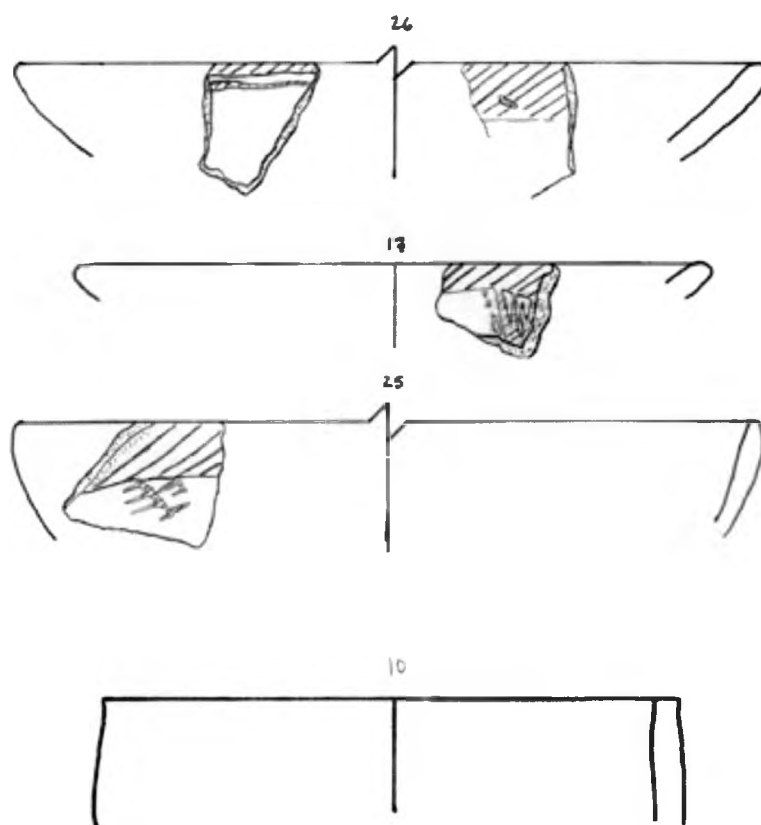
### **Form/Function Analysis**

#### *Open Vessels*

The only type of open vessel present was the bowl. Bowls are unrestricted with walls that are rounded, straight, flaring, or convex (incurving). They may or may not have basal angles. Bowls were the most common type of vessel used for the serving and consumption of foods. They range considerably in size and shape, although certain shapes can be quite indicative of distinct stylistic phases. The most common bowl shape found on Nasca 1 habitation sites is low with very convex, C-shaped walls (Silverman 1993:250), while Early Horizon bowls (Ocucaje phase 8) are usually semi-hemispherical open forms (Van Gijseghem 2004:244; see also Silverman 1994:Figure 6). However, for both time periods there is considerable overlap of these forms, as well as less common forms, which vary greatly morphologically. Additionally, the use of a red slip, especially as a rim band, was a common decorative element of both Ocucaje phase 8 and Nasca 1 wares. There are some clues though that can aid in their temporal discernment. In

general, Early Horizon bowls demonstrate less control over firing atmosphere, and less even surface treatments and pastes than Nasca 1 bowls. In fact, Nasca 1 bowls are sometimes referred to as “fine plainware” (Silverman 1993:250, quoting Menzel et al. 1964:252). But again, there tends to be a great amount of variability in technology, paste quality, and manufacturing technique in utilitarian bowls. Furthermore, stylistic change tends to catch on at a slower rate in plainware than its fineware counterpart. Therefore, there may sometimes be a lag, maintaining older forms of utility vessels, even when finewares are being modified drastically (Menzel et al. 1964).

Ten bowls (21 percent of the assemblage) were recognized with relative certainty as late Early Horizon or Nasca 1. An attempt at more temporal specificity resulted in the following, however, these dates are offered with a lesser degree of confidence: four Nasca 1 bowls, three Early Horizon bowls, and three which could not be determined. See Figures 6.1 and 6.2 for vessel drawings.



**Figure 6.1. Nasca 1 bowls.**  
(28-C-95, 28-C-101, 31-D-1, 31-D-1H)

Of the four Nasca 1 bowls, three are of a similar shape and size. They are all shallow bowls with rounded walls. Two have walls that are considerably flat and angled inward, while the others' walls are more parabolic. Their diameters range from 17 to 26 cm with an average diameter of 23 cm. Their forms are similar to Menzel, Rowe, and Dawson's shapes 20, 12, and possibly shape 5, but the lack of their lower body portions limits the ability to compare their basal angles (1964:Figure 19). They also correspond to Van Gijsegheem's *Bowl 6 Montana Open Reduced Bowls* and *Bowl 6a Montana Open Oxidized Bowls* (2000:253-254, Figures 5.15-5.19). (*Montana* refers to Ocucaje phase 10 and Nasca 1 materials, whereas *Puntilla* refers to Ocucaje phase 8.) Two of the bowls are oxidized and one is reduced, but this differential technology does not appear to correlate with any specific vessel shape. The two oxidized vessels have brown pastes, while the paste of the reduced bowl is grayish brown in color. Their body widths range from 5.2 to 6.4 mm, and their paste quality is poor with relatively large inclusions including mica, pyrite, quartz, subangular gravels, and organic material. The most important feature of this vessel type, however, is its pre-fire slip. All three vessels are slipped (two with a wash of the same clay and the other with an orange clay), and they are smoothed and burnished. In addition, a red slip is added as a band around the rim of the interior, exterior or both.

Van Gijsegheem identified these bowls as Nasca 1, but there is a possibility they may date to the late Early Horizon as well. The two flatter forms especially seem to agree more in shape with Ocucaje phase 8 bowls (see Silverman 1994:Figure 6a,b; Van Gijsegheem 2004: Figure 5.4) than typical Nasca 1 forms. However, the fact that they are evenly fired with homogenous surfaces does support their Nasca 1 assignment.



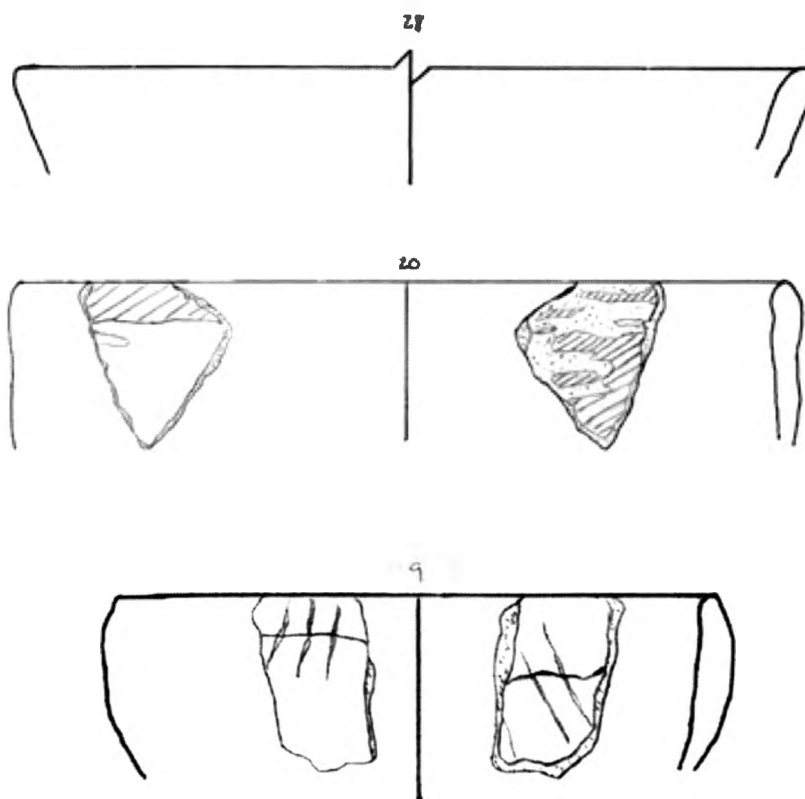
The other Nasca 1 bowl (31-D-H1-1), distinct from those above, is smaller in size with a diameter of 10 cm (Figure 6.1). It could also be considered a cup. Its sides are straight with a slightly reinforced rim, and its body width is 5.4 mm. The paste is reddish brown in color and of a quality consistent with the others. The vessel is completely oxidized and self-slipped on both the interior and exterior, although the interior surface is smoother.

Two of the three Early Horizon bowls are very similar to the Nasca 1 types (Figure 6.2). The first one (30-A-1) resembles the three larger Nasca 1 bowls. It has a diameter of 28 cm, and its sides are less rounded but still angled inward. Its walls are thicker (body width = 7.9 mm), but the paste is better sorted than the above Nasca 1 bowls. It is reddish brown in color with a slip of the same clay applied to the interior and exterior, and both sides have been burnished. The firing technology displays less skill (or care) than that of the Nasca 1 bowls. The exterior and interior walls are oxidized, with a reduced core, and the outside of the vessel possesses a firing cloud. The color, shape, and burnishing technique of this vessel are very typical of the Early Horizon bowls from La Puntilla (Van Gijseghem 2005, personal communication). This bowl is also similar in shape to Silverman's Tajo bowl (1994:Figure 7i). However, most Tajo wares have matte surfaces or geometric pattern burnishing (Silverman 1994:368), and this bowl appears to have been burnished entirely.

The second Early Horizon bowl (28-B-R1-1) is deeper with straighter sides and a diameter of 20 cm (Figure 6.2). It corresponds in shape with Van Gijseghem's *Bowl 4: Puntilla Plain Straight Bowls*. It is oxidized and has a light reddish micaceous paste of a medium quality with subangular inclusions. While Van Gijseghem's bowls of this

category were usually unslipped or self-slipped, this vessel had a red slip applied to the entire interior surface which extended to a red band around the lip and extending down about 1 cm on the exterior surface of the bowl. The rest of the exterior surface was self-slipped, and both surfaces were matte. The interior slip was badly eroded, and the exterior had dark firing clouds. It is possible that this bowl is actually Nasca 1, however, the technology, paste and shape indicate otherwise, and Van Gijseghem (2005, personal communication) additionally identified it as likely Early Horizon in origin.

The last Early Horizon bowl (28-C-97) is smaller, with a diameter of only 9 cm (Figure 6.2). It has rounded sides that are slightly convex and thicker throughout the middle section of the bowl. This vessel is reduced and dark reddish gray in color. It is of a medium quality micaceous paste with subangular inclusion, not slipped, and only roughly smoothed on the interior and exterior. The most distinguishing feature of this vessel is its incisions. Both the interior and exterior sides are incised with a horizontal line cross-cut with smaller oblique lines. This bowl is similar to the Tajo type in paste and surface treatment. It also resembles some Tajo bowl shapes illustrated by Silverman (1994: Figures 7h, 8e), and while the incised designs do not correspond to any of her published examples, incised decoration is a common characteristic of the Tajo style (Silverman 1994:368).



**Figure 6.2. Early Horizon bowls.** (30-A-1, 28-B-R1-1, 28-C-97)

Three bowls could not be distinguished between late Early Horizon and Nasca 1 types, and their shapes could not be approximated. Their diameters range from 16 to 22 cm. They are all reduced with dark gray to grayish brown pastes. One (28-C-83) is partially reduced with an inconsistent paste color ranging from very dark gray to light red. This example also has a medium-fine paste and is self-slipped and burnished, while the other two (28-A-3, 28-C-122) have coarser pastes consisting of quartz, mica and organic material. They are self-slipped and only wiped smoothed rather than burnished. 28-A-3 also has a red slipped exterior.

### *Constricted Vessels*

Nineteen constricted vessels were recognized, constituting 63 percent of the EH/N1 assemblage. These jars all appeared to serve utilitarian functions, and were probably multi-purpose vessels that were used for a variety of tasks (cooking and storage of dry foods and liquids). I did recognize several different shape patterns and was able to divide the jars based on such. However, there is a great amount of variability in the pastes and surface treatments within and across these categories. Also, it should be noted that these morphological vessel classes are arbitrarily assigned with their shapes in mind. I do not intend to suggest that the potter or vessel owner perceived them according to the same or similar typology. I did not attempt to classify them by functional terms as it is quite possible that these utilitarian vessels served many different functions to accommodate the jobs-at-hand throughout their use-lives.

Utilitarian pottery is rarely discussed in much detail in the literature on south coastal ceramics because of a focus by researchers on the elaborate and beautifully made fineware. In what is available on the subject, I found the devised ceramic classes to be fraught with inconsistencies and ambiguous or poorly explained terminologies. The most pertinent example to the present work concerns the utilitarian pottery classes of *jars* and *ollas*. The distinction between the two is officially derived from vessel height to width ratios. However, since full vessel shape allowing for such calculations can rarely be approximated from the limited sherd data, characteristics related to their rim and neck shapes are more often utilized. Both ollas and jars are described as globular in shape, however, the olla is often referred to as a cooking vessel, while the function of the jar is rarely addressed, although most would probably agree the term *jar* commonly infers

storage. Initially the olla was commonly perceived as neckless, though some examples have what is typically called a “thickening” of the lip on the rim interior, exterior, or both (Silverman 1993:245; Van Gijseghem 2004:258). The jar, on the other hand, has a wide short neck or what is called a collar. Confounding the problem, another type of vessel has been recognized – the necked olla. This vessel, by most accounts, is identical to the neckless olla except that it possesses an everted, flaring, or convex bowl-like neck (Silverman 1993:245-248; Van Gijseghem 2004:259-260; Vaughn 2000:339).

Complications in assigning certain sherds to the appropriate vessel class can occur when there is a difficulty distinguishing between thickened lips and short collars or tall collars and necks. For example, how the analyst describes an extension of the lip determines whether a vessel goes into the neckless olla or collared jar class. Confronted with this dilemma, DeLeonardis (1997:229-230) chose to call all of her storage/cooking vessels *jars* rather than *ollas*, and Van Gijseghem (2004:239) adopted her terminology. Because there is such a close proximity between La Puntilla and La Tiza, and Van Gijseghem (2005, personal communication) recognized many of the La Tiza vessel shapes and pastes to be similar to those he found at La Puntilla, I decided to follow Van Gijseghem and DeLeonardis and conflate the olla and jar classes into one jar category. However, the fundamental problem still arose when faced with the decision to place certain sherds into the neckless jar or short-collared jar categories. I compared a few of my sherds to the utilitarian vessel drawings of Van Gijseghem (2004), Vaughn (2000), and Silverman (1993), all of whom employed these same basic utilitarian vessel classes, and I found that some vessels of very similar shapes were assigned to different classes by the analysts. (I describe these discrepancies in more detail below.) Therefore, I feel it is necessary to

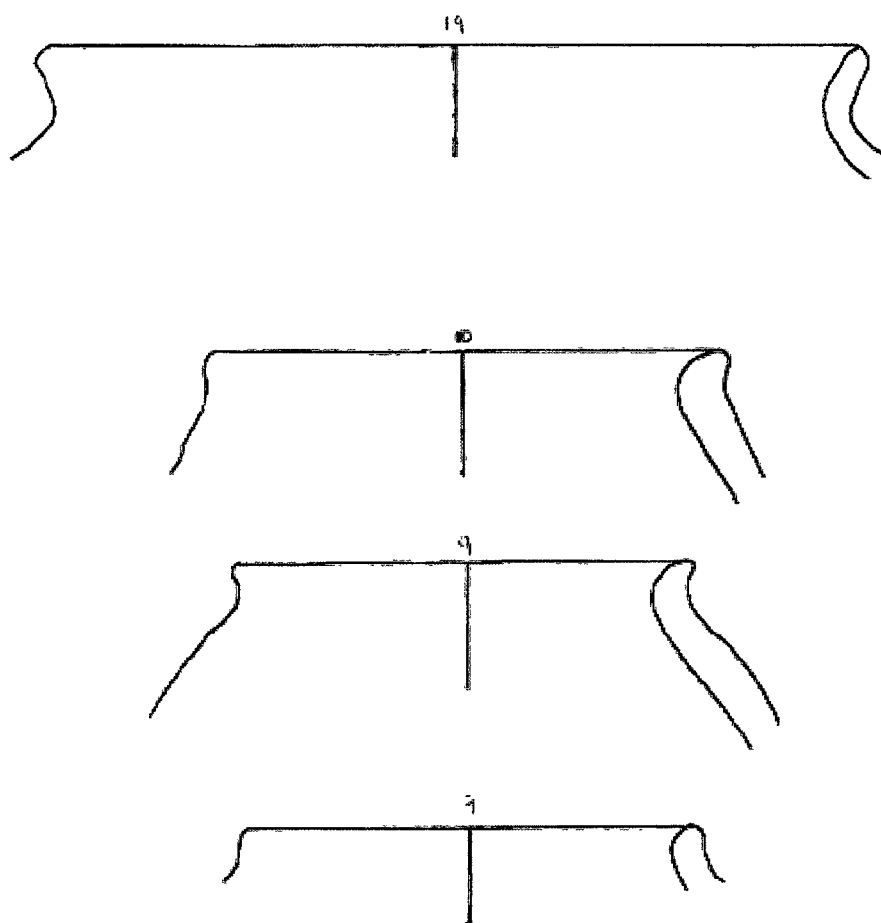
warn the reader that, for some vessel shapes, the delineation between morphological classes is quite hazy.

Nasca 1 utility jars and ollas are slightly modified derivatives of their Ocucaje phase 10 antecedents. Changes are mostly related to their neck forms. Ocucaje phase 10 necks are more bulging, and the Nasca 1 necks more tapering. There is also a pattern in their paste selection. Many of the Early Horizon vessels possess brown pastes, while an orange-red or buff paste is more characteristic of Nasca 1, although the brownware was retained with lesser frequency (Menzel et al. 1964:254).

These 19 constricted vessels are parsed into three primary jar classes: collared, necked and indeterminate jars. The necked jar class is further subdivided into tall-necked and short-necked jars.

*Collared Jars.* I recognized four collared jars among the utilitarian constricted vessels (Figure 6.3). One in particular (31-A-4), I believe, exemplifies the more classic representation of the typical collared jar class. This vessel has an everted, comma-shaped collar, approximately two centimeters tall. The rim diameter is 19 cm, and the maximum wall thickness is 5.9 mm. It has a brown to yellowish red paste of a medium quality with quartzite, mica, and organic inclusions. The vessel is incompletely oxidized and has a firing cloud on the exterior and rim surface. It is self-slipped on both sides. The area of the collar on both the interior and exterior was smoothed, leaving striation marks. This vessel corresponds to Silverman's *Jar 3* (1993:253-254, Figure 16.42e) and Van Gijseghem's *Plain Vessel 2: Unrestricted Collared Jar* (2004:257, Figure 5.22, 5.23). Van Gijseghem mentions this specific class of vessels as "presumably used for cooking"

(2004:257). However, his proportion of sooted sherds was basically the same for this category as his other main plainware types (Van Gijseghem 2004:255-260), suggesting this class was not preferentially utilized for cooking.



**Figure 6.3. Collared jars. (31-A-4, 29-C-3, 31-A-20, 31-B-9)**

This vessel (31-A-4) could date to the late Early Horizon or Early Nasca. In his inspection of this assemblage, Van Gijseghem (2005, personal communication) commented that the paste of this specimen is similar to that of the Formative (Early Horizon) vessels of La Puntilla. However, its similarity to Silverman's (1993:253-254, Figure 16.42e) jar descriptions and drawings indicates it could also be Nasca 1.

The other three collared jars (Figure 6.3) are much smaller in diameter than the vessel just discussed. They range between 9 and 10 cm and have a body width from 6 to 9.5 mm. These vessels have a very slight collar, appearing more like an elongated, rolled-over or externally reinforced lip. They extend up from the body only a centimeter or less. One specimen (31-A-20) has what Silverman calls a "noticeable inflection point just beneath the lip, creating a pronounced eversion" (1993:254, see Figure 16.43a).

These smaller vessel shapes were nearly identical to Silverman's *Vase 1* (1993: Figure 16.43a,b). Silverman calls the vessels *vases* because they are less globular than those of the *jar* class (1993:254). However, vases are described as "tall cylinder-shaped jars whose height is greater than the mouth diameter" (Proulx (1968:13), and (although their heights are unknown due to the limited extent of the sherds) these vessels and Silverman's appear more squat than cylinder-shaped.

These three sherds also resemble some examples in Van Gijseghem's *Plain Vessel 1: Restricted Collared Jar* class (2004:Figure 5.20). (The only difference between his *restricted* and *unrestricted collared jar* types lies in their mouth diameter – *unrestricted* being 12 cm or more and *restricted* being 11 cm or less.) While there are similarities in shape, his *restricted collared jars* generally have taller collars and are more globular than the La Tiza specimens. The best match from the La Puntilla assemblage is



probably one specimen from Van Gijseghem's *Plain Vessel 3· Neckless Jar* class (2004:Figure 5.25 LP212-5). While most neckless jars are very round in shape, a few have more gently sloping sides. Also, many of them have thickened rims that resemble the La Tiza *collared jar* and Silverman's *vase* forms (for comparison see Silverman 1993:Figure 16.43; Van Gijseghem 2004:Figure 5.25).

These analyzed sherds have brown very coarse pastes with large quartz grains. One sherd is also tempered with mica. Another has a paste with a more yellowish tone and contains such large gravels that its matrix is quite unusual. They are all slipped on at least one side – one on the interior, one on the exterior and just the interior of the rim, and the last is slipped on both sides. They are roughly smoothed, with some non-uniform striation marks. None are decorated. They are incompletely oxidized with gray cores, and one may be burned.

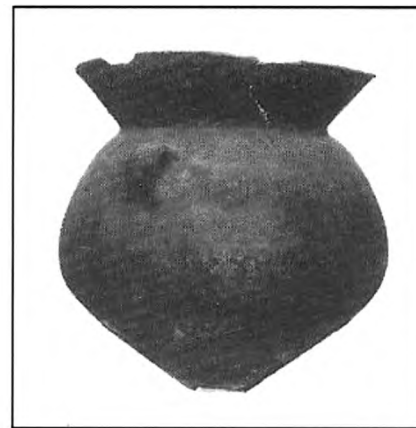
The shape of these vessels suggests they are Nasca 1 in origin. Their pastes, on the other hand, are more in line with the Early Horizon. However, their rough quality could fall in the acceptable range of Nasca 1 material.

*Necked Jars: Tall-necked.* I identified two different morphological groups of necked vessels. The first, the tall-necked jars, is often described as a necked variant of the neckless jar/olla. While, the neckless olla is considered to be an Early Horizon form which cross-cuts several phases, the necked olla is thought to be an Early Horizon 10 and Nasca 1 innovation. It has a similar globular shape with the addition of an angled, flaring or bowl-shaped neck. I should mention though that none of the sherds possess a portion of the vessel body. Without such, it is possible to misidentify a bowl rim sherd for a tall-

necked jar sherd, or vice versa, as the same shapes can be found on both. However, the body walls are generally thicker for jars than bowls, helping to distinguish between the two, although there is overlap in the ranges of utility bowls and jars/ollas. See Figure 6.4 for examples of the necked jar shape.



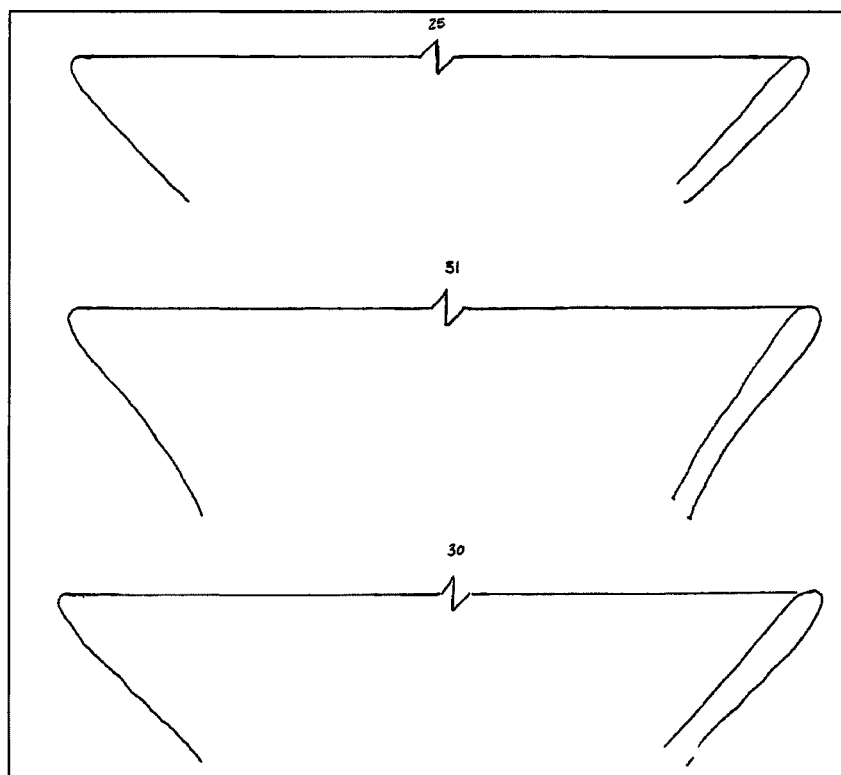
(a)



(b)

**Figure 6.4. Necked jars from Cahauchi.** (Silverman 1993:Figure 16.25, 16.26)

The three La Tiza specimens have tall everted necks (four to six centimeters in length) that are either straight or slightly flaring rather bulging or bowl-shaped, suggesting they may be Nasca 1 rather than EH 10 (Figure 6.5). They are similar in shape to Van Gijseghem's *Plain Vessel 4: Necked Jars* (2004:Figure 5.28), Silverman's *Necked Ollas* at Cahuachi (1993:Figures 16.25, 16.26, 16.33), and Early Nasca *Necked Ollas* from Marcaya (Vaughn 2000:Figure 6.14m, n). DeLeonardis found no examples of these necked jars (ollas) at Paracas settlements in the Lower Ica Valley (Van Gijseghem 2004:259), and I found no similar illustrations in Menzel et al.'s publication (1964) on the Ocucaje phase styles. This reinforces my argument that this vessel form is Nasca 1 or possibly Early Nasca in origin.



**Figure 6.5. Necked jars: tall-necked.** (27-B-1, 27-B-2, 29-C-1)

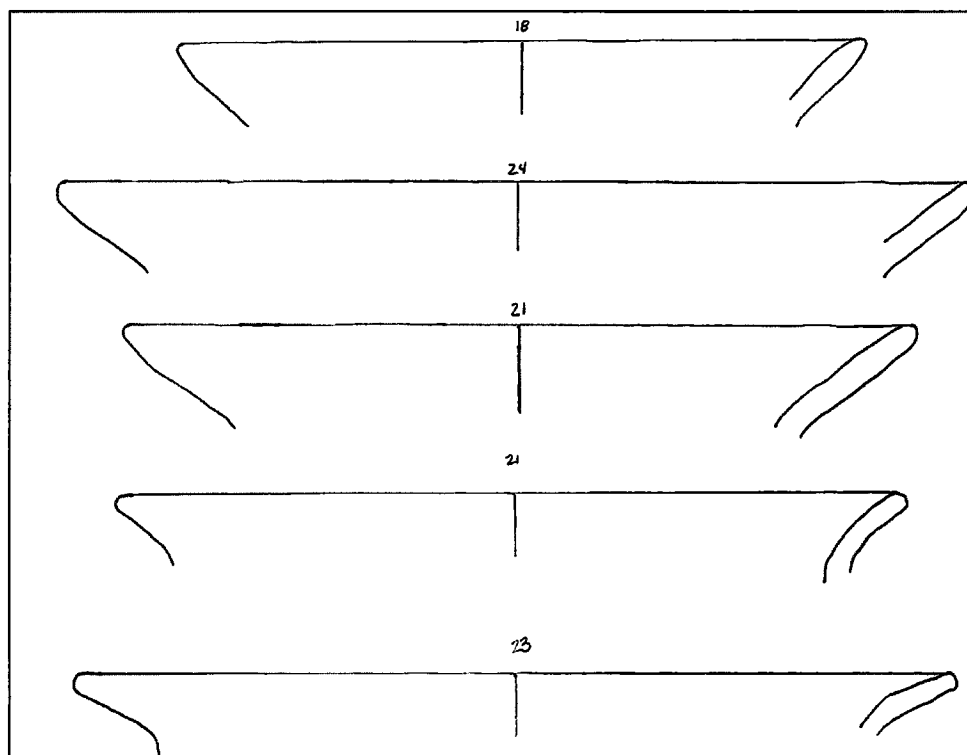
The three tall-necked specimens are brown to reddish brown in color with rim diameters from 25 to 31 cm and body widths from 6.9 to 8.5 mm. The rims are rounded, and the vessel walls are slightly thicker near the rims than their lower necks. The paste fabrics range from medium-fine to medium-coarse, tempered with quartz and mica. They are unevenly fired with reduced cores and firing clouds on the exterior and rim. Two are self-slipped on both sides and one just on the interior. One is burnished on both sides, giving it an even smooth appearance, while the other two are only roughly smoothed, with uneven surfaces. One of the unburnished specimens displays crazing (small fracture lines in the slip) and its rim does not follow an even curve.

It is presumed that these vessels were used for the storage of liquids (Van Gijseghem 2004:260) based on the presence of slips and their taller necks, which can aid in pouring, fastening a protective covering and the prevention of spillage (Henrickson and McDonald 1983:633). However, Van Gijseghem reports that 33.8 percent of the necked jars analyzed from La Puntilla exhibit sooting or burning. Silverman (1993:247) also notes some sooting (although only one case) and the possibility that these vessels were used for cooking.

I termed this class *tall-necked jars* rather than just *necked jars* (ollas) as Silverman (1993), Van Gijseghem (2000) and Vaughn (2004) in order to distinguish them from another shape present at La Tiza that is not commonly reported in the literature, *short-necked jars*.

*Necked Jars. Short-necked.* The short-necked jars have necks that are two to three centimeters in length rather than four to six like the tall-necked jars (Figure 6.6). They also possess much more sharply everted angles than the tall-necked jars and collared jars. As a type, they are quite consistent in shape, at least in their rim forms (no sherds possess body walls).

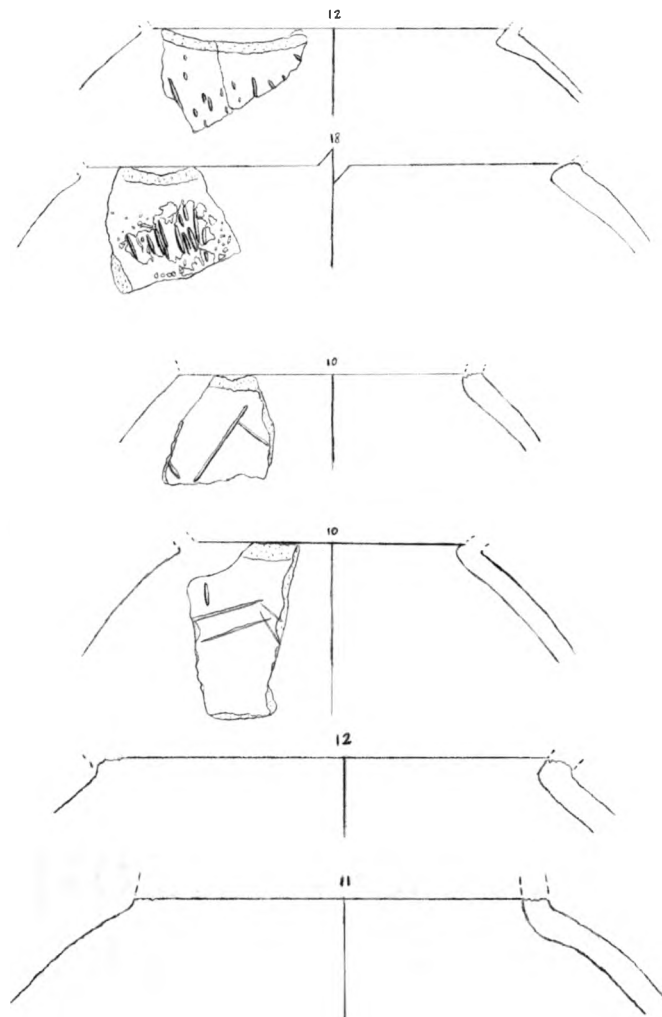
There are no morphological parallels in the La Puntilla assemblage, and Van Gijseghem (2006, personal communication) has confirmed that he has seen nothing analogous. Some shapes that are comparative are found in Nasca 1 necked olla illustrations by Silverman (1993:Figure 16.31c, d; Figure 16.32a), a late Early Horizon Tajo example (Silverman 1994:Figure 7d) and Early Nasca necked ollas by Vaughn (2000:Figure 6.14a, h). I found no correlates published by Menzel et al. (1964).



**Figure 6.6. Necked jars: short-necked.**  
(31-C-1, 31-C-2, 31-D-2R, 31-A-12, 31-A-61)

There are six specimens comprising this vessel type. They are 16 - 24 cm in diameter with an average diameter of 20.5. Wall thickness ranges from 4.8 – 7 mm. They are mainly incompletely oxidized with reduced cores and firing clouds, although one is completely oxidized and another reduced. Most are reddish-brown in color. One is brown, and the reduced specimen is gray. Their textures are medium to coarse, tempered with mica, quartz and subangular inclusions. All but one is self-slipped. The exception is only wiped smooth. The pastes of these specimens are reminiscent of the Early Horizon utility vessels at La Puntilla, but the shapes are quite distinct (Van Gijseghem 2005, personal communication).

*Indeterminate Jars.* There are six specimens whose forms could not be definitely determined (Figure 6.7). These sherds retained enough of their rim to approximate rim diameter and shape. However, they all have what appears to be a broken collar or neck, which would have extended from their exterior faces adjacent to their rims or from the rim itself. While I cannot be certain what these fully intact vessels may have looked like, I can offer an informed postulation based on comparative analyses.



**Figure 6.7. Indeterminate jars (probable neckless jars).**  
(27-B-3A,B; 29-C-2; 31-D-4R, 28-C-29; 27-A-3; 31-D-1R)

These vessels are globular and quite homologous in shape. They appear akin to neckless jars when not taking into account their missing extensions. Indeed they may be neckless jars whose thickened lips have broken from the vessel body. Or, rather than a thickened lip, they may have possessed more extensive collars or necks (see Figure 6.4a for an example of a broken neck).

The most informative characteristic of these sherds is their decorative elements. Four of the six specimens are incised. The designs range in size from elongated dots to lines, clustered together or crossing each other. These patterns of incisions appear very related to Silverman's Tajo examples (1994:Figure 8k, l) (see Figure 4.3k, l of the present work) and Van Gijseghem's incised plainware (2004:5.24). Their vessel types that bear incisions are neckless and collared jars (ollas). Additionally, in an examination of Van Gijseghem's photographs of the La Puntilla incised plainware, I recognized some break patterns very similar to these La Tiza specimens, as well as analogous pastes and incised designs. See Figure 6.8 for a comparison.

**Figure 6.8. Images of La Puntilla and La Tiza incised utilitarian wares.**  
(Photographs provided by Hendrik Van Gijsegheem.)

a) La Puntilla incised utilitarian wares.



b) La Tiza incised utilitarian wares.



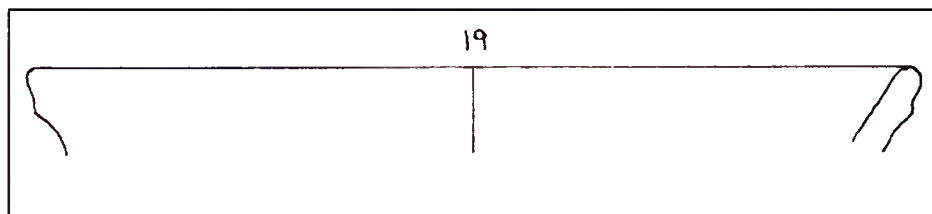


The La Tiza indeterminate jars are 10-18 cm in diameter. They are brown, reddish-brown to reddish-gray in color. They have medium to coarse pastes tempered with quartz and some mica, organic material and subangular inclusions. Two are self-slipped and one has a reddish-orange slip that is badly corroded. The other three are wiped smoothed.

It is unlikely that the incised vessels possessed tall necks or even the everted necks from my short-necked jar class because none of the examples from those classes or the necked jar/olla types of other researchers exhibit incised decoration. The only constricted utility vessels bearing incisions reported by other investigators belong to the neckless olla/jar class. It is important to note though that many of those neckless ollas/jars possess collars or extended lips. Therefore, there is a good probability that these indeterminate jars are actually collared neckless jars (ollas) from the late Early Horizon.

### *Indeterminate Vessels*

There is one final rim sherd that I could not confidently assign to a vessel type (Figure 6.9). The sherd is very small, less than two centimeters long, with an everted angle and a small bump directly beneath the exterior lip. I am not certain whether this sherd represents a bowl or the neck of a jar. The vessel diameter is 18 cm, and the wall thickness is 5.9 mm. It is reddish-brown in color, partially reduced, with a medium coarse paste tempered with quartz and mica. It possibly possesses a thin rudimentary slip of the same clay on both sides, and the surfaces are uneven. The bump is somewhat characteristic of Paracas plainware so this may be a late Early Horizon utilitarian vessel.



**Figure 6.9. Indeterminate vessel. (27-B-R3-1)**

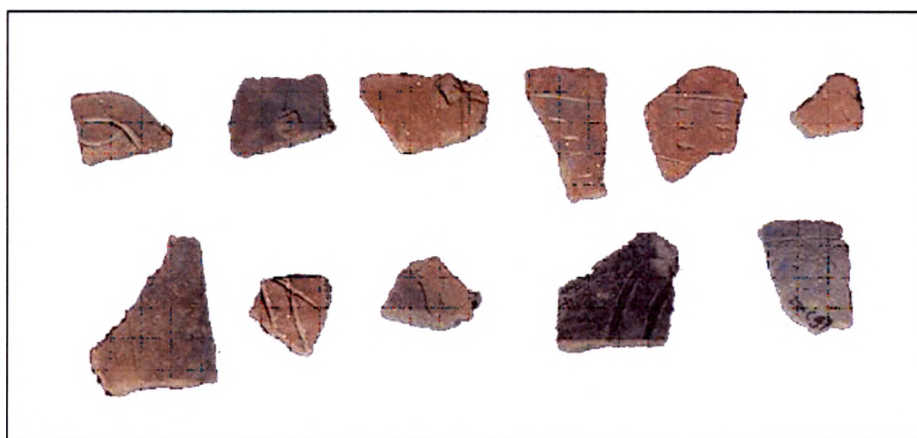
*Diagnostic Body Sherds and Handles*

Other vessel sherds were recovered that were not included in the Minimum Vessel Count but are worthy of discussion. Thirteen body sherds were identified as being likely of Early Horizon or Nasca 1 origin. One (30-B-1) is a thin bowls fragment with a reddish-brown slip and a watery black painted band design (Figure 6.10). This body fragment could possibly be from a Nasca 1 grater bowl.



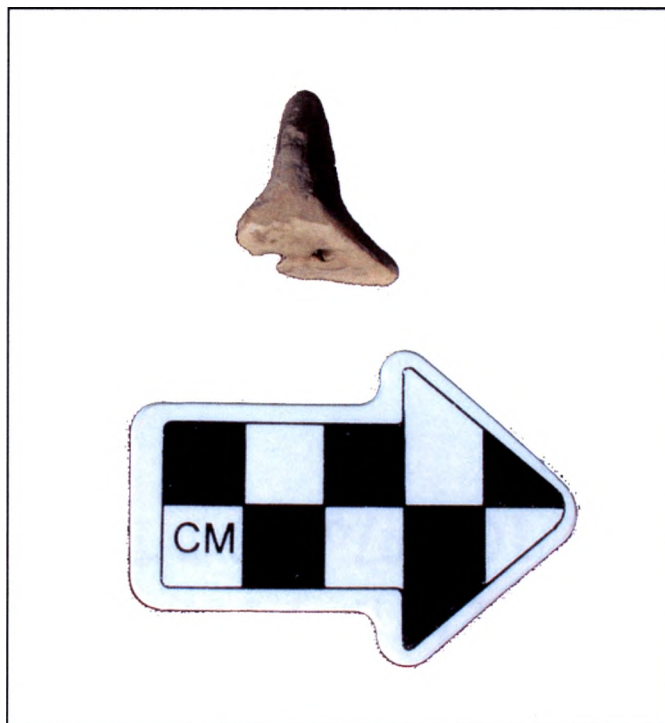
**Figure 6.10. Painted ceramic body sherd (possibly grater bowl). (30-B-1)**

The other 12 body sherds are decorated with incised dots and lines, incised button appliqués and combinations of both (Figure 6.11). Like the sherds from the indeterminate jar class, these sherds are probably from neckless ollas from the late Early Horizon. The only incised utilitarian sherds Silverman (1993) reports belonged to her neckless olla class. The trend was similar in the La Puntilla assemblage, with the exception of four specimens from *PV2: Unrestricted Collared Jars*. These La Tiza sherds are also very similar to Silverman's (1994:368) Tajo type in paste description and style, especially the use of the appliqué buttons and triangle pattern. What I am calling the triangle pattern is a common Tajo decorative technique in which incised upside-down triangles extend down from around the vessel mouth or neck. The area within the triangles is filled in with incised dots or parallel lines (see Figure 4.3k, l). Many of the La Puntilla, and several of the La Tiza, sherds display variations of this pattern (see Figure 6.8). One sherd (28-C-20) appears more Paracas-related. It has an incised design resembling the feline eye motif, an Ocucaje phase 8 decorative element.



**Figure 6.11. Incised body sherds.**  
(Top left sherd, 28-C-20, is incised with the possible Ocucaje phase 8 feline eye design.)

One unique ceramic artifact appears to be a modeled nose (Figure 6.12). These three-dimensional noses which protrude from the vessel surface are common on Paracas effigy vessels and Nasca head jars. This specimen is unpainted and has a grayish-brown reduced paste, which may be more indicative of the Early Horizon than Nasca styles.



**Figure 6.12. Ceramic nose.**

There are five handles not included in the MVC (Figure 6.13). Three of the handles are wide and flat, although two of these were broken off so near to the vessel body that their shapes cannot be further approximated. The other, however, is semi-circular (or perhaps oblong) in shape and demonstrates a thickening at the outer handle edges with a thinner groove down the center. This style was the most common handle type found at Cahuachi, which Silverman called Handle 3 (1993:Figure 16.48). Of the last two handles, one is multi-coiled and braided, and the other is two-coiled and twisted.

Two-coiled straight and braided handles were found at Cahuachi, but in lesser frequencies than the others. Silverman also illustrates coiled and twisted handle styles as Tajo examples (1994:Figure 9).



**Figure 6.13. Handles.**

Four of the La Tiza handles are reddish brown in color, and one is light brown. Their pastes, containing abundant quartz, mica and small subangular inclusions, are congruent with much of the rest of the assemblage.

Since no vessels were found with their handles in tact, it is uncertain to which class of vessels these handles belong. However, the braided and twisted handle types are illustrated by Menzel et al. (1964:Figure 26c, d) on Ocucaje phase 10 collared cooking ollas. Silverman tentatively suggests these handle styles survived into Nasca times (1993:257). Photographs of her necked ollas from Cahuachi (1993:Figure 16.25, 16.26, 26.28) demonstrate the semi-circular wide and grooved handles (Handle 3), which correspond to at least one of the La Tiza examples. These examples indicate the handles probably belong to larger necked and neckless jars (ollas) from the late Early Horizon, N1 or Early Nasca.

### Distributional Analysis

In this section, I discuss the distribution of the vessel types and the periods to which they are likely associated. Such an analysis is intended to compare the materials coming from different habitation areas of the site and the correspondence between vessel types. See Table 6.1 for a distribution of the vessel types across the excavation units and Table 6.2 for the time periods to which the vessels were assigned. These tables are based on Minimum Vessel Counts.

**Table 6.1. Distribution of vessel types.**

Prov.	EH Bowl	Nasca1 Bowl	Collared Jar	Short-Necked Jar	Tall-Necked Jar	Indeterminate (Neckless) Jar
Unit 27				1	2	2
Unit 29			1		1	1
Unit 30	1					
Unit 31		2	3	5		2
Unit 28	2	2				1

**Table 6.2. Temporal assignment of vessels.**

Estimated Time Period	Bowl	Collared Jar	Short-Necked Jar	Tall-Necked Jar	Indeterminate (Neckless) Jar
Early Horizon	3				6
Nasca 1	4			3	
? (EH or N1)		4	6		

### *Units by Vessel Type*

*Unit 27.* Unit 27 contained only constricted utility vessels of what I posit to be Nasca 1 and perhaps some Early Horizon materials. The vessel types include tall-necked, short-necked and indeterminate jars. The former two types I believe to be Nasca 1 or possibly Early Nasca in origin. If the indeterminate jars (one of which is incised) are indeed collared neckless jars as I have argued, then they may be Early Horizon. However, Silverman's evidence from Cahuachi does suggest these jar types, and the incised decoration that often accompanied them, did survive into the subsequent Nasca phases (1993:245-246). Four out the five handles also came from this unit. They could date anywhere from Ocucaje phase 8 (late Early Horizon) through Early Nasca.

*Units 29 and 30.* Units 29 and 30 were excavated on both sides of an interior wall dividing one structure. Very little material was recovered from either unit, though that which was found also appears to be all Early Horizon, Nasca 1, or Early Nasca in nature. Unit 29 produced constricted vessels of the following types: tall-necked jars, collared jars and indeterminate jars (collared neckless). The one sherd which represents the latter jar type possesses incisions in the *Tajo* style, indicating a late Early Horizon origin (Ocucaje phase 8-10). Unit 30 produced only two sherds: one rim fragment of what appears to be an Early Horizon bowl, and the one thin, oxidized body fragment of what may be a Nasca 1 grater bowl.

*Unit 31.* The first two levels of Unit 31 displayed a mix of Early Horizon, Nasca and Late Intermediate Period (LIP) pottery. In the first level, the Early Horizon / Early

Nasca material consisted of short-necked and collared jars. The second level contained one LIP sherd, a collared jar sherd (probably late Early Horizon or Early Nasca) and a handle (whose style spans the late Early Horizon through Middle Nasca). The next two levels produced material that appears to be late Early Horizon, Nasca 1 or Early Nasca: short-necked jars, Nasca 1 bowls and one indeterminate jar (collared neckless not incised).

*Unit 28.* Unit 28 in Sector II contained LIP, Nasca and Early Horizon materials in all three levels. The first level produced one LIP sherd, two Nasca sherds (one of which was dated to Nasca 4), an incised body sherd that appears to be of the Tajo style (Ocucaje 8-10), an indeterminate bowl fragment and another bowl sherd which is probably late Early Horizon or Nasca 1.

The second level consisted of one LIP sherd, three Nasca 3 bowl sherds, seven indeterminate bowl fragments, three Early Horizon incised Tajo body sherds, one Early Horizon bowl rim sherd and the modeled ceramic nose.

The last level produced three LIP sherds, seven Early and Middle Nasca sherds, three indeterminate sherds, two Nasca 1 bowls, one bowl that is either Early Horizon or Nasca 1 and nine incised body sherds (eight Tajo and one Ocucaje phase 8).

### **Discussion**

The pottery of La Tiza is very similar to the utilitarian vessels of La Puntilla in paste composition, vessel form, and decorative style. All of the incised Early Horizon



material (with the exception perhaps of the feline eye sherd) resembles the Tajo type, which is either Paracas plainware or a locally derived style. Whichever the case, there is no Ocucaje phase 8 Paracas fineware like that found at La Puntilla, nor the polished blackware bowl so representative of Nasca 1. If there appears such a commonality between La Puntilla and La Tiza in terms of utility pottery, the question remains then why did they not share either of the finer Paracas or Montana bowl types. I will offer some explanations to this question in Chapter 8.

While there is some evidence of Early Horizon material, it appears far more tenuous in Sector I than in Unit 28 of Sector II, where the diagnostic incised body sherds were collected. Unit 28 possesses the strongest evidence of Ocucaje phase 8 or 9/10 occupations. However, the association of later ceramic traditions in all three levels creates doubt regarding the reliability of the context of this unit.

The distribution of the sherds shows that the late Early Horizon wares and Nasca 1 wares are found in association with one another in every unit. This co-occurrence is not unusual. Settlement pattern surveys have reported that all EH 10 sites possess Nasca 1 materials (Schreiber 2003). Furthermore, at La Puntilla, incised utility vessels, plainwares, and Nasca 1 bowls were distributed across all areas of the site, while Paracas finewares and Nasca 1 blackwares were restricted to separate sectors (Van Gijseghem 2006:29). Therefore, this pattern of non-differential use of utilitarian pottery at La Tiza is concurrent with that of La Puntilla. This suggests that the manipulation of pottery as an ethnic or political identifier was restricted to very specific styles and decorative icons at that time (i.e., Nasca 1 smoked blackware and Paracas polychromes, respectively).

It should also be noted that no evidence for on-site ceramic production, such as kilns, pigments, or unfired clay, was discovered at La Tiza, although this could be due to poor preservation or sampling bias. Most units were excavated within structures, and the vessels may have been fired in a pit outside the domestic residences. The regional pattern in ceramic production for most small agricultural-based communities was that of household production and trade (Van Gijseghem 2004:286). It would have been rather unusual for the residents of La Tiza not to manufacture their own utility pottery, but the site's close proximity to La Puntilla may have encouraged trade instead. The resemblance between the utilitarian wares from both sites does not dissuade such thought. Recent compositional studies on sherds from the late Early Horizon, Nasca 1, and Early Nasca indicate that utilitarian vessels were generally manufactured locally and made from clays obtained from various sources near the domestic sites, while finewares were much more likely to be manufactured at production centers and imported (Van Gijseghem 2004, 2006; Vaughn 2000; Vaughn et al. 2006; Vaughn and Van Gijseghem 2007). It is likely that the Paracas polychromes were imported from the Ica or Palpa valleys (Van Gijseghem 2004, 2006), Early Nasca polychromes were produced at Cahauchi (Vaughn 2000; Vaughn et al. 2006), as were the Nasca 1 blackwares (Vaughn and Van Gijseghem 2007), and grater bowls were produced locally but from different clay sources than the utility vessels (Van Gijseghem 2004).

## Conclusions

This assemblage appears to be entirely utilitarian in nature. Two decorative techniques are present: the use of red slips on bowls and incised designs on what are probably neckless jars (ollas). Still, these vessels would not be considered fineware by most standards (see Vaughn 2000 for an alternative classification). Perhaps the “fine plainware” term utilized by Menzel et al. (1964:252) and Silverman (1993:250) is useful here.

Although all the pottery is presumed to have been used for utilitarian purposes, no evidence of sooting was present. This occurrence, however, is probably due to the fact that no basal portions of vessels were recovered. Trends in decorative technique and vessel type are observable. While the use of self-slips are common on all vessel types, red slips are restricted to bowls (with the exception of the one indeterminate jar that possessed an orange-red slip). Concordantly, incised decoration occurs only on constricted vessels. This is assuming that none of the bowls are grater bowls with incised interior bases, a claim which cannot be verified since no basal portions were recovered. Breaking down the constricted vessels into more specific types, none of the specimens of the collared jar or necked jar classes were decorated with incisions. Only vessels from the indeterminate jar class were incised. I have hypothesized that these vessels correspond to the neckless jars/ollas that other researchers have reported (Silverman 1993, 1994; Van Gijseghem 2004; Vaughn 2000). Van Gijseghem has argued that the use of the incising technique fell out of practice around Nasca 1, accompanied by the trend toward the replacement of neckless jars with necked (my tall-necked) types.

Evidential support for such temporal assumptions can be found in the following:

DeLeonardis (1997) found no necked ollas in her excavations of Paracas habitation in Callango; Silverman's (1993) excavations at Cahuachi, which flourished during Early Nasca, revealed only six neckless ollas, whereas, necked ollas were the most abundant type of utilitarian pottery present; at the Early Nasca site of Marcaya, necked ollas comprised 19 percent of the ceramic assemblage, while only 1 percent was neckless (Vaughn 2000:339-400); and at La Puntilla, with both late Paracas and Nasca 1 components, necked jars made up 14.7 percent and neckless jars 7.6 percent of the total wares recovered (Van Gijseghem 2004:258-259).

Since none of my short-necked jars possess incisions I speculate they are a Nasca 1 innovation as well. Additionally, most of my collared jars, which also are not incised, appear to correspond to the class of Nasca vases from Cahuachi. Therefore, it is my argument that all of these constricted jar types are Nasca 1 in origin, with the exception of the indeterminate jar class, which seems to be late Early Horizon. Some of the distributional evidence lends support to this hypothesis. For example, all of the incised body sherds, which I speculate are Early Horizon neckless jars, came from Unit 28, and all of the assumed Nasca 1 constricted vessels were located in Sector I (Units 27, 29 and 31).

A problem with this hypothesis arises, however, when the vessel types are examined by correspondence (i.e., their association with other vessel types). The indeterminate (speculated Early Horizon neckless) jars are found in association with all other Nasca 1 constricted vessel types, as well as Nasca 1 bowls. Therefore, I tentatively posit that this Early Horizon vessel style survived into Nasca 1 times at La Tiza. This

argument is strengthened by Silverman's (1993) findings of some neckless, incised ollas and coiled and braided Early Horizon handle types at Cahuachi. If some older plainware styles managed to endure at the ceremonial center that drove the impetus of the newly emerging Nasca cult and the ceramic tradition which communicated its ideologies, then surely surrounding habitation sites may experience a greater lag and higher frequencies of more traditional ceramic survivals.

## **CHAPTER 7**

### **ANALYSIS OF OTHER ARTIFACTS**

While ceramic vessels were my primary interest in investigations at La Tiza, I also recovered and analyzed several other types of cultural materials. These include non-vessel ceramic artifacts, lithic material, botanical, faunal, and shell remains, and other miscellaneous ornaments and tools. The present chapter will address the analysis of these materials.

#### **Non-vessel Ceramic Artifacts**

Several non-vessel ceramic artifact types were recovered from excavations. They include spindle whorls, spindle whorl blanks, smoothing tools, a pan pipe fragment and a miscellaneous ceramic tool.

##### *Spindle whorls*

One broken and one complete spindle whorl were found from Sector I, both from Unit 31 (Figure 7.1). The complete spindle whorl measures 25.16 mm in diameter, with

a hole diameter of 5.46 mm, a thickness of 6.62 and a weight of 5.2 grams. It was created from a fired broken vessel sherd that had been ground and shaped into the whorl.



**Figure 7.1. Sector I spindle whorls.**

Unit 28 in Sector II produced six broken spindle whorls, five of which were made from sherds and one that was clay-modeled (Figure 7.2). The La Tiza spindle whorls are similar to La Puntilla examples illustrated by Van Gijseghem (2004:Figure 5.29) and a photograph of a “perforated ceramic disk made from a reutilized sherd” by Silverman (1993:Figure 17.2).

**Figure 7.2. Sector II spindle whorls.**

a) Spindle whorls made from pottery sherds



b) Clay molded spindle whorl



Conlee and Vaughn (2006) have conducted an investigation of the spindle whorl assemblages of the Early Nasca site of Marcaya and a Late Intermediate Period site called Pajonal Alto. They note that the spindle whorls from Marcaya, like many of the whorls from the central and south-central highlands, are typically flat and wide and made from

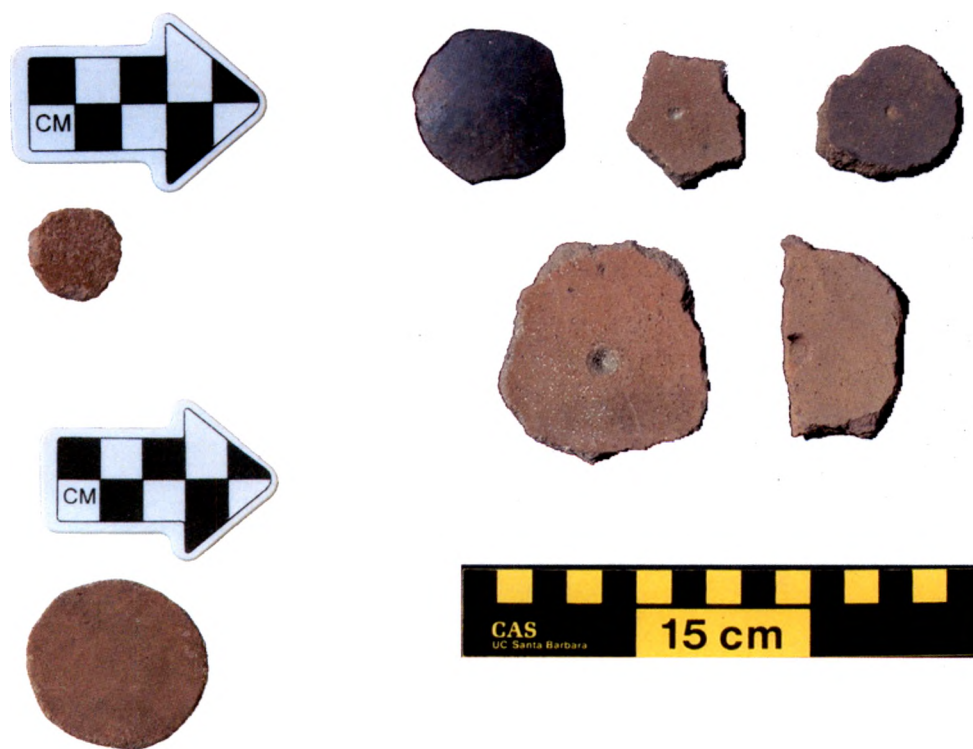


recycled ceramic sherds. The Pajonal Alto sherds, on the other hand, are modeled from raw clay and are generally thicker (Conlee and Vaughn 2006). They also note a dichotomy of sizes in the Marcaya assemblage and attribute the difference to the material which was being spun. They hypothesize that the smaller sized whorls were used to spin cotton (or fine wool), while the larger sized ones were used for regular coarser camelid wool (Conlee and Vaughn 2006:21). The La Tiza spindle whorl is similar to the Early Nasca Marcaya whorls in shape and manufacture. The two size groups at Marcaya consist of lighter whorls (2-4 gm) and heavier whorls (5-15 gm) (Conlee and Vaughn 2006:18). Based on this criterion, the La Tiza whorl would fall into the lowest range of the heavier whorls. This makes drawing any conclusions on what type of fiber it was used to spin quite difficult. I would venture a guess though that it was probably used to spin camelid wool. I offer a tenuous yet note-worthy clue in that camelid dung and bones were found in several of the units. However, I should also note that La Tiza is located near an area where cotton is presently grown so it is possible that it was cultivated in the past as well.

### *Spindle Whorl Blanks*

Related to spindle whorl artifacts are spindle whorl blanks (Figure 7.3). These are rounded ground sherds that are unfinished, either partially perforated or completely undrilled. They are assumed to be blanks intended for later spindle whorl use that, for whatever reason, never made it through the final stages of manufacture. It should be mentioned, however, that some of these blanks could have been drilling platforms, which would have created an analogous centrally located, partially drilled hole. Two blanks

were recovered from Sector I (Unit 27 and 31) and five from Sector II (Unit 28). Both Sector I blanks and one of the five Sector II blanks were unperforated (no sign of drilling). Silverman offers an alternative explanation for these undrilled types as plugs for constricted vessels (1993:260; see also 1993:Figure 17.3 for her drawings). The diameters of the La Tiza undrilled blanks are generally smaller (20.49-45.27 mm) than the partially perforated blanks (37.63-60.23 mm), although there is significant overlap. Van Gijseghem has an additional category of lids which he considers analogous to Silverman's plugs (Van Gijseghem 2004:264), but he does not explain what criteria are used to differentiate his lids from undrilled spindle whorl blanks.



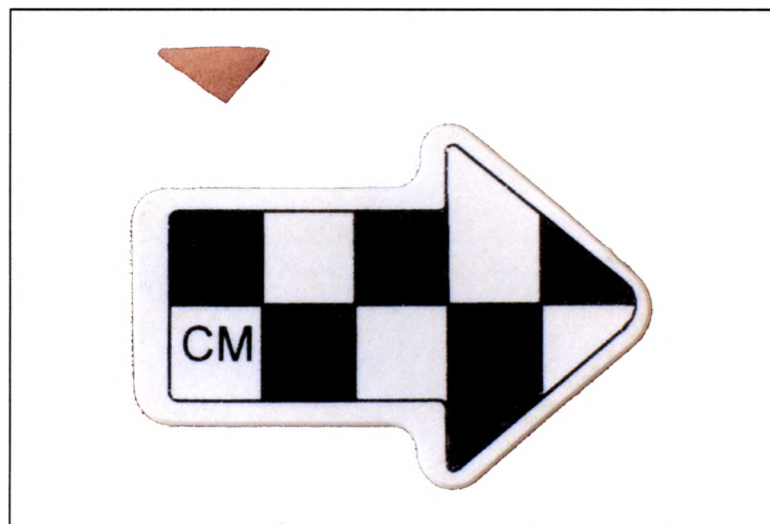
**Figure 7.3. Spindle whorl blanks.**  
(left: 27-B, 31-B; right: 28-C)

### *Smoothing Tools*

Another utensil made from recycled sherds is the smoothing tool, or polishing tool (Van Gijseghem 2004:263). These sherds have one or two abraded edges and are thought to have been used to smooth or polish ceramic vessels during the manufacturing process (See Silverman 1993:Figure 17.4 for an illustration). Two ceramic smoothing tools were present in Sector I (Units 27 and 29).

### *Pan Pipes*

One small pan pipe fragment was recovered from Sector I in Unit 30 Level B. The fragment is very thin, made from a very fine paste, and completely oxidized (Figure 7.4). Musical instruments, such as the pan pipe, are usually associated with the late Early Horizon (Ocucaje phase 10) and Early Nasca periods, when musical instruments grew in popularity (Menzel et al. 1964:211). However, they are also found in Late Intermediate Period and Late Horizon contexts (Conlee 2000).



**Figure 7.4. Pan pipe fragment.**

### *Miscellaneous Ceramic Artifacts*

There is one final miscellaneous ceramic artifact of an unknown function (Figure 7.5) from Unit 27 Level B. It is small and oblong in shape (17.77 by 15.24 mm with a thickness of 7.21 mm). It is somewhat bilobal with a thinner mid-section and two concave ends. This shape suggests to me that it was used for the coiling of fibers and may have been used as a net weight.



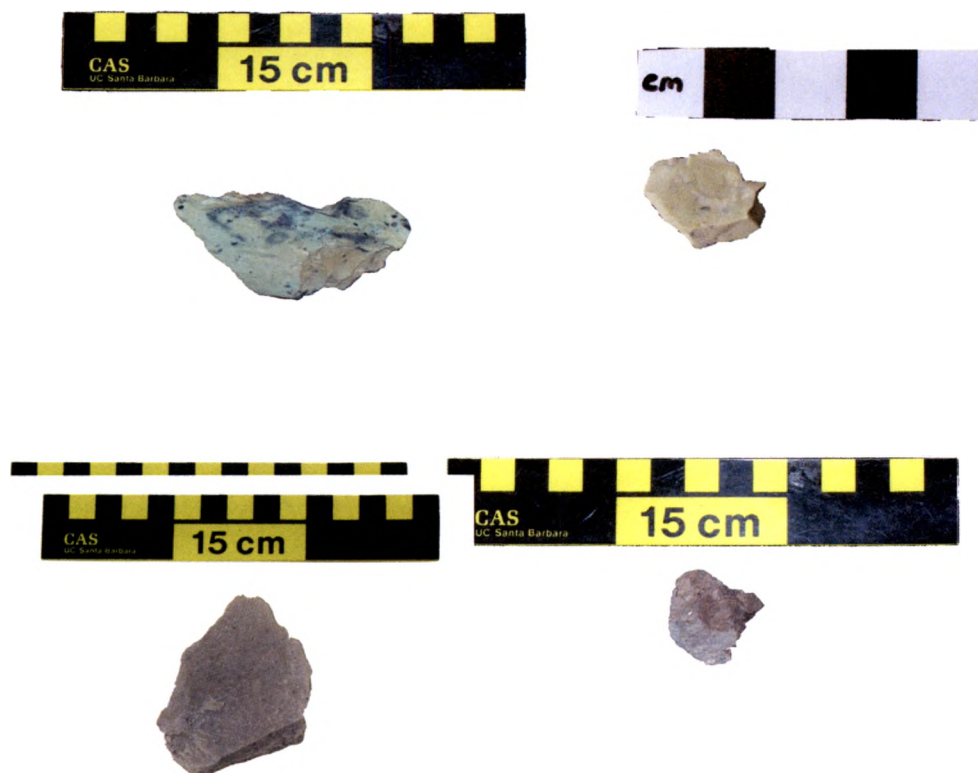
**Figure 7.5. Miscellaneous ceramic artifact.**

### **Lithic Artifacts**

Thirteen lithic artifacts comprise the lithic material of Sector I. Four are ground stone artifacts made from local river cobbles (Figure 7.6). Their size and shape suggests they were *manos* used for grinding foodstuffs or other materials. The nine chipped stone artifacts include two flakes of andesite, one flake of quartzite, one flake of an unidentified lithic material, two obsidian bifaces, and three obsidian projectile points (see Figure 7.7 for photographs and Figure 7.8 for drawings).

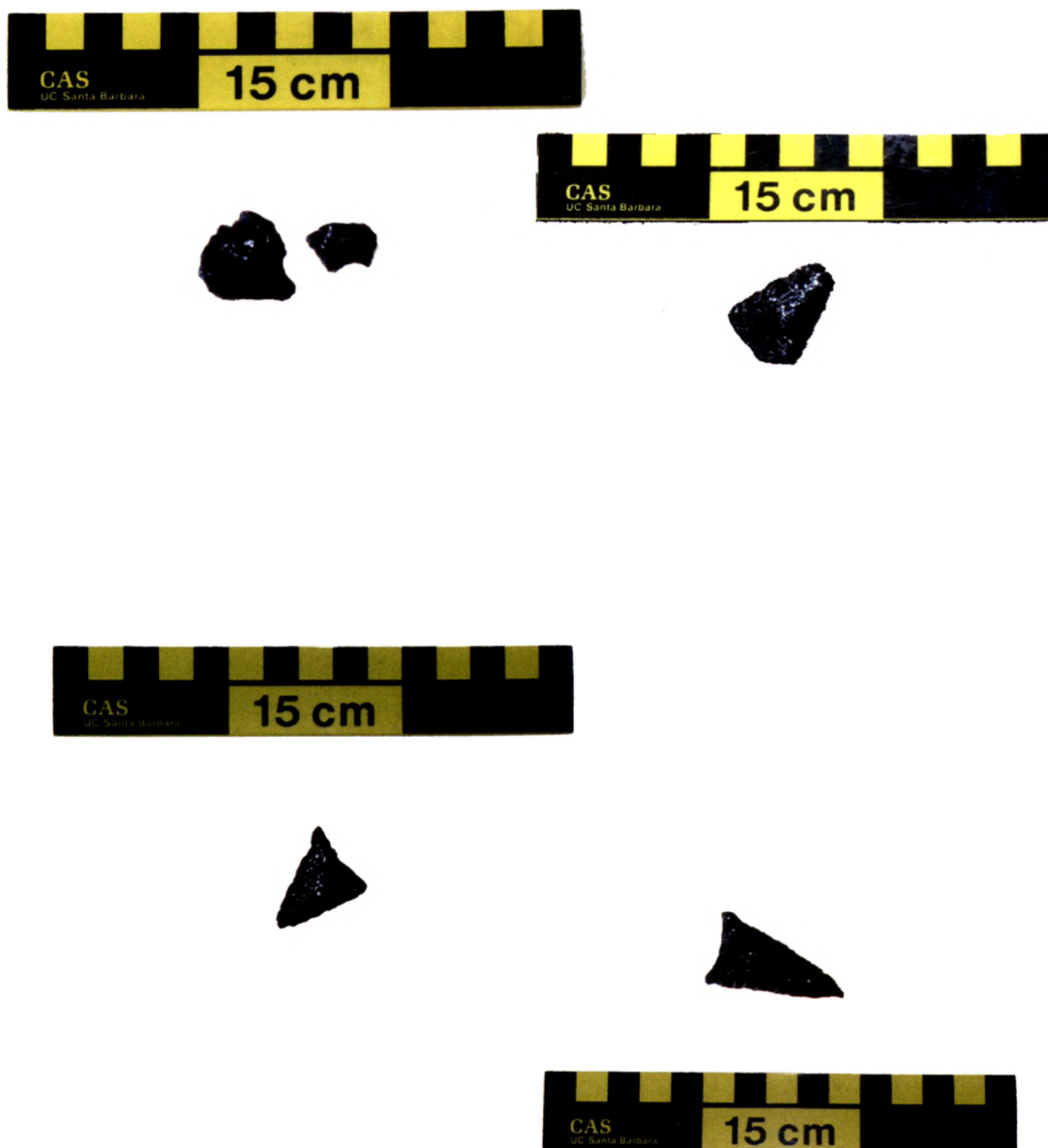


**Figure 7.6. Sector I ground stones.**  
(27-B, 27-C, 30-C, 31-D)

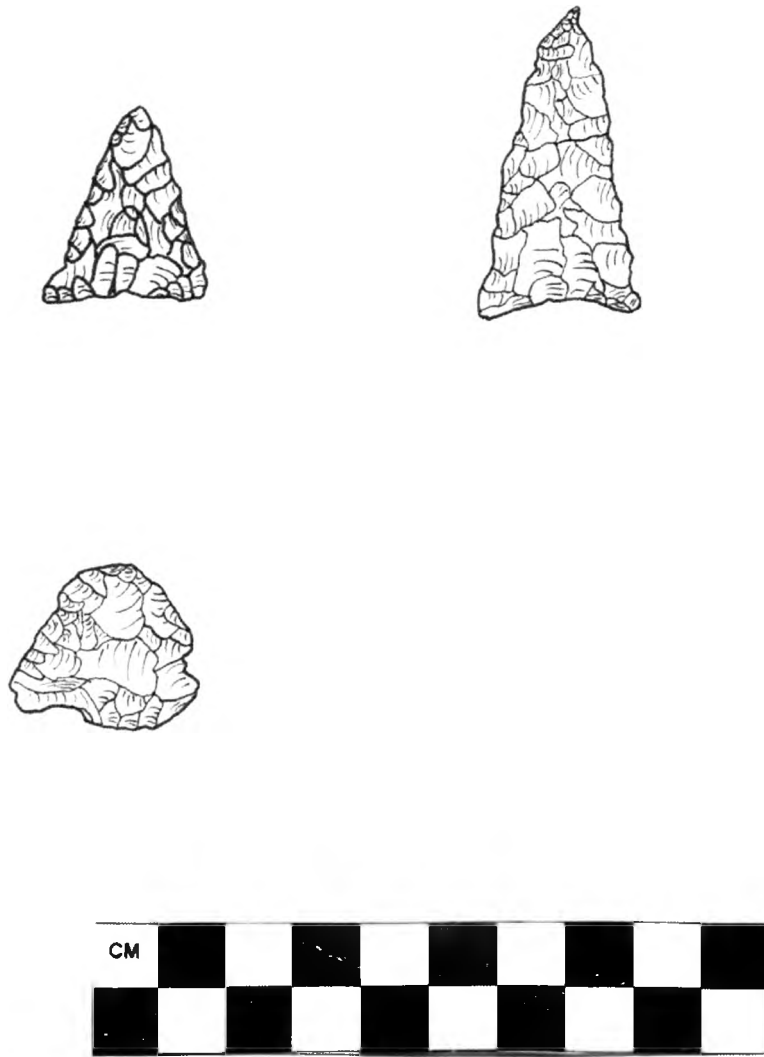


**Figure 7.7. Sector I chipped stone artifacts.**

Two flakes of andesite (top left:27-A, top right:30-B)  
one flake of quartzite (bottom left:31-C)  
one unidentified flake (bottom right:27-B)



**Figure 7.7. Sector I chipped stone artifacts. (continued)**  
obsidian bifaces (top row:29-C, 29-C, 27-B)  
projectile points (bottom left:29-C, and bottom right:30-C).

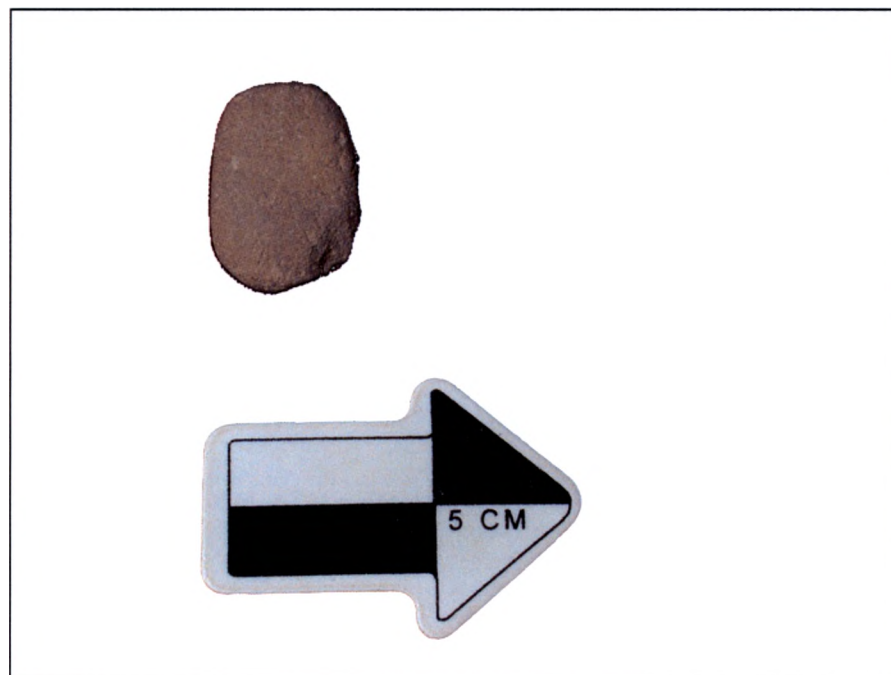


**Figure 7.8. Drawing of Sector I projectile points and biface.**  
(top left:29-C, top right:30-C, bottom left:29-C)



In terms of distribution, ground stone artifacts are associated with Units 27, 30 and 31. The andesite flakes were recovered from Units 27 and 30. The quartzite flake came from Unit 31, and the unidentified flake from Unit 27. Obsidian was associated with all units except for Unit 31. Unit 29 contained the worked obsidian flake, pre-form and one projectile point, and the other projectile point was recovered from Unit 30.

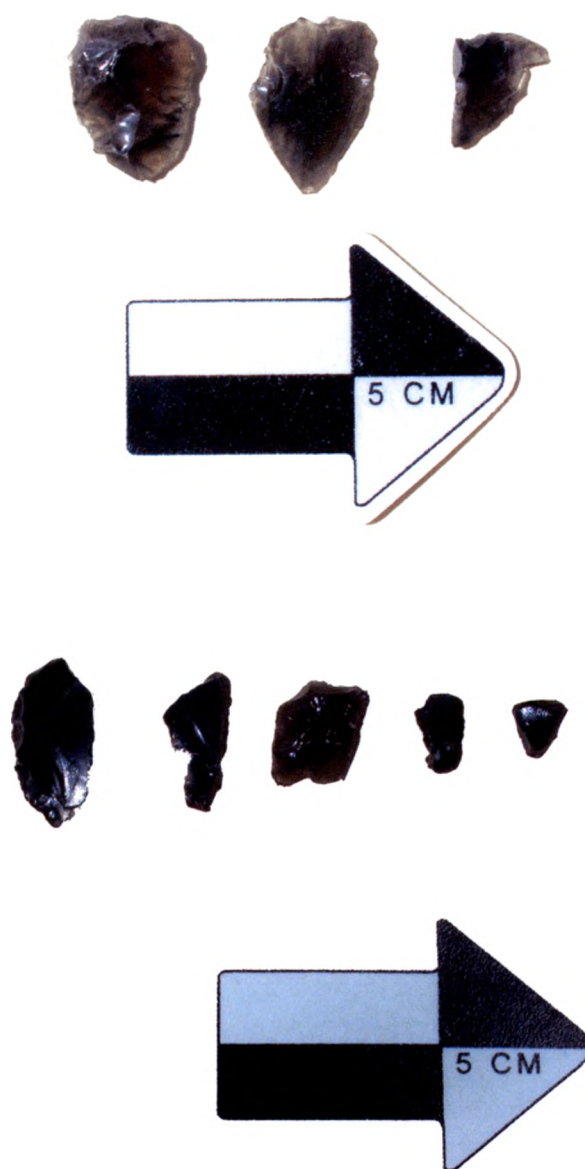
Sector II (Unit 28) produced a greater quantity of lithic material – 29 artifacts from the one unit. They include one ground stone (perhaps a smoothing/polishing tool) (Figure 7.9), ten flakes and chunks of andesite, seven of quartzite (Figure 7.10), nine flakes of obsidian (Figure 7.11), and two obsidian bifaces (Figure 7.12). A distribution of the lithic materials from all four units is presented in Table 7.1.



**Figure 7.9. Sector II ground stone artifact.**  
(28-C)



**Figure 7.10. Sector II flakes and chunks of andesite and quartzite.**  
28-A (top), 28-B (bottom left), 28-C (bottom right)



**Figure 7.11. Sector II flakes and chunks of obsidian.**  
28-B (top row), 28-C (bottom row)



**Figure 7.12. Sector II obsidian bifaces.**  
28-B (top), 28-C (bottom)

**Table 7.1. Lithic distribution.**

	Flakes & chunks	Tools	Ground stones	Total
<u>Sector I</u>				
Unit 27	1a, 1u	1o	2r	<b>4</b>
Unit 29		3o		<b>3</b>
Unit 30	1a	1o	1r	<b>3</b>
Unit 31	1q		1r	<b>2</b>
<u>Sector II:</u>				
Unit 28	10a, 7q, 9o	2o	1r	<b>29</b>
<b>Total</b>	<b>30</b>	<b>7</b>	<b>5</b>	

a = andesite    o = obsidian    q = quartzite    r = river cobble    u = unidentified

The larger number of lithics from Unit 28 relative to the other units of Sector I is probably related to the greater amount of ceramic material which Unit 28 possessed. Because much of the pottery was associated with later time periods, the lithic artifacts may also span several time periods.

In terms of distribution, there does not appear to be any significant pattern or sign of restricted access to particular lithic materials. The ground stones were probably household utensils used in food production. As most lithic manufacturing areas are typically found outside the living area, the small frequency of lithic debitage is not unexpected. That which was recovered may have been used as expedient tools.

Of the lithic materials present at La Tiza, obsidian is the only one that could not have been locally accessed. Nearly all the obsidian found at south coastal prehispanic sites belongs to a type known as Quispisisa (Burger and Asaro 1979), the source of which is located in the highland of Ayacucho over 100 km from the Nasca region (Vaughn and Glascock 2005:97). Quispisisa obsidian can display a variety of colors – from black, gray, nearly transparent, to red and striped combinations thereof. While the obsidian may range in appearance, a sourcing of the obsidian from various south coastal sites links

them all, with the exception of one site, to the Quispisisa source (Burger and Asaro 1979). One of the other obsidian types has been identified as Jampatilla, which is suggested to be of an inferior quality and was, therefore, less desired (Burger et al. 1998). An instrumental neutron activation analysis (INAA) of obsidian samples from the Early Nasca site of Marcaya indicates an exclusive use of the Quispisisa type (Vaughn and Glascock 2005).

The two obsidian projectile points of La Tiza (see Figures 7.7 and 7.8) somewhat resemble several of those illustrated by Van Gijseghem (2004:Figure 6.1), although his assemblage displays a great amount of variation in form and flaking technique. Van Gijseghem posits that the La Puntilla obsidian is from the Quispisisa source due to its visual similarities to the Marcaya assemblage. Based on the overwhelming preference of this type in the south coastal region, and on visual continuity, I speculate that the La Tiza obsidian is likely of the Quispisisa type as well.

While there is no evidence of restricted access to this obsidian, the remains do hint that it was not excessively abundant and perhaps brought to the site in reduced forms, such as bifaces or pre-forms. No cores or larger nodules of obsidian were found. Additionally, none of the obsidian flakes were more than a few centimeters in size, and they were all secondary flakes, possessing no cortex, indicative of the finishing stages of production. These findings could be the result of a sampling bias though. All of the excavated units were within the interior of the structures, where little lithic manufacture is likely to have taken place. However, one of the structures at Marcaya appears to have been an area designated for lithic tool production, possessing several times more lithic material than the other structures. Even this location, which presumably would display a

greater range of size and quality, demonstrates the same tendency as La Tiza toward small flake size and later stages of production (Vaughn and Glascock 2005:96).

### **Botanical Remains**

The remains of only one botanical specimen were recovered from excavations. From Unit 27, a large fragment of wood was collected, weighing 79.9 gm. It was found in the center of the structure, unassociated with any feature, and was unburned. It may have been related to the housing construction, perhaps part of the roof support.

### **Faunal Remains**

Four different kinds of faunal remains were recognized from the analyzed materials. They include bones of camelids (llama or alpaca), rodents (guinea pig or mouse), and fish. No MNI approximations could be executed due the limited quality of the specimens. The most abundant faunal type was camelid, which was found in all excavation units except unit 30. Rodent remains were found in Units 29 and 28, and fish in Unit 28. A number of unidentifiable bone fragments were also recovered from all four units. The distribution of these remains is presented in Table 7.2.

**Table 7.2. Faunal distribution.**

<u>Unit</u>	<u>Level</u>	<u>Camelid</u>		<u>Rodent</u>		<u>Fish</u>		<u>U</u>		<u>Camelid Teeth</u>	
		#	(g)	#	(g)	#	(g)	#	(g)	#	(g)
27	A							13	16 1		
27	B	1	13 2					23	6 5		
29	A							1	0 1		
29	B	2	11 4					16	5 2		
29	C	3	12 7	1	0 1			9	3 9		
30	A							1	0 1		
30	B							4	1 1		
30	C							6	4 3		
31	A	3	12 9					9	3 8		
31	B							8	4 1		
31	C	1	1 9					1	0 3		
31	D							4	1 8		
31	D							1	0 7		
28	A							15	10 2		
28	B			1	0 1			52	25 1		
28	B							49	24 4		
28	C	26	178 1	7	0 6	1	0 2	195	137 4	12	3 9
28	C	1	26 7					6	1 5	4	1 3
28	C							8	2 9		
TOTALS=		37	256 9	9	0 8	1	0 2	421	249 5	16	5 2

# = count

(g) = weight in grams

U = unidentifiable



Camelid and guinea pig remains are common finds at south coastal sites, even though neither are indigenous to the coastal area. They are originally from the highlands, but evidence suggests that the llama, alpaca, and guinea pig were domesticated and found at the lower elevations by the Early Horizon. Guinea pigs were regularly consumed and occasionally sacrificed (see Silverman 1993:168), and camelids, while also consumed, were probably important resources as beasts of burden and producers of wool (Silverman and Proulx 2002:57).

### Shell Remains

A total of 654 fragments of shell remains were collected. The total MNI equaled 204, and the entire assemblage weighed 346.9 grams. Broken down by Sectors, Units 27, 29, 30 and 31 contained 128 shell fragments, a MNI of 34, weighing 80.3 grams. Sector II (Unit 28) produced 526 fragments, a MNI of 170 and 266.6 grams of shell material. The large majority (84.6 percent of the total fragments and 92.6 percent of the MNI) of the shell remains is made up of mussels (Mytilidae family). The most common mussel type is *Brachidontes purpuratus*, followed by *Choromytilus chorus*, *Aulacomya ater* and *Semimytilus algosus*. The remainder of the malacological material is composed of clam (*Protothaca taca* and *Mesodesma donacium*), sea snail (*Oliva peruviana* and *Concholepas concholepas*), crab and sea urchin (*Loxechinus albus*). Proportions of the different shell materials were fairly consistent across the units. See Tables 7.3 – 7.7 for a distribution of the malacological remains.

**Table 7.3. Sector I Unit 27 shell distribution.**

Shell type	Common name	Count	MNI	Weight (g)
<i>Protothaca taca</i>	clam	1	1	1.8
<i>Mesodesma donacium</i>	clam	0	0	0
<i>Choromytilus chorus</i>	mussel	13	4	15.3
<i>Semimytilus algosus</i>	mussel	0	0	0
<i>Aulacomya ater</i>	mussel	20	3	10.8
<i>Brachidontes purpuratus</i>	mussel	0	0	0
<i>Loxechinus albus</i>	sea urchin	10	0	2.4
<i>Oliva peruviana</i>	sea snail	1	1	0.3
<i>Concholepas concholepas</i>	sea snail	0	0	0
	crab	0	0	0

**Table 7.4. Sector I Unit 29 shell distribution.**

Shell type	Common name	Count	MNI	Weight (g)
<i>Protothaca taca</i>	clam	--	--	3
<i>Mesodesma donacium</i>	clam	0	0	0
<i>Choromytilus chorus</i>	mussel	10	3	10
<i>Semimytilus algosus</i>	mussel	0	0	0
<i>Aulacomya ater</i>	mussel	4	2	1.6
<i>Brachidontes purpuratus</i>	mussel	0	0	0
<i>Loxechinus albus</i>	sea urchin	3	0	0.6
<i>Oliva peruviana</i>	sea snail	0	0	0
<i>Concholepas concholepas</i>	sea snail	0	0	0
	crab	0	0	0

**Table 7.5. Sector I Unit 30 shell distribution.**

Shell type	Common name	Count	MNI	Weight (g)
<i>Protothaca taca</i>	clam	2	1	0.8
<i>Mesodesma donacium</i>	clam	0	0	0
<i>Choromytilus chorus</i>	mussel	3	2	1.9
<i>Semimytilus algosus</i>	mussel	0	0	0
<i>Aulacomya ater</i>	mussel	5	3	2.4
<i>Brachidontes purpuratus</i>	mussel	0	0	0
<i>Loxechinus albus</i>	sea urchin	2	0	0.2
<i>Oliva peruviana</i>	sea snail	1	1	1.8
<i>Concholepas concholepas</i>	sea snail	0	0	0
	crab	0	0	0

**Table 7.6. Sector I Unit 31 shell distribution.**

Shell type	Common name	Count	MNI	Weight (g)
<i>Protothaca taca</i>	clam	0	0	0
<i>Mesodesma donacium</i>	clam	8	4	4.7
<i>Choromytilus chorus</i>	mussel	23	6	17.5
<i>Semimytilus algosus</i>	mussel	0	0	0
<i>Aulacomya ater</i>	mussel	11	2	5.9
<i>Brachidontes purpuratus</i>	mussel	0	0	0
<i>Loxechinus albus</i>	sea urchin	1	0	0.5
<i>Oliva peruviana</i>	sea snail	0	0	0
<i>Concholepas concholepas</i>	sea snail	0	0	0
	crab	0	0	0

**Table 7.7. Sector II Unit 28 shell distribution.**

Shell type	Common name	Count	MNI	Weight (g)
<i>Protothaca taca</i>	clam	11	3	11.9
<i>Mesodesma donacium</i>	clam	4	0	5.1
<i>Choromytilus chorus</i>	mussel	61	15	74.8
<i>Semimytilus algosus</i>	mussel	15	6	3.3
<i>Aulacomya ater</i>	mussel	69	6	25.9
<i>Brachidontes purpuratus</i>	mussel	319	137	111.2
<i>Loxechinus albus</i>	sea urchin	27	0	6.5
<i>Oliva peruviana</i>	sea snail	4	3	4
<i>Concholepas concholepas</i>	sea snail	14	0	16.2
	crab	2	0	0.4

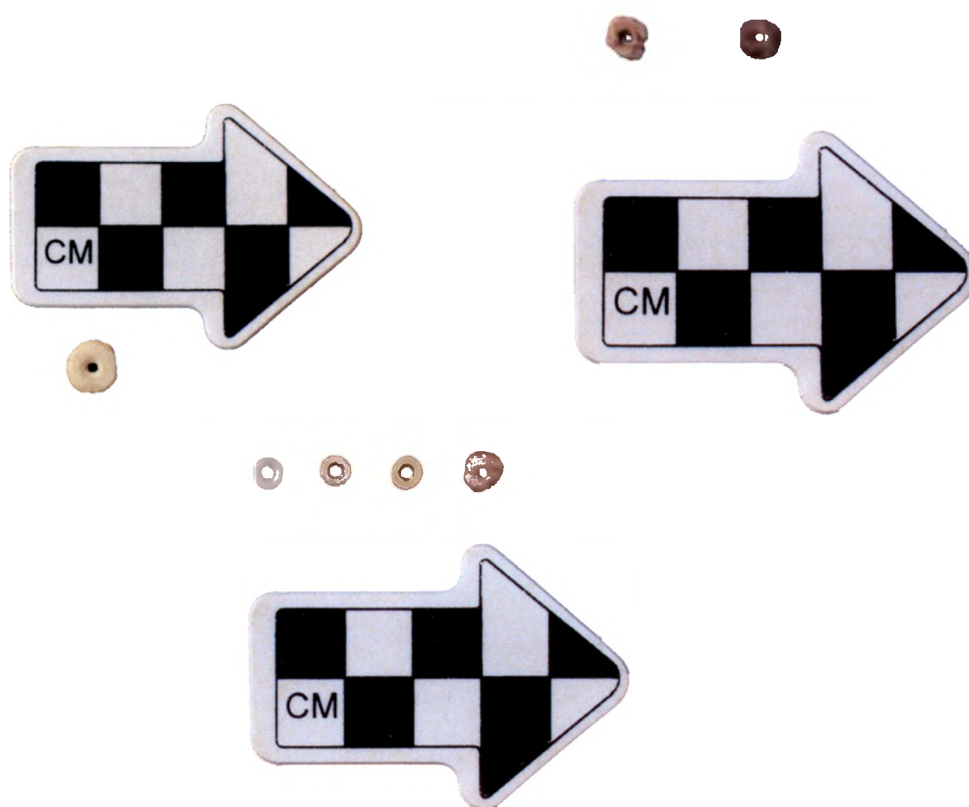
La Puntilla possessed a malacological assemblage of considerable similarity to La Tiza. Mussels composed 78 percent of the total shell fragments and 62 percent of the MNI (Van Gijseghem 2004:297). Like La Tiza, the different shell types at La Puntilla were also evenly distributed across units and sectors (Van Gijseghem 2004:298).

The shell material is most likely associated with domestic refuse from food consumption. (Special shell ornaments will be discussed in the next section.) It is

unclear exactly what proportion shell foods comprised of the regular diet at La Tiza, but it does not appear to constitute a controlled or solitary consumption event. The site of La Tiza is about 60 km from the ocean. At this location, the marine resources could have been acquired directly or through trade.

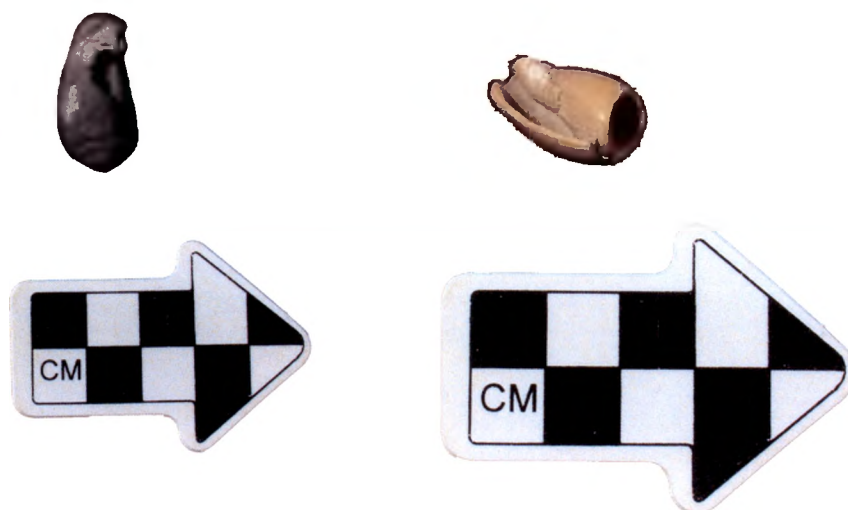
### **Other Artifacts**

This final artifact category is dedicated to ornaments and unique tools. One shell bead from Unit 31 and seven others from unit 28 were collected. These could have been decorative ornaments from jewelry or clothing. See Figure 7.13 for photographs of these shell beads. Unit 28 also produced two other shell ornaments (Figure 7.14). These were larger sea snail shells that were engraved and perforated. Two fragments of polished bone, two and three centimeters in length, were also collected from Unit 28 (Figure 7.15). It is unclear what purpose they served. Table 7.8 presents the distribution of these artifacts.



**Figure 7.13. Shell beads.**

31-D (top left), 28-B (top right), 28-C (bottom center row)



**Figure 7.14. Shell ornaments.**  
28-C-Rasgo 3 (left), 28-C (right)



**Figure 7.15. Bone tools or ornaments.**  
28-B-Rasgo 1 (top and bottom)

**Table 7.4. Distribution of other artifacts.**

	Shell beads	Shell ornaments	Bone tools/ornaments
<u>Sector I:</u>			
Unit 27			
Unit 29			
Unit 30			
Unit 31	1		
<u>Sector II:</u>			
Unit 28	7	2	2

### Conclusions

The non-ceramic material of the early occupations at La Tiza does not suggest any major restrictive access to raw materials. The lithic and shell resources appear to have been equally available to all residents. The presence of marine and obsidian materials at La Tiza indicates that members of the community were either traveling relatively long-distances to obtain these resources from the coast and highlands, or they were participating in social networks of trade and exchange.

While the population as a whole seems to have had access to basic raw materials, Unit 28 possesses a notable concentration of artifact frequencies compared to other units excavated in Sector I. However, it is likely that area of Sector II experienced heavier occupation during later time periods, resulting in more cultural deposition. Since non-contemporaneous diagnostic pottery was found intermingled in all three layers, it is unclear exactly which of the non-ceramic materials are related to the late Early Horizon and Early Nasca periods. Furthermore, Quispisisa was the primary obsidian source used

in the south coast from the Early Horizon through the Middle Horizon, further complicating attempts to pinpoint a specific occupational period.

When comparing the overall distribution, without being able to isolate particular occupational events related to Unit 28, this unit does possess a greater frequency of ornaments and tools. Perhaps the occupants of this domicile produced larger surpluses, reaped the benefits and, therefore, enjoyed a higher status.



## **CHAPTER 8**

### **INTERPRETATIONS**

From the limited context of these four excavated units, the earliest occupation at La Tiza appears to be late Early Horizon – Ocucaje phase 8 at the earliest, but phase 10 is more likely. Unit 28 in Sector II did contain more diagnostic Early Horizon material than the Sector I units. More excavation is needed, particularly in the lower elevations of Sector II because the material from Unit 28 appears mixed. A better context is desired for more precise dating and effective comparison.

While there was some limited Early Horizon type material, the ceramic pastes of many of the vessels could not be distinguished between Early Horizon and Nasca 1 due to the ambiguity of utilitarian pottery manufacture. However, the majority of the vessel forms appear to be Nasca 1. Therefore, I conclude that materials from both times are possibly present, but more likely there was a survival of late Early Horizons styles into Nasca 1, as well as some blending of traditional paste preferences with new Nasca 1 forms. Some of the Nasca 1 vessel shapes continued on into subsequent Nasca phases. However, I feel fairly certain that these are indeed Nasca 1 and not later because the habitation location at La Tiza shifted during subsequent Nasca times to the southern end of Sector I. The few later Nasca sherds collected from the superficial levels of the excavated units appear to be more related to refuse than continual occupation.

As Silverman (1994) and Schreiber (2003) have pointed out, many of the Montana Period (200 B.C. – A.D. 1) sites have combined Ocucaje phase 10 and Nasca 1 materials, suggesting co-habitation was quite common. Such could have been the case at La Tiza. However, if they did share residence at La Tiza, they did not physically separate themselves, as EH and Nasca 1 materials were frequently found in association with each other. For this reason, I suggest that the early occupation at La Tiza could date to EIP 1 (100 B.C. – A.D. 1), and the EH styles extended into Nasca 1. Recently obtained  $^{14}\text{C}$  dates confirm this period of occupation for both Sectors I and II. Samples from Units 27 and 28 date to  $2069 \pm 37$  B.P. and  $2082 \pm 36$  B.P. (wood charcoal; RC-3-05 and RC-4-05). These dates indicate that Structures I-A and II-F were occupied during the middle to late EIP 1.

Van Gijseghem's (2004) investigations support these findings of co-habitation, although La Puntilla appears to demonstrate greater time depth and Paracas ties, which are conspicuously absent at La Tiza unless the incised materials are considered to be Paracas plainware. The paucity of Paracas fineware indicates that La Tiza did not possess any cultural affiliations with the migrant culture. Concordantly, the absence of the Montana blackware bowls, which are thought to have been an important icon emanating from Cahuachi, suggest that the La Tiza community did not associate with the newly emerging Nasca cult. The absence of diagnostic Nasca 1 pottery at La Tiza was somewhat surprising because the utilitarian wares from both sites were so similar, especially in paste and manufacturing technique. So the real mystery, in my opinion, lies in determining the cause of this material discrepancy.

The early populations which resided at La Tiza can be interpreted in several ways based on the ceramic material present at the site. Firstly, it can be argued that the populations were locally derived. If Silverman (1994) is correct in her assertions that the incised Tajo style is locally derived, then the Early Horizon inhabitants may already have been established in the area and were not associated with Paracas migration events. The brownware is truly a widespread Early Horizon tradition (Silverman 1994) that could have easily reached La Tiza without La Puntilla acting as its agent. Concurrently, the red-rimmed bowls of La Tiza were commonly found throughout the Nasca region and were not exclusively related to the Paracas or Proto-Nasca peoples (Van Gijseghem 2006:26). They are likely local imitations of a style rooted in Ocucaje phase 8 (Menzel et al. 1964). Based on these arguments, it can be concluded that the residents of La Tiza came from the surrounding area and did not have ties to Paracas or Proto-Nasca factions. They were likely witness to this transitional time but were not part of any tumultuous sociopolitical realignment.

Secondly, it can be interpreted that the La Tiza population was predominately related to Nasca 1, and the wares reminiscent of the Early Horizon are layovers, as I previously discussed in the conclusion of Chapter 6. Many of the vessel from La Tiza are Nasca 1 in shape, yet they do not demonstrate the stylistic techniques, such as the smoked blackware, that would have affiliated the owners with the social and religious activities occurring at Cahuachi during that time. It follows that if the residents were not involved in the rapidly developing cult and the changes in expression and technology that were associated with it, then they may have maintained some of their older customs and ceramic-making techniques well through Early Intermediate Period epoch 1.

Alternatively, whether the incised Tajo wares were locally derived or not, they were part of the Paracas repetoire at La Puntilla and La Tiza. Furthermore, other utilitarian vessels at La Tiza resembled La Puntilla plainware in vessel shape and paste composition. While this may just indicate that both sites were influenced by local traditions in utilitarian pottery manufacturing trends, it could also be interpreted as a direct connection between the two sites, or at least between portions of their populations. The population of La Puntilla was significantly larger than that of La Tiza, and it is unlikely that a smaller community so close in proximity would not exercise trade with La Puntilla. However, this does not explain why they did not trade in any of the finer wares, which La Puntilla possessed. It is possible they were of a lower social status and did not have the political leverage necessary to access such restricted icons. La Puntilla could have been operating like an exclusive neighborhood, where only those with the appropriate ties could gain access to high status artifacts. Perhaps the people of La Tiza were rejected and thusly excluded from the exchange of the finer material goods from La Puntilla – materials that communicated something of status, social positioning and political and religious affiliation.

Conversely, the exclusion could have been more voluntary. Some dissatisfied residents of La Puntilla may have broken from the group and settled at La Tiza as a means of disengaging themselves. The pile of slingstones above the occupation at La Tiza does suggest there was some sense of a need for defense, and perhaps La Puntilla, as the closest neighbor, was considered a threat. It is presently unclear if violence did occur at La Tiza at that time, as no burials have been found in Sector I. However, during the period of the Paracas-Nasca transition, political power appears to have been shifting at La

Puntilla from the traditional Paracas elites to those aligned with the newly emerging cult at Cahuachi (Van Gijseghem 2004, 2006). It is expected that there would have been some tension between the two factions. Perhaps the residents at La Tiza were attempting to stay out of, and protect themselves from, what they feared would become a combative situation.

I offer one final alternative interpretation. Van Gijseghem (personal communication 2006) has suggested the possibility that La Tiza was a hamlet of La Puntilla, perhaps only temporarily occupied during periods of intensive agricultural production. Cultivation would have occurred on the river basin below, separating the two sites. This area is still used in modern times to grow cotton and various staple crops. The relatively large number of storage pits to domestic structures in Sector I does make his theory somewhat appealing, and perhaps the sling stones were needed to safeguard the stores. I believe this theory also supplies an explanation for the paucity of fineware pottery at La Tiza. If the site was only utilized during limited times of the year for seasonal work related activities, more prized belongings would have remained at their permanent residences at La Puntilla. For status symbols to function, they require an audience and an occasion to be seen. Either the occupants of La Tiza did not reside there long enough to warrant transporting their finer possessions, or they were citizens of a working class who did not own them. A shortcoming of this hypothesis though is that there is not much other evidentiary support. La Tiza does not appear to possess a high number of food processing tools, such as grinding stones or adzes, and more importantly, no botanical remains (aside from a single piece of wood) were recovered from

excavations. This absence, however, could be due to poor preservation, or perhaps the food supplies and tools were transported to La Puntilla or elsewhere.

## **CHAPTER 9**

### **CONCLUSIONS**

While the materials derived from excavations were not definitive cultural identifiers, the data did allow for insights related to several of the project's research questions. The earliest occupation at La Tiza appears to have occurred during the Montana Period (200 B.C. – A.D. 1), when EH 10 and EIP 1 sites were often co-inhabited. This indicates that La Tiza was witness to the Paracas-Nasca interface, albeit in a less conspicuous manner than neighboring La Puntilla.

Decorative styles and vessel forms are indicative of both the Tajo characteristics and Nasca 1 innovations. More research is needed regarding Tajo to determine if it is indeed a local style or a plainware type associated with the Paracas culture. Whether the incised brownware was introduced by the Paracas culture or not, I would argue that its use does not appear to have been restricted to the Paracas peoples. It has been documented at non-Paracas related sites by Silverman (1994) and in association with Nasca 1 habitation at La Puntilla (Van Gijseghem 2004) and at La Tiza (present work).

The co-association of the Tajo and Nasca 1 wares indicates that this Early Horizon tradition survived into Nasca 1 times. Therefore, I tentatively argue that the period of early occupation at La Tiza could be narrowed down to the beginning of EIP 1 (Nasca 1, 100 B.C. – A.D. 1). Yet I hesitate to call the residents of La Tiza “Proto-

Nasca” because they did not participate in the exchange of the materials that would have identified them to others as associated with the newly emerging Nasca cult. They may have purposely remained disengaged from the Nasca faction for fear of violent repercussions, however, the paucity of any other culturally distinct finewares suggest their exclusion was more likely not of their own choosing. A segment of the population may have broken from La Puntilla and relocated to La Tiza, or the site was only occasionally or seasonally inhabited by agricultural workers from La Puntilla.

Questions regarding the social status of La Tiza inhabitants were addressed. The absence of polychromes or any finely made bottles or bowls suggests they were not of an elite rank. Among the residents, there does not appear to have been any restricted access to raw materials and foodstuffs. However, the occupants of Sector II (Unit 28) may have enjoyed a slightly higher status than the residents of Sector I. Additional excavation could further elucidate the relationship between the two sectors regarding the issue of their contemporaneity and unequal artifact distributions.

Van Gijsegheem’s research (2004, 2006) at La Puntilla provides interesting insights into the Paracas-Nasca transition. However, it is not certain how successfully the sociopolitical relationships understood at one site can be applied to others. La Tiza’s population was a fraction of the size of La Puntilla, and it was excluded from the material identifiers of the vying local political factions. The evidence at La Tiza suggests that, while Paracas and Proto-Nasca peoples considered themselves ethnically or politically distinct, not all populations aligned themselves with one faction or the other. The reasons for such are currently not clear. Future research is still needed to elucidate the dynamics, both at the intra- and inter-site level, that existed during the Paracas-Nasca transition.



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## **VITA**

Lindsey Erin Stoker was born in Beaumont, Texas, on January 27, 1979, the daughter of George Robin Bond and Barbara Lazenby Bond. Lindsey was raised by Barbara and her adopted father, Daryl Stoker. She grew up in Nederland, Texas and graduated from Nederland High School in 1997. She received a Bachelor of Business Administration in Management and a Certificate in International Business in August of 2002 from Texas A & M University. Lindsey taught English in Puebla, Mexico for a year and then returned to Texas to study Anthropology at Texas State University–San Marcos. In August of 2004 she received a Bachelor of Arts in Anthropology and entered the Graduate College of Texas State University–San Marcos to continue her studies in Anthropology with a specialization in Archaeology. Lindsey has been employed as the Curator for the Center for Archaeological Studies since 2004 and has worked on archaeological projects in San Marcos, Wimberley, and the Texas Panhandle. During the summer of 2005, she accompanied Dr. Christina Conlee, of the Texas State Anthropology Department, to Nasca, Peru to conduct archaeological fieldwork for her thesis research at the site of La Tiza. The present work is the result of these studies.

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