

Shellfish, Water, and Entanglements: Inter-community Interaction and Exchange during
the Late Intermediate Period (1100-1470 CE) in the Huanangue Valley, Peru

By

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Chapter I

Introduction: Defining Chancay-*Chaupiyungino* relationships in the Huanangue Valley during the Late Intermediate Period

Population mobility, culture contact, and the resulting interaction have a long history of study in the social sciences (Barth 1969; Cohen 2000; Knapp 2013; Stein 2002; Dietler 2010; Knapp and van Dommelen 2008, 2010). This is particularly true in the Andes where high levels of ethnic and ecological diversity have fueled population movement and intergroup interaction for millennia. This study seeks to provide a historic and archaeological perspective to these issues by examining how tensions created by migration and interaction were resolved through cooperation, conflict, conflict resolution, and/or a combination of all three on the western slopes of the Peruvian Andes during the Late Intermediate Period (1100-1470 CE). Specifically, this study will explore the possible relationship between diaspora and entanglement theory (*sensu* Hodder 2010, 2012; Dietler 1998, 2010; Stein 2002) as potential alternatives to other explanatory models such as verticality (Murra 2002), production zones and niche filling (Mayer 2002), and resource sharing and intermarriage (Dillehay 1976, 1977, 1979, 2013; Santoro et al. 2010) that have traditionally been used to describe population movement and interaction in many parts of the Andes. Furthermore, this study has the potential to add greater understanding to the processes involved in resource management and conflict resolution among multi-ethnic communities today (see Lobo 1982; Skar 1994; Sanjek 2000).

This investigation focuses on the movement of coastal groups into the Huanangue Valley, Peru, and their interactions with local populations during the Late Intermediate Period (1000-1450 CE). Specifically, the data presented here will explore how coastal Chancay settlers and local Huanangue peoples, here called *chaupiyunginos*, interacted by negotiating access to agricultural

lands and irrigation water in order to grow products such as coca, maize, and chili pepper. These products were (and still are) highly valuable commodities that can only be grown in restricted ecological zones such as the tropical *chaupiyunga* ecotone (see Spedding 2004; Goldstein 2005; Netherly 1988), and the desire to gain access to these products was a driving force of mobility and interaction among many pre-Hispanic coastal and highland groups (Dillehay 1976, 1979, 2013; Rostworowski 1988).

Though previous research on the western Andean slopes suggests that complex relationships existed between coastal, highland, and middle valley groups and that many of these relationships played out in the middle zone, the *chaupiyunga*, few studies have focused on these relationships specifically (Dillehay 1976, 1977, 1979, 2013; Santoro et. al. 2010; Topic and Topic 1983, 1985; Topic 2013). This dissertation seeks to address these themes by answering the following questions: What were the mechanisms behind coastal community expansion into the *chaupiyunga zone*? What was the nature of interaction between coastal and *chaupiyunga* groups in the region? How did it change over time? What types of interaction took place between them, and how do we analytically describe them? Furthermore, how were *chaupiyunga* and coastal community identities challenged, (re)created, transformed, and negotiated through intergroup interaction, and what roles did human and landscape agencies play in this? How did interaction between communities affect the organization of agricultural production during the Late Intermediate Period, and conversely, how did any material restraints imposed by agricultural production affect inter-group coastal and *chaupiyunga* relationships? In other words, what types of entangled interactions developed between the landscape and local and coastal groups, and how were those entanglements mediated through agricultural production?

These questions were addressed through archaeological survey, archival research, and excavations at the archaeological sites of Campo Libre and Salitre. This dissertation hypothesizes that the coastal Chancay moved into the Huanangue Valley during the Late Intermediate Period, perhaps as part of a trade diaspora, in order to gain access to agricultural land. However, in spite of the Chancay's greater economic power, they were unable and/or unwilling to subjugate local Huanangue Valley people, perhaps due to the tactical power (*sensu* Wolf 1999) that local groups were able to exercise (see Chapter 2). As such, a relative balance of power may have existed in the valley. This may have led to the development of economic entanglements developed between the Chancay migrants and local *chaupiyunginos* in response to the Chancay's need for more agricultural land and water and the *chaupiyunginos*' desire for marine goods such as shellfish. As a result of these entanglements, neighboring highland groups were unable to move into the Huanangue Valley and intergroup relationships were largely peaceful.

Interaction, Entanglements, and Social Identity: Building a Framework for Understanding Coastal-*Chaupiyungino* Relationships in the Huanangue Valley

Interaction theory is first of two theoretical foci in this work and is explored in detail in Chapter 2. Briefly, concepts in interaction theory deal with different kinds of social and economic relationships that develop between different social groups, the outcomes of these relationships, as well as how local and non-local group identities can change as a result of interaction. This, in turn, can result in power struggles and shifts in agency. As a result, interaction can have many different outcomes, ranging from balkanization (where little interaction occurs between groups, and the interaction that does occur tends to be violent), to syncretism (where groups heavily interact and co-mingle—potentially leading to a breakdown and reconfiguring of group boundaries). The different outcomes of interaction can be distinguished from each other archaeologically by

examining the relative permeability of group boundaries as expressed in the material culture of these groups through time and space (see Chapter 3) (Riva 2010; White 1991).

Entanglement theory (Dietler 1998, 2010; Hodder 2012; Silliman 2005; Stahl 2002; Whitely 2013; Yao 2012) models the complex relationships that can develop between groups when foreign goods are adopted into local systems of value (Dietler 2010). This is the outcome of interaction that is specifically hypothesized in this dissertation. Generally, entanglement theory has been used as a way to understand how trade between groups can create an imbalance of economic power which allows one group to subjugate the other. For example, Michael Dietler has examined how the dependence of indigenous French elite on Greek and later Roman wine drew these groups deeper into interregional exchange networks and facilitated Roman colonization of the region (Dietler 1998, 2010). However, the correlation between entanglement and colonialism is not a necessary one. For example, Yao's analysis of the relationships between the Sarmatians and Han dynasty China shows how the Sarmatians were able to maintain their autonomy despite becoming dependent on Chinese bronze mirrors, because of their role as intermediaries along east–west trade routes that connected the Han with the Greeks (Yao 2012). Thus, though economic entanglements can lead to colonial relationships between entangled trade partners, this does not necessarily happen in every case. Therefore this model has the potential to explain the types of interdependences that can develop between small-scale groups in the absence of a strong power differential. In the case of the Huanangue Valley, though the Chancay were more economically powerful than the local *chaupiyunginos*, local groups may have been able to leverage their proximity to and thus control over important irrigation intakes in the middle valley into tactical power, leading to an absence of power asymmetry between groups. This, in turn, may also have prevented power imbalances from developing as these groups became more entangled.

Entanglements are closely tied to exchange, specifically to intergroup trade. Since the mechanisms behind group expansion into a new area can impact how groups interact with one another, it is important to understand the mechanisms through which the coastal Chancay moved into the Huanangue Valley. In Chapter 2, I hypothesize that one possible mechanism at work in the Huanangue Valley could have been that of the trade diaspora, which occurs when people move to distant territories to gain access to foreign resources and/or capitalize on trade networks, but do so without the oversight of the state (R. Cohen 2001). Trade diasporas are well documented for many areas of the ancient world (Stein 1999, 2002; Dietler 1998; Goldstein 2005; Owen 2005), and the establishment of trade settlements often precedes the development of intergroup entanglements as diaspora members often have to deal closely with the indigenous peoples in the region where they have settled. Alternatively, it is possible that the Chancay moved into the Huanangue Valley through the mechanism of vertical colonization, niche filling, intermarriage, or some combination of these models.

Identifying the possible outcomes of interaction archaeologically can be difficult. However, since in many cases there is a relationship between these outcomes and the relative permeability/impermeability of group boundaries (Buzon 2006; Smith 2003), it should be possible to detect them by reconstructing group boundaries and tracking how these boundaries changed over time. Therefore, the second theoretical foci of this study examines the materialization of group identity and group boundaries (see Chapter 3). Group identity has an indirect relationship with the material record (Jones 1995; Emberling 1997; Knapp 2008; Knapp and van Dommelen 2008, 2010) in that identity can be materialized both consciously and unconsciously through the manipulation of different types of style (see Chapter 3). Thus, different types of material culture may be useful in the reconstruction of social group boundaries in different contexts, making it

necessary to track the co-variance of different types of material cultural remains, including, but not limited to, site plan and placement, architectural styles, construction techniques, artifact styles, and diet.

A multivariate approach to detecting group identity is also useful for determining the type and level of permeability of group boundaries, which is an important aspect of the study of the economic and cultural outcomes of interaction between groups. For example, in the case of balkanization, one would expect clearly defined group boundaries which would be manifested materially through a number of sites with distinct suites of material culture and little to no evidence for mixing (in other words, foreign ceramics, food stuffs, etc. would likely be absent from site assemblages). At the other end of the spectrum—in cases of hybridization and syncretism—one would expect group boundaries to be blurred and highly permeable with material assemblages mixed between sites and artifacts combining different stylistic elements. In the case of entanglement, one would expect to see a pattern whereby group boundaries appear to be clearly materialized (i.e., with clearly defined symbolic boundaries as delineated through differentially distributed ceramics, site plans, architectural styles, etc.). However, a close analysis of the artifacts from sites belonging to different groups also may show that boundaries were becoming semi-permeable as non-local goods were inserted into local systems of value. This would be manifested through the presence of foreign goods in local material assemblages. As both survey and excavation data will show in this study (see Chapters 6 and 7), this pattern appears to be similar to that documented for the Huanangué Valley, where clearly distinct site types were identified for different groups interacting during the Late Intermediate Period, but where evidence for certain products (coastal ceramics and marine foods) crossing site boundaries into the middle valley was also found.

A multivariate approach is also useful for identifying the mechanisms behind population movement. For example, trade diasporas can be detected through the sudden appearance of sites with distinct types of material culture that do not have local antecedents; these intrusive, foreign sites would be inter-mixed with local sites. While vertical colonies would be similar to diaspora sites in that they could consist of foreign material assemblages, they can be distinguished from diaspora settlements through the presence of evidence for centralized planning. Evidence for centralized planning can include sites with a grid layout, buildings oriented along a similar axis, the reproduction of important monuments from the homeland, etc. Furthermore, since vertical colonies would be established under the auspices of the state, colonists would be more likely to have access to elite, state ceramics and other prestige artifacts. In addition, since the verticality model predicts that agricultural and other products generated by colonists would be sent to the core and redistributed, then it is likely that agricultural goods would have been relatively equally distributed across co-ethnic sites (see Chapter 2).

Economic vs. Tactical Power and the Formation of Entanglements in the Huanangue Valley

The Late Intermediate Period (examined in more detail in Chapter 5) is often characterized as a period of endemic raiding and warfare where different groups battled for position in the power vacuum left by the fall of the Wari and Tiwanaku empires (Arkush 2008; Brown 2008; Tung 2007, 2012). While warfare certainly was prevalent in certain parts of the Andes, communities during this period interacted in numerous ways, including through verticality (Van Buren 1996), trade and exchange (Salomon 1986; Conlee 2003; Mayer 2013; Topic and Topic 1985), intermarriage (Santoro et al. 2010; Dillehay 2013; Ramos 2011); resources sharing, and co-residence (Dillehay 1977, 1979; Santoro et al. 2010). The fractured nature of the Andean political landscape during the Late Intermediate Period makes it a good setting for studying entanglements as different groups

would have to engage with each other in order to gain access to non-local resources, which were important for minimizing risk through diversifying economies and for satisfying elite need/desire for exotic goods.

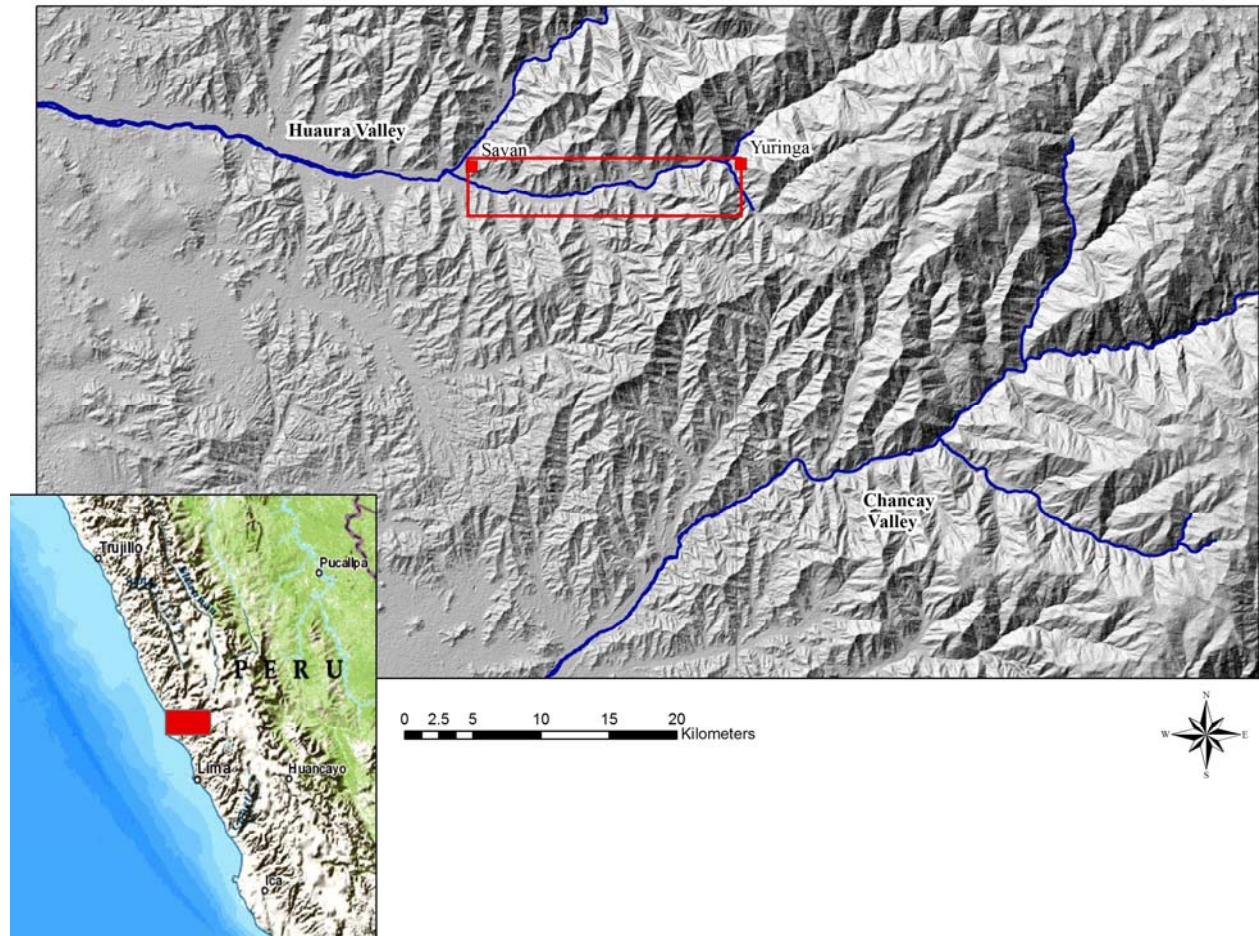


Figure 1.1: Map of the Study Area (in the red box) showing its spatial relationship with the Huaura Drainage and Chancay Valley.

The research presented here takes place in the Huanangue Valley, which runs through the *chaupiyunga* zone, the ecological and cultural boundary between the coast and highlands. Ranging in elevation from 700-1500 meters above sea level and characterized by semi-arid, hot, and sunny conditions, the *chaupiyunga* was (and is) the prime location for growing coca, maize, chili peppers,

and fruits. Both archaeological and documentary evidence demonstrate that coastal, highland, and local groups often came into contact in the *chaupiyunga* zone, as these groups desired access to the available land for cultivation of these products (Rostworowski 1978; Guffroy 1999). Previous research in the Chillón Valley suggests that coastal and middle valley groups may have become entangled with each other due to various groups competing for access to coca fields in the middle valley *chaupiyunga* (Dillehay 1976, 1977, 1979, 2013; Santoro et al. 2010). The ecological and cultural similarities between the Chillón and Huanangue valleys suggest that that similar processes may have occurred in the latter area.

This dissertation specifically focuses on the relationships that developed between the coastal Chancay and local *chaupiyunginos* in the Huanangue Valley. The Chancay were a larger affiliated community that emerged around 900 CE in the Chancay Valley (Pazdur and Krzanowski 1991), and who later expanded into the Huaura drainage and surrounding areas either through a trade diaspora, vertical colonization or possibly through both. Though Chancay research has been hindered by a lack of publication, available data suggests that the Chancay had access to extensive agricultural lands as well as to long-distance trade networks, and that they were likely more economically and politically powerful than their Huanangue Valley neighbors (see Chapter 5). In contrast, survey and excavation data suggest that the *chaupiyunginos* were members of a much smaller community with limited economic reach and little political power. However, in spite of their limited access to economic resources, the *chaupiyungino* proximity to Huanangue Valley irrigation intakes may have given this group tactical power, as they may have been able to threaten to impede access to water during times of scarcity by diverting it away from the main river channel that reached the lower valley Chancay people. The Chancay moved into the Huanangue Valley during the Late Intermediate period around 1420 cal BCE, if not earlier (see Chapter 7), and

because of their greater economic power, one would expect them to exploit the local groups in the valley. However, excavations at Campo Libre reveal that this was not the case (see Chapters 7 and 8). Rather, the *chaupiyungino*'s tactical power (Wolf 1999) may have leveled the playing field between groups, and may have encouraged the Chancay to engage in diplomacy with local groups as opposed to subjugating them.

Study Relevance and Broader Impact

Andean research can contribute to larger discussions around entanglement theory as the high relief of the Andean landscape is uniquely suited to the development of different types of economic and cultural entanglements. The steepness of Andean slopes creates a pattern of closely stacked ecological zones, each of which contains different resources. Therefore, ancient Andean people were often driven to gain access to these scattered resources in order to increase variety in their diets as well as to access desired goods such as metals, minerals, wool, feathers, etc. Though verticality was one mechanism through which this could be achieved, other mechanisms also existed, including resource sharing, intermarriage, raiding, and intergroup trade. While trade has been understudied in the Andes, a careful review of ethnohistoric and archaeological literature suggests that it played an important role in the development of Andean political and cultural systems, and that different groups may have become entangled as the result of this trade (Salomon 1985; Topic and Topic 1983, 1985; Santoro et al. 2010; Dillehay 1979, 2013; Mayer 2013; Burger 2013; Conlee 2003). For example, the coastal Collique and middle valley Quives may have become entangled because of their complex relationships, which were mediated through resource sharing, mutual military support, and intermarriage (Dillehay 1976, 1979, 2013; Santoro et al. 2010).

Understanding how different non-state groups interacted is key to understanding the development of local political landscapes that were managed by later expansive states. Furthermore, many of the problems faced by ancient Andean populations are similar to those faced by societies in other parts of the ancient world. In areas such as Mesopotamia (Yoffee 1995, 2005; Stein 1987, 2001; Wengrow 2001), China (R. McIntosh 1991); India (Allchin and Allchin 1982); and parts of African (Kemp 1989; S. McIntosh 1999; R. McIntosh and S. McIntosh 1981) societies also had to deal with harsh and varied environments with scattered pockets of resources, and highly diverse political landscapes consisting of a mosaic of different ethnicities, political systems, social systems, and economic systems. As such, by looking at the diverse ways in which Andean societies interacted with each other and with their environments, Andeanists can reenter world debates through developing models of interaction that are applicable to other world areas.

Chapter Divisions

In order to answer the questions posed by this dissertation, it is necessary to examine the body of literature on interaction and entanglement theory so that an analytical framework through which intergroup relationships in the Huanangue Valley can be developed. It will also be necessary to consider the literature on the materialization of identity in order to develop a methodology through which the outcomes of interaction can be distinguished from each other archaeologically. Due to the complexity of both of these bodies of literature, they will be approached separately in Chapters 2 and 3. Specifically, **Chapter 2** examines interaction theory and explores the outcomes of interaction with a focus on entanglements (Dietler 2010; Hodder 2012). Drawing from multiple case studies, this chapter will argue that entanglements can be useful for analyzing the relationships that develop between non-state groups such as those in the Huanangue Valley. In conclusion, this chapter hypothesizes that the Chancay moved into the valley, potentially as part of a trade diaspora,

and then became entangled with local *chaupiyunginos* who they may have been unable or unwilling to exploit.

Chapter 3 analyzes the relationship between social identities, symbolic boundaries, and the archaeological record. As different outcomes of interaction can be differentiated from each other based on the level of permeability in group boundaries, understanding how these boundaries are materialized in the archeological record is important. Specifically, this chapter examines two different theoretical approaches to social identities: the primordialist approach, which views identity as a deeply held, inherent quality, and the contextual/interactional approach, which views identity as something that is negotiated and formed in response to intergroup interaction as well as to shifting cultural, political, and historical circumstances. The methodological implications that each of these approaches has for detecting social identities in the archaeological record are also considered. Ultimately, this chapter concludes that it is necessary to use a multivariate approach which tracks variation in several different domains of material culture in order to detect symbolic boundaries and determine their level of permeability. **Chapter 4** briefly summarizes the different methodological techniques used in this study and details how archival research, survey, excavation, and artifact analysis were performed.

Chapter 5 studies the physical, cultural, and historic settings in which this study takes place in order to locate the processes that occurred in the Huanangue Valley within the context of the wider cultural and political developments of the Late Intermediate Period. Though the Late Intermediate Period is generally characterized as a time of endemic warfare, this chapter argues that many different forms of interaction representing a full range of cooperative/competitive behaviors were in play during this time. Documentary data from the Huaura Drainage suggests that this region was occupied by multiple small-scale groups known as *curacazgos*. Data published

by Rostworowski (1978) and by Elias Ipinze (2004) further suggest that trade between coastal, highland, and middle valley groups occurred regularly, and that coastal groups founded settlements in the middle valley in order to gain access to agricultural land there. Based on this information, the chapter hypothesizes that Chancay settlers may have moved in the Huanangue Valley as part of a trade diaspora in order to gain access to agricultural land, and that the Chancay migrants likely engaged in trade with local groups in the valley, eventually becoming entangled with them.

Chapter 6 presents the results of an opportunistic survey that was conducted in the Huanangue Valley over two field seasons. The goal of this survey was to document archaeological sites in the Huanangue Valley in order to identify which groups inhabited the valley, reconstruct changes in land use overtime, and form preliminary conclusions about the nature of intergroup relationships. In brief, 16 different archaeological sites were documented, 11 of which dated to the Late Intermediate Period. Based on differences in site layout and location, architectural styles, and surface artifact assemblages, the research team concluded that four different communities occupied the valley during the Late Intermediate Period: the Chancay, highland (possibly Atavillos), local *chaupiyungino*, and an unidentified group. Survey data suggests that relationships between groups were relatively peaceful, and Chancay black-on-white ceramics and shellfish were recovered on the surface of the majority of late sites, which may mean that trade was practiced between communities living in the valley. This pattern is consistent with the documentary data published by Rostworowski (1978) and Ipinze (2004), and also very similar to the list of material correlates that can be used to distinguish entanglements from other outcomes of intergroup interaction. Crucially, survey data also revealed that *chaupiyungino* proximity to irrigation intakes may have been a source of tactical power (*sensu* Wolf 1999) for this group.

The Chancay site of Salitre and the *chaupiyungino* site of Campo Libre were excavated in order to verify the preliminary conclusions made during survey, and to better understand the dynamics of Chancay-*chaupiyungino* relationships. The results are presented in **Chapter 7**. Excavations revealed that the site of Campo Libre was occupied by local *chaupiyunginos* for a period of approximately 3,000 years. The presence of shellfish remains in all contexts at Campo Libre suggests that marine products were a desired resource and that coastal-middle valley interaction had a long time depth. However, shellfish remains increased drastically for contexts dating to the Late Intermediate Period, coinciding with the arrival of the Chancay into the valley. In contrast, excavations at Salitre show that the site was founded by Chancay migrants, and was only occupied for about 150 years. Work here also revealed that the Chancay had access to a wide range of agricultural and marine goods, and that feasts were held at the site. These feasts may have been part of the mechanism through which marine resources were distributed to the local *chaupiyunginos* in order to persuade them not to cut off access to irrigation water.

In **Chapter 8**, ethnohistoric, survey, and excavation data are brought together to explain both how entanglements developed between the Chancay and *chaupiyunginos*, and why these entanglements did not lead to the development of power asymmetries between groups. In brief, though evidence from excavations suggests that the Chancay living at Salitre were economically powerful, the tactical power held by the *chaupiyunginos* gave the local group an advantage in the valley, as they may have been able to threaten to cut off access to irrigation water which the Chancay needed in order to grow the agricultural goods that documentary and archaeological data suggest were being sent down to the coast. However, the *chaupiyunginos* also desired access to marine resources such as shellfish, and evidence suggests that the Chancay were in the perfect

position to supply access to this resource, potentially leading to the development of entanglements between the two groups.

In sum, this project contributes to a growing body of research on population mobility, intergroup contact and interaction, resource management, and conflict resolution. Though there is a long history of study on culture contact in anthropology, the majority of studies focus on cases of contact and interaction brought about through state expansion. Looking at cases of contact between small-scale, non-state entities is important because 1) understanding the inter-relationships between local ethnic groups allows for better understanding of how later expansive states incorporated these areas (Schreiber 2005), 2) cases of contact between non-state polities, for whom no initial power asymmetry existed, provide the opportunity to explore identity negotiation and culture change in a dynamic setting, and 3) these processes are often more visible in small-scale societies, because larger state actions are more difficult to detect and also tend to mask local-level identities and actions. As such, this case study adds to existing knowledge of intergroup interaction by moving beyond mechanistic explanations of how and why interaction takes place by focusing on the political, social, and cultural consequences and meanings of interaction.

Chapter II

Interaction, Power, and the Development of Entanglements

Understanding interaction and its outcomes at different levels and scales is key to understanding the development of human societies throughout time. This study investigates how economic interaction between small-scale groups living in the Huanangue Valley impacted local and regional geopolitics. Survey data suggested that highland groups had little influence in the valley (see Chapter 6). Therefore, the analysis presented here focuses primarily on the relationships formed between the coastal Chancay and the local *chaupiyunginos*. Although it is beyond the scope of this work to present a full review of the literature on interaction, a brief outline of the more important trends related to the outcomes of interactions follows. After this review, multiple cases of entanglements will be explored in order to create an analytical framework through which interactions in the Huanangue Valley can be studied archaeologically and ethnohistorically. Finally, the physical and political landscape of the Huanangue Valley will be considered in order to determine what mechanisms were behind Chancay movement into the area, as well as what constraints the physical and social settings may have imposed on Chancay-*chaupiyungino* relationships.

This chapter hypothesizes that the Chancay likely moved into the valley in order to gain access to *chaupiyunga* agricultural resources, perhaps through the mechanism of trade diasporas, which occur when people move to distant areas in order to engage in various economic pursuits that cross geographic and/or cultural boundaries without state/bureaucratic oversight (R. Cohen 2001; Stein 1999, 2002). Furthermore, Chancay movement into the valley may have led to entanglement between the Chancay and *chaupiyunginos* as the people living at the Chancay site

of Salitre may have become dependent on the *chaupiyunginos* living in the valley, due to their need for agricultural land and irrigation water. In return for access to water, the people at Campo Libre received coastal products from the lower valley Chancay people. Together, these needs and desires may have established a co-dependency between the Salitre and Chancay people.

The chapter employs argument by analogy in order to construct an interpretive framework through which interaction in the Huanangue Valley can be analyzed. Although there is always a possibility of taking analogies too far and creating false equivalencies (Wylie 2002), the discussion presented here attempts to minimize this problem through comparing and contrasting several cases of entanglement in order to create a general model that can be tested against the Huanangue Valley case. Using the comparative method in this way is necessary for two reasons. The first is that there is little published data from the research area on Late Intermediate Period societies. As such, it is necessary to turn to other world regions where similar problems have been studied in order to develop hypotheses regarding how they may have been handled by groups in the Huanangue Valley. The second is that comparing Andean societies to those in other world regions is a way to help re-integrate the Andes into the broader academic discourse through highlighting the similarities between Andean and other societies. As such, this chapter will use cross-cultural analogies to create a framework to describe the different possible outcomes of intergroup interaction, with a particular focus on entanglements, which are hypothesized to have been at play in the Huanangue Valley.

A Brief History of Interaction Studies

Studies of culture contact began in earnest during the early 20th century, and largely focused on acculturation models as a way of understanding the social, political, and economic processes that occur during moments of cultural contact. These models propose that when two groups come

into contact, one group is dominant and the other is eventually absorbed into the dominant one (Herskovits 1938; Redfield 1956; Linton 1940; Barnett 1954). This approach began to change in the 1960's and 1970's, due in part to an increasing focus on the importance of ethnic identity in shaping the political and cultural dynamics of many of the new nation states created in the aftermath of World War II (Jones 1997). As former European states began to lose control over their far-flung territories, it became increasingly clear that many subordinate groups had not passively acculturated, but rather had energetically maintained their identities and their boundaries.

Following Barth's seminal work on ethnic group boundaries (1969), scholars began to increasingly focus on the ways in which group identity became stronger through the creation and maintenance of symbolic boundaries during periods of contact with other groups (see also A. Cohen 1985). Building on this body of literature, scholars such as Safran (1991), Clifford (1994), and R. Cohen (1996) demonstrated that migrant/diaspora communities located in foreign territories retain their identities through maintaining ties with their homeland, either physically through continued contact (Goldstein 2000, 2005) or symbolically through the conscious maintenance of material markers of homeland identity (Clifford 1994). These continued connections between migrants and their place of origin can lead to political and economic entanglements between the host country and the migrant's homeland. For example, during the Cold War era, the Polish diaspora community in the United States lobbied lawmakers in an attempt to make legislators in Washington keep up pressure on the Kremlin to limit Soviet control in Poland (Blejwas 1996). Similar processes occurred in the past. Neo-Assyrian kings, such as Shalmaneser, attempted to legitimize their expansion into Anatolia and Syria through arguing that the presence of an Assyrian trade diaspora in these lands gave the Assyrian city-state sovereignty over the distant territory (Postgate 1992).

In the 1980's, as part of post-colonial critique, scholars also began to build on Barth's observations by using literature on practice theory (Bourdieu 1977), agency (Scott 1985), and structuration (Giddens 1984) to examine the complex sets of negotiations that occur in colonial interactions. Much of this research focused on the ways in which subordinate groups exercised agency and were able to retain some semblance of independence while under colonial control (Scott 1985; Comaroff and Comaroff 1989, 1998; Wolf 1982; Taussig 1980). For example, in the Andes, Steve Wernke has shown how indigenous forms of social organization were preserved, even after people were forced to resettle in *reducciones* (Wernke 2007). Furthermore, colonist societies themselves were often profoundly changed through interaction with their subjects. In the ancient Mediterranean, both the Greek and Roman metropolises experienced episodes of "orientalization," during which elites incorporated elements of eastern ritual and material culture into Greco-Roman traditions as part of status competitions driven by elites trying to see who was the most cosmopolitan. As a result, many aspects of Greco-Roman identity had eastern origins, which can be seen through changes in material culture, particularly in the types of vessels and other goods used during *symposia* (Acheraiou 2011).

In summary, the recent literature on interaction, whether between members of a diaspora community and its host community or between colonizer and colonized, show that interaction has a dialectical relationship with identity (be it social, ethnic, class, political, gender, and/or another form of identity). Interaction is a central part of how these identities are made and remade and, in turn, identities can shape how interactions proceeds at the same time. Furthermore, though power can and does structure intergroup relationships, the correlation between power and how interaction plays out is not always straightforward, as subaltern groups often retain different forms of agency. Finally, continuing contact between migrant/diaspora groups, their host community, and their

homeland can have profound impacts for all three groups, who often become entangled with each other due to various political and/or economic networks that form between them. These entanglements can impact the ways these different communities are organized, how these communities perceive themselves, and how these communities are perceived by others.

Potential Outcomes of Interaction

There are many different mechanisms that can drive interaction, such as trade, colonization, migration, diaspora, intermarriage, and niche filling, among others, and there are complex interrelationships between intergroup interaction, power, and identity. As a result, interaction can lead to several different outcomes. These outcomes include: 1) balkanization, where different groups vigorously maintain their boundaries and interact very little; this outcome tends to arise in contexts of conflict or competition between groups. Balkanization can be caused by numerous mechanisms of interaction, such as migration, niche filling, and diaspora, among others, any of which can lead to increasing tension between groups and eventually to the outbreak of violence. For example, textual analysis of the Amarna letters suggest that the Late Bronze Age Levant was highly fragmented and populated by small, competing city-states. The analysis of regional settlement pattern data corroborates this through demonstrating the presence of distinct site clusters separated by buffer zones, suggesting that what little interaction existed between these polities was probably contentious (Savage and Falconer 2003). Materially, balkanization would result in a pattern similar to that seen in the Late Bronze Age Levant, with a mosaic of sites with clearly distinct physical and symbolic boundaries. Boundary marking could be accomplished in a number of ways, including through the maintenance of distinct sets of material culture, such as ceramic styles, architectural styles, site layout, food preferences, burial practices, etc. (Stanish 1989, 1992, 2005; Goldstein 2005; Owen 2005).

2) Entanglements are discussed in greater detail below, but essentially refer to the types of interdependencies that can arise when groups insert non-local goods into local systems of value (Dietler 2010). For example, Tiwanaku style snuff pallets were included in the burials of Atacameño elites as a marker of increased status (Blom 2005; Knudson and Torres-Rouff 2009; Torres-Rouff 2008). Entanglements may grow stronger over time, in which case one would expect to see these foreign goods appearing in a wider context as they become more widely available, and to see an increasing range of foreign goods appropriated by local cultures as well (Dietler 2010). While entangled groups may maintain their identities, the exchange of goods across group boundaries can lead to their increasing permeability. Typically, entanglements are likely to arise as the result of exchange relationships; thus, trade diasporas may be particularly likely to lead to the development of entanglements (Stein 1999, 2002). Of course, other mechanisms, such as colonization and niche filling, among others, may also lead to this outcome (Dietler 2010, Gosden 2004).

3) Hybridization occurs when groups interact and borrow different ideas from each other. While separate identities may still be maintained, the boundaries between groups begin to break down. Examples of this can be seen during the early Colonial period in both Mesoamerica and the Andes as indigenous groups adopted different Spanish artifacts and adapted them to their own uses (Rodríguez-Alegría et al. 2003, Chatfield 2007). Hybridization would result in the appearance of new material cultural styles that mix stylistic elements of two or more interacting cultures. Etruscan *bucchero wares*, which combine the vessel forms of Etruscan bronzes with Greek ceramic techniques, are an example of hybridized material culture (Riva 2010). Hybridization can occur as the result of several different mechanisms of interaction, such as such as colonization and intermarriage, among others.

4) Syncretism occurs when both groups combine elements of their cultures in new and different ways. Within the Andes, the clearest example of syncretism come from modern Andean religious practices, which combine different elements of Catholicism with pre-Colonial religious beliefs to create a new type of belief system that cannot be classified as traditionally Catholic or as pre-Colonial (Allen 1988; Isbell 1978; Sallnow 1982; however, see Nash 1993 for an opposing view). Materially, syncretism would result in the creation of new forms of material culture that creatively combine elements of the two donor systems. A classic example of syncretism is colonial Andean paintings of the Virgin Mary as Pachamama, resulting in the creation of a female deity that was neither fully Catholic nor fully Andean, but something unique and new (Tassi 2012). The Señor de los Milagros, who combines Christ with Pachacamac, is another, similar example (Rostworowski 2004). Like hybridization, syncretism can be the result of different mechanisms of interaction such as intermarriage and colonization.

The relationship between the mechanism of interaction and outcomes is highly variable, and outcomes are not mutually exclusive. They can occur at different times and in different contexts, as well as in different combinations. As this dissertation focuses on identifying the different outcomes of interaction, that is what this section will focus on. Since the outcomes of interaction are not mutually exclusive, rather than thinking of them as separate categories, it is perhaps better to conceptualize them as different points along a continuum, ranging from complete separation (balkanization) to complete fusion (syncretism). The overlapping and changeable nature of the outcomes of interaction is illustrated by the vacillating nature of the relationships between Egyptians and Nubians along Egypt's southern border, which occurred over a 1,500 year timespan (Smith 2003; Buzon et. al. 2007). During the Middle Kingdom Period, the Egyptian state established a series of fortifications along its southern border with the goal of keeping Nubians out

of their territory. However, in spite of an official policy of balkanization, low-level trade existed between Egyptian colonists and local people (Buzon 2006; Smith 2003). With the disintegration of centralized Egyptian power during the Second Intermediate Period, interactions between Egyptian colonists and local Nubians became increasingly intense, both due to intermarriage between these groups as well as increasing economic and cultural entanglements. As the political fortunes of Egypt and Nubia fluctuated throughout the New Kingdom and Late periods, people living in the forts were able to mobilize their Egyptian and Nubian connections in order switch alliances based upon whichever group was in power (Smith 2003). These changes can be traced both through the fluctuating numbers of Egyptian and Nubian goods in artifact assemblages at sites around the second cataract (Smith 2003), and through the mixed burial assemblages at the site of Tombos, where individuals with Egyptian craniomorphic and Nubian craniomorphic features were using the same cemetery and were buried with both Egyptian and Nubian artifacts (Buzon 2006).

Sixteenth century documents from the Andes reveal similar shifting patterns of interactional outcomes between different groups living in the central highlands and coast. Both the *Huarochiri Manuscript*, an indigenous retelling of local creation myths, and the *Justicia 416*, an early colonial court case over disputed territories in the Chillón Valley, show that relationships between highland, coastal, and middle valley groups shifted regularly between warfare and balkanization to resource sharing and ritual entanglements (Salomon and Urste 1991; Dillehay 1977, 1979). While the Chillón Valley case has been used as evidence for Murra's verticality model, archaeological research in the valley demonstrates that the relationship between the Collique and Quives was much more complex, and that while verticality may have operated during specific historical moments, the desire for coca led groups to engage in several different types of

relationships, such as resource sharing, co-residency, and mutual military support (Santoro et al. 2010; Dillehay 1976, 2013.)

Controlling Settings: The Importance of Tactical Power for Shaping Intergroup Interaction

As the Egyptian and Chillon examples demonstrate, the political, cultural, economic, and ecologic settings in which interactions take place potentially affect both the development and outcomes of intergroup interaction. Ervin Goffman's (1969) work on strategic interaction explores the importance of settings in detail. Goffman conceptualized of interaction as a game played between two or more different antagonists. Each of these antagonists seeks to achieve different (often conflicting) goals, and in order to achieve these goals, they enter into what Goffman refers to as "Game Play." These "games" are of varying complexity depending on the number of players, the ground rules/setting of play, and whether or not the game is being played as a zero-sum game. Though Goffman's work has rightly been criticized for over-emphasizing the strategic aspects of intergroup interaction (Cohen 2000), it does contain some key observations that are important for understanding the different outcomes can develop over time.

Specifically, game theory draws attention to how settings or initial conditions of interaction, such as the relative power of players, the distribution of resources across players, and/or the physical and social environments where the "game" takes place, can impact game outcomes (Goffman 1969, 1997; Kendon 1988; Molm et al. 2007, 2009; Schaefer 2009; Lawler et al. 2008; Bonacich 2000; Simpson and Willer 2005; Dijkstra and van Assen 2008). For example, Bonacich argues that the existence of large power disparities between a central player and other players will lead to the formation of coalitions between the less powerful players in an attempt to level the playing field (Bonacich 2000; Simpson and Willer 2005). In contrast, an initial condition of power symmetry where groups practice generalized exchange can lead to conflict as the

distribution of resources may become unequal (or be perceived to be unequal) over time, which led to tension between players (Molm et al. 2006).

These studies illustrate that physical and social settings can influence the outcome of interaction. Eric Wolf (1999) takes this general point a step further in his discussion of tactical/organization power. Wolf understands tactical/organizational power as the ability to control the settings in which “people exhibit their capabilities and interact” (Wolf 1999:5). In other words, tactical/organizational power models how control of the social and/or physical settings of interaction can give individuals/groups the power to shape how those interactions play out. For example, both Linnekin (1991) and Taussig (1980) discuss how European colonial powers employed tactical power through creating situations in which indigenous populations were forced to become indebted to them. However, tactical power could also be used by disadvantaged groups. In the studies by Bonacich (2000) and Simpson and Willer (2005), disadvantaged groups formed coalitions in order to leverage control of the social settings in which interaction was taking place, and thus employ tactical power as a way to improve their negotiating position.

Sources of tactical power are varied, and would depend on the social and physical settings where intergroup interactions take place. For the archaeologist, this means that studying both the physical and political landscapes in which past interactions took place can provide clues about what the outcomes of these interactions might have been. In the Andean case, these data can be derived both from colonial period documents and through landscape and regional settlement pattern data. Key information to look for includes identifying strategic points on the landscape (irrigation intakes, inter-valley passes, spiritually charged places such as *apus* or *huacas*, etc.) and the groups that controlled them. The ability to travel through difficult physical settings can also be important to consider, as some resources (maritime, mineral, agricultural, etc.) could be located at

some distance from population centers. Colonial documents can be helpful in reconstructing the balance of power in a region through providing information on things such as land tenure, the productive value of the land, and any trade contracts that indigenous groups may have held, etc. Together, these different types of data can provide valuable insight into the political, economic, social, and ecological settings in which interaction took place, as well as how these factors may have either constrained or helped different types of interaction. For example, in the case of the Huanangue Valley, *chaupiyungino* proximity to strategic points in the valley landscape could have become a source of tactical power for the local group, and may have influenced the outcome of the interaction between the *chaupiyunginos* and the Chancay (see Chapters 5 and 6). In summary, it is necessary to remember the importance of the both the social and physical settings where interactions take place, as these settings can shape the outcomes of interaction. This is particularly true for the Andes, where both the rugged topography and limited access to water and arable land would make controlling strategic points on the landscape key to influencing the outcomes of intergroup interaction, particularly when it comes to entanglements.

Culture Contact, Trade, and Entanglements

Entanglements can be understood in two different yet related ways. The first way focuses on how people become entangled in economic networks through adopting foreign goods into local value systems (Dietler 1998, 2010; Hodder 2012). The second way examines how humans and things are co-constituents of each other, as well as how the connections between things and people can structure interactions between people, but also between people and things (Hodder 2012). Understanding both forms of entanglement is important to understanding how it is that intergroup interaction can have such a transformative effect on regional cultural and political organization. In

order to understand the role that entanglements may have played in the Huanangue Valley, the concept will be further analyzed below.

For Dietler, the trade networks that emerged in the Mediterranean during the Bronze Age created a series of entanglements between Greek merchants and local populations. Essentially, as the Greeks spread throughout the Mediterranean through mechanisms ranging from the establishment of trade emporiums to direct colonization (Dietler 2010; Knapp and van Dommelen 2008; van Dommelen 1997), local elites began to adopt particular aspects of Greek material culture (specifically wine) and used those components to enhance their prestige (Dietler 1998). Over time, the use of these objects changed local systems of value, and also made local elites dependent upon these goods (and on the merchants who brought them) as they needed them to legitimize their position. This dependency was materialized through the increasing penetration of foreign amphorae into southern France throughout the 5th century BCE (Dietler 2010). This pattern raises a few key points. First, the agency of local consumers is a vital component in creating entanglements. Local groups are not passive vessels that absorb any aspect of foreign material culture in hopes of emulating their cultural “betters.” Rather, local groups selectively choose which elements of foreign culture to adapt, and then insert these elements into indigenous systems of value. Greek and Etruscan wine became popular in France because it fit into a pre-existing indigenous drinking culture, which involved competitive feasts held by local leaders as a way to gain followers (Dietler 2010). However, as indigenous leaders integrated wine into their feasts, they also became more dependent on it as a way of legitimizing their status. Similarly, indigenous French demand for wine had an impact on different sectors of the Greek economy, particularly boat building and the production of transport ceramics.

Entanglements arose in many parts of the ancient world and had a profound impact on the development of past political systems. For example, Gosden's categories of colonialism within a shared cultural milieu and middle ground colonialism both describe how power differentials can occur over time as the result of different types of interactions that cause groups to become entwined. Specifically, these categories emphasize how interaction can create entanglements between different groups, as well as between groups and things, and how these entanglements can eventually lead to changes in group identity and the nature of regional geo-political organization. These processes were likely at play during the 4th millennium B.C.E. as Uruk expanded into northern Mesopotamia by establishing trade diaspora settlements throughout the region (Stein 1999, 2002). As a result, aspects of Uruk material culture, such as cylinder seals, conical adobes, and Inanna temple complexes, were disseminated into northern territories. As these elements were adopted into local systems of value within northern Mesopotamia, a shared Mesopotamian culture was created, which was later manipulated by Sargon of Akkad in order to service his imperial ambitions. Though in this case entanglements eventually led to colonialism, they developed between northern and southern Mesopotamia long before power asymmetries did. This strongly suggests that entanglements can and do arise in the absence of power asymmetries and between non-state actors. By extension, entanglements may be a useful model for understanding the types of relationships that developed between different small-scale groups that existed in places like the western slopes of the Andes. This case also demonstrates the role that trade and trade diasporas can play in the development of entanglements.

In summary, the above discussion suggests that exchange relationships can have profound intentional and unintentional consequences. Ultimately, it may be possible that the trade diaspora networks developed by Uruk played a role in the development of a unified Sumerian culture, which

may later have been exploited by Sargon to unify the region and legitimize his rule (Gosden 2004). Similarly, trade in the Mediterranean may have contributed to the formation of Greek identity (Gosden 2004) and also have played a role in the eventual Greco-Roman domination of the region (Dietler 2010). This may have important implications for understanding intergroup interaction in the case of the Huanangue Valley. As will be discussed in Chapter 8, exchange seems to have been occurring at several different scales within the valley: between Chancay settlers and local *chaupiyunginos*, between Chancay settlers and their contacts in the Chancay homeland, and possibly between Huanangue Valley groups and groups on the north coast, such as the Chimú. These different exchange relationships may have had the potential to shape geopolitics both on the local and on the regional levels.

Materiality and Entanglement

A central part of understanding how exchange between groups can lead to entanglements is examining the complex relationships between people and things. Since the development of actor-network theory in the late 1980's, archaeologists have been aware of the importance that “things” play in shaping human action and relationships (Latour 1987, 2005). More recent work has further developed actor-network theory through focusing on how objects can mediate different forms of sociality (see Robb 2004; Gell 1998). However, in spite of these advances in how archaeologists approach material culture, there have been lingering criticisms that archaeologists do not take materiality seriously enough (Ingold 2007, Hodder 2011). Specifically, Ingold (2007) argues that archaeologists must take into account the actual physical properties of the materials that they study, as these properties in and of themselves structure both how individuals interact with particular items, as well as the social networks needed to produce different types of artifacts.

Hodder (2012) tries to merge earlier work on materiality with Ingold's insistence that archaeologists must focus on the physical properties of materials through what he calls human-thing entanglement. According to Hodder, humans and things are linked together through complex sets of dependence, the need of one thing for another, and dependencies, sets of contingencies that limit/shape action (Hodder 2012). Hodder's discussion of human-thing entanglement compliments Dietler's work on colonial entanglements in several important ways. First, it provides an entrée into understanding how entanglements between different human groups can form. For example, it was the physical properties of wine that made it particularly attractive to local French elite, because its alcoholic content was higher than local drinks such as beer and mead, making it more potent and thus more highly valued. Furthermore, unlike local drinks, wine could be stored for long periods, allowing local French elites to stockpile it (Dietler 2010). However, once wine became embedded within local systems of value, these very properties caused local elites to become dependent on it. Its high potency would have been greatly appreciated by those who consumed it, and a local leader who could not offer large quantities of wine may have had a hard time attracting followers. As local French leaders became more dependent on wine, and thus more deeply entangled with Greek wine merchants, an ever-widening net of dependencies was created and had to be satisfied for the wine trade to continue. The wine trade was dependent on several different objects and actors, including ceramic amphora, boats, boat builders, merchants, grapes, rain patterns, favorable currents and wind patterns, etc. (Dietler 2010). At each of these junctions, humans and material objects were necessary to keep the flow of goods moving, drawing disparate groups closer and closer together into a complex set of mutual dependent economic relationships.

Similar processes may have been occurring at different periods of time in the Andean *chaupiyunga*. Both documentary and archaeological evidence shows that the *chaupiyunga* was the

primary zone for growing coca along the western slopes of the Andes (Guffroy 1999; Marcus 1988; Murra 1986; Plowman 1984a, 1984b; Rostworowski 2004; Netherly 1984). Coca was (and still is) a highly valued commodity because of its ritual importance (Allen 1988; Plowman 1984b; Rostworowski 2004; Cartmell et al. 1991). As Catherine Allen (1988) has argued, coca functions as a social lubricant that facilitates several different types of social relationships between individuals within a group, as well as between groups, and between individuals and the ancestors/supernatural. Thus, different forms of social (and natural) reproduction may have been dependent on the coca leaf. However, the production of coca is also dependent upon the availability of arable land and water for cultivation, and in areas such as the Huanangue Valley where both land and water are highly restricted, these conditions may have set the stage for the development of complex webs of entanglement between people, land, and water. For example, the basis of the dispute in the *Justicia 416* is a problem of how to define ownership of *chaupiyunga* coca fields. One claimant, the coastal Collique, asserted ownership of *chaupiyunga* land because members of the Collique community lived in this area. In contrast, members of the Quives group also claimed ownership of this same land because they controlled the irrigation canals that watered it (Dillehay 2013). The case between Collique and Quives is further complicated because of the complex set of relationships that ranged from patronage to resource sharing and possible intermarriage (Dillehay 2013; Santoro et al. 2010). In other words, the production of coca was dependent on land, water, and people, and the relationships that developed because of these variables were so complex that it was no longer clear who owned what land in the coca-growing parts of the Chillon Valley during the late pre-Hispanic period.

Survey data from the Huanangue Valley (see Chapter 6) also suggests that the physical landscape itself may have placed important constraints on how entanglements developed between

the Chancay and *chaupiyunginos*. Due to the aridity of the valley, agriculture is irrigation dependent, and if members of the Chancay community established settlements in the valley in order to increase access to agricultural land, they would have been dependent on gaining access to irrigation water. However, survey data shows that *chaupiyungino* sites were located up-river from the Chancay settlements and were clustered around irrigation intakes (see Figure 8.1). This suggests that the *chaupiyunginos* may have been able to pressure the Chancay into negotiating for access to this water by threatening to impede the flow of irrigation water down-valley during times of drought. If the Chancay did move into the valley as part of a trade diaspora, as this study hypothesizes, they may have been particularly vulnerable to this type of coercion, as they likely would not have been able to count on any type of material or military support from their homeland (see R. Cohen 2001).

Entanglements, Tactical Power, and Preventing Subjugation

The majority of literature on entanglement deals with cases that eventually lead to one group being colonized by another. However, the relationship between entanglements and colonialism is not a necessary one. For example, between the 2nd century BCE and the 2nd century CE, the semi-nomadic Sarmatian people of the western steppes became important intermediaries along the Silk Road through their control of strategic points along trade routes, which brought them into contact with Greek and Han material culture (Yao 2012). During this time, distinct clan identities were also being formed within the Sarmatian culture through experimentation with inscriptionality, eventually leading to the creation of bronze amulets that emulated Han linked-arc mirrors and served as key markers of elite identity (Yao 2012). In other words, foreign material culture was transformed into a central symbol of Sarmatian identity, creating entanglements between the Sarmatians and the Han. However, since the Samaritans existed on the peripheries of

Greek and Han spheres of control and controlled strategic points along east-west trade points, they had sufficient tactical/organization power to resist attempts at subjugation even as they became economically entangled with more powerful groups.

Like the Sarmatians, both the Chancay and the *chaupiyunginos* living in the Huanangue Valley were small-scale groups that appear to have been able to avoid being drawn into exploitative relationships despite becoming entangled with each other. One reason for this may be related to tactical power. As described in Chapter 1, tactical power is derived from the control of the social or physical settings in which different types of interaction take place (Wolf 1999). In the central Asian case, the Sarmatians were likely able to employ tactical power based on their control of strategic points along the Silk Road. In the Huanangue Valley case, though the Chancay were more economically powerful than local groups, as members of a possible trade diaspora they may have been vulnerable due to lack of homeland support, particularly since they were located down-river from irrigation intakes. In contrast, *chaupiyunginos* may have been able to derive tactical power from their proximity to these intakes, which may helped to level the playing field between them and the Chancay, making it less likely for the *chaupiyunginos* to be drawn into disadvantageous relationships with Chancay (see Chapters 6 and 8).

Research Hypotheses: Chancay Trade Diaspora, Tactical Power, and Entanglements without Subjugation

Before discussing possible hypotheses, it is first necessary to briefly examine the Chancay and *chaupiyunginos* within the Huanangue Valley in order to define the likely parameters of intergroup interaction in the valley. Survey data presented in Chapter 6 suggests that the valley was likely occupied by four different groups during the Late Intermediate Period: the coastal Chancay, the local *chaupiyunginos*, a highlands group (probably Atavillos) and one unidentified group. Since excavations (see Chapter 7) were conducted at the Chancay site of Salitre and the

chaupiyungino site of Campo Libre, this discussion will focus on the Chancay and the *chaupiyungino* groups. The *chaupiyunginos* were a local group who occupied the valley probably as early as the Late Archaic period (3000-1800 BCE). Based on the lack of public, monumental architecture and the relatively small size of *chaupiyunginos* sites documented during survey, it seems likely that the *chaupiyunginos* were a small-scale community of loosely affiliated villages. In contrast, the larger Chancay-affiliated community emerged around 900 CE in the Chancay Valley (Pazdur and Krzanowski 1991) and began to move into the Huaura drainage around 1300 CE. The presence of public, monumental architecture at Chancay sites along with the large size of sites like Pisquillo Chico and Lauri suggest that the Chancay were likely more politically organized than the *chaupiyunginos*; however, the lack of a clear capital and the heterogeneity of Chancay architecture and ceramics suggest that this community may have consisted of a network of heterarchically organized, semi-autonomous centers/nodes (see Chapter 5 for further discussion). As such, though the Chancay were likely more economically powerful and better organized politically than the *chaupiyunginos*, there is little evidence to suggest that the Chancay core would have been sufficiently politically organized to maintain control of Chancay settlements placed in distant lands.

The dynamics of Chancay movement into the Huaura drainage are still being studied. Based on the currently available data, there are two possible models that may explain Chancay expansion into the region: colonization, via verticality or a similar mechanism (Murra 2002; Rostworowski 1978, 1993), or what Robin Cohen (2001) and Gil Stein (1999) call a trade diaspora. As described above, trade diasporas occur when people move to distant areas in order to engage in different economic pursuits which cross geographic and/or cultural boundaries without state/bureaucratic oversight. These scattered groups maintain their distinctive identity, and also

seek to maintain connections with their homeland (Clifford 1994; Saffran 1991; Goldstein 2000; 2005; Owen 2005; R. Cohen 2001). Diaspora differs from colonization in that this type of population movement tends to be the result of grassroots driven action, whereas colonies typically are centrally mandated and remain under state control (Murra 2002; Stein 1999, 2002; Owen 2005; Goldstein 2005).

Vertical colonization and diasporas have both been well documented in the Andes. In the case of diaspora, work by both Paul Goldstein (2000, 2005) and Bruce Owen (2005) have identified two different phases of diaspora within the Osmore drainage that were affiliated with the distant Tiwanaku polity. The first phase related to the movement of Tiwanaku-affiliated people into the Osmore drainage and the establishment of sites that were linked to the altiplano core through both symbolic and physical means (Goldstein 2000, 2005; Owen 2005). The second phase of diaspora consisted of the traumatic dispersal of people away from Omo, Chen Chen, and other Tiwanaku-affiliated sites in response to the collapse of the Tiwanaku polity. These refugees founded new sites and created a new form of material culture, Tumilaca, which strongly referenced earlier Tiwanaku styles. Based on these two phases of diaspora, a series of correlates can be used to identify diaspora settlements. These include the appearance of sites with intrusive, foreign material culture that does not have local antecedents; evidence of continuing connection with a distant point of origin through the production and/or importation of artifacts in the homeland style over many generations; and the continuation of homeland diets and burial practices over several generations, among others (Goldstein 2005; Owen 2005).

Trade diasporas tend to be linked to the development of entanglements. As defined by Robin Cohen (2001), members of a trade diaspora typically find themselves in a position where they need to interact with local inhabitants in order to gain access to the economic resources that

they plan to export back to their homeland. Since trade diasporas tend to be established and maintained without any intervention on the part of any kind of centralized bureaucratic structure, it likely would be difficult for members of the diaspora living abroad to draw on state resources in order to coerce local groups into allowing them access to land and other resources that they might desire. As such, trade diaspora members would likely have to negotiate with local groups to secure access to materials that they required, and in doing so, could potentially become entangled with those local groups. This appears to have been the case for many of the Uruk trade diaspora settlements that were located in Anatolia and other distant regions during the 4th millennium BC (Stein 1998, 2002). If the Chancay established settlements in the Huanangue Valley through the mechanism of a trade diaspora, as is hypothesized here, then it seems likely that Chancay settlers living in the valley would have become dependent on local *chaupiyunginos* for access to water (see Chapters 5 and 6). This relationship could eventually have led both groups to become entangled (see Chapter 8).

Alternatively, it is possible that Chancay expansion into the Huanangue Valley represents an example of verticality, which describes the colonization of other ecological zones by a polity centered in either the coast or the highlands (Murra 2002). Cases of verticality have been documented for the south-central Andes, particularly around the Lake Titicaca basin. For example, based on his analysis of colonial documents, John Murra argued that the altiplano-based Lupaqa sent colonies into lower ecological zones in order to gain access to growing land for crops such as maize, chili peppers, and fruits which could not be grown at high elevations. These colonies remained under the control of the Lupaqa elite and colonists had to send agricultural products back to the core, from whence these goods would be re-distributed (see Chapter 5 for further discussion of the verticality model). Vertical colony sites can be archaeologically distinguished from diaspora

settlements in a number of ways. First, since these sites were centrally mandated, they are more likely to show evidence of being centrally planned (i.e. orthogonal layout, replication of aspects of the capital's layout, continuation of homeland construction technics, etc.). In addition, since verticality is predicated on the centralized redistribution of agricultural goods, one would expect that these goods would be evenly distributed between sites (see Chapter 5, 7, and 8). In contrast, diaspora settlements would lack evidence for centralized planning, and since the circulation of goods would have occurred through trade networks that were likely mediated through personal/family relationships, the distribution of goods across sites would likely be uneven and patchy (Nelson and Bellido 2010).

In summary, based on available documentary and archaeological data, this study hypothesizes that the Chancay community established a trade diaspora within the Huanangue Valley and then became entangled with local *chaupiyungino* populations, and that it was unlikely that the Chancay exercised any type of control or influence over local groups. Materially, it will be possible to identify Chancay sites in the Huanangue Valley through the presence of settlements with distinctly Chancay material culture, including the presence of Chancay black-on-white ceramics, Cayash ceramics, marine foods, cotton textiles, *adobe tapia* construction, and the use of household midden in construction fill. Entanglements would be materialized through the presence of Chancay goods within *chaupiyungino* artifact assemblages and vice-versa. Evidence for Chancay exploitation of local groups would manifest through the appearance of indicators of declining quality of life at *chaupiyungino* sites such as decreasing site size, decreasing construction quality, increasing restriction in the range and quality of artifacts, among other possible factors (Brumfiel 2006). These changes would occur around the same time that the Chancay were moving into the Huanangue Valley. If, as seems more likely, the Chancay were not exploiting local groups,

material culture at *chaupiyungino* sites should show little evidence for these kinds of changes (see Chapters 7 and 8).

As has been discussed above, tactical power, the control of settings, and the processes of entanglement are particularly important in frontiers. Since the Huanangue Valley is both the geographic and cultural frontier between the coast and the highland, it provides a unique opportunity to study these processes in action. Furthermore, because the *chaupiyunga* acts as a geographic bottleneck, all coastal products being traded to the highlands had to pass through this zone, as did highland products being brought to the coast (see Santoro et al. 2010; Dillehay 2013). Moreover, the Huanangue Valley was an important agricultural center in its own right, as its climate was ideal for growing maize, coca, fruits, and other highly valued crops. However, this valley was also quite arid, and the need to manage water may have led to entanglements between the different communities that lived in the valley as the decisions made by people living in the upper parts of the valley would affect those downstream.

Studying entanglements can provide important insight into the nature of different political, economic, and cultural arrangements in the ancient Andes. The extreme slope of the Andean mountains may promote the development of entanglements as the landscape is divided into a series of vertically nested ecotones that hold very restricted sets of resources (Murra 1975). As such, people living at a particular elevation would have been dependent on the ability to gain access to resources in other zones, meaning trade would have been a vital strategy to ensure that groups were able to gain access to distant goods. While extensive trade networks have been documented for all regions and time periods of the Andes, little work has looked at what sorts of entanglements these trade networks created. For example, the literature illustrates that trade was vitally important to the Wari polity, so much so that there continue to be arguments that the Wari are best understood

as a trade emporium rather than an empire (Shady and Ruiz 1979; Jennings 2006). In the Wari case, using entanglement theory may provide a useful explanatory framework that could better elucidate the possible colonial implications of the trade relationships that developed between the Wari heartland and the Peruvian north coast. In addition, it is evident that trade occurred between small-scale communities at several different scales, both up and down the coast and up and down the Andean slopes (Rostworowski 2004; Marcus 1988; Dillehay 1976, 1977, 1979). Using entanglement as a theoretical framework to examine these trade networks will provide a better understanding of regional geopolitics, which is important both to understanding the unique ways in which Andean groups managed their social and physical environments, and to understanding how these groups were later incorporated into Inka and Spanish polities.

Chapter III

Material Boundaries, Social Identity, and Permeability

Interaction both structures and is structured by identity, and the relationship between the two is materialized in the archaeological record in different ways. This chapter examines the relationship between the material record, social group identity, and boundary formation in order to develop a methodological framework through which the outcomes of interaction discussed in Chapter 2 can be distinguished from each other archaeologically. In doing so, this chapter argues that the outcomes of interaction affect both the permeability of social boundaries and their material signatures. For example, balkanization may lead to clearly expressed identities and strongly defined symbolic boundaries which would manifest through stylistically distinct material assemblages, whereas the outcomes of more cooperative forms of interaction, such as hybridization/syncretism, can lead to a blurring of symbolic boundaries and the transformation of identity, causing the creation of stylistically mixed material assemblages.

In addition, as the Huanangue Valley had not previously been studied archaeologically, understanding how group identities are materialized was essential to identifying the different groups living in the Huanangue Valley during the Late Intermediate Period, which was the first step in defining the dynamics of interaction in the valley. Therefore, this chapter examines the different types of relationships that exist between interaction, identity, stylistic variation, and material culture. It will argue that the complex and indirect relationship between these categories means that archaeologists must take a multi-variable approach to detecting social boundaries. This includes investigating the meaning of style and its relationship to different types of material, cultural variations, and the manifestation of social identity. In sum, archaeologists must tack

between the regional and local scale to examine variation in both conscious style and technological style (Conkey and Hastorf 1990; Emberling 1997; Hegmon 1992; Stovel 2013; Weissner 1983; Wobst 1977) in several different categories of material culture in order to more accurately reconstruct social boundaries.

Understanding Identity

Identity is a complex quality possessed by individuals and by groups, and is both ascriptive (Cohen 2000; Jussim et al. 2001) and self-defined (Cohen 2000). It develops as the result of cross-boundary negotiations and interactions within groups, between groups, and between humans and the material world. On the individual level, people can have multiple, nested identities that shift in relation to the particular social context in which a person finds him or herself (Sofaer 2011; Sokefeld 1999; Meskell 2001; Strathern 1988). At the group level, identity can be formed through shared experiences/memories (Sofaer 2011) and through cross-boundary interactions (Barth 1969, 2000; Cohen 2000). Studying social group identities presents serious challenges to archaeologists. Unlike ethnographers or sociologists, archaeologists cannot directly observe how they are performed, nor the complex ways in which individuals, groups, and cultural institutions interact to create them. However, identity is often expressed through the manipulation of the stylistic aspects of material culture (Cohen 2000; Sofaer 2011; Bhabha 1994; Gupta 1992; Meskell 2001; Neil 2012).

As group identity is at least partially ideological, it must be materialized to be meaningful (Keane 2003; Cohen 1985). The material markers of group identity include the ephemeral, such as language (Sheyholislami 2010; Fishman 2010), gestures (Bourdieu 1977), techniques of the body (Mauss 1934), and ritual (Keane 2004), as well as more tangible signs such as variations in styles of dress (Wobst 1977), artifacts style (ceramics, tools, personal adornment etc.) (Stark 1998; Stovel

2013; Wiessner 1978), architectural style (Rappaport 1982; Stanish 1989), dietary preferences (Weismantel 1998; Cherry et al. 2011; Rabikowski 2010) and burial practice (Blom 2005; Knudson and Torres-Rouff 2009; Torres-Rouff 2008; Emberling 1997; Jones 1997). Charting how these different artifact categories and their stylistic meanings vary across space and time can help archaeologists determine the locations of social boundaries.

Though identity takes many different forms, much of the literature within anthropology focuses on ethnic identity (Antonaccio 2010; Barth 1969, 2000; Cohen 2000; Cusick 1998; Jones 1997; Knapp and van Dommelen 2008). In part, this interest in ethnicity is due to the post-colonial and post-processual turn in anthropology and its renewed interest in comprehending the dynamics of multiculturalism in a world that seems increasingly mired in ethnic conflict (Jones 1997). In order to understand how archaeologists have tried to read identity through material culture, it is important to examine how they grapple with definitions of ethnicity. There is little consensus as to how this concept should be defined, and different definitions have varied implications for how the relationship between ethnicity, other forms of identity, and the material record is understood.

The word ethnicity is derived from the Greek term *ethnos*, which refers to a race or nation of people (Partridge 1983). Early uses of this term were related to the belief that members of a particular ethnic group were bonded together through a shared, common ancestry (Emberling 1997) and culture. Thus, ethnicity was originally understood as something deeply primordial, a characteristic that someone is born with and that could not be altered. Archaeologists who prescribe to this primordialist view of identity tend to take the “pots as people” approach to detecting ethnic boundaries in the material record. While this methodological approach will be discussed in more detail below, in essence, archaeologists following the primordialist view make

simple connections between changes in ceramic or other types of artifact style and changes in identity (Emberling 1997; Jones 1997; Stanish 1992).

In the mid-century, scholars began to reconsider the primordial nature of ethnicity through examining how ethnic identity could be constructed and manipulated. For example, Barth's seminal work highlights the nested and situational aspects of ethnicity by pointing out how ethnic identity changes based on socio-historical context (Barth 1969, 2000; Emberling 1997). The shifting nature of ethnic identity is illustrated when looking at how immigrant identities change as they move between their host community and their home community. For example, Japanese migrants living in Brazil consider themselves primarily ethnic Japanese, even though many of them were born and raised in their host community. However, when second and third-generation individuals return to Japan, they are rejected by those in their home country, leading these returned immigrants to reject their Japanese identity in favor of a Brazilian one (Tsuda 1999; see Emberling 1997 for additional examples). Similarly, people can shift their presentation of ethnic identity depending on their audience. For example, during the Middle Bronze Age, Assyrian merchants living in Anatolia at the trade colony of Kanesh adopted many elements of local culture while living in the city, but kept accounts and wrote letters home in Assyrian (Emberling 1997). This suggests that these merchants may have shifted their identity depending on their audience—presenting themselves as local to the native inhabitants of Kanesh, while presenting themselves as Assyrian to the people from their homeland.

More recently, Sian Jones has examined the greater implications of Barth's formulation of ethnicity as situational (Jones 1997). Jones defines ethnicity as “culturally ascribed identity groups, which are based on the expression of real or assumed shared cultural and common descent” (Jones 1997:84). Though this definition seems very similar to the traditional primordialist approach that

reduces ethnicity to kinship writ large, Jones focuses on the agentic nature of ethnicity through specifically highlighting how ethnic identities can be created in response to specific historical and political circumstances as part of a strategy for minority groups to gain power over certain aspects of their lives (Jones 1997). For example, the Kayapo resistance is a classic example of how symbols can be manipulated to create a particular type of ethnic identity as part of a political strategy (Jones 1997, see also Knapp 2010). Although the Kayapo had begun to wear western style clothing in the 1960's, Kayapo chiefs strategically manipulated the style of their dress by transitioning back to wearing native garb when meeting with Brazilian officials around the time they began to fight for indigenous rights. This was part of a broader strategy to embrace their indigenous identity, and to use that identity as a tool in legitimating their claims (Turner 1993). As contextual understandings of ethnicity stress the mutability of ethnic identity, archaeologists who prescribe to this view tend to use multivariate methodologies to detect ethnic boundaries (Emberling 1997). This methodology is explored in further detail below.

As ethnic identity is an aspect of the broader category of social identity, primordial/contextual approaches can be applied to other forms of group identity as well (Cohen 2000). Understanding the differences between these approaches is important as each has different implications for understanding the relationship between identity and material culture. In the context of this study, understanding the relationship between material culture and identity is also important both for identifying the different groups that inhabited the Huanangue Valley during the Late Intermediate Period, and for tracking the outcomes of interaction between these groups, particularly since ethnohistoric records for this region are spotty. In the primordialist approach to identity, *habitus* (Bourdieu 1977) is considered to be perhaps the best index of ethnic identity, as it represents the repertoire of deeply instilled behaviors and actions which people perform

unconsciously and which also serve to separate one social group from another (Bourdieu 1977; Bourdieu and Wacquant 1992; see also Stanish 1992). *Habitus* is materialized in different ways, and can be approached through studying aspects of material culture such as variation in formal aspects of style, called here technological style, including construction technique and paste type (Druc 1996, 2006; Stanish 1992; Stark 1998a, 1998b). Archaeologists also document variation in domestic spaces (Stanish 1989, 1992) and quotidian dietary habits (Emberling 1997; Cherry et al. 2011), among others. As such, archaeologists who have a primordialist understanding of social identity tend to reconstruct symbolic boundaries on the basis of variation in a few key elements of material culture, particularly ceramics (Engelbrecht 1978; MacNeish 1952; Smith 1947).

In contrast, the contextual view approaches identity as consciously manipulated and as best studied through an analysis of several different types of material culture. In particular, adherents to the contextual view argue that stylistic variation in public symbols is particularly apt for conveying consciously created messages about identity (Stovel 2013; Wobst 1977; Weissner 1983). This includes stylistic variation in the decorations on fine serving ceramics, ritual activities, and possibly mortuary patterns (Knudson and Torres-Rouff 2009; Torres-Rouff 2009; Blom 2005) and markers of difference in *habitus*, such as technological style, domestic ceramics, and domestic architecture (Stanish 1992). The difference in methodology between primordialists and contextual approaches can be summed up in that primordialists tend to use a limited range of artifacts as indexes of differences in *habitus*, and they tend to see the relationship between stylistic variation and social boundaries as simple and direct. In contrast, contextualists use a much broader range of material culture in order to track variation in both public identity markers and in *habitus* (Hodder 1982; Weissner 1983) and view the relationship between material culture and identity as complex and indirect.

Following Jones (1997) and Knapp (2008), this study views social identity as a cultural construct that makes reference to deeply held shared traditions, but that is also shaped by contemporary social, historical, and political contexts. Social identity is a general term that encompasses ethnic, class, and gender identities, among others. The case of the highland Andean village of Chusqui illustrates how flexible social identities can be. Chusqui residents who migrated to Lima and then returned home found that their time in Lima resulted in the development of a dual identity as members of both *comunero* and national Peruvian communities. As such, they were able to mediate between local and national customs and expectations, allowing many of them to assume traditional leadership roles within their community (Isbell 1978). Brumfield has also shown how the identity of ancient weavers changed in relation to the changing sociotechnical context of production that occurred as the result of the Aztec conquest of traditionally Maya areas (Brumfield 2006). When social identity is understood as contextual, an archaeological program designed to identify identity boundaries must tack between regional and local-level analysis and pay particular attention to temporal and spatial variation in multiple domains of material culture (see Emberling 1997). Furthermore, different types of stylistic variation must be traced across the various material culture domains, including variations in decorative styles, construction/technological styles, and patterns of use, as co-variance in these categories can be used to determine social group boundaries.

Detecting Social Group Boundaries in the Material Record

Reconstructing social boundaries is a central part of the research problem addressed in this study. As the Huanangue Valley has yet to be studied, archaeological and documentary data for the valley are sparse. Therefore, identifying the groups that occupied the valley during the Late Intermediate Period was a necessary first step to addressing interaction. Reconstructing social

boundaries is also important for this study, as many of the archaeological correlates for the outcomes of interaction that were described in Chapter 2 relate to the extent to which these boundaries were fixed or permeable. For example, balkanization probably would have meant that social identities were clearly expressed, and that social boundaries were fixed and relatively impermeable. This would manifest materially through the presence of stylistically distinct material assemblages. In contrast, entanglement would mean that groups maintained separate identities, but that symbolic boundaries were permeable as a handful of goods would have crossed these boundaries and been incorporated into local assemblages. Archaeologically, this would manifest through the presence of assemblages that were largely stylistically distinct, but also contained a small number of items of non-local origins. As identities became mingled, as in the case of hybridization and/or syncretism, symbolic boundaries would become increasingly blurred, as would be manifest through the creation of new classes of artifacts that combined the distinct stylistic elements from their source cultures.

Although archaeologists have been in the business of identifying social groups in the archaeological record since the 1950's, it is only recently that they have begun to problematize identity and its relationship to style and material culture (Jones 1997; Stanish 1992; Emberling 1992; Stovel 2013). Questioning this relationship is important in order to construct an appropriate methodology both for detecting social boundaries and for understanding how these boundaries changed over time as a result of interaction. A key aspect for many of these approaches focuses on using variations in artifact "style" as a proxy for variation in identity. The literature on style is too vast to be covered here, but style can broadly be grouped into two types: conscious style and technological style. Conscious style can be defined as variations in form, decorations, and/or surface embellishment that are purposefully manipulated in order to communicate something,

though the messages that ancient artisans were attempting to send can vary considerably. Examples of conscious style include decorations on elite ceramics, personal adornment, and public architectural styles, among others (Weissner 1993; Wobst 1977; Conkey and Hastorf 1990; Hodder 1982; Hegmon 1992), and has alternatively been called emblematic/assertive style (Weissner 1983), and informational/communicative style (Wobst 1977). Wobst's (1977) analysis of clothing styles in the Balkans is a classic example of analyzing conscious style to construct social boundaries, in this case through the conscious manipulation of dress in order to send messages about group identity. Chancay black-on-white ceramics may be particularly amenable to the analysis of conscious style. As Bria (2009) has argued, the uniqueness and high visibility of Chancay black-on-white ceramics makes them highly emblematic. Thus, it seems likely that Chancay potters may have been trying to make some sort of claim about identity through the ways in which they decorated their pots.

The second category of style can be termed technological style, which refers to variation in artifact construction (Dietler and Herbich 1998; Hegmon 1992). This category of style is often linked with the material expression of *habitus* (Bourdieu 1977), and has been variously termed passive style and isocrestic style (Sackett 1977, 1982). Because technological style is closely related to *habitus*, it is not used to actively transmit information in the way that conscious style is. Rather, since production techniques tend to be passed down from generation to generation (either from parents to children or from master to apprentice), technological style can be used for delimiting workshop traditions (Druc 1996, 2009; Dietler 1998b) and for reconstructing socio-technical networks (Pfaffenberger 1992; Lemonnier 1992). When working at the analytical level of residential groups, as this study does, workshop traditions can sometimes be used as a proxy for social identities. Many techniques exist for analyzing different aspects of both conscious and

technological style. For example, Adam Smith approaches conscious style through the analysis of the composition, motif, and context of the Karashamb cup to argue that this vessel acted as a medium through which ideology was spread as part of an elite program to extend and legitimize their sovereignty over their subjects (Smith 2001). In contrast, Dietler and Herbich (1998) approach technological style through analyzing the paste of Luo ceramics. Their analysis shows that personal preferences/workshop tradition determined the materials used in ceramic production, and thus variation in paste recipe could be used to reconstruct these traditions.

In this study, both conscious and technological style will be analyzed. Conscious style would potentially manifest in the decorations on Chancay black-on-white and Chancay yellow ceramics, architectural styles (particularly of public structures), burial practices, and potentially textiles. Technological style may be manifest in paste recipes and construction techniques used for both decorated and undecorated ceramics, dietary practices (foods chosen, butchering techniques, cooking methods, etc.), and lithic tool technology, among other things. Since the level of preservation of botanic and faunal remains did not permit the reconstruction of butchering or cooking techniques, nor were Late Intermediate Period textiles or burials recovered, this study specifically focuses on the analysis of conscious and technological styles in ceramics, as well as architectural styles and construction techniques.

Of course, both conscious and technological styles are etic categories, and the boundaries between the two types of style are not always clear. For example, in certain cases surface decorations do not carry any particular meanings (Dietler and Herbich 1998), and in other cases, potters may purposefully choose certain types of materials over others in order to make particular claims about identity (Cecil and Neff 2006). For example, though Luo ceramics are decorated using designs and patterns that are quite different from each other (Dietler and Herbich 1998),

these pots are made by individuals who all belong to the same ethnic group, and this variation is related to personal preference as opposed to differences in group identity. As such, artifacts should never be viewed in isolation, but careful consideration must be taken of context and assemblage in order to gain a better feel for which aspects of style may be meaningful in a particular setting, and which may not be. For instance, Chancay black-on-white ceramics were likely emblematic and may have been used to communicate something about identity, shared history, or both. However, there are several steps involved in decorating these ceramics that may be more connected to technological style as opposed to conscious style. For example, both mineral and organic materials can be used to make the black paint used to decorate Chancay pottery. To date, no studies have been undertaken to look at the spatial or chronological distribution of mineral based vs. organic-based paint, but it is entirely possible that this technical choice was made due to workshop traditions and that it may have little to do with the larger messages that were being communicated. This variation could also provide insight into the larger economic relationships involved in ceramic production.

Since conscious style can be manipulated by artisans to send messages about social identity, analyzing conscious style will clearly be important for detecting social boundaries in the Huanangue Valley. However, this also presents a problem. As is discussed in Chapter 6, most of the Late Intermediate Period sites in the Huanangue Valley were small village sites where the types of highly decorated, elite ceramics that are best suited to the analysis of conscious style (see Stovel 2013) would be quite rare. As such, technological style will play an important part in the reconstruction of social boundaries in the valley. Though technological style is more closely linked to *habitus* and thus may only be indirectly related to identity, it can be useful for identifying boundaries and also for reconstructing economic networks. In order to track both conscious and

technological style, component analysis will be performed on the ceramics collected during excavations. Conscious style will be documented through recording information related to decoration type (painted, impressed, incised, etc.), color scheme, paint type, and motif type. Variation in technical style will be documented through recording information on construction technique, paste color, temper type and size, wall thickness, and surface treatment.

Alternate Approaches to Social Identities: Technological Style

As the majority of the pottery recovered from Campo Libre and Salitre were domestic wares, technological style will form an important part of this study and will be explored here in detail. Traditionally, anthropologists have not spent much time problematizing technological systems. Starting with Lewis Henry Morgan, technology was understood as a way to index a society's progress from simple to complex as groups moved from savagery to civilization by progressing through different technological steps, such as inventing pottery or agriculture (Morgan 1877). This continued to be the case well into the middle of the 20th century, as illustrated by the works of V. Gordon Childe (1936) and Leslie White (1943). Although these authors came out of different intellectual paradigms, they understood technology as a social response to external crisis caused by factors such as population growth, limited food resources, and climatic variation (Pfaffenberger 1992), and this view has remained dominant in much of American anthropology and archaeology.

In contrast, members of the French School take variations in technological style more seriously, both for understanding social identity and for understanding social organization. The 1980's work by French anthropologist Leroi-Gourhan (1993) on Paleolithic artifacts led to the development of the *chaîne opératoire*, or chain of operation, which is a way of breaking down artifact production into each of its constituent steps and analyzing the decision-making processes

that occurred at every stage. Using the *chaîne opératoire*, Leroi-Gourhan (1993, 2000), Lemonnier (1992), Malafouris (2004) and others have demonstrated how technology is embedded in and intertwined with social relationships. This is more clearly expressed by Brian Pfaffenberger, who defines technology as “a set of operationally replicable social behaviors” (Pfaffenberger 1988:241) that should be understood as the nexus of various types of social relationships (1988; 1992). For example, the production of ceramic vessels requires access to raw materials such as clay, temper, pigment, and fuel, as well as the knowledge about how to form the fabric, shape the pot, dry and fire it, and finally decorate it. Each of these different stages is tied to different sets of social relationships. Access to raw materials must be negotiated, technological knowledge must be passed down from master to apprentice or from parent to child, and finished products must be distributed, used, and finally disposed of. As such, technology can shape social relationships, and changes in technological organization can cause changes in social organization. In the anthropology of a technology approach, every act of artifact creation can also be seen as an act of social reproduction, and by extension, the reproduction of identity. Social identities are constructed, in part, through shared experiences and relationships, thus socio-technological networks can help delimitate social boundaries, particularly at the site level. As utilitarian ceramics are often produced by part-time specialists in domestic settings, the socio-technological relationships embodied in these ceramics can overlap with residential group boundaries. Thus, workshop traditions can be used as a proxy for residential group boundaries and can be applied to site-level analysis.

This approach also has many similarities with Hodder’s (2010, 2012) work on human-thing entanglement, as it explores the ways material properties shape both productive processes and the social networks that enable those productive processes, causing them to become entangled.

Human-thing entanglements also provide an entrée into understanding how artifact production can structure intergroup interaction and vice versa. To a large extent, the dependencies that develop between people and things are created as the result of the types of technological systems that are in place to both create and maintain different types of artifacts (see Chapter 2 for full discussion). For example, the dependencies that existed between people, houses walls, and smectite clays (Hodder 2012) existed in a large part due to a particular technological system of house building that existed at Çatal Huyuk. This technological system, in turn, was the result of accumulated knowledge that passed through the different social networks at the site. Thus, entanglement theory adds an important dimension to the analysis of technological systems by integrating the analysis of technological style with network actor theory, and thus showing how technological systems both structure and are structured by social organization. Furthermore, this approach can help illuminate the intricacies of interaction networks, as each point in the production sequence requires different people and materials which can be tracked back to their places of origin, making it possible to reconstruct economic networks.

In sum, using material entanglement theory to analyze technological systems is also useful for identifying social boundaries and understanding interaction across those boundaries. First, production techniques tend to be dependent on social relationships that are embedded in local traditions passed down generationally from parent to child, and/or master to apprentice. Therefore, reconstructing the spatial distribution of technological traditions can provide insight into the geographical extent of the social relationships that produced those traditions. In addition, artifact production, whether of ceramics, textiles, metals, or lithics, generally requires the manipulation of raw materials that come from different sources. Sourcing these different raw materials can provide insight into the types of exchange networks that existed in the past, and struggles to control these

exchange networks often influenced intergroup interaction in the past. For example, Aslihan Yener's work on metal production in Anatolia has demonstrated how detailed deconstructive analysis of metal objects can illuminate a number of facts about the organization of ancient production processes, from which trade networks were used to gain access to raw materials to the level of technical skill needed to finish the final product (Yener 2007). Ceramics are also amenable to this type of analysis. For instance, ceramic paste can be analyzed to determine what types of clays and tempers were used, how the vessel was formed, as well as what temperature and under what condition the vessel was fired at. As ethnoarchaeologist Isabell Druc has discussed, within a particular region paste recipes tend to vary by workshop as a reflection of different workshop traditions (Druc 1996); a similar pattern has been noted for Luo potters by Dietler and Herbich (1998).

In addition, sourcing studies can help determine where different clays and tempers sources were located, which has important implications for understanding interregional interaction. Karen Chavez's study of ceramic production in the modern town of Raqch'i demonstrates that there are a complex set of interactions that existed between potters in the town of Raqch'i and llama pastoralists at higher altitudes, because the potters need animal dung for fuel to fire their pots (Chavez 1984), creating mutual dependencies between these groups. Similarly, work by Joyce et al. (2006) in Central Mexico used INAA analysis to define chemical groups and source ceramics from excavated contexts at numerous Formative Period sites. Based on this analysis, the authors were able to reconstruct the complex exchange networks that existed between sites in the three arms of the Valley of Oaxaca, as well as between the Valley of Oaxaca and the neighboring regions of Mixteca Alta, Mixteca Baja, the Rio Verde Valley, and Cuitcatlan Cañada (Joyce et al. 2006). These studies illustrate the utility of analyzing material entanglements and technological style in

order to recreate the complex types of relationships that can exist between groups. This project will follow their example in order to better understand the dynamics of intergroup interaction in the Huanangue Valley.

The analysis of technological style will be important to this study, as approximately 93% of the ceramic assemblage from Salitre and Campo Libre consists of undecorated, domestic ceramics, which most likely were not consciously used to make claims about identity. However, by doing a careful component analysis that focuses on characteristics such as paste type, temper, construction technique, surface treatments, and vessel form of these domestic ceramics, it may be possible to detect different workshop traditions at the sites of Campo Libre and Salitre, and these workshop traditions can potentially be used as a proxy for group identities. Both Campo Libre and Salitre were small village sites, and that can be understood as residential groups. Based on the ethnoarchaeological examples provided by Druc (2006) for Ancash, and for other world regions by Stark (1991), and Dietler and Herbich (1998), ceramics at Campo Libre and Salitre were most likely produced at the household level by part-time ceramicists, and it should be possible to use variation in paste recipe and type, construction method, vessel form, etc. to define which production traditions were located at each site. This, in turn, can be used to help track interaction between sites. For example, if ceramics are found at Campo Libre that have a technological stylistic signature that comes from an identified workshop tradition at Salitre, that could be evidence for different types of inter-site interaction such as trade, co-residence, or intermarriage between sites.

Approaches to Detecting Social Group Boundaries in the Andes

The ancient Andes were very culturally, ethnically, and socially diverse. Andean researchers employ several different methods to reconstruct boundaries between these distinct social entities as one means of studying social interaction and cultural transmission in the past. Spanish colonial period documents have often proven to be valuable in these projects; however, it is not clear how different Andean social/political groups recorded in these documents (such as the *ayllu*, the *señorio*, *curacazgo*, and *macroetnia*, among others) were organized, or how they articulated with each other. As a result, it is difficult to determine what the material correlates of these different social groups may be. An example of this problem is seen in the work of historian Maria Rostworowski (1981, 1988, 1993, 2004).

Though Rostworowski never explicitly defines the *ayllu*, *curacazgo*, *señorio*, or *macroetnia*, based on how she uses them it seems that *curacazgo* is best understood as a small-scale political unit made up of a small number of *ayllus* and centered around one particular settlement (Rostworowski 1978). For example, Rostworowski links the *curacazgo* of Vilcahuaura to the archaeological ruins near the modern town of the same name (Rostworowski 2002[1978]; see Ruiz and Nelson 2005, Dunn 2013 for descriptions of Vilcahuaura). *Señorios* are larger political units that are composed of related *curacazgos* and that are led by the “lord” of the highest ranked *curacazgo* (Rostworowski 2002). Rostworowski argues that the *curacazgo* of Vilcahuaura along with other Huaura valley *curacazgos* such as Carquin, Vegueta, and Gualmay were grouped together in the *Señorio* de Huaura which was led by Guachapayco (Rostworowski 2002[1978]). She also argues that, in some cases, *señorios* can be grouped together into *macroetnias*, as may have occurred at Pachacamac, when the Inka restructured the political organization of the Lurin Valley. It is unclear whether these terms refer to ethnic group or socio-political units; however,

considering the shifting nature of ethnic identity, it is quite likely that these terms referred to both ethnic and socio-political boundaries depending on the specific historical context.

With the exception of *ayllu*, the above are all Spanish terms that were used by officials trying to document local social and political organization in order to more effectively administer their newly conquered territories. As such, *etnia*, *curacazgo*, and *señorio* represent etic categories that have unclear relationships to the emic categories that pre-contact Andean groups used to organize themselves, particularly since many parts of the Andes had been re-organized after the Inka conquest. Furthermore, it is unclear which types of social group identities existed between these different categories, particularly as conflict existed between these different categories in different historical periods (see Marcus 1988; Rostworowski 1988). The most likely possibility is that social group boundaries manifested in various ways and at different levels as historical and political contexts changed. For example, among the present-day Maya, ethnic identity shifts between local, regional, and national levels. There are approximately 21 Maya ethnic groups living today in Guatemala, each of which is regionally dispersed and identified by different languages, but more specifically by different forms of indigenous dress. However, as Maya groups fight for the recognition of their rights in the aftermath of *la violencia*, many individuals will strategically combine stylistic elements of dress from different ethnic groups as part of the creation of a pan-Maya identity which is used when dealing with the Guatemalan state (Fischer 2003).

A similar pattern may have been functioning in the ancient Andes. Like in the Maya region, it is possible that Andean ethnic identity shifted between *curacazgo* and *señorio* levels in response to changes in regional socio-political organization. As Ogburn (2008) illustrated in his discussion of Saraguro ethnogenesis, small-scale groups who were recognized as independent ethnic groups under the Inka later came together to form the larger Saraguro ethnic group in response to changes

caused by Spanish colonialism (Ogburn 2008). It is important to keep the flexible nature of social/ethnic group boundaries in mind, since Spanish documents describe past Andean social organization at particular moments in time, whereas the archaeological record represents a palimpsest of shifting boundaries across time, meaning that the documentary data cannot be projected directly into the past.

Materially, these shifting boundaries would be manifest through fluctuations in the distributions of different forms of material culture, as well as in the degree of stylistic unity between regional material assemblages. In the Andean case, during periods of fragmentation when social group boundaries would more likely be manifest at the level of *curacazgo*, one would expect to see a great deal of variation in both conscious and technological style, even when there were shared stylistic canons. For example, even though Chancay black-on-white ceramics are all decorated with black designs painted over cream slip and can be loosely grouped into the same stylistic family, analysis of ceramic from excavated contexts at five Chancay sites in the Huaura Valley have identified more than 20 distinct iconographic motives (Terry et al. 2010; Szremiski and Imbertis 2013). This suggests that the individual potters at each site were free to interpret shared artistic traditions as they saw fit, and that presenting a unified front stylistically was not particularly important. In contrast, during periods of unification where social boundaries are more likely to be manifest on the level of *señorio* or *etnia*, one would expect to see conscious style to be more cohesive between artisans at different sites. For example, Wengrow (2001) has argued that the simplification of ceramics styles from the Halaf to Uruk periods was a sign of increasing bureaucratic control over the messages communicated through ceramic vessels.

Understanding the problematic relationship between these social/political categories is particularly important for this study, as the Colonial period documentation for the Huaura drainage

is sparse, and there is only a rough correspondence between the archaeologically known Chancay community and what Rostworowski (2002[1978]) describes as the *Señorio* de Huaura (see Chapter 5). It seems likely that the nature and boundaries of this *señorio* would have shifted over time, meaning that the nature and extent of this polity may have been quite different during the Late Intermediate Period than what was described in the 16th century documents that Rostworowski cites. This was also the case for polities in Huarochiri (Salomon and Urste 1991) and the Chillón Valley (Dillehay 1976, 1977, 1979, 2013; Santoro et al. 2010). The flexibility in Andean social boundaries highlights the importance of using a multivariable approach to reconstructing these boundaries, as they could be materialized differently through manipulation of both conscious and technological style by various members of the same group. For example, several domains of material culture need to be used to locate Chancay sites. While Chancay black-on-white sherds were likely emblematic of Chancay identity, only a very small number of these fragments were recovered during excavations at Salitre. It was the presence of other Chancay signifiers, such as Cayash style ceramics, shellfish remains, and the use of midden in fill between floors, that made it possible to link this site with the Chancay community (see Chapter 7 for further discussion). This is why it is necessary to use multiple lines of data to reconstruct social boundaries.

Material Approaches to Social Identity and Interaction in the Andes

In addition to documentary data, Andean archaeologists have used several techniques for detecting social boundaries in the material record. These approaches range from the primordial, with focus on variation in domestic architecture and quotidian activities (Stanish 1989, 1992), to the contextual, with a focus on multiple lines of evidence from burial settings such as forms of body modification, tomb type, and variations in burial furniture (Blom 2005; Knudson and Torres-Rouff 2009; Nado et al. 2012; Torres-Rouff 2008). Other contextual approaches look at variation

in burial pattern along with dietary preferences, differences in elite and domestic ceramics, and both monumental and domestic architecture (Goldstein 2005; Owen 2005). Though these studies rely primarily on archaeological data for reconstructing group boundaries, they also often make references to ethnohistoric data.

Recently, Emily Stovel (2013) has argued for a re-evaluation of the use of ethnicity in Andean archaeology on the grounds that archaeologists have not been sufficiently critical when making linkages between material culture variation and ethnic identity (2013). Drawing from Sian Jones (1997), she sees the formation of ethnicity as the result of a conscious process of manipulation of cultural symbols in response to particular historical and political circumstances (Stove 2013). As such, she argues that ethnicity has an indirect relationship to material culture, and is best reflected by objects/artifacts that would have been highly visible publically (Stovel 2013). Therefore, she sees the multivariate approach to detecting ethnicity that is used by archaeologists such as Paul Goldstein (2002, 2005) and Bruce Owen (2005) as picking up on differences in deep, unconscious cultural structures as opposed to differences in ethnic identity, because most variation in material culture reflects differences in structure and habitus. Since variation in structure/habitus is largely unconscious, they do not reflect differentiation in ethnic identity. Thus, Stovel asserts that only variation in a highly restricted range of conscious style (elite ceramics, public stone works, etc.) is useful for understanding ethnic variation.

While Stovel's (2013) larger point that there is not a direct correlation between material culture and ethnic identity is an important one, the opposition that she sets up between ethnic identity as active and agentic and cultural identity as passive and unconscious is problematic (Stovel 2013). Following Cohen (2004), this study argues that, regardless of how ethnic identities are invented/negotiated, certain aspects of those identities are still held as deeply traditional and

non-negotiable, which, as Cohen pointed out, is why people are willing to fight over them (Cohen 2004). Furthermore, in creating a dialectic between ethnicity/agency and culture/structure, Stovel misrepresents Jones's (1997) argument. Though Jones does focus on the processual and contextual aspects of ethnicity, she also recognizes that ethnicity is deeply tied to concepts of tradition, culture, and common ancestry. Moreover, while Jones does not see a direct relationship between *habitus* and ethnic identity, she argues that *habitus* is deeply tied to the way in which ethnic identity becomes manifest. As Jones argues, ethnicity is formed through the intersection of *habitus* and the objectification of cultural difference, and is shaped by the contexts in which this intersection occurs (Jones 1997). As such, *habitus* forms an important bridge between the internal lived experiences of ethnicity, and the external symbols that were used to express that ethnicity (see also Knapp 2008, 2013). However, since these symbols can be manipulated without necessarily changing *habitus*, difference in *habitus* cannot be directly read as difference in ethnicity. Instead, archaeologists have to work back and forth between the local and regional levels, as well as between conscious and technological style, in order to uncover both the "conscious and unconscious practices" that are related to the creation of ethnic boundaries (Knapp 2010).

Conclusions

In sum, this study understands social identity as a quality which is ascriptive (Cohen 2000; Jussim et al. 2001), self-defined (Cohen 2000), and formed through shared experiences/memories (Sofaer 2011) and cross-boundary interactions (Barth 1969, 2000; Cohen 2000). That is to say, social identities are constructed in response to changing social, political, cultural and historical contexts, yet at the same time, aspects of identity can be perceived as deeply traditional. As a result, identity has a complex relationship with material culture, making it necessary to track different types of stylistic variation through multiple material domains. Understanding the

relationship between social identities and material culture is important for this study, as the groups who lived in the Huanangué Valley during the Late Intermediate Period need to be identified in order to define the actors involved in interaction. Second, interaction can have a range of impacts on social boundaries, from making them more fixed, as is the case of balkanization, to making them more permeable, as is the case with hybridization. Thus it is important to have a clear understanding of how the boundaries in the Huanangué Valley were materialized in order to detect how they change over time.

In order to address this problem, this study takes a multivariate approach to identifying social group boundaries that moves between local and regional levels as well as between the analysis of conscious and technological styles. Specifically, site placement and layout, architectural styles, diet (based on faunal and botanical remains), and conscious and technological artifact style will be scrutinized, along with the relevant documentary data from the region. These data will be gathered through a variety of means, including archival analysis, archaeological survey, and excavation. Once patterns in variation among the variables defined above are defined, they will be compared to published data from other sites in the region in order to link the residential groups at Salitre and Campo Libre to the larger polities/cultural groups that they belonged to. Specifically, documentary data will be used to create hypotheses related to which social groups may have inhabited the Huanangué Valley during the Late Intermediate Period. These hypotheses will then be tested by documenting the spatial distribution of site types, site plans, architectural styles, and surface artifact styles across the Huanangué Valley. By looking at how these variables co-vary, preliminary conclusions are formed about which social groups inhabited the valley during the Late Intermediate Period.

The preliminary conclusions formed during survey are refined through excavations that will provide greater detail about construction techniques, dietary preferences, and variation in conscious and technological aspects of artifact style. These data will help to provide a clearer understanding of how social boundaries were materialized, as well as provide insight into economic and technological organization at each site, and help illuminate what kind of interaction networks may have existed. Particular attention will be paid to ceramics. By conducting detailed component analysis of paste color, nucleus color, temper type and size, form, and surface treatment, among other features, of non-diagnostic pottery fragments, it may be possible to reconstruct different workshop traditions that existed at each site. Looking at the spatial distribution of workshop traditions together with the spatial distribution of architectural styles, diet, conscious ceramic style, etc. may help in reconstructing these boundaries, as well as help understand interaction across these boundaries.

In sum, studying various aspects of both conscious and technological style together is important for understanding both the formation of social boundaries as well as the interactions that occur across these boundaries. For example, variations in the surface treatments of ceramics can provide insight into how particular groups manipulated ideological messages to make claims about political/cultural affiliations. Technological style can provide insight into elements of the organization of technological systems, which can also help elucidate both the existence of social boundaries (through examining workshop traditions) as well as some of the dynamics of interregional interaction (through sourcing studies which can help identify trade partners). This in turn can help us to better understand the types of dependencies that existed between people and things, and how those dependencies can lead to economic (and other) forms of entanglement. Understanding entanglement may be useful for studying inter-group relationships along the

Andean slopes, where both people and important resources were scattered across different ecotones, making interaction necessary.

Chapter IV

Methodology

This dissertation is focused on the outcomes of interaction between the Chancay and the local *chaupiyunginos* in the Huanangue Valley during the Late Intermediate Period, and hypothesizes that the Chancay became entangled with the *chaupiyunginos* after moving into the valley as part of a trade diaspora. The two previous chapters examined the literature on entanglements in order to create a conceptual framework through which the relationship between the Chancay and *chaupiyunginos* could be understood (Chapter 2), and also explored how social group boundaries are materialized in order to create a list of archaeological correlates for entanglements (Chapter 3). Briefly, the outcomes of interaction can be inferred archaeologically in different ways. As discussed in Chapter 2, the relative impermeability of social boundaries changes from fixed and impermeable (in the case of balkanization) to blurred and highly permeable (in the cases of hybridization/syncretization). Social boundaries can be materialized in several different ways and through various types of material culture (Cohen 2000; Sofaer 2011; Bhabha 1994; Gupta 1992; Meskell 2001; Neil 2012). Therefore, it is best to use a multivariate approach in detecting and tracking boundaries (see Chapter 3). The variables tracked by this study include site size and layout, site placement, architectural styles, construction techniques, artifact (ceramic, lithic, textile, etc.) styles, dietary preferences, and burial practices. Both conscious style (i.e. decorative motives or other forms of surface elaboration on elite ceramics and public monuments, etc.) and technological style (formal variation in the construction of artifacts) are considered (Weissner 1993; Wobst 1977; Conkey and Hastorf 1990; Hodder 1982; Hegmon 1992; Dietler and

Herbich 1998; Pfaffenberger 1988). Data were gathered through a four-pronged research approach, which consisted of archival research, survey, excavation, and artifact analysis.

Ethnohistoric Research

Ethnohistoric research consisted of visits to the National Library and the Archives of the Arch-Bishop in Lima, as well as to the Parochial Archives in Huacho in order to access Colonial-period documents from the Huaura drainage. Preference was given to documents dating from the 16th century, as pre-colonial forms of social organization would likely be more intact during this time. In addition, as some Colonial-period documents from this region have previously been published (Rostworowski 1978; Rosas Cuadros 1988; Ipinze 2004), library research was conducted at IFEA and the National Library. While there are always difficulties with projecting documentary data into the past, this study follows models put forth by Wernke for the Colca Valley (2006a, 2006b) and Dillehay for the Chillón Valley (1979) and southern Chile (2007). The goal of this phase of research was to identify the groups that may have been present in the Huanangue Valley during the Colonial period in order to help reconstruct the social, political, and cultural landscapes of the valley during the Late Intermediate Period. Documentary data suggested that the Huaura drainage was occupied by a mosaic of small-scale, loosely affiliated *ayllus*, and that members of the coastal Chancay community may have migrated into the middle valley in order to gain access to agricultural land. If the documentary data are correct, this would suggest that the settlement pattern in the Huanangue Valley would consist of a number of small, stylistically distinct sites, some of which may contain distinctively Chancay material culture. Survey and excavation were then used to test this potential model (see Chapters 5, 6, and 7).

Opportunistic Survey

The next phase of research, opportunistic survey, was conducted in order to test the models derived from documentary data and to identify the groups that inhabited the valley during the Late Intermediate Period, as well as to gain preliminary insight into the types of interactions that took place between these groups. Because of constraints on time and resources, doing 100% coverage survey of the research area was unrealistic, thus an opportunistic sampling strategy was used instead. In order to maximize data recovery, areas of interest were identified through examining 1971 aerial photographs from the National Institute of Geography in Peru as well as through conducting interviews with local people. Areas of interest were identified by the presence of linear, rectangular, and/or circular shapes that could represent man-made objects. Attention was also paid to areas that appeared to be heavily pitted or discolored, as these could represent areas of looting. Local people were asked if they knew of any *ruinas* (ruins), *huacarias* (looted areas), or *cementarios/pantanos de los gentiles* (“gentile” cemeteries), all of which are local terms used to describe archaeological sites, and these interviews were useful for identifying small sites that did not appear on the aerial photos.

Once identified, areas of interest were ground-truthed through walking the landscape. Archaeological localities, which are defined as any spot where archaeological remains are present (i.e. wall fragments, ceramic scatters, rock art, etc.) were recorded with a Trimble Geoexplorer II and photographed, and information regarding locality size, location, architectural style, construction techniques, and surface artifacts was recorded. Data was then entered into a GIS database in order to track the spatial distribution of these variables in order to begin to reconstruct past social boundaries (see Chapter 6). An attempt was made to use the Geoexplorer II to map localities; however, the local base station was malfunctioning and it was impossible to correct the

recorded GPS data. As such, site size estimates were based on field observations and spatial analysis done in Google Earth Pro.

Excavations

The third phase of research consisted of testing residential structures, storage structures, and agricultural fields at Campo Libre and Salitre. These sites were selected for excavation for a number of reasons. Salitre was tested because survey data suggested that it was a Chancay settlement, and the site was located about 2 km downriver from the *chaupiyungino* site of Campo Libre. Due to their close proximity, it is conceivable that the people living at Campo Libre and Salitre would have been able to interact on a regular basis. Furthermore, Salitre was associated with the largest and best-preserved agricultural field system in the valley; therefore, testing this site would maximize the likelihood of recovering information about what types of crops were grown by the Chancay culture in the Huanangue Valley, which is important for understanding regional networks of exchange. Campo Libre was selected because it was the largest and best-preserved of the *chaupiyungino* sites documented during the survey. It was also associated with agricultural fields and storage structures, thus providing the research team with the opportunity to test both residential and agricultural fields. This is important for determining the types of crops that were grown by the *chaupiyunginos*, and can also provide insight into what types of goods the *chaupiyunginos* may have been trading with the Chancay (see Chapter 7).

Residential structures, storage structures, and agricultural fields were excavated at both sites in order gain a broad perspective of the types of activities that took place at Salitre and Campo Libre. Excavating these sectors also helped the research team to recover as many variables as possible to help identify how social boundaries change over time, which can provide insight into what types of interaction were occurring between the Chancay and *chaupiyunginos*. In addition,

excavations in the agricultural fields and storage structures were also important for identifying which crops were grown in the Huanangué Valley in order to better understand how different goods were circulating through the valley. Residential areas were tested through the placement of 2 by 3 meter excavation units in well preserved structures. The goal of this testing was to confirm the chronologic and cultural affiliation of the sites, to determine the types of activities that occurred there, and to document evidence for interaction, such as the presence of non-local ceramics or other artifacts. Units were excavated using a modified form of the Harris method, with each unit assigned a locus number and all depositional layer within each locus assigned a lote number. Because of the relatively small size of the units, lotes were typically natural, stratigraphic layers, or lenses. Lotes that exceeded 10 cm in depth subdivide into artificial levels in order to maintain vertical control. Intrusive features that were encountered during excavation were assigned their own locus number and then excavated by lotes.

Three 1 by 3 meter trenches were placed in the agricultural fields at Salitre, whereas the agricultural fields at Campo Libre were tested with two 1 by 1 meter test pits, as these fields were in the process of being converted into avocado orchards. Units were excavated using the same methodology as detailed above. Soil samples for pollen, phytolith, and starch grain analysis were taken from each lote. Storage structures at Campo Libre were also tested through excavating two 1 by 1 meter test pits within storage units, and two 1 by 1 meter test pits were also placed in the platforms associated with the storage structures. The goals of excavating the agricultural fields and storage structures was to determine who was growing which crops in the valley, and to look for evidence that intergroup interaction was effected by the organization of agricultural production. All sediments were passed through 1/8 inch screens, and all artifacts collected and bagged by type and provenience. Special care will be taken with any use surfaces encountered. Artifacts found on

the surface of use surfaces were piece plotted and collected separately, and samples were taken for pollen and fine screen analysis. The excavation results were also compared to the documentary data (see Chapter 7 for further discussion). Once artifact analysis was complete, all materials were turned over to the Ministerio de Cultura in Lima, Peru.

Paleobotanic Analysis

Due to the periodic episodes of rainfall in the upper part of the Huanangue Valley, excavators were unable to recover identifiable macrobotanical remains from the agricultural fields. Fortunately, there are various other methods through which the presence of different botanic species can be detected. Plant pollen preserves well in the archaeological record and has been successfully used to identify the presence of different plant species in a number of archaeological projects (Dillehay et al. 2007; Piperno et al. 1990; Hansen et al. 1984). However, the drawback of this type of analysis is that most types of pollen are air born, so the presence of pollen in a sample only can be used to say that a specific plant grew somewhere in the general area (Pearsall 2000). Thus, other types of analysis are needed to compliment pollen data.

Phytolith analysis can be employed to complement pollen analysis in order to give a more precise picture of what which plants were physically present in a given local. Phytoliths are small silica structures that form in plant leaves and stems. They are highly resistant to degradation, and thus can be detected in archaeological soils (Pearsall 2000; Piperno 2006). Furthermore, each plant species has a unique type of phytolith, and there have been several cases where archaeologically recovered phytoliths were successfully used to identify crops in cultivation (Dillehay et al. 2007; Pearsall et al. 2003; Siemens et al. 1988; Pohl et al. 1996). Since phytoliths are generally deposited in soil through the decomposition of plant remains, the presence of a particular type of phytolith in a soil sample is a good indication that a specific plant was physically present in the excavated

context (Piperno 2006). Similar to phytoliths, starch grains can be used to identify plant taxa, as starch grain form varies by plant type. Starch grains are typically found in fruits, roots, tubers, and underground stems, thus the presence of starch grains in a sample can also be indicative of plant presence. Though starch grain analysis is typically performed on ceramic and grindstone residues, they also can be detected in soil samples (Zarrillo and Kooyman 2006). Therefore, pollen, phytolith, and starch grain analysis performed together complement each other, and allow for the reconstruction of regional flora patterns and the detection of specific plant taxa that were growing in a particular locale.

Soil samples were collected from every lote for pollen, starch grain, and phytolith analysis using methodologies established by Pearsall (2000) and Piperno (2006). In brief, the trowel used in collection was rinsed with water in order to remove contaminants, and then 50 to 100 grams of sediment were collected from one spot and placed in a plastic bag. The plastic bag was then sealed, labeled and placed inside of a second plastic bag in order to reduce the chance of contamination. When possible, samples were taken from protected areas (for example under rocks) in order to reduce the possibility of the sample being tainted with modern airborne pollen. Ultimately, 9 samples were selected for analysis based on their association with possible agricultural soils (in the case of samples from agricultural terraces) or with possible use surfaces (in the case of storage structures), and sent to the Laboratorio de Palinología y Paleobotánica at the Universidad Peruana Cayetano Heredia in Lima, Peru. Macrobotanic materials that were recovered during excavation in residential structures were analyzed by Peruvian paleoethnobotanist Carmela Alarcon using methodologies she established.

Ceramic Analysis

Ceramics were subjected to component analysis by the author. Briefly, ceramics sherds were washed and dried and then assigned a unique number derived from their provenience. Using a coding system developed for the Huaura Valley by Kit Nelson, Stacey Dunn, and Ashley Heaton (Terry et al. 2009), information regarding sherd type, size and thickness, paste color, nucleus color, temper type and size, surface treatment, surface decoration, color motif, and decoration type was recorded. SPSS was then used to look for correlations between the different variables. The ceramic analysis had two major goals. The first was to contribute to the growing database of ceramic styles in the Huaura drainage. This database is part of a long-term, collaborative project and will be used to refine the definitions of local ceramic styles, and will also be used as a starting point for understanding the local and regional-scale economic relations that underlay ceramic production and distribution. The second goal was to define differences in workshop traditions for the production of ceramics between Campo Libre and Salitre in order to both reconstruct symbolic boundaries at each site, and to document any possible evidence of inter-site trade.

Faunal Analysis

Faunal material recovered during excavation was analyzed by the author. Before analysis, adhering sediments were removed from bones with a soft, dry toothbrush in order to make sure that both anatomical features and any human modifications (such as cut marks or burning) were clearly visible. Once bone fragments were cleaned, they were labeled with a unique code derived from their provenience. Fragments were then compared to reference images from *Human and Nonhuman Bone Identification: A Color Atlas* (France 2008) in order to identify element type (i.e. femur, radio-ulna, cuboid, etc.) and animal taxa. A rough age estimate was also made (juvenile vs. adult) based on the presence or absence of unfused epiphyseal lines. The location of cut marks

and/or burning, if present, was also recorded. The goal of this analysis was to determine the types of animal protein that were available at Campo Libre and Salitre, as well as to determine if different “cuts” of meat were preferred at each site, as this could be a sign of differing culinary preferences. Element distribution and age data can also provide insight into how animals were managed, and if they were raised and butchered locally. This in turn can help illuminate the types of economic networks that existed in the valley.

Radiocarbon Analysis

Carbonized organic remains were collected for radiocarbon dating. Whenever possible, carbonized remains were collected in situ; however, carbon was also collected from screens when present. Samples were removed from surrounding sediments by using either metal tweezers, or by scooping the fragments up with a metal trowel blade. These fragments were then placed in aluminum foil pouches that were labeled with the sample’s provenience, and the pouch was then placed in a plastic bag to protect the sample from contamination. 15 samples were selected for analysis at the DirectAMS laboratory in Bethel, Washington. Samples were selected based on their association with important architectural or depositional features, such as use surfaces, walls, and/or primary fill deposits. The goal of the radiocarbon analysis was to gain a better understanding of the chronology of occupation at each site.

Expected Results

Several different types of intergroup interaction may have occurred in the Huanangue Valley. Based on preliminary data from previous studies in the lower Huaura drainage (Nelson and Bellido 2010; Brown 2008; Janke 2009; Nelson and Ruiz Estrada 2010; Dunn 2011; Heaton and Dunn 2010; Dunn and Heaton 2013; Rutherford 2014), this study hypothesizes that people from the coastal Chancay community settled the Huanangue Valley as part of a trade diaspora

during the Late Intermediate Period in order to gain access to agricultural land. Once there, they engaged in trade with local *chaupiyunginos* in order to gain access to water and agricultural land. Over time, this exchange could potentially have led to cultural and economic entanglement (see Gosden 2004; Dietler 1998, 2010), whereby both groups would become increasingly dependent on each other. If this is indeed the case, it would be expected to see a settlement pattern dominated by well-defined symbolic boundaries as materialized by co-variance in site type, architectural style, artifact style, and so forth. However, closer examination should reveal some permeability in these boundaries, as goods were exchanged across them. As entanglements developed, these non-local goods will become incorporated into local artifact assemblages. For example, one would expect to find Chancay ceramics and shellfish at *chaupiyungino* sites, and local *chaupiyungino* ceramics/products at Chancay sites. If entanglements did develop between local *chaupiyunginos* and the foreign Chancay, this could have had several different implications for local geopolitics. For example, it is likely that these entanglements could have led to the development of alliances between these groups, which may have made it more difficult for highland groups, and later the Inka, to encroach in the valley.

There are other possible scenarios for coastal-*chaupiyungino* interaction. For one, it is possibly that coastal and local communities in the Huanangue Valley did not interact with one another. In this case, one would expect to see a settlement pattern with clearly defined site types as above, but closer examination will show that symbolic boundaries were strongly maintained with little to no exchange of goods across them. As such, there would be no overlap between artifact assemblages at Campo Libre and Salitre. In cases of balkanization, there is also an increased potential for violence as different factions try to access the limited agricultural land. Thus, weaponry, such as sling stones, bolas, and mace heads, would likely be observed, and sites

would likely be located in easily defensible, fortified locations. In this scenario, Inka incorporation of the Huanangue valley may have been relatively easy.

A third possibility is that coastal and local communities closely interacted and practiced co-residency and intermarriage, leading to eventual cultural hybridization/syncretization. The correlates of cultural hybridization would be manifest in the combining of different stylistic elements in ceramics, textiles, architecture, and possibly diet. Burials may also have mixed coastal-local assemblages with coastal and *chaupiyungino*-style ceramics, wool and cotton textiles, and a variety of tomb forms. In this case, Inka incorporation of the region would be more difficult, as communities would be more likely to band together to offer unified resistance. A fourth possible scenario is that coastal–local interaction in the Huanangue Valley was actually fostered by the Inka state. In this case, agricultural fields in Salitre and Campo Libre may have been constructed and managed by Inka agents during the Late Horizon. Inka ceramics may also be associated with the agricultural fields and storage structures at Salitre and Campo Libre. It is also possible that these different scenarios functioned in tandem with each other.

The results of this study will add to understandings of social and economic complexity as mediated through economic interaction in the Andes, and will also illustrate how small-scale groups can become entangled without a power differential developing between the entangled groups. This is important because 1) it will increase the perception of how truly diverse past Andean cultures were, 2) studying how groups interacted on the local level is important to understanding how local politics articulate with larger state processes, and 3) by studying the variety of different ways in which cultures interact, we can help to bring the Andes back into world debates through developing models of intergroup interaction that have cross-cultural applicability.

Chapters 5, 6, and 7 will present the results of the ethnohistoric research, opportunistic survey, and excavations.

Chapter V

Physical, Historic, and Cultural Setting of Interaction and Entanglements during the Late Intermediate Period

Population mobility, culture contact, and intergroup interaction have been shaping human societies in the Andes for millennia. However, for reasons that will be explored in this chapter, intergroup interaction and its outcomes historically have been under-theorized and understudied in this region (Dillehay 1976, 1977, 1979, 2013; Mayer 2013; Santoro et al. 2010; Van Burren 1996). Chapter 2 explored the utility of entanglement theory for investigating the types of relationships that can develop between small-scale groups, and also looked at some of the reasons why entanglements may or may not develop into colonialism. In order to demonstrate why entanglement theory is useful for understanding the nature of the relationships between the Chancay and *chaupiyunginos*, as well as for understanding intergroup interactions in the Andes more generally, it is important to place this study within its wider geographic, historic, and cultural contexts. Therefore, this chapter will first examine the physical characteristics of the Huanangue Valley in order to demonstrate how the physical landscape primed groups to develop entanglements due to the restricted availability of vital resources such as land and water. Next, this chapter will briefly examine the political and social contexts of the Late Intermediate Period with a specific focus on the nature of Chancay polity through a consideration of archaeological and documentary data. The goal of this analysis will be to explain why the Late Intermediate Period is an ideal setting for studying interaction and entanglement.

The Physical Setting

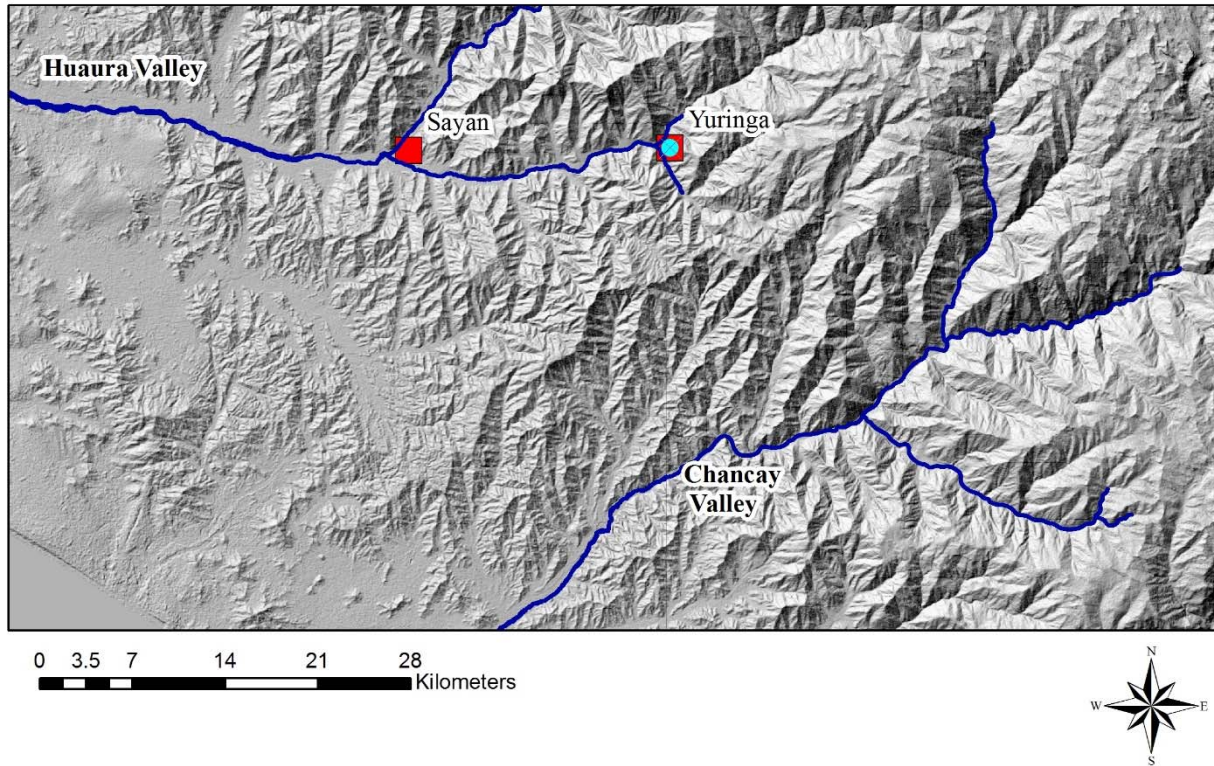


Figure 5.1: Map of Huaura Drainage and Chancay Valley

The Huanangue Valley is the southern branch of the larger Huaura drainage, and is located at the southern boundary of the Norte Chico (Little North). The valley is relatively wide and runs from Yuringa to Sayan, covering some 20 km, and communicates with the Chancay Valley (see Figure 5.1). It ranges in altitude from 800-1600 meters above sea level. These elevations correspond to the *chaupiyunga* ecotone, which is the transitional zone between the coastal *chala* and highland *yunga*. Like other *chaupiyunga* valleys, the Huanangue is semi-arid and experiences light seasonal rainfall from the months of October through March. While this rainfall is important for increasing caudal flow, it is also potentially dangerous, as brief, localized episodes of heavy rainfall cause *huaycos* (flash floods) which flow through the valley's many *quebradas* and can

have devastating consequences. The seasonal and often unpredictable nature of rainfall makes water management very important for local agriculture.

While coastal fog occasionally reaches into the valley, most days are sunny and the temperature averages about 27 degrees C year round. Local plant species include various types of cacti, *molle*, *guarango*, and *sauco* trees, and other scrubby desert plants, though grasses do grow during the rainy season. Local animal species include foxes, snakes, lizards, *viscacha*, deer, pumas, vultures, hummingbirds, and various other bird species.¹ *Chaupiyunga* valleys are typically narrower than coastal valleys and thus have less arable land, but that land is extremely fertile. Today, the primary crops grown in the Huanangue Valley are avocado and *cherimoya* (custard apple), though *maize morado* (purple corn), *maracuya* (passion fruit), and various citrus fruits are produced as well (ONERN 1971, 1974). While camelids are no longer raised, older residents still remember people from the highland villages surrounding Ihuari bringing their llama herds when they descended into the valley in order to barter goods and work local agricultural fields (ONERN 1971, 1974).

Due to this, the Huanangue Valley is an excellent locale for studying processes of intergroup interaction and entanglements. The valley was (and still is) the ecological and cultural border between coastal and highland populations, and today it is the main route of communication between coastal centers such as Huaral and Huacho and the fruit producing region around Ihuari. People currently living in the valley hold a liminal position. Based on conversations with local collaborators, though there does not appear to be a clearly defined “*chaupiyunga* identity,” inhabitants also do not identify as either coastal or highland. In fact, *los costeños* (coastal people) are viewed with a mixture of fear and contempt and are generally considered to be untrustworthy,

¹ Local informants say that condors also use to nest in the valley.

while the “*gente de altura*” (people from the highland) are seen as much more respectable, though perhaps somewhat technologically backwards and beholden to their own customs. At the same time, both the Huanangue Valley and the people living within it are viewed differently depending on the position of the observer. For example, people living in the coastal town of Huacho considered the Huanangue Valley to be part of the highlands and its inhabitants as *serranos*, whereas the inhabitants of Ihuari view those living in the Huanangue Valley as *costeños*. What this suggests is that the *chaupiyunga* zone today serves as a liminal place between the coast and highlands, and is a region of intense interaction between highland and coastal peoples.

Preliminary documentary and archaeological data, which will be explored in more detail below, suggest that this was the case in the past as well. Documentary data show that *chaupiyunga* valleys were the primary loci for coca production and also important sources of maize, chili peppers, and fruits. Coastal and highland groups often tried to move into *chaupiyunga* valleys in order to gain access to these resources (Rostworowski 2004; Plowman 1984b; Marcus 1988; Santoro et al. 2010; Llagostera 2010). As these products were also desired by a number of groups in the past, they are the types of products around which entanglements are likely to occur, as they could easily be inserted into local systems of value. In addition, *chaupiyunga* valleys also served as a geographic bottleneck through which coastal and highland people had to traverse in order to move from one zone to another, and as a result, many different types of people often came into contact in these zones (Topic and Topic 1984; Topic 2013). Thus, *chaupiyunga* valleys like the Huanangue Valley were often the setting for intense sets of interactions between coastal, highland, and local *chaupiyungino* peoples.

Local *chaupiyungino* groups could become quite powerful as their strategic position between the coast and highlands often allowed them to mediate trade between these two areas

(Topic 2013). In the case of the Huanangue Valley, survey data suggests that *chaupiyunga* proximity to irrigation intakes may have been an important source of tactical power for this group (see Chapters 6 and 7 for fuller discussion). Because of the overall aridity of the valley, the *chaupiyunginos* could use this proximity to threaten to divert water away from the main river channel, effectively cutting off those who lived downstream. This situation may have helped encourage entanglements to develop between local groups and the Chancay, as the latter would have been dependent on local groups for continued access to water. The tactical power granted by the threat of control over water may also have helped to protect local groups from being subjugated by the more economically powerful Chancay (see Chapters 2, 6, and 7).

Social and Political Landscapes during the Late Intermediate Period

In order to understand how and why non-colonial entanglements developed between local groups and the Chancay in the Huanangue Valley, it is necessary to examine the wider political and cultural landscape within which these communities were situated. Andean prehistory is arbitrarily divided into horizons, or periods of apparent unity when broad swathes of the Andes were united under particular hegemonic regimes, and intermediate periods, or times of regional fragmentation and local development. The processes related to intergroup interaction and entanglements are likely to be more visible during intermediate periods, as they are less likely to be masked by monolithic state policy. The Late Intermediate Period (1100-1470 CE), which falls between the dissolution of the Wari and Tiwanaku Empires (600-1100 CE) and the rise of the Inka Empire (1470-1532 CE), is a particularly good time period for analyzing these issues as colonial documents can be used to compliment archaeological data.

There has been a good deal of debate about the nature of political and social organization during the Late Intermediate Period (Arkush 2006, 2008; Conlee 2003, 2004; Dulanto 2008;

Llagostera 2010; Nielsen 2013; Platt 2010; Santoro et al. 2010; Brown 2008). Indigenous chronicler Felipe Guaman Poma de Ayala characterized the time before the Inka as belonging to the *Auca Pacha Runa*, a violent, bellicose people who lived in an age of constant raiding and warfare that came to an end with the Inka unification of the Andes (Guaman Poma 1980 [1615]). Drawing from Guaman Poma, many archaeologists have traditionally argued that the Late Intermediate Period was a time of endemic warfare and raiding between fragmented, small-scale polities (Arkush 2008; Conlee 2003; Arkush and Stanish 2005; Rowe 1945, 1948, 1951; Lumbreras 1974). However, as will be discussed below, the processes that occurred in different areas of the Andes during the Late Intermediate Period were varied and complex as different social and cultural groups engaged in several strategies of competition and/or cooperation while jockeying for position in a turbulent political landscape. The fragmented nature of the Late Intermediate Period cultural and political landscapes also may have created the types of social and political conditions that promoted the development of entanglements, at least in some regions.

After the fall of the Wari Empire, there is clear evidence for increased violence in the south-central Andes, particularly around the Lake Titicaca Basin as well as in the former Wari heartland. For example, Tung (2008) has documented a clear up-tick in violence as evidenced through increasing levels in cranial trauma in Late Intermediate Period skeletons in the former Wari heartland. This escalation happened along with a surge in rates of cranial modification, suggesting a fragmentation of identity and higher levels of competition and violence between these new social groups (Tung 2008; see Andrushko and Verano 2008, Torres-Rouff et al. 2005 for similar examples). In addition, work by Arkush (2008) and Arkush and Stanish (2005) reports an increase in the number of fortifications in Puno, which they argue is evidence for greater levels of ethnic balkanization and violence for this time. More recently, Kohut (2012a, 2012b) has documented an

extensive network of fortresses in the upper Colca Valley (see also Choque and Kohut 2012), suggesting that the threat of violence was real in this region as well.

However, while there is clear evidence for violence in the south-central Andes during the Late Intermediate Period, other forms of interaction were occurring in this region as well. For example, data from the Tarama-Chinchaycocha region suggest that herders and agriculturalists were tied together due to complimentary economic organization, as well as complex sets of ritual practices geared toward knitting these groups together (Parsons et al. 1997). Evidence from other parts of the Andes also shows that trade can be integrated within the practice of warfare. For example, in the Southern Cone, llama caravans regularly traversed the southern Bolivian Altiplano as well as the northern Argentinian puna, facilitating the movement of goods between groups and sub-regions in spite of the violence that was occurring (Nielsen 2013; Berenguer 2004).

During this same time period, a very different set of processes were occurring in the north-central Andes. Throughout the Middle Horizon-Late Intermediate Period transition, numerous valley-centered polities emerged on the north coast of Peru (Dulanto 2008; Topic 1990; Shimada 2000). One of these was the Lambayeque polity, which flourished in the valley of the same name. While little is known about the political organization of this society, excavations by Jennings and others show that Lambayeque elites were extraordinarily wealthy due to encouraging metalworking and long-distance trade, particularly with Ecuador (Jennings 2008; Shimada 2000). Just south of Lambayeque, in the Moche and Viru valleys, a complex set of relationships existed between coastal, *chaupiyunga*, and highland groups during the early part of the Late Intermediate Period (Topic 2013). Trade between groups was an important part of local political economies, particularly as coastal elites needed access to highland ores, and this trade appears to have been mediated by *chaupiyunginos* (Topic 2013; Topic and Topic 1984; see also Santoro et al. 2010). In

addition to trade, there is also ample evidence for resource sharing (see Dillehay 1976, 1977, 2013; Ramirez 1996) between coastal and highland lords. In the case of the Moche and Viru valleys, it appears that coastal elites negotiated with their counterparts in the highlands for access to mineral and agricultural resources. In these cases, the coastal lords sent people to work these resources and would provide payment in the form of a percentage of the wealth extracted (Topic 2013).

Though trade, resource sharing, intermarriage, and other cooperative forms of interaction were relatively common for the north-central Andes, tensions did occasionally arise between different groups that could lead to outbreaks of violence (Arkush 2008; Dulanto 2008; Mackey and Klymyshyn 1990; Topic 1990). This is evident during the early phases of Chimu expansion during the mid-14th century. The Chimu polity emerged around 1100 AD in the Moche Valley. After consolidating the Moche Valley, the Chimu expanded quickly, conquering neighboring valleys to the north and south in two separate waves of expansion (Topic 1990; Moore 2008; Mackey and Klymyshyn 1990; Conrad 1981; Tonye 2011). Both of these waves were associated with a flurry of fort building. Chimu forts were located in strategic positions where they could control trade (Topic 2013; Topic 1990) and were also placed near the principle administrative centers in the valleys they conquered (Topic 1998). However, in spite of the evidence for episodes of conflict, there is also ample evidence that the Chimu administered through local lords, suggesting that once different valleys were subdued, the level of violence probably subsided (Topic 1990).

Research in the Norte Chico, the region between the north and central coasts, is still in an incipient state and little is known about the archaeology of the zone, particularly for later periods. However, as this is the region where the Huanangue Valley is located, the limited data available will be considered in some detail. Recent work by Margaret Brown Vega (2011) documented a

possible increase in the number of defensible sites in the Fortaleza and Huaura valleys during the Late Intermediate Period. However, excavations are still lacking and an attempt to date defensive architecture at 11 of the Huaura Valley sites demonstrated that many of these fortifications may have been built during the Early Intermediate Period (Brown Vega 2013). Furthermore, with the exceptions of Acaray, La Fortaleza de Paramonga, and La Centinela, the defensible sites identified by Brown do not completely fulfill her six-part defensibility index (Brown Vega 2011). As such, in spite of the potential defensibility of these sites, it is unlikely that their primary function was to defend people against violent attack. Rather, one important function of these sites may have been to control strategic points on the local landscape. Alternatively, groups may have chosen to place settlements on hilltops in order to maximize the availability of arable land in the valley bottoms. As such, while it is very likely that there were tensions between the various groups occupying the Norte Chico, based on the present data, it seems unlikely that warfare was a primary mode of interaction between Norte Chico peoples. This is corroborated by studies of skeletal materials from looted cemeteries in the Huaura Valley which show that, with the exception of the remains found in association with the fortified site of Acaray, the number of traumatic lesions present in the skeletal population was relatively low (Janke 2009).

Work by Nelson and Bellido (2010) suggests that trade was an important part of regional economy in the Huaura drainage. In their study of botanic remains from Late Intermediate Period sites in the valley, the authors found that plant taxa are distributed in a way that cannot be accounted for ecologically. For example, several key low-elevation crops were missing from the coastal site of Rontoy, including squash, manioc, and wild cucumber, yet these same plants were present at the higher elevation sites of Chambara and Quipico (Nelson and Bellido 2010). As such, the authors suggest that the distribution of plant taxa between sites may have been affected by

social mechanisms such as trade between sites (Nelson and Bellido 2010). Furthermore, research by Lori Janke (2009) demonstrated that there was a high level of genetic similarity between some Huaura Valley populations and populations from the neighboring Chancay Valley. This suggests that there may have been regular population movement between valleys, perhaps as the result of migration or intermarriage. In sum, the presently available data suggest that the social processes at play in the Huaura Valley during the Late Intermediate Period were similar to those at play in the Chillón Valley to the south (Dillehay 1976, 1977, 1979, 2013; Santoro et al. 2010) in that there were moments of intergroup tension, and perhaps even violence, that were interdigitated with episodes of trading, alliance building, resource sharing, and/or intermarriage.

Further south, along the central-coast several smaller polities dotted the coast, including the Ichsma, Nazca, and Chincha polities, among others (Dulanto 2008; Eeckhout 2000, 2004a, 2004b; Matos Medietá 2000; Makowski 2004; Makowski et al. 2004; van Dalen 2008; Krzanowski 1986, 1991, 2008; Nelson and Ruiz Estrada 2010; Conlee 2003, 2004; Janke 2009; Engel 2011; Cornejo 2004; Rostworowski 1978, 2004; Shimada 2000). The Ichsma polity was located in the Rimac and Lurin valleys. Little is known about the political organization of this group, though Rostworowski argues that it was composed of several small *curacazgos* which were later unified by the Inka (Rostworowski 1978). This seems to match the little archaeological evidence that has been published, as there are several Ichsma sites with monumental, ramped platform mounds scattered throughout Lima and the surrounding areas. The relationships between these mound sites is still poorly understood, as many of them have been heavily impacted by Lima's urban sprawl and few excavation reports have been published (Dulanto 2008; Eeckhout 2000, 2004a, 2004b). One Rimac Valley site that is particularly interesting is the *chaupiyungino* center of Cajamarquilla. This massive site covers approximately 167 ha and appears to have been occupied from the

Formative through the Late Intermediate Period, though the little data available suggests that it reached its apogee during the Middle Horizon (Stumer 1956; Sestieri 1964; Segura Llanos et al. 2002). The exact size and nature of the Late Intermediate Period occupation is unclear, but it does seem that this site served as an important trading center between the coast and the highlands (Sestieri 1964).

The Nazca drainage was densely populated during the Late Intermediate Period with several local elite emerging to compete for power. Sites in the northern part of the drainage were located in defensible positions, suggesting that there may have been a threat of violent conflict during this time, either locally or from the Ica Valley (Conlee 2003). However, at the same time, elite power in the Nazca drainage seems to have been based on preferential access to long-distance trade goods, suggesting that local elites took control of the trade networks that had been established by the Wari (Conlee 2003, 2004). The Chincha polity seems to have been centralized around the site of La Centinela. Again, there is little evidence for an increase in violence among the Chincha, but research suggests that long-distance trade seems to have been important (Hocquenghem 1993; Morris and Idilio Santillana 2007; Rostworowski 1970).

In sum, the archaeological data shows that several different social, political, and economic processes were at play during the Late Intermediate Period. Violence increased in the south-central Peruvian Andes, as can be documented through the construction of hilltop forts as well as through increasing levels of skeletal trauma (Arkush and Stanish 2005; Arkush 2008; Kohut 2012a; Tung 2008). In contrast, the north coast became at least partially unified through the expansion of the Chimú empire, and though the Chimú occasionally had contentious relationships with their neighbors both on the coast and in the highlands, there is little evidence that this time period was more violent than previous ones. Along the Norte Chico and central coast there seems to have been

a political and cultural floresces that saw the formation of several smaller communities who were linked in complex sets of relationships that included trade, resource sharing, residential mobility, intermarriage, and occasional conflict, among other strategies (Brown Vega 2008, 2011; Dillehay 1976, 1979, 2013; Hirth and Pillsbury 2013; Llagostera 2010; Santoro et al. 2010; Topic 2013). Thus, while warfare did occur during the Late Intermediate Period, conflict was only one of many strategies of interaction that were employed, and for many regions it is unclear whether or not violence was actually increasing. The conflict that did occur also probably had many different causes. For example, the increasing number of skirmishes that manifested in the former Wari heartland were likely partially the result the power vacuum created by the dissolution of the Wari empire (Tung 2008; Isbell 2008; Jennings and Alvarez 2001). In other regions, it is likely that occasional periods of violence were due to the long-simmering tensions that existed between neighbors who had to share access to limited agricultural (and other) resources.

One thing that the Late Intermediate Period data makes clear is that different forms of interregional exchange were important throughout the Andes, and violence and trade were not always mutually exclusive. The presence of weaponry made from exotic materials in the south-central Andes illustrates that, at least in some cases, these two things may have gone hand in hand (Nielsen 2013). In addition, various forms of interregional exchange have a deep time history in the Andes, going back at least to the Archaic Period (Nielsen 2013; Dillehay 2013; Burger 2013; Briones et al. 2005; Bruhns 2003; Church and Von Hagen 2008; Hocquenghem et al. 1993). During the Middle Horizon, the Wari worked to monopolize these interregional trade networks (Burger 2013; Conlee 2003; Jennings and Craig 2001; Shady and Ruiz 1979), and after the dissolution of the Wari Empire, many of the small polities jockeyed to favorably position themselves within these networks (Conlee 2003). This fractured landscape may have also helped promote the development

of entanglements as the reach of the majority of these communities was small, and they would only be able to mobilize resources that were locally available. Thus, if these groups desired exotic goods, they would depend on the ability to negotiate access to these goods with foreign communities. Ethnohistoric data from the Chillón Valley, which was discussed in Chapter 2, suggests that entanglements did occur between coastal and middle valley groups (Dillehay 1977, 1979, 2013), and it is likely that they also occurred in other parts of the Andes.

Chancay Archaeology

The Chancay culture was first described by Max Uhle in 1904, but appears to have been known locally much earlier (Krzanowski 1991a). Archaeologically, this culture is defined by the presence of distinctive black-on-white ceramics, fine textiles, and multi-room rectangular compounds built primarily of adobe *tapia* (poured adobe) (Krzanowski 1991c). Though Chancay culture was identified more than a century ago, relatively little is known about it for a variety of reasons. First, most Chancay sites have been extensively looted as their distinctive ceramics and textiles fetch high prices on the antiquities market (Krzanowski 1991a), and the majority of these sites have been badly disturbed, making excavation difficult. Because of this, most of the Chancay materials that have been studied come from museum collections with little to no provenience information. Furthermore, though there was a brief spate of research between the late 1950's through the 1970's, archaeologists have largely remained uninterested in this region, in large part because it was perceived as unsafe due to the past presence of *Sendero Luminoso* as well as the current prevalence of armed, professional looters at sites in the Chancay Valley. Though excavations have recently been re-started at Pisquillo Chico and other sites in the last few years, the results of these excavations have yet to be published.

In the late 1980's, Polish archaeologist Andrzej Krzanowski synthesized much of the available data on the Chancay culture and conducted survey and small-scale excavations in the Chancay, Huaura, and Chillón valleys, where he documented 32 Chancay sites (Krzanowski 1991c). Research by the Huanangue Valley Archaeology Project documented four more sites, increasing the total number to 36. Krzanowski divided Chancay sites into three types: 1) large administrative-ceremonial centers, 2) palace-residential complexes, and 3) village sites (Krzanowski 1991c). Overall, Krzanowski's site typology is sound, though it would probably be more appropriate to consider category 2 sites as mid-level administrative sites as opposed to palatial-residential centers. While many of these mid-level sites are not well preserved, there is no clear reason to believe that these sites served as palaces or elite estates. The majority of administrative-ceremonial centers and mid-level administrative centers are located in the Chancay valley, while the majority of Huaura Valley sites are small village sites, with the exception of San José de Cañas and Cerro Blanco, both of which are mid-level administrative centers (Krzanowski 1991a; Dunn 2011; Dunn and Heaton 2013; Szremksi 2014).

Though the layout of Chancay sites are highly variable, there are some general patterns that can be observed. Sites tend to be located in lateral *quebradas*, which connect the valley floor to the inter-valley Andean foothills and are generally placed on alluvial terraces toward the *quebrada*'s edge, thus leaving the fluvial cone free (Negro 1991). The exceptions to this are San José de Cañas in the Huaura Valley and Cerro Blanco in the Huanangue Valley, both of which were placed directly in fluvial cones and as a result have been damaged by *huaycos* (Krzanowski 1991; Szremksi 2007, 2009). Overall, Chancay sites show little evidence of site planning as living spaces, storage areas, and public architecture are mixed together. Since they seem to have been grown organically over time, these sites are not clearly bounded (Negro 1991). Typically, they

consist of a number of rectangular, multi-room compounds, though larger centers such as Pisquillo Chico and Lauri have a number of ramped platform mounds that may have been associated with administrative and/or religious functions (Krzanowski 1991). However, apart from these general similarities, there is much variation. As Stacy Dunn (2011) has shown, each Chancay site is relatively unique in relation to how compounds are placed, as well as to how internal space is divided within each of these compounds. Even the ramped pyramids at Pisquillo Chico are different sized and have different orientations² (Krzanowski 1991; Negro 1991).

In 1991, Sandra Negro published an architectural study of Pancha la Huaca, Tronconal, and Pisquillo Chico, all located in the Chancay Valley, in an attempt to define Chancay architectural styles. Her analysis showed that Chancay architectural techniques were extremely varied. While adobe tapia appears to have been the preferred construction material, structures at all three sites also incorporated roughly shaped field stones and adobe bricks into their construction, as well (Negro 1991). In fact, Negro described a number of structures where all three construction materials were incorporated into the same wall (Negro 1991). This high degree of variability in construction technique has also been observed for sites in the Huaura Valley, including Rontoy, Quipico, and Casa Blanca (Dunn 2011; Dunn and Heaton 2013; Szremiski 2007).

² Compare to Ichsma ramped pyramids which tend to be oriented in respect to irrigation intakes (Eeckhout 2004).

Based on the distribution of Chancay sites, it seems likely that the Huaura and Chancay valleys formed the core of the Chancay community (Krzanowski 1991a; Horkheimer 1970; Dunn 2011). To date, no roads have been identified as linking these valleys; however, these neighboring valleys are only separated by approximately 2,440 square km of desert and inter-valley hills. A Least Cost Path analysis run in ArcMap 10.2 on DEM data taken from Aster satellite images showed that they were several different paths that people could potentially have used as a means

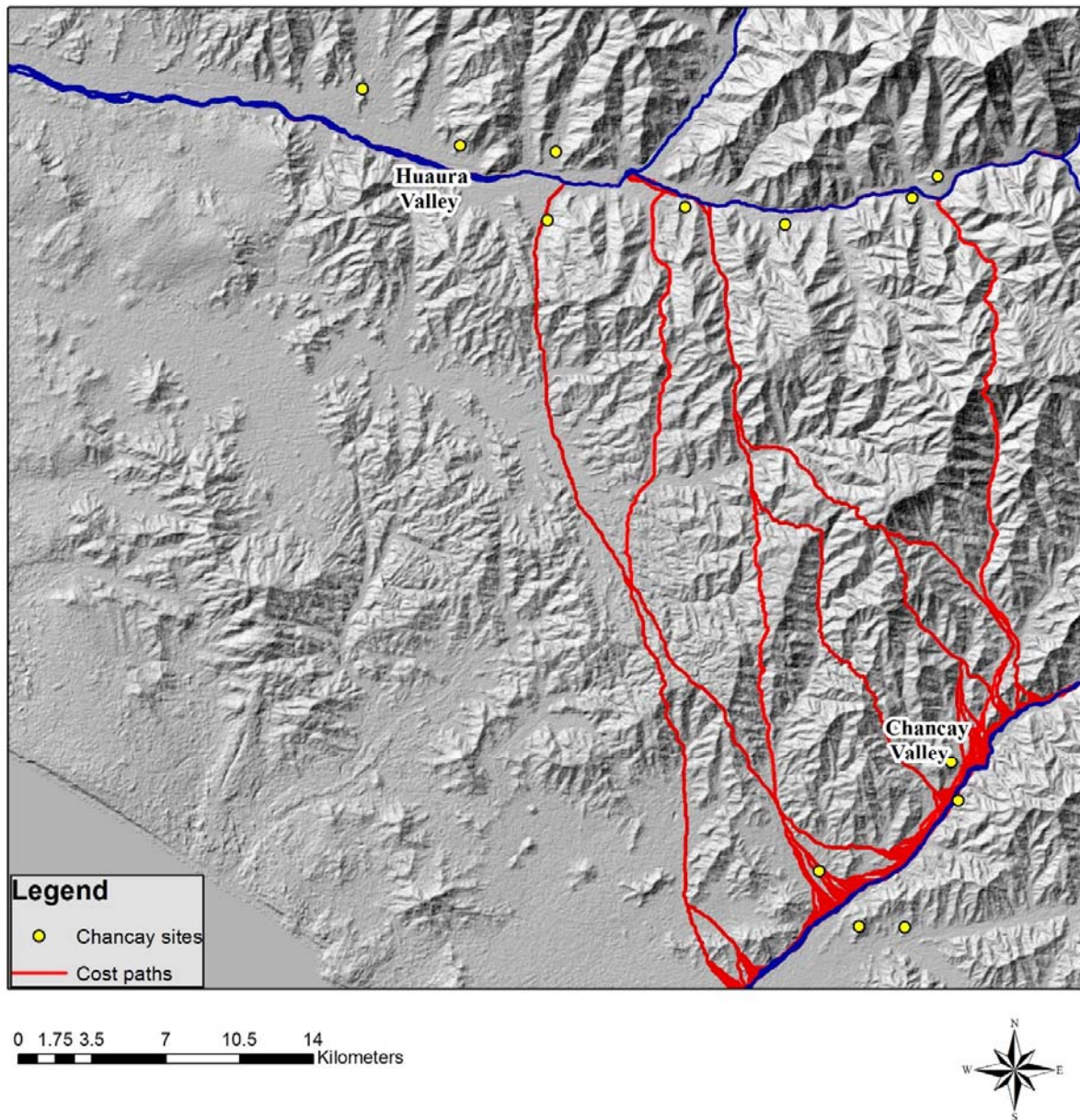


Figure 5.2: Least Cost Paths between the Huaura and Chancay Drainages

of communication between the two valleys (see Figure 5.2). One of these paths runs along a modern road that connects Huaral with Sayan, and which may have served as the primary means of communication between the two valleys. This path is approximately 35 km long, and could have been traversed on foot or by llama caravan in approximately two days.

The boundaries of the Chancay community have still not been well defined, but, based on the evidence available from unpublished field reports, possible Chancay sites have been found as far north as the Fortaleza Valley (Perales 2007). Chancay style burials have been documented in Ancon in the Chillón drainage (Cornejo 1991), and Chancay black-on-white style sherds have been located as far south as Pueblo Viejo-Pucara in the Lurin Valley (Makowski 2004). However, little is currently known about the relationship between the Chancay core and these outlying sites. The sites that are present in these outlying valleys tend to be small, and Chancay black-on-white ceramics only make up a small percentage of diagnostic wares present on their surfaces. This suggests that local peoples were perhaps adopting certain aspects of Chancay material culture, and/or trading with the Chancay core, but it seems unlikely that the Chancay politically dominated these outlying areas in any meaningful way. The exception to this is the Ancon cemetery, which is a large, multi-component cemetery with a significant number of elaborate Chancay burials. Still, the majority of material that is known from this cemetery comes from museum collections and lack detailed provenance or contextual information, making it difficult to reconstruct the relationship this cemetery had with the Chancay heartland.

Even less is known about Chancay's relationship with neighboring highland groups. Krzanowski reported the presence of classic Chancay style black-and-white sherds at sites in the highland Cayash region, near the neck of the Huaura Valley; however, these sherds were surface finds and don't have a clear context (Krzanowski 1986). While surveys have been conducted in

the Pativilca (Perales 2006), Supe (Zechenter 1988), Huaura (Ruiz and Nelson 2004), and Fortaleza valleys (Perales 2007), the research teams only covered the lower parts of their respective valleys and did not extend up into the *chaupiyunga* or the highlands. There is also ongoing research in the Chancay Valley, but much of this data is still unpublished, making it extremely difficult to determine how far the Chancay polity was able to extend its reach inland.

The nature of the relationship between the Huaura and Chancay valleys, as well as the chronology of Chancay expansion into the Huaura Valley, is also still largely unknown. Only a handful of radiocarbon dates have been published for Chancay sites in the Chancay and Huaura valleys. Based on dates taken from pieces of wood collected in the cemeteries of Pisquillo Chico and Lauri, these sites were likely occupied throughout the Late Intermediate Period, with dates ranging from approximately 900 AD through 1414 AD (Pazdur and Krzanowski 1991). In contrast, Chancay sites in the Huaura Valley seem to have appeared later, with published dates in the 1450's for Casa Blanca (Pazdur and Krzanowski 1991). This coincides with the dates presented by Ashley Heaton and Stacey Dunn for the sites of El Carmen, Chambarra, and Quipico in the Huaura Valley (Dunn and Heaton 2013). Dunn and Heaton have argued that the Chancay migration into the Huaura during the second half of the Late Intermediate Period triggered a transformation of Huaura Valley settlement patterns as earlier Huaura culture sites such as El Carmen were abandoned in favor of newly founded Chancay sites, such as Quipico, Rontoy, and Vilcahuaura (Dunn and Heaton 2013).

The nature of political complexity and centralization for the Chancay community is still poorly understood. While some scholars argue that the Chancay should be understood as an emerging state (Nelson and Ruiz Estrada 2010; Dunn 2011; Heaton and Dunn 2010; Dunn and Heaton 2013; van Dalen 2008), based on published ethnohistoric and archaeological data it seems

more likely Chancay was a heterarchically organized community of multiple, loosely connected centers/nodes that shared sets of cultural principles, as manifest through a shared ceramic and architectural traditions (Bria 2009) and trade relationships (see Nelson and Bellido 2010). Multiple Chancay administrative nodes, including Lauri, Pisquillo Chico, and San Juan de Cañas have been documented for both the Chancay and Huaura valleys (Krzanowski 1991a; van Dalen 2008). While there is little evidence that any one of these centers was predominate over the others, it is interesting to note that each of these sites is located in or very near *quebradas* that provide routes of communication between the Huaura and Chancay valleys, suggesting that these sites may have served as nodes where people from distinct *ayllus* within the Chancay community could gather in order to engage in ceremonial and ritual events, and/or to exchange agricultural, maritime, and pastoral resources (Ipinze 2004; Krzanowski 1991; see also Burger 2013 for a similar argument about Chavin).

In addition to a poorly defined settlement hierarchy, there is little evidence for standardization in the production of material culture of the type that would be expected in a state-level society (Wengrow 2001). With the exception of funerary jars, which are rare, ceramics are sloppily made. There is little evidence of site planning, even at large centers such as Pisquillo Chico and Lauri. Building techniques are varied as well, with adobe tapia, adobe brick, and stone used at the same site, often in the same structure and sometimes in the same wall (Negro 1991). Taken together, this lack of standardization may suggest that there was little centralized oversight or centralized bureaucratic control (Wengrow 2001). In this case, then, it is unlikely that the establishment of Chancay sites in peripheral areas, such as the Huanangue Valley, was the result of a centrally mandated colonization policy. Rather, it seems more probable that these sites were the result of a “grassroots” diaspora of individuals and families. Similar processes have been

documented throughout the Andes, including in the Codpa Valley (Llagostera 2010), the Moquegua Valley (Goldstein 2005), as well as in the Chillón Valley (Santoro et al. 2010; Dillehay 1976; 1979; 2013).

While people at Chancay outposts such as Salitre probably maintained linkages with relatives back in the Chancay core in order to maintain access to things such as decorated ceramics, marine goods, and coastal agricultural products, it seems unlikely that these dispersed peoples could have relied on the Chancay core for military or material support in times of need. Thus, Chancay settlers at sites such as Salitre would have largely been without outside help as they navigated a potentially contentious political landscape populated by “others,” such as the local *chaupiyunginos* and highland Atavillos. At the same time, though the Chancay community was not very centralized, excavation and survey data from the Huaura and Chancay drainages suggest that the Chancay were likely more economically powerful than the *chaupiyunginos* in the Huanangue Valley (see Chapters 6 and 7). However, as will be explored in more depth in later chapters, *chaupiyunginos* may have been able to leverage their proximity to irrigation intakes into tactical power, thus preventing the Chancay from being able to take advantage of them.

Discussion of Late Intermediate Period Archaeology

The previous section demonstrated that different forms of intergroup interaction were common during the Late Intermediate Period, and that trade was an integral part of many of these interactions. In this way, the social and political situation in the Late Intermediate Period Andes was similar to that in the Mediterranean during the Bronze Age. Like the Late Intermediate Period of the Andes, the Bronze Age in the Mediterranean was a time of political, social, and cultural transformation, where various different groups interacted in a variety of ways as they worked to gain access to widely scattered resources (mineral, agricultural, and maritime, among others)

(Gkiasta 2010; Janes 2010; Knapp and von Dommelen 2008, 2010; Dietler 2010; Gosden 2004). Researchers working in the Mediterranean have documented the profound impact that these economic interactions had on the development of group identities, and through changes in identities, profound impact on later political and economic relationships between groups (Gkiasta 2010; Riva 2010; Gosden 2004). As Dietler (1998, 2010) and Gosden (2004) have shown, these contexts were also ripe for the development of economic entanglements as inter-regional trade became increasingly intense.

With the similarities between the Andean and Mediterranean cases, it seems natural that Andeanists would also contribute to these larger conversations about the relationship between interaction, entanglements, identity formation, and the formation of hierarchies of power on both the political and economic fronts. However, until very recently, studies of the outcomes of intergroup interaction have largely been lacking in the Andes (Dillehay 1976, 1977, 1979, 2013; Llagostera 2010; Santoro et al. 2010; Topic and Topic 1983, 1985; Topic 2013; Burger 2013; Blom 2005; Knudson and Torres Rouff 2009; Salomon 1986). One of the reasons for this has been the traditional dominance of John Murra's (1975) model of verticality. While archaeologists are beginning to explore alternate models of intergroup interaction and verticality's explanatory power has been reduced, it is still important to consider, and will be explored in detail below.

The Ethnohistoric Perspective on Andean Interaction: John Murra and Verticality

Murra's introduction of the verticality model demonstrated that at least some societies in the Andes had developed a complex and unique socio-economic system that allowed these societies to thrive and develop highly organized political systems in the absence of market economies (Larson 1995; Mayer 2013). Working from a series of early colonial documents, Murra reconstructed the economic organization of the Lupaqa polity of the southern Peruvian highlands.

These documents showed that families were sent from the Lupaqa homeland near Lake Titicaca to lower elevations in order to establish settlements and gain access to the various types of crops that could be grown at different altitudes. This vertical archipelago, as Murra called it, was a way for Andean polities to limit risk and maintain self-sufficiency through colonizing a variety of ecological zones (Murra 2002).

According to Murra, there were four different types of archipelago systems: 1) archipelagos controlled by small *etnías* from a highland base, 2) archipelagos controlled by “kingdoms” from a highland base, 3) archipelagos controlled by small coastal *señorios*, and 4) archipelagos controlled by large coastal states (Murra 2002). The major difference between these different types of archipelago systems is scale. For example, in cases 1 and 3, which refer to smaller socio-political units, Murra argued that people preferred to occupy fields in locales not more than a three or four-day trip from the “nucleus” settlement, allowing people to constantly move back and forth from the highland (or coastal) nucleus and fields in different ecozones. In contrast, cases 2 and 4 refer to the settlement of permanent colonies at distances of greater than 10 days of travel from the settlement to the nucleus (Murra 2002). Despite this difference in scale, Murra argues that all types of archipelago require some form of centralized political oversight (Murra 2002). Furthermore, since the vertical archipelago allowed *ayllus* to be self-sufficient, interaction and/or exchange across *ayllu* boundaries would have been minimal (Murra 2002; Santoro et al. 2010; Mayer 2013).

Though the archipelago model can be useful for understanding some forms of Andean political and economic organization, the over-application of this model has come under increasing criticism in recent years. Murra’s work is largely ahistorical in that it does not consider the historic or socio-cultural contexts in which the vertical archipelago system developed. Rather the archipelago is presented as a timeless form of economic organization which structured Andean

societies for millennia (Van Buren 1996; Llagostera 2010). Second, because of the popularity of his theory as well as his own anti-capitalist biases, Murra emphasized documentary evidence for verticality while simultaneously down-playing information in documents that suggested that various forms of exchange, from inter-ethnic trade to outright markets, existed in the Andean past (Dillehay 1976; Mayer 2013). Third, since the archipelago model has been used to explain many forms of population mobility throughout the Andes, the other forms of exchange/interaction that occurred in various times and places have been masked (Van Buren 1996; Santoro et al. 2010; Dillehay 1976, 1977, 1979, 2013). Finally, since the vertical archipelago model focuses on *ayllu* self-sufficiency, it minimizes the importance of inter-*ayllu*/inter-ethnic group interaction (Dillehay 1976; Mayer 2013; Burger 2013).

As self-sufficiency is typically understood as an intrinsic part of the verticality model, many archaeologists have tended to minimize the possibilities for cross-boundary interaction in their own work (Murra 2002; Goldstein 2000, 2005; Owen 2005; Stanish 1989, 1992; for a more nuanced take, see Llagostera 2010; Santoro et al. 2010; Dillehay 2013). However, there is ample documentary and archaeological evidence that different groups did interact. For example, the *Justicia 413*, a 16th century legal document describing the court battle over coca fields between different ethnic groups in the upper Chillón Valley, demonstrates that there were complex networks of trade, water and resource sharing, and conflict between highland and coastal groups prior to Spanish contact (Dillehay 1976, 1977, 1979, 2013; Santoro et al. 2010). Similar types of relationships have been documented by John Topic for the north coast of Peru (Topic 1998, 2013), and recent linguistic work by Ramos (2011) has shown that inter-marriage between north and central coast peoples was likely common. Research by Frank Solomon (1986) in Ecuador has also

demonstrated the importance of long-distance trade for northern Andean groups (see also Topic 2013; Bruhns 2003; Valdez 2008; Bray 2005, 2008).

In sum, various lines of archaeological and ethnohistoric evidence from different regions in the Andes suggest that moderate to high levels of interaction existed between different groups, and that the relationships that formed between groups ran the gambit from violent conflict to intermarriage and co-residence. Since preliminary evidence suggests that the Huanangue Valley was ecologically, geographically, and political similar to the Chillón Valley, it is possible that similar types of relationships as those portrayed in the *Justicia 413* and the *Probanza de Canta* may have existed there as well. Documentary data from the Huaura drainage and Huanangue Valley provide an important compliment to the limited archaeological data, and will be explored below in order to better contextualize the available archaeological data, and to examine the specific modes of interaction that may have been functioning in the drainage during the Late Intermediate Period.

Ethnohistoric Data for the Huaura Drainage

Several documents are available from the Huaura drainage that are important for understanding local social and political organization in the valley during the Late Intermediate and Late Horizon periods. The earliest mention of the Huaura Valley comes from the 1533 *Relación* of Hernando Pizarro, where he recounts passing through the indigenous towns of Huaura and Vilcahuara during his journey from Cajamarca to Pachacamac (Rostworowski 2002[1978]). A slightly later document, the *Justicia 396* provides testimony from both indigenous and Spanish witnesses who claim that the principle *curaka* of the Huaura Valley during the time of the Inka was a man named Guachapayco. The document also suggests that Guachapayco had hegemony over the neighboring Chancay and Supe valleys. In addition, Guachapayco is said to have installed

members of *ayllus* who were allied with him in the middle valley so that they could serve the Inka when they passed through. He also claimed to have brought a *mitimaq* group of “Mochica” fisherman from the north coast to live in the Chancay Valley so that he could increase fish production (Rostworowski 2002[1978]). It is interesting to note that a 1583 census conducted as part of program of *reducciones* also mentions an *ayllu* Mochica for the Huaura Valley (manuscript BNA-A-629, year 1583).

The 1549 *visita* to the Huaura Valley by Jeronimo de Aliaga provides more clues about the socio-political organization of the Huaura *Señorio*. According to the testimony of Don Diego, who was the *curaca* of Huaura at the time of the *visita*, there were six towns (*pueblos*) that owed him allegiance: Vytan (or Hubytan), Chambarra, Quipico, Sayan, Canan, and Quintay (Rostworowski 2002[1973]). While the location of Vytan is unknown, Canan is probably known today as San Jose de Cañas. Archaeological sites dating to the Late Intermediate Period have been documented for all of these places. However, while the sites at Chambarra, Quipico, and Sayan were all affiliated with the coastal Chancay community (Dunn 2011; Dunn and Heaton 2013; Nelson and Ruiz 2004; Nelson and Bellido 2010; Krzanowski 1991b), work by Krzanowski (1986, 1991) shows that the site of Quintay was occupied by migrants from the highlands, which suggests that either village allegiances changed over time, or that allegiances may have been incorrectly recorded by the Spanish. Several *ayllus* are also named in this *visita*, including the Guacan, Chonta primero, Chonta segundo, Amay, Luriamá, Mochic, Compac, Cantac, Carquin, Vilcaguaura, and Gualmay (BN-A-629, year 1583).

Information about possible economic practices in the valley come from historian Elias Ipinze (2004, 2005). His research suggests that inter-group exchange was an important part of the economic activities that took place in the Huaura drainage during the Late Intermediate Period.

According to his analysis, highland and coastal groups met in the *chaupiyunga* region during specific parts of the year in order to swap goods from their respective zones. The goods that were exchanged included dried fish, shellfish, and salt from the coast for potatoes, dried meat, and fruits from the highlands (Ipinze 2004). It is possible that these meetings took the form of informal markets or *ferias*, which are still commonly held in the region today. Possible *feria* spaces have also been identified for late sites located in the Jequetepeque Valley (Dillehay 2013).

Together, these data suggest that during the 16th century the Huaura drainage was organized as a number of small-scale, *ayllu*-based communities who owed some form of allegiance to a central *curaka*. Furthermore, the documents suggest that coastal groups were actively interested in gaining access to middle valley agricultural land in order to increase the production of fruit and other important crops. While the *Justicia 396* suggests that the Huaura Valley lord sent people into the *chaupiyunga* zone, the available archaeological evidence from this region does not provide any evidence to suggest that the groups living in the Huaura Valley during the Late Intermediate Period were powerful enough to mandate colonization efforts. Rather, it is more likely that individuals/families moved into the middle valley of their own accord, perhaps as part of a trade diaspora-like movement. Furthermore, though Don Martin claims that Guachapayco brought foreign *mitimaq* into the region from the Casma and Santa valleys, this seems unlikely given the small-scale and limited political power of the Huaura *Señorio*, as well as the distances involved. More likely is that Inka were responsible for moving the northern “mochic” *ayllus* into the Huaura and Chancay valleys, and that they gave Guachapayco the authority to administer these *mitimaq* colonists. In sum, based on the documentary data it is possible to hypothesize that the coastal Chancay people moved into the Huanangue Valley in order to gain access to agricultural land, but that they maintained their allegiance to the wider Chancay community. At the same time, the

archaeological data suggests that the Chancay were not sufficiently powerful or centralized to control these newly established settlements, and that the people who moved into the Huanangue Valley may have largely had to fend for themselves.

Projecting information from 16th century documents back into the Late Intermediate Period is difficult; however, there are several material correlates that can be used to test the patterns that appear in the documentary data. If the documentary data are correct, one would expect to see a settlement pattern that reflected the heterarchical nature of political relationships between different Huaura Valley *ayllus*. In this case, it is likely that a number of small to medium-sized administrative centers with modest public architecture would serve as the nucleus for each *ayllu*, similar to the pattern that has been described for the Rimac Valley (Eeckhout 2000, 2004; Dulanto 2008; Matos Mendieta 2000; Engels 2011). Furthermore, as coastal Huaura Valley inhabitants moved into the *chaupiyunga*, small coastal enclaves would likely extend up into the Huanangue Valley. The nature of the settlement pattern in both the Huaura and Chancay valleys seems to support the idea that the Chancay community was composed of smaller, heterarchically organized units that may have owed some kind of loose allegiance or fealty to a central leader. However, based on the available archaeological data, the Chancay Valley appears to have been the center of this community, not the Huaura Valley. In fact, it appears that people from the Chancay Valley began to move into the Huaura Valley sometime during the early to mid-1300's CE, bringing with them new styles of architecture and ceramics that then spread (Jahnke 2009; Dunn and Heaton 2013; Heaton and Dunn 2010).

Colonial documents also provide some clues into the nature of relationships between the Huaura *Señorio* and the neighboring Chimu and Ichsma polities. While there is little archaeological evidence for Chimu presence in the Huaura drainage (Ruiz and Nelson 2004), the

Historia Anonima de Trujillo states that the Chimu lord Minchancaman married a woman from the Huaura Valley, with whom he had a son, Chumuncaur. After Minchancaman died in captivity in Cuzco, Topa Yupanqui gave control of the Chimu territories over to Chumuncaur (Vargas Ugarte 1936[1604]). This opens up the possibility that some type of alliance, perhaps based on intermarriage, existed between the Huaura *Señorio* and the Chimu during the transitional period between the Late Intermediate Period and Late Horizon. This fits into the general pattern described by Ramos, who argued that intermarriage people from the north coast and central coast was fairly common (Ramos 2011). Furthermore, as discussed above, testimony for the *Justicia 396* stated that “mochic” *ayllus* were present in the Huaura Valley. While physical evidence for northern *mitimac* settlements have still not been located in the Huaura Valley, the presence of Chimu style black wares in the valley does re-enforce the possibility that there was some form of contact between the Chimu and the people living in the Huaura drainage.

The Huaura *Señorio*'s relationship to the neighboring Ichsma polity is less clear, but local myths may provide some insight. Versions of the Norte Chico creation myth were recorded by Avila (2009[1598]) and Calancha (1976[1663]), and recount a series of struggles between the god Vichama and his half-brother Pachacamac. In these myths, Vichama is described as being from the coastal town of Vegueta (located near the mouth of the Huaura River) and as the father of agriculture and creator of human beings. Pachacamac's jealousy of Vichama's accomplishments led to a bitter rivalry between the two. After a series of clashes, Vichama banishes his brother to a *peña* in the ocean (Calancha 1976[1663]). While no temple to Vichama is currently known, this myth may suggest that there were tensions between the Ichsma (the polity associated with Pachacamac) and the Huaura *Señorio*. To what extent these tensions were violent is unknown, and

to date there is no evidence of warfare or raiding between the two polities. This myth may also symbolize the rejection of the Pachacamac cult in favor of local gods.

The relationship between the Huaura *Señorio* and the Ichsma polity is further confused by Garcilaso de la Vega's account of the Inka conquest of the central coast. According to Garcilaso, Topa Yupanqui arrived at the site of Pachacamac and treated with Cusimancu, who was the *Hatun Apu* of the Lurin, Rimac, Chillón, Chancay, and Barranca (today Pativilca) valleys. After a few days of discussion, and after Topa Yupanqui agreed to respect the cult of Pachacamac, Cusimancu agreed to become a subject of the Inka state and to support Topa Yupanqui in his fight against the Chimu (Garcilaso 2009). While some scholars have used this account to argue that Cusimancu was lord of the Chancay (Rutherford 2014; Dunn and Heaton 2013), there are several problems with Garcilaso's account. First, no independent mention of a Cusimancu on the central coast has been published. Rostworowski's analysis of early 16th century documents from the Rimac and Lurin valleys show no mention of this figure. Furthermore, her analysis suggest that the Ichsma polity was fairly small, consisting only of the Rimac and Lurin valleys (Rostworowski 2002[1978]), which is more consistent with the archeological evidence (Eeckhout 2000, 2004; Dulanto 2008; Makowski 2004). As such, it seems highly unlikely that the Ichsma and Chancay communities were united under one leader during the Late Intermediate Period.

In summary, some general patterns can be derived from the study area's documentary data. First of all, like other central coast communities, the Huaura *Señorio* seems to have consisted of a number of independent, yet loosely affiliated *ayllus* that owed some sort of allegiance to a central figure. The documents also suggest that coastal settlements were established in the *chaupiyunga* zone (Rostworowski 2002[1978]). Trade was also common between highland, mid-valley and coastal groups, and data presented by Ipinze (2004) suggests that temporary markets may have

been held in the middle valley as people from throughout the drainage gathered there periodically to exchange goods. Though a literal interpretation of the documentary data would seem to suggest that a coastally based vertical archipelago may have existed, at least for moments during the Late Intermediate Period, the available archaeological data suggest that it is more likely that whatever population movement occurred in the Huaura drainage was part of a grassroots movement where individuals/families relocated to the *chaupiyunga* zone in pursuit of agricultural land without any type of centralized oversight. If this is indeed the case, then it suggests that Chancay movement into the Huanangue Valley was more likely the result of a trade diaspora. As was examined in Chapter 2, the desire for non-local goods can often be a contributing factor in the development of entanglements. Thus, it is further possible to hypothesize that coastal Chancay peoples moved to the Huanangue Valley through the mechanisms of verticality, migration, niche filling, or other potential mechanisms. Once there, they would have had to engage with local *chaupiyunga* groups in order to be able to fulfil the homeland's desire for agricultural goods.

Conclusions

In this chapter, available documentary and archaeological data for the Late Intermediate Period were reviewed. Several tentative conclusions can be drawn from these data. First, though the Late Intermediate Period is often characterized as a time of endemic violence, in actuality several different types of social, economic, and political processes were occurring. These processes can be placed along a continuum ranging from competitive (for example, raiding and warfare) to cooperative (for example, resource sharing and co-residence) and the nature of interaction in a particular place changed over time as groups employed different strategies moving up and down this scale. Furthermore, groups could employ different strategies at the same time, as was the case in the Chillón Valley (Dillehay 1976, 1979, 2013) and in the southern Bolivian Altiplano (Nielsen

2013). In addition, the similarity between the political landscapes of the Late Intermediate Period Andes and those in the Bronze Age Mediterranean suggest that entanglement theory may be useful for explaining many of the types of relationships that developed between different Late Intermediate Period communities. Studying the diversity of political, economic, and social machinations that took place during the Late Intermediate Period is important to understanding how the social identities and political landscapes that were present during the Late Horizon and late Colonial Period developed.

The documentary data for the Huaura drainage suggests that the drainage was inhabited by heterarchically arranged *ayllus/curacazgos*, who owed loose allegiance to a central lord, and who interacted using different strategies, including trade and possible market exchange (Ipinze 2004). Though archaeological research in the Huaura Valley is still in its infancy, the available archaeological data largely coincides with the ethnohistoric information. Late Intermediate Period settlement patterns appear to reflect heterarchical political organization, and there is strong preliminary data that inter-valley trade was important to the regional economy (Nelson and Bellido 2010). If the Huaura Valley *Señorio* was not strongly centralized, as the archaeological data suggests, that could also mean that verticality was not in operation in the valley, but other mechanisms such as diaspora, migration, resource sharing, and/or niche filling, among others, may have been responsible for the movement of coastal peoples into the middle valley.

The heterarchical nature of the Huaura drainage political landscape, along with the harsh and arid conditions of the Huanangue Valley, may have encouraged the development of entanglements between Chancay settlers and local *chaupiyunginos*. With the *chaupiyunginos* able to threaten to impede access to water in the valley (see Chapter 6), and Chancay settlers unable to rely on material or military support from the Chancay core, they would have had to find some way

to persuade the *chaupiyunginos* to share access to water. The following chapters will explore the available archaeological evidence for Chancay settlements in the Huanangue Valley, and will also examine how entanglements developed. In Chapter 6, the Huanangue Valley survey data suggest that coastal Chancay groups did in fact establish sites in the *chaupiyunga* zone; however, local *chaupiyunga* were located near irrigation intakes, and may have had traditional authority over this resource. In Chapter 7, excavation data from the *chaupiyunga* site of Campo Libre and the Chancay site of Salitre will be analyzed in order to gain a better understanding of the nature of the relationship between these two groups.

Chapter VI

Survey Data: Identifying Group Boundaries and Examining the Setting for Entanglements in the Huanangue Valley

The ethnohistoric evidence presented in Chapter 5 suggested that the Huaura drainage was populated by a number of small, loosely affiliated *curacazgos* during the Late Intermediate Period, and that trade between people living on the coast, middle valley, and highlands was common. Data also suggest that members of the coastal Huaura *Señorio* may have moved into the middle valley in order to gain access to agricultural land. Thus, based on the ethnohistoric sources, it appears that the Huanangue Valley would be a likely setting for entanglements to develop (see Chapter 2). Since the Huanangue Valley was previously unknown to archaeology, conducting an opportunistic survey was an important first step for this study in order to identify the groups that lived in the valley, and to test the models for interaction that were derived from documentary data. By looking at how occupation and land use in the valley changed over time, it is possible to gain insight into how the physical environment impacted the relationships between groups as well as between people and the environment, and how these relationships changed over time. In sum, the survey data will help elucidate the broader chronological and spatial contexts in which coastal-*chaupiyungino* interaction took place, which in turn will provide the context for understanding how entanglements developed in the valley. This will also explain what role, if any, the landscape played in shaping inter-group relationships.

Due to constraints on time and resources, conducting a 100% coverage survey would have been unrealistic. Thus, to maximize survey efficacy, areas of interest were identified in the 1971 National Geographic Institute of Peru's aerial photos of the Huanangue Valley. This was

accomplished by looking for anomalies such as lines and/or rectangular/circular objects, which could represent man-made objects such as walls and buildings. Attention was also paid to areas of heavy pitting or with unusual discoloration, which could indicate areas of looting. These areas of interest were then ground truthed by walking the area. If archaeological remains were present, GPS coordinates were taken, and information about site size and location, architectural styles, and ceramic and other artifact styles was recorded. Local people were also interviewed and asked if they knew of any *haucarias*, *ruinas*, *pueblos antiguos*, or *cementarios de los Inka/los gentiles* in order to ascertain the locations of sites that were not visible in the air photos.

In total, 28 localities were documented by the survey team within an area of approximately 75 square km (see Figure 6.1). These localities can be classified into four different types: ceremonial/administrative centers, rock art, agricultural fields/terraces, and residential. Identifications were made based on the location of the site, as well as the type and diversity of architecture and surface artifacts documented there. Ceremonial/administrative centers contained public architecture (plazas and/or platform mounds) and measured at least 10 ha in area. For the purposes of this study, rock art is defined as a locality where petroglyphs were present (Guffroy 1998; Szremski 2009), and they can either be isolated or be part of a larger site. Localities that contain *andenes* and/or terraces were defined as agricultural fields. *Andenes* are small rectangular spaces formed by low, parallel retaining walls, and tend to be located on alluvial terraces within lateral *quebradas*. In contrast, agricultural terraces are rectangular terraces set into the slope of various hillsides, and tend to range in size from 1 to 9 meters wide. They can be distinguished from domestic terraces both in size and shape. Agricultural terraces tend to be larger than domestic terraces and are rectangular, whereas the retaining walls of domestic terraces tend to be somewhat rounded. Agricultural terraces can further be distinguished from domestic terraces in that they have

very few ceramic sherds or other artifacts present on the surface (Owen 1996; Nelson and Ruiz 2004; Szremski 2009). Residential localities are defined by the presence of domestic architecture (small, rectangular stone structures associated with domestic refuse, such as utilitarian ceramics, animal bone and plant remains, and grind stones), and measure less than 10 ha in area.

Based on the distribution of these localities, they have been grouped into 16 sites (see Figures 6.2) dating from the Late Archaic Period (3000-1800 BCE) to the Colonial Period (1532-1821 CE). Each site is composed of one or more localities; for example, the site of Salitre contains both a residential locality and agricultural fields (see description below). The following section will discuss the establishment of the *chaupiyungino* culture in the Huanangue Valley, and the beginnings of inter-regional interaction in the valley. From there, this chapter will turn to a consideration of the coastal, local, and highland groups that occupied the valley during the Late Intermediate Period in order to show that a group of people from Chancay moved to the Huanangue Valley during the Late Intermediate Period, perhaps as part of a trade diaspora (see Chapter 2), and to make an initial determination in regards to what some of the outcomes of interaction were. It will also be argued that *chaupiyungino* proximity to irrigation intakes may have been an important source of tactical power for that group.

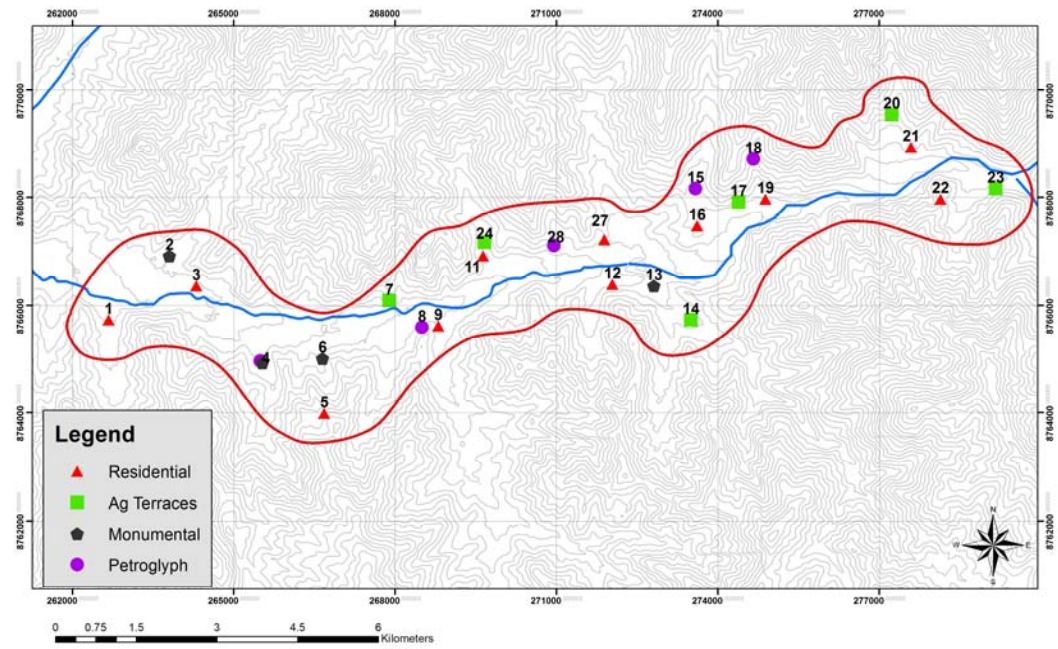
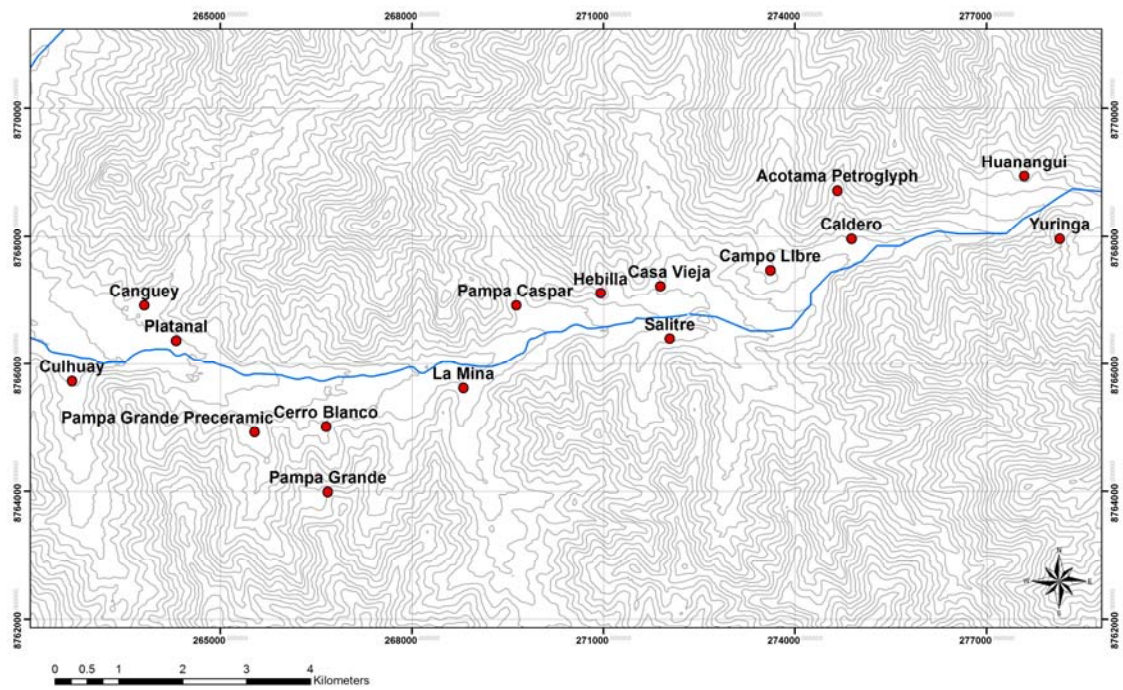


Figure 6.1: Map of Study Area



6.2: Map of Study Area with Sites Labeled

Late Archaic Period: Foundations of *Chaupiyungino* Culture and Inter-regional Relations

Based on survey data, the earliest existing evidence for occupation in the Huanangue Valley comes from the Late Archaic Period (3000-1800 BCE), suggesting that *chaupiyungino* culture had very early roots. Specifically, three Late Archaic mound sites, Canguey, Pampa Grande, and Salitre, were documented in the valley. These sites consisted of multiple platform mounds similar to those described at the sites of Caral (Shady and Leyva 2003; Shady 2006), Aspero (Feldman 1981; Moseley and Willey 1973), Caballete, and Huaricanga (Haas and Creamer 2006), among others. The sites are located on alluvial terraces in the mouths of large side *quebradas* which communicate with the coast (Pampa Grande) and with the highland and neighboring valleys (Canguey and Salitre). Though they have yet to be excavated, the location of these sites suggests that they may have served as important nodes where people from the coast, highlands, and middle valley gathered to participate in different types of ceremonies. Descriptions of Canguey, Pampa Grande, and Salitre follow below.

Canguey (Locality 2): Late Archaic Mound Center

The site of Canguey is located on the floor of a large *quebrada* on the north bank of the Huanangue River. This site consists of three large, rectangular stone platform mounds whose sizes range from approximately 30 meters wide by 40 meters long to 40 meters wide and 50 meters long. The height of these mounds ranges from approximately 3 meters to 10 meters. Unfortunately, the site has been heavily modified by local farmers who have removed and rearranged stones in order to build a road through the middle of the site, and to create areas for their beehives. This activity has revealed the facades of two walls on the principle mound, one of which is constructed of large and medium-sized, roughly shaped rectangular field stones that are laid horizontally in five courses (see Figure 6.4). The other wall is constructed in *pachia* style, with several large, roughly shaped

monoliths set in place forming the base of the wall, and several small stones filling the gaps between these stones (see Figure 6.4). There is also a badly eroded circular feature that may have been a sunken circular plaza, which measures approximately 10 meters in diameter.

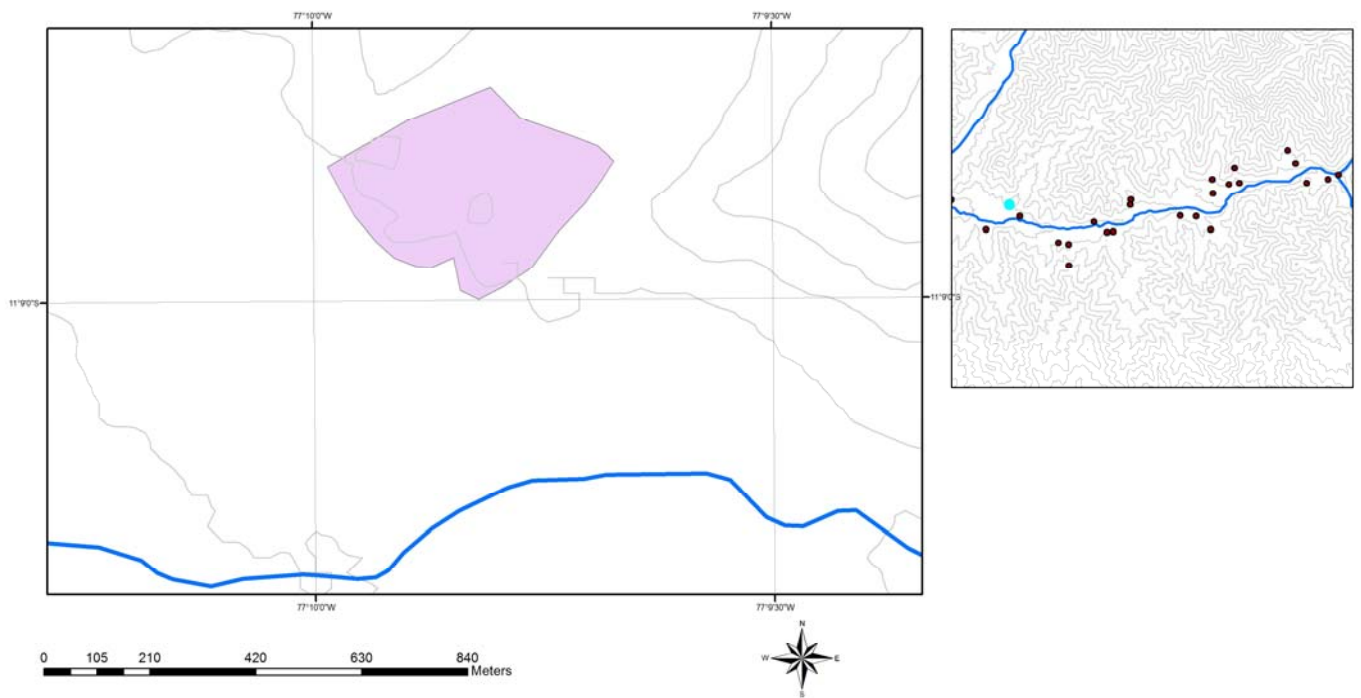


Figure 6.3: Location of Canguey



Main mound at Canguey



Small mound at Canguey



Small mound, northern side of Canguey



Exposed wall at Canguey



Exposed wall in pachia style at Canguey

Figure 6.4: Photographs from Canguey showing architectural detail

Pampa Grande I (Locality 4): Late Archaic Mound Center

The site of Pampa Grande I is a Late Archaic mound center located on the floor of a large *quebrada* on the south side of the Huanangu River, approximately 2 km east of the site of Canguey. The site consists of 3 platform mounds arranged linearly along an east-west line. These mounds range in size from approximately 25 by 30 meters to approximately 40 by 50 meters, and the height for these mounds ranges from about 2 to 8 meters. The largest and most westerly of the mounds is associated with a sunken circular plaza, which measures approximately 10 meters in diameter. There are also four smaller circular features constructed of medium-sized, upright field stones toward the middle of the site. These features measure about 2 to 3 meters in diameter, and their function is unclear. There was a thin scatter of late ceramics on the surface, including Cayash, Chancay black-on-white, and Chancay yellow. However, these ceramics are likely intrusive, as the site is surrounded by Late Intermediate Period settlements located on adjacent ridges and in adjacent *quebradas*, and there was no evidence of any ceramics in the profiles of the looters' pits.

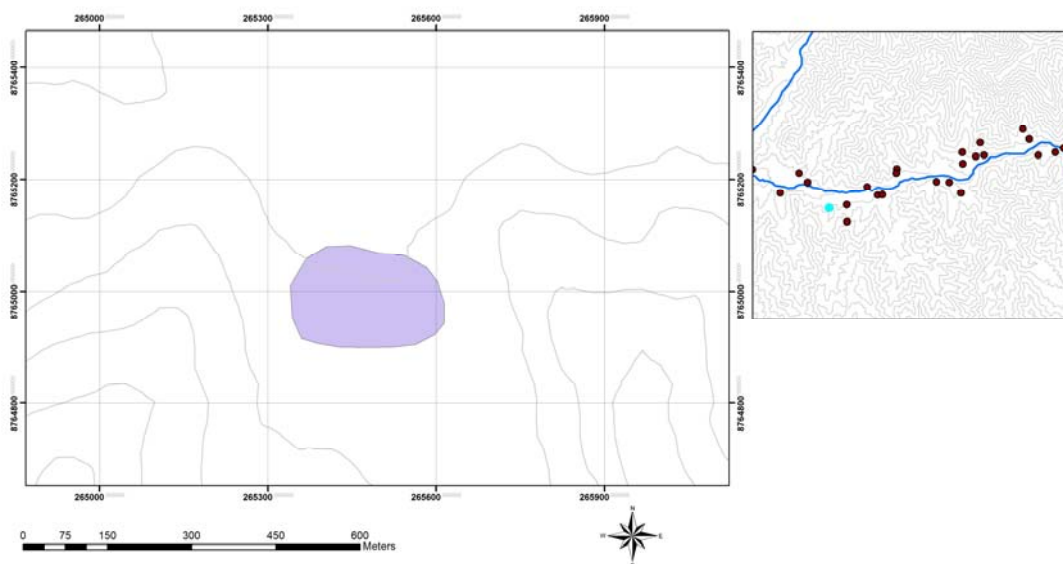


Figure 6.5: Location of Pampa Grande I



Over head view of Preceramic mounds at Pampa Grande II



Closeup of main mound at Pampa Grande II



Top of main mound at Pampa Grande II



Circular structures at Pampa Grande II



Closeup of circular structures at Pampa Grande II

Figure 6.6: Photographs of Pampa Grande

Salitre I (Locality 13): Late Archaic Mound Center

Salitre I is a small Late Archaic mound center located on an alluvial terrace in the middle of a large *quebrada* of the same name on the south side of the Huanangue Valley, approximately 9 km up river from the site of Canguey and 7 km up river from the site of Pampa Grande 1. Since this site is located in a part of the *quebrada* that is actively being cultivated, it was difficult to count the number of mounds that are present, but there appear to be four or five which measure between approximately 20 by 30 meters to approximately 30 to 70 meters. The façade of one of the mounds is still visible, and three separate stepped terraces can be observed (see Figure 6.8). The walls that form these terraces are constructed of medium-sized (20 to 50 cm in length) field stones set horizontally in various courses, similar to wall construction at Canguey. The lowest terrace measures about 60 cm in height, and the next two terraces are both close to one meter in height. The main mound at this site sits on the edge of a chasm carved out by the *huaycos* that pass through the *quebrada* every rainy season. As a result of this hydrological action, the main mound has been cut in half and the entire profile is visible. This cut features various walls, floors, and burning episodes, suggesting that the mound had undergone several episodes of use and remodeling, as was the case for other Late Archaic sites such as Aspero (Feldman 1981; Moseley and Willey 1973).

Discussion: Evidence for Early Coastal – Middle Valley – Highland Interaction

Based on comparison with the other Late Archaic sites known for the Norte Chico, it seems likely that these mound sites served as the settings for different types of ceremonial activities (see Feldman 1981; Shady 2006; Dillehay 2004; Dillehay et al. 2012; Quilter 1985, 1991; Chu 2012a, 2012b). Little evidence for domestic occupation was observed at these sites. This should not be

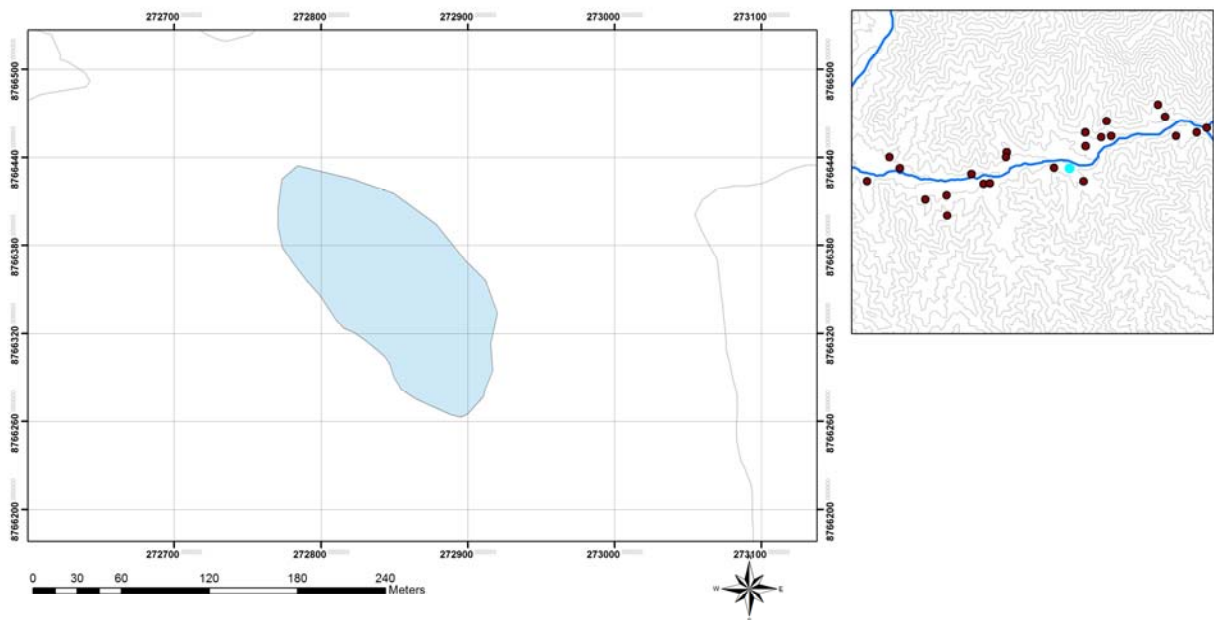


Figure 6.7: Map of Location of Salitre I



Salitre I from across the wash



Exposed walls, Preceramic mound Salitre I

Figure 6.8: Photographs from Salitre

surprising, as excavations at Bandurria have shown that most Late Archaic dwellings were ephemeral constructions made of cane and mud, and thus do not preserve well (Chu 2012b). Furthermore, research at similar sites in the Pativilca and Fortaleza valleys suggests that most mound sites were only lightly occupied (Haas and Perales 2004; Haas and Creamer 2006). No Late Archaic residential sites were documented during survey. This may have been due to the perishable nature of domestic architecture from this time period. It is also possible that Late Archaic Period residential sites are buried underneath later sites, and thus were not visible during survey.

The presence of Late Archaic mound centers suggests a few things. First, based on this evidence, it appears that the antecedents of *chaupiyungino* culture can be traced back at least 5,000 years, though it is possible that people had moved into the valley even earlier, as the survey methodology likely would not have been able to pick up on Early/Middle Archaic sites due to their ephemeral nature. These data also suggest that interaction between local middle valley, coastal, and highland groups started at a very early date. There are more than 30 Late Archaic mound sites known from the Norte Chico region, and various lines of evidence show that there was at least some contact between these coastal sites and the highland sites that were associated with the Mito tradition. However, the means of communication between these two regions is not well understood. One possibility is that *chaupiyunga* valleys, such as the Huanangue, may have served as a route that connected the coast and the highlands, particularly since Pampa Grande was located in a *quebrada* which communicated with the coast, and Canguey and Salitre were located in *quebradas* that connected with the highlands. As such, it is likely that coastal-middle valley interaction had a long time depth in the Huaura drainage.

Initial Period through Middle Horizon: Possible Population Decline

Though there is ample evidence for Late Archaic occupation and inter-regional interaction in the Huanangue Valley, the data is less clear for the Initial through Middle Horizon periods. Based on available survey data, only two sites could tentatively be dated to this time span: Pampa Caspar and Platanal. This seems to suggest that there was a demographic shift during this time, perhaps because people moved to higher elevations that were outside of the study area. Data from the Huaura Valley Survey, which covered the Huaura drainage from the coast to Sayan, shows a similar decline in population during this time period (Nelson and Ruiz 2004). However, as the re-use of sites was common in the Andes, it is also possible that earlier sites were re-occupied during the Late Intermediate Period, and thus were identified as such during survey, as earlier ceramic and architectural signatures may have been covered over by later ones. For example, excavations at Campo Libre revealed that the site was occupied from as early as 1730 BCE (see Chapter 7). Thus, though population levels may have decreased during the Initial Period through Middle Horizon time span, it is unlikely that the Huanangue Valley was completely abandoned. Descriptions of Pampa Caspar and Platanal continue below.

Pampa Caspar (Locality 24): A Potential Initial Period Site

The site of Pampa Caspar is located on a hill slope behind the modern village of the same name. The site covers approximately 0.3 ha and consists of two sets of terraces that are separated by a long, low wall. The terraces above the dividing wall are wider, but shorter and slightly curved, and measure approximately 2 meters in width and 5.5 meters in length. They are suggestive of domestic terraces, and may have served as bases for small structures built out of perishable materials. The terraces below the dividing wall are narrower, but longer and rectangular in shape, measuring about 1 meter in width and approximately 10 meters in length. These terraces may have

been agricultural in nature, suggesting that this site may have had a dual purpose with both residential and agricultural spaces. There were very few ceramics present on the surface; only a handful of small, highly weathered sherds were documented. The only diagnostic fragments were three *olla sin cuello* (neckless pot) rim sherds, suggesting that this site may potentially have been occupied during the Initial Period. However, since the *olla sin cuello* form was occasionally used during later periods of Andean prehistory, this assessment is very tentative.

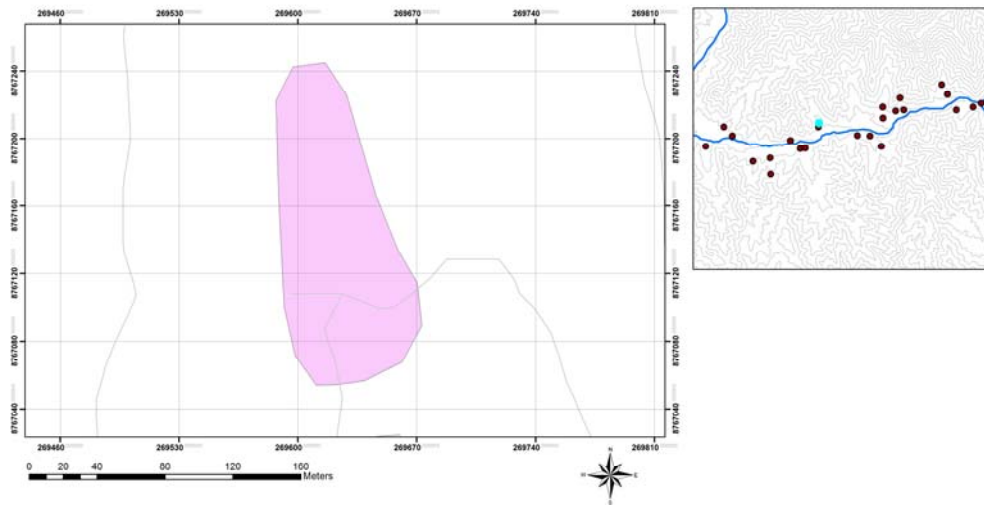


Figure 6.9: Map of Location of Pampa Caspar



Platform terraces at Pampa Caspar



Domestic and agricultural terraces Pampa Caspar

Figure 6.10: Photographs of Pampa Caspar

Platanal (Locality 3): A Possible Middle Horizon Site

Platanal is located on an alluvial terrace toward the back of a small dry *quebrada* on the north side of the Huanangué River. This site is located behind the modern village of Pueblo Nuevo, and has been badly damaged both by natural processes and by people removing stones to make corrals for their goats. As such, the size and layout of the site is hard to determine, but it appears to cover approximately 0.8 ha and consist of small and medium-sized rectangular structures built of roughly shaped field stones. As the southern boundary of the site is unclear, it is possible that the site was originally larger, but that part of it now lies under Pueblo Nuevo. Visible structures measure approximately 10 meters in length and 7 meters in width. This site also features what appears to be a double rectangular plaza at its northeast edge, which is similar in appearance to the double plaza at Cerro Blanco (see description below). This plaza measures approximately 18 meters by 18 meters. There was a fairly thick covering of surface ceramics, but the vast majority of these ceramics were undiagnostic redwares. Diagnostic sherds include a mold-made polychrome sherd and a handful of possible Middle Horizon style polychromes. Due to the presence of the polychrome sherds and the absence of any clearly Late Intermediate period ceramics, this site may date to the Middle Horizon. If this assessment is correct, then Platanal is the only Middle Horizon site that was documented during survey. The survey team was also unable to identify any evidence for burials, agricultural terraces, or storage structures.

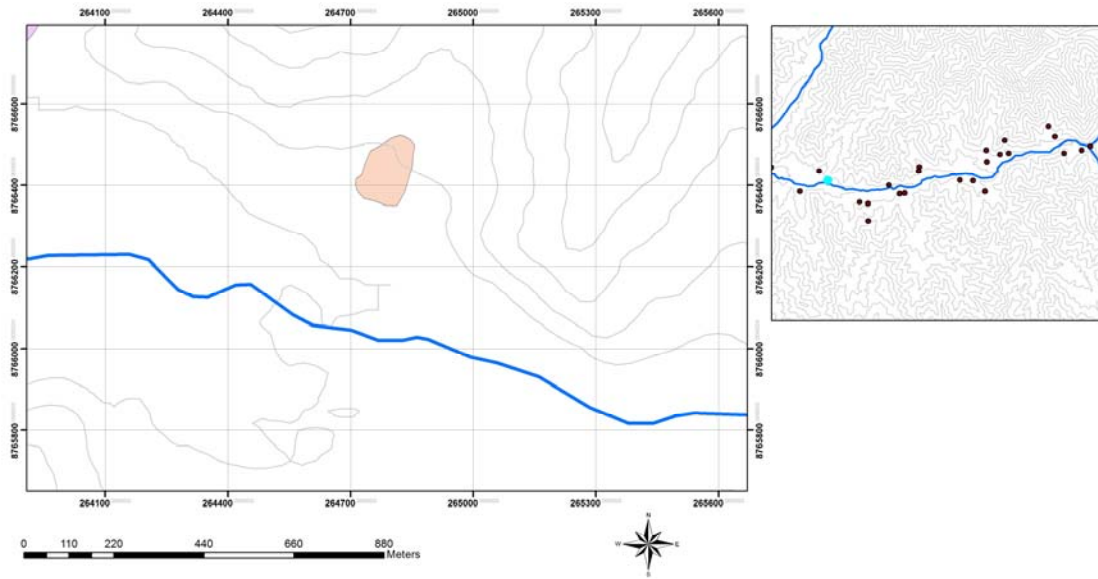


Figure 6.11: Map of Location of Platanal



Possible Middle Horizon ceramics at Platanal



Possible Middle Horizon ceramics at Platanal



Possible Middle Horizon ceramics at Platanal

Figure 6.12: Photographs of Platanal

Discussion

It is unclear why so few sites were documented for the Initial through Middle Horizon time period. Recent work in the Norte Chico by Margaret Brown Vega demonstrates that there was an increase in the construction of fortified/defensible sites during the Early Horizon/Early Intermediate Period (Brown Vega et al. 2011), which may suggest that there was an increase in violent interaction during this time period. As such, people living in the Huanangue Valley may have moved to higher elevations for safety. Alternatively, it is possible that early sites continued to be occupied through the Late Intermediate Period, rendering them invisible to the survey team.

The Late Intermediate Period and Chancay/Highland Migration into the Huanangue Valley

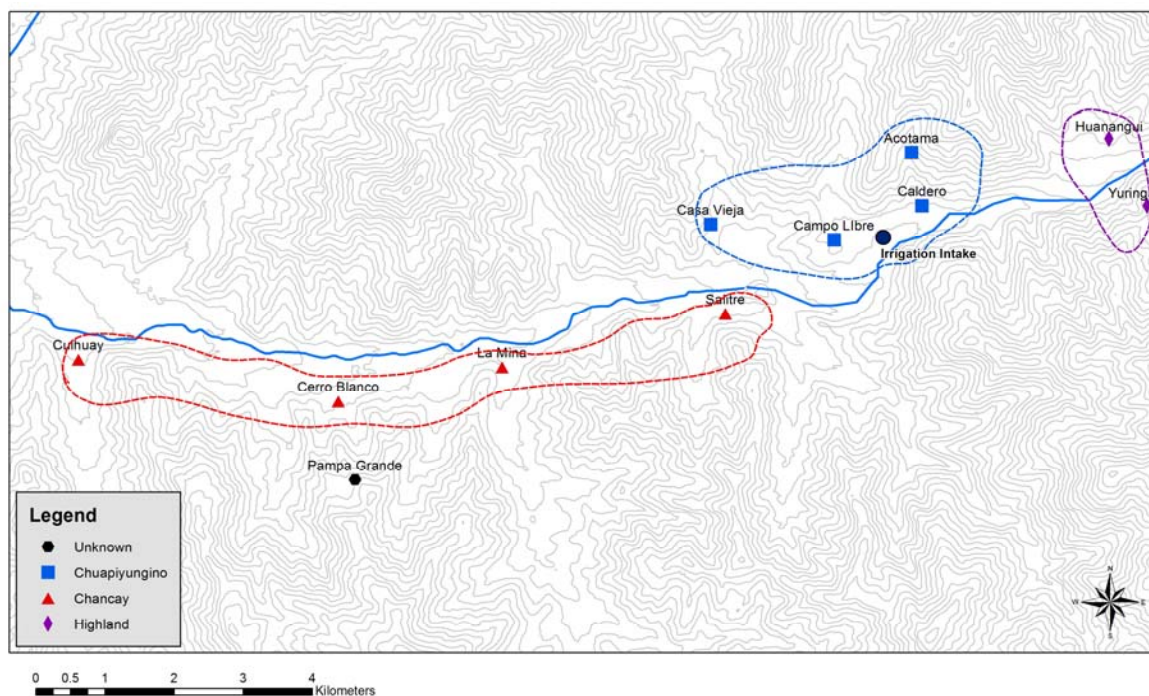


Figure 6.13: Map of Late Intermediate Sites showing the distribution of different groups in relation to the irrigation intake. Note that Chancay sites are downriver from this intake.

The majority of sites documented during survey appear to date to the Late Intermediate Period and include 10 residential sites, one administrative center, terraces/*andenes* and numerous petroglyphs. These sites likely belonged to four different ethnic-like groups: the coastal Chancay, the *chaupiyunginos*, a highland group (likely Atavillos), and one unidentified group. These determinations were made based on differences in site placement and plan, architectural styles and construction techniques, and surface ceramics/artifacts. For example, Chancay sites can be identified due to their placement on *quebrada* floors, the use of adobe *tapia* to construct multi-room compounds, and the presence of Chancay black-on-white and Cayash style ceramics. *Chaupiyungino* sites are located on low hilltops and feature rectangular structures built of roughly shaped fieldstones. *Chaupiyungino* buildings are also unique in that they are constructed of three walls: one long wall that curves around at close to a 90 degree angle to form two sides, and then two smaller walls that abut the longer wall to close the structure off. These sites are also clustered around irrigation intakes. Highland sites are also located on hilltops and consist of multiple, agglutinated, rectangular stone structures. The masonry at highland sites is finer than that at *chaupiyungino* sites, and building corners are square. Survey data suggested that symbolic boundaries were clearly maintained between these different groups; however, Chancay black-on-white ceramics and shellfish were found in limited quantities on the surface of the majority of these sites. This pattern fits the expected correlates for entanglements that were discussed in Chapter 2, and also conform to documentary data which suggested that trade between coastal, middle valley, and highland groups was common during this time period. Furthermore, the clearly intrusive nature of Chancay sites and the limited evidence for indicators of centralized planning, such as site planning, especially at smaller sites such as Salitre and Culhauy, suggests that the Chancay may have moved into the valley as part of a trade diaspora. The following sections will describe the

Chancay, *chaupiyungino*, highland, and identified sites in detail in order to elucidate the pattern described above, and show how *chaupiyunginos* could have used their positioning in the valley as a form of tactical power.

Chancay Sites – Migration and Intervalley Communication

Cerro Blanco (Locality 6): Potential Chancay Administrative Center

Cerro Blanco is a large Chancay administrative center dating to the Late Intermediate Period. The site is approximately 14 ha in size and completely covers the floors of two small *quebradas* on the south side of the Huanangue River (see Figure 6.14). For comparison, the site of San Juan de Cañas, which was recorded by Krzanowski (1991) as a mid-level Chancay administrative center in the lower Huaura Valley, covers approximately 18 ha. The architecture of Cerro Blanco is complex. In the western most of the two *quebradas*, there are two conjoined rectangular plazas located in the upper end of the *quebrada*. These plazas measure 30 meters by 33 meters and 23 meters by 33 meters, and adjoin multiple rectangular, multi-room compounds built of stone that fill the rest of the *quebrada* floor. The sizes of the rooms vary drastically from approximately 5 meters by 5.5 meters to approximately 18 meters by 13 meters. At the mouth of the *quebrada* there is a walled circular plaza with a floor paved by flagstones (see Figure 6.15) that has a diameter of approximately 22 meters. As this structure is in a much better state of preservation than the other structures at the site, it may be a colonial-era threshing floor.

The architecture in the eastern *quebrada* is heavily damaged both due to *huaycos* and looting; however, this portion of the site can be divided into two sectors. Sector A is located to the west and consists of multi-room stone compounds similar to those in the western *quebrada*, whereas Sector B is located to the east and consists of rectangular compounds constructed of thin-walled adobe *tapia* and adobe brick. There is evidence that the interior faces of these walls were originally plastered and painted yellow (see Figure 6.15). These compounds have baffled entryways similar to those documented by Nelson and Heaton (2009) for the Huaura Valley sites of El Carmen, Caldera, and Casa Blanca (see also Krzanowski 1991; Dunn and Heaton 2013). Early work by Nelson and Heaton (2009) suggested this feature may have been typical for Middle Horizon Period architecture in the Huaura drainage; however, the sites of El Carmen and Caldera were recently dated to the early part of the Late Intermediate Period by Dunn and Heaton (2013). While the sites of El Carmen, Caldera, and Casa Blanca were originally residential sites, excavations suggest that they may have been abandoned sometime in the late 13th or early 14th centuries, and then used as cemeteries by the Chancay in the later part of the 14th century. At Cerro

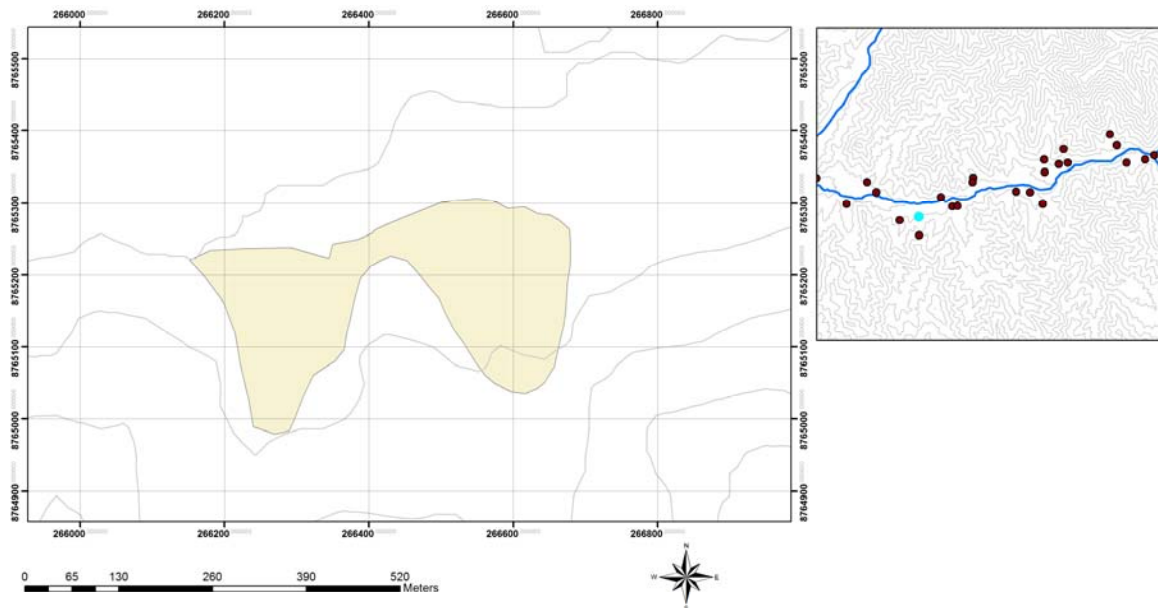


Figure 6.14: Map of Location of Cerro Blanco

Blanco, the heavy looting and presence of weathered human remains on the surface of this sector suggest that a similar pattern was followed here. The structures in the eastern part of the eastern *quebrada* were constructed from a combination of roughly shaped and unmodified field stones, and are very poorly preserved due to *huayco* damage.

The ceramics present on the surface of this site were varied. The survey team documented classic Chancay black-on-white, Chancay yellow, Chancay-Inka, Cayash, possible Chimu, and possible Inka ceramics, as well as several other decorated ceramics styles that have not yet been identified. Other surface artifacts include shellfish, a few scattered camelid bones, and lithics. Because of a combination of human and taphonomic processes, there is no clear pattern in the distribution of the surface ceramics. This makes it difficult to determine both where different activity areas may have been located across the site, as well as whether the ceramic diversity was the result of co-residence, exchange, or some other process. Based on the diversity of architectural forms in the western *quebrada*, it is possible that this area was used for public and/or administrative purposes or for elite housing. As the architecture in the eastern *quebrada* is poorly preserved, it is difficult to describe structure form and size. While it is clear that a cemetery was present in the Sector A of the eastern *quebrada*, the function of the structures in the rest of the *quebrada* remains unclear. It is possible that they may have served as residential structures.

Cerro Blanco is located approximately 4 km from the Huanangue Valley Chancay sites of Culhauy, 2 km from La Mina, and 5.5 km from Salitre. To date, no pathways have been identified between Cerro Blanco and any of these sites, though ancient pathways may have been lost under the informal truck road which runs along the edge of modern agriculture fields. Based on Cerro Blanco's size, as well as its architectural complexity, it fits Krzanowski's definition of a mid-level Chancay administrative center (1991); however, the relationship between Cerro Blanco and other



Overhead view of Western side of Cerro Blanco



Painted tapial wall at Cerro Blanco



Circular structure with stone floor at Cerro Blanco



Architecture on Eastern side of Cerro Blanco



Blackware ceramics at Cerro Blanco



Shellfish remains at Cerro Blanco

Figure 6.15: Photographs from Cerro Blanco

Chancay administrative centers such as San Jose de Cañas (which is only 12 km downriver) and Pisquillo Chico, and between Cerro Blanco and the smaller Chancay sites in the Huanangue Valley is unclear. Cerro Blanco does have the highest concentration of shellfish remains present in its surface assemblage, which suggests that the people living at Cerro Blanco likely maintained contact with their counterparts on the coast, and that the site may also have been a distribution point for marine products to other Chancay sites in the valley. Furthermore, though Cerro Blanco is large and architecturally complex, little evidence was found during survey to suggest that this site was built with any oversight from the Chancay core. Key features, such as ramped platform mounds that are common at sites such as Pisquillo Chico and Lauri, are missing from Cerro Blanco. Furthermore, differences in the orientations of buildings at the site may suggest that the site was not centrally planned, but developed more organically over time as people moved to the site. Taken together, this suggests that Cerro Blanco was founded as part of a grassroots movement of people out of the Chancay Valley, perhaps as part of a trade diaspora, though this supposition needs to be confirmed through excavation. In addition, the diversity of surface ceramics suggests that this site may have served as a gathering point or node (see Topic and Topic 1983, 1985) where people from many different groups may have periodically gathered for different public rituals, and/or to engage in exchange, perhaps of agricultural products for shellfish and other maritime goods, as described by Ipinze (2004).

Culhuay (Locality 1): A Small Chancay Settlement

This site consists of four small multi-room adobe *tapia* structures spread over an area of approximately 1 ha. These structures are located in the mouth of a large *quebrada* of the same name near the junction of the Huaura and Huanangue Rivers. The smallest measures approximately 20 meters by 10 meters, and the largest measures approximately 15 meters by 30

meters. The site is poorly preserved and no diagnostic sherds were found on the surface, but the use of adobe *tapia* as well as the layout of the compounds is typical of Chancay style architecture (Negro 1991; Krzanowski 1991b; Dunn and Heaton 2013) make it possible that this site may have been a small Chancay outpost. The compounds at this site are all different sizes and have different orientations, which suggests that the site may not have been centrally planned.

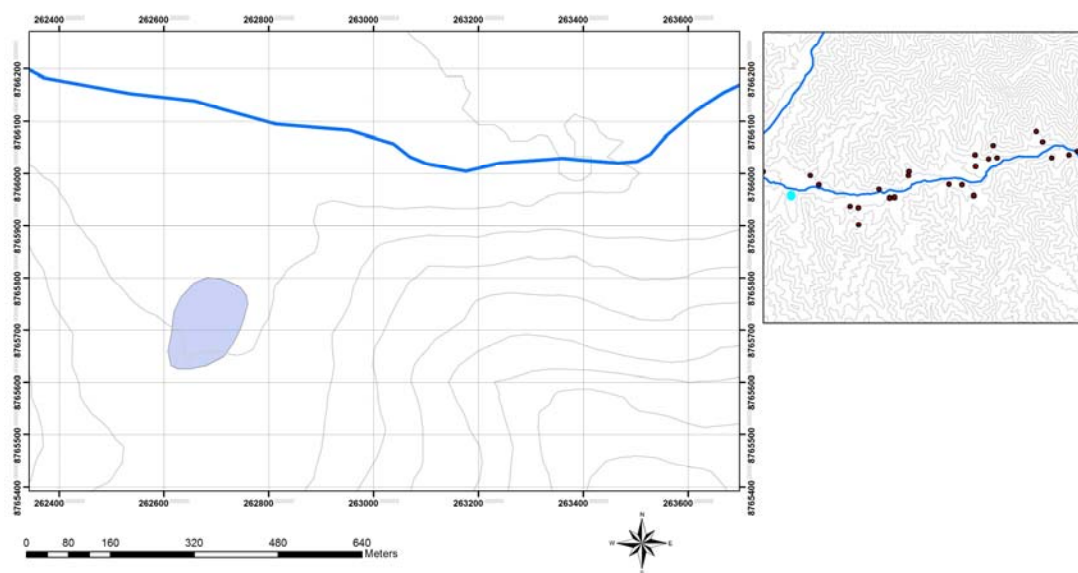


Figure 6.16: Map Showing Location of Culhuay

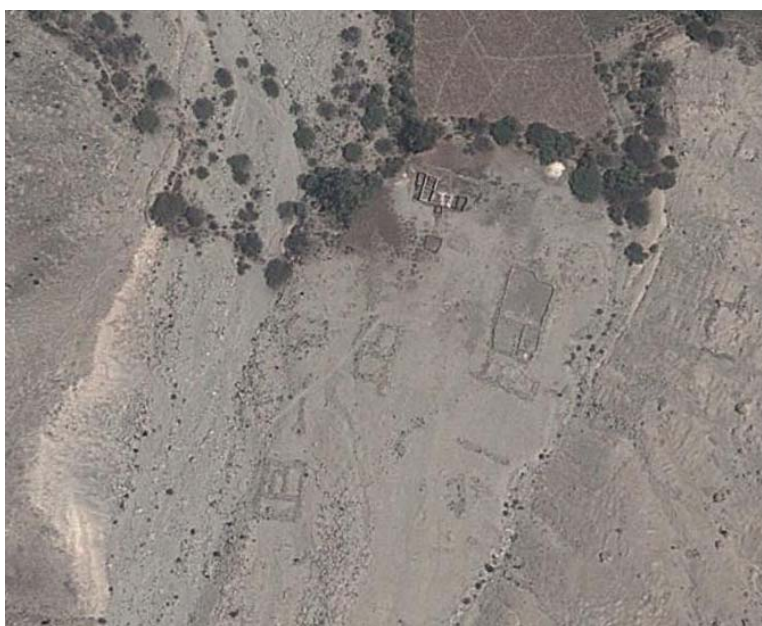


Figure 6.17: Aerial photograph of Culhuay

La Mina (Locality 7, 8, and 9): Possible Chancay Multicomponent Site

La Mina is a multicomponent site that consists of residential compounds (locality 9), agricultural terraces (locality 7), and petroglyphs (locality 8). The residential portion of the site is located on an alluvial terrace on the south side of the Huanangue River, and consists of several small rectangular structures spread over an area of approximately 0.3 ha. Counting the number of structures as well as documenting their size and layout was difficult, as the level of preservation at this site is very poor. The structures are perfunctorily built of unshaped fieldstone. Natural boulders were also incorporated into the bases of these structures, and they vary a great deal in size. The surface ceramics at this site were few in number and heavily worn. The majority of ceramics were undiagnostic redwares, but Cayash ceramics were present along with Chancay yellow, Chancay black-on-white, and Pativilca Impreso wares. Based on presence of both Chancay black-on-white and Cayash style ceramics, this site likely dates to the Late Intermediate Period and may be a small Chancay settlement.

Small agricultural terraces are located approximately 300 meters downriver from the residential sector of La Mina. These terraces are highly eroded, but appear to have been narrow, measuring approximately 2 meters wide, and were set into the hill slope. The terraces also vary in height from 15-50 cm. They were constructed of small and medium-sized angular field stones, measuring approximately 5-20 cm in length. Because of the overall poor state of preservation, it is difficult to determine the total area covered by this locality, but based on field observations it appears to cover an area of approximately 3 ha. The only ceramics that were observed on the surface were small, eroded, non-diagnostic red-wares. Because of the paucity of ceramics, it is difficult to determine the chronological or cultural affiliation of these terraces. However, a few of these sherds feature a linear burnishing pattern that has been documented for other late sites in the

region (Nelson and Ruiz 2004), suggesting that these terraces may have been in use during the Late Intermediate Period, and their proximity to the residential structures described above may mean that these terraces were used by the Chancay living nearby. It is also possible that they were constructed earlier and used over a long period of time.

The La Mina petroglyph is an isolated piece of rock art on the flat top of a large boulder located on an alluvial terrace on the south side of the Huanangue River. It is located in between the residential site of La Mina and the La Mina agricultural terraces. The design is faded, but is composed of two figures, one which may either be an anthropomorph, or alternatively, some type of avian figure (see Figure 6.20). The other figure is a floating anthropomorphic face that is attached to a rhomboid figure with a cross inside it. The lack of associated cultural material makes it difficult to assign a date to the piece, but based on stylistic similarities to other rock art known for the Late Intermediate Period (Cabrel Palomares 2007; Guffoy 1999), it is possible that it dates to the same time period.

In sum, the data from La Mina suggest that this was a small Chancay settlement that was likely involved in agriculture production. Though the architecture at the site was poorly preserved, the haphazard nature of the construction of domestic units at the site seems to suggest that the site developed organically over time without much, if any, centralized oversight, as one would expect if this site was a diaspora settlement as opposed to a colony. La Mina is located less than 2 km from Cerro Blanco, so it is possible that people living at La Mina may have been associated with this center in some way, perhaps through provisioning Cerro Blanco with food. However, excavations are still needed at this site in order to better understand what the relationship was between the people living at La Mina and those living at other Chancay and *chaupiyungino* sites.

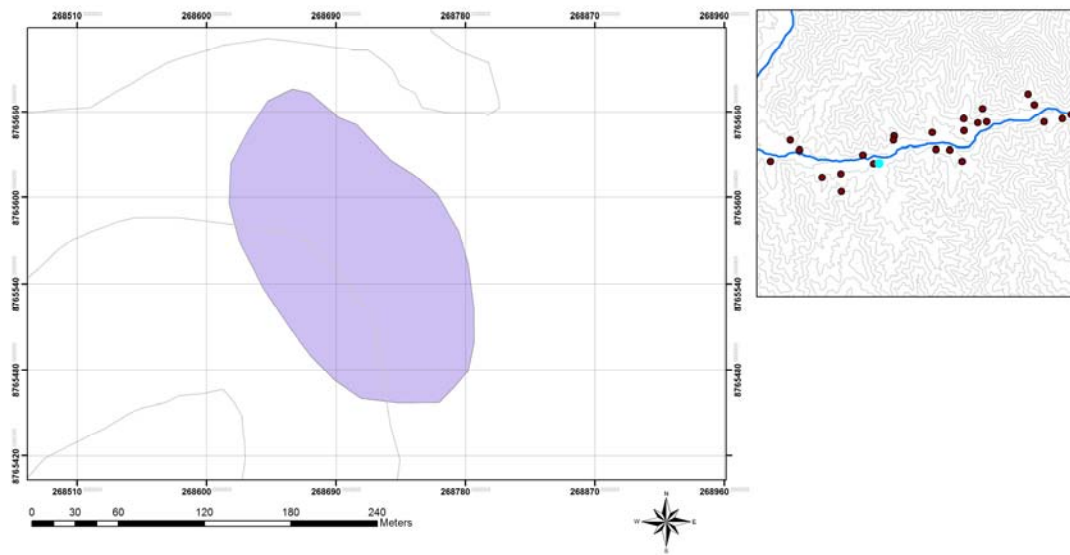


Figure 6.18: Map of the Location of La Mina (Locality 9)



Terraces near La Mina



Terraces near La Mina

Figure 6.19: Photographs of possible agricultural terraces at La Mina (Locality 7)



Figure 6.20: La Mina Petroglyph (Locality 9)



Structures at La Mina



Ceramics at La Mina



Ceramics at La Mina



Ceramics at La Mina

Figure 6.21: Photographs from La Mina illustrating typical architecture and ceramics

Salitre (Localities 12 and 14): A Chancay Village

Salitre is a multi-component site located in the mouth of the same large *quebrada* as the Preceramic site Salitre I. The site is composed of a residential sector (locality 12) and associated agricultural fields (locality 14). The residential sector consists of several highly eroded rectangular stone structures and covers an area of approximately 4 ha. The walls are built of unmodified river cobbles, and are double-faced with a ceramic sherd fill. As such, walls are extremely unstable and the majority of them have collapsed, making it difficult to determine the total number and layout of the structures at the site. Based on field observations, these structures appeared to measure roughly 4.5 to 5 meters by 6 to 10 meters. At the very mouth of the *quebrada*, just beyond the edge of modern agriculture, there is a plaza area defined by two small platform mounds, each between 2 to 3 meters high, with bases that measure 20 meters by 14 meters and 40 meters by 20 meters. Though these platform mounds are highly eroded, looter pits reveal that they were constructed of stone masonry walls that were covered with mud plaster, making the walls appear as if they were constructed from adobe *tapia*.

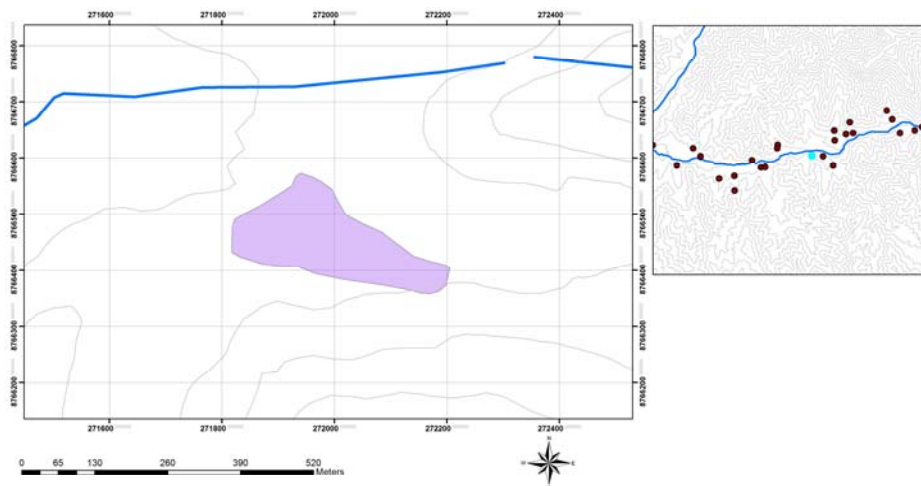


Figure 6.22: Map of Location of Salitre's residential sector

Toward the eastern edge of the site, there are 4 relatively well persevered multi-room stone structures, the largest of which measures 57 meters by 17 meters and the smallest of which measures 22 meters by 20 meters. The easternmost of these structures has been modified by local goat herders who periodically use it to corral their animals. There were several lithics present on the surface of the site, including grind stones and polishers. There were also several sherds from broken storage vessels present on the surface. Diagnostic sherds included Cayash, Chancay black-on-white, and Pativilca Impreso. Based on these ceramics, it is likely that the site dates to the Late Intermediate Period and was a Chancay settlement (see Chapter 7 for further detail). The small mounds and plaza on the western edge of the site, along with the multi-room structures on the eastern edge of the site, speak to the potential for both public and administrative activities potentially having taken place at the site. However, like Cerro Blanco, Culhuay, and La Mina, the expedient nature of construction at the site along with the apparent differences in orientations of structures suggest that this site was not centrally planned, but rather that the site plan was likely the result of accretional growth as the settlement slowly expanded due to continued Chancay migration out of the Chancay Valley. This pattern conforms to the expectations for trade diaspora settlements (see Chapter 2). Because of the presence of Chancay material culture at this site, 6 excavation units were placed around the site in order to better understand interactions between the Chancay and local groups.

The agricultural fields at Salitre are the best preserved in the valley. They are located on an alluvial terrace approximately 1 km from the residential sector of the site. Both sectors are connected by a path that runs along the side of the *quebrada*. The total area covered by these fields is approximately 7 ha. Since this field system was the best preserved and the largest in the valley, excavation units were placed here in order to determine what crops were being grown (see Chapter

7 for more detail). These fields are made up of a series long, narrow *andenes* which are grouped in large rectangular sectors. Each *anden* is about 2 to 3 meters wide. The dividing walls are made of small to medium-sized (5-15 cm long) unmodified field stones, and are one to two courses high (an average of about 15 cm high). It is unclear as to whether these groupings reflected differences in the type of crop being cultivated, or if they reflect differences in who was working that particular section. Though most ceramics recovered on the surface of the fields were undiagnostic, there were a few Cayash and Pativilco Impreso sherds in the surface assemblage. Based on the proximity of these fields to the residential locality of Salitre, the pathway connecting the two localities, and the presence of late ceramics on the surface of both localities, it is likely that they were occupied contemporaneously.

Discussion: Evidence for Chancay Migration into the Huanangue Valley

Cerro Blanco, Culhuay, La Mina, and Salitre were all identified at Chancay sites based on the presence of both Cayash and Chancay black-on-white ceramics, their placement in side *quebradas*, and the presence of multi-room compounds. Since Chancay black-on-white ceramics were likely traded between different groups in the valley, the survey team only counted sites as being affiliated with the Chancay when these ceramics were found in association with Cayash style pottery, as this style was used in Chancay domestic settings. Though La Mina and Salitre differ from typical Chancay sites in that they are missing adobe *tapia* structures, excavations from Salitre show that other aspects of Chancay construction techniques were persevered (see Chapter 7 for more detail). Both La Mina and Salitre are located in zones that receive annual rainfall, so it is possible that the switch from adobe to stone may have been due to the Chancay trying to adapt to local climatological regimes.



Residential Sector of Salitre



Grinding stone at residential sector of Salitre



Agricultural fields of Salitre



Agricultural fields of Salitre



Ceramics at Salitre



Ceramics of Salitre

Figure 6.23: Photographs of Salitre showing architecture from the residential and agricultural sectors, and typical ceramics from the site.

These data shed some light onto the potential mechanisms that may have driven Chancay migration into the valley. Though the presence of the administrative center of Cerro Blanco does point to the possibility that verticality may have been in operation, as excavation data presented in Chapter 7 will show, there is little evidence that Cerro Blanco exerted any type of control over the other Chancay sites in the valley. Furthermore, the lack of evidence for centralized planning at Cerro Blanco, Culhuay, La Mina, and Salitre, along with the expedient and often haphazard nature of construction at the latter three sites, suggests that they may have been settled by individual families that moved out of the Chancay Valley as part of a grassroots diaspora (see Goldstein 2005; Owen 2005). Furthermore, the association of La Mina and Salitre with agricultural fields and the presence of shellfish on the surface of all Chancay sites coincides with the documentary data that suggest the Chancay moved into the valley in order to gain access to agricultural resources that they sent down to the coast. This seems to confirm the hypothesis that the Chancay may have moved into the valley as part of a trade diaspora, though more excavation is needed to confirm this.

If the Chancay moved into the valley as part of a diaspora movement, as the survey data seems to suggest, this may have placed them in a vulnerable position vis-à-vis the local *chaupiyunginos*, as the Chancay settlement of the valley would have taken place without state support. Furthermore, these Chancay sites were located about a 20 hour walk (round-trip) away from the Chancay core, and there is little evidence that the core had the power or infrastructure to send appreciable economic or military support to any diasporic populations in the Huanangue Valley. All Chancay sites were located below the valley's irrigation intakes, whereas the *chaupiyungino* sites are clustered around this intake (see discussion below), which suggests that the Chancay would likely have needed to negotiate with the *chaupiyunginos* in order to ensure

continued access to irrigation water. Thus, even though the Chancay community as a whole was more economically powerful than the *chaupiyunginos*, the Huanangue Valley's relative isolation from the Chancay core and the Chancay's possible dependence on the *chaupiyungino* for water likely would have encouraged entanglements to develop between these two groups.

Chaupiyungino Sites and Strategic Control of the Landscape

Hebilla (Locality 27): Possible Chaupiyungino Site

Hebilla is a small site covering just under 3 ha that is located on a low spur on the east side of Hebilla Quebrada. The site consists of several small, stone, roughly circular structures which appear to be semi-subterranean, and which are associated with highly eroded terraces. These circular structures have a diameter of just under 1 meter. There is also a rectangular structure that measures roughly 27 meters by 26 meters located approximately 100 meters upslope from the eroded terraces. Few ceramics or other artifacts were associated with this structure, and based on its size and placement, it may have served as a corral for camelids.

Because of the poor level of preservation at this site, as well as the lack of surface ceramics, it is difficult to say what the functions of the semi-subterranean structures were. One possibility is that they were tombs, but no human remains were observed in the one structure that had been looted. Another possibility is that they were used for storage. This seems somewhat more likely, considering their proximity to the eroded terraces, as well as the fact that all storage features identified in the valley are either subterranean or semi-subterranean. Few ceramics were detected on the surface, with the exception of a handful of non-diagnostic redwares and one black-on-red sherd. Based on the architecture at this site, it may date to the Late Intermediate Period, but the lack of diagnostic ceramics on the surface makes it difficult to be sure or to assign a cultural affiliation to the site. However, the similarity between the storage structures found here and those

found at Campo Libre, suggest that this site may have been built and used by the local *chaupiyungino* group.

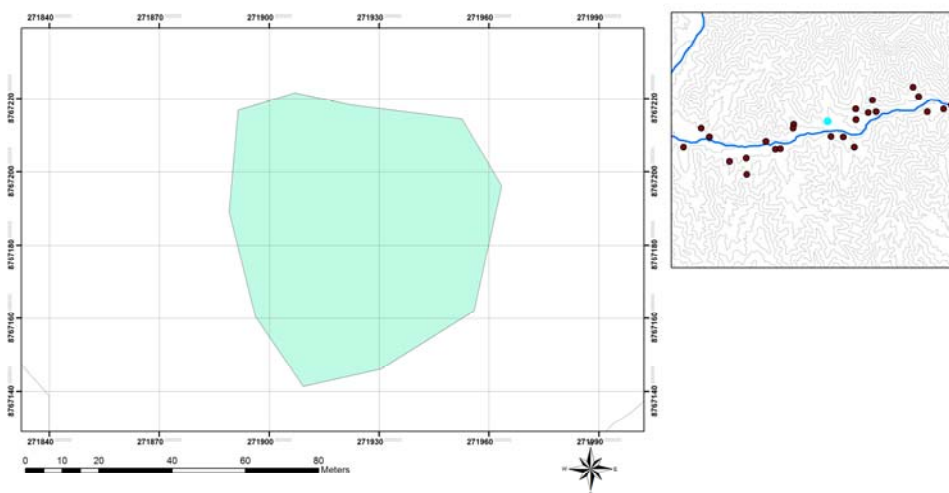


Figure 6.24: Map Showing Location of Hebilla



Architecture at Hebilla



Closeup of structure at Hebilla

Figure 6.25: Photographs from Hebilla showing architectural detail from the possible storage structures

Caldero (Locality 19): A Small Chaupiyungino Site

Caldero is a small site of four to five rectangular stone-walled structures measuring roughly 3 meters by 5 meters, and spread over approximately 0.3 ha. The site is located at the base of a hill and at the edge of a small *guarango* grove near the bank of the Huanangue River. Visibility was poor due to the overgrowth of local plants, making surface artifacts hard to find. However, one Cayash sherd was documented, along with two yellow-on-red sherds, similar to those found at the site of Yuringa. Based on the architectural similarities to Campo Libre, as well as the late style ceramics, this site is tentatively identified as belonging to the Late Intermediate Period and as having a *chaupiyungino* occupation. Caldero is located approximately 1.3 km from Campo Libre, and there is a pathway that runs along the edge of the modern agriculture which connects the two sites. Approximately 75 meters west of the site there is a pathway that is still used today to walk to the northern branch of the Huaura drainage.

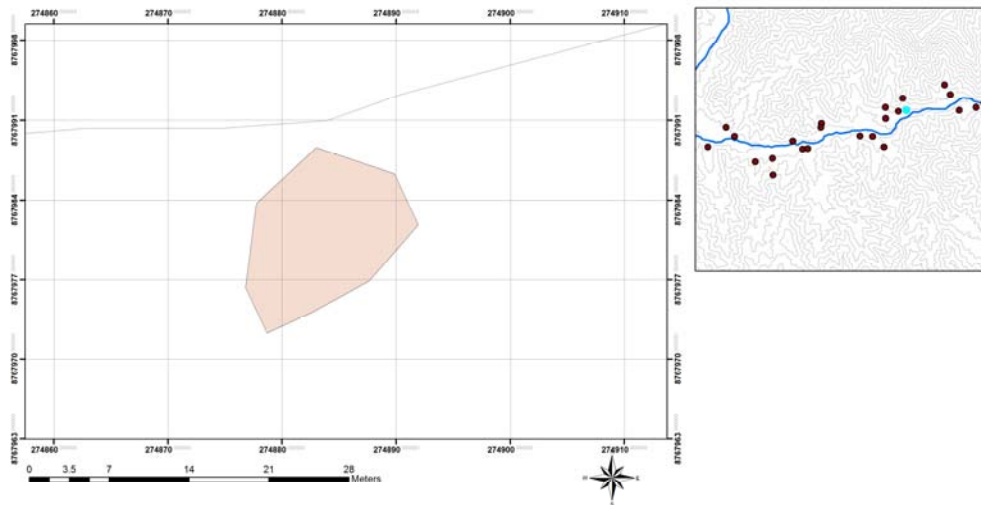


Figure 6.26: Map of Location of Caldero



Architecture at Caldero



Architecture at Caldero



Ceramics at Caldero

Figure 6.27: Photographs from Caldero



Figure 6.28: Casa Vieja Petroglyphs

Casa Vieja Petroglyph (Locality 27)

Near the modern town of Casa Vieja, there is a petroglyph panel inscribed on a large boulder located on the edge of a hill on the north side of the Huanangue River. The panel contains approximately 20 figures of different sizes, including anthropomorphs, humming birds, abstract curvilinear patterns, possible frogs, and crosses. The surface of the boulder has been damaged by natural spalling, so several figures have likely been lost. Just above the boulder with the rock art panel, near the peak of the hill are several small circular depressions, which may be tombs. The conjunction of the rock art panel with the possible tombs suggests that this complex may have marked the boundary of the *chaupiyungino* territory. According to a local collaborator, this same boulder used to serve as the boundary marker for the Comunidad Campesina de Acotama. At least one document dates this community to 1697 (manuscript Leg8Exp33, year 1697), and the number of buried wall fragments under Acotama as well as its close proximity to Campo Libre suggests that this town may have been inhabited during the Prehispanic period. Furthermore, Late Intermediate Period *chaupiyungino* sites were not found west of this locality. All together, these data suggest that this panel served as a boundary marker for *chaupiyungino* territory in the past.

Campo Libre II (Locality 16 and 17): A Chaupiyungino Village Strategically Positioned in Relation to Irrigation Intakes

Campo Libre is a multi-component *chaupiyungino* site that consists of two residential sectors, agricultural fields, and storage structures. The main portion of the site consists of two residential sectors covering about 3 ha on a small rise on the north side of the Huanangue River, almost directly across from Salitre. The northern sector, Sector A, is composed of several rectangular stone compounds. The walls of these compounds are built of roughly shaped field stones, and are double-faced with a mud fill. The construction of the compounds is somewhat unique, as they are composed of only three walls. One long wall curves around at roughly a 90

degree angle to form two sides of the structure, while two smaller walls abutt this longer wall and close the structure off. These rooms measure approximately 10 meters by 5 meters. There is also a small open area that may have served as a plaza in the middle of this sector.

The southern sector of the site, Sector B, is composed of rectangular stone compounds of *pirca* construction. The stones used in the construction of these structures are small, unshaped, red fieldstones. The walls are also very low, suggesting that they served as the base for structures constructed of perishable materials. These compounds measure approximately 4 meters by 5.5 meters. In spite of the difference in construction techniques, surface ceramics were the same across the surface of the site, consisting mainly of non-diagnostic redwares, with the occasional Chancay black-on-white sherd present as well. Based on architectural and excavation data (see Chapter 7), this site dates mostly likely dates to the Late Intermediate Period and was occupied by a local *chaupiyungino* group.

The hill upon which Campo Libre is located projects out into the valley floor, providing the site with a commanding view of the surrounding area and with direct sight lines to the nearby sites of Huanangui and Yuringa. More importantly, viewshed analysis performed in ArcMap 10.2 demonstrated that the irrigation intake for the middle and lower Huanangue Valley would have been visible from Campo Libre (see Figure 6.31). Because of the aridity of the local environment, agriculture was irrigation dependent. This made the management of water important, particularly in years of drought. As such, it is possible that Campo Libre was established at this location in order to allow local *chaupiyunginos* to monitor access to this irrigation intake, potentially allowing this group to intimidate groups living down-valley by threatening to divert water away from the main river channel during times of scarcity. The ability to make these threats may have been a

source of tactical power for the group, and may have influenced relationships between the *chaupiyunginos* and other groups in the valley (see Chapter 8).

The agricultural fields of Campo Libre are located toward the middle of Quebrada Huayojirca, northeast of the residential sector of Campo Libre. These fields are set on an alluvial terrace, and are constructed of several low retention walls build of unmodified field stones ranging in size from about 5 to about 15 cm long. The walls also take advantage of the various natural boulders that are scattered across the floor of the *quebrada*. The distance between walls differs greatly, ranging from 3 to 10 meters. The total area covered by the fields is approximately 9 ha. This locale has been heavily modified by modern agricultural activity, as local farmers built a water reservoir in the middle of the sector and are also preparing the area for planting avocado trees. Surface ceramics were small and worn and consisted mostly of undiagnostic redwares, though a few Chancay black-on-white and local net-incised wares were present as well. There is also a pathway which connects these fields to the residential sectors of Campo Libre; the two parts of the site are approximately 400 meters from each other. Based on the presence of late style ceramics, as well as the proximity and the pathway between the residential locality of Campo Libre and these fields, it seems likely that they were used contemporaneously with the occupation of the residential portion of Campo Libre in the Late Intermediate Period. Because of the association between these fields and the residential part of Campo Libre, these fields were selected for excavation (see Chapter 7).

The Tunampata petroglyph is an isolated piece of rock art located the middle of the Tunampata Quebrada on the north side of the Huanangue River. The petroglyph was inscribed on the side of a large bolder just north of the agricultural fields of Campo Libre. The artwork is divided into two panels. The left panel features a large circular face with two small eyes and paddle-like

ears, and the right panel features a serpentine figure associated with a small circle (perhaps a sun or a moon) and a small four-legged animal that could be a camelid (see Figure 6.30). The technique used to create this image is the same as that used at Pampa Grande I and La Mina. Interpreting rock art is difficult; however, research by Guffroy (1999) in the central highlands suggests that petroglyphs may have been used to mark coca growing fields and water. Alternatively, work by Berenguer (2004) in the Atacama suggests that rock art may have served to mark paths, territorial boundaries and ritual spaces. In this case, the Tunampata petroglyph may have served as some kind of boundary marker, though its exact purpose is still unknown.

Campo Libre was chosen for excavation due to its proximity to agricultural fields and storage structures (which were also tested), because of its strategic position on the landscape, and because it was the best preserved of the *chaupiyungino* sites documented during survey. It is approximately 1.8 km northeast of Salitre, and there are three potential routes of communication between the sites. Only the longest of these routes is still preserved today, as the other two have been obscured by the modern highway which runs along the north margin of the valley. The surviving route is still used to access Quebrada Salitre by the people living near the ancient site of Campo Libre.

Acotama Petroglyphs (Locality 18)

The Acotama petroglyph complex is located on a steep hill slope just upriver from the modern town of Acotama, and is well known to local goat herders. This complex consists of approximately 11 large boulders with images inscribed on them. These images include crosses, curvilinear designs, hummingbirds, flowers, abstract geometric designs, clusters of points, possible anthropomorphs, and a large frog (see Figure 6.34). The technique used to create these images is the same as at the other rock art sites in the survey area. The overall level of preservation

here is very good; however, one of the largest panels was recently defaced by modern graffiti. Though there are no structures associated with this rock art complex, there were a few ceramics present on the surface, including some possible Cayash sherds. As this complex is located between Campo Libre and the highland site of Huanangui, it may have served to mark the easternmost extent of *chaupiyungino* territory.

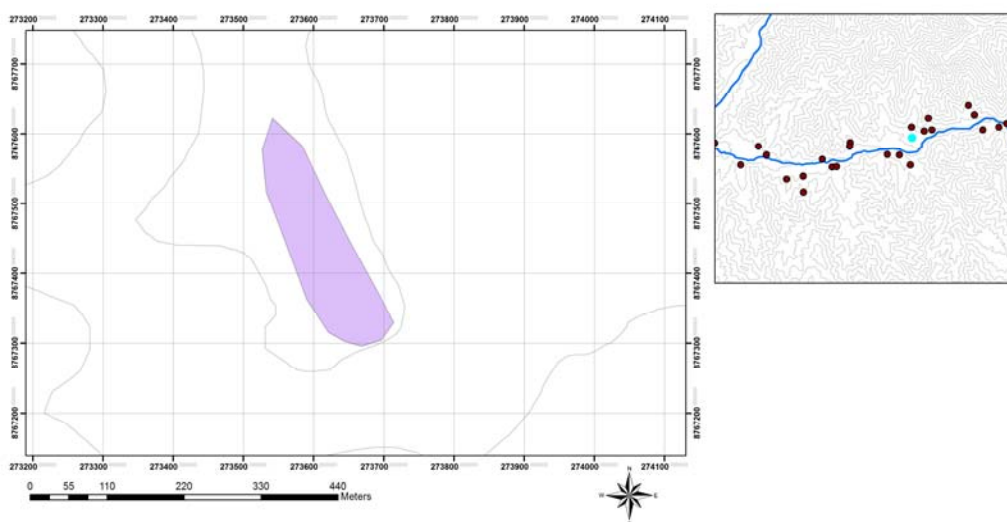


Figure 6.29: Map of Location of Campo Libre II



Figure 6.30: Tunampata Petroglyph

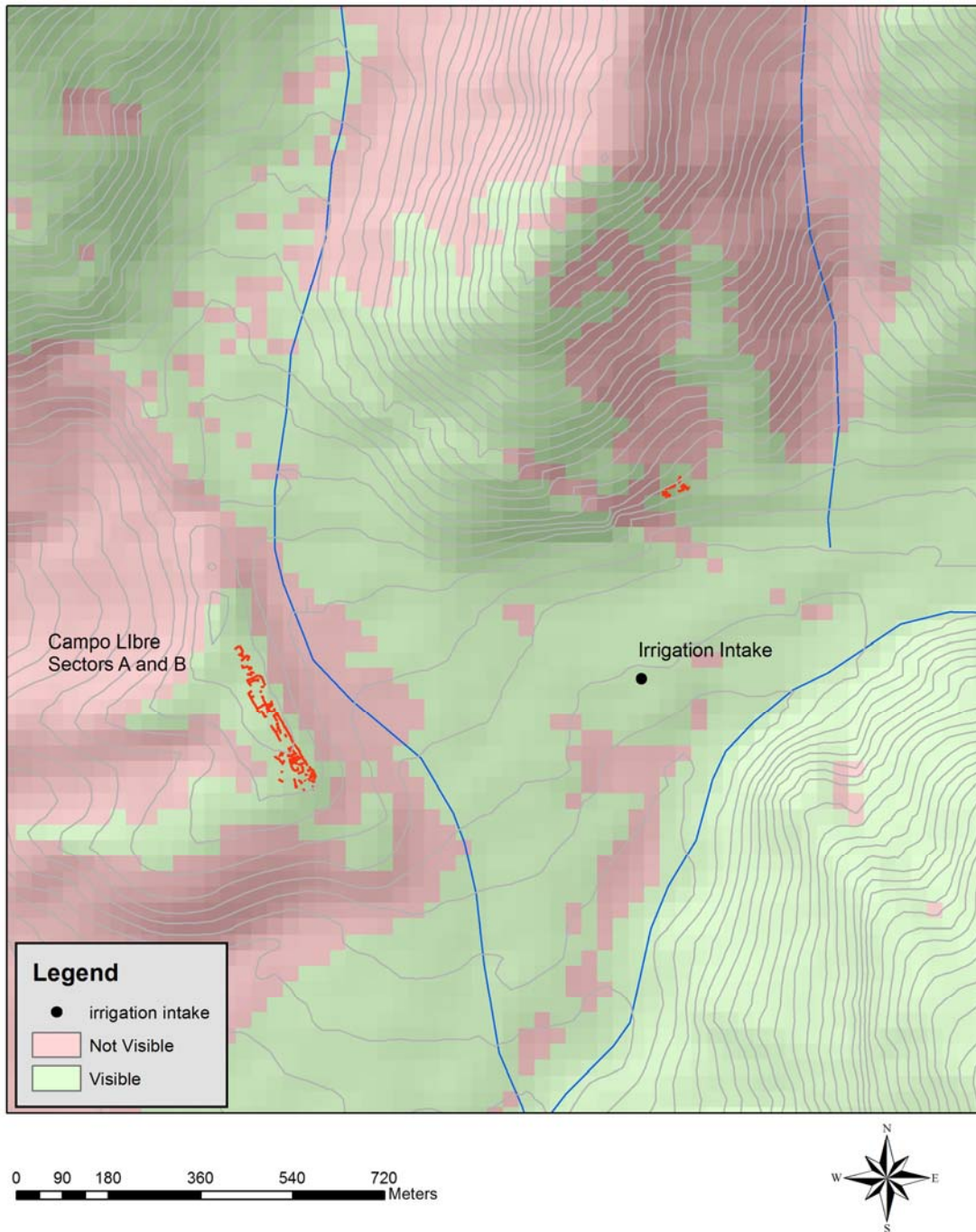


Figure 6.31: Viewshed analysis done in ArcMap 10.2 that illustrates the intervisibility between Campo Libre and the irrigation intakes



Overview of Sector A at Campo Libre



Boundary wall for Sector A at Campo Libre



Pativilca Impreso ceramics at Campo Libre



Ceramics at Campo Libre



Agricultural fields at Campo Libre



Storage structures at Salitre

Figure 6.32: Photographs of Campo Libre showing architectural details



Possible frog/toad figure



Points



Possible hummingbird



Unknown-possible floral pattern



Unknown



Surface ceramics found near petroglyphs

Figure 6.33: Photographs of Petroglyphs near Acotama

Chaupiyungino Discussion:

Chaupiyungino sites are clustered in the middle of the Huanangue Valley, near the irrigation intake for the middle and lower parts of this valley (see Figure 6.13). The documented sites were small and largely lacked public architecture, which suggests that the *chaupiyungino* culture can probably best be described as a loose confederation of largely autonomous villages and hamlets. However, even though the *chaupiyunginos* may not have been very politically organized, the prevalence of petroglyphs associated with *chaupiyungino* sites suggests that these villages did have a strong, shared identity, and that they may have been concerned with clearly demarcating their territory. The Acotama petroglyph complex is located between the easternmost *chaupiyungino* sites and the highland sites of Huananguí and Yuringa (see below for more detail), and the petroglyphs at Casa Vieja seem to mark the westernmost extent of Late Intermediate Period *chaupiyungino* settlement. In sum, the distribution of large petroglyphs around the probable boundaries of *chaupiyungino* settlements suggests that these petroglyphs were being used to make claims about identity and territorial ownership, perhaps in response to increasing pressure from coastal and highland migrants.

In addition, the close proximity of *chaupiyungino* sites to middle valley irrigation intakes suggests that local people were concerned with monitoring access to irrigation water. In many regions, the middle valley groups had traditional sovereignty over irrigation intakes, and could coerce people living in lower elevations to comply with their desires by threatening to purposefully mismanage water during times of scarcity (Dillehay 1976, 1977). Even if the *chaupiyunginos* in the Huanangue Valley did not make good on these threats, the fact that they could, in theory, interfere with access to water for people living in lower elevations suggests that the *chaupiyunginos* may have had a strategic advantage over other groups in the valley, such as the

Chancay and the highlanders. As will be explored in Chapters 7 and 8, this strategic advantage may have given the *chaupiyunginos* tactical power that they could leverage against the Chancay, and which may have buffered them from being drawn into a disadvantageous relationship with the Chancay as entanglements developed between the two groups.

Highland Residential Sites

Only two highland affiliated sites, Huanangui and Yuringa, were documented during survey. Both of these sites were located at the very upper boundary of the *chaupiyunga* zone. Highland ceramics were rarely recovered from the surfaces of lower elevations sites, suggesting that highland groups were unable to penetrate very far into the valley. Descriptions of these sites continues below.

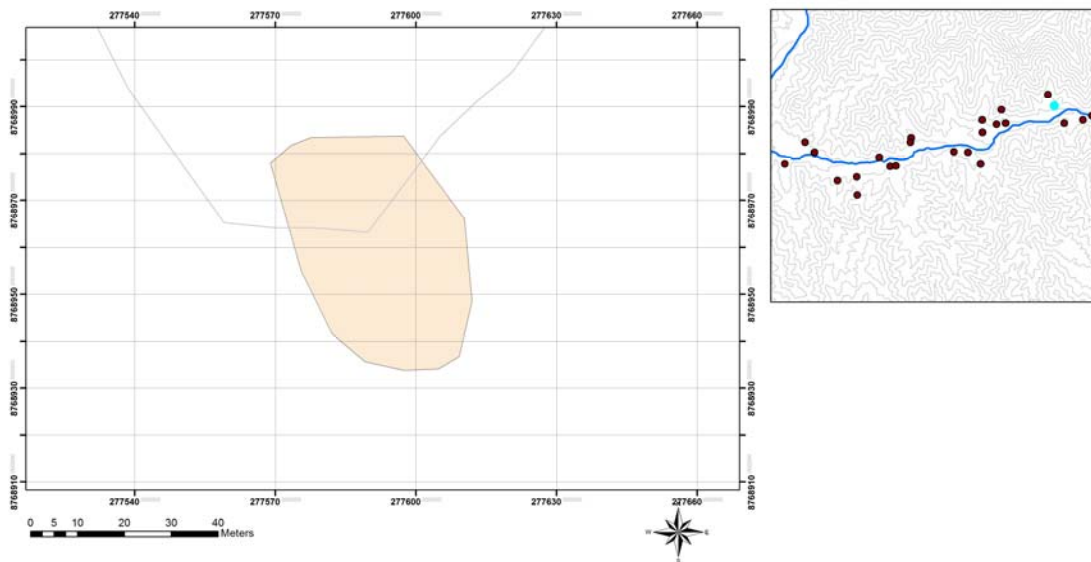


Figure 6.34: Map of Location of Huanangui



Modern cross at Huanangui



Collapsed structure at Huanangui



Pachia style architecture at Huanangui



Pachia style architecture at Huanangui



Ceramics at Huanangui

Figure 6.35: Photographs from Huanangui showing architectural details and ceramics

Huanangui (Locality 21): A Possible Highland Settlement

The site of Huanangui covers approximately 2 ha at the top of Cerro San Cristobal on the north side of the Huanangue River, about 4 km east of Campo Libre. There is a fragmentary trail that may have connected the two sites in the past. Unfortunately, thick undergrowth obscured most of the architectural features at the site, making it difficult to count the number of structures. Furthermore, several structures have recently been dismantled in order to build a platform for a modern cross that now occupies the summit of the hill. The structures that are visible appear to be rectangular and constructed of carefully shaped field stones. Also, in contrast to the structures at Campo Libre, these buildings were constructed with four walls that meet at 90 degree angles. In sum, the construction at the site is very typical of other highland sites documented in the region (Krzanowski 1986; van Dalen 2008). The majority of surface ceramics were undiagnostic redwares, though typical highland ceramics were recovered as well. Based on these ceramics, the site is tentatively dated to the Late Intermediate Period with a highland occupation.

Yuringa (Locality 22): A Possible Highland Settlement

The site of Yuringa is located on a hilltop on the south side of the Huanangue River. The site overlooks the conjunction of the Ihuari and Huanangue rivers and covers approximately 2 ha. The site stretches along the hilltop and can be divided into three sectors. Each of these sectors consists of clusters of small rectangular structures that were fashioned in a similar manner to the buildings at Huanangui. The structures at Yuringa measure roughly 5 meters by 3 meters. There are also a few small, subterranean, stone-walled circular pits that measure just under 1 meter in diameter, and that may have been used for storage. A low wall about 20 cm high runs across the hilltop just past the southernmost edge of the site. Though this wall is about 1.5 meters wide, its function is unclear because of its diminutive height. The wall would have been of little use as a

defensive feature, and thus may have served as some type of boundary marker. The sites of Huanangui and Campo Libre are visible from Yuringa. The ceramics at this site are quite varied and include Cayash, highland style white-on-red, local web-incised, and utilitarian redwares. We have tentatively dated this site to the Late Intermediate Period, and it may have had a highland occupation.

This site is located approximately 1 km from Huanangui, 4.5 km from Campo Libre, and just 6 km from Salitre. Both the site of Huanangui and the site of Campo Libre are visible from Yuringa. No pathways between Yuringa and the previously mentioned sites have been documented; however, there is a pathway that runs along the ridge which seems to connect into a larger network of pathways that go into the highlands.

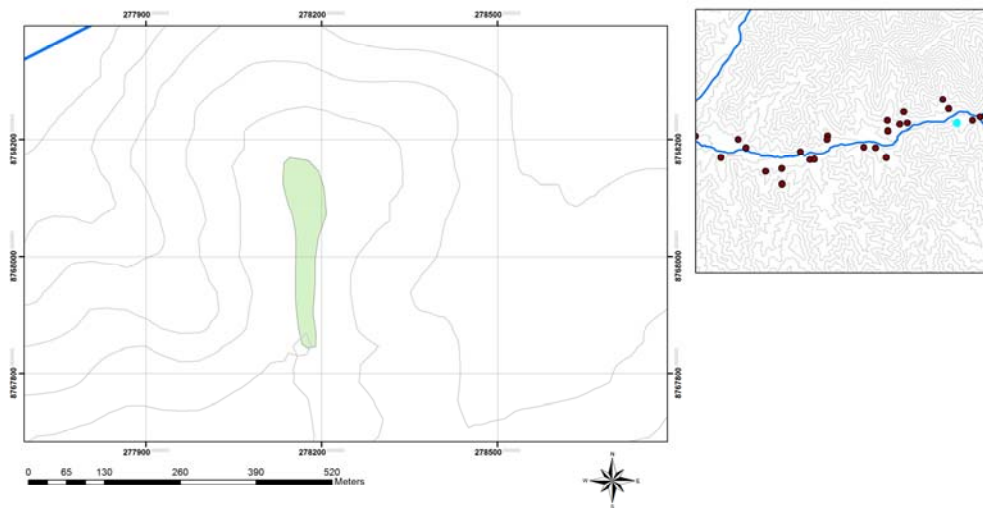


Figure 6.36: Map of Location of Yuringa



Overview of Yuringa



Wall at Yuringa



Rectangular structures at Yuringa



Ceramics at Yuringa



Ceramics at Yuringa

Figure 6.37: Photographs from Yuringa showing architectural details and ceramics

Pampa Grande (Locality 5): Site with an Unknown Cultural Affiliation

Pampa Grande is a small site located in the saddle of two high hills overlooking the Late Archaic site of Pampa Grande I. The site consists of approximately 20 clustered circular structures dispersed over approximately 0.5 ha. The walls of these structures are constructed of small field stones, and are no more than 30-20 cm high. Since there is little wall fall, they probably served as bases for structures built of perishable materials, possibly *quincha*. While in some respects these structures resemble the wind breaks that pastoralists used at their camp sites (Owen 1996), the high concentration of ceramics and grind stones on the surface suggest that the site was either a habitation site, or perhaps the location for some type of specialized processing. The majority of diagnostic ceramics were Cayash style, though a few Chancay yellow sherds and one Huaura style sherd was found as well. While this was likely a Late Intermediate Period site, it is difficult to determine what its cultural affiliation may be due to the unusual nature of its architecture.

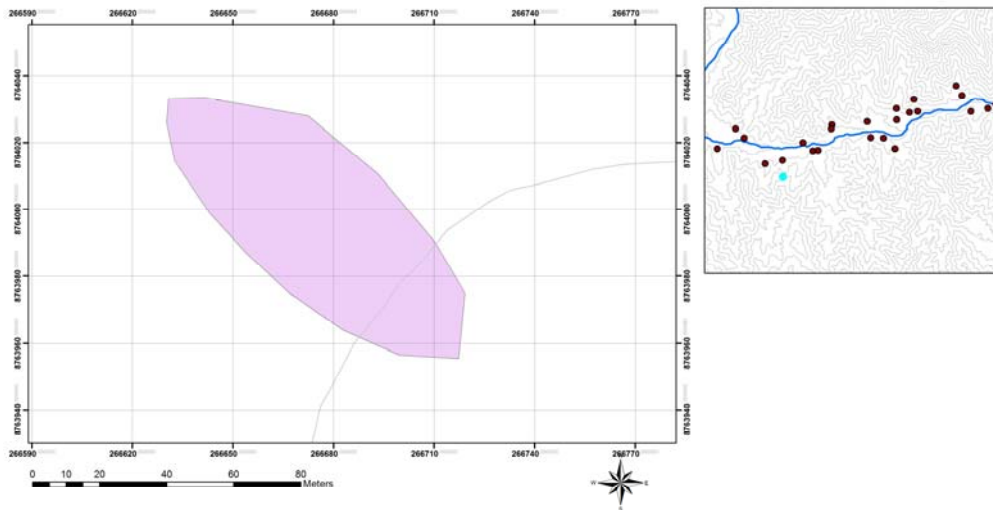


Figure 6.38: Map of Location of Pampa Grande



Pampa Grande overview



Circular structures at Pampa Grande



Ceramics at Pampa Grande



Ceramics at Pampa Grande



Grinding stones at Pampa Grande

Figure 6.39: Photographs from Pampa Grande showing architectural detail and surface artifacts

Discussion: Multicultural Occupation, Irrigation Intakes, and Tactical Power

Some preliminary conclusions can be drawn from the data presented above. First, the Huanangue Valley was occupied from at least the Late Archaic (3200-1800 BCE) through Initial (1800-900 BCE) periods, and then again during the Middle Horizon (600-1000 CE) through Colonial (1532-1821 CE) periods, which suggests that *chaupiyungino* culture had deep roots in the valley. At this time, it is not clear why few sites dating to the Early Horizon and Early Intermediate periods were observed. One possibility is that political instability, as suggested by the increase in fortress building in the Huaura drainage during this time (see Brown, Vega and Craig 2011), may have made conditions in the valley inhospitable, leading to its temporary abandonment. However, it seems more likely that occupation was in fact continuous in the valley, but that earlier sites are either located at higher elevations outside the range of the survey, or were buried underneath later site. In fact, excavations in Unit 4 at Campo Libre showed evidence for much earlier occupations dating to 1730 and 125 cal BCE that were buried underneath later occupations (see Chapter 7). Alternatively, it is possible that early sites have been destroyed by the flash floods that plague the valley annually.

This demographic pattern also reflects similar trends in the region. Archaeological survey performed in the lower Huaura Valley (from the coast to Sayan) in 2004 documented 630 localities, 399 of which were successfully assigned chronological periods. Of these 399 localities, 51 date to the Late Archaic Period, 20 to the Initial Period, 21 to the Early Horizon, 8 to the Early Intermediate Period, 66 to the Middle Horizon, and 221 to the Late Intermediate Period (Ruiz and Nelson 2004). Taken together, these data suggest that there was a dramatic increase in population throughout the Huaura drainage during the Late Intermediate Period, though this needs to be verified through further excavations.

The Huanangue Valley survey data also suggests that *chaupiyungino*-coastal relationships were established at a very early date. Like their counterparts throughout the Norte Chico and beyond (Dillehay 2004, 2008; Vega Centeno 2004; Vega Centeno 2012; Shady 2006; Feldman 1981; Haas and Creamer 2006), the three Late Archaic mound sites documented during survey probably served as centers for different forms of community-based ceremonies that would have brought people from the surrounding areas together. One of these sites, Pampa Grande, was located in the mouth of a large lateral *quebrada* that communicated with the coast, while Salitre and Canguey were located in *quebradas* that communicated with the surrounding highlands. This opens the possibility that highland and coastal peoples may have periodically come to the middle valley in order to participate in rituals at these sites, similar to the way in which highland people would seasonally make offerings at the later coastal temple, Choque Ispana (de Medina 1920[1650]). Such movement between the coast, middle valley, and highlands is likely, considering the presence of shared features, such as sunken hearths with elaborate subterranean ventilation features at highland sites such as Kotosh and at coastal sites such as Caral (Shady 2006).

The clearest data for intergroup interaction in the valley comes from the Late Intermediate Period. Survey documented 10 residential sites and one administrative center for a total of 11 Late Intermediate Period sites. By analyzing the spatial distribution of variation in site placement, site plan, construction technics, and artifact assemblages, it was possible to identify three different groups, the Chancay, *chaupiyunginos*, and highland (possibly Atavillos), living in the valley. One unidentified group was documented as well. Chancay sites are located on *quebrada* floors and consist of multi-room compounds built of adobe and stone, and were associated with Chancay black-on-white and Cayash ceramics. The placement of the Chancay sites of Culhauy and Salitre in particular are interesting, as both sites are located in the mouths of a large *quebradas* which

connect to the Chancay Valley and to the highland region around Ihuari, respectively. This suggests that at least some Chancay settlements may have been strategically placed in positions where they could monitor movement between the Chancay and Huanangue valleys, as well as between the highlands and *chaupiyunga* zone.

Chaupiyungino sites are located on low hilltops and consist of rectangular structures built of roughly shaped stones, with surface assemblages consisting primarily of utilitarian redware ceramics. Highland sites are also located on low hilltops, and consist of rectangular buildings constructed in *pachia* style with finely shaped stones. Surface ceramics also primarily consist of redwares, but yellow-on-red sherds are present as well. *Chaupiyunginos* sites are strategically positioned both to overlook critical resources, such as irrigation intakes, as well as to potentially monitor the activities of highland groups living at Huanangui and Yuringa. Following Eric Wolf (1999), by controlling strategic points on the landscape, the *chaupiyunginos* potentially would have had access to organization/tactical power that would have given them an advantage in terms of setting the terms for interaction in the valley. In the arid Huanangue Valley, access to water was extremely important, and by claiming traditional control over water, the *chaupiyunginos* would have been able to pressure other groups into negotiations for access to that water.

The hilltop placement of highland and *chaupiyungino* sites may have been the result of ecological adaptation, as well. The Huanangue Valley is relatively narrow and agricultural space is limited; thus, placing settlements on hilltops could have been part of a strategy to maximize agricultural space. Furthermore, the *quebradas* in this area are extremely active and prone to destructive *huaycos* during the highland rainy season, so sites may have been placed on hilltops as part of a strategy to avoid these events. As such, both *chaupiyungino* and highland groups may have strategically placed their settlements such that they were able to maximize available

agricultural space, avoid natural dangers such as *huaycos*, and perhaps most importantly, monitor/control important parts of the landscape.

The function of the hilltop site of Pampa Grande is unclear. This site is much more difficult to access than other hilltop sites, such as Campo Libre or Yuringa. However, as Pampa Grande is located in a saddle between two peaks, visibility of the surrounding valley is very low. As such, even though the inaccessibility of the site would have increased its potential defensibility, the lack of visibility as well as the lack of access to water suggests that defense was not its primary function. Rather, the presence of storage vessels and ground stones scattered along the surface suggest that this site may have served as a specialized processing center, or potentially as a temporary residence for people from the highlands, who may have migrated seasonally to work in agricultural fields (see Dillehay 1976).

Based on settlement pattern data, it is possible to make a few observations about the nature of intergroup relationships. Though the emphasis that the *chaupiyunginos* put into controlling strategic points on the landscape suggests that some tensions may have existed between communities, it is important to note that there is little archaeological or ethnohistoric evidence for violence in the Huanangue Valley. This suggest that groups were able to manage whatever tensions may have existed through other means. In addition, the sudden appearance of sites with a Chancay signature in the valley suggests that the Chancay were migrating to valley in relatively high numbers during the Late Intermediate Period. While more excavation need to be done to confirm the mechanism behind Chancay expansion into the Huanangue Valley, the lack of clear evidence for site planning, and the desultory manner in which structures were built at Culhuay, La Mina, and Salitre, suggests that these sites may have been built as part of a trade diaspora (see Goldstein 2005; Owen 2005). Furthermore, though the highland, Chancay, and *chaupiyunginos* living in the

valley maintained clear symbolic boundaries, Chancay black-on-white ceramics and shellfish were found on the surface of the majority of Late Intermediate Period sites. Since the concentrations of these materials on the surface of *chaupiyungino* and highland sites are low, these materials were most likely spread through trade or some other form of exchange (see Dillehay 2013; Burger 2013; Topic 2013). Potential mechanisms of exchange will be explored in greater detail in Chapter 7. The role that the administrative center of Cerro Blanco played in the valley is still unclear. As discussed above, based on the complexity of the architecture as well as the ceramics present on the surface, it seems likely that this site was a Chancay mid-level administrative center, which may have also served as a node of exchange between the different groups who lived in the valley (Dillehay 1976; Topic and Topic 1983, 1985).

Overall, the survey data seems to coincide with the documentary data presented in Chapter 5. It is clear that there were several Chancay sites in Huanangue Valley that may have been founded through the mechanisms of diaspora, and that the Chancay settlers living in the valley engaged in exchange with local *chaupiyunginos*. Furthermore, the association of large agricultural fields with the Chancay site of Salitre suggests that the Chancay may also have been involved in the production of maize, fruits, coca and/or other middle valley products, which they may have traded with relatives living on the coast for shellfish and decorated ceramics. This falls in line with both the patterns described by Ipinze (2004) and those described by Rostworowski (1978) (see Chapter 5), and also corresponds with what one would expect to find if these sites were indeed part of a trade diaspora (see Chapter 2). There is also evidence for contact with northern groups, in the form of possible Chimu ceramics found on the surface of Cerro Blanco. The two most evocative sherds are both fragments of human figurines. Both are face fragments with diagnostic coffee bean eyes,

suggesting northern origin (see Figure 6.40). Clearly, this is not enough evidence to suggest that Cerro Blanco was the site of the *ayllu* “Mochic” documented in the 1586 census of



Blackware ceramics from Cerro Blanco - possible Chimu



Two anthropomorph fragments with coffee bean eyes

Figure 6.40: North coast style ceramics from Cerro Blanco

the Huaura Valley, but it does suggest that there was at least northern, possibly Chimu, influence in the valley, probably as the result of trade.

In addition to symbolic control of irrigation intakes, *chaupiyungino* groups also may have had special control over rituals and/or the scheduling of agricultural events. During survey, a possible ritual space was found about an hour’s walk up the *quebrada* from where the Casa Vieja petroglyph was recorded. This space consists of a large flat boulder set into the ground with several circular depressions scattered across its surface. The perimeter of this boulder is lined by smaller, flat flagstones, and it is adjacent to a tall, upright boulder (Figure 6.41). While the function of this complex is unclear, it seems likely that it had some sort of ritual purpose. The upright boulder casts a very clear shadow across the depressions on the flat boulder, opening up the possibility that this complex may have served as some type of solar calendar. Alternatively, we know from both ethnographic and ethnohistoric evidence that people would often take pieces from sacred boulders

or other landscape features and use them as talismans for good luck (Skar 1994), and it is possible that the depressions in the flat boulder were formed by people grinding out bits of the boulder to use for different ritual purposes. Though the majority of local people are unaware of the stone's existence, goat herders from Ihauri, who pasture their herds nearby, occasionally make offerings of cigarettes and chicha. If this feature was used as a solar calendar, then it is possible that the



Figure 6.41: Possible Solar Calendar at Casa Vieja

chaupiyunginos may have also controlled ritual knowledge related to solstice observation and agricultural seasonality. This control of ritual knowledge could also have served as a source of power for the *chaupiyunginos*.

In sum, based on differences in site plan, as well as the distribution of architectural and ceramic styles, survey data suggests that four different ethnic-like groups, including the Chancay, local *chaupiyunginos*, highlanders (possibly Atavillos), and one unknown group, likely inhabited

the Huanangue Valley during the Late Intermediate Period. These groups maintained symbolic and territorial boundaries, but interacted relatively peacefully and engaged in exchange. Based on the presence of extensive agricultural fields throughout the valley, these groups most likely engaged primarily in agriculture. However, the presence of a potential corral at Hebilla suggests that pastoralism may have been practiced as well, at least to a limited extent. A good deal of camelid bone was recovered during excavations at both Salitre and Campo Libre, which lends support to this possibility (see Chapter 7).

In spite of the large size of Cerro Blanco and the presence of public architecture at the site, it is unclear to what extent the Chancay exerted control over others living in the valley. Careful analysis of the relationship between site distribution and the landscape suggests that local *chaupiyunginos* may have had a better understanding of how to manage the inherent dangers of the landscape that they inhabited, and that their close proximity to irrigation intakes may have allowed them to claim symbolic control over water by threatening to divert water away from the main river channel during times of scarcity, thus interfering with the ability of people living downriver to access that water. This symbolic control could have served as a source of tactical power, suggesting that the *chaupiyunginos* may have been able to influence the settings of intergroup interaction. If this was the case, it likely would have had a profound impact on how entanglements developed between Chancay and *chaupiyungino* groups. Ethnohistoric evidence suggests that the Chancay's primary interest in the middle valley was gaining access to agricultural land. As Chancay sites were located downriver of *chaupiyungino* sites, they would have been dependent on the *chaupiyunginos* to manage water properly to ensure that enough water flowed downriver for their fields (see Figure 6.13). Chapter 7 will explore potential strategies, such as resource sharing, that the Chancay could have used to convince the *chaupiyunginos* to share this

important resource. In addition, it also appears that highland influence was limited to the very upper extent of the survey region. It is unclear why highland groups were unwilling or unable to move further into the valley, but it is possible that whatever type of alliance existed between the Chancay and *chaupiyunginos* may have prevented further highland encroachment.

Chapter VII

Investigating the Mechanisms behind Entanglements: Tactical Power, Shellfish and Feasting at Campo Libre and Salitre

Economic entanglements between groups have helped shape the dynamics of the economic, political, and cultural systems that develop in many regions. Though there is potential for studying these themes in the Andes, Andeanists have only recently begun to focus on them. Studying the interplay between groups is important to understanding the development of regional political landscapes, particularly during the Late Intermediate Period. The two previous chapters examined both documentary and archaeological survey data for the Huaura drainage and hypothesized that the coastal Chancay moved into the Huanangue Valley during the Late Intermediate Period via trade diaspora, niche-filling, and/or resource sharing, or some combination of these things. These datasets further suggest that the *chaupiyunginos* may have used their proximity to irrigation intakes to pressure the downstream living Chancay to negotiate for access to water. The shellfish fragments and Chancay black-on-white sherds encountered on the surface of many late sites also suggests that the Chancay engaged in exchange with highland and local *chaupiyungino* groups in the Huanangue Valley. This chapter presents data from the excavations at Campo Libre and Salitre in order to build on these observations, with the aim of using the recovered information to verify the chronological and cultural assignments made during survey and to test models of interaction that were developed through ethnohistoric and archaeological survey work. Specifically, the data from excavation will be used to better understand how and why the Chancay came into the Huanangue Valley as well as to determine possible ways through which entanglements may have developed between the Chancay and *chaupiyunginos*.

This chapter uses excavation data to argue that the Chancay spread into the Huanangue Valley in order to gain access to agricultural land for producing maize and other highly valued crops. However, since the local *chaupiyunginos* used their proximity to the irrigation intakes to threaten control of water, the Chancay likely would have had to negotiate for access to this resource. As a result, this chapter hypothesizes that the presence of Chancay diaspora communities in the valley lead to the development of economic entanglements between the local *chaupiyunginos* and the Chancay as the Chancay gave shellfish and other maritime goods to the *chaupiyunginos* in exchange for continued access to irrigation water.

Campo Libre and Salitre were chosen for excavation due to their relatively small size, their location in the middle valley, their associations with large agricultural field systems, and the fact that they were fairly well preserved. The goals of excavation were to 1) verify chronological and cultural affiliations at the sites, 2) take soil samples from agricultural terraces in order to determine what crops were grown, 3) gain an understanding of interaction between local *chaupiyunginos* and the Chancay in the Huanangue Valley, 4) gain a better understanding of the relationships between local Huanangue Valley groups and groups living in the lower Huaura drainage and/or in other distance areas.

These data are important for a number of reasons. First, as archaeological sites were often reused in the past, it is always possible that late ceramics may be present on the surface of an early site. Thus, chronological assessments made during survey must be verified through excavations. Second, documentary data shows that several very important plant species, such as maize and coca, were cultivated in the *chaupiyunga* zone, and preliminary work at lower valley sites in the Huaura Valley shows that cultigens were regularly traded between the different ecozones in the drainage (Nelson and Bellido 2010). As such, determining where different crops were being grown, who

was growing them, and where/who they were being traded to, is important to understanding the economic and political relationships that existed between different groups in the valley. Thus, soil samples were collected and subject to pollen, starch grain, and phytolith analysis in order to determine what crops were grown where. Finally, excavation in domestic structures can provide insight into the types of interaction that occurred in the valley, what the outcomes of these interaction were, how this changed over time, and how interaction and its outcomes impacted local identities at the site level. Altogether, these data will complement the documentary and survey data presented previously and elucidate how and why entanglements developed between the Chancay and local *chaupiyunginos*.

Campo Libre: A Multicomponent *Chaupiyungino* Site with access to Agricultural Fields, Storage and Irrigation Intakes

Campo Libre is a medium sized, multi-component settlement consisting of four sectors that cover a total area of about 13 ha and that is located on the north side of the Huanangue River, approximately 16 km away from the confluence of the Huanangue and Huaura rivers. The site is located at approximately 1500 meters above sea level (Figure 7.1). Sectors were divided based on numerous criteria including location, differences in architecture, and difference in surmised function. The original size of the site may have been much larger, as local collaborators said that they removed a cemetery from the mouth of the Huayojirca Quebrada several years earlier and buried wall fragments can be observed around the perimeter of the modern town of Acotama.

Sectors A and B were both residential in nature but differ in terms of architecture. They are located on top of a low spur, overlooking the river (see Figure 7.2). Sector A is located on the northern part of the spur and consists of several rectangular, stone walled structures which are spread over an area of approximately one hectare. The walls are constructed of double faced masonry with a

mud fill, and the field stones that were used were roughly shaped and smoothed. Structures were formed using three walls: one long wall that curves to form two adjacent sides,

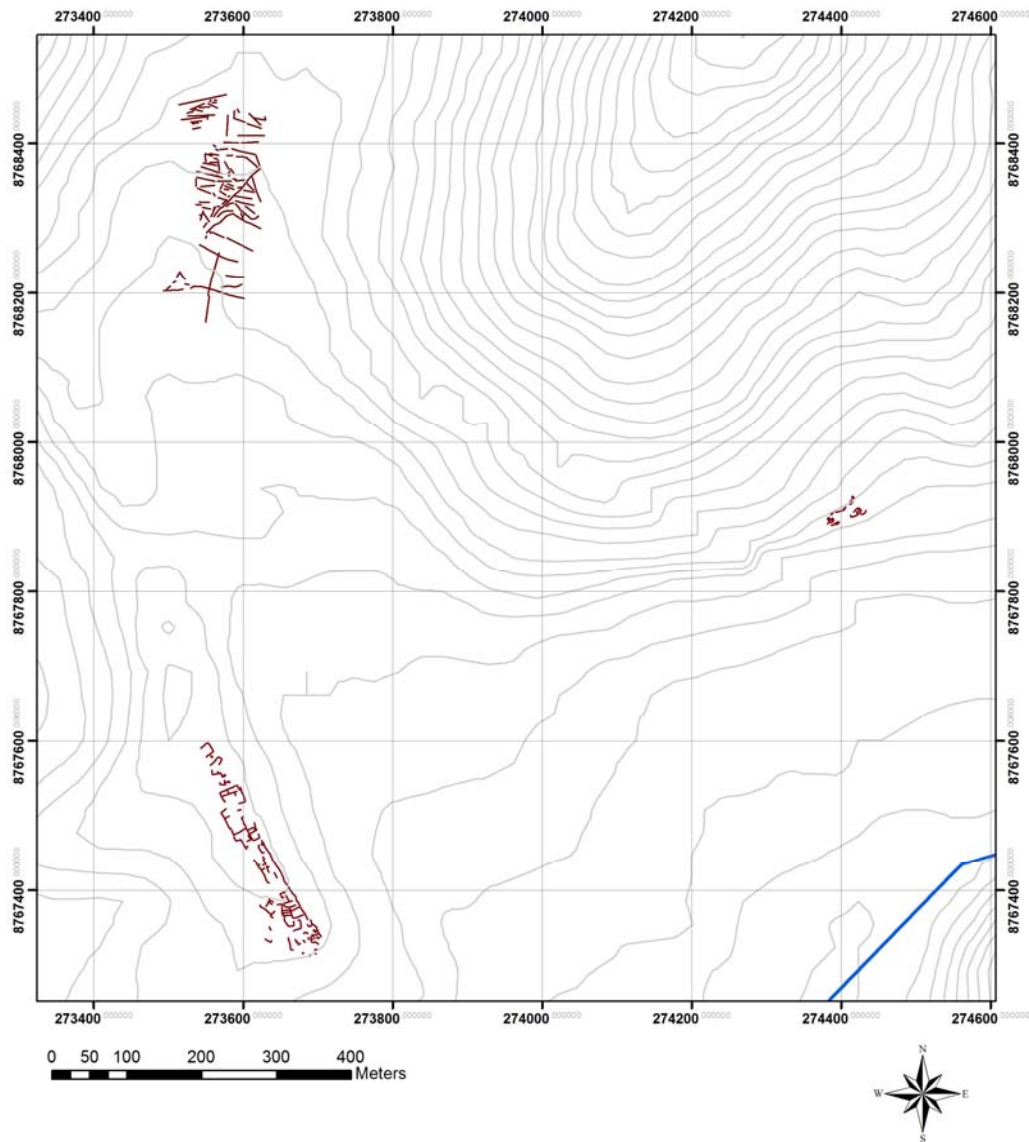


Figure 7.1: Campo Libre Sectors A-D

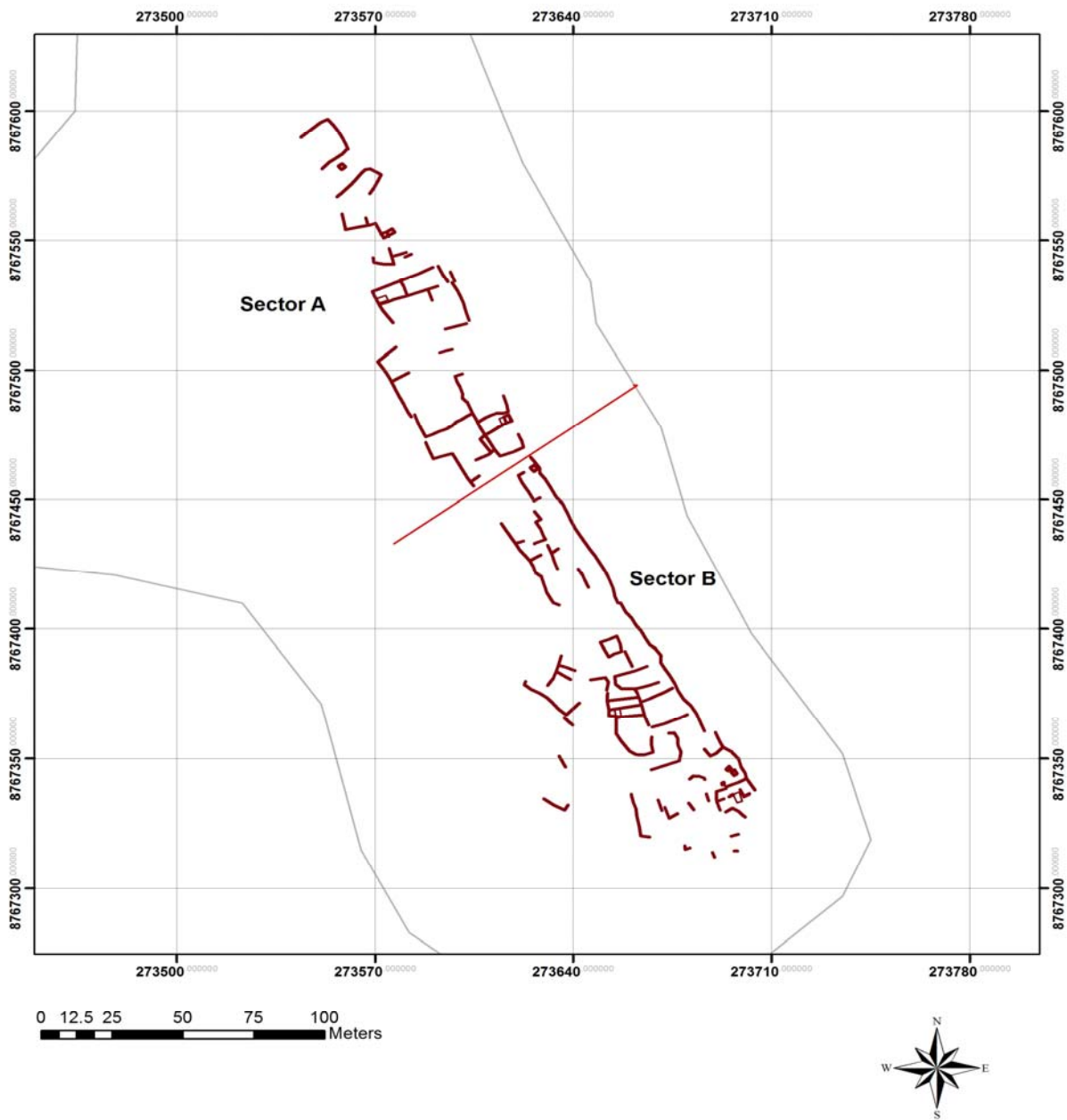


Figure 7.2: Map of the Sectors A and B at Campo Libre illustrating site placement and architecture.

and two smaller walls that join to close off the rest of the structure. While the corners formed by the shorter walls are roughly square, none of the corners of any structures form true 90 degree angles. Towards the southern half of the sector, there is a small rectangular plaza that is enclosed on the long sides by low mud walls. It is unclear if these are adobe walls, or if these are the mud cores of walls that had their facade removed. Sector A continues south of the plaza. The middle part of the southernmost section of Sector A is heavily looted and several weathered human bones are scattered on the surface, suggesting that this area may have served as a cemetery.

Sector B is contiguous with Sector A but can be distinguished from it by a marked change in architecture (see Figure 7.3). This sector occupies the very southern end of the spur and consists of several rectangular stone compounds spread over an area of approximately two hectares. The walls are composed of small, angular, loosely piled fieldstones. While these walls are mostly collapsed, there is not enough wall collapse present to suggest they were any more than a meter or so high. As such, these walls probably served as foundations for perishable structures constructed



Figure 7.3: Examples of Architecture from Sectors A and B at Campo Libre: note the difference in construction – walls in Sector A are constructed with shaped field stone whereas those in Sector B and made with loosely piled, unmodified stone

of *quincha* (cane and mud), or a similar material. At the southern end of Sector B, there is a large, naturally rectangular boulder. Its surface is marked with several man-made pockmarks and small depressions (see Figure 7.4). According to ethnographers, Andean people will remove *illa* (talisman) from larger sacred boulders for luck and protection (Skar 1994:68). Therefore, the fact that small pieces of stone were removed from this large rock suggests it may have had some kind of ritual importance.



Possible ritual space in Sector B of Campo Libre



Detail showing man-made divots on top of natural boulder

Figure 7.4: Possible ritual boulder at Sector B, Campo Libre – the depressions in the photo in the right may have been formed through some form of ritual practice such as the making of *illa*.



Overview of Sector C at Campo Libre



Sector C at Campo Libre



Sector C at Campo Libre

Figure 7.5: Photos of Sector C at Campo Libre

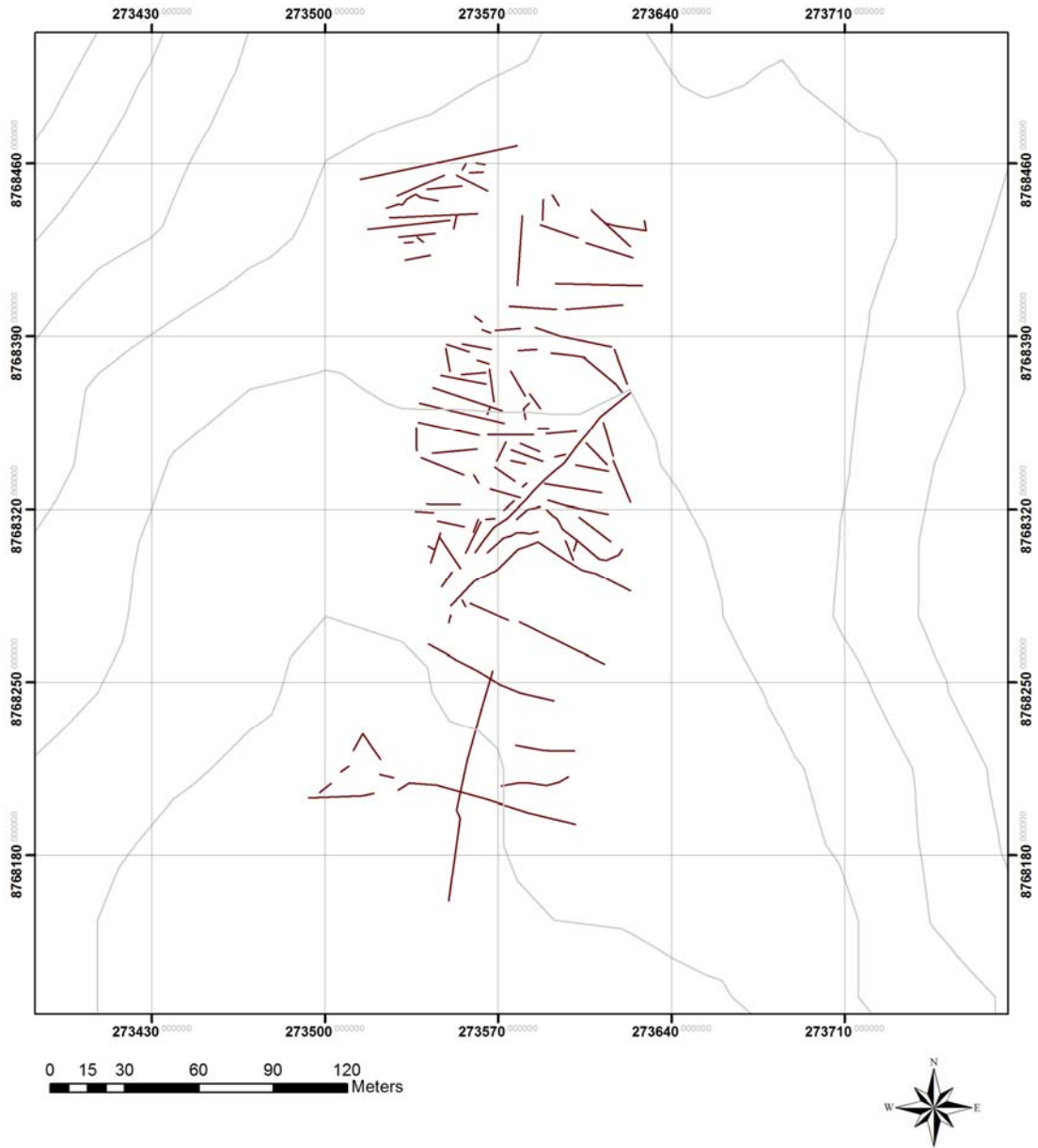


Figure 7.5a: Map of Sector C at Campo Libre

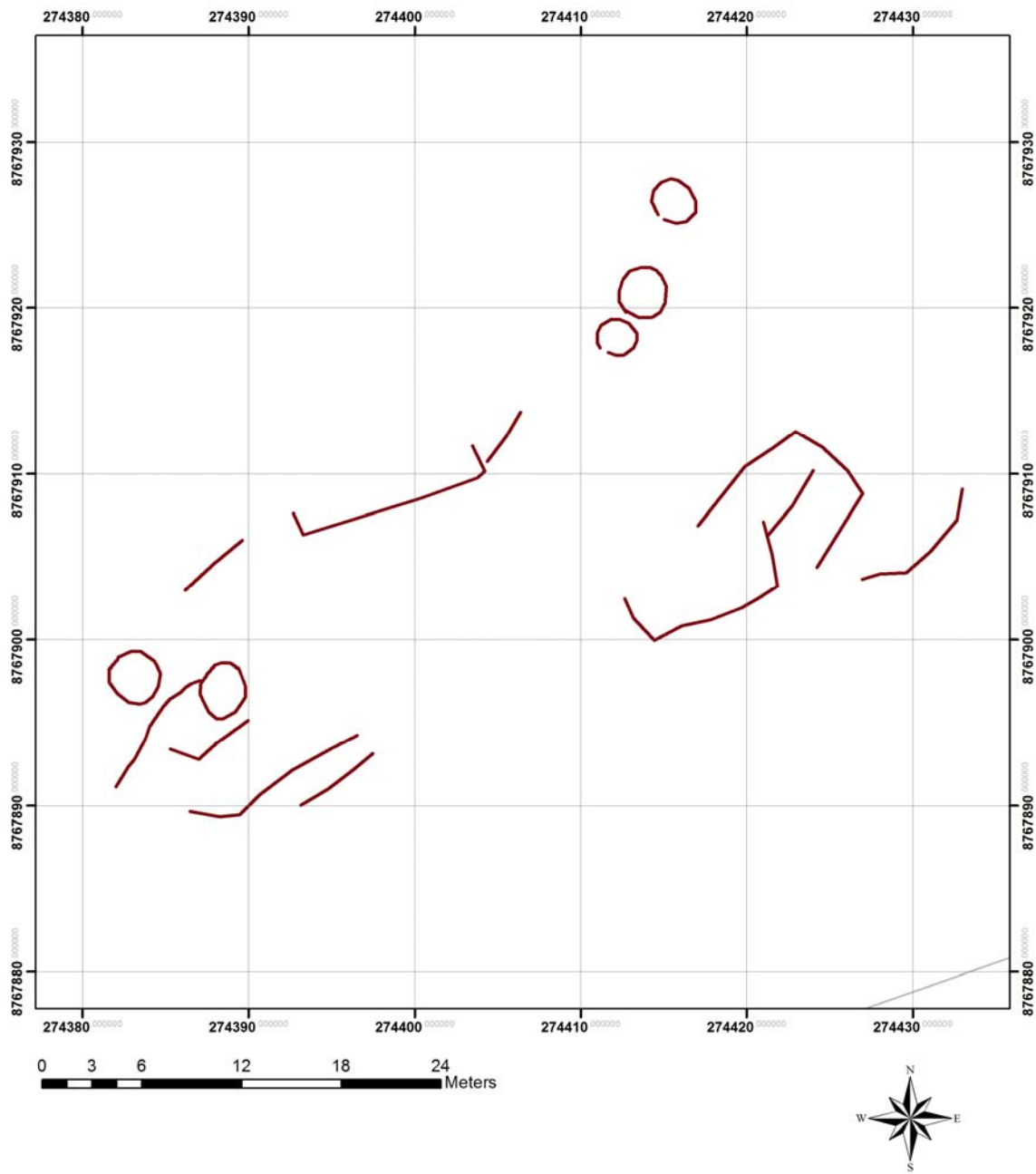


Figure 7.6: Map of Sector D at Campo Libre, showing storage structures and possible drying platforms

Sector C is located on an alluvial terrace in Quebrada Huayojirca, just to the northeast of sectors A and B. It consists of a series of narrow *andenes*, or agricultural fields, separated by low stone walls, and covers an area of approximately 9 hectares. These walls are constructed of unmodified field stones and are only 2-3 courses high, and also include the natural boulders that dot the landscape. The lower sections of these fields are being re-purposed by members of the local community who plan on growing avocado and *cherimoya* there, and the wall sections that remain in the fields have been damaged by alluvial processes. Very few ceramics were recovered on the surface, which included a small number of Chancay black-on-white sherds. There is a modern road which connects Sector C to Sector A which takes approximately 15 minutes to walk. Sector C is also visible from the northern part of Sector A.

Sector D is located on a hill slope to the east of sectors A, B, and C. This sector consists of 5 small, circular stone structures which are associated with a number of small rectangular platforms and covers an area of approximately 0.2 hectares. The surface is fairly clean, though a thin scatter of ceramic sherds was present. These circular structures possibly were used for storage, and the platforms may have served as drying areas for agricultural produce. This sector is connected to Sectors A and B via a path that takes approximately 15 minutes to walk. There is no intervisibility between Sector D and the other sectors at the site. Late period ceramics were recovered from all four sectors suggesting that they were probably occupied contemporaneously. Taken together, these sectors show that Campo Libre was a complex site where both residential and agricultural activities took place. The close proximity and intervisibility between Sectors A, B and C suggests that the people living at Campo Libre were able to monitor access to the agricultural fields in Sector C. As was discussed in Chapter 6, the irrigation intake is also visible from Sectors A and B. As such, the residential portion of Campo Libre may have been strategically

positioned to monitor access to water as well as to agricultural space. Though Sector D is somewhat separate from the rest of the site this sector is a short and easy walk from both Sector C (about 30 minutes) and from Sectors A and B (about 15 minutes), so it would have been a convenient place to dry and store agricultural produce.



Figure 7.7: Architecture from Sector D at Campo Libre

Campo Libre Excavations: 3000 Years of Occupation with Increasing Shellfish

Campo Libre was chosen for excavation because it was the largest and best preserved of the *chaupiyungino* sites. Furthermore, its proximity to the irrigation intake suggest that the people living at this site would have been able to monitor its use. Finally, Campo Libre was only about 2 km from Salitre, which makes it likely that people from these sites could have interacted with each other on a regular basis. In order to gain better insight into how the people at Campo Libre engaged with other groups living in the valley and with the larger regional political and economic networks, excavations units were placed in residential buildings, agricultural fields, and storage structures. By testing multiple structures, excavators hoped to identify what crops were being grown and processed at the site and to better understand how local *chaupiyunginos* engaged with their Chancay and highland neighbors. Residential structures in both Sectors A and B were excavated in order to determine the reasons behind the architectural differences between these sectors. In total, two units measuring two by three meters were placed in Sector A, and two units of the same

size were placed in Sector B. Two more units measuring one by one meter were located in Sector C and four one by one meter units were excavated in Sector D for a total of 10 units. Units were scattered across the site in order to reduce possible sampling bias, but it could not be eliminated completely. Excavations were placed in structures that were well preserved in order to maximize the amount of data that could be recovered while minimizing the time and number of resources needed to extract that data. However, as elite structures tend to be better constructed and thus better preserved than non-elite structures, the resulting database may over represent materials associated with elite lifestyles. In addition, since the structures that were excavated were kept relatively clean and it appears that midden was disposed of offsite, the range and number of artifacts recovered may have been suppressed.

Table 7.1: Artifacts from Campo Libre

	Ceramics (counts)	Botanics	Funal (counts)	Marine (weight)	Lithics	Other (weights)
Unit 1	undiagnostic redware					
Unit 2	undiagnostic redware					
Unit 3	Linear burnished redware (115), Chancay B/W (1), Chancay Yellow (1), blackware (2)	maize	camelid (77), cuy (19), vizcacha (3)	marine shell (186 g)	unmodified flakes, quartz projectile point	circular stone beads, antarra fragments (7)
Unit 4	Linear burnished redware (53), Chancay Yellow (1)	cotton, beans, lucuma	camelid (14), cuy (2), deer (1)	marine shell (138 g)	unmodified flakes, quartz projectile point, quartz blank, quartz debitage	spindol whorl (3), antara fragment (1)
Unit 5	Linear burnished redware (52), Chancay B/W (9), Chancay Yellow (3)			marine shell (69 g)	unmodified flakes	human burial with: quartz flakes, stone bead, clay owl beads (3), wooden pin
Unit 6	Linear burnished redware (66), Chancay B/W (1), Chancay Yellow (1)		camelid (1)		unmodified flakes, quartz flakes	
Unit 7	Linear burnished redware (10)	maize		marine shell (9 g)		
Unit 8	Linear burnished redware (3), Chancay Yellow (1)	maize		marine shell (3 g)		
Unit 9	Linear burnished redware (21), Chancay B/W (1), Chancay Yellow (2), Cajamarca cursive (1)			marine shell (4 g)	unmodified flakes	
Unit 10	Linear burnished redware (14), Chancay B/W (1), Chancay Yellow (2),				unmodified flakes	

Unit 3: Uncovering Chaupiyungino Construction Techniques and Reliance on Maize

Unit 3 was a two by three meter unit placed in a stone walled room on the eastern edge of the site, towards the southern end of Sector A. Excavation in this structure provided clear insight into *chaupiyungino* construction techniques and also revealed a surprising amount of burned maize throughout the construction sequence, even though no midden deposits were identified. This may mean that maize production may have been important to the site's economy. Charcoal from the one floor recovered during excavation dated to cal 135 BCE (D-AMS 004334), suggesting that this structure was first built and used during the Early Horizon/Early Intermediate Period transition. However late ceramics were recovered in upper strata, thus this structure may have been re-used during the Late Intermediate Period. The south side of the unit was flush against the south wall of the structure, and the east side of the unit was flush against the east wall. A third wall, running roughly north-south, divided the unit in half. As such, the unit was divided into two loci, locus 5 (eastern half of the unit) and locus 4 (western half of the unit). During the excavation of locus 5, a fourth wall that ran along the north profile was discovered that abutted the wall that divided the unit, but did not continue into locus 4. As such, locus 5 was entirely contained within a small room on the eastern side of the structure, however, no doorway (or any other kind of entrance) for this room was found. The upper layers of this locus were disturbed from light looting and consisted of a mix of windblown sediments, fill from the abandonment of the structure, and back dirt from the looting of nearby structures. In this fill, we found a few loose human bones, including some teeth (molars and premolars) as well as a few loose hand phalanges. A quartz projectile point (see Figure 7.8) and a few small circular stone beads were also recovered.

Below the layers of fill in locus 5, a badly damaged floor was uncovered which touched all four walls, and was thus contemporary with their use. The floor was very thin (2-3 cm) and made of highly compacted, fine silt and clay sediments. Three small lenses of fine black ash were found just over the surface of the floor, and toward the middle of the floor a fragment of camelid pelvis was found next to several burned bowl fragments (see Figure 7.9). The rest of the floor surface was clean and no diagnostic ceramics were associated with it.

Just below the floor excavators encountered a thin layer of small, angular stones that served as a sort of cushion between the floor and the construction fill below. While excavating the construction fill, we came across a thin and highly uneven use surface composed of compacted fine sediments. The most interesting thing about this surface was the preservation of two footprints and a few rectangular impressions made by what appears to have been a stave, and which may have been used to compact the construction fill. It appears that, in an attempt to create a stable and level surface for building, the *chaupiyunginos* poured fine sediment and water over the rocks and then tamped everything down to compact it. According to local collaborators, this is a common method that is used in order to create a stable base for construction. A wide variety of artifacts were found during the excavation of this locus including camelid and cuy bone, burned maize



Figure 7.8: Quartz projectile point recovered from the upper levels of Unit 3 at Campo Libre

fragments (both kernels and cobs), and unmodified stone flakes (see Table 6.1) Unfortunately, locus 4 was very disturbed, both due to looting and due to water damage. As such, we were not able to recover any floors or use surfaces. The most interesting find from locus 4, however, was a deep lens of ash mixed with carbonized maize. There is no evidence that the maize was burned *situ* as the borders of the lens were poorly defined and the adjoining sediments showed no evidence of heat alteration. While the meaning of this deposit is unclear, it suggests that maize processing was an important part of the economic activities that took place at the site. In fact, with the exception of one unidentified legume fragment, maize was the only plant identified in this unit. The majority of ceramics recovered during excavation were domestic redwares with a linear burnishing surface treatment. Though a similar style has been described for the Formative Period, redware ceramics with this type of burnishing are also very common at other late sites in the Huaura Valley (Dunn 2014). One Chancay black on white sherd and one possible fragment of Chimú polished blackware and approximately 20 grams of shellfish were recovered from the upper strata of the locus, as well.



Ash lens on top of floor,
Locus 5, Unit 3, Campo Libre



Camelid pelvis at base of ash lens
Locus 5, Unit 3, Campo Libre

Figure 7.9: Ash lens and camelid pelvis associated with floor in Locus 5, Unit 3 at Campo Libre

In sum, excavations at this unit suggest that there were two periods of occupation at Campo Libre, one during the Early Intermediate Period/Early Horizon transition and the other during the Late Intermediate Period. While an analysis of artifacts from this unit suggested little change over time in the material standards of living as similar amounts of maize and animal bone were found in early and late contexts. The exception to this was shellfish – which were found in greater quantities in late contexts, suggesting that access to this good may have increased. In addition, the

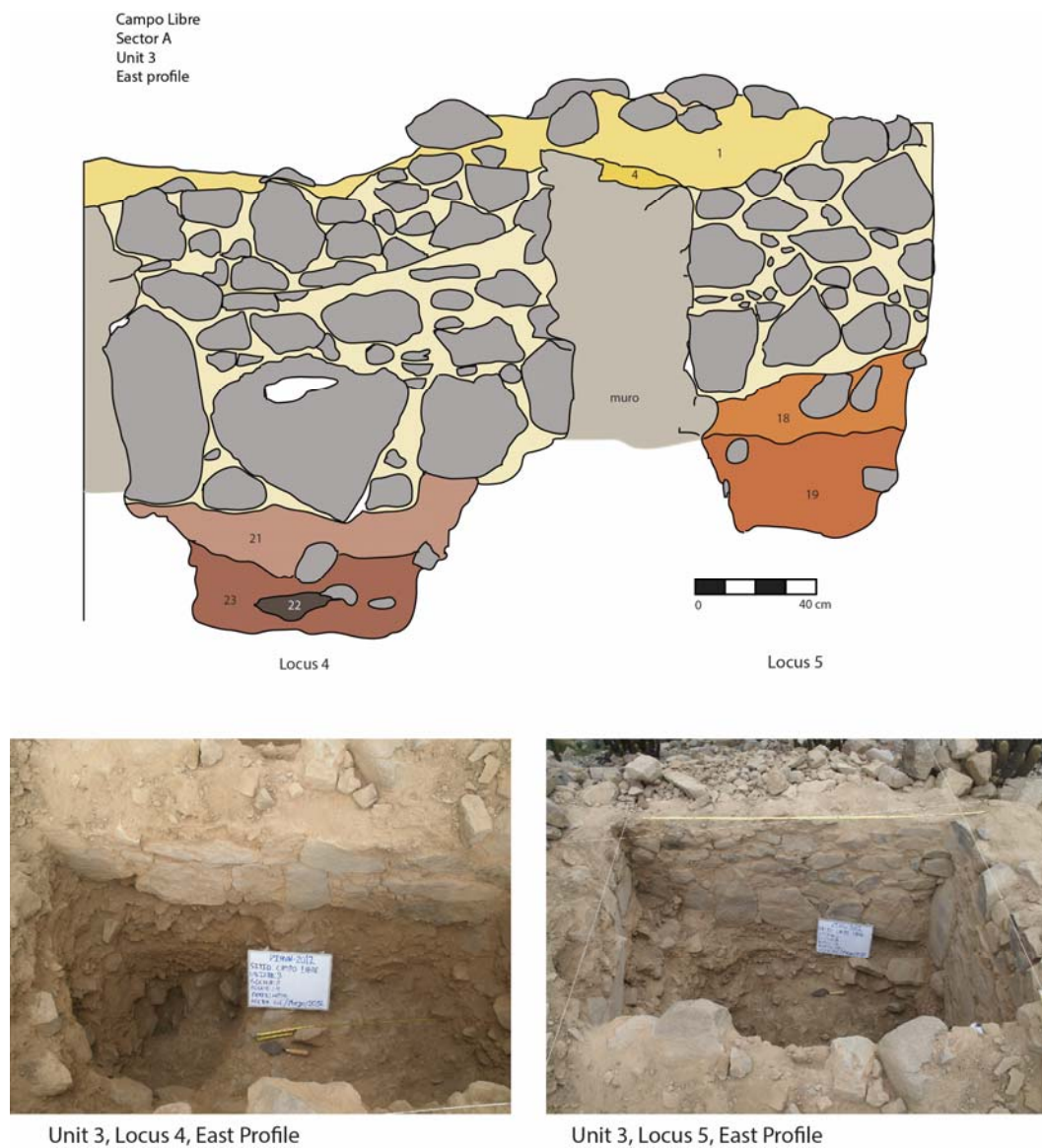


Figure 7.10: East Profile of Unit 3 at Campo Libre. The profile drawing shows the relationship between the north-south running wall which divided the unit and the east wall which ran the length of the unit. The north-south wall abuts the east wall and is a later addition.

prevalence of burned maize kernels throughout the stratigraphic sequence suggests the maize production was an important factor of *chaupiyungino* economy.

Unit 4: Further Evidence for increased Shellfish Consumption during the Late Intermediate Period

Unit 4 was a two by three meter unit placed inside a stone walled room in the northwestern part of Sector A. This unit had evidence for an Early Intermediate Period occupation dating to about 120 cal BCE (D-AMS 004333) and evidence for a second, Late Intermediate Period occupation dating to 1100 cal CE (D-AMS 005108). These two occupation layers were separated about 20 cm of sterile, natural fill, and while the Late Intermediate Period was associated with the wall, the earlier occupation was found about 15 cm below its base. There was also evidence for a clear increase in the consumption of shellfish between the early to the late occupation. The south side of the unit was flush against the south wall of the structure and the west side of the unit was flush against the west wall. The south wall is constructed of roughly shaped fieldstones that were set together with mud mortar. The stones at the base of the wall are significantly larger than those used for higher courses (see Figure 7.11).



Figure 7.11: South wall of Unit 4 at Campo Libre showing architectural detail. Notice the size of the stones used for the base of the wall.

Throughout the late sequence, several small intrusive pits were dug into fill strata and then filled with burned trash that was significantly different in composition to the surrounding matrix. In most cases only ash and charcoal fragments were recovered from these pits, however, a few burnt *Phaseolus vulgaris* (common bean) remains were recovered. A number of artifacts were associated with the later occupation of the structure, including camelid and cuy bone, one possible deer mandible fragment, carbonized *Phaseolus vulgaris* (common bean) and *Pouteria lucuma* (*lucuma*) remains. The ceramics associated with this occupation are more restricted than those associated with Unit 3. The ceramic assemblage is primarily composed of plain redwares with linear burnishing, though one Chancay yellow fragment was recovered. Significantly more shellfish remains were recovered from this occupation (26 grams) in comparison to the early occupation (16 grams). Also of note was evidence for the production of projectile points which excavators recovered from the late fill (see Figure 7.12). This evidence includes a blank, a partially



Figure 7.12: Quartz Artifacts from Lote 8, Unit 4 at Campo Libre. From left to right these represent a fully form point, a roughly shaped blank, an unmodified quartz nodule, and two flakes of debitage. All pieces were found in the same stratigraphic layer and, together, suggest that the production of quartz artifacts may have occurred on site.

formed point, a completed point, and a few flakes of detritus. All of the quartz was found in the same stratigraphic layer, however, as this was a layer of secondary fill, it is premature to say that this structure was the location of a quartz workshop, though it does seem likely that quartz was being worked somewhere on the site.

Campo Libre
Sector A
Unit 4
Northeast Profile

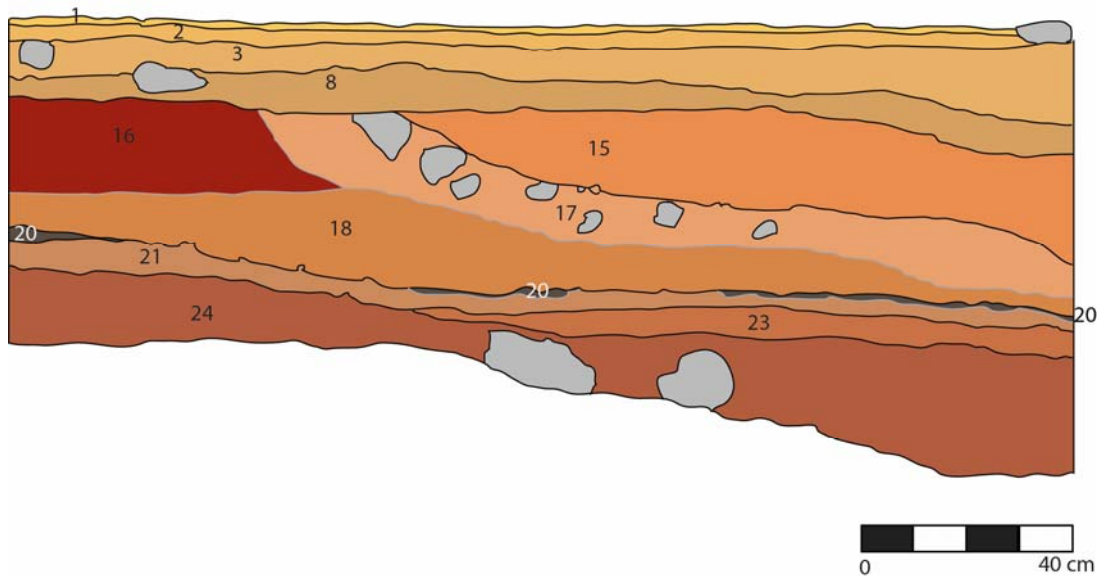


Figure 7.13: Northeast Profile of Unit 4 at Campo Libre showing the Late Intermediate Period Occupation layer (No. 8 on the drawing), the layer of sterile fill separating the early and late occupations (No. 18) and the early occupation (layer 20).

According to local informants, there is an easily accessible quartz source located in the Quebrada Locmuro, approximately 3 km from the site. Unmodified stone flakes were recovered as well (see Table 6.1).

The earlier occupation was found under a 20 cm thick layer of culturally sterile, natural fill, which suggests that there may have been a long occupational hiatus at the site (See Figure 7.13). This occupational layer consists of a thin cultural deposit with ash lenses, the mandible of a juvenile camelid, and a handful of non-diagnostic ceramic sherds. Charcoal collected from one of these ash lenses dates to 120 cal BCE which falls in the transitional period between the Early Horizon and Early Intermediate Periods. Since the evidence for this early occupation was found well below the bases of the walls of the excavated structure, it is possible that it was associated with architectural elements that are no longer present on the surface, either because they are buried or because they have been destroyed through human and/or natural processes.

In summary, excavations in Unit 4 confirmed the findings from Unit 3; that Campo Libre had both an early and a late occupation and that the consumption of shellfish increased between these two periods. Apart from this apparent change in shellfish consumption, there was very little observable change in the material cultural remains between the two periods. The importance of quartz point production at the site is unclear, though it is possible that these items were used for exchange or perhaps had ritual significance.

Unit 5: Site Expansion during the Late Intermediate Period

Unit 5 was a two by three meter unit located in the northwest corner of a rectangular structure in Sector B. The unit was placed so that its north side was flush against the north wall of the structure and the west side was flush against the west wall. While an attempt was made to reveal the facades of these walls by clearing away surface rubble, this proved impossible as the

structure was too unstable. The high concentration of Late Intermediate Period ceramics in this unit suggests that this structure was occupied during this time period. Unit 5 proved to be very shallow, with bedrock appearing at an average depth of 15 cm below the present ground surface. Excavations revealed a thin layer of secondary fill that contained primarily ceramics fragments and a negligible amount of domestic trash. The majority of ceramics were utilitarian red wares with linear burnishing, though nine Chancay black-on-white sherds and three Chancay yellow sherds were recovered, which represents approximately 80% of all Chancay sherds recovered at the site.

The most interesting feature of this excavation unit was a secondary burial that was uncovered during the excavation of lote 9 and that was located 15 cm below the base of the western wall. This burial was placed in a circular pit that was excavated into the bedrock and was extremely fragmented (Figure 7.14). Many bones were missing, and those that were present were positioned haphazardly, though the cranial vault seems to have been carefully placed at the west edge of the pit. The burial goods included a painted wooden pin, four clay owl beads, several small quartz flakes, shellfish remains, and a few ceramic burnt sherds (see Table 7.1). Charcoal from this



Campo Libre Unit 5 Lote 9 - top of burial pit



Skull fragments located beneath base of wall

Figure 7.14: Burial in Unit 5 at Campo Libre. The image to the left shows the outline of the burial pit and the image to the right shows skull fragments at the bottom of the pit

burial dated to 1730 cal BCE (D-AMS 004332). Since the burial was located about 15 cm below the foundation of the west wall, it predates construction in this sector.

The stratigraphic layers that were associated with the occupation of this structure did not yield enough organic material to date, however, the 12 Chancay sherds recovered from this unit suggest it was likely occupied during the Late Intermediate Period. In sum, the ephemeral nature of the walls for this unit and the thinness of the deposit suggest that either this structure had a very short occupation, or that it was used as a temporary shelter. Furthermore, since the burial was found well below the base of the wall, this structure likely had a single, late occupation, pointing to the possible expansion of Campo Libre during the Late Intermediate Period. In spite of the Chancay black-on-white ceramics, it is unlikely that this structure was actually occupied by the Chancay as no domestic Cayash ceramics and shellfish remains were few. Thus the Chancay

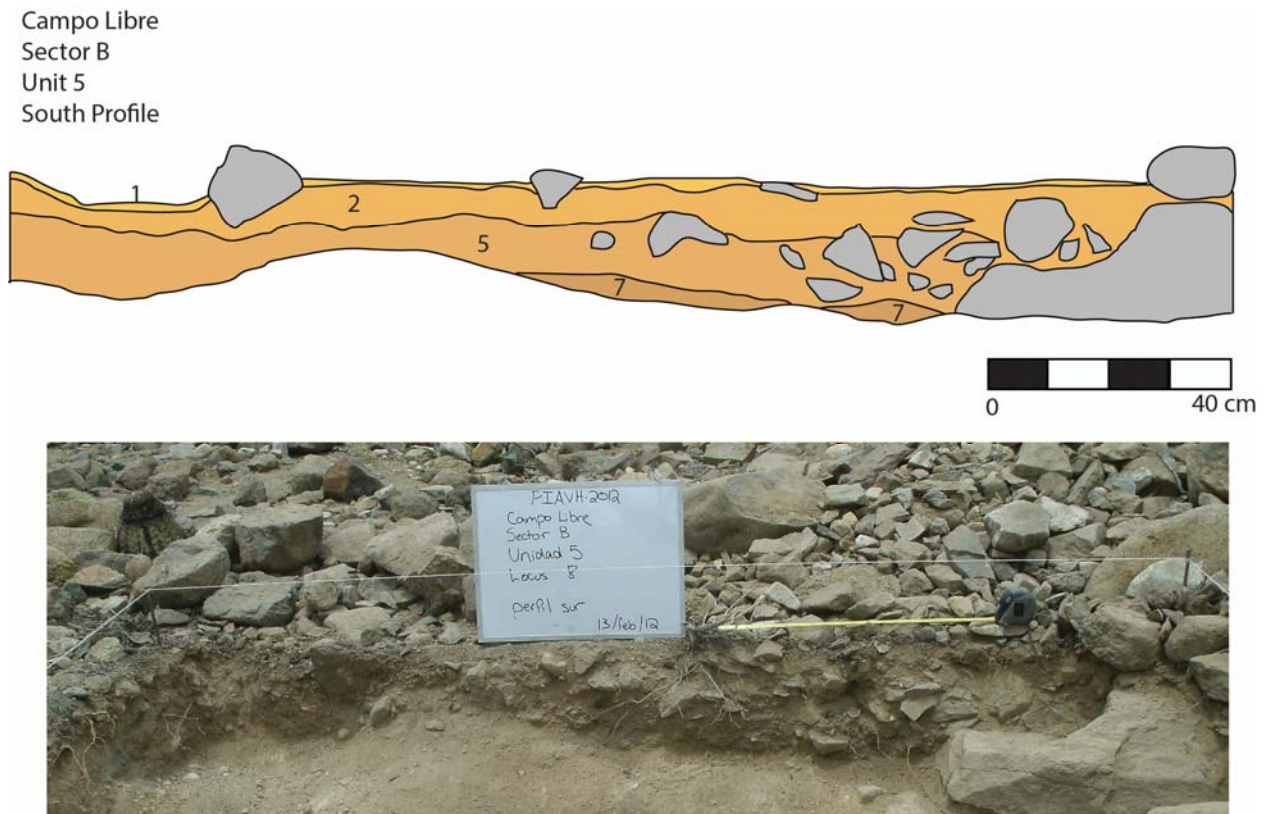


Figure 7.15: South Profile of Unit 5 at Campo Libre, illustrating thinness of deposit.

ceramics present in this unit probably arrived at the site through trade as opposed to co-residence or intermarriage.

Unit 6: More Evidence for a Late Intermediate Period Occupation and Shellfish Consumption

Unit 6 was located in a large, open rectangular structure that was subdivided into three low terraces. Data from excavation clearly shows that this structure was occupied during the Late Intermediate Period. There were a large number of ceramic sherds present on the surface of this area, so excavators placed a 2 by 3 meter excavation unit there, under the working hypothesis that this space may have been some type of workshop. Unfortunately, excavations showed that this wasn't the case. The only evidence of occupation was a 30 cm layer of secondary fill that contained 166 ceramic sherds. The majority of these sherds (approximately 66) were plain redwares with linear burnishing. One Chancay black-on-white and one Chancay yellow sherd were recovered, as well. While very few other artifacts were recovered, one camelid metacarpal fragment and three quartz fragments were documented (see Table 7.1). Charcoal taken from layer 5 (at a depth of about 20 cm) of this unit dated to 1440 cal CE (D-AMS 005106). 39 grams of shellfish remains were also recovered from this context, making it one of the richest shellfish deposits at the site. In summary, the excavation data from Unit 6 coincides with that from Unit 5 and adds support to the hypothesis that Sector B represents a Late Intermediate Period expansion of Campo Libre. In addition, the prevalence of shellfish remains in this unit also supports the hypothesis that the consumption of marine goods increased during the Late Intermediate Period.

Units 1 and 2: Testing Agricultural Fields

Units 1 and 2 were one by one meter test pits located in Sector C. Each unit was placed inside an agricultural terrace with one side of the unit flush against the upper terrace restraining wall. The goal of excavating in these areas was to take soil samples for pollen, phytolith and starch

grain analysis in order to determine what crops may have been grown by the *chaupiyunginos*. During the excavation of Unit 1, a wall fragment was found about 10 cm south of the north retaining wall that also formed the north side of the unit, suggesting that the terrace was remodeled at least once. No such feature was uncovered in Unit 2. A handful of small, worn ceramic fragments were found in the upper 15 cm of each unit, but no other cultural remains were recovered. Each unit was excavated to a depth of approximately 1 meter to ensure that sterile soil had been reached. Soil samples were taken for pollen, starch, and phytolith analysis every 10 cm.

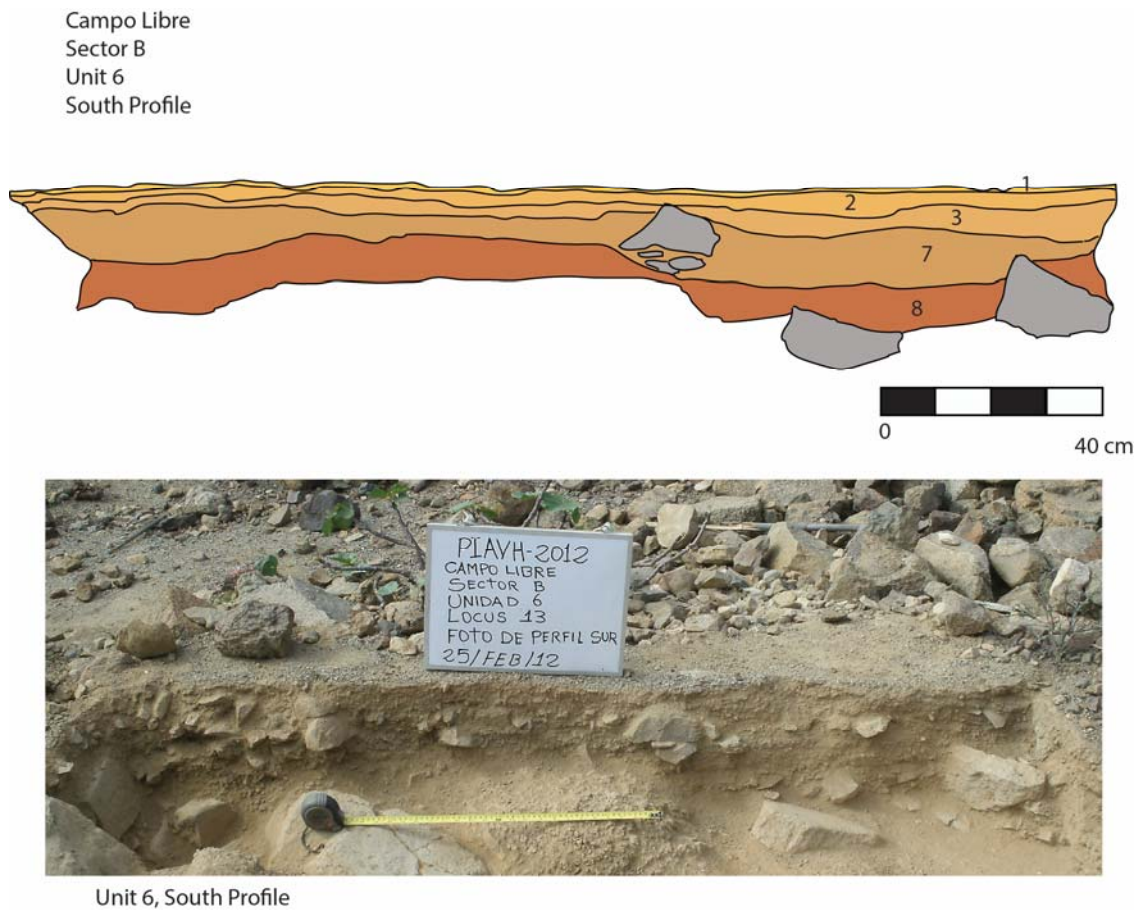


Figure 7.16: South Profile of Unit 6 at Campo Libre

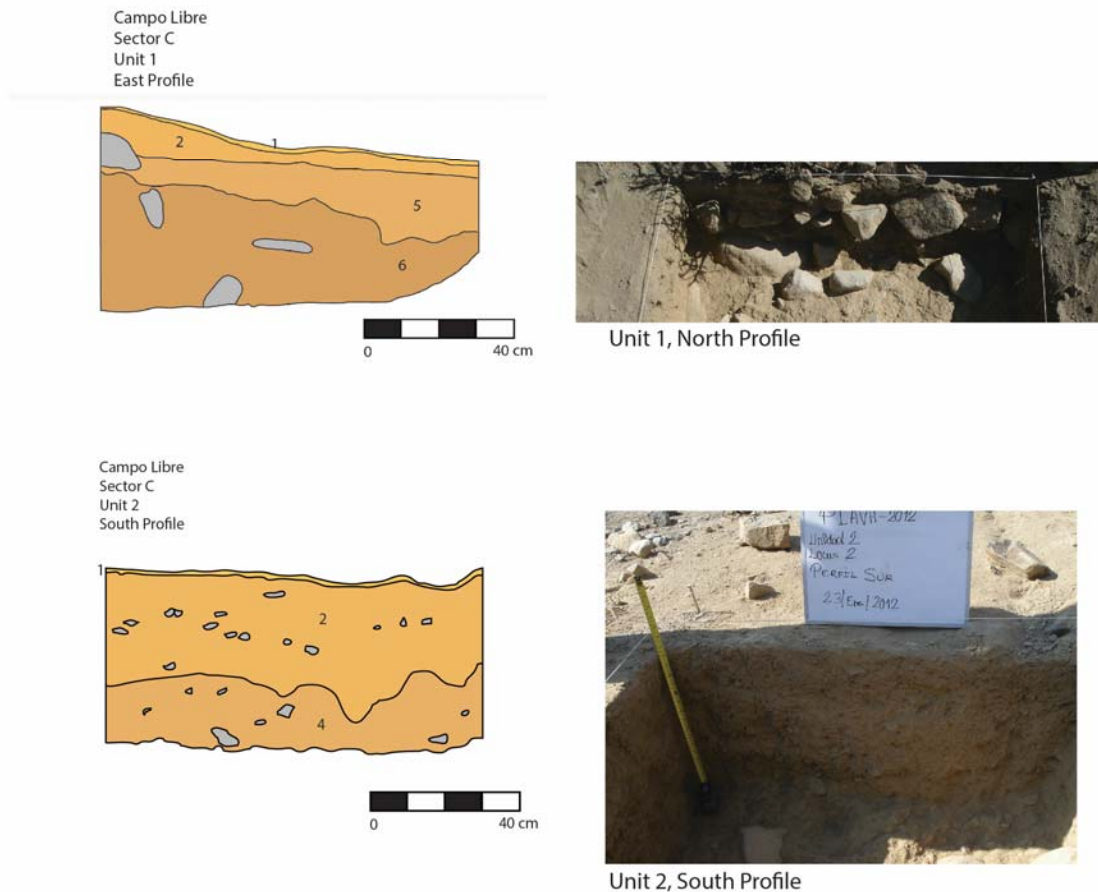


Figure 7.17: Profiles from Units 1 and 2 at Campo Libre – no cultural layers were recovered in either unit

Soil sample analysis found both maize pollen and phytoliths. No other cultivars were documented. This data, together with the presence of burned maize in residential structures strongly suggests that maize was one of the principle crops grown by the *chaupiyunginos*.

Units 7-10: Testing Storage Structures where Maize and Marine Goods may have been kept.

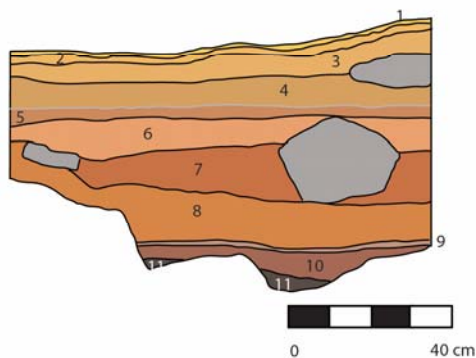
Four one by one meter units were excavated in Sector D, two in circular storage units (Units 7 and 9) and two in the associated rectangular platforms (Units 8 and 10) which were likely used to dry produce. The goal of excavation was to take soil samples in order to determine what types of goods were stored in these structures. Excavations in the storage units revealed a series of

alternating layers of loose, coarse, blue-gray gravel and semi-compacted, fine clay-like sediments. Few artifacts were recovered from these layers: primarily worn fragments of non-diagnostic ceramics, land snail shell fragments, and a few small fragments of animal bone. The base of each of these units consisted of burned trash containing mostly maize and maize cobs, though an unidentified *Fabaceae* (legume) pod was recovered from Unit 7 as well. The burning was performed in situ, as the underlying bedrock showed signs of heat alteration. Ethnoarchaeological accounts suggest that this type of burning could be performed to insure that all parasites and insect larva were killed. Starch grains from maize and beans were documented during soil sample analysis as were sponge spicules and diatoms. Sponge spicules are typically found in maritime contexts or associated with goods that have come from the sea, thus, their presence in the soil samples suggests that marine goods may have been stored in these structures, along with agricultural goods such as maize and beans.

Unit 9 was located in a rectangular platform associated with storage structure that Unit 7 was placed in. Excavations in this unit revealed several layers of secondary fill mixed with ceramics, as well as negligible amounts of domestic trash such as animal bone and shellfish remains. While the majority of ceramics recovered were local utilitarian redwares, one fragment of a Cajamarca cursive style plate was recovered. Unit 10 was placed in a rectangular platform just below the storage structure Unit 8 was placed in. This unit was considerably shallower than Unit 9, but a floor constructed of compacted, yellow, silty sediments was encountered approximately 5 cm below the current ground surface. Below this was a layer of secondary fill used to level the platform surface. This fill contained broken fragments of redware, utilitarian pottery and negligible amounts of domestic trash (see Table 7.1).

In sum, Sector D appears to have served as an area where agricultural products were dried and stored. The analysis of soil samples taken from the storage structures also shows that maize and beans were the predominate crop at the site, coinciding with data from the agricultural fields and residential units. In addition, it appears that marine goods may have been stored in these structures as well. Though access to these units was not restricted, the close spatial association with the residential sectors of Campo Libre, as well as the similarity in utilitarian ceramics between Sectors A/B and Sector D, suggests that these storage units were used and controlled by the *chaupiyunginos*. Furthermore, the presence of Cajamarca ceramics suggests that there was at least intermittent contact with groups in the northern Andes.

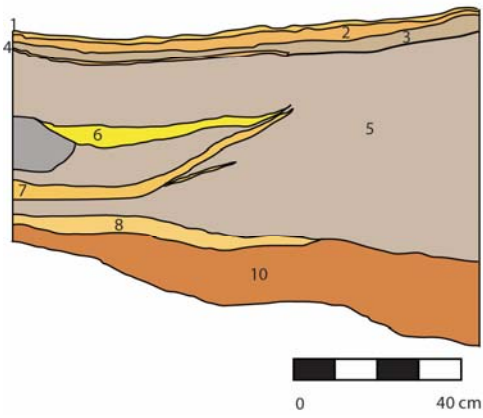
Campo Libre
Sector D
Unit 7
West Profile



Unit 7, West Profile

Figure 7.17a: West Profile of Unit 7 at Campo Libre showing alternative levels of gravel and compacted

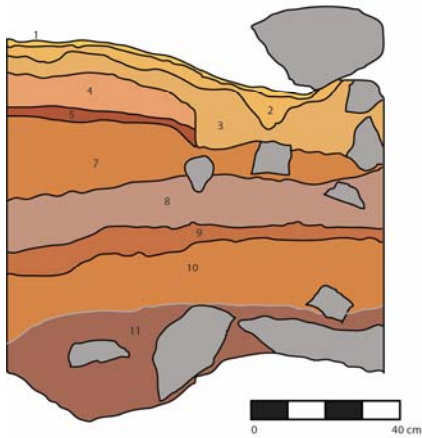
Campo Libre
Sector D
Unit 8
Southeast Profile



Unit 8, Southeast Profile

Figure 7.18: Southeast Profile of Unit 8 at Campo Libre showing semi-compacted clay layers (No. 6, 7, and 8) alternating with loose gravel (No. 5)

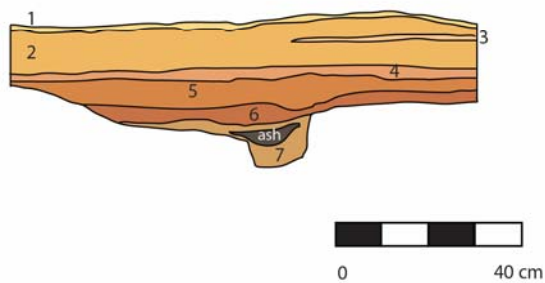
Campo Libre
Sector D
Unit 9
South Profile



Unit 9, South Profile

Figure 7.19: South Profile of Unit 9 at Campo Libre

Campo Libre
Sector D
Unit 10
West Profile



Unit 10, West Profile

Figure 7.20: West Profile of Unit 10 at Campo Libre showing possible use surface (No. 4 in the drawing)

Campo Libre Discussion: An early desire for shellfish and increasing consumption overtime

Excavation data from Campo Libre sheds light on the occupational history of the site. There is abundant evidence for the early use of Sector A, with lower level strata in these sectors dating from 135 cal BCE to 20 cal CE. Since one of these dates comes directly from the floor uncovered in Unit 3, it seems likely that this sector was built and used during the Early Horizon/ Early Intermediate Period transition. Sector A then seems to have been re-occupied and perhaps remodeled during the Late Intermediate Period as suggested by the late dates associated with the wall excavated in Unit 4. In contrast, though there was evidence for an Initial Period burial in Sector B, the architecture in there appears to date to the Late Intermediate Period, suggesting that this sector represents the expansion of Campo Libre during this time period. The number of Chancay black-on-white ceramics and shellfish remains also point to the possibility of contact between the Chancay newcomers from Salitre and local people living at Campo Libre.

Macro-botanic evidence from residential structures along with phytolith and starch grain analysis of samples from the agricultural fields and storage structures illustrate that maize and beans were likely the two predominate crops grown by the *chaupiyunginos* through the site's

occupation history. The presence of marine shells (see Figure 7.21) in the early deposits in Unit 3 suggests that interaction between coastal and middle valley groups had already been established during the Early Horizon/Early Intermediate Period transition, though this contact was perhaps limited to occasional exchange. This also illustrates that *chaupiyunga* desire for marine goods had a long time depth. Apart from the marine shells, there are no early coastal ceramics or other coastal artifacts that would suggest any type of coastal co-residence or colonization of the middle valley during this time. Excavations also showed that the consumption of marine goods increased dramatically during the Late Intermediate Period, with the quantity of shell nearly doubling during the Late Intermediate Period, there is also evidence for increasing contact with the Chancay and possible also with more distant Northern groups. For example, both coastal Chancay ceramics and local Chimu-style blackwares were recovered during excavation, albeit in limited numbers: 24 and 2 sherds out of 1008 respectively (see Table 7.1).



Figure 7.21: Example of a mollusk shell recovered from an early context from Unite 3 Campo Libre

In sum, excavations at Campo Libre illustrated a few key things. First, as discussed in Chapter 6, Campo Libre appears to have been strategically placed in such a way to monitor access to irrigation intakes, and their proximity to this resource may have been a source of tactical power for the *chaupiyunginos*. Second, contact with coastal groups was established quite early in the site's history as demonstrated by shellfish recovered in Early Horizon/Early Intermediate Period contexts. This suggests that the *chaupiyunga* desire for marine goods was an old one and that marine goods may have been a key factor in the development of entanglements as they could be easily inserted into local systems of value. Third, there is little evidence suggestive of that the *chapuiyunginos* were oppressed or exploited by the Chancay from Late Intermediate Period contexts. Rather, the comparison of early and late assemblages at the site suggest that *chaupiyungino* life styles remained more or less the same during the occupation of the site. If anything, life may have been slightly better after the Chancay entered the valley as evidence suggests that the site was expanded and access to marine goods increased at the same time (see Chapter 8 for further discussion). Thus, the increase in access to shellfish and lack of evidence for exploitation suggests that the *chaupiyunginos* engaged in trade and may have become entangled with the Chancay without becoming subjugated by them.

Salitre Excavations: Chancay Trade Diaspora in the Huanangue Valley

Salitre is a medium sized, multi-component site that covers a total of approximately 10 ha and is located at approximately 1350 masl. The multi-component settlement is located in a large quebrada of the same name and survey data suggested that this site was constructed and occupied by members of the Chancay community. This site was chosen for excavation because of its proximity to Campo Libre (see above) and because it was associated with the largest and best persevered agricultural field system in the valley. Salitre is divided into three sectors: A, B, and

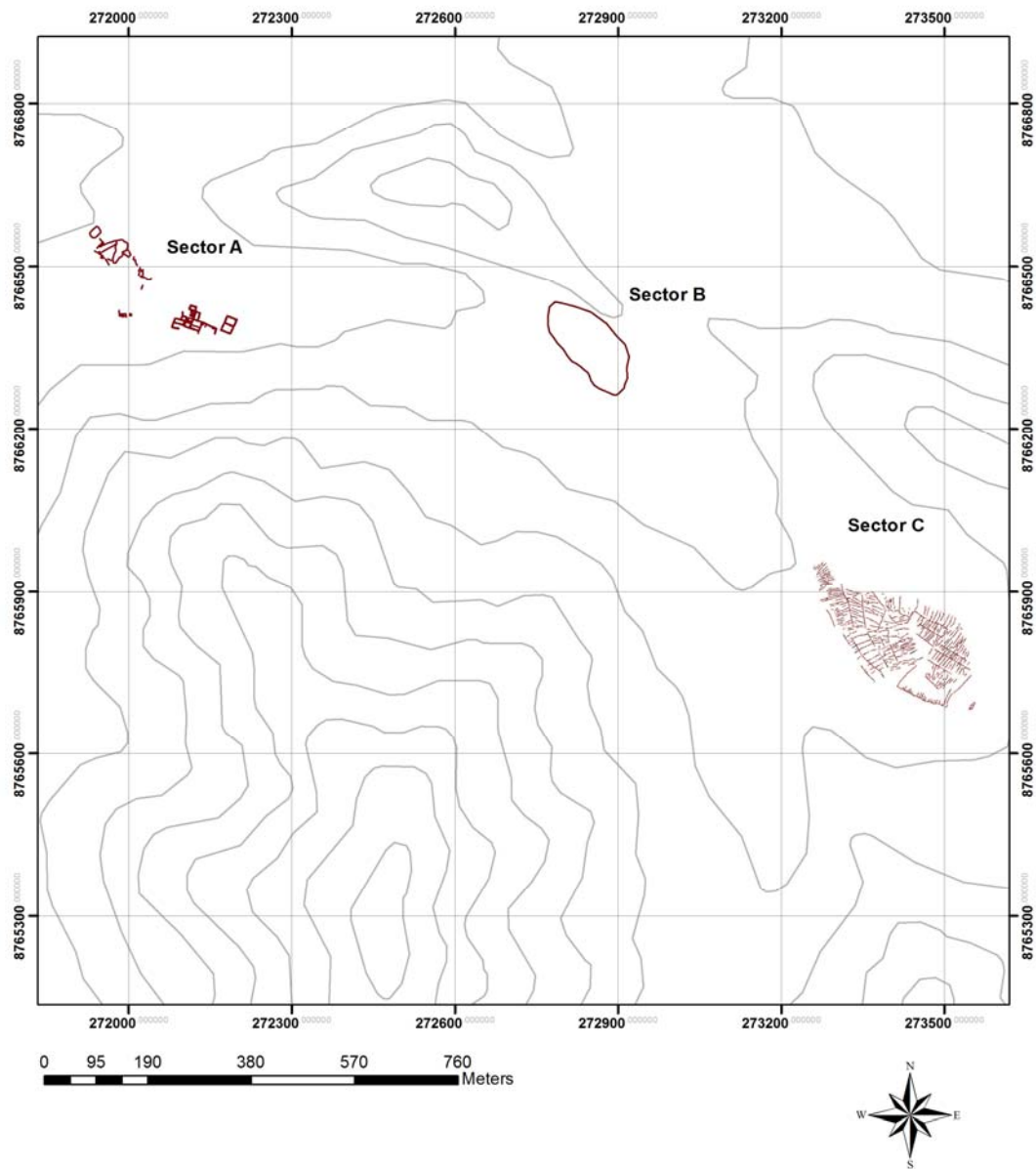


Figure 7.22: Map of Salitre showing the locations of Sectors A-C

C. As with Campo Libre, sectors were defined based on differences in architecture, presumed function, and location (see Figure 7.22). Sector A is located on an alluvial terrace at the mouth of the quebrada. This sector consists of a number of stone walled rectangular compounds of various

sizes. These walls are built of river cobbles and ceramic sherd fill. As no mortar was used in construction, these walls are very unstable and have mostly have collapsed (see Figure 7.23). The poor architectural preservation at the site made it impossible to count the number of compounds and also difficult to understand the layout and organization of the site.

At the northern edge of the sector there are two low stone and adobe platform mounds located on opposite sides of a small flat, open area that may have served as a plaza. These mounds measured about 21 by 13 meters and 44 by 23 meters and 3 and 4.5 meters high respectively. Neither is well preserved due to a combination of erosion and looting. The surfaces of these structures are covered in adobe melt, but looter's pits reveal the presence of internal walls constructed of roughly shaped field stones and mud mortar. They were also faced with mud plaster, giving them the appearance of adobe *tapia* walls. The potential plaza between the two platform mounds appears to measures approximately 35 meters by 24 meters, though the true dimensions are difficult to determine as there are no boundary walls that define the space, and area around the mounds has been heavily modified by the current residents of the local village of Casa Vieja.



Overview of Sector A at Salitre



Collapsed Rooms in Sector A at Salitre

Figure 7.23: Photos of Sector A at Salitre illustrating the poor preservation of the site due to wall collapse

Sector B is located in the middle of the quebrada, on an alluvial terrace to the northeast of a large cut created by annual *huaycos*. This sector consists of five small stone platform mounds similar to those at known Late Archaic sites like Aspero (Feldman 1981; Moseley and Willey 1973), Caral (Shady 1977; 2005), Caballete and Huaricanga (Creamer and Haas 2006). As such, this sector likely dates to the Late Archaic Period (3000-1800 BCE). These mounds have been heavily damaged both through modern agriculture (they sit in the middle of modern agricultural fields) and from flash floods. The main mound sits right at the edge of the *huayco* channel that runs through the quebrada and has been cut in half by repeated flooding events. This cut reveals a series of floors, walls, hearths, and burning events, suggesting that the mound was used and repeatedly modified over a long period of time. This sector was not excavated as there was no evidence for a Late Intermediate Period occupation (see Chapter 6 for more details).

Sector C is located on an alluvial terrace towards the neck of the quebrada, approximately 1 km from Sector A. This sector consists of approximately 230 *andenes* spread over an area of approximately 7 hectares and organized into 16 large, roughly rectangular blocks. The *andenes* are composed of small stone retention walls build of roughly shaped fieldstones. These walls run parallel to each other inside of larger rectangular blocks (see Figure 7.34). There is a great deal of variability in the size of these *andenes*; they range from 3-9 meters wide and 10 to 40 meters long. Just behind the fields there is a small, four room rectangular building; the purpose of this building is currently unclear. This building measures 15 by 5 meters. It was constructed of roughly shaped fieldstone and mud mortar, making it distinct from the structures in Sector A.

A total of 9 units were excavated at Salitre; 3 two by three meter units and 1 two by one meter unit in residential structures in Sector A, and 3 one by three meter trenches in the agricultural fields and 2 one by one test pits in the associated structure near those fields. Units were distributed

in this way in order to fully investigate the different activities that occurred at the site. Specifically, excavation units were placed in residential structures in order to verify that the site was indeed built and occupied by the Chancay as well as to examine evidence for potential entanglements with the *chaupiyunginos*. Units were placed in the agricultural fields in order to take soil samples for pollen, phytolith, and starch grain analysis to determine what crops were grown there and units were placed in rectangular structure associated with the agricultural fields in order to determine its function.

Placing units in Sector A was challenging because of the poor state of preservation. The research team selected the most intact structures for excavation in order to maximize data recovery. Many of the same sources of sampling bias that effected excavations in Campo Libre were also present at Salitre. As preservation in Sector A was poor and the only well conserved structures were in close proximity, excavators were unable to spread out units. For example, 2 of the 3 two by three meter units were located near the platform mounds. As a result, it is possible that elite/administrative contexts were over sampled. In the case of Sector C, excavators attempted to minimize sampling bias by spreading the excavation units out across the agricultural fields and by orienting excavation units perpendicular to the *andenes* in order to maximize the number of agricultural spaces that were test.

Table 7.2: Artifacts at Salitre

	Ceramics (counts)	Botanics	Fuanaal (counts)	Marine (weight)	Lithic	Other (counts)
Unit 1	Linear burnished redware (3)					
Unit 2	Linear burnished redware (4)				unmodified flake	
Unit 3	Linear burnished redware (1)				unmodified flake	
Unit 4	Linear burnished redware (306), Pativilca Impressed (2), Chanchay Polychrome (2), Cayash (48), Chancay B/W (22), Chancay Yellow (46), Chancay Inka (5), Blackware (21)	beans, lucuma, maize, boliche, guayaba, peanut, gourd, avocaldo, pumpkin	camelid (83), cuy (1) vizcacha (1)	marine shell (39 g)	unmodified flake	ceramic bead, anthropomorph figurine (3)
Unit 5	Linear Burnished 752, Pativilca Impressed (2), Chancay Polychrome (1), Chayash (57), Chancay B/W (6), Chancay Yellow (6), Chancay-Inka (3), Blackware (15)	beans, lucuma, gourd, pumpkin	camelid (150), cuy (20) deer (2) vizcacha (13) fish (5)	marine shell (220 g)	grinding stone, unmodified flakes	beads (5)
Unit 6	Linear burnished (141), Cayash (10), Chancay B/W (4), Chancay Yellow (6), Chancay-Inka (2), Blackware (13)	chilli, cotton, lucuma, maize, guarango, guayaba, peanut, gourd, palillo, avocaldo, pumpkin	camelid (174) cuy (4) deer (1) vizcacha (2)	marine shell (311 g)	unmodified flake, grinding stone	copper, ceramic bead, spondylus bead, bone pin, wooden weaving sword
Unit 7	Linear Burnished (69), Cayash (3), Chancay B/W (6), Chancay Yellow (3), Chancay-Inka (3), Blackware (1)	lucuma, maize, guarango, peanut, gourd, pumpkin	camelid (8)	marine shell (6 g)	unmodified flake	obsidian nodule

Unit 4: Confirming Chancay Presence through Documenting their Construction Techniques

Unit 4 was a two by three meter unit placed against the north wall of a disturbed structure located on the edge of the possible plaza between the two platform mounds, and which measured approximately 15 by 5 meters. The walls of this structure were double faced and constructed of river cobbles with a rubble fill composed largely of ceramic fragments. No mortar was used, so the construction could not be directly dated. However, charcoal was recovered from a burning event that passed just under the base of the wall, and it dated to 1545 cal CE (D-AMS 005110). This suggests that this structure was occupied during the beginning of the Colonial Period (1532

– 1821 CE). Interestingly, the unit also contained the lowest amount of shellfish at the site, which may mean that contact with the coast was disrupted in the aftermath of the Spanish invasion.

After removing the over burden of wall collapse and the backfill from nearby looting, a use surface was uncovered which ran just below the base of the north wall. This use surface was about 5 cm thick, and was uneven and poorly preserved. It was composed of compacted, poorly sorted, light beige sediment. There were two burned areas consisting of large quantities of botanic remains associated with this use surface, one in the north corner of the unit and the other along its southwest side. According to macrobotanic analysis performed by Carmela Alarcon, the plant taxa represented in these deposits included *Lagenaria siceraria* (gourd), *Arachis hypogaea* (peanut), *Persea americana* (avocado), *Pouteria lucuma* (*lucuma*), *Cucurbitacea* (pumpkin), *Psidium guajava* (guayaba), *Phaseolus vulgaris* (common bean), *Sapindus saponaria* (*boliche*), and *Zea mays* (maize). Camelid bone fragments were also recovered from these areas. There was evidence of color changes in the surrounding sediments that would be indicative of heat alteration, which suggests that these burning events occurred *in situ*, however, in both cases the border of these lenses is not clearly defined nor is there any other strong evidence that these areas may have been used as hearths. As such, it is more likely that some type of ritual burning event may have occurred prior to the structures abandonment.

The use surface ran under the base of the walls, which is typical of Chancay construction (Dunn and Heaton 2013; Negro 1991). Since the Chancay typically used adobe *tapia*, they would often construct the floor first in order to have a firm base to build the walls over. As seasonal rainfall in this part of the Huanangue Valley would make building with adobe problematic, the people living at Salitre appear to have switched to using stone, but continued using the same construction sequence; leveling and compacting the area where they wanted to build and then

putting up the walls after the floor was finished. Beneath the floor was a series of secondary fills used to level out the surface and that contained abundant midden, including ceramics, camelid and cuy bones, botanic remains, unmodified stone flakes, and shellfish. The ceramics recovered from this unit include linear burnished redwares, Cayash, Chancay black-on-white, Chancay yellow, and local Chimú. We also recovered two figurine fragments: the head of what appears to be an early style *cuchimilco* (Krzanowski 1991) and the body of an anthropomorphic figure in an unknown style (see Table 6.2 and Figure 7.25).

In summary, though both ceramics evidence and construction techniques clearly identify this building as belonging to the Chancay, radiocarbon dates suggest that it was occupied during the beginning of the Colonial Period. While excavation turned up very little evidence for Spanish influence as all ceramics were of indigenous manufacture, the paucity of shellfish suggests that trade routes to the coast may have been negatively impacted shortly after the arrival of the Spanish.



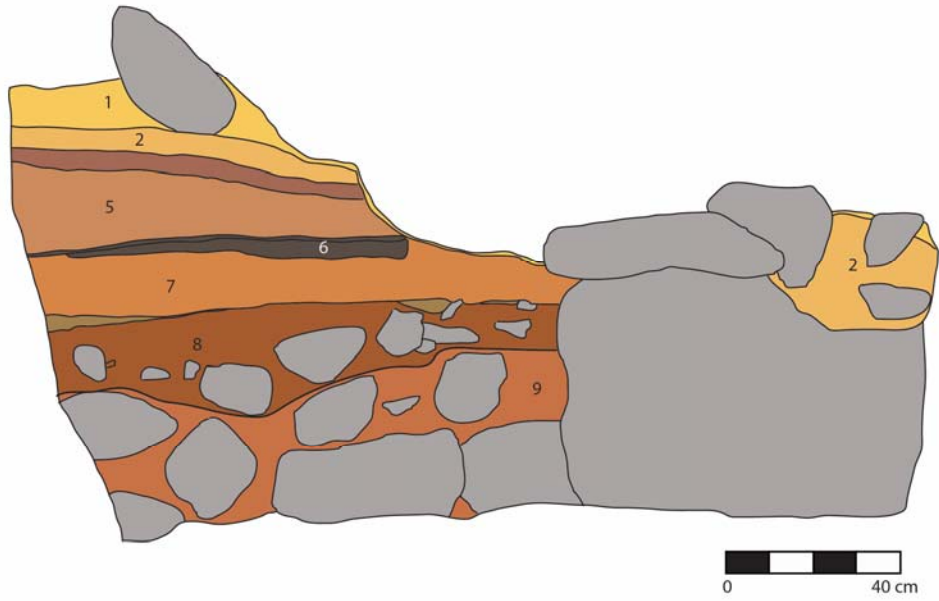
Figurine from Unit 4 at Salitre



Early style *cuchimilco* figurine from Unit 4 at Salitre

Figure 7.24: Figurines fragments recovered during from Unit 4 at Salitre. The figurine on the right is of an unknown style while the one on the right may be an early style *cuchimilco*

Salitre
Sector A
Unit 4
Northeast Profile



Unit 4, Northeast Profile

Figure 7.25: Northeast Profile of Unit 4 Salitre showing one of the burned areas recovered in association with the base of the Northwest wall (No. 6 in drawing)

Unit 5: Evidence for Feasting

Unit 5 was a two by three meter unit placed against the northeast wall inside of a small, rectangular platform that measured approximately 6.7 by 5 meters. This location was selected as the platform was adjacent to one of the platform mound and was well preserved with a level surface and moderate wall collapse. Excavations in this structure revealed evidence of feasting remains. Charcoal taken from the feasting layer dated to 1475 cal CE (D-AMS 004331), placing the occupation of this unit in the Late Intermediate Period/Late Horizon transition. The walls were double faced and built using river cobbles with a pottery rubble fill. The upper layers of the unit consisted of a 15 cm thick layer of superimposed strata of semi-compact, fine silty sediment and that were separated by a thin layer of fine, loose sand. The sediments that composed these strata were different from the sediments that composed the surface layers in all of the other excavation units, and may have been brought in to seal off the structure, perhaps as part of an abandonment ritual. Underlying these sterile strata was a thick layer of ashy sediments that contained an extraordinarily high density of artifacts including ceramics, camelid bones, cuy remains, botanic remains, and shellfish remains. Analysis of the botanic remains detected *Cucurbitacea* (pumpkin), *Lagenaria siceraria*, (gourd), *Pouteria lucuma* (*lucuma*), *Canabalia sp.* (*frijol de los gentiles*). The majority of diagnostic ceramics were large Cayash serving and storage jars, though two Chancay style ceramics were found near the bottom of this layer, as was a Chimu style stirrup handle.

Though this layer was only approximately 15-20 cm thick, 599 ceramic fragments were recovered, representing approximately 18% of the entire ceramic assemblage for Salitre. Approximately 659 grams of faunal remains, and 166 grams of shellfish remains, which represent approximately 16% and 28% of the total of their respective assemblages at the site level were also

recovered. Because of the extremely high density of artifacts, particularly of highly valued foods such as shellfish, as well as the relatively close proximity to platform mound, it is highly probable that this layer represents a feasting midden.

A wide variety of artifacts were recovered from Unit 5. The majority of ceramics that were recovered were plain redwares with linear burnishing (749 fragments), followed by Cayash impressed fragments (55). Twenty-two Chancay fragments and 15 local Chimú blackware fragments were recovered, as well. Faunal remains include camelid, cuy, viscacha, and one fragment of a deer radio-ulna and 450 grams of shellfish remains. One grinding stone and a few unmodified stone flakes were also recovered (see Table 7.2). In summary, Unit 5 demonstrates that the Chancay villagers were engaged in feasting, perhaps as part of a strategy of *fêting* the *chaupiyunginos* to help ensure access to irrigation water (see below for other possible explanations). Like in Unit 4, this unit also shows that the Chancay had access to a striking variety of plant species – especially in comparison to Campo Libre where maize and beans predominated. This variety of plant remains lends support to the documentary data which suggested that the Chancay moved into the Huanangue Valley in order to gain access to agricultural land to produce crops to send back down to the coast.

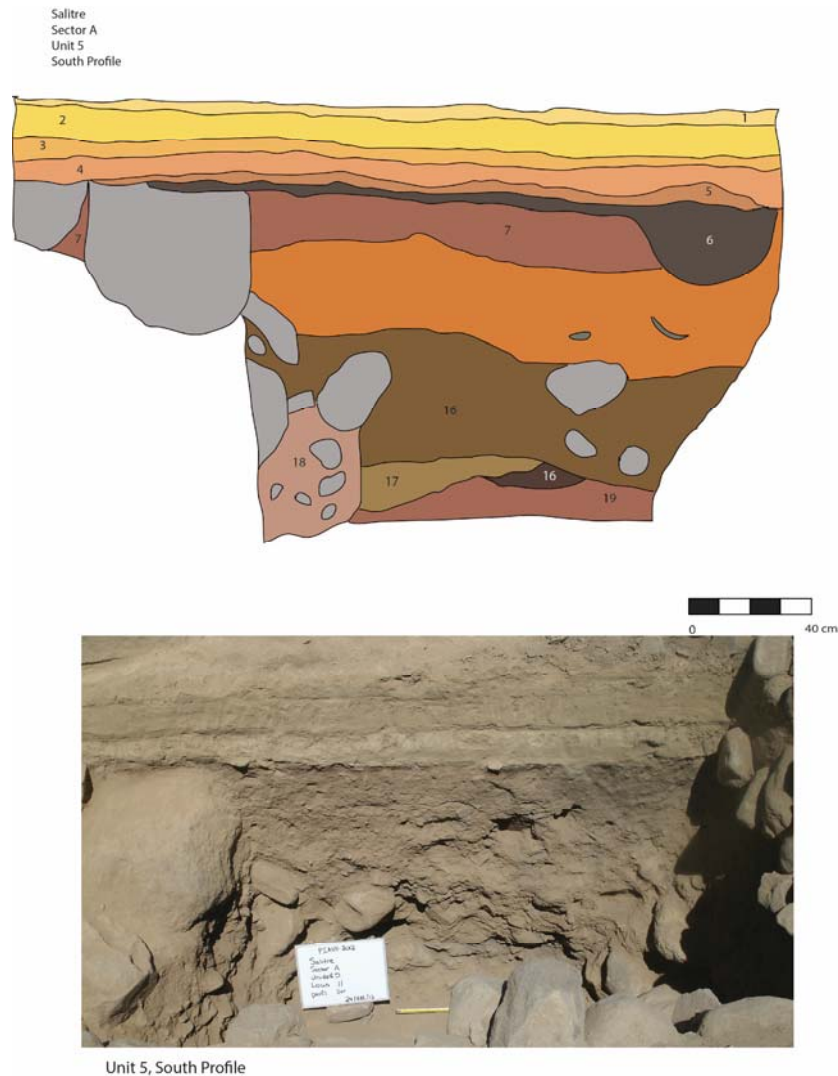


Figure 7.26: South Profile of Unit 5 at Salitre. The sterile upper layers of fine silty sediment are represented by no. 2-5 in the drawing, while the feasting layer is no. 6

Unit 6: Documenting the Chancay’s Economic Power through Exotic Goods and Botanic Diversity

Unit 6 was a two by three meter unit located in a large terrace in the southwestern section of Sector A. Excavations in this unit uncovered three floors separated by midden rich construction fill. Two radiocarbon samples were taken from different layers of fill and were dated to 1460 (D-AMS 004337) and 1490 (D-AMS 005111) cal CE, showing that this structure was contemporaneous with the platform where Unit 5 was located. This terrace was constructed in a similar manner to the other structures in Sector A, though unmodified field stones were used in

place of river cobbles and measures 8.5 by 16.7 meters. The upper layers of Unit 6 consisted of thin, superimposed layers of natural sediments. Underneath these natural strata excavators uncovered a series of three floors alternating with layers of burned trash. The floors were poorly persevered and incomplete. They were made of thin layers of compacted, well sorted, fine, silty sediment. In all three cases, the surfaces of the floors were clean and no artifacts were recovered. A small hearth was found in conjunction with floor 2 (lote 15). The hearth was full of large land snail shells that may have been cooked for consumption.

The trash used as fill between floors was artifact rich and contained diverse botanic remains, including: *Capsicum sp.* (chili pepper), *Gossipium b.* (cotton), *Psidium guajava* (guajava), *Cucurbitacea* (pumpkin), *Lagenaria sicerania* (gourd), *Pouteria lucuma* (*lucuma*), *Zea mays* (maize), *Arachis hypogaea* (peanuts), *Persea americana* (avocado), *Campomanecia l. (palillo)*, and *Prosopis pallida* (*guarango*). Excavators also recovered large quantities of animal bone (1822 grams), and shellfish remains (311 grams). The majority of animal bone consisted of camelid remains, though cuy and viscacha elements were recovered, as well. Ceramics primarily consisted of plain redwares with linear burnishing (141 fragments), though Cayash (10 fragments), Chancay (12 fragments), and local copies of Chimu blackware (13 fragments) were also found. A few high status artifacts were recovered in these trash layers, including a fragment of a *cuchimilco* face, a small spondylus bead, an obsidian nodule, and a small piece of copper (see Table 7.2 and Figure 7.27a).

The use of midden as fill between floors is a common Chancay construction technique that has also been observed at sites in the lower Huaura Valley (Heaton and Dunn 2010). Like Units 4 and 5, the diversity in plant remains recovered in this unit again support the documentary data suggesting that the Chancay's primary interest in the middle valley was agricultural. This

evidence, in turn, supports the hypothesis presented in Chapter 2 that Salitre and other Chancay sites in the Huanangue Valley may represent a Chancay trade diaspora that specialized in procuring crops to trade with the Chancay living on the coast. Furthermore, the diversity in ceramics and presence of exotic goods such as spondylus and obsidian illustrate that the members of the Chancay diaspora that lived at Salitre were likely more economically well off than the *chaupiyunginos* living at Campo Libre.



Circular Spondylus bead from Unit 6 at Salitre



Wooden weaving sword from Unit 6 at Salitre



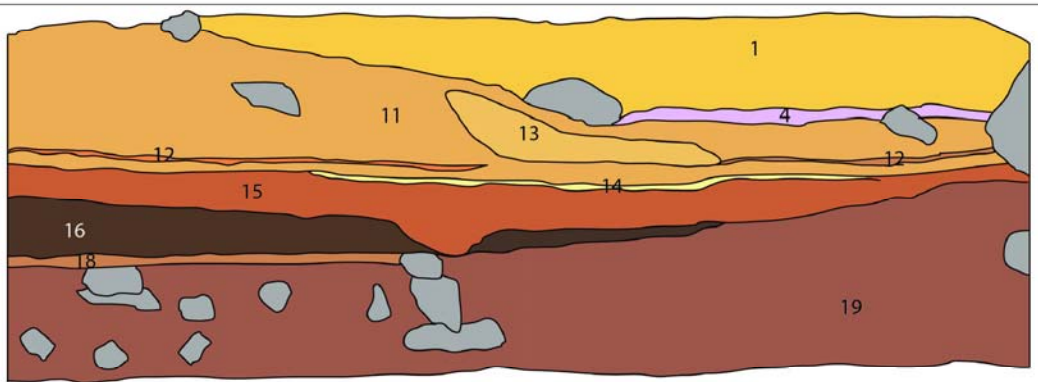
Obsidian nodule from Unit 7 at Salitre



Copper fragment from Unit 6 at Salitre

Figure 7.27a: Artifacts from Salitre from left top to bottom right: spondylus bead, wooden weaving sword, obsidian nodule, and copper fragment.

Salitre
Sector A
Unit 6
East Profile



0 40 cm



Unit 6, East Profile

Figure 7.27b: East Profile of Unit 6 at Salitre. No. 12, 15, and 18 represent use surfaces and No. 15 represents a layer of midden rich construction fill.

Unit 7: More Evidence for the Diversity of Botanic and Faunal Remains

Unit 7 was a one by two meter unit placed on a terrace just below Unit 6. This terrace measured 7 by 8.5 meters and was constructed in a similar manner to the terrace where Unit 6 was located. Excavators placed the unit here hoping to find a similar pattern of floors alternating with fill like that was uncovered in Unit 6. However, no floors or use surfaces were identified in the unit. Instead, the stratigraphy was made up of several super-imposed layers of construction fill

that were used to level the surface of the terrace. Charcoal taken from the fill dated to 1420 cal CE (D-AMS 005112). Excavators found a number of artifacts in the first 50 cm of this fill. These objects included a variety of botanic remains, such as *Zea mays* (maize), *Prosopis pallida* (guarango), *Pouteria lucuma* (lucuma), *Cucurbitacea* (pumpkin), and *Arachis hypogaea* (peanut). They also found approximately 120 grams of camelid bone fragments and approximately six grams of shellfish remains. No other faunal remains were recovered. The majority of ceramics were plain redwares with linear burnishing (69 fragments), though 12 Chancay sherds and one local copy of Chimu blackware were also recovered (see Table 7.2).

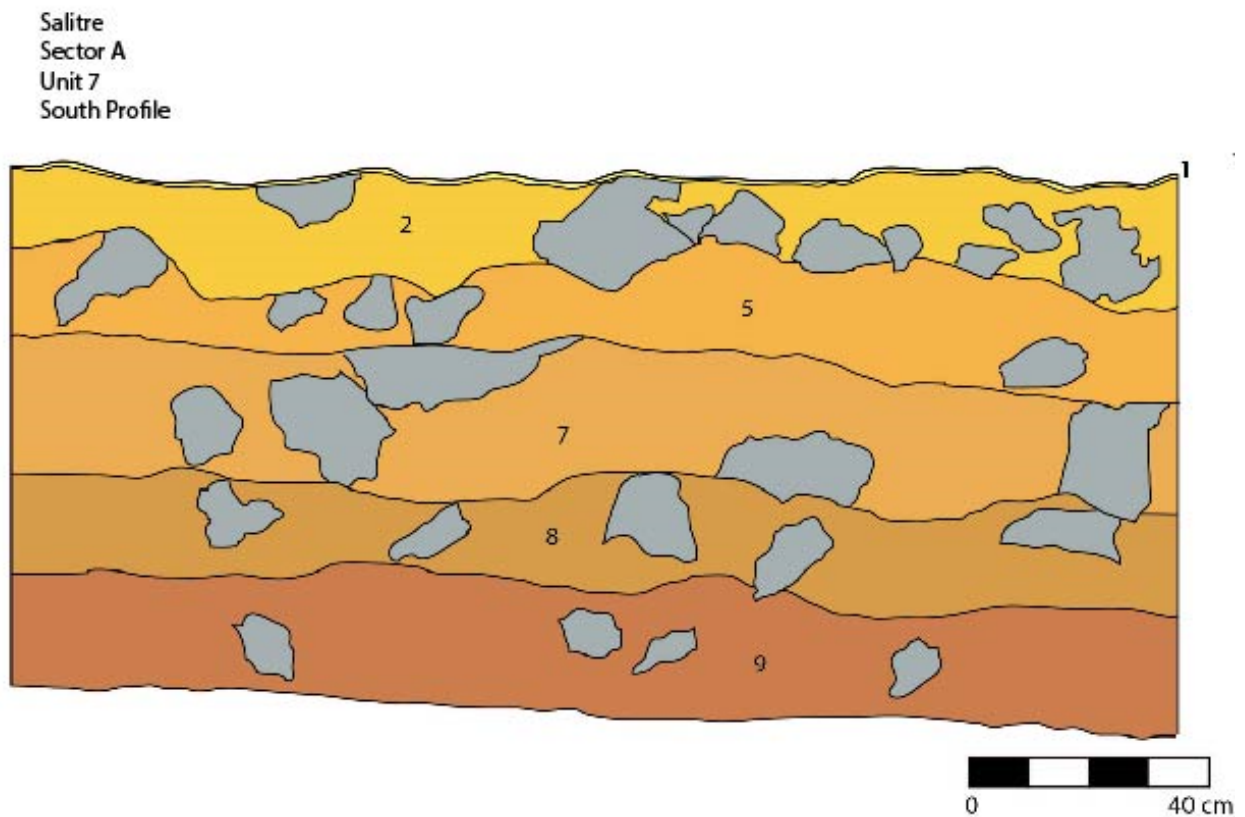


Figure 7.28: East Profile of Unit 7 at Salitre

Units 1-3: Testing Agricultural Fields

Units 1-3 were one by three meters trenches placed in agricultural *andenes* in Sector C. The goal of these excavations was to collect soil samples for pollen, phytolith, and starch grain testing in order to determine what crops were being grown by the Chancay. Excavators recovered a number of small, worn ceramic fragments in the upper layers of these trenches, suggesting that household midden may have been used to fertilize these fields. Unfortunately no diagnostic wares were recovered. Analysis of soil samples from the fields found starch grains from maize and beans as well as maize pollen and phytoliths. This suggests that maize and beans were two of the products cultivated at the site. As the macrobotanic remains recovered from the residential sector of Salitre suggest that people at the site had access to a much wider range of plant foods, it remains to be determined where these other plants were being grown. One possibility is that these crops were grown in sections of the fields that have not yet been tested. Alternatively, they may have been grown elsewhere in the valley and traded to the people at Salitre.

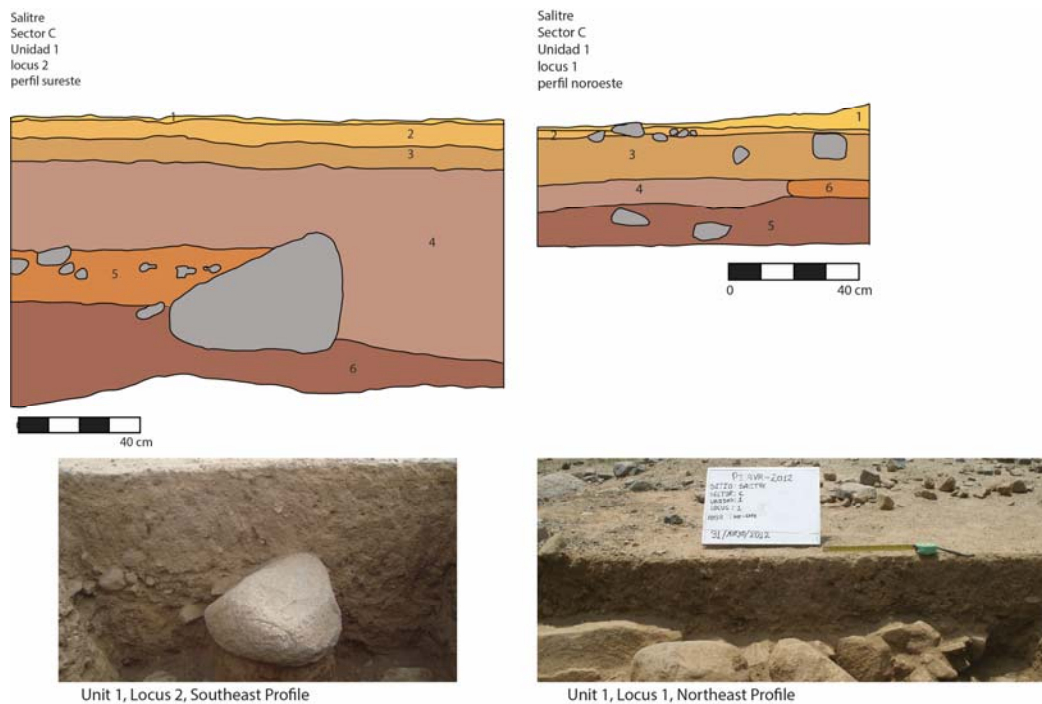


Figure 7.29: Northeast Profile of Unit 1 at Salitre, the stratigraphy from locus 2 is shown on the right and the stratigraphy for locus 1 is on the left.

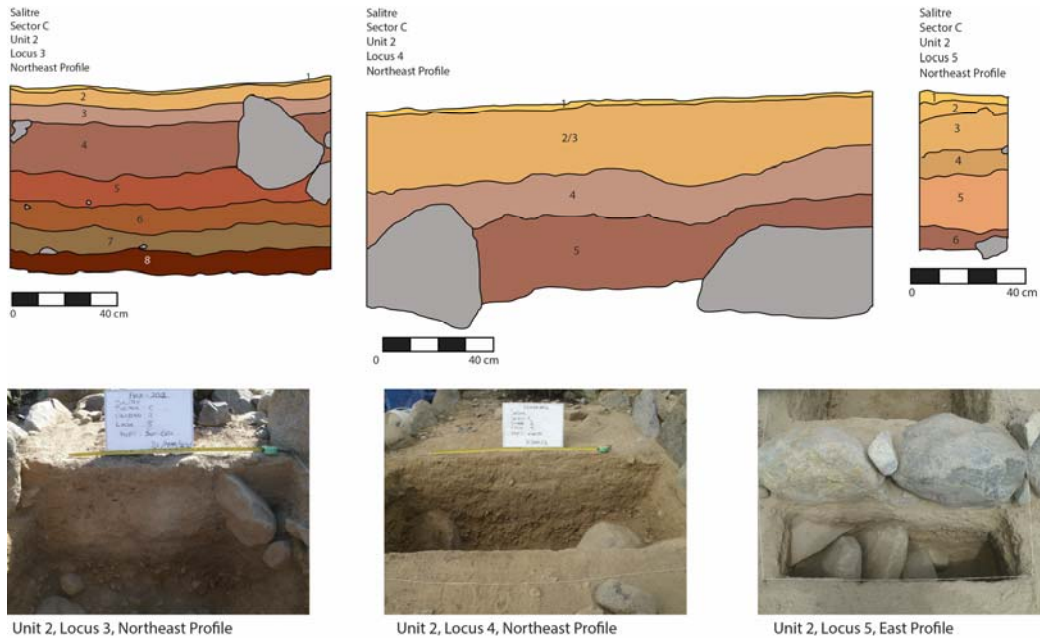


Figure 7.30: Northwest Profile of Unit 2 at Salitre with loci 3, 4, and 5 featured from left to right. Soil samples were taken from layer 4 (no. 4 in the drawing) for pollen, phytolith, and starch grain analysis.

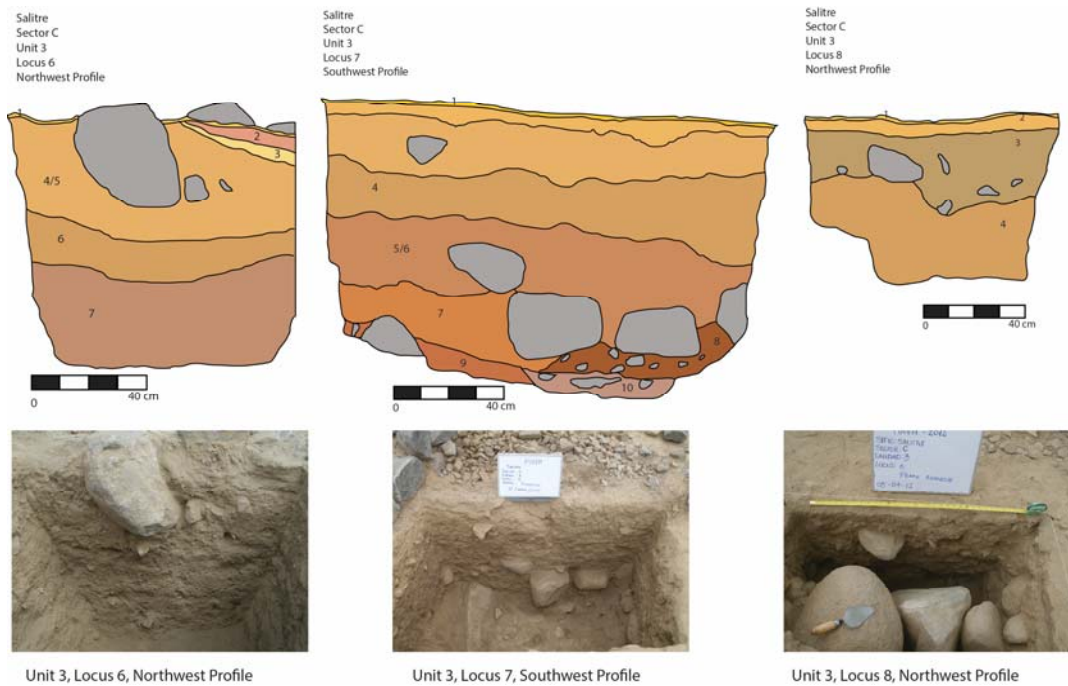


Figure 7.31: Northwest Profile of Unit 3 at Salitre with loci 6, 7, and 8 features from left to right. Soil samples were taken from layer 4 (No. 4 in the drawing) for pollen, phytolith, and starch grain analysis.

Units 8 and 9: Testing the Structure associated with the Agricultural Fields

Units 8 and 9 were one by one meter units placed in two rooms in the rectangular structure which was located just southeast of the agricultural fields. The goal of excavating these units was to gain an understanding of the function of this building. Though a possible floor was documented in unit 9, very few artifacts were recovered and both pits hit sterile deposits after about 50 centimeters.

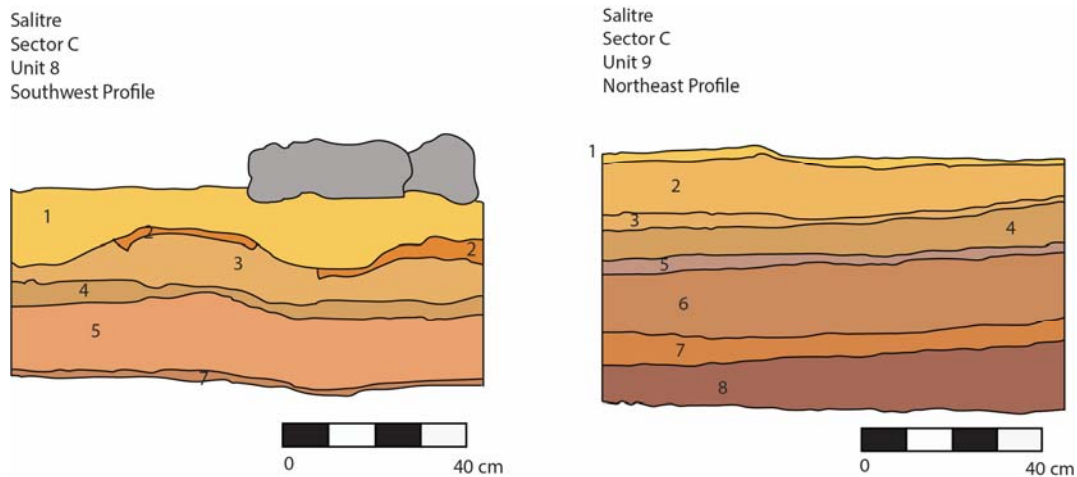


Figure 7.32: Profiles of Unit 8 and Unit 9 (from left to right). Layer No. 5 in the drawing of Unit 9 represents the possible floor that was uncovered during excavation.

Salitre Discussion: Evidence for Feasting, Exchange and Chancay Colonies

Based on ceramics and architectural data, Salitre was a Chancay site. There were a wide variety of decorated Chancay ceramics present at the site, including Chancay black-on-white, Chancay yellow, and Chancay Inka styles. Even though Cayash ceramics have been documented for highland sites in the Cayash region of the Huaura Valley (Krzanowski 1986), they are also common at Chancay sites and many authors argue that Cayash style vessels were also produced by Chancay potters for domestic use (Horkheimer 1970; Krzanowski 1986; 1991). Though the overall percentage of decorated sherds for Salitre is somewhat low, about 3.3% of the total assemblage (6.8% of diagnostic ceramics), this percentage is in line with that of decorated Chancay

ceramics from other small Chancay sites in the lower part of the Huaura Valley (Dunn 2011; Dunn and Heaton 2013). Furthermore, as majority of decorated Chancay wares have primarily been recovered from mortuary contexts (Krzanowski 1991), it is not surprising that they are relatively uncommon at domestic sites.

Though structures at the site of Salitre were built primarily with river cobbles and unmodified fieldstone as opposed to adobe *tapia*, other aspects of the construction were typical of Chancay architectural style. For example, in Unit 4 walls were constructed on top of pre-prepared floor, a technique that has been documented for the Chancay site of Quipico (Dunn 2011; Dunn and Heaton 2013). Furthermore, the construction sequence of floors alternating with burned midden that was documented for Unit 6 is similar to the sequences documented for other Chancay sites such as Quipico (Dunn and Heaton 2013); Rontoy, Vilcahuaura, and Chambarra (Nelson and Bellido 2010). The prevalence of shellfish remains at Salitre (583 total grams compared to the 161 total grams for Campo Libre) suggests that the people living at Salitre maintained coastal dietary preferences and had access to coastal resources. Taken together, these variables strongly suggests that Salitre was constructed and settled by coastal Chancay who maintained contact with their relatives living on the coast.

Sector A at Salitre is complex and probably was the setting for a myriad of activities. The presence of two small platform mounds, a possible plaza, and the evidence for feasting in Unit 5 suggests that the northern part of the sector may have been used for public ceremonial/administrative events. There are several collapsed rooms coming off the south-east side of the main platform mound. These structures are so poorly preserved that it is difficult to determine the number, shape, or size of these rooms and excavation units could not be placed in this area. However, due to their association with the principle platform mound, it is possible that

these rooms served some type of administrative and/or ritual purpose. The presence of grinding stones scattered around the surface of this area also suggests that agricultural goods were being processed and perhaps stored in this sector. In contrast, the eastern portion of the sector appears to have been dedicated to residential activities and some of these residential compounds were remodeled multiple times as demonstrated by the excavations in Unit 6.

The diet at Salitre was varied. Based on the faunal remains, it appears that camelid meat was the main protein source. This was supplemented by cuy, viscacha, shellfish, and occasionally deer. As at Campo Libre, all skeletal elements are well represented which suggest that the camelids were slaughtered on site. During the initial survey in 2009, a potential corral was located on the side of the ridge just west of Sector A; however, the structure had been destroyed before the 2012 excavation began, so it was not possible to investigate it further. The hills around Salitre support grass during the rainy season and are used today to provide pasturage for goats. As such, it is probable that camelids were raised locally. There is also a wide variety of plant foods available, including chili peppers, beans, *lucuma*, maize, guayaba, peanuts, avocado, and pumpkin. The majority of these plants can be grown locally. While peanuts can be grown in a variety of different environments (Kochert et. al. 1996:1282), local farmers say that they do not grow well in the Huanangue valley because the soil type is not suitable for their cultivation. However, peanuts are intensively cultivated near the present day town of Huaura, located in the alluvial fan of the Huaura Valley. As such, it is possible that the people living at Salitre imported this crop from the coast. Analysis of soil samples taken from the agricultural fields in Sector C revealed the presence of starch grains, phytolith and pollen from maize and beans, suggesting that these crops were grown at the site. It is still unclear where the other plant species found during excavation were grown.

In sum, there are a few key insights that can be drawn from excavation data at Salitre. The site was established by the Chancay who occupied the site for about 150 years. Furthermore, the variety and abundance of cultivars recovered during excavation suggest that agricultural production was a central part of the economy of the site. The presence of coastal goods such as shellfish and peanuts further suggests that some of these agricultural goods may have been sent down to the coast in exchange for these products (see Nelson and Bellido 2010). In sum, Salitre appears to fit the definition of a trade diaspora as laid out in Chapter 2 and it seems likely that this site was settled, at least in part, to gain access to agricultural land that could produce maize and fruits which could be traded down to the coast. However, if agricultural production was central to Salitre's economy, this means that ensuring access to irrigation water would be of utmost importance to those living at the site. The following section will explore some mechanism through which the Chancay may have been able to negotiate with the *chaupiyunginos* for water rights.

Discussion and Conclusions: Chancay Wealth vs. *Chaupiyungino* Tactical Power in the Formation of Entanglements

Based on survey data (see Chapter 6), the research team originally thought that both Campo Libre and Salitre would be similar as both sites appeared to have been small villages devoted to quotidian tasks. However, excavations revealed a number of differences. First, the Chancay living at Salitre appear to have better access to a wide range of goods, suggesting that they had better access to economic networks and may have been more economically powerful than the *chaupiyunginos*. For example, the ceramic sherd count from Salitre is approximately 3 times that of Campo Libre (3350 sherds vs. 1004 sherds), though ceramic analysis suggests that people at both sites had access to a similar range of vessels (see Table 7.3 and 7.4). The count of faunal bone fragments at Salitre is almost twice as high as that at Campo Libre (590 bone fragments vs. 309 bone fragments) and 583 grams of shellfish remains were recovered at Salitre in comparison

to 186 grams recovered at Campo Libre. The Chancay also appear to have had access to a much greater range of plants than the *chaupiyunginos* at Campo Libre (see Table 7.5).

The low frequency of artifacts at Campo Libre is particularly telling as the site was occupied over a considerably longer period of time than Salitre, with dates ranging between 1730 cal BCE to 1440 cal CE, whereas radiocarbon dates suggest that Salitre was only occupied between 1420 cal CE to 1560 cal CE (Table 7.6). Thus, the low frequency of artifacts at Campo Libre is not due to a short-lived occupation. Rather, this suggests that the Chancay at Salitre had better access to local and regional economic networks and were likely wealthier and more economically powerful than their neighbors in the Huanangue Valley. The relative wealth of the Chancay at Salitre corresponds well with the archaeological and documentary data for other Chancay sites. Though the Chancay community was relatively small and not well politically organized, there is ample archaeological evidence that this community was engaged in trade with larger polities to the north, such as the Casma and the Chimu (see Chapter 5).

In many cases, when an economically stronger, and more politically organized group moves into a new area, the wealthy newcomers subjugate local groups. However, there is little evidence that the Chancay migration into the Huanangue Valley had much impact on life at Campo Libre. Rather, excavations revealed little change in the quality of life between the Early Horizon and Late Intermediate periods of occupation; people living at Campo Libre appear to have had access to the same range and same amount of plant foods, animal protein and ceramics during this time span. In fact, the only changes that occurred at the site – the construction of Sector B and the increase in access to shellfish – suggest that people living at Campo Libre may have been somewhat better off after Chancay arrival to the valley. The reasons why the *chaupiyunginos* were

able to benefit from Chancay diaspora movement into the valley will be explored in more detail below.

The wider variety of plant remains at Salitre may also suggest that different economic activities taking place at these. Both macro and microbotanic remains from Campo Libre were restricted to maize and beans, with maize being the most common. The high quantity of burned maize kernels and cobs that were recovered from the site suggests that people were involved in the cultivation and processing maize, perhaps as part of chicha production. In other words, *chaupiyungino* economy at Campo Libre appears to have been focused on a restricted suite of high-value crops. In contrast, economic activities at Salitre seem to have been more diversified and centered on access to a broad base of agricultural goods including fruits such as *lucuma* and avocado as well as high valued crops such as maize and chili peppers. This diversity corresponds well with the model derived from documentary data that suggests that Chancay sites were established in the Huanangue Valley as part of a trade diaspora that had the goal of producing fruits and other agricultural crops that could be traded with members of the Chancay community residing on the coast (see Chapter 2). That contact was maintained between the Huanangue Valley and coastal Chancay is illustrated by the presence of coastal goods at Salitre such as Chancay black-on-white ceramics made with pink and white paste (see below), shellfish, and peanuts.

If Salitre was indeed a trade diaspora settlement as the data suggest, then it would have been imperative for the people living at the site to have continuous access to irrigation water for their crops. As such, one reason that the *chaupiyunginos* appear not to have been drawn into disadvantageous relationship with their wealthier Chancay neighbors may have been due to the tactical power afforded to them by their proximity to irrigation intakes. As discussed in Chapter 6, the local *chaupiyunginos* may have held a strategic advantage in the valley due to their proximity

to irrigation intakes. The *chaupiyunginos* likely would have been able to use this proximity to threaten to impede access to water for people, like the Chancay, who lived down river. By making these threats, *chaupiyunginos* may have been able to protect themselves against being drawn into disadvantageous relations with the Chancay through forcing the Chancay to negotiate for access to water. This possibility will be discussed further in Chapter 8.

Table 7.3: Paste Types documented at Campo Libre and Salitre

Type 1-Red Paste	Type 2 - Orange Paste	Type 3-White Paste	Type 4-Grey Paste	Type 5-Pink Paste	Type 6-Brown Paste
var 1a -rock and sand temper	var 2a-coarse rock temper	var 3a -rock temper	var 4a -rock temper	var 5a -rock temper	var 6a - rock and sand temper
var 1b -rock temper	var 2b- rock temper	var 3b -rock and sand temper	4b -sand temper	var 5b -rock and sand temper	var 6b - sand temper
var 1c -sand temper	var 3c -sand temper			var 5c -sand temper	

Evidence for interaction between Chancay migrants at Salitre and *chaupiyunginos* at Campo Libre is subtle. At the outset, the research team hoped to use difference in technological style to track the exchange of goods between Salitre and Campo Libre (see Chapter 3). Specifically, component analysis was used in an attempt to reveal the presence of distinct workshop traditions at each site with the goal of using the signatures of these different workshops to distinguish between ceramics produced at Salitre and at Campo Libre. However this proved not to be possible as ceramics at both Campo Libre and Salitre were too similar. Analysis defined five different paste types, each with two to three variants (see Table 7.9) and these paste types were present at both sites with type 1 (red paste) being predominate at both sites. There was little to no correlation between paste type and vessel form or paste type and vessel style. The exception were Chancay wares. Both Chancay black-on-white and Chancay yellow ceramics were made either with red paste (type 1), orange paste (type 2), pink paste (type 5), or white paste (type 3). While the Chancay ceramics made with red and orange paste may have been produced locally, pink and

white paste types are often documented for coastal Chancay ceramics (Rutherford 2014; Dunn and Heaton 2013). Thus it is possible that the Chancay fragments with these paste types may have come from vessels that were imported from the coast. However, apart from this one exception, the general lack of variation in paste type, vessel form, or vessel style between Campo Libre and Salitre means that little information about interaction can be derived from the ceramic data. Chemical analysis is planned for the future and may help differentiate the ceramics between the two sites.

Though domestic ceramics provided little insight into the types of exchange that may have occurred between the Chancay and *chaupiyunginos*, the presence of Chancay black-on-white ceramics, shellfish, sponge spicules, and diatoms at Campo Libre strongly suggest that exchange occurred. The presence of marine goods at Campo Libre is particularly telling and may provide insight into how entanglements may have developed between the Chancay and *chaupiyunginos*. Shellfish were present at Campo Libre from at least 130 cal BCE, which suggests that local desire for marine foods had a long history in the region. However, the amount of shellfish present during this early time period is minimal, and does not surpass 12 grams in any early stratigraphic layer. In contrast, there is a clear increase in the amount of shellfish in strata corresponding to the Late Intermediate Period, with layers dated to this time period containing between 20-24 grams of shellfish remains. Considering that this increase in shellfish roughly coincides with the rise of the Chancay community and their encroachment into the Huanangue Valley, it may be due to increasing economic and political ties between the Chancay and local *chaupiyungino* groups. Furthermore, as the importance of marine goods to middle valley and highland groups has been attested to in the historical record (Antenez de Mayolo 1981), the *chaupiyunginos* may have been willing to provide the Chancay with access to irrigation water in exchange for shellfish and other

marine goods such as salt and dried fish. The importance of shellfish to middle valley and highland groups would make it easy to insert them into local systems of value, thus it is likely that Chancay – *chaupiyungino* entanglements could have developed around this commodity.

One possible mechanism through which shellfish could have been exchanged between the Chancay and *chaupiyunginos* may have been feasting. Following the guidelines set out by Dietler and Hayden (2001), lote 6 from Unit 5 at Salitre was interpreted as representing the remains of feasting events due to the unit's proximity to public architecture and due to the high quantity of high status food goods such as camelid meat and shellfish that was documented during excavation (see discussion above). This deposit was also atypical compared to the other excavated strata throughout the site of Salitre due to the dominance of Cayash style ceramics. 11.8% of the recovered diagnostic ceramics were of Cayash style, which only comprised 7.2% of the diagnostic ceramic assemblage across the site. At the same time, decorated Chancay ceramics were rare, comprising only 0.4% of the diagnostic ceramics in the deposit while these ceramics make up 6.8% of the diagnostic site assemblage. Due to their unique black-on-white decorations, Chancay ceramics are highly visible, and it has been argued that they may be emblems of Chancay identity (Bria 2009). In contrast Cayash style ceramics have no clear link to social identity as they were used by various different groups throughout Huaura drainage and beyond. Though there has been debate about how to interpret Cayash ceramics (Krzanowski 1986; Horkeimer 1970) it seems most likely that this was a general style of domestic ceramics that was produced by many different groups on the central coast and thus were not used as an identity marker in the way that the elaborately decorated Chancay black on white ceramics ware.

This makes the use of Cayash ceramics in feasting contexts at Salitre unusual. Feasts are often highly charged events where identity politics often come into play (Dietler and Hayden 2001;

White 1990). In the Andes, feasts were generally used by elites as a way to both negotiate social boundaries as well as a way to recruit followers through taking advantage of prevailing Andean notions of reciprocity (Chicoine 2011; Kaulicke 2008; Ramirez 2005). Groups such as the Inka, the Wari, the Tiwanaku, and the Moche would use feasting as a way to bring local sub-elites into the fold and as a strategy to legitimate their hegemony. As such, these events often featured finely decorated elite ceramics as well as other objects that served as tokens of the identity of the ruling group, both reminding participants who was sponsoring the event as well as allowing sub-elites to align themselves with these powerful groups and improve their own standing (Ramirez 2005; Bray 2003b). This contrasts strongly with the use of Cayash style ceramics at Salitre since these ceramics were a domestic ware that was not strongly linked to any particular social identity (Krzanowski 1986). This may suggest that the Chancay residents at Salitre had different aims when hosting feasts. Since the *chaupiyungino* proximity to irrigation intakes and symbolic control over water could have made Chancay settlement in the valley potentially tenuous, it is possible that the Chancay were attempting to de-emphasize their foreign identity in an attempt to form stronger ties with the local *chaupiyungino* population, much in the same way that French fur traders and native Algonquin speakers would purposefully manipulate their identities in order to create a “middle ground” where they all shared membership (see White 1991).

Table 7.4: Ceramic Forms at Campo Libre

Form	Count	Percentage	Form	Count	Percentage
Kero	3	0.8	bowl	11	2.8
Goblet	1	0.3	straight-sided bowl	1	0.3
Gigantes	53	13.7	olla	15	3.9
Antara	8	2.1	jar	26	6.7
hollowware	252	64.9	globular jar	2	0.5
plate	8	2.1	short-neck jar	5	1.3
angle-sided plate	1	0.3	top heavy ovaloid vase	2	0.5

Table 7.5: Ceramic Forms at Salitre

Form	Count	Percentage	Form	Count	Percentage
Flatware	10	0.7	bowl	40	2.9
Kero	23	1.7	olla	13	0.9
Goblet	8	0.6	jar	198	14.4
Gigante	92	6.7	bubblenecked jar	4	0.3
hollow ware	903	65.5	short-necked jar	12	0.9
plate	36	2.6	cantaro	1	0.1
convex-sided plate	1	0.1	vase	3	0.2
straight-sided plate	3	0.2	top-heavy ovaloid vase	24	1.7
angle-sided plate	7	0.5			

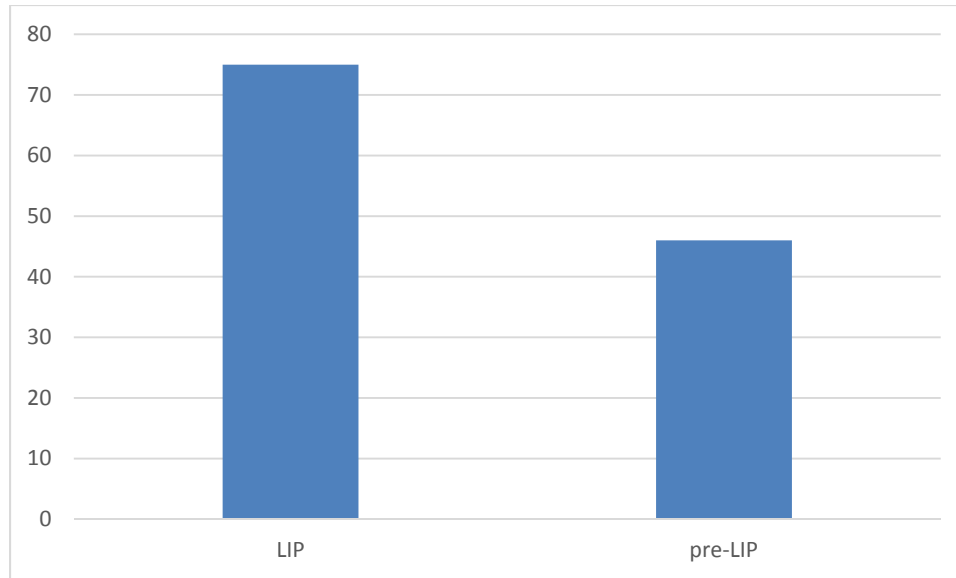


Figure 7.33: Shell weight in grams at Campo Libre for early and late contexts

Table 7.6: Radiocarbon Dates

Sample Number	Site	Provenience	BP	Median Calibrated
D-AMS 004331	Salitre	U5 L11 I6	391±20	1475
D-AMS 004337	Salitre	U6 L12 I15	411±23	1460
D-AMS 005109	Salitre	U4 L10 I9	308±28	1560
D-AMS 005110	Salitre	U4 L10 I4	357±29	1545
D-AMS 005111	Salitre	U6 L12 I19	389±29	1490
D-AMS 005112	Salitre	U7 L14 I3	515±30	1420
D-AMS 004332	Campo Libre	U5 L8 I9	3417±32	-1730
D-AMS 004333	Campo Libre	U4 L6 I23	2101±27	-120
D-AMS 004334	Campo Libre	U3 L5 I12	2113±26	-135
D-AMS 005106	Campo Libre	U6 L13 I5	448±30	1440
D-AMS 005107	Campo Libre	U4 L11 I1	1983±29	20
D-AMS 005108	Campo Libre	U4 L6 I8	938±31	1100

In sum, evidence from excavations appears to support the models derived from the documentary data presented in Chapter 5. Colonial Period documents suggest that the coastal groups sent people into the *chaupiyunga* region in order to gain access to the fruits that could be grown there (Ipinze 2004; Rostworowski 1978). While the documents cited by Rostworowski suggest that this was done in order to better serve the Inka (Rostworowski 1978), Ipinze implies that this incursion into the middle valley may have occurred earlier as coastal groups would come up to this elevation periodically in order to exchange goods with their highland and *chaupiyungino* neighbors (Ipinze 2004). Archaeological data from Salitre supports Ipinze interpretation as radiocarbon dates suggest that Salitre was founded in 1420 cal CE (D-AMS 005112), some 50 years before the Inka are thought to have incorporated the region (see Chapter 8). Furthermore, though ceramic, architectural and dietary evidence clearly suggest that Salitre was founded by members of the Chancay community, there is no archaeological evidence to suggest that the people living at the site were sent by Chancay leadership as the Chancay community was likely not well organized enough politically to resettle people by elite fiat (see Chapter 5). Thus, Salitre likely represents a trade diaspora settlement in that it was a place founded by individual Chancay families who appear to have come to the Huanangue Valley in order to gain access to agricultural land and produce maize and other fruits to send back to Chancay community members on the coast (see Chapter 2).

In addition, changes in the frequency of shellfish access at Campo Libre suggest that access to this resource changed as political circumstances in the valley changed. Access to marine goods increased at Campo Libre during the Late Intermediate Period as demonstrated by greater numbers of shellfish remains for late contexts and sponge spicules found in sediment from storage

structures. Furthermore, though the Chancay settlers at Salitre clearly commanded more wealth than the local *chaupiyunginos* at Campo Libre, there is no evidence that they held any type of political sway over local groups. In fact, apart from increased access to shellfish, there is little evidence that lifestyles at Campo Libre changed much in response to Chancay settlement in the valley. Finally, excavation data from Salitre suggests that feasting may have been an important part of the alliance building strategies used by the Chancay. As was discussed in Chapter 6, local *chaupiyunginos* had traditional sovereignty over irrigation intakes that would have been vital for the Chancay's agricultural endeavors. As such, Chancay settlers would have needed to negotiate for water rights. This may have been done both through providing *chaupiyunginos* with access to shellfish as well as through hosting feasts. Taken together, the Chancay's need for irrigation water along with the *chaupiyungino*'s desire for marine products may have set the stage for economic entanglements to develop between the two groups. These possibilities will be explored further in Chapter 8.

Chapter VIII

Discussion and Conclusions

Human history has been shaped by migration, culture contact, and intergroup interaction for millennia. The processes continue to be of concern today as globalization fuels increasing population movement and interethnic conflict over increasingly scarce resources. Studying the ways in which population movement, interaction, and resource management were dealt with by ancient peoples can provide insight into how to manage the tensions caused by these processes today. This study has looked at how interaction between the coastal Chancay and local middle valley groups in the Huanangue Valley led to the creation of entanglements between these groups. Specifically, it has examined the processes through which the Chancay migrated into the Huanangue Valley and how they negotiated with the local *chaupiyunginos* to gain access to water and agricultural land, thus suggesting the potential relationship that can exist between intergroup interaction and resource management.

In order to investigate these themes, this study analyzed key facets of interaction and entanglement theory, explored the relationship between identity and material culture, and summarized the central characteristics of the Late Intermediate Period with specific focus on the archaeological and documentary data for the Huaura drainage. This chapter will bring these strands of data together in order to argue that Chancay trade diaspora settlements (see Chapter 2) were established in the Huanangue Valley in order to gain access to agricultural land, but that the movement of the economically powerful Chancay into the valley did not negatively impact the local *chaupiyunginos*. Instead, a balance of power appears to have existed between local *chaupiyunginos* and the Chancay, and may have led to the development of economic

entanglements as the Chancay became dependent on the *chaupiyunginos* for water and the *chaupiyunginos* on the Chancay for access to marine resources.

Trade diasporas have been documented in many parts of the world (R. Cohen 1996; Stein 1999, 2002; Owen 2005), however, relatively little attention has been paid to this phenomenon in the Andes. This chapter argues that members of the Chancay community moved into the Huanangue Valley as part of a trade diaspora in order to gain access to agricultural lands for growing maize and fruits that could be sent back to the coast. Furthermore, even though the Chancay were wealthier and more economically powerful than the *chaupiyunginos* (see Chapters 5 and 7), they were unable or unwilling to subjugate them due to the local group's proximity to and symbolic control over irrigation intakes. There are several reasons for why this may have occurred. First, though the Chancay community appears to have been economically powerful (Nelson and Bellido 2010; Nelson and Ruiz 2010; Szremski 2009, 2013; Dunn and Heaton 2013; Krzanowski 1991), currently available evidence suggests that this wider affiliated community lacked both the political organization and military power necessary to exert any form of sovereignty over local groups in the Huanangue Valley. Second, in spite of the apparent lack of traditional indicators of formal or hegemonic power, local *chaupiyungino* groups seem to have had ample tactical power due to their proximity to local irrigation intakes, which provided water for the downstream fields used by the Chancay (see Figure 8.1). This relative balance of power between groups may have set the stage for the formation of economic entanglements, since neither the Chancay nor the local *chaupiyunginos* appear to have been able to exert hegemony over the other, preventing power imbalances (and formal colonialism) from developing.

As explored in Chapter 2, interaction theory details the diverse economic, political, social, and cultural relationships that develop when different human groups come together. Though there

are many potential outcomes of interaction, the data presented by this study suggest that entanglement, which refers to the dependencies that develop when local groups adopt foreign goods into local systems of value (Dietler 2010), likely occurred between local and foreign groups in the Huanangue Valley. Entanglement theory is generally used to illustrate how local groups become unintentionally subjugated to colonial powers through being drawn into regional economic networks and developing dependencies on the foreign goods (and the foreign providers of those goods) (Dietler 2010; Gosden 2004). For example, as discussed in Chapter 2, the dependence of indigenous French elites on Greek and later Roman wine helped lead to the later colonization of France by the Romans (Dietler 2010).

However, entanglement does not always lead to power imbalances. For example, foreign Egyptian and local Nubian populations living around the 2nd cataract during the Middle through Late Kingdom periods became entangled through centuries of trade and intermarriage, even though one group was never able to effectively dominate the other over the long term (Buzon 2006; Smith 2003). Furthermore, in the case of Mesopotamia, colonists sent to distant lands by Uruk often lived at the whim of local populations (Stein 1999, 2002; see also Emberling 1997 for Assyria). The high levels of ethnic and ecological diversity in the Andes make this region an ideal place for entanglements to develop as different groups may have had to work together in order to gain access to widely scattered resources. However, as this concept is relatively new, Andean archaeologists are only beginning to explore it in much detail. For example, Jennings and Alvarez (2001) suggest that local elites built structures in accordance to Imperial Wari architectural canons at the sites of Collata and Netahaha in the Cotahuasi Valley as a way of improving their own status, but that this stylistic borrowing may also have helped precipitate the social and political transformations that occurred in the region during the Middle Horizon, effectively helping the Wari to increase their

influence there. In addition, a careful consideration of documentary and archaeological data can illustrate how different groups in the Andes became entangled as these people worked to gain access to distant goods. For example, as discussed in Chapter 2, the Collique's desire for coca and the Quives' need for military support in the Chillón Valley may have led to complex entanglements between these groups (Dillehay 1976, 1979, 2013; Santoro et al. 2010).

Entanglements can be documented archaeologically in several ways. As described in Chapters 2 and 3, entanglements can be detected through the increasing permeability of the boundaries between groups. Specifically, regional settlement pattern analysis would show the presence of two or more distinct groups. These groups could be detected materially through the presence of clearly defined symbolic boundaries represented through the distribution of stylistically distinct material assemblages between sites. While these boundaries may appear fixed at the regional level, site level analysis can demonstrate that there is a low level of permeability demonstrated by the incorporation of stylistically foreign artifacts into local assemblages. As such, this study used a regional, multivariate approach to reconstructing symbolic boundaries that considered the spatial distribution of site type and location, site plan, architectural styles, ceramic and other artifact styles along with documentary data. These data were gathered through archival research (Chapter 5), opportunist survey (Chapter 6), and excavation (Chapter 7), and are summarized below.

Fragmented Political Landscapes, Colonization, and the Ethnohistoric Record: The Regional, Cultural, and Historic Contexts for Entanglements in the Huanangue Valley

Together, both the physical and political landscape of the Huaura drainage that may have been well suited to the development of entanglements. This drainage passes through a number of ecotones where different agricultural and other resources are available. According to colonial sources, the *curacazgos* inhabiting the drainage likely had various sets of alliances (Rostworowski

1978), which would have given them access to different sets of goods. Since maximizing access to diversified resources is one strategy for limiting risk (see Murra 1975; Mayer 1985, 2002), and people often desired products (food, cloth, ceramics, etc.) that were not locally available, the Huaura drainage *curacazgos* likely desired to gain access to different goods that were only available outside of their local networks. Though resources could have been forcibly taken through raiding, this can be a risky and expensive pursuit, as it does not always guarantee long-term access to supplies and also opens groups to the dangers of reprisals. Since evidence suggests that the groups that inhabited the Huaura drainage likely lacked coercive power (Dulanto 2008; Krzanowski 1991; Rostworowski 1978), trade or other forms of exchange may have been a better strategy for maximizing access to resources. This trade, in turn, could potentially have led to entanglements as groups became increasingly dependent on access to non-local goods.

The available documentary data suggest that the political landscape in the Huaura drainage was likely composed of numerous loosely affiliated *curacazgos*, coastal groups had an interest in moving into the middle valley in order to gain access to agricultural land, and trade between the coast and middle valley may have been common. Specifically, data suggest that the Huaura drainage was populated by numerous small, largely independent *curacazgos* who were loosely allied with a central figure known as Guachapayco. The data also indicate that the members of coastal *ayllus* were sent to the *chaupiyunga* zone in order to gain access to agricultural lands for the production of fruits and other highly valued goods, such as maize (Rostworowski 1978). Furthermore, work by historians Ipinze (2004) and Rosas Cuadros (1976) suggests that trade regularly occurred between coastal, highland, and middle valley people who gathered periodically in the middle valley in order to exchange marine products such as fish, shellfish, and salt for highland products such as potatoes, fruits, and camelid meat. Thus, the documentary data suggest

that the Huanangue Valley was likely populated by different groups who participated in the exchange of different types of resources. Based on this data, it was hypothesized that the Huanangue Valley settlement pattern would be characterized by a mosaic of different site types, and that site types would be distinguishable from each other by the presence of different layouts, architectural styles, and/or artifact assemblages, etc. (see Chapter 3). Exchange would likely be detectable through a slight overlapping of material assemblages as portable artifacts crossed community boundaries.

Looking for Evidence of Entanglements through Survey: Four Ethnic-like Communities, Proximity to Water and Exchange

Data from the opportunistic survey suggest that four ethnic-like communities occupied the Huanangue Valley during the Late Intermediate Period. Specifically, eleven sites identified during survey were tentatively dated to the Late Intermediate Period. Based on the co-varying distribution of site plans and placement, architectural style and construction techniques, and artifact styles, the following groups were identified: the Chancay, *chaupiyunginos*, a highland group (possibly Atavillos), and one unknown group (see Chapter 6). Due to the presence of late style ceramics on the surface of these sites, it seems likely that they were contemporaneous; however, future excavation is needed to verify this. Though the clear co-variance of site plan and placement, architectural styles, and ceramic/other artifact styles suggests that symbolic boundaries were largely maintained between groups, the presence of Chancay black-on-white ceramics and shellfish remains may mean that exchange between groups was causing boundaries to become more permeable, as one would expect in the case of entanglements (see Chapter 3).

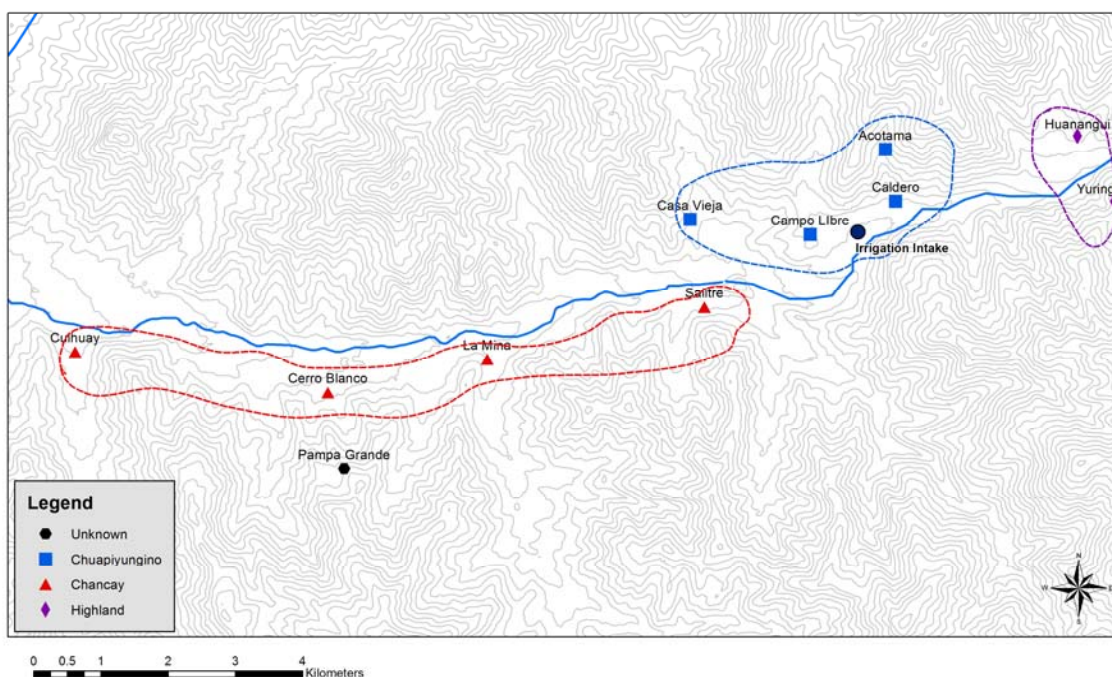


Figure 8.1: Map of Late Intermediate Period Sites in the Huanangue Valley. The different colors correspond to different group affiliations.

The distribution of sites may provide clues about the nature of inter-group relationships in the valley during the Late Intermediate Period. Chancay sites documented during survey were located in the lower part of the Huanangue Valley, downriver from *chaupiyungino* and highland sites and downriver from irrigation intakes (see Figure 8.1). These sites are placed on the floors of side *quebradas*, much as they were in the Chancay core. While this site placement follows the same logic used in the core area, it also may betray a lack of understanding of the local landscape. *Quebradas* in the Huanangue Valley are active, and *huaycos* are an annual threat during the highland rainy season. Evidence of flood damage at Cerro Blanco suggests that the Chancay may have had to confront this problem. Chancay sites were also not fortified, suggesting that the Chancay were not concerned about aggression from local groups whose territory they were moving into.

In contrast, *chaupiyungino* sites are clustered in the middle and upper parts of the Huanangue Valley (see Figure 8.1) and appear to be strategically positioned on low hilltops in areas where they likely were able to monitor key aspects of the landscape, such as irrigation intakes. This placement also likely protected *chaupiyungino* sites from the threat of *huaycos* and allowed for visibility between *chaupiyungino* and highland sites. Only two highland sites were documented. They were located approximately 18 km from the confluence of the Huanangue and Huaura Rivers, or about 65 km from the coast, at elevations between 1,750 and 1,800 masl. Based on these data, it appears that highland occupation was limited to the upper edge of the *chaupiyungino* zone. While both of these sites are also located on hilltops, they were not fortified and were fairly easy to access.

Though both *chaupiyungino* and highland sites were placed in potentially defensible locations, there is little evidence that raiding or warfare was endemic in the Huanangue Valley, as was the case in other parts of the Andes during the Late Intermediate Period (Arkush 2008; Stanish and Arkush 2005; Tung 2008; Kohut 2012a, 2012b; Dulanto 2008; Szremski 2009, 2013). Rather, the presence of Chancay black-on-white ceramics and shellfish on the surface of most Late Intermediate Period sites suggests that exchange or other similar forms of interaction between groups was likely more common. As opposed to defense, the hilltop position of the *chaupiyungino* sites likely could have allowed local people to monitor access to irrigation intakes, which was a key resource in the valley as the climate was (and still is) arid, and crops were dependent on irrigation water. *Chaupiyungino* proximity to irrigations intakes may have become a source of what Eric Wolf (1999) calls tactical/organizational power, potentially giving the *chaupiyunginos* the ability to influence down-valley groups such as the Chancay settlers. This is important because the *chaupiyunginos* appear to have been a small-scale group that was not well organized politically,

and that may not have had access to more traditional forms of economic or coercive power, which could have made it difficult for them to compete with the more powerful Chancay. In times of drought, people depended on their upstream neighbors to conserve water in order to ensure that there was enough left over to reach downstream settlements. As such, the *chaupiyunginos* could have used their proximity to irrigation intakes as well as their position upriver from the Chancay to threaten to misuse water during times of scarcity, effectively cutting off access for the Chancay. In other words, this could have allowed the local *chaupiyunginos* to set the terms of interaction in the valley, which may have been an important factor in how and why entanglements between the *chaupiyunginos* and Chancay developed, as the Chancay may have been dependent on the *chaupiyunginos* for access to irrigation water. This also demonstrates the role that local landscapes and ecologies played in shaping intergroup entanglements, and that both the aridity and the physical morphology of the valley set constraints on the groups that lived there. While the *chaupiyunginos* were able to take advantage of these constraints, the Chancay appear to have been less lucky.

In sum, the survey team identified four different ethnic-like groups living in the valley and was able to confirm the models derived from documentary data, which suggested that the Huanangue Valley would be populated by multiple groups that appear to have primarily interacted through trade. Importantly, these data show the role that the landscape played in shaping the setting for intergroup interaction, as the Chancay may have been in a vulnerable position vis-à-vis the *chaupiyunginos* since they lived downriver, and the upriver *chaupiyungino* sites clustered around the irrigation intake. The *chaupiyunginos* may have been able to use this proximity to manipulate the downriver Chancay, as they could threaten to interfere with the Chancay's access to water during times of drought. This may have afforded the *chaupiyunginos* tactical power that could

have given them an advantage over the wealthier, more economically powerful Chancay. The balance of power that appears to have existed may have helped influence how entanglements developed in the valley, as the Chancay would have been dependent on the *chaupiyunginos* for continued access to water. This will be explored in more detail below.

Increasing Access to Shellfish and the Need for Water

Thus, the available documentary and archaeological data suggest that the Huanangue Valley was occupied by four small-scale groups who interacted primarily through exchange. One of these groups, the Chancay, may have moved into the valley in order to gain access to more agricultural land. Though the Chancay were likely more economically powerful than the other groups in the valley, they seem to have been unable to exert any control or influence over local Huanangue Valley groups. While the Chancay's lack of influence in the valley was likely partially due to their lack of political organization, the *chaupiyungino*'s proximity to irrigation intakes also may have provided the local group with tactical power, and may have helped them to set the terms for interaction in the valley as they could threaten to mismanage irrigation water during times of scarcity. In sum, the situation in the valley appears to have been primed for the development of entanglements, as the Chancay likely would have had to negotiate with the *chaupiyunginos* for water rights.

In light of the documentary and archaeological survey data, the *chaupiyungino* site of Campo Libre and the Chancay site of Salitre were excavated in order to elucidate how these entanglements may have occurred. Principally, the excavation data suggest that access to shellfish increased almost twofold at Campo Libre during the Late Intermediate Period. Furthermore, it appears that feasts held at Salitre may have been one of the mechanisms used to distribute shellfish and other marine resources to the *chaupiyunginos* at Campo Libre. Excavation data is presented in

detail in Chapter 7, however, a brief summary highlighting the available evidence of Chancay-*chaupiyungino* entanglements follows below.

Based on the available radiocarbon dates, Campo Libre was likely occupied for approximately 3,000 years (see Table 7.6). The site may originally have been used during the Initial Period as a cemetery, though it is still unclear by whom and for how long. Sector A appears to have been built and inhabited during the transition between the Early Horizon and Early Intermediate Period and extensively remodeled during the Late Intermediate Period, when Sector B was also constructed. The late date for Sector B is particularly interesting, considering the radically different nature of the architecture in this sector. Unlike Sector A, where structures were well made, the structures in Sector B were constructed of unshaped field stones that were expediently piled. The limited amount of wall-fall suggests that these walls were not very tall, and may have served as the bases for structures built of perishable materials. The majority of Chancay black-on-white ceramics recovered from Campo Libre came from excavations in this sector as well (see Table 7.1).

Overall, the Chancay migration into the valley seems to have had very little impact on the *chaupiyunginos* as their access to different plant and terrestrial animal species does not appear to have changed significantly from the Initial Period through Late Intermediate Period. The exception to this is in the quantity of marine resources, as the amount of shellfish recovered from late deposits was close to double that recovered from earlier contexts (see Table 7.33). This suggests that access to marine resources increased roughly at the same time as the rise of the Chancay community and its entrance into the Huanangue Valley. Since the Chancay needed to negotiate with the *chaupiyunginos* for access to water (see Chapter 6), and since middle valley and highland groups often desired marine goods such as shellfish, salt, and dried fish, it is possible that the Chancay

were providing the *chaupiyunginos* with shellfish and other marine goods in exchange for secure access to irrigation water.

In contrast to Campo Libre, Salitre appears to have had a much shorter occupation history, with radiocarbon dates ranging between 1420 through 1560 cal CE. Based both on this range of dates, as well as the stratigraphy of excavation units, this site was likely occupied continuously during this time frame. Ceramics, architecture, and botanic remains at Salitre are quite distinctive in comparison to Campo Libre. The presence of Chancay black-on-white and Cayash ceramics, the use of midden as construction fill, and the placement of walls on top of floors confirm that this site was built and occupied by the Chancay (see Chapter 7). Furthermore, a wide range of botanic remains were present at Salitre, including maize, *lucuma*, chili peppers, avocado, gourds, *guayaba*, pumpkin, and beans. This data coincides with the information from colonial documents that suggested the coastal groups in the Huaura drainage were interested in gaining access to middle valley agricultural land in order to grow maize and other fruits (see Chapters 2 and 5). Both the intrusive and permanent nature of Salitre support the possibility that this site represented a Chancay trade diaspora (see Chapter 2).

In addition, excavation data suggest that inter-community exchange and long distance trade were important to the economy at Salitre. The prevalence of coastal goods such as marine food remains, coastal style Chancay black-on-white ceramics, and peanuts¹ at Salitre suggests that people at the site maintained contact with their Chancay counterparts on the coast, and that goods may have been exchanged between these two regions (see also Nelson and Bellido 2010). It is unclear which goods the Chancay at Salitre were exporting to their coastal relatives, but there are

¹ Though peanuts can grow at the elevations which correspond to the *chaupiyunga* zone, they may not be able to be cultivated with much success in the Huanangue Valley. Local farmers said that the soil is too hard and rocky in the Huanangue Valley and thus not conducive to peanut cultivation. Rather, the majority of peanut cultivation in the Huaura drainage takes place in the areas around the coastal towns of Huaura and Huacho.

some possibilities. Phytolith and starch grain analysis suggests that maize and beans were being grown at the site. Maize was highly valued in the past, as it was a key ingredient in producing *chicha* (Antenez de Mayolo 1981; Hastorf and Johannessen 1993; Raffino et al. 2007), thus it may be that one of the reasons that the Chancay settled in Salitre was to increase access to maize growing land. Alternatively, several different plant species were recovered during excavation, including avocado, *lucuma*, *guayaba*, pumpkin, squash, and chili peppers. Any of these are products that could potentially have been sent down to the coast.

The Setting for the Chancay Trade Diaspora

The timing of and motivation for Chancay migration into the Huaura drainage is still being studied. Prior to Chancay settlement in the area, the lower part of the valley was inhabited by the poorly known Huaura culture. Based on recent excavations by Dunn and Heaton (2013), it appears the Huaura culture sites were abandoned around the same time that the Chancay settled the lower Huaura Valley, which took place sometime after 1300 CE (Dunn and Heaton 2013). Dates from the Huanangue Valley suggest that the Chancay settled the area somewhat later, with the earliest date at 1420 cal CE, though it is possible that the Chancay entered the valley earlier, as this date comes from an upper stratum at Salitre. The dates from Salitre correspond well with the dates for other Chancay sites in the middle Huaura drainage, such as San Jose de las Cañas and Casa Vieja, which both date to about 1450 CE (Pazdur and Krzanowski 1991). Biodistance analysis suggests that there may have been continuous gene flow between the Chancay and Huaura valleys throughout the Late Intermediate Period (Janke 2009), which may suggest that people may have moved back and forth between valleys regularly (see Chapter 5). It is also possible that intermarriage was common between the Chancay settlers and indigenous Huaura Valley people (Janke 2009).

Documentary and archaeological data provide some clues about the potential mechanism behind the establishment of Chancay sites in the Huanangue Valley. Though both *mitimaq* and verticality could possibly explain how the Chancay moved into the valley, the currently available data suggests that the Chancay most likely moved into the valley as part of a trade diaspora that was accomplished through niche filling. As was discussed in Chapters 5 and 6, testimony recorded in the *Justicia 396* claims that the *Señorio* of Huaura sent people into the middle valley in order to cultivate fruits, possibly at the behest of the Inka (Rostworowski 1978). This would seem to suggest that Salitre and other Chancay sites in the Huanangue Valley may have been part of an Inka-ordered *mitimaq* re-settlement; however, this seems unlikely, as Salitre appears to have been settled too early. Though the Inka incorporation of the Norte Chico has yet to be dated archaeologically, documentary data suggest that conquest of this region may have occurred either at the end of Pachacuti's reign, or the beginning of Topa Inka Yupanki's, which John Rowe dates to approximately 1470 CE (Rowe 1945). If this is correct, then the conquest would have occurred approximately 50 years after the apparent 1420 cal CE establishment of Salitre. As such, Chancay migration into the Huanangue Valley is unlikely to have been the result of a *mitimaqkuna* resettlement.

Another possible mechanism for Chancay expansion into the Huanangue Valley may have been verticality. On the surface, the relationship between the coastal and Huanangue Valley Chancay appears to be similar to what Murra described as the third case of verticality, which models how coastal polities establish colonies at higher elevations in order to gain access to highland agricultural, mineral, and other resources (Murra 1975). The verticality model predicts that products from different regions were taken to the polity center and then redistributed. Therefore, in cases where verticality was in operation, one would expect to see a fairly even

distribution of different agricultural (and other) products across sites. However, this was not the pattern of distribution described by Nelson and Bellido (2010) for sites in the lower Huaura drainage. While middle and upper valley products were documented at lower valley sites, overall the distribution of plant taxa was patchy, with several different species documented at some sites and not at others (Nelson and Bellido 2010). Thus, it seems more likely that there was not a centralized mechanism controlling the circulation of agricultural goods, but rather that the movement of these goods may have been shaped by relationships between individuals/families living at different sites. Furthermore, there is little archaeological evidence to suggest that the Chancay community had the power to send people to settle other regions, or to maintain control of those “colonies” once they were established. Therefore, it seems unlikely that verticality was in operation in the Huanangue Valley.

Another possibility is that Salitre and the other Chancay sites in the Huanangue Valley were originally settled as part of a gradual campaign of Chancay expansion through niche filling. Niche filling is an alternative to verticality that was proposed by Enrique Mayer (2002), which describes how many modern Andean communities extend their production zones through establishing annexes approximately a day’s walk away from the community proper (Mayer 2002; see also Dillehay 1976). Archaeologically, niche filling would manifest itself through the presence of a central village site with a cluster of smaller settlements scattered within a short distance² from the central site. This model seems to fit the settlement pattern of Chancay sites within the valley. The smaller sites of Culhauy, La Mina, and Salitre are all within 6 km of the administrative center of Cerro Blanco, thus all are well within a few hours walk of this nodal site.

² The exact distance will vary based on the terrain.

If the Chancay moved into the Huanangue Valley through the grassroots process of niche-filling, they may have done so in order to gain middle valley agricultural land, as was suggested by the documentary data. This also fits the pattern for a trade diaspora as described in Chapter 2, as Chancay people moved to distant lands to gain access to new resources without the aegis of a state (R. Cohen 1996). Excavations seem to confirm this as well. Specifically, the wide variety of agricultural remains at Salitre suggest that agricultural resource extraction may have been an important role that the Salitre fulfilled, which corresponds with the documentary data derived from the *Justicia 396* (see below; Chapter 7). The importance of agriculture for Chancay sites like Salitre also may have been an important factor in the development of entanglements between the Chancay and *chaupiyunginos*. In addition, the hypothesis that Salitre may have been part of a Chancay trade diaspora is supported by the presence of coastal products such as shellfish and peanuts at Salitre, which suggests that people living at Salitre maintained linkages with their counterparts on the coast, perhaps by sending them *chaupiyunga* agricultural products in exchange for marine goods, peanuts, and ceramics.

Exchange between the coastal and middle valley Chancay was likely facilitated by the camelids, whose remains were found at Salitre (Albeck 2001; Berenguer 2005; Nielson 2013). A total of 224 different bone fragments were identified at the site, and both juvenile and adult animals were represented in the sample. The distribution of elements suggests that animals were probably being raised nearby. Though it is still unknown what coastal sites may have been visited by the Chancay at Salitre, one possible place where they may have traveled is the Chancay center/node of Pisquillo Chico. Pisquillo Chico was a large site located in the Chancay Valley, and, based on the amount of public architecture present at the site, it is likely that it served as a location for public ceremonies and may have been a gathering place for members of the Chancay wider affiliated

community. If people from Salitre were traveling to Pisquillo Chico in order to participate in ceremonies, they may have also used these trips as an opportunity to exchange agricultural products for marine resources.

According to Least Cost Path analysis, the distance between Salitre and the Chancay center of Pisquillo Chico is approximately 41 km and would take about 22.5 hours to traverse round-trip, making camelids invaluable to this trip. There are also several other coastal sites that the Chancay settlers at Salitre could have traveled to in order to gain access to shellfish (see Figure 8.2). These sites are anywhere from 45-55 km away from Salitre, and a round-trip would take 20-24 hours to complete. Camelids could have facilitated such journeys working as pack animals, particularly since shellfish can be difficult to transport. Unless the meat is smoked or otherwise dried beforehand, shellfish must be kept alive until cooking as they quickly go rancid. Different species of shellfish have different survival times out of water, but on average can survive for about a week as long as they are kept wet and cool. As the excavation team recovered mollusk shells at both Salitre and Campo Libre, it is likely that whole, live mollusks were being transported to these sites. In such a case, the shellfish consumed at Salitre and Campo Libre would have been carefully packed and quickly transported after having been harvested on the coast. As the combined weight of the containers, unhusked shellfish, and water would likely have been great, camelids may have been used to facilitate their transport, particularly considering that these goods would have had to

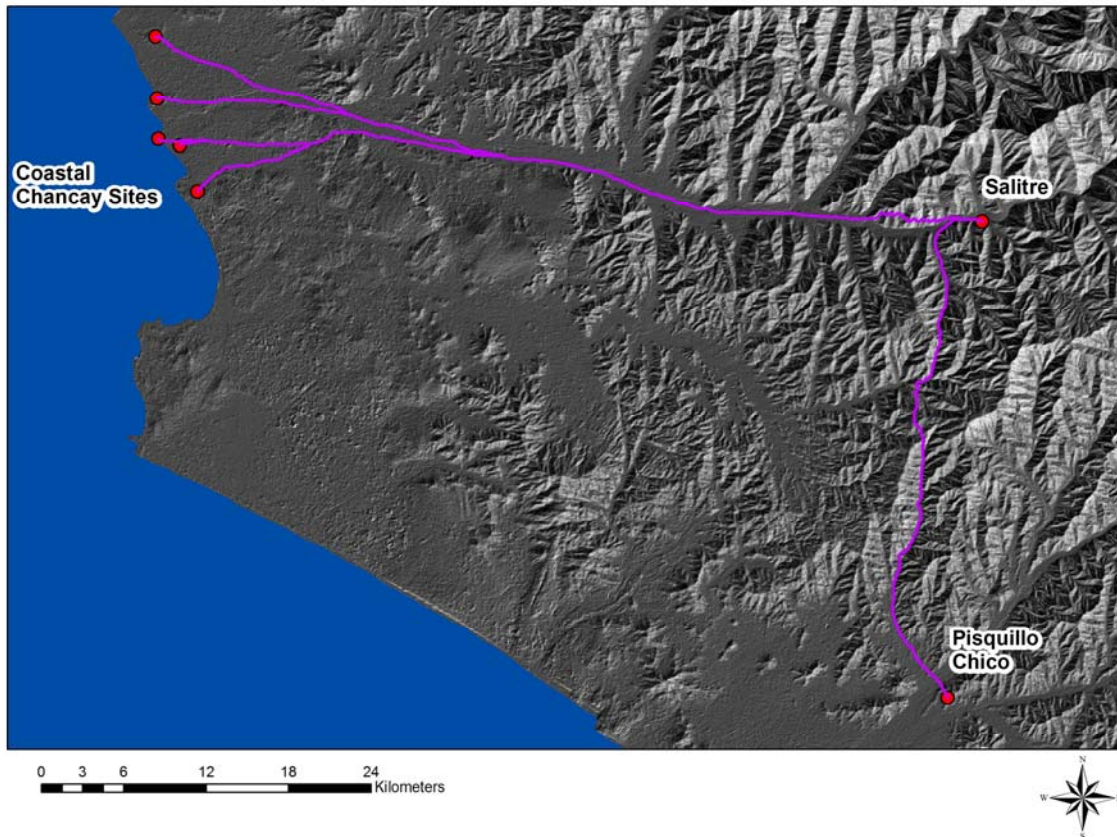


Figure 8.2: Map of Potential Routes from Salitre to Coastal Sites

been moved quickly. These animals could also have been important for facilitating trade with highland groups to the east, and with groups inhabiting the Upper Huaura Valley to the north.

In addition to participating in intra-community trade as describe above, the Chancay also appear to have had access to regional trade networks that would have provided them with access to exotic goods. For example, the research team recovered 51 polished blackware sherds similar to Chimu style, representing approximately 3% of the diagnostic ceramic assemblage (see Table 7.2). In Units 6 and 7, the team uncovered a spondylus bead, a piece of copper, and an obsidian nodule (see Table 7.2). Together, this suggests that there was at least some limited trade with northern groups, mostly likely the Chimu. Though it may have been possible that the people living at Salitre themselves were in close contact with traders from the north coast, this seems unlikely,

as foreign goods were few in number and there is little evidence for Chimu presence in the valley apart from the handful of blackware sherds recovered during excavation. Rather, whatever limited contact occurred between the Chancay community and northern traders likely took place at nodes such as Pisquillo Chico, Lauri, and/or Cerro Blanco, and exotic goods may have been distributed to people living at more distant sites.

Along with trade, agriculture also appears to have been an important part of the economy at Salitre. Since domestic midden was used in the fill between floors at Salitre, excavators were able to gain a clear picture of the range of plants that were available at the site. Species recovered include *aji*, cotton, beans, *lucuma*, maize, avocado, *boliche*, *guarango*, *guayaba*, peanuts, gourd, *palillo*, and pumpkin (see Table 7.2). This variety is striking, considering that excavations suggested that the botanical remains at the *chaupiyungino* site of Campo Libre were more restricted, as only beans, *lucuma*, and cotton were recovered. As midden deposits were not encountered during excavations at Campo Libre, part of this difference may be due to sampling bias. However, testimony provided by Don Diego in the *visita* to Huaura suggests that one of the reasons that coastal people moved to the *chaupiyunga* was in order to gain access to fruits and other agricultural goods (Rostworowski 1978), and the large number of plant taxa documented during macrobotanic analysis appears to confirm that the Chancay at Salitre were doing just this.

In addition, large agricultural fields measuring approximately 7 ha in area were located approximately 1 km up *quebrada* from the site's residential sector. The Chancay at Salitre likely controlled these fields, as the easiest way to access them was to take a path that passed through the residential sector of this site (see Figure 8.3). Though Least Cost Path analysis revealed an alternative path that could have connected the residential sectors of Campo Libre and the agricultural fields at Salitre, this alternate path was visible from both Salitre's residential fields

and residential sector. This suggests that people living at Salitre likely would have been aware if *chaupiyunginos* from Campo Libre tried to access the fields, and lends further support to the idea that the Chancay controlled these fields. In sum, Don Diego's testimony, together with the diversity of plant remains and presence of extensive agricultural fields, suggest that Salitre may have been established in order to gain access to middle valley agricultural land where an increased range of agricultural goods could be produced. In turn, agricultural production likely went hand in hand with trade. According to the documentary data, the Chancay at Salitre were likely sending agricultural products back to the coast, an idea which is supported by the prevalence of camelid bone at the site as well as the presence of coastal goods, such as shellfish and peanuts (see Chapter 6). If this is indeed the case, it would support the hypothesis that Salitre was established as part of a Chancay trade diaspora.

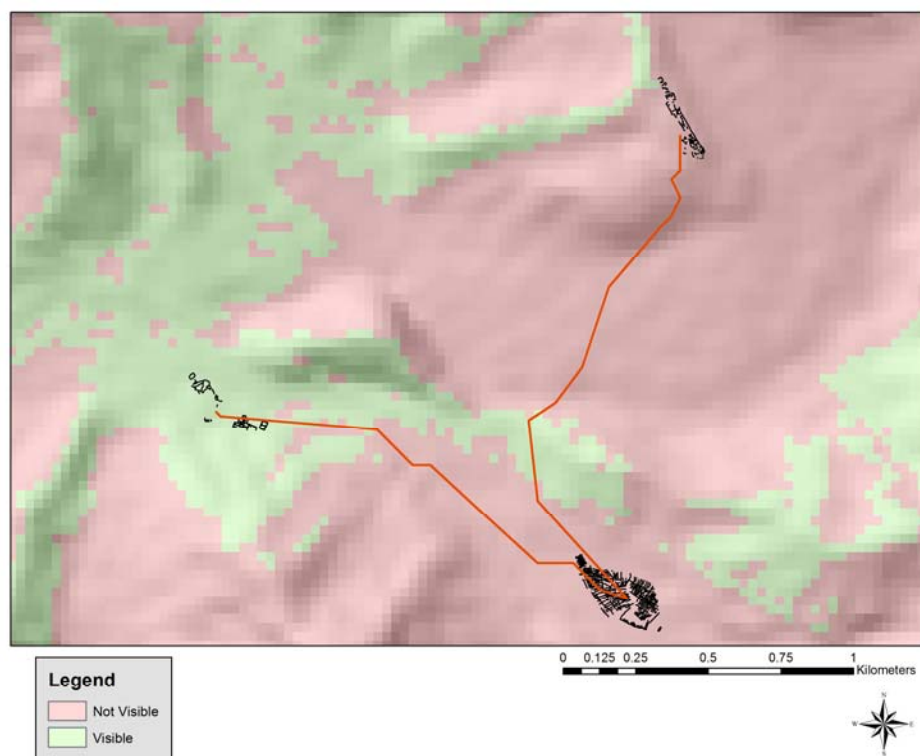


Figure 8.3: Map of Potential Pathways to Agricultural Fields at Salitre

Trade Diaspora, Entanglements, and Tactical Power: Negotiating a Balance of Power in the Huanangue Valley

Based on excavation data from various Chancay sites in both the Chancay and the Huaura drainage, the Chancay wider affiliated community appears to have had a strong economy which was based in both intra-community exchange and long-distance trade with groups living in the north coast, highland, and *selva* regions. Exotic goods such as gold and silver, spondylus, *achira*, tropical bird feathers, and in one case, a mummified monkey (Nelson and Ruiz 2010; Krzanowski 1991a; Cornejo 1991) have been documented at a variety of different locations. In contrast, archaeological data suggests that the *chaupiyunginos* in the Huanangue Valley may have been more economically isolated. *Chaupiyungino* sites documented during survey were small and lacked public architecture (see Chapter 6), suggesting that this group did not have the necessary economic and/or political resources to marshal the labor necessary to construct public monuments. Excavation data from Salitre and Campo Libre confirm this pattern. Chancay settlers at Salitre seem to have had access to a greater range and greater quantity of goods than did the *chaupiyunginos* at Campo Libre, as a greater range of plant and animal taxa were represented at Salitre and ceramics styles were more diverse (see Tables 7.1 and 7.2). In addition, though one Cajamarca cursive style sherd was recovered from Campo Libre along with two Chimu style blackware sherds, foreign goods were largely absent from this *chaupiyungino* site. This lack of exotic goods, along with the restricted array of material cultural remains, suggests that the *chaupiyunginos* did not have access to the same types of economic networks that the Chancay did, and may not have had the same level of economic power.

Typically, when wealthy and economically powerful foreigners move into a new territory, it is assumed that they will exploit the indigenous groups that they come into contact with (Stein 2005; Gosden 2004; Knapp 2010). Archaeologically, oppression can manifest in different ways,

including through changes in modes of production, decreasing quality of life as represented through decreasing artifact diversity/quality, increasingly restricted access to food, more expedient construction techniques, declining health status, and changes in ritual practice, among other possibilities (Smith 2011). For example, Brumfiel (1996) argued that the increase in the use of small, light spindle whorl used to make cotton thread for fine textiles indicates increasing demands on women to produce high-quality cloth for tribute after Aztec conquest. In addition, bioarchaeologists have documented clear evidence for a decline in health for indigenous populations living in La Florida after Spanish Conquest (Larsen et al. 2001). These same excavations revealed that post-conquest diets were much more restricted in comparison to the pre-contact period (Larsen et al. 2001).

Therefore, had the Chancay managed to overpower the *chaupiyunginos*, it is likely that some type of negative change would have been observed at Campo Libre, such as reduction in occupied space, decrease in the variety, quantity, and/or quality of available artifacts, decrease in construction quality, etc. However, as was discussed above (and in Chapter 7), excavations at Campo Libre did not reveal evidence for these types of changes as the material assemblage at the site changed very little over time, particularly in regards to the availability of plant and animal species. If anything, the few changes that excavators observed during the Late Intermediate Period at Campo Libre appear to have been positive; the site was remodeled and expanded, and access to shellfish appears to have doubled (see Chapter 7). In sum, these data suggest that it is unlikely that the Chancay exerted any type of control over local groups in the Huanangue Valley; in contrast, it seems that what little impact that Chancay migration into the valley had was largely positive.

In Chapter 2, the relationship between entanglement and power was examined, and it was hypothesized that small-scale groups could keep from being drawn into unequal power relations if

they controlled some kind of strategic resource which could afford them tactical power. In the Huanangue Valley case, the *chaupiyunginos* may have been able to leverage their proximity to irrigation intakes into tactical power, which may have minimized the potential for power asymmetries to develop between them and the wealthier Chancay. Chancay sites were located downriver from the *chaupiyunga*-controlled irrigation intakes (see Figure 8.1), which may have made the Chancay vulnerable during times of drought, as they would have to rely on the upstream *chaupiyunginos* to conserve water so that there would be enough water left over to reach Chancay fields. While the Chancay at Salitre could have tried to take the irrigation intakes by force, there currently is little evidence to suggest that the Chancay had a strong military. Martial themes are not typically depicted on Chancay ceramics or textiles (Cornejo 1991; Krzanowski 1991), and, while mace-heads and sling stones are occasionally found at Chancay sites (Brown 2008), there are no accounts of warrior burials in the published literature on Chancay cemeteries (Ruiz 1991; Cornejo 1991).

This apparent lack of militarism suggests that the Chancay may not have had the coercive power to take the irrigation intakes by force, and that diplomacy may have been their best option for gaining access to the water they would have needed for their fields. It is here that the Chancay's economic power could have been useful: they had access to products that the *chaupiyunginos* likely desired, such as marine resources like fish, shellfish, and salt (see below). In sum, it appears that a situation existed in the valley where the *chaupiyunginos* held a resource that the Chancay needed, and the Chancay, in turn, had access to resources that the *chaupiyunginos* desired. If this was indeed the case, then the situation that existed in the Huanangue Valley may have been primed for entanglements to develop.

The *Chaupiyungino* Desire for Marine Resources and Entanglements

According to Peruvian historian Santiago Antenez de Mayolo (1981), marine foods were highly valued by middle and upper valley peoples as a supplementary source of protein, particularly during times when labor demands were high (1981). For example, Sarmiento (cited in Mayolo 1981) reported that dried fish was stored by the Inka state, while Betanzos wrote that the Inca Yupanqui ordered that dried fish, along with maize and *charqi*, be distributed every five days to the people involved with the reconstruction of Cuzco (Mayolo 1981). Ipinze's (2004) description of trade occurring between highland and coastal groups in *chaupiyunga* elevations of the Huaura drainage suggests that marine resources were also important to middle valley groups during pre-Inka periods. Excavations at Campo Libre did find evidence for shellfish remains dating to Early Horizon/Early Intermediate Period contexts, though in very limited amounts, with no early context containing more than 12 grams of mollusk shell (see Chapter 7). This suggests that *chaupiyunginos* groups in the Huanangue Valley desired marine resources from a very early date, and that this was a type of foreign good that could be easily inserted into local cultural logics.

In spite of the local desire for shellfish, marine resources likely would have been difficult to obtain for people living in the *chaupiyunga* zone. The coast is located approximately 54 km from Campo Libre, and Least Cost Path Analysis shows that it would have taken 20-24 hours to cover this distance round-trip. As discussed above, transporting shellfish over this distance was probably not an easy feat as it likely would have required at least some technical knowledge in order to properly harvest and pack the shellfish for transportation, as well as man-power (and camelid-power) to cover the necessary distance, particularly as the presence of marine shell on the surfaces of the majority of late sites in the Huanangue Valley suggests that shellfish were transported whole instead of being dried and shucked on the coast. As a coastal community, the

Chancay likely would have had the technological knowledge and proximity to the littoral region to gather and transport marine goods. The presence of a wide variety of fish and shellfish remains, as well as evidence for nets and net-weights at coastal Chancay sites, suggests that the Chancay were able fisherman (Krzanowski 1991a). Furthermore, as discussed above, the Chancay in the Huanangue Valley appear to have maintained access to marine resources. For example, shellfish are plentiful on the surface of the administrative center of Cerro Blanco (see Figure 6.15), and excavations at Salitre also uncovered a total of 583 grams of shellfish from the residential sector of the site. This suggests that the Chancay were already moving shellfish up into the middle valley for their own consumption, and may mean that the Chancay settlers at Salitre were well positioned to fulfill the *chaupiyungino* desire for marine foods.

Thus, it is possible that the Chancay at Salitre may have brokered their access to marine resources in exchange for secure access to irrigation water from the *chaupiyunginos* at Campo Libre. Survey and excavation data from Campo Libre support this hypothesis. As discussed in Chapter 6, viewshed analysis shows that the irrigation intakes were visible from the residential sectors of Campo Libre, suggesting that *chaupiyunginos* would have been able to monitor access to them. Furthermore, the *chaupiyunginos* may have been able to intimidate groups living down river by threatening to mismanage water in times of scarcity. Excavation data from Campo Libre illustrated that the amount of shellfish from Late Intermediate Period contexts is nearly double the amount of shellfish from all pre-Late Intermediate Period contexts. For example, in Unit 4 at Campo Libre, the greatest amount of shellfish recovered in any pre-Late Intermediate Period layer did not exceed 12 grams. In contrast, the most shellfish-rich Late Intermediate Period layer from the same unit contained 20 grams of shellfish (see Table 7.8). At Unit 6, which appears to have had a single Late Intermediate Period occupation, a total of 39 grams of shellfish were recovered.

When shellfish weights from all pre-Late Intermediate Period and all Late Intermediate Period contexts are summed and compared, Late Intermediate Period contexts contained a total of 75 grams of shellfish, whereas pre-Late Intermediate Period contexts contained only 46 grams of shellfish (see Table 7.8). These numbers are more striking when one considers that the pre-Late Intermediate Period group represents a nearly 2,500-year period, whereas the Late Intermediate Period group represents a time span of approximately 500 years. In other words, there appears to have been a substantial increase in the availability of shellfish (and, by proxy, other marine resources) that coincided with the rise of the Chancay community and their eventually movement into the Huanangue Valley. This supports the hypothesis that the Chancay may have been providing shellfish (and likely other marine resources) to the *chaupiyunginos*, perhaps in exchange for guaranteed access to irrigation water. While the mechanism through which shellfish were exchanged is still not entirely clear, one possibility is that feasting may have played a role in the distribution of this resource.

Feasting and Entanglements

Based on excavation data presented in Chapter 7, it appears that feasts were held at Salitre. Specifically, a thick layer of midden containing copious amounts of ceramics, shellfish, botanics, and faunal remains was recovered from Unit 5 at Salitre. This deposit has been interpreted as containing feasting remains due to Unit 5's proximity to small platform mounds that may have been used for public rituals, and due to the fact that 18% of the ceramics, 16% of the faunal remains, and 28% of the shellfish recovered from Salitre came from this layer. Typically, studies of feasting focus on how commensality helps promote the emergence of social and political hierarchies (Bray 2003a:1). For example, in contemporary African societies, elites often use feasting to mobilize support and legitimize their position (Dietler and Herbich 1998). For the

ancient world, scenes depicting commensality between various elite personages on the Standard for Ur are generally interpreted as illustrating the importance of feasting to the rise of Mesopotamian city-states during the 3rd millennium BCE (Pollock 2003). In the ancient Andes, feasts were often employed by the leaders of states such as the Inka, Wari, and Chimú to mobilize labor and legitimize elite authority through manipulating Andean ideas of reciprocity (Bray 2003b; Ramirez 2005; Hastorf and Johannessen 1993; Vaughn 2004; Chicoine 2011). As such, the presence of feasting (see Chapter 7) at Salitre raises several interesting points. First, in highly centralized, hierarchical societies, feasting is generally used as a mechanism for elites to create allegiance among their followers (Dietler 1998; Bray 2003a; Ramirez 2005; Mauss 1954). Thus, hosting feasts would likely have been an activity restricted to elites, making it unlikely that villagers would have been sponsoring their own feasts in a strongly hierarchical society. Therefore, the fact that feasts were held at Salitre may suggest that the elites living at Cerro Blanco had little interest in, and/or little control over, the activities that took place at lower-level sites.

As it appears that feasts were not being used to create/reinforce social and political hierarchies in the valley, it may be possible that they were used to help support alliance-building between different groups. This hypothesis can be evaluated through an examination of the pottery associated with the feasting deposit documented in Unit 5 (see Chapter 7). Typically, decorated, high-status ceramics tend to be associated with feasting remains (Hayden 2001; Bray 2003b). This is particularly true in the Andes, where elaborately decorated drinking and eating vessels were often used during feasts and other commensal rituals as part of a strategy to disseminate elite ideologies and recruit followers (Swenson 2006; Bray 2003b; Chicoine 2011; Hastorf and Johannessen 1993). The Chancay black-on-white style is a highly distinctive type of ceramic which is generally associated with Chancay cemeteries and other ceremonial spaces (Krzanowski

1991; Horkheimer 1963), and that may have been linked to Chancay identity (Bria 2009). As such, excavators expected to find a high percentage of Chancay black-on-white ceramics in the assemblage associated with the feasting deposit. However, only one decorated Chancay black-on-white ceramic was recovered. Instead, the deposit was dominated by Cayash style ceramics, which represented 11.8% of the diagnostic ceramics recovered in this context. This is significant because the Cayash ware is a style of utilitarian ceramic that was common both on the coast and in the highland in the Norte Chico, and was used by groups other than just the Chancay (Krzanowski 1986; Vogel 2011). As such, Cayash style ceramics do not appear to have been closely tied to any particular type of social identity in the valley. Thus, the Chancay may have consciously chosen to use these ceramics during feasts at Salitre in order to de-emphasize their identity as foreigners in the valley, which in turn may suggest that the Chancay were hosting local *chaupiyunginos* as part of a strategy of alliance-building in order to gain access to irrigation water.

Furthermore, feasting could also have contributed to the development of economic and political entanglements between groups. Commensal events requires numerous resources, both in terms of food and labor (Hayden 2001). As both agricultural products and shellfish appear to have played an important role in the feasts at Salitre (see Chapter 7), holding these events may have put pressure on the Chancay settlers, as they may have had to intensify production in order to be able to have enough produce to fulfill the nutritional needs of the people living at the site, maintain their trade relationship with the coast, and to fête the *chaupiyunginos* with. If this were the case, then the Chancay likely would have become increasingly dependent on access to the irrigation water that was vital to a successful harvest.

Thus, it is possible that the Chancay at Saltire could have become doubly entangled. First, as discussed above and in Chapter 7, since excavation data suggests that the Chancay at Salitre

were likely providing shellfish and other marine goods to the *chaupiyunginos*, they probably would have had to rely upon their Chancay counterparts living on the coast to get access to this resource, which the residents of Salitre could have obtained in exchange for middle valley agricultural products. The need to exchange agricultural goods for marine ones would, in turn, likely have deepened the entanglements between the Chancay at Salitre and the *chaupiyunginos* as the settlers living at Salitre would need water in order to produce the agricultural goods that they needed to send back to the coast, and that they needed to fête the *chaupiyunginos* with during feasts. In turn, the *chaupiyunginos* may have become dependent upon the Chancay at Salitre to fulfill their desire for shellfish and other marine resources, particularly as ethnohistoric sources suggests that marine foods were an important source of supplemental protein (Antenez de Mayolo 1981).

The entanglement between the Chancay and the *chaupiyunginos* may have had several consequences for the formation of local and regional political landscapes. First, the need to provide shellfish to local *chaupiyunginos* may have increased the intensity of trade between middle valley and the coastal Chancay, which, in turn, may have helped to preserve and strengthen social linkages between both groups (see Goldstein 2005; Clifford 1994). Furthermore, mutual interdependence between the Chancay and the *chaupiyunginos* possibly could have allowed them to present a united front against incursions from highland groups such as the Atavillos. Ethnohistoric accounts (Dillehay 1976, 1977, 1979, 2013; Rostworowski 1978, 1988; Santoro et al. 2010) suggest that highland groups often had contentious relationships with middle valley and coastal groups. For example, according to the *Huaro-chiri Manuscripts*, the highland Yuayos were in the process of moving toward the coast, and thus often came into conflict with the groups living at lower altitudes (Salomon and Urste 1991). In addition, according to the *Justicia 416*, the Yuayos encroached on the Quives people, causing them to ask the coastal Collique for military support

(Dillehay 2013). In the Huanangue Valley case, two highland-affiliated sites were documented during survey (see Chapter 6), but these sites were located at the very upper limit of the *chaupiyunga*, and highland style ceramics were only rarely documented throughout the valley during survey. As such, it appears that the highland groups had largely been contained, and thus were not big players in the *chaupiyunga* zone, perhaps as a result of a Chancay-*chaupiyungino* alliance.

Summary and Conclusions

In sum, by using a combination of ethnohistoric and archaeological data, several different conclusions can be drawn in reference to the questions asked in Chapter 1. First, survey data suggested that four different ethnic-like groups lived in the Huanangue Valley during the Late Intermediate Period, and that they likely interacted primarily through trade. Second, two of these groups, the Chancay and the *chaupiyunginos*, appear to have become entangled with each other due to the Chancay's need for water and the *chaupiyungino*'s desire for shellfish and other marine goods. Third, both agricultural production and landscape played a role in how these entanglements developed, as documentary and excavation data suggest that the Chancay moved into the Huanangue Valley in pursuit of agricultural land, but that the aridity of the local environment caused them to become dependent on the *chaupiyunginos* for access to irrigation water.

Specifically, based on the diversity of botanic remains at Salitre, it is likely that this site was used to produce agricultural goods which may have been sent down to the coast using llama caravans. This supposition is supported by the presence of camelid remains at Salitre, as well as by documentary data which documents the movement of coastal people into the middle valley as part of a strategy to increase agricultural production. As such, Salitre likely fits the definition for a trade diaspora settlement as defined in Chapter 2. At the same time, excavations at Campo Libre

seem to suggest that Chancay migration into the Huanangue Valley had very little impact on the *chaupiyunginos*, as material culture at the site remained relatively the same throughout its history of occupation. This lack of influence may have been due in part to the *chaupiyunginos*' tactical power, suggesting that in the particularly harsh environment of the Huanangue Valley, tactical power may have been more important than economic power. Because *chaupiyunginos* sites were clustered around the irrigation intakes, they may have been able to coerce the Chancay into providing them with access to marine goods through threatening to use up all the water during times of drought. Thus, the Chancay need for irrigation water, together with the *chaupiyungino* desire for shellfish, may have helped create the conditions for entanglements to develop between these two groups.

Typically, when entanglements are discussed in the anthropological literature, they are understood as drawing local peoples into disadvantageous relationships with the foreign groups, and are often seen to lead to the eventual subjugation of those local groups (Dietler 2010; Gosden 2004). However, this seems not to be what occurred in the Huanangue Valley. Rather, the *chaupiyunginos* may have been protected by the tactical power that they likely was based on their proximity to strategic resources. In fact, the data suggests that the Chancay settlers at Salitre may have been the ones most disadvantaged by their entanglement with the *chaupiyunginos*. First, in order to produce the agricultural goods that they were likely sending down to the coast, the Chancay would have been dependent on the *chaupiyunginos* to ensure continued access to irrigation water. Second, in order to get that water, they likely would have needed to provide to the *chaupiyunginos* marine resources. In turn, the Chancay at Salitre would have also been dependent on their counterparts on the coast in order to be able to acquire the necessary marine resources that they were likely exchanging with the *chaupiyunginos* for access to irrigation water.

Thus, this Andean case of entanglements provides an additional important lesson: In some contexts, “colonists” can be taken advantage of both by the metropole and by the indigenous groups whose territory they invade.

Studying entanglements between small-scale groups also highlights the importance of understanding power in a broad sense in order to be able to detect the different types of power that small-scale groups are able to employ. In spite of the post-colonial turn in the social sciences, many archaeologists still use traditional Marxian or Weberian definitions of power that focus on economic and military control. However, power takes many different forms, and though those that are employed by small-scale groups are subtle and thus difficult to detect, they are still important to study, as they can profoundly impact geopolitics on both the local and regional scales. For example, in the case of the Huanangue Valley, the indigenous *chaupiyunginos* appear to neither to have been neither rich, nor to have had any appreciable military power; however, their control over irrigation intakes may have provided a source of tactical power that allowed them to set the terms for interaction in the valley.

More generally, tactical power can both encourage the development of entanglements and help prevent those entanglements from leading to asymmetrical power relationships. For example, when indigenous French elites became dependent upon Greek (and later Roman) wine, they appear not to have controlled any assets that would have been of strategic interest to the Greco-Romans. This may have hindered their ability to check Greco-Roman colonial intentions during the Iron Age. In contrast, the Samaritans were a small-scale group that was able to exercise tactical power through controlling strategic points on important east-west trade routes, and were able to retain their independence in spite of becoming economically entangled with the Han dynasty. Comparatively, the *chaupiyunginos* appear to have been similar to the Samaritans in that their

symbolic control over irrigation intakes seems to have given them a strategic advantage over the Chancay that may have allowed them to become dependant on the Chancay for shellfish without becoming subjugated by them. As such, looking beyond traditional notions of power can be key to understanding how small-scale groups are able to engage in regional economic networks without coming under the control of the more powerful participants in those networks.

For Andean archaeology, this study is important, as it examines a new interpretative framework for analyzing intergroup interaction. Intergroup interaction was a central component of past political economies in the Andes, and understanding the nuances of this interaction is important to understanding the pre-Inka political landscape, particularly as the manipulation of local social networks and local institutions were a key part of Inka administrative techniques. Thus, reconstructing these institutions is key to gaining understanding of indigenous, non-European forms of colonialism. As this study has shown, and as many scholars have recently suggested (Van Buren 1996; Dillehay 1979, 2013; Burger 2013; Mayer 2002, 2013; Santoro et al. 2010), ancient Andean groups had several different economic mechanisms at their disposal, and intergroup interaction was a key component to local and regional political-economies.

Studying these different mechanisms of economic interaction is necessary, not only to better understand the variability of past Andean ways of life, but also to help make Andean research relevant to researchers in other world areas. As this study has shown, economic entanglements between groups may have been common on the Andean slopes. The case study presented here highlights both the potential explanatory utility of the entanglement model for understanding pre-Inka political economies, as well as the role that the tactical power may play in preventing unequal power relationships from developing out of economic entanglements. Furthermore, as climate change puts increasing pressure on water and other vital resources in

today's world, understanding the impact of tactical power in shaping intergroup interaction will be key to learning how to better and more equitably manage these resources.

Directions for Future Research

There are still several unresolved questions that need to be addressed through further research. First, while this study focused on the connections between Salitre and Campo Libre, the relationships between the administrative center of Cerro Blanco and the other Chancay sites in the Huanangue Valley, such as Salitre, need to be defined. Furthermore, it is still unclear what role highland groups played in the valley. In order to resolve these issues, three major research pathways need to be further pursued in the short, medium and long term. In the short term, it will be necessary to map and excavate the administrative site of Cerro Blanco in order to better understand what types of activities took place there, and who participated in these activities. This, in turn, will help to develop a better understanding of the relationship between Cerro Blanco, Salitre, and the other Chancay sites in the Huanangue Valley, and may also provide insight into the relationship between Cerro Blanco and other Chancay administrative centers, such as San Jose de Cañas, Pisquillo Chico, and Lauri.

In conjunction with excavations at Campo Libre, the Huaura drainage ceramic database will continue to be expanded and refined through adding new data to it as excavations at other sites in the Huaura drainage progress. In the medium term, collaborative work is planned with other researchers in the lower Huaura Valley in order to begin ceramic sources studies so that the political economy of ceramic production in the region can be reconstructed. This project will involve identifying and sampling potential clay sources in the Chancay and Huaura drainages, and the chemical analysis of ceramics from excavated contexts at Chancay sites. These types of studies can provide insight into regional and inter-regional patterns of interaction by helping to pin down

where the raw materials needed to make different styles of ceramics were located, and how these resources were then distributed to potters in the region.

In the long term, survey and excavation projects need to be carried out in the highland region around Ihuari. This research is necessary to identifying which highland groups were living in the region, and may provide further insight into why highland groups did not encroach any further into the Huanangue Valley. Part of this research project will also include the excavation of the potential highland sites of Huanangui and Yuringa in order to confirm that these sites were indeed inhabited by highland groups, and to better understand what types of relationships may have existed between the *chaupiyunginos* and highland communities.

On a broader note, this study highlights the need for more inter-valley comparative work, particularly along the central and north central coast, where archaeological and ethnohistoric evidence suggests that numerous small-scale polities (the Chancay, Collique, Ichsma, Chinchu, etc.) existed in close proximity, and were almost certainly interacting with each other.³ Studying the dynamics of these interactions is important to understanding how this region was eventually subjugated and administered by the Inka, and may also provide insight into the ways in which small-scale groups could cooperate in order to resist imperial power. Inter-valley research will also provide insight into the unique ways in which small-scale groups managed their landscapes, and how landscape and resource management can provide a basis for the development of tactical power.

Finally, entanglement theory is one of several interpretive frameworks that may prove useful for understanding Andean political and economic relationships. Further research is also

³ For example, in Garcilaso's account of the Inka conquest of this region, the leaders of the Chancay, Collique and Ichsma polities were all gathered at Pachacamac to engage in dialogue with Tupac Yupanqui regarding their terms of surrender to the Inka Empire (see Chapter 5).

needed into related themes, such as the ways in which groups may have used feasts and other ceremonial/ritual events to create a “Middle Ground,” reduce inter-group tension, and promote alliance-building. Alternatively, Gosden’s (2004) model of colonialism through a shared cultural milieu may provide insight into the types of processes that were occurring both during the Early and Middle Horizons.

Appendix A: Maps of Campo Libre

Figure A.1: Map of Campo Libre Showing the Locations of Sectors A-D

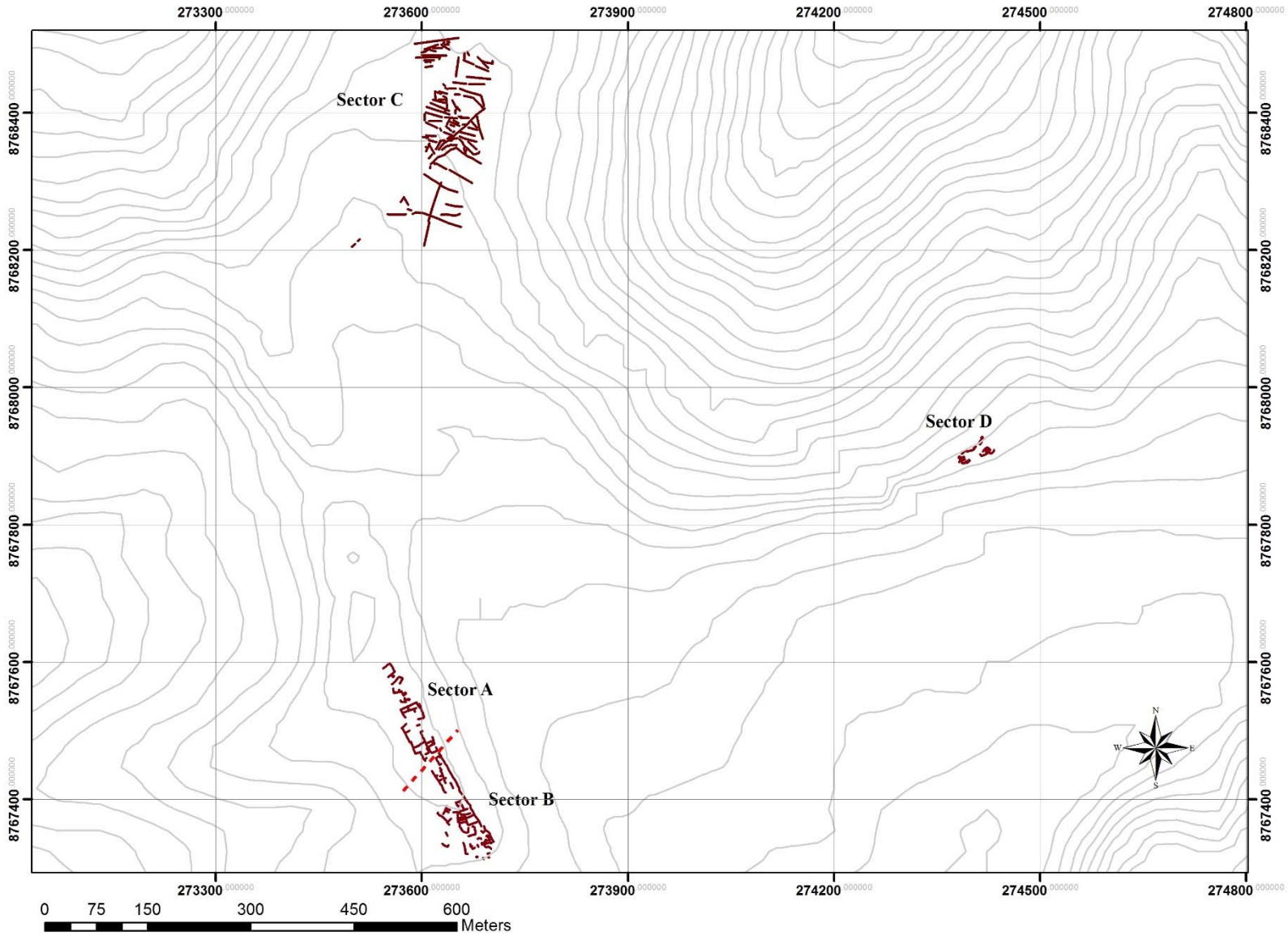


Figure A.2: Map of Campo Libre, Sectors A and B

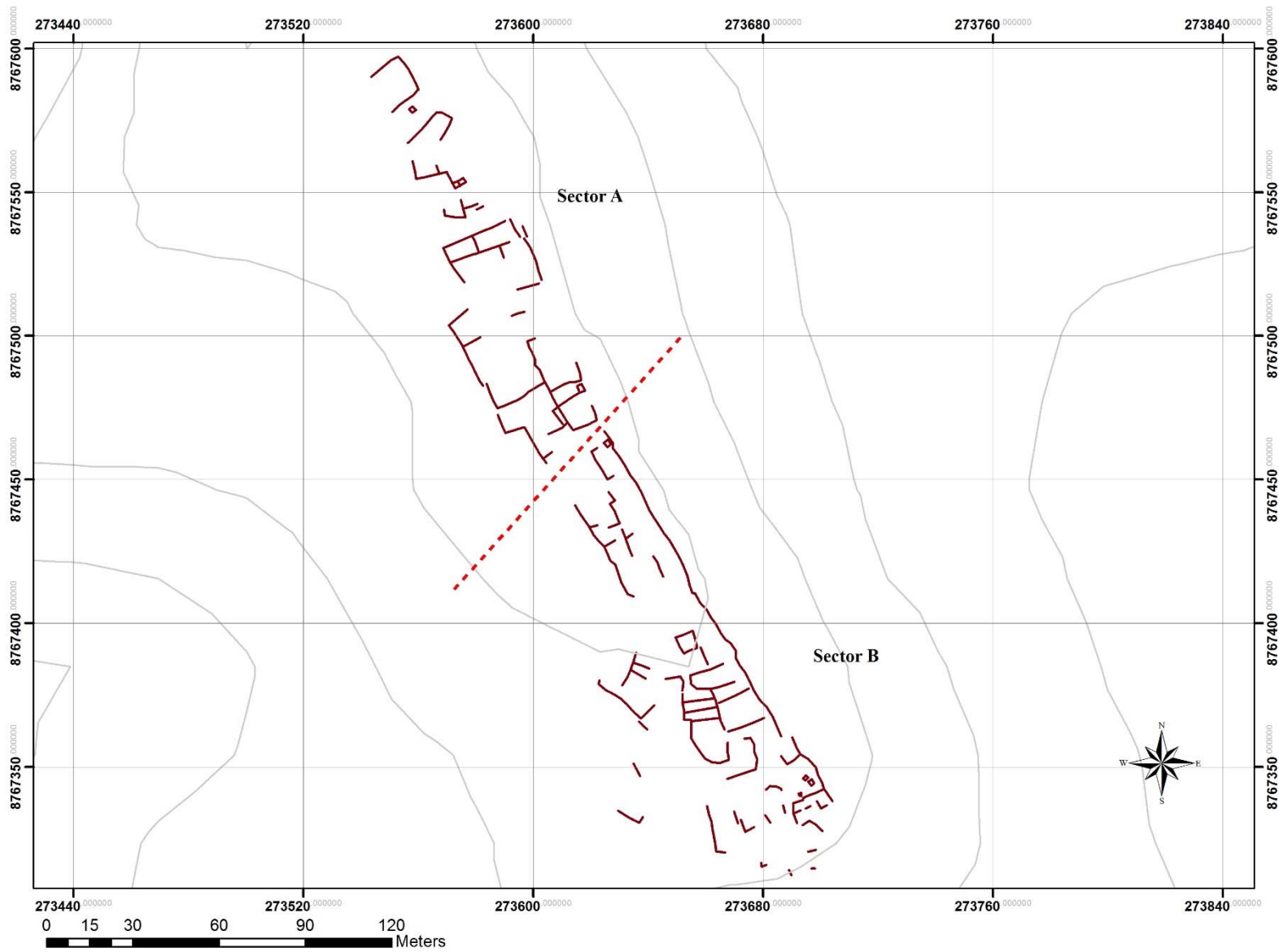


Figure A.3: Map of Campo Libre, Sector C (Agricultural Fields)

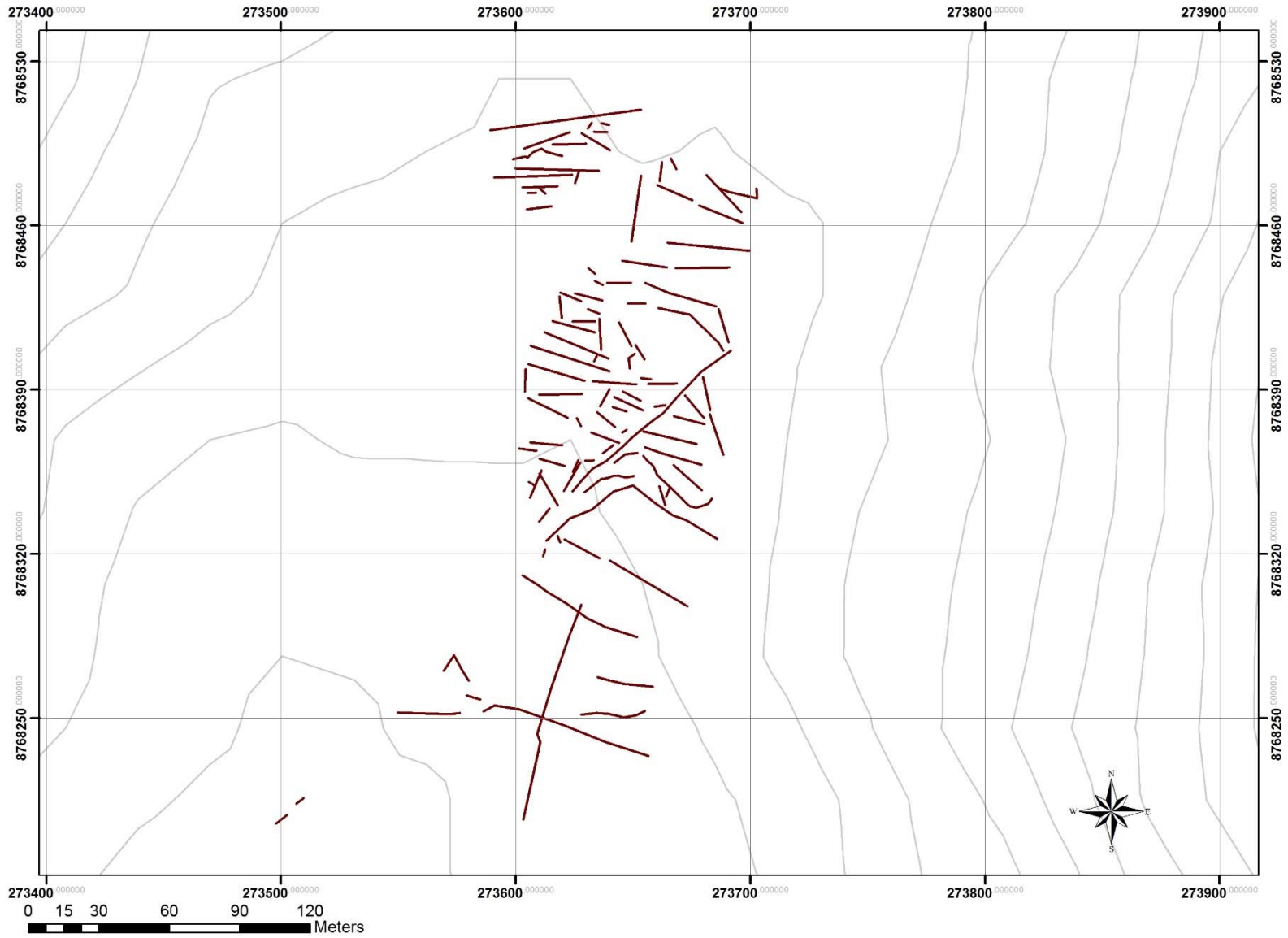
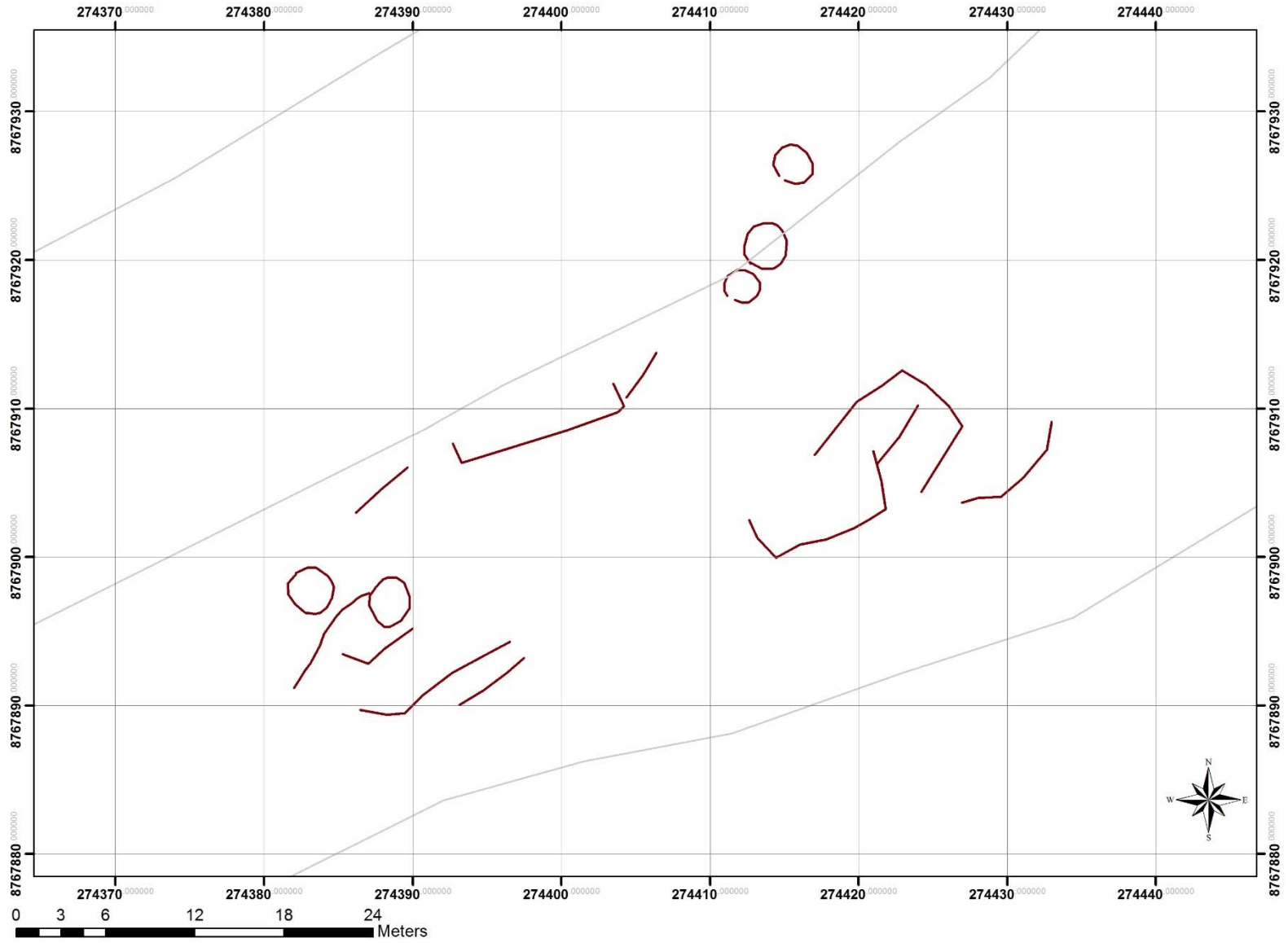


Figure A.4: Map of Campo Libre, Sector D (Storage Structures and Drying Platforms)



Appendix B: Maps of Salitre

Figure B.1: Map of Salitre Showing the Location of Sectors A and C

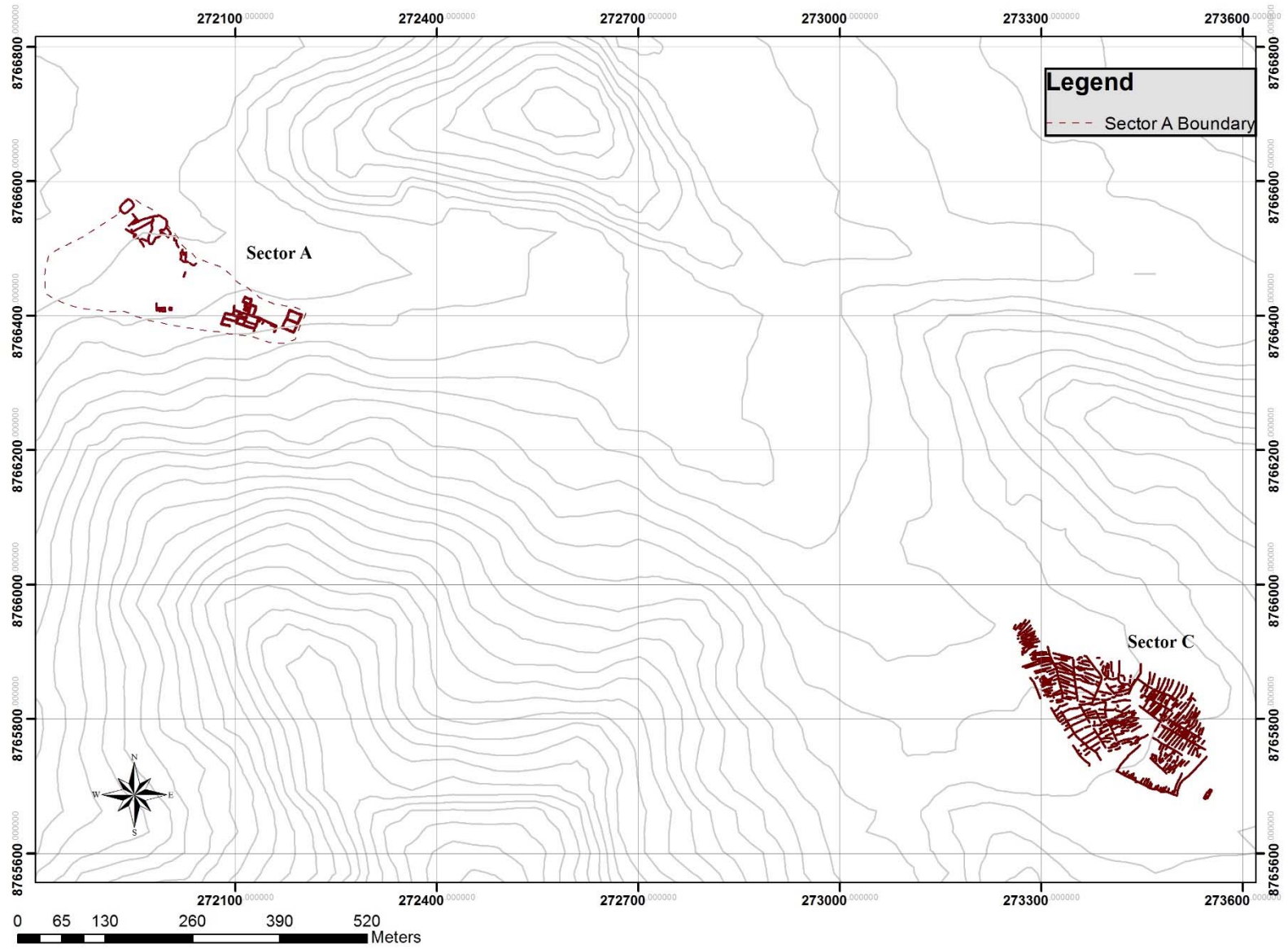


Figure B.2: Map of Salitre, Sector A

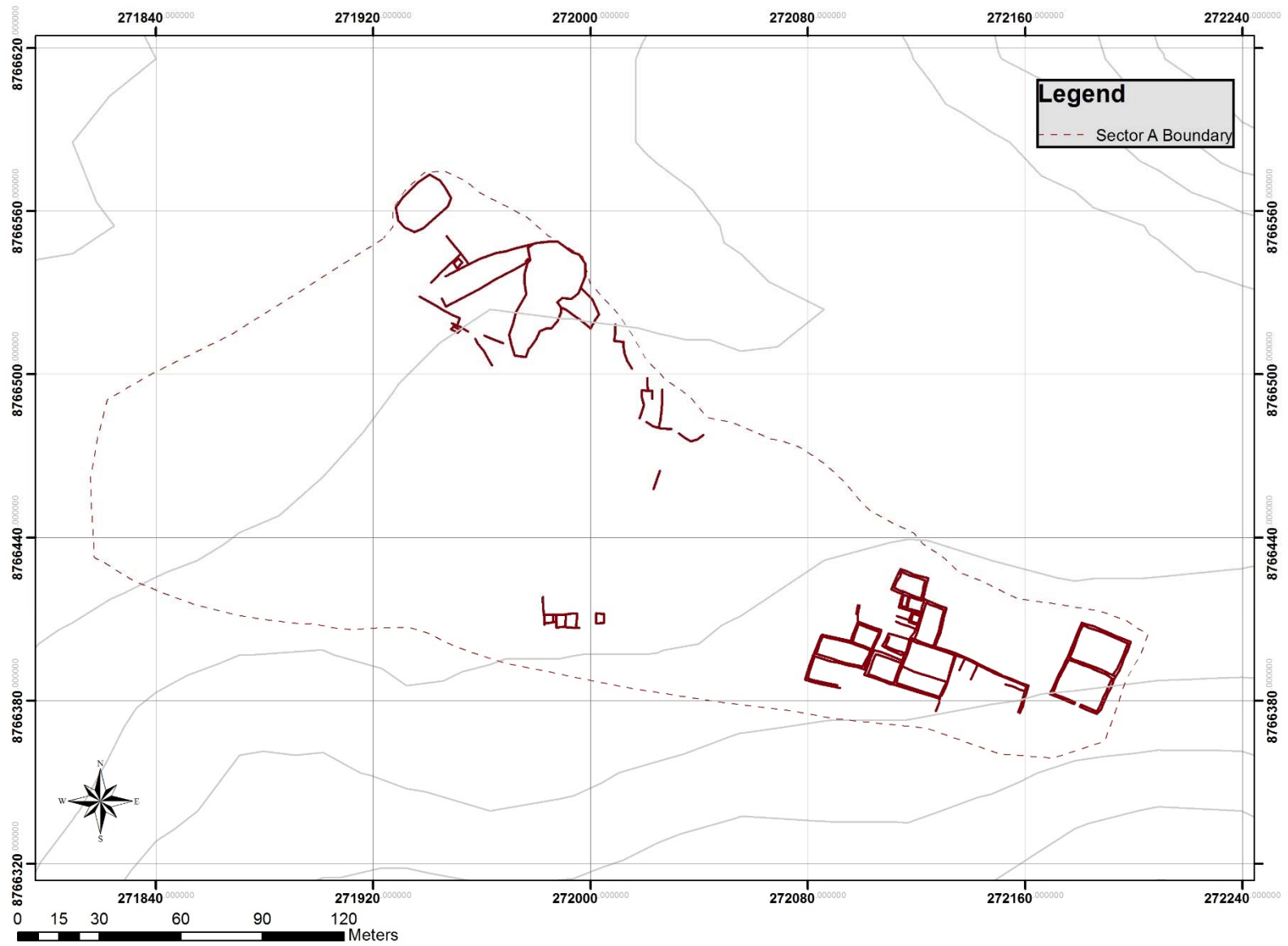


Figure B.3: Map of Salitre, Sector C (Agricultural Fields)



Appendix C: Macrobotanic Analysis

Carmela Alacróm

Table C.1: Results of the Botanic Analysis from Salitre

Bolsa	Sitio	Sector	Unidad	Locus	Lote	N. comun	Parte	Condicion
1486	Salitre	Sector A	unidad 4	locus 10	lote 3	palta	semilla	frg
1486	Salitre	Sector A	unidad 4	locus 10	lote 3	lucuma	semilla	frg
1486	Salitre	Sector A	unidad 4	locus 10	lote 3	mate	fruto	frg
1486	Salitre	Sector A	unidad 4	locus 10	lote 3	mate	semilla	completa
1486	Salitre	Sector A	unidad 4	locus 10	lote 3	zapallo loche	semilla	completa
1486	Salitre	Sector A	unidad 4	locus 10	lote 3	frejol	semilla	completa
1486	Salitre	Sector A	unidad 4	locus 10	lote 3	zapallo	pedunculo	frg
1486	Salitre	Sector A	unidad 4	locus 10	lote 3	guayaba	fruto	frg
1486	Salitre	Sector A	unidad 4	locus 10	lote 3	maní	capsula	frg
1486	Salitre	Sector A	unidad 4	locus 10	lote 3	boliche	semilla	
1486	Salitre	Sector A	unidad 4	locus 10	lote 3	ni	ramas	frg
1486	Salitre	Sector A	unidad 4	locus 10	lote 3	maiz	tusa	frg
1583	Salitre	Sector A	Unidad 5	locus 11	lote 6	zapallo loche	semilla	completa
1583	Salitre	Sector A	Unidad 5	locus 11	lote 6	mate	fruto	frg
1583	Salitre	Sector A	Unidad 5	locus 11	lote 6	ni	tallos	frg
1583	Salitre	Sector A	Unidad 5	locus 11	lote 6	lucuma	semilla	frg
1356	Salitre	Sector A	Unidad 5	locus 11	lote 6	frejol de los gentiles	semilla	completa
1356	Salitre	Sector A	Unidad 5	locus 11	lote 6	lucuma	semilla	frg
1356	Salitre	Sector A	Unidad 5	locus 11	lote 6	zapallo macre	semilla	frg
1356	Salitre	Sector A	Unidad 5	locus 11	lote 6	ni	tallos	frg
1356	Salitre	Sector A	Unidad 5	locus 11	lote 6	ni	otros	frg

Bolsa	Sitio	Sector	Unidad	Locus	Lote	N. comun	Parte	Condicion
1637	Salitre	sector A	Unidad 5	locus 11	lote 8	zapallo loche	semilla	completa
1715	Salitre	Sector A	Unidad 5	locus 11		ni	corteza	frg
1627	Salitre	Sector A	Unidad 5	locus 13	lote 1	ni	talos	frg
1807	Salitre	Sector A	Unidad 6	Locus 12	lote 12	lucuma	semilla	frg
1807	Salitre	Sector A	Unidad 6	Locus 12	lote 12	guarango	tallos	frg
1862	Salitre	Sector A	Unidad 6	Locus 12	lote 13	maní	capsula	frg
1862	Salitre	Sector A	Unidad 6	Locus 12	lote 13	zapallo loche	semilla	frg
1862	Salitre	Sector A	Unidad 6	Locus 12	lote 13	mate	semilla	completa
1862	Salitre	Sector A	Unidad 6	Locus 12	lote 13	ni	ramas	frg
1872	Salitre	Sector A	Unidad 6	Locus 12	lote 14	maní	capsula	frg
1872	Salitre	Sector A	Unidad 6	Locus 12	lote 14	mate	semilla	frg
1872	Salitre	Sector A	Unidad 6	Locus 12	lote 14	zapallo loche	semilla	frg
1872	Salitre	Sector A	Unidad 6	Locus 12	lote 14	lucuma	semilla	frg
1872	Salitre	Sector A	Unidad 6	Locus 12	lote 14	maíz	tusa	frg
1872	Salitre	Sector A	Unidad 6	Locus 12	lote 14	ni	tallos	frg
1889	Salitre	Sector A	Unidad 6	Locus 12	lote 15	maní	capsula	frg
1889	Salitre	Sector A	Unidad 6	Locus 12	lote 15	maíz	tusa	frg
1889	Salitre	Sector A	Unidad 6	Locus 12	lote 15	lucuma	semilla	frg
1889	Salitre	Sector A	Unidad 6	Locus 12	lote 15	palta	semilla	frg
1889	Salitre	Sector A	Unidad 6	Locus 12	lote 15	palta	semilla	frg
1889	Salitre	Sector A	Unidad 6	Locus 12	lote 15	mate	fruto	frg
1889	Salitre	Sector A	Unidad 6	Locus 12	lote 15	zapallo loche	semilla	frg

Bolsa	Sitio	Sector	Unidad	Locus	Lote	N. comun	Parte	Condicion
1889	Salitre	Sector A	Unidad 6	Locus 12	lote 15	zapallo macre	semilla	frg
1889	Salitre	Sector A	Unidad 6	Locus 12	lote 15	mate	semilla	frg
1889	Salitre	Sector A	Unidad 6	Locus 12	lote 15	ni	tallos	frg
1889	Salitre	Sector A	Unidad 6	Locus 12	lote 15	ni	madera	frg
1889	Salitre	Sector A	Unidad 6	Locus 12	lote 15	algodón	tallos	frg
1947	Salitre	Sector A	Unidad 6	Locus 12	Lote 16	aji	pedunculo	frg
1947	Salitre	Sector A	Unidad 6	Locus 12	Lote 16	aji	semilla	completa
1947	Salitre	Sector A	Unidad 6	Locus 12	Lote 16	algodón	tallo	frg
1947	Salitre	Sector A	Unidad 6	Locus 12	Lote 16	guayaba	fruto	frg
1947	Salitre	Sector A	Unidad 6	Locus 12	Lote 16	zapallo	pedunculo	frg
1947	Salitre	Sector A	Unidad 6	Locus 12	Lote 16	mate	fruto	frg
1947	Salitre	Sector A	Unidad 6	Locus 12	Lote 16	lucuma	semilla	frg
1947	Salitre	Sector A	Unidad 6	Locus 12	Lote 16	mate	semilla	frg
1947	Salitre	Sector A	Unidad 6	Locus 12	Lote 16	zapallo loche	semilla	frg
1947	Salitre	Sector A	Unidad 6	Locus 12	Lote 16	zapallo macre	semilla	fgr
1947	Salitre	Sector A	Unidad 6	Locus 12	Lote 16	maíz	tusa	frg
1947	Salitre	Sector A	Unidad 6	Locus 12	Lote 16	maní	capsula	frg
1947	Salitre	Sector A	Unidad 6	Locus 12	Lote 16	palta	semilla	frg
1986	Salitre	Sector A	Unidad 6	Locus 12	lote 17	ni	tallos	frg
1986	Salitre	Sector A	Unidad 6	Locus 12	lote 17	algodón	fibra	
1986	Salitre	Sector A	Unidad 6	Locus 12	lote 17	maní	capsula	frg
1986	Salitre	Sector A	Unidad 6	Locus 12	lote 17	maíz	tusa	frg
1986	Salitre	Sector A	Unidad 6	Locus 12	lote 17	mate	semilla	completa

Bolsa	Sitio	Sector	Unidad	Locus	Lote	N. comun	Parte	Condicion
1986	Salitre	Sector A	Unidad 6	Locus 12	lote 17	zapallo macre	semilla	frg
1986	Salitre	Sector A	Unidad 6	Locus 12	lote 17	zapallo loche	semilla	frg
1986	Salitre	Sector A	Unidad 6	Locus 12	lote 17	palta	semilla	frg
1986	Salitre	Sector A	Unidad 6	Locus 12	lote 17	algodón	fruto	completa
1986	Salitre	Sector A	Unidad 6	Locus 12	lote 17	guayaba	fruto	frg
1986	Salitre	Sector A	Unidad 6	Locus 12	lote 17	lucuma	semilla	frg
1986	Salitre	Sector A	Unidad 6	Locus 12	lote 17	algodón	semilla	completa
1994	Salitre	Sector A	Unidad 6	Locus 12	lote 18	palta	semilla	frg
1994	Salitre	Sector A	Unidad 6	Locus 12	lote 18	maíz	tusa	frg
1994	Salitre	Sector A	Unidad 6	Locus 12	lote 18	guayaba	fruto	frg
1994	Salitre	Sector A	Unidad 6	Locus 12	lote 18	guarango	tallos	frg
1994	Salitre	Sector A	Unidad 6	Locus 12	lote 18	guarango	tallos	frg
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	mate	fruto	frg
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	zapallo macre	semilla	frg
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	zapallo loche	semilla	frg
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	mate	semilla	frg
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	guayaba	fruto	frg
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	palillo	fruto	frg
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	algodón	semilla	completa
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	palta	semilla	frg
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	maíz	tusa	frg
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	algodón	tallo	frg
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	lucuma	semilla	frg

Bolsa	Sitio	Sector	Unidad	Locus	Lote	N. comun	Parte	Condicion
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	maní	capsula	frg
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	ni	tallos	frg
2019	Salitre	Sector A	Unidad 6	Locus 12	Lote 19	guarango	tallos	frg
2117	Salitre	Sector A	Unidad 6	Locus 12	lote 20	guarango	tallos	frg
2102	Salitre	Sector A	Unidad 6	Locus 12	lote19	mate	fruto	frg
1914	Salitre	Sector A	Unidad 7	locus 14	lote 5	Ni	semilla	frg
1902	Salitre	Sector A	Unidad 7	locus 14	lote 5	maiz	mazorca	completa
1902	Salitre	Sector A	Unidad 7	locus 14	lote 5	lucuma	fruto	frg
1902	Salitre	Sector A	Unidad 7	locus 14	lote 5	maíz	tusa	frg
1902	Salitre	Sector A	Unidad 7	locus 14	lote 5	zapallo loche	semilla	frg
1902	Salitre	Sector A	Unidad 7	locus 14	lote 5	maní	cupula	frg
1902	Salitre	Sector A	Unidad 7	locus 14	lote 5	zapallo	pedunculo	frg
1902	Salitre	Sector A	Unidad 7	locus 14	lote 5	guarango	tallos	frg
1962	Salitre	Sector A	Unidad 7	locus 14	lote 7	maiz	tusa	frg
1962	Salitre	Sector A	Unidad 7	locus 14	lote 7	guarango	tallos	frg
1968	Salitre	Sector A	unidad 7	locus 14	lote 8	zapallo	pedunculo	frg
1968	Salitre	Sector A	unidad 7	locus 14	lote 8	ni	ramas	frg
1968	Salitre	Sector A	unidad 7	locus 14	lote 8	zapallo loche	semilla	frg
1968	Salitre	Sector A	unidad 7	locus 14	lote 8	ni	semilla	frg
1528	Salitre	Sector A	unidad 4	locus 10		mate	fruto	frg
1528	Salitre	Sector A	unidad 4	locus 10		maní	capsula	frg
1528	Salitre	Sector A	unidad 4	locus 10		ni	corteza	frg
1528	Salitre	Sector A	unidad 4	locus 10		ni	tallos	frg

Table C.2 Results of Macrobotanic Analysis from Campo Libre

Bolsa	Sitio	Sector	Unidad	Locus	Lote	N. comun	Parte	Condicion
392	Campo libre	Sector A	Unidad 4	Locus 12	lote 1	algodón	semilla	completa
392	Campo libre	Sector A	Unidad 5	Locus 12	lote 1	ni	tallos	frg
890	Campo libre	Sector D	Unidad 7	locus 14	lote 11	maiz	tusa	frg
890	Campo libre	Sector D	Unidad 7	locus 14	lote 11	n.i	tallos	frg
884	Campo libre	Sector D	unidad 7	locus 14	lote 10	maiz	tusa	frg
884	Campo libre	Sector D	unidad 7	locus 14	lote 10	ni	tallos	frg
884	Campo libre	Sector D	unidad 7	locus 14	lote 10	ni	vaina	frg
478	Campo libre	sector A	unidad 4	locus 6	lote 15	ni	organico	frg
520	Campo libre	Sector A	unidad 4	locus 6	lote 18	ni	fruto	frg
507	Campo libre	sector A	unidad 4	locus 6	lote 16	ni	tallos	frg
228	Campo libre	sector A	Unidad 4	locus 6	lote 7	ni	raices	frg
228	Campo libre	sector A	Unidad 4	locus 6	lote 7	frejol	semilla	completa
545	Campo libre	Sector A	unidad 4	locus 6	lote 17	lucuma	semilla	frg
1060	Campo libre	Sector D	unidad 8	locus 16	lote 103	maiz	tusa	frg
1060	Campo libre	Sector D	unidad 8	locus 16	lote 103	maiz	grano	completa
1058	Campo libre	sector D	unidad 8	locus 16	lote 10(A)	maiz	tusa	frg
1058	Campo libre	sector D	unidad 8	locus 16	lote 10(A)	maiz	grano	completa
401	Campo libre	Sector A	unidad 3	locus 4		maiz	grano	completa
401	Campo libre	Sector A	unidad 3	locus 4		Ni	semilla	frg
401	Campo libre	Sector A	unidad 3	locus 4		ni	tallos	frg

Bolsa	Sitio	Sector	Unidad	Locus	Lote	N. comun	Parte	Condicion
343	Campo libre	Sector A	unidad 3	locus 5	lote 6	maiz	grano	completa
343	Campo libre	Sector A	unidad 3	locus 5	lote 6	maiz	tusa	frg
770	Campo libre	Sector A	unidad 3	locus 5	lote 15	maiz	tusa	frg
770	Campo libre	Sector A	unidad 3	locus 5	lote 15	ni	raices	frg
280	Campo libre	Sector A	unidad 3	locus 5	lote 6	maiz	grano	completa
280	Campo libre	Sector A	unidad 3	locus 5	lote 6	ni	tallos	frg
280	Campo libre	Sector A	unidad 3	locus 5	lote 6	maiz	tusa	frg
140	Campo libre	Sector A	unidad 3	locus 5	lote 3	maiz	grano	completa
410	Campo libre	Sector A	unidad 3	locus 5	lote 6	maiz	grano	completa
410	Campo libre	Sector A	unidad 3	locus 5	lote 6	maiz	tusa	frg
410	Campo libre	Sector A	unidad 3	locus 5	lote 6	ni	tallos	frg
186	Campo libre	Sector A	unidad 3	locus 5	lote 4	maiz	grano	completa
700	Campo libre	Sector A	Unidad 3	locus 5	lote 11	ni	ramas	frg
1118	Campo libre	Sector A	Unidad 3	locus 5	lote 23	ni	ramas	frg
1024	Campo libre	Sector A	unidad 3	locus 5	lote 20	ni	tallos	frg
1024	Campo libre	Sector A	unidad 3	locus 5	lote 20	ni	tallos	frg
195	Campo libre	Sector A	Unidad 3	locus 5	lote 4	maiz	grano	completa
723	Campo libre	Sector A	unidad 3	locus 5	lote 12	maiz	grano	completa
335	Campo libre	Sector A	unidad 4	locus 10	lote 1	ni	tallos	frg
335	Campo libre	Sector A	unidad 4	locus 10	lote 1	ni	talos	frg
335	Campo libre	Sector A	unidad 4	locus 10	lote 1	ni	otros	
738	Campo libre	Sector A	unidad 3	locus 14	lote 14	maiz	grano	frg

Bolsa	Sitio	Sector	Unidad	Locus	Lote	N. comun	Parte	Condicion
329	Campo libre	sector A	unidad 4	locus 9	lote 1	frejol	semilla	completa
263	Campo libre	Sector A	unidad 3	locus 4	lote 7	maiz	grano	completa
275	Campo libre	Sector A	unidad 3	locus 5	lote 7	maiz	grano	completa

Table C.3: Presence Absence Chart for Salitre (1 means present and 0 means absent)

	Unit 4	Unit 5	Unit 6	Unit 7
aji	0	0	1	0
algodon	0	0	1	0
frejol	1	1	0	0
lucuma	1	1	1	1
maiz	1	0	1	1
boliche	1	0	0	0
guarango	0	0	1	1
guayaba	1	0	1	0
mani	1	0	1	1
mate	1	1	1	1
palillo	0	0	1	0
palta	1	0	1	0
zapallo	1	1	1	1

Table C.4: Presence Absence Chart for Campo Libre (1 means present and 0 means absent)

	Unit 3	Unit 4	Unit 7	Unit 8
algodon	0	1	0	0
frejol	0	1	0	0
lucuma	0	1	0	0
maiz	1	0	1	1

Appendix D: Microbotanic Analysis

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OBJETIVO

- Identificar granos de almidón y fitolitos en muestras de sedimentos.

METODOLOGÍA

Se procesaron 9 muestras de sedimentos (Tabla 1). Para el aislamiento de microrestos, se empleó la técnica combinada de recuperación de granos de almidón y fitolitos propuesta por Horrocks (2005), que consiste en la separación por densidad mediante el uso del Bromuro de Zinc de 1,8-1.9 g/mL, para la recuperación de almidón y Bromuro de Zinc de 2.3 g/mL para la recuperación de fitolitos. Durante el procesamiento y montaje de las muestras, se trabajó en una campana de extracción con guantes sin talco y materiales esterilizados, para así evitar la contaminación.

El montaje de láminas y la observación de granos de almidón y fitolitos se realizaron por separado. En el caso de almidón se hizo el montaje con glicerina y se utilizó el microscopio de luz normal con filtro polarizado a un aumento de 400X. Los fitolitos fueron observados en el medio de montaje Permount con un microscopio de luz normal. Para la determinación e identificación de ambos microrestos vegetales se utilizaron los catálogos referenciales del Laboratorio de Palinología y Paleobotánica; además, se consultó bibliografía especializada (Babot, 2004; Pearsall et al 2003; Perry, 2004; Perry et al, 2006, Piperno, 2005).

Tabla 1: Datos arqueológicos de las muestras analizadas del “Proyecto Huanangué”.

Muestras	Código almidón	Código fitolito
BOLSA 14, UNIDAD 01 LOTE 02	A1	F1
BOLSA 28, UNIDAD 02 LOTE 02	A2	F2
BOLSA 753, UNIDAD 07 LOTE 04	A3	F3
BOLSA 804, UNIDAD 07 LOTE 05	A4	F4
BOLSA 946, UNIDAD 08 LOTE 4B	A5	F5
BOLSA 1048, UNIDAD 08 LOTE 08	A6	F6
BOLSA 1371, UNIDAD 03 LOTE 04	A7	F7
BOLSA 1216, UNIDAD 01 LOTE 04	A8	F8
BOLSA 1263, UNIDAD 01 LOTE 04	A9	F9

RESULTADOS

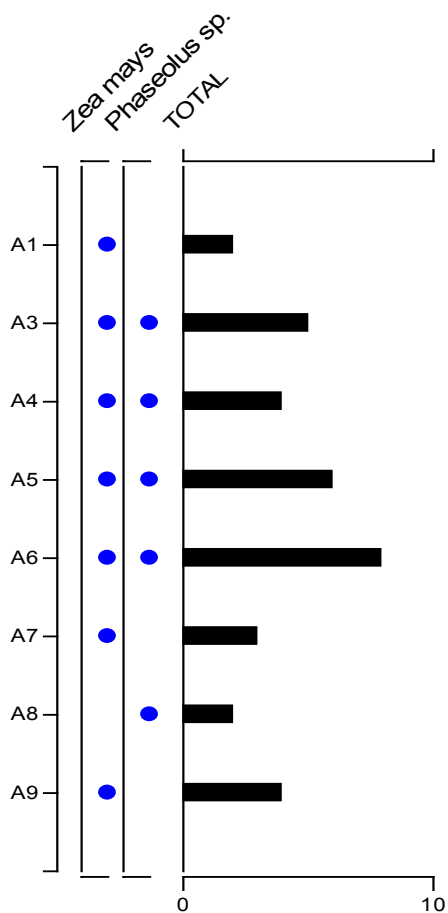


Figura D.1: Análisis cualitativo de granos de almidón en muestras de sedimentos.

Resultados almidón:

Se encontraron dos tipos de granos de almidón pertenecientes a *Zea mays* “maíz” y *Phaseolus sp.* “frijol”. A6 tuvo la mayor cantidad de granos (8 granos); no se encontraron granos de almidón en A2.

Ambas especies encontradas son utilizadas como alimento. (Figura 1)

Resultados fitolitos:

Se identificaron 12 morfotipos de fitolitos, 8 son específicos para determinados taxa (Chloroideae, Eragrostoideae, Festucoideae, Panicoideae, *Zea mays* (cruciforme), *Zea mays* (rondel), Cyperaceae y Fabaceae). (Figura 2)

La familia Poaceae, presentó 4 subfamilias: Chloroideae, Eragrostoideae, Festucoideae, Panicoideae, que son plantas herbáceas algunas de ellas son indicadores de ambientes específicos tal es el caso de las plantas Festucoides y Panicoides crecen en ambientes húmedos y cálidos. A partir de los morfotipos de *Zea mays* encontrados, se evidencia la presencia de mazorcas (morfotipo rondel) y hojas (morfotipo cruciforme) de maíz.

La familia Cyperaceae, representa a un grupo de plantas utilizadas como cañas, la presencia de fitolitos sugiere la ubicación de este grupo en el sitio, además de su posible uso en la construcción de viviendas y cestas. La familia Fabaceae, representa a especies comestibles como *Phaseolus lunatus* “pallar”, *Phaseolus vulgaris* “frijol”.

Por otro lado, se encontraron morfotipos no específicos para un taxón en particular como fitolitos elongados (dicotiledóneas), elongados equinados (graminoides), poliédricos y estrellados; generalmente indican la presencia de arbustos y hierbas.

La presencia de diatomeas y espículas de esponja en las muestras; indicaría la presencia de cuerpos de agua cercanos al sitio, además del consumo de productos marinos por la población.

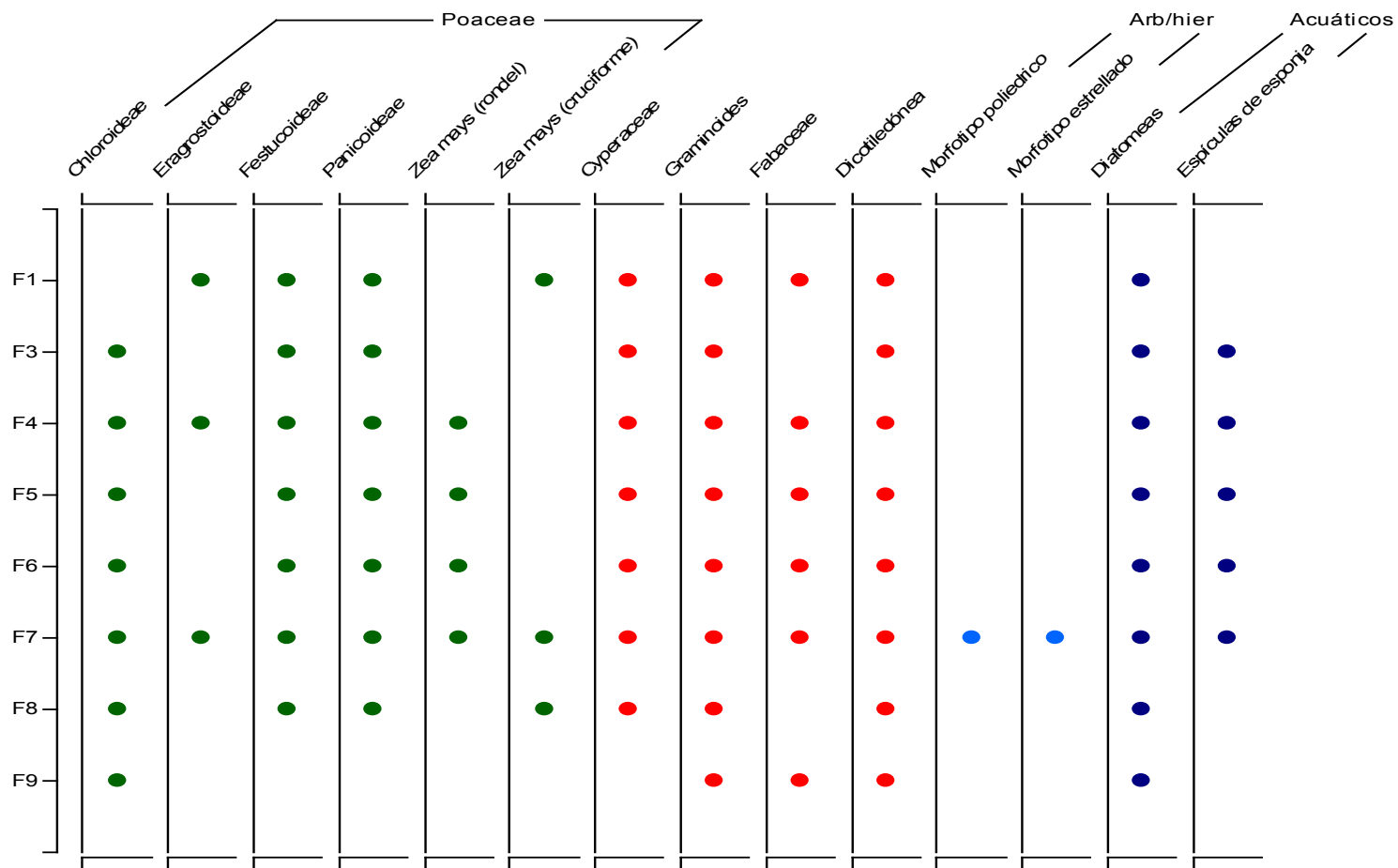


Figura D.2: Análisis cualitativo de taxa encontrados en el análisis de fitolitos en muestras de sedimentos. Los puntos de color verde son los morfotipos encontrados para la familia Poaceae; los rojos representan a los morfotipos de Cyperaceae, Fabaceae, dicotiledóneas y graminoides; los azules son morfotipos presentes en arbustos y hierbas; los azul oscuro representan a las diatomeas y espículas de esponjas que forman parte del componente marino

Familias	Especies	Nombre común	Alimento Medicinal	Construcción	Tintórea	Fibra	Artisanal	Leña	Mágico- Forraje	Ornamental
Sub F. Choroideae (Fam. Poaceae)	<i>Chloris</i> sp.								X	
	<i>Distichlis</i>	Pasto , pelo de								
	<i>spicata</i>	chancho							X	
Sub F. Festucoideae (Fam. Poaceae)	<i>Bromus</i> sp.	Bromo	X			X				
	<i>Calamagros</i>	Pasto de cañas								X
	<i>tis</i> sp.	altas								X
	<i>Festuca</i> sp.									X
Sub F. Panicodideae (Fam. Poaceae)	<i>Cenchrus</i>									
	sp.								X	
	<i>Panicum</i> sp.								X	
	<i>Paspalum</i>									
	sp.								X	

	<i>Pennisetum</i>	Cortadera		
	sp.			
	<i>Setaria</i> sp.			X
	<i>Zea mays</i>	Maiz	X	X
	<i>Carex</i> sp.		X	X
Fam. Cyperaceae	<i>Cyperus</i>	Coco		
	<i>sculentus</i>		X X	
	<i>Scirpus</i> sp.	Junco , totora	X	X

REFERENCIAS BIBLIOGRÁFICAS

1. **Albert, R; Weiner, S; Bar-Yosef, O & Meig-Nen, L.** 2000. *Phytoliths in the Middle Palaeolithic Deposits of Kebara Cave, Mt Carmel, Israel: Study of PLant Materials used for Fuel and Other Purposes.* Journal of Archaeological Sciencia. 27: 931-947.
2. **Babot, M.** 2007. *Granos de Almidón en Contextos Arqueologicos: Posibilidades y Perspectivas a partir de casos del noroeste Argentino. Paleobotánica del Cono Sur: Estudio de Caso y Propuestas Metodológicas.* Cap 5, pag. 95 – 125.
3. **Brack, A.** 1999. *Diccionario enciclopédico de plantas útiles del Perú.* Primera edición. Programa de las Naciones Unidas para el Desarrollo (PNUD). Cuzco. 556pp.
4. **Fernández, A & Rodríguez, E.** 2007. *Etnobotánica del Perú Pre-Hispano.* Primera edición. Herbarium Truxillense (HUT)- Universidad Nacional de Trujillo. Perú. 253 pp.

5. **Horrocks, M.** 2005. *A combined procedure for recovering phytoliths and starch residues from soils, sedimentary deposits and similar materials.* Journal of Archaeological Science. 32 (8): 1169-1175
6. **Huamán, L; Velásquez, M; Villanueva, F.** In Press. *Catálogo de Fitolitos del Perú.* Laboratorio de Palinología y Paleobotánica.
7. **Huamán, L; Castillo, I; Pablo, M; Velásquez, M.** In Press. *Catálogo de Granos de Almidón de Plantas Alimenticias en el Perú.* Laboratorio de Palinología y Paleobotánica.
8. **Ugent, D.** 2006. *La Etnobotánica del Perú: Desde la Prehistoria al Presente.* Primera edición. CONCYTEC. Perú. 379 pp.

Appendix E: Ceramic Photos

Cayash Style



To the right are examples of Cayash style ceramics from Salitre. Cayash style ceramics are defined by the presence of a rounded lip with a ledge-like projection that runs around the circumference of the vessel mouth. Cayash style ceramics are also often decorated with circular or semi-circular impressions around the rim and/or neck of the vessel (Krzanowski 1986). This ceramic style has a wide distribution and, while often associated with Chancay domestic contexts, it was also produced by highland groups living in the Cayash region near the neck of the Huaura Valley (Krzanowski 1986).



Chancay Black-on-White



To the right are examples of Chancay black-on-white ceramics. This style is defined by the use of cream colored slip and black paint. Several different design motifs were commonly used including parallel lines, geometric patterns, stylized fish and birds, anthropomorphs and camelids, among others. Chancay black-on-white ceramics are typically associated with cemeteries and other ceremonial contexts, however they are also occasional found in domestic settings as was the case at Salitre and Campo Libre



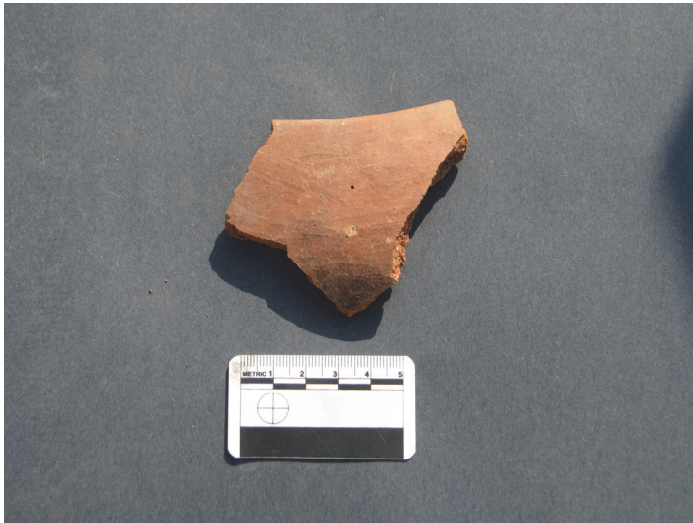
Blackwares



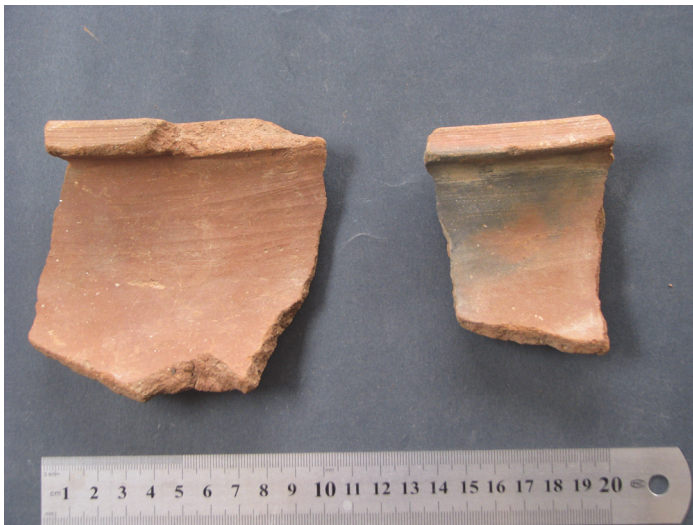
To the right are examples of blackware sherds recovered from excavations at Salitre. Blackware ceramics were produced by many different groups living along the north coast. The limited number and small size of the fragments makes it difficult to identify which specific stylistic tradition they belonged too, though the sherd in the bottom most image bears some resemblance to blackware ceramics found in Casma (Vogel 2006). It is also possible that these ceramics were locally produced copies of northern styles.



Linear burnished redwares



To the right are examples of linear burnished redwares recovered during excavations at Campo Libre and Salitre. This was by far the most common style of ceramic recovered during excavation and was probably produced locally



REFERENCES CITED

- Acheraiou, A. (2011). *Questioning Hybridity, Postcolonialism and Globalization*. Hampshire: Palgrave MacMillan.
- Allchin, B. (1982). *The rise of civilization in India and Pakistan*: Cambridge: Cambridge University Press.
- Allen, C. (1988). *The Hold Life Has: Coca and Cultural Identity in an Andean Community*. Washington D.C.: Smithsonian Institution Press.
- Antenez de Mayolo R., S. E. (1981). *La Nutricion en el Antiguo Peru*. Lima, Peru: Banco Central de Resserva del Peru Fondo Editorial.
- Andrushko, V. A., and J. Verano (2008). Prehistoric trepanation in the Cuzco region of Peru: a view into an ancient Andean practice. *American journal of physical anthropology*, 137(1), 4-13.
- Arkush, E. (2006). Collapse, Conflict, Conquest: The Transformation of Warfare in the Late Prehispanic Andean Highlands. In E. Arkush and M. Allen (Ed.), *The Archaeology of Warfare* (pp. 286-335). Gainesville: University of Florida Press.
- (2008). War, Chronology, and Causality in the Titicaca Basin. *Latin American Antiquity*, 19(4), 339-373.
- Arkush, E., and C. Stanish. (2005). Interpreting Conflict in the Ancient Andes: Implications for the Archaeology of Warfare. *Current Anthropology*, 46(1), 3-28.
- Avila, F. (2009[1598]). *Manuscrito Quechua de Huarochiri. Spanish and Quechua*. Lima: Universidad Antonio Ruiz de Montoya, Jesuitas.
- Barnett, H. G. (1954). Acculturation: an exploratory formulation the social science research council summer seminar on acculturation, *American Anthropologist*, 1000-1002.
- Barth, F. (1969). *Ethnic Groups and Boundaries*.
(2000). *Boundaries and Connections*. In A. Cohen (Ed.), *Signifying Identities: Anthropological Perspectives on Boundaries and Contested Values* (pp. 17-36). London: Routledge.
- Berenguer, J. (2004). *Caravans, Interaccion, y Cambio en el Desierto de Atacama*. Santiago, Chile: Museo de Arte Precolombiano, Chile.
- Bhabha, H. (1994). *The Location of Culture*. London: Routledge.
- Blejwas, S. (1996). Polonia and Politics. In J. Bukowczyk (Ed.), *Polish Americans and Their History: Community, Culture and Politics* (pp. 121-151). Pittsburgh: University of Pittsburgh Press.

- Blom, D. (2005). Embodying Borders: Human Body Modification and Diversity in Tiwanaku Society. *Journal of Anthropological Archaeology*, 24(1), 1-24.
- Bonacich, P. (2000). Patterns of Coalitions in Exchange Networks: An Experimental Study. *Rationality and Society*, 12(3), 353-373.
- Bourdieu. (1977). *Outline of a Theory of Practice*.
- Bourdieu, P., & Wacquant, L. J. (1992). *An invitation to reflexive sociology*: University of Chicago Press.
- Bray, T. (2005). Archaeological Investigations in Northern Ecuador Highlands: The Pimampiro District as a Multi-Ethnic Local. *Journal of Field Archaeology*, 30(2), 119-141.
- (2008). Late Prehispanic Polities of Highland Ecuador. In H. Silverman and W. Isbell (Ed.), *Handbook of South American Archaeology* (pp. 527-544).
- (2003a). The Commensal Politics of Early States and Empires. In T. Bray (Ed.), *Archaeology and the Politics of Food and Feasting in Early States and Empires* (pp. 1-16). New York: Kluwer Academic Publishers.
- (2003b). Inka Pottery as Culinary Equipment: Food, Feasting, and Gender in Imperial State Design. *Latin American Antiquity*, 14(1), 3-28.
- Bria, R. (2009). Social Affiliations and Political Boundaries in the Norte Chico from the Middle Horizonte to the Late Intermediate Period. Paper presented at the 74th Annual Meeting of the Society for American Archaeology, Atlanta, Georgia.
- Briones, L., L. Núñez, and V. G Standen. (2005). Geoglifos y Tráfico Prehispánico de Caravans de Llamas en el Desierto de Atacama (Norte de Chile). *Chungara*, 37(2), 195-223.
- Brown Vega, M. (2008). War and social life in prehispanic Perú: ritual, defense, and communities at the Fortress of Acaray, Huaura Valley: ProQuest.
- Brown Vega, M., N. Craig, and G. A. Lindo, (2011). Ground Truthing of Remotely Identified Fortifications on the Central Coast of Perú. *Journal of Archaeological Science*, 38(7), 1680-1689.
- Bruhns, K. (2003). Social and Cultural Development in the Ecuadorian Highlands and Eastern Lowlands during the Formative. In J. Raymond and R. Burger (Ed.), *Archaeology in Formative Ecuador*. Washington D.C.: Dumbarton Oaks.
- Brumfiel, E. M. (2006). Cloth, gender, continuity, and change: Fabricating unity in anthropology. *American Anthropologist*, 108(4), 862-877.
- Burger, R. (1992). *Chavin and the Origins of Andean Civilization*. London: Thames and Hudson.
- (2013). In the Realm of the Incas: An Archaeological Reconsideration of Household Exchange, Long-Distance Trade, and Marketplaces in the Pre-Hispanic Central Andes. In K. Hirth and J.

Pillsbury (Ed.), *Merchants, Markets, and Exchange in the Pre-Columbian Andes* (pp. 319-334). Washington D.C.: Dumbarton Oaks.

Buzon, M. R. (2006). Health of the non-elites at Tombos: Nutritional and disease stress in New Kingdom Nubia. *American journal of physical anthropology*, 130(1), 26-37.

Buzon, M. R., and R. Richman. (2007). Traumatic injuries and imperialism: The effects of Egyptian colonial strategies at Tombos in upper Nubia. *American Journal of Physical Anthropology*, 133(2), 783-791.

Cabrel Palomares, D. (2007). Canas: Arte Rupestre Tardío en el Valle Medio de Huaura. *Arkeos*, 2(1).

Cartmell, L., et al. (1991). The Frequency and Antiquity of Prehistoric Coca Leaf Chewing Practices in Northern Chile: *Radioimmunoassay of a Cocaine Metabolite in Human-Mummy Hair*. *Latin American Antiquity*, 2(3), 260-268.

Cecil, L. G., & Neff, H. (2006). Postclassic Maya slips and paints and their relationship to socio-political groups in El Petén, Guatemala. *Journal of Archaeological Science*, 33(10), 1482-1491. doi: <http://dx.doi.org/10.1016/j.jas.2006.02.005>

Chatfield, M. (2007). *From Inca to Spanish Colonial: Transitions in Ceramic Technology*: University of California, Santa Barbara.

Chávez, K. (1984). Traditional Pottery of Raqch'i, Cuzco, Peru: A Preliminary Study of its Production, Distribution, and Consumption. *Nawpa Pacha*, 161-210.

Cherry, E., C. Ellis, and M. DeSoucey. (2011). Food for Thought, Thought for Food: Consumption, Identity, and Ethnography. *Journal of Contemporary Ethnography*, 40(2), 231-258. doi: 10.1177/0891241610379122

Chicoine, D. (2011). Feasting Landscapes and Political Economy at the Early Horizon Center of Huambacho, Nepeña Valley, Peru. *Journal of Anthropological Archaeology*, 30(3), 432-453.

Childe, V. G. (1951). Man makes himself.

Chu, A. (2012a). Arquitectura Monumental Prececerámica de Bandurria, Huacho. *Boletín de Arqueología PUCP*(10), 91-109.

(2012b). *Household organization and social inequality at Bandurria, a Late Prececeramic village in Huaura, Peru*. University of Pittsburgh.

Church, W., and A. Von Hagen. (2008). Chachapoyas: Cultural Development at an Andean Cloud Forest Crossroad. In H. Silverman. and W. Isbell (Ed.), *Handbook of South American Archaeology* (pp. 903-276).

- Cohen, A. (1985). *The Symbolic Construction of Community*. London: Routledge Press.
- (2000). Introduction: Discriminating relations: Identity, Boundary, and Authenticity. In A. Cohen (Ed.), *Signifying Identities: Anthropological Perspectives on Boundaries and Contested Values* (pp. 1-14). London: Routledge.
- Cohen, R. (1996). Diasporas and the nation-state: from victims to challengers. *International Affairs* (Royal Institute of International Affairs 1944-), 507-520.
- Comaroff, J. (1998). Reflections of the Colonial State in South Africa and Elsewhere: Factions, Fragments, Facts and Friction. *Social Identities*, 4(3), 321-361.
- Comaroff, J. and J. L. Comaroff (1987). The Madman and the Migrant: Work and Labor in the Historical Consciousness of a South African People. *American Ethnologist*, 14(2).
- Conkey, M. W., and C. Hastorf (1990). *The Uses of Style in Archaeology*. Cambridge: Cambridge University Press.
- Conlee, C. (2003). Local Elites and the Reformation of Late Intermediate Period Sociopolitical and Economic Organization in in Nasca, Peru. *Latin American Antiquity*, 14(1), 47-65.
- (2004). The Expansion, Diversification, and Segmentation of Power in the Late Prehispanic Nasca. *Archaeological Papers of the American Anthropological Association*, 14(1), 211-223.
- Conrad, G. W. (1981). Cultural Materialism, Split Inheritance, and the Expansion of Ancient Peruvian Empires. *American Antiquity*, 46(1), 3-26.
- Cornejo, M. A. (1991). Patrones Funerarios y Discusión Cronológica en Lauri valle de Chancay. In A. Krzanowski (Ed.), *Estudios sobre la Cultura Chancay* (pp. 83-113). Krakow: Uniwersytet Jagiellonski.
- (2004). Pachacamac y el Canal de Guatca en el Bajo Rimac. *Bullentin del Instituto Francais de etudes Andines*, 33(3), 783-814.
- Cusick, J. (1998). *Studies in Culture Contact: Interaction, Culture Change, and Archaeology*. Carbondale: Southern Illinois University Press.
- (2000). Creolization and the Borderlands. *Historical Archaeology*, 34(3), 46-55.
- De la Calancha, A. (1976). *Crónicas del Perú: Crónica Moralizada del Orden de San Agustín en el Perú*. Lima, Perú.
- Dietler, M. (1998). Consumption, Agency, and Cultural Entanglement: Theoretical Implications of a Mediterranean Colonial Encounters. In J. Cusick (Ed.), *Studies in Cultural Contact: Interaction, Culture Contact and Archaeology* (pp. 288-315). Carbondale: Center for Archaeological Studies.
- (2010) *Archaeologies of Colonialism: Consumption, Entanglement, and Violence in Ancient Mediterranean France*. Berkeley: University of California Press.

Dietler, M. and B. Hayden (2001). *Feasts: Archaeological and Ethnographic Perspectives of Food, Politics, and Power*. Washington D.C.: Smithsonian Institution Press.

Dietler, M. and I. Herbich (1998). Technology, Style, and Social Practices: Archaeological Approaches. In M. Stark (Ed.), *The Archaeology of Social Boundaries* (pp. 232-263). Washington: Smithsonian Institution Press.

Dijkstra, J. a. M. v. A. (2008). Transferring Goods or Splitting a Resource Pool. *Social Psychology Quarterly*, 71(1), 17-36.

Dillehay, T. (1976). *Competition and Cooperation in a Prehispanic Multi-Ethnic System in the Central Andes*. (PhD), University of Texas, Austin.

(1977). Tawantinsuyu Integration of the Chillón Valley, Perú: A Case of Inca Geo-Political Mastery. *Journal of Field Archaeology*, 4, 8.

(1979). Pre-Hispanic Resource Sharing in the Central Andes. *Science*, 204(6), 7.

(2004). Social Landscape and Ritual Pause: Uncertainty and Integration in Formative Peru. *Journal of Social Archaeology*, 4(2), 239-268.

(2007). *Monuments, Empires, and Resistance: The Araucanian Polity and Ritual Narratives*. Cambridge: Cambridge University Press.

(2008). Pequeñas y Grandes "Voces" a en los Foros Públicos del Discurso Andino. In T. Dillehay and P. Kaulicke (Ed.), *Encuentros: Indentidad, Poder, y Manejo de Espacios Públicos* (pp. 25-44). Lima, Peru: Fondo Editorial PUCP.

(2013). Economic Mobility, Exchange, and Order in the Andes. In K. Hirth and J. Pillsbury (Ed.), *Merchants, Markets, and Exchange in the Pre-Columbian Andes* (pp. 283-308). Washington D.C.: Dumbarton Oaks.

Dillehay, T., D. Bonavia, S Goodbred, M. Pino, V Vasquez, T. R. Tham, and J. Iriarte (2012). Chronology, mound-building and environment at Huaca Prieta, coastal Peru, from 13,700 to 4000 years ago. *Antiquity*, 86(331), 48-70.

Dillehay, T., A. Kolata, and Q. Mario Pino (2004). Pre-industrial human and environment interactions in northern Peru during the late Holocene. *The Holocene*, 14(2), 272-281.

Dillehay, T., J. Rossen, T. C. Andres, and D. E. Williams, (2007). Pre-ceramic adoption of peanut, squash, and cotton in northern Peru. *Science*, 316(5833), 1890-1893.

Dillehay, T., J. Rossen and K. Stackelbeck. (2011). Foraging to Farming and Community Development. In T. Dillehay (Ed.), *From Foraging to Farming the Andes: New Perspectives on Food Production and Social Organization* (pp. 257-274). Cambridge: Cambridge University Press.

Druc, I. (1996). De la etnografía hacia la arqueología: aportes de entrevistas con ceramistas de Ancash (Perú) para la caracterización de la cerámica prehispánica. *Bulletin de l'Institut français d'études andines*, 25(1), 17-41.

(2009). Tradiciones alfareras, identidad social y el concepto de etnias tardías en Conchucos, Ancash, Perú. *Bulletin de l'Institut français d'études andines*, 38(1), 87-106.

Dulanto, J. (2008). Between Horizons: Diverse Configurations of Society and Power in the Late Pre-Hispanic Central Andes. In W. Isbell and H. Silverman (Ed.), *Handbook of South American Archaeology*. New York: Springer Science and Business Media.

Dunn, S. (2011). Chancay Political Strategies and Economy: A Study of Rural Elite Residences at Quipico, Peru. Paper presented at the 76th Annual Meeting of the Society for American Archaeology, Sacramento, California.

Dunn, S. and A. Heaton (2013). Local Elite Resilience during the Late Intermediate Period, Central Coast of Peru. Paper presented at the Beyond Collapse: Archaeological Perspectives on Resilience, REvitalization, and Reorganization in Complex Societies, Southern Illinois University, Carbondale.

Eeckhout, P. (2000). The Palaces of the Lords of Ychsma: An archaeological Reappraisal of the Function of Pyramids with Ramps at Pachacamac, Central Coast of Peru. *Journal of American Archaeology*, 17-19, 217-254.

(2004a). Arqueología de la Costa Central del Perú en los Periodos Tardíos. Lima: IFEA.

(2004b). La Sombra de Ychsma: Ensayo Introductorio Sobre la Arqueología de la Costa Central del Peru en los Periodos Tardíos. *Bulletin de l'Institut Francais d'Etudes Andines*, 33(3), 402-423.

Emberling, G. (1997). Ethnicity in Complex Societies: Archaeological Perspectives. *Journal of Archaeological Research*, 5(4), 295-344.

Engel, F. (2011). *Arqueología Inédita de la Costa Peruana*. Lima, Peru: Asamblea Nacional de Rectores.

Engelbrecht, W. (1974). The Iroquois: Archaeological patterning on the tribal level. *World Archaeology*, 6(1), 52-65.

Feldman, R. (1981). *Aspero, Peru: Architecture, Subsistence Economy, and other Artifacts of a Preceramic Maritime Chiefdom*. (PhD), Harvard, Cambridge.

Fischer, E. (2002). *Tecpan Guatemala*. Boulder: Westview Press.

Fishman, J. (2010). Sociolinguistics: Language and Ethnic Identity in Context. In J. Fishman and O. Garcia (Ed.), *Handbook of Language and Ethnic Identity: Disciplinary and Regional Perspectives* (pp. xxiii-1). Oxford: Oxford University Press.

Gell, A. (1998). *Art and Agency: An Anthropological Theory*. Oxford: Clarendon Press.

Giddens, A. (1984). *The Constitution of Society: Outlines of a Theory of Structuration*.

Gkiasta, M. (2010). Social Identities, Materiality and Connectivity in Early Bronze Age Crete. In P. Von Domellen a. A. B. Knapp (Ed.), *Material Connections in the Ancient Mediterranean* (pp. 85-105). London: Routledge.

- Goffman, E. (1969). *Strategic Interaction*. Philadelphia: University of Pennsylvania Press.
- (1997). Social Life as Game. In C. Lemert and A. Branaman (Ed.), *The Goffman Reader* (pp. 129-146). Oxford: Blackwell.
- Goldstein, P. (2000). Communities without Borders: The Vertical Archipelago and Diaspora Communities in the Southern Andes. In M. Canuto and J. Yaeger (Ed.), *The Archaeology of Communities* (pp. 17). London: Routledge.
- (2005). *Andean Diaspora: The Tiwanaku Colonies and the Origins of South American Empire*. Gainesville: University of Florida Press.
- Gomez, C., Enrique and Lauren Kohut. (2012). *Proyecto Arqueológico Pukaras del Colca*. Lima: Ministerio de Cultura, Peru.
- Gosden, C. (2004). *Archaeology and Colonialism: Cultural Contact from 5000 BC to the Present*. Cambridge: Cambridge University Press.
- Guaman Poma de Ayala, F. (1980 [1615]). *Nueva Cronica y Buen Gobierno*. Caracas: Biblioteca Ayacucho.
- Guffroy, J. (1999). *El Arte Rupestre del Antiguo Perú*. Lima, Perú: IFEA.
- Gupta, A. and J. Ferguson (1992). Beyond: "Culture": Space, Identity, and the Politics of Difference. *Current Anthropology*, 7(1), 6-23.
- Haas, J. and M. Perales (2004). *Proyecto de Investigación Arqueológico en el Norte Chico: Excavaciones en Caballete, Valle de Fortaleza, Peru*. Lima: Instituto Nacional de Cultura.
- Haas, J. and W. Creamer (2006). Crucible of Andean Civilization: The Peruvian Coast from 3000-1800 BC. *Current Anthropology*, 47(5), 745-776.
- Hansen, B. G. Seltzer, and H. Wright, Jr. (1984). Late Quaternary Vegetation Change in the Central Peruvian Andes. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 109, 263-285.
- Hayden, B. (2001). Fabulous Feasts: A Prolegomenon to the Importance of Feasting. In M. Dietler and B. Hayden (Ed.), *Feasts: Archaeological and Ethnographic Perspectives on Food, Politics, and Power* (pp. 23-64). Tuscaloosa: The University of Alabama Press.
- Heaton, A. and Dunn. (2010). New Research on Local Elite Control in the Huaura Valley, North-Central Coast of Peru. Paper presented at the 75th Annual Meeting of the Society for American Archaeology, St. Louis, Missouri.
- Hegmon, M. (1992). Archaeological Research on Style. *Annual Review of Anthropology*, 21, 517-539.

- Henrich, J., S. J. Heine, and A. Norenzayan (2010). The Weirdest People in the World? *Behavioral and Brain Sciences*, 33(2-3), 61-83.
- Herskovits, M. J. (1938). *Acculturation: The study of culture contact*. JJ Augustin.
- Hirth, K., and J. Pillsbury (2013). Redistribution and Markets in Andean South America. *Current Anthropology*, 54(5), 642-647.
- Hocquenghem, A.M. (1993). Rutas de Entrada del Mollu en el Extremo Norte del Peru. *Bulletin Instituto francais études andines*, 22(3), 701-719.
- Hocquenghem, A.M., et. al. (1993). Bases del intercambio entre las sociedades norperuanas y surecuatorianas: una zona de transición entre 1500 A.C. y 600 D.C. *Bulletin de L'IFEA*, 22(2), 443-466.
- Hodder, I. (1982). *Symbols in Action: Ethnoarchaeological Studies of Material Culture*: Cambridge University Press.
- (2012) *Entangled: An Archaeology of the Relationships between Humans and Things*. Malden, MA: Wiley-Blackwell.
- Horkheimer, H. (1970). Chancay prehispánico: diversidad y belleza. In *100 Años de Arqueología en el Perú*, 363-378.
- Ingold, T. (2007). Materials against Materiality. *Archaeological Dialogues*, 14(1), 1-16.
- Ipinze, E. (2004). *Sayán: trabajos de historia*. Huacho: Comisión de Celebración del Centenario del Nacimiento del Historiador Jesús Elías Ipinze.
- Isbell, B. J. (1978). *To Defend Ourselves: Ecology and Ritual in an Andean Village*. Austin: University of Texas Press.
- Isbell, W. H. (1997). Reconstructing Huari Emergence and change in early urban societies (pp. 181-227): Springer.
- (2008). Wari and Tiwanaku: International Identities in the Central Andes Middle Horizon. In H. Silverman and W. Isbell (Ed.), *Handbook of South American Archaeology* (pp. 731-760)
- Janes, S. (2010). Negotiating Island Interactions: Cyprus, the Aegean and the Levant in the Late Bronze to Early Iron Ages. In P. Von Domellen and A. B. Knapp (Ed.), *Material Connections in the Late Mediterranean* (pp. 127-146). London: Routledge.
- Janke, L. (2009). Human biological variation and cemetery distribution in the Huaura Valley, Peru. (PhD), Tulane, Proquest.
- Jennings, J. (2006). Understanding Middle Horizon Peru: Hermeneutic Spirals, Interpretative Traditions, and Wari Administrative Centers. *Latin American Antiquity*, 17(3), 265-285.

(2008). Catastrophe, Revitalization and Religious Change on the Prehispanic North Coast of Peru. *Cambridge Archaeological Journal*, 18(2), 177-194

Jennings, J., and W. Alvarez (2001). Architecture, Local Elites, and Imperial Entanglements: The Wari Empire and the Cotahuasi Valley of Peru. *Journal of Field Archaeology*, 28(1/2), 143-159.

Jennings, J., and N. Craig. (2001). Polity Wide Analysis and Imperial Political Economy: The Relationship between Valley Political Complexity and Administrative Centers in the Wari Empire of the Central Andes. *Journal of Anthropological Archaeology*, 20(4), 479-502.

John Howland, R. (1945). Absolute Chronology in the Andean Area. *American Antiquity*, 10(3), 265-284.

Jones, S. (1997). *The Archaeology of Ethnicity: Constructing Identities in the Past and Present*. London Routledge.

Jussim, L., R. Ashmore, and D. Wilder. (2001). Introduction: Social Identity and Intergroup Conflict. In L. Jussim R. Ashmore, and D. Wilder (Ed.), *Social Identity, Intergroup Conflict, and Conflict Resolution* (pp. 3-16). Oxford: Oxford University Press.

Kamp, K. and N. Yoffee. (1980). Ethnicity in Ancient Western Asia during the Early Second Millennium B. C.: Archaeological Assessments and Ethnoarchaeological Perspectives. *Bulletin of the American Schools of Oriental Research*, 237, 85-104.

Kaulicke, P. (2008). Las Fiestas y sus Residuos: Algunas Reflexiones Finales. *Boletín de Arqueología PUCP*, 9, 387-402.

Keane, W. (2003). Semiotics and the Social Analysis of Material Things. *Language and Communication*, 23, 409-425.

Kendon, A. (1988). Goffman's Approach to Face to Face Interaction. In P. Drew and A. Wootton (Ed.), *Erving Goffman: Exploring the Interaction Order* (pp. 14-40). Boston: Northeastern University Press.

Kenoyer, J. (1998). Early City-States in South Asia: Comparing the Harappan Phase and the Early Historic Period. In D. L. Nichols and T. H. Charlton (Ed.), *The Archaeology of City-States: Cross Cultural Approaches* (pp. 51-70). Washington D.C.: Smithsonian Books.

Knapp, A. (2008). *Prehistoric and Protohistoric Cyprus: Identity, Insularity, and Connectivity*. Oxford: Oxford University Press.

(2013). *The Archaeology of Cyprus*. Cambridge: Cambridge University Press.

Knapp, A., and P. van Dommelen (2008). Past Practices: Rethinking Individuals and Agents in Archaeology. *Cambridge Archaeological Journal*, 18(1), 15-34.

(2010). *Material Connections: Mobility, Materiality and Mediterranean Identities*. In P. Van Dommelen and A. Knapp (Ed.), *Material Connections in the Ancient Mediterranean* (pp. 1-18). New York: Routledge.

Knudson, K. a. C. T.-R. (2009). Investigating Cultural Heterogeneity in San Pedro de Atacama, Northern Chile, through Biogeochemistry and Bioarchaeology. *American journal of physical anthropology*, 138(4), 473-485.

Knudson, K. J., Tung, T. A., Nystrom, K. C., Price, T. D., & Fullagar, P. D. (2005). The origin of the Juch'uy pampa Cave mummies: strontium isotope analysis of archaeological human remains from Bolivia. *Journal of Archaeological Science*, 32(6), 903-913.

Kochert, G., Stalker, H. T., Gimenes, M., Galgaro, L., Lopes, C. R., & Moore, K. (1996). RFLP and Cytogenetic Evidence on the Origin and Evolution of Allotetraploid Domesticated Peanut, *Arachis hypogaea* (Leguminosae). *American Journal of Botany*, 83(10), 1282-1291. doi: 10.2307/2446112

Kohut, L. (2012). GIS-based approaches to conflict and cooperation during the Late Intermediate Period in the Colca Valley, Peru. Paper presented at the Archaeological Sciences of the Americas Symposium, Nashville, Tennessee.

Kohut, L. (2012). Visibility in a landscape of war: GIS-based viewshed analysis of fortified sites in the Colca Valley, Peru. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, Tennessee.

Kroeber, A. L. (1927). Coast and highland in prehistoric Peru. *American Anthropologist*, 29(4), 625-653.

Krzanowski, A. (1986). *Cayash Prehispanico*. Wroclaw: Wydawnictwo Polskiej Akademii Nauk.

(1991a). Chancay: Una Cultural Desconocida? In A. Krzanowski (Ed.), *Estudios sobre la Cultura Chancay* (pp. 19-35). Krakow: Uniwersytet Jagiellonski.

(1991b). Influencia Inca en los Valles de Huaura y Chancay. In A. Krzanowski (Ed.), *Estudios sobre la Cultura Chancay* (pp. 198-213). Krakow: Uniwersytet Jagiellonski.

(1991c). Observaciones sobre la Arquitectura y Patrón de Asentamiento de la Cultura Chancay. In A. Krzanowski (Ed.), *Estudios sobre la Cultura Chancay* (pp. 37-56). Krakow: Uniwersytet Jagiellonski

(1991d). Sobre la Cerámica Chancay del Tipo Lauri Impreso. In A. Krzanowski (Ed.), *Estudios sobre la Cultura Chancay* (pp. 215-242). Krakow: Uniwersytet Jagiellonski.

Krzanowski, A. and K. Tunia (1986). Cerámica de la Región Cayas. In A. Krzanowski (Ed.), *Cayash Prehispanico: Primera Parte del Informe sobre las Investigaciones Arqueológicas de la Expedición Científica Polaca a los Andes* (pp. 49-186). Krakow: Polska Academia Nauka

- (1991). Ceramica Cayash del Tipo Quillahuaca. In A. Krzanowski (Ed.), *Estudios sobre la Cultural Chancay* (pp. 243-261.). Krakow: Uniwersytet Jagiellonski.
- Larson, B. (1995). Andean Communities, Political Cultures, and Markets: the Changing Contours of a Field. *Ethnicity, Markets, and Migration in the Andes: At the Crossroads of History and Anthropology*, 5-54.
- Latour, B. (1987). *Science in Action: How to Follow Scientists and Engineers through Society*. Boston: Harvard University Press.
- (2005). *Reassembling the Social-an Introduction to Actor-Network-Theory*. Oxford: Oxford University Press, Sep 2005.
- Lawler, E., S. Thye, and J. Yoon. (2008). Social Exchange and Micro Social Order. *American Sociological Association*, 73(4), 519-542.
- Lewis, H. (1998). The Misrepresentation of Anthropology and Its Consequences. *American Anthropologist*, 100(3), 716-731.
- Lemonnier, P. (1992). Elements for an Anthropology of Technology.
- Leroi-Gourhan, A. (1993). *L'homme et la matière: évolution et techniques*: Albin Michel.
- (2000). *Milieu et techniques: évolution et techniques*: Albin Michel.
- Liebmann, M. (2002). Signs of Power and Resistance: The (Re)Creation of Christian Imagery and Identities in the Pueblo Revolt Era. In R. Preucel (Ed.), *Archaeologies of the Pueblo Revolt* (pp. 132-146). Albuquerque: The University of New Mexico Press
- Linnekin, J. (1991). Fine Mats and Money: Contending Exchange Paradigms in Colonial Samoa. *Anthropological Quarterly*, 1-13.
- Linton, R. (1940). *Acculturation in Seven American Indian Tribes*. New York: Appleton-Century.
- Llagostera, A. (2010). Retomando los Limites y las Limitaciones del "Archipiélago Vertical". *Chungara*, 42(1), 283-295.
- Lumbreras, L. G. (1974). Los Reinos post-Tiwanaku en el Área Altiplánica. *Revista del Museo Nacional*, 40, 55-85.
- Lumbreras, L. G. (2007). *Chavín: Excavaciones Arqueológicas (Vol. 2)*: UAP, Universidad Alas Peruanas.
- Lynch, T. (1989). Regional Interaction, Transhumance, and Verticality: Archaeological Uses of Zonal Complementarity in the Peru and Northern Chile. *Michigan Discussions of Anthropology*, 8, 1-11.

- Mackey, C. J. and A. M. Ulana Klymyshun (1990). The Southern Frontier of the Chimu Empire. In M. Moseley and A. Cordy-Collins (Ed.), *The Northern Dynasties: Kingship and Statecraft in Chimor* (pp. 195-226). Washington D.C.: Dumbarton Oaks
- MacNeish, R. S. (1952). Iroquois pottery types: a technique for the study of Iroquois prehistory (Vol. 31): E. Cloutier, Queen's printer.
- Makowski, K. (2004). Arquitectura, estilo e identidad en el Horizonte Tardío: el sitio de Pueblo Viejo-Pucará, valle de Lurín. *Bolentin de Arqueological PUCP*, 6, 137-170.
- Makowski, K. and M. Vega Centeno. (2004). Estilos Regionales en la Costa Central en el Horizonte Tardío: Una Aproximación desde el Valle de Lurin. *Bulletin del Instituto Francais de etudes Andines*, 33(3), 681-714.
- Makowski, K., I. Ghezzi, D. Guerrero, H. Neff, M. Himenez, G. Ore, R. Alvarez-Calderon. (2008). *Pachacamac, Ychsma, y los Caringas: Estilos e Identidades en el Valle de Lurin Inca*. In O. Pinedo and H. Tantalean (Ed.), *Arqueologia de la Costa Centra*. Lima: Avqi Ediciones.
- Malafouris, L. (2004). The Cognitive Basis of Material Engagement: Where Brain, Body and Culture Conflate. *Rethinking Materiality: the Engagement of Mind with the Material World*, 53-61.
- Marcus, J. (1988). *Conflict Over Coca Fields in XVIth-Century Perú* (Vol. 21). Ann Arbor: University of Michigan Press.
- Matos Mendieta, R. (2000). The Señoríos in the Sierra and the Central Coast. In *The Inca World*
- Mauss, M. (1936). Les techniques du corps. *Journal de Psychologie*, 32(3-4), 365-386.
(1954). *The Gift: The Form and Reason for Exchange in Archaic Societies*, W D. New York and London: Norton 1990 [1950], 11.
- Mayer, E. (2002). *The Articulated Peasant: Household Economies in the Andes*. Boulder: Westview Press.
(2013). In the Realm of the Incas. In K. Hirth and J. Pillsbury (Ed.), *Merchants, Markets and Exchange in the Pre-Columbian World* (pp. 309-317). Washington, D.C.: Dumbarton Oaks.
- McIntosh, S. K. (1999). Pathways to complexity: An African perspective. In *Beyond chiefdoms: Pathways to Complexity in Africa*, 1-30.
- McIntosh, R. (1991). Early Urban Clusters in China and Africa: The Arbitration of Social Ambiguity. *Journal of Field Archaeology*, 18(2), 199-212
- Medina, F. d. (1920). Relación del Licenciado Felipe de Medina, Visitador General de Las Idolatrías del Arzobispado de Lima, Enviada al Ilustrísimo y reverendísimo señor Arzobispo

Della en que le da cuenta de las que se han descubierto en el Pueblo de Huacho, donde he comenzado a visitar desde 19 de febrero hasta 23 de Marzo de 1650. In *Informaciones Sobre el Antiguo Perú*. Lima, Peru: Sanmarti.

Meskell, L. (2001). Archaeologies of Identity. In I. Hodder (Ed.), *Archaeological Theory Today* (pp. 187-213). Cambridge Polity Press.

Molm, L. D., J. L. Collett, and D. R. Schaefer (2006). Conflict and Fairness in Social Exchange. *Social Forces*, 84(4), 2331-2352.

(2007). Building Solidarity through Generalized Exchange: A Theory of Reciprocity. *American Journal of Sociology*, 113(1), 205-242.

Molm, L. D., D. R. Schaefer, and J. L. Collett (2009). Fragile and Resilient Trust: Risk and Uncertainty in Negotiated and Reciprocal Exchange. *Sociological Theory*, 27(1), 1-32.

Morgan, L. H. (1877). *Ancient Society: Or, Researches in the Lines of Human Progress from Savagery, Through Barbarism to Civilization* New York: H. Holt.

Morris, C., and Julian Idilio Santillana. (2007). The Inka Transformation of the Chincha Capital. In J. Pillsbury (Ed.), *Variations in the Expression of Inka Power* (pp. 135-164). Washington D.C.: Dumbarton Oaks.

Moseley, M. and G. Willey. (1973). Aspero, Peru: A Reexamination of the Site and Its Implications. *American Antiquity*, 38(4), 452-468.

Mujica, E. (1985). Altiplano-Coastal Relationships in the South-Central Andes: From Indirect to Direct Complementarity. In I. Shimada, S. Masuda, and C. Morris (Ed.), *Andean Ecology and Civilization*. Tokyo: University of Tokyo Press.

Murra, J. (1975). *Formaciones Economicas y Politicas de Mundo Andino*. Lima, Peru: IEP ediciones.

(1986). Notes on PreColombian Cultivation of Coca Leaf. In D. Pachini and C. Franquenmonte (Ed.), *Coca and Cocaine: Effects People on Policy in Latin America* (pp. 49-52). Cambridge: Cultural Survival Inc.

Nado, K. L., Marsteller, S. J., King, L. M., Daverman, B. M., Torres-Rouff, C., & Knudson, K. J. (2012). Examining local social identities through patterns of biological and cultural variation in the Solcor "Ayllu", San Pedro de Atacama, Chile. *Chungara: Revista de Antropología Chilena*, 44(2), 341-357.

Nash, J. C. (1993). *We eat the mines and the mines eat us: Dependency and exploitation in Bolivian tin mines*: Columbia University Press.

Negro, S. (1991). Arquitectura y Sistemas Constructivos en los Asentamientos de la Cultura Chancay. In A. Krzanowski (Ed.), *Estudios sobre la Cultura Chancay*. Krakow: Uniwersytet Jagiellonski.

- Neil, S. (2012). Identity Construction and Boundaries: Hellenistic Perugia. In S. T. Roselaar (Ed.), *Process of Integration and Identity Formation in the Roman Republic* (pp. 51-70). Leiden: Brill.
- Nelson, K., and E. Bellido. (2010). Evidence of Botanical Diversity and Species Continuity from Chancay Sites in the Huaura Valley, Peru. *Economic Botany*, 64(1), 46-54.
- Nelson, K. and A. Heaton (2009). Old Politics and New Cemeteries: The Establishment of the Chancay in the Huaura Valley. Paper presented at the 74th Annual Meeting for the Society for American Archaeology, Atlanta, Georgia.
- Nelson, K. and A. Ruiz (2004). Proyecto de Investigacion Arqueologica: Valle de Huaura, Peru, Informe Final. Lima: Instituto Nacional de Cultura.
- Nelson, K., and A. Ruiz Estrada. (2010). The Chancay tomb of Rontoy, Peru. *Antiquity*, 84(323).
- Netherly, P. (1988). From Event to Process: The Recovery of Late Andean Organizational Structure by Means of Spanish Colonial Written Records. In R. Keatinge (Ed.), *Peruvian Prehistory* (pp. 21). New York: Cambridge University Press.
- Nielsen, A. (2013). Circulating objects and the constitution of South Andean society (500 BC-AD 1550). In K. H. a. J. Pillsbury (Ed.), *Merchants, markets, and exchange in the Pre-Columbian world*. Washington D.C.: Dumbarton Oaks.
- Núñez, L., & Dillehay, T. D. (1978). Movilidad giratoria, armonía social y desarrollo en los Andes meridionales: patrones de tráfico e interacción económica: ensayo: Universidad del Norte (Chile), Facultad de Ciencias Sociales, Dirección General de Investigaciones Científicas y Tecnológicas, Departamento de Arqueología.
- Ogburn, D. (2008). Becoming Saraguro: Ethnogenesis in the Context of Inca and Spanish Colonialism. *Ethnohistory*, 55(2), 287-319.
- ONERN. (1974). *Estudio Agrologico Detallada y Zonificacion Climatica de Cultivos del Valle Chancay-Huaral*. Lima: Ministerio de Agricultura, Peru.
- Owen, B. (1996). Inventario Arqueologico del Drenaja Superior de Rio Osmore, Informe de Campo e Informe Final. Lima: Instituto Nacional de Cultura.
- (2005). Distant Colonies and Explosive Collapse: The Two Stages of Tiwanaaku Diaspora in the Osmore Drainage. *Latin American Antiquity*, 16, 45-80.
- Parsons, J., C. Hastings, and R. Matos Mendieta (1997). Rebuilding the State in Highland Peru: Herder-Cultivator Interactions during the Late Intermediate Period in the Tarama-Chinchaycocha Region. *Latin American Antiquity*, 8(4), 317-341.

- Partridge, E. (1983). *Origins: A Short Etymological Dictionary of Modern English*. New York: Greenwich House.
- Pazdur, M. and A. Krzanowski (1991). Fechados Radiocarbonicos para los Sitios de la Cultura Chancay. In A. Krzanowski (Ed.), *Estudios sobre la Cultura Chancay* (pp. 115-132). Krakow: Uniwersytet Jagiellonski.
- Pearsall, D. M. (2000). *Paleoethnobotany. A Handbook of Procedures, Second Edition*. San Diego: Academic Press.
- Pearsall, D. M., K. Chandler-Ezell, and A. Chandler-Ezell (2003). Identifying Maize in Neotropical Sediments and Soils Using Cob Phytoliths. *Journal of Archaeological Science*, 30(5), 611-627.
- Pels, P. (1997). The Anthropology of Colonialism: Culture, History, and the Emergence of Western Governmentality. *Annual Review of Anthropology*, 26, 163-183.
- Perales, M. (2006). Proyecto de Investigación: Reconocimiento Arqueológico en el Valle Bajo de Pativilca, Lima-Perú. Lima: Instituto Nacional de Cultura, Perú.
(2007). Proyecto de Investigación: Reconocimiento Arqueológico en el Valley de Fortaleza, Lima-Ancash, Perú. Lima: Instituto Nacional de Cultura, Perú.
- Pfaffenberger, B. (1988). Fetishised Objects and Humanised Nature: Towards an Anthropology of Technology. *Man*, 23(2), 236-252.
(1992). Social Anthropology of Technology. *Annual Review of Anthropology*, 21, 491-516.
- Piperno, D. R. (2006). Phytoliths: a comprehensive guide for archaeologists and paleoecologists: Rowman Altamira.
- Piperno, D. R., Bush, M. B., & Colinvaux, P. A. (1990). Paleoenvironments and human occupation in late-glacial Panama. *Quaternary Research*, 33(1), 108-116.
- Platt, T. (2010). Desde la Perspectiva de la Isla. Guerra y Transformación en un Archipiélago Vertical Andino: Macha (Norte de Potosí, Bolivia). *Chungara*, 42(1), 297-324.
- Plowman, T. (1984a). The Ethnobotany of Coca (*Erythroxylum* spp, *Ethroxylaceae*). In G. Prance and J. Kallunki (Ed.), *Ethnobotany in the Neotropics* (pp. 62-111). Bronx: New York Botanical Garden.
(1984b). The Origins, Evolution, and Diffusion of Coca, *Erythroxylum* spp., in South and Central America. In D. Stone (Ed.), *Pre-Columbian Plant Migration* (Vol. 76, pp. 39). Cambridge: Harvard University Press.
- Pollock, S. (2003). *Feasts, Funerals, and Fast Food in early Mesopotamian States*. New York: Springer.

Postgate, J. N. (1992). The Land of Assur and the Yoke of Assur. *World Archaeology*, 23(3), 247-263.

Pozorski, S and T. Pozorski (1991). Storage, access control, and bureaucratic proliferation: Understanding the initial period (1800–900 BC) economy at Pampa de las Llamas-Moxeke, Casma Valley, Peru. *Research in Economic Anthropology*, 13, 341-371.

Quilter, J. (1985). Architecture and Chronology at El Paraiso, Peru. *Journal of Field Archaeology*, 12(3), 279-297.

(1991). Late Preceramic Peru. *Journal of World Prehistory*, 5(4), 387-438.

Quilter, J., & Stocker, T. (1983). Subsistence economies and the origins of Andean complex societies. *American Anthropologist*, 85(3), 545-562.

Rabikowska, M. (2010). The Ritualisation of Food, Home and National Identity among Polish migrants in London. *Social Identities*, 16(3), 377-398.

Ramírez, S. E. (1996). *The World Upside Down: Cross-cultural Contact and Conflict in Sixteenth-century Peru*. Stanford: Stanford University Press.

(2005). *To Feed and be Fed: The Cosmological Bases of Authority and Identity in the Andes*, Stanford: Stanford University Press.

Ramos, G. (2011). Language and Society in Early Colonial Peru. In P. Heggarty and A. Pearce (Ed.), *History and Language in the Andes* (pp. 19-38). New York: Palgrave MacMillan.

Rapoport, A. (1982). *The Meaning of the Built Environment: A Nonverbal Communication Approach*. Tuscon: University of Arizona Press.

Redfield, R. (1956). *Peasant Society and Culture: an Anthropological Approach to Civilization*.

Rick, J. (2004). The Evolution of Authority and Power at Chavín de Huántar, Peru.

Anthropological Papers of the American Anthropological Association, 14(1), 71-89.

(2008). *Context, Construction and Ritual in the Development of Authority at Chavín de Huántar. Chavín: Art, Architecture and Culture*. Los Angeles: Cotsen Institute of Archaeology.

Riva, C. (2010). Ingenious Inventions: Welding Ethnicities East and West. In S. Hales and T. Hodos (Ed.), *Material Culture and Social Identities in the Ancient World* (pp. 79-113).

Cambridge: Cambridge University Press.

Robb, J. (2004) The Extended Artefact and the Monumental Economy: a Methodology for Material Agency. In E. DeMarrais, C. Gosden and C. Renfrew (Ed.), *Rethinking Materiality: The Engagement of Mind with the Material World* (pp. 131-139).

- Rodríguez-Alegría, E., H. Neff, H., M. D. Glascock. (2003). Indigenous Ware or Spanish Import? The Case of Indígena Ware and Approaches to Power in Colonial Mexico. *Latin American Antiquity*, 14(1), 67-81. doi: 10.2307/972235
- Rosas Cuadros, E. (1976). *La Provincia de Chancay en la Colonia y la Emancipación*. Lima: Editorial Industrial.
- Ross, J., Valenzuela R, D., Hernández Llosas, M. I., Briones, L., & Santoro, C. M. (2008). More than the Motifs: The Archaeological Analysis of Rock Art in Arid Regions of the Southern Hemisphere. *Chungara*, 273-294.
- Rostworowski, M. (1970). Mercaderes del Valle de Chíncha en la Época Prehispánica: un Documento y unos Comentarios. *Revista Española de Antropología Americana*, 5, 135-184.
 (1978). *Señoríos Indígenas de Lima y Canta*. Lima: Instituto de Estudios Peruanos.
 (1988). *Prologue to Conflicts over Coca Fields in 16th Century Peru*. Ann Arbor: University of Michigan Museum.
 (1993). *Ensayos de Historia Andina: Elites, Etnias, Recursos*. Lima: Instituto de Estudios Peruanos.
 (2002). *Pachacamac y el Señor de los Milagros: una trayectoria milenaria; Señoríos indígenas de Lima y Canta* (Vol. 25): Instituto de Estudios peruanos
 (2004). *Costa Peruana: Prólogo a Conflicts over Coca Fields in XVIth Century Peru*. Lima, Peru: IEP Ediciones
- Rowe, J. H. (1948). On Basic Highland Culture. *Memoirs of the Society for American Archaeology*, 20-20.
 (1951). Andean Culture History: An Apology and Clarification. *American Antiquity*, 16(4), 356-356.
- Rutherford, A. (2014). Maintaining Community in a Sociopolitical Frontier: Recent Data from Cerro Colorado de Huacho, Huaura Valley, Peru. Paper presented at the 79th Annual Meeting of the Society for American Archaeology, Austin, Texas.
- Sackett, J. R. (1977). The Meaning of Style in Archaeology: a General Model. *American Antiquity*, 369-380.
 (1982). Approaches to Style in Lithic Archaeology. *Journal of Anthropological Archaeology*, 1(1), 59-112.
- Safran, W. (1991). Diasporas in Modern Societies: Myths of Homeland and Return. *Diaspora: A Journal of Transnational Studies*, 1(1), 83-99.
- Sallnow, M. J. (1982). a Trinity of Christs: Cultic Processes in Andean Catholicism. *American Ethnologist*, 9(4), 730-749.
- Salomon, F. (1986). *Native Lords of Quito in the Ages of the Incas*. New York: Cambridge University Press.

Salomon, F., and G. Urioste (1991). *The Huarochiri Manuscript: A Testament of Ancient and Colonial Andean Religion*. Austin: University of Texas Press.

Santoro, C., T. Dillehay, J. Hidalgo, D. Valenzuela, L. Alvaro, G. Romero, F. Rothhammer, and V. Standen. (2010). Revista al Tercer Caso de Verticalidad de John Murra en las Costas de los Andes Centrales y Centro Sur. *Chungara*, 42(1), 325-340.

Schaedel, R. (1985). Coast-highland interrelationships and Ethnic Groups in Northern Peru (500 B.C. - 1980 A.D.). In I. Shimada, S. Masuda, and C. Morris (Ed.), *Andean Ecology and Civilization* (pp. 443-473). Tokyo: University of Tokyo Press.

Schaefer, D. R. (2009). Resource Variation and the Development of Cohesion in Exchange Networks. *American Sociological Review*, 74(4), 551-572.

Schreiber, K. (2005). Imperial Agendas and Local Agency: Wari Colonial Strategies. In G. Stein (Ed.), *The Archaeology of Colonial Encounters*. Santa Fe: School of American Research.

Scott, J. (1985). *Weapons of the weak: Everyday forms of peasant resistance*. New Haven: Yale University Press.

(2001) *Power*. Cambridge: Polity Press.

Segura Llanos, R., M. del Carmen Vega, and P. Landa (2002). Recent Investigations at the Site of Cajamarquilla: Advances in the Study of Precolumbian Mortuary Practices on the Peruvian Central Coast. Paper presented at the 20th Annual Northeast Conference on Andean Archaeology and Ethnohistory, London, Ontario.

Sestieri, P. (1964). Excavations at Cajamarquilla, Peru. *Archaeology*, 17(1), 12-17.

Shady Solis, R. (1997). *La Ciudad Sagrada de Caral-Supe en los Albores de la Civilización en el Perú*. Lima, Peru: Fondo Editorial UNMSM.

(2005). *Caral Supe, Perú : la Civilización de Caral-Supe : 5000 Años de Identidad Cultural en el Perú*. Lima, Peru: INC.

(2006). America's first city? The case of Late Archaic Caral. In *Andean Archaeology III* (pp. 28-66) New York: Springer.

Shady Solís, R. and A. Ruiz Estrada (1979). Evidence for Interregional Relationships during the Middle Horizon on the North Central Coast of Peru. *American Antiquity*, 44(4), 18.

Shady Solís, R., and C. Leyva (2003). La Ciudad Sagrada de Caral-Supe: los Orígenes de la Civilización Andina y la Formación del Estado Prístino en el Antiguo Perú: Instituto Nacional de Cultura, Proyecto Especial Arqueológico Caral-Supe.

Sheyholislami, J. (2010). Identity, Language, and New Media: the Kurdish case. *Language Policy*, 9(4), 289-312.

- Shimada, I. (2000). Late Prehispanic Coastal States. In L. Minelli (Ed.), *The Inca World: the Development of Pre-Columbian Peru* (pp. 49-110). Norman: University of Oklahoma Press.
- Siemens, A., R. Hebda, M. Naverette Hernandez, D. Piperno, J. Stein, and M. Zola Baez. (1988). Evidence for a Cultivar and a Chronology from Patterned Wetlands in Central Veracruz, Mexico. *Science*, 242, 105-107.
- Silliman, S. W. (2005). Culture Contact or Colonialism? Challenges in the Archaeology of Native North America. *American Antiquity*, 70(1).
- Simpson, B., and David Willer. (2005). The Structural Embeddedness of Collective Goods: Connection and Coalitions in Exchange Networks. *Sociological Theory*, 23(4), 386-407.
- Skar, S. (1994). *Lives Together – Worlds Apart: Quechua Colonization in Jungle and City*. Oslo: Scandinavian University Press.
- Smith, A. T. (2001). The Limitations of Doxa, Agency and Subjectivity from an Archaeological Point of View. *Journal of Social Archaeology*, 1, 155-171.
- Smith, C. S. (1947). An Outline of the Archaeology of Coastal New York. *Bulletin of the Archaeological Society of Connecticut*, 21, 2-9.
- Smith, S. T. (2003). *Wretched Kush: Ethnic Identities and Boundaries in Egypt's Nubian Empire*. New York: Psychology Press.
- Sofaer, J. (2011). Human Ontogeny and Material Change at the Bronze Age Tell of Százhalombatta, Hungary. *Cambridge Archaeological Journal*, 21(02), 217-227.
- Sökefeld, M. (1999). Debating Self, Identity, and Culture in Anthropology. *Current Anthropology*, 40(4), 417-448.
- Stanish, C. (1989). Household Archaeology: Testing Models of Zonal Complimentarity in the South Central Andes. *American Anthropologist*, 91, 7-25.
- (1992). *Ancient Andean Political Economy*. Austin: University of Texas Press
- (2005). Migration, Colonies, and Ethnicity in the South-Central Andes Us and Them. In *Archaeology and Ethnicity in the Andes*.
- Stark, M. (1991). Ceramic Production and Community Specialization: A Kalinga Ethnoarchaeological Study. *World Archaeology*, 23(1), 64-78.
- (1998). *The Archaeology of Social Boundaries*. Washington D.C.: Smithsonian Institution Press.
- Stein, G. (1987). Regional Economic Integration in Early State Societies: Third Millennium B.C. Pastoral Production at Gritille Southeast Turkey. *Paleorient*, 13(2), 101-111.
- (1999). *Rethinking World Systems: Diasporas, Colonies and Interaction in Uruk Mesopotamia*. Tuscon: University of Arizona Press.

(2001). "Who was King? Who was not King?": Social Group Composition and Competition in Early Mesopotamian State Societies. In J. Haas (Ed.), *From Leaders to Rulers* (pp. 205-234). New York: Kluwer Academic.

(2002). Colonies without Colonialism: A Trade Diaspora Model of 4th Millenium BC Mesopotamian Enclaves in Anatolia. In *The Archaeology of Colonialism* (pp. 26-64). Los Angeles: Paul Getty Museum Publications.

(2005). Introduction: The Comparative Archaeology of Colonial Encounters. In G. Stein (Ed.), *The Archaeology of Colonial Encounters: Comparative Perspectives* (pp. 3-32). Santa Fe: School of American Research Press.

Stovel, E. (2008). Interaction and Social Fields in San Pedro de Atacama, Northern Chile. In H. Silverman and W. Isbell (Ed.), *Handbook of South American Archaeology* (pp. 979-1004).

(2013). Concepts of Ethnicity and Culture in Andean Archaeology. *Latin American Antiquity*, 24(1), 3-20.

Strathern, M. (1997). Partners and Consumers: Making Relations Visible. In *The Logic of the Gift: Toward an Ethic of Generosity*, 292-311.

Stumer, L. M. (1956). Development of Peruvian Coastal Tiahuanacoid Styles. *American Antiquity*, 59-69.

Sutter, R. (2000). Prehistoric Genetic and Culture Change: A Bioarchaeological Search for Pre-Inka Altiplano Colonies in the Coastal Valleys of Moquegua, Peru and Azapa, Chile. *Latin American Antiquity*, 11(1), 43-70.

Swenson, E. (2006). Competitive Feasting, Religious Pluralism and Decentralized Power in the Late Moche Period. In H. Silverman and W. Isbell (Ed.), *Andean Archaeology III* (pp. 112-142). New York: Springer Science.

Szremski, K. (2007). Report of Investigations in the Huaura Valley, 2007: Vanderbilt University.

(2009). Economic Exchange and Cultural Contact in the Late. Intermediate Period: the view from Rio Huanangue. Paper presented at the 74th Annual Meeting of the Society for American Archaeology, Atlanta, Georgia.

(2013). Interaction Strategies and the Middle Ground: Community building in the Huanangue Valley, Peru. Paper presented at the 2nd Annual Second City Anthropology Conferences, Chicago.

Taussig, M. (1980). The devil and commodity fetishism in South America.

Tassi, N. (2012). 'Dancing the Image': Materiality and Spirituality in Andean Religious 'Images'. *The Journal of the Royal Anthropological Institute*, 18(2), 285-310.

Tello, J. (1942). *Origen y Desarrollo de las Civilizaciones Prehistóricas Andinas*. Lima: Librería e imprenta Gil

- Topic, J. (2013). Exchange on the Equatorial Frontier: A Comparison of Ecuador and Northern Peru. In K. Hirth and J. Pillsbury (Ed.), *Merchants, Markets, and Exchange in the Pre-Columbian Andes* (pp. 335-360). Washington D.C.: Dumbarton Oaks.
- Topic, T. (1990). Territorial Expansion and the Kingdom of Chimor. In M. Moseley and A. Cordy-Collins (Ed.), *The Northern Dynasties: Kingship and Statecraft in Chimor* (pp. 177-194). Washington D.C.: Dumbarton Oaks
- Topic, J. and T. Topic (1983). Coast-Highland Relations in Northern Peru: Some Observations on Routes, Networks, and Scales of Interaction. In R. Leventhal and A. Kolata (Ed.), *Civilization in the Ancient Americas* (pp. 237-260). Albuquerque: University of New Mexico Press.
- (1985). Coast Highland Relations in Northern Highland Peru: The Structure and Strategy of Interaction. In M. Thompson, M. Garcia and F. Kense (Eds.), *Status, Structure and Stratification: Current Archaeological Reconstructions* (pp. 55-66). Calgary, Canada: The Archaeological Association of Calgary.
- Torres-Rouff, C. (2008). The Influence of Tiwanaku on Life in the Chilean Atacama: Mortuary and Bodily Perspectives. *American Anthropologist*, 110(3), 325-337.
- Torres-Rouff, C., M. A. Costa-Junqueira, and A. Llagostera. (2005). Violencia en Tiempos de Cambio: El Periodo Intermedio Tardío en San Pedro de Atacama. *Chungará*, 37(1), 75-83.
- Toyne, J. (2011). Possible Cases of Scalping from pre-Hispanic Highland Peru. *International Journal of Osteoarchaeology*, 21, 229-242.
- Tsuda, T. (1999). Transnational Migration and the Nationalization of Ethnic Identity among Japanese Brazilian Return Migrants. *Ethos*, 27(2), 145-179.
- Tung, T. A. (2008). Violence after Imperial Collapse: A Study of Cranial Trauma among Late Intermediate Period Burials from the Former Huari Capital, Ayacucho, Peru. *Nawpa Pacha*, 29, 101-118.
- (2012). *Violence, Ritual, and the Wari Empire: A Social Bioarchaeology of Imperialism in the Ancient Andes*. Gainesville: University Press of Florida.
- Valdez, F. (2008). Inter-zonal Relationships in Ecuador. In H. Silverman and W. Isbell (Ed.), *Handbook of South American Archaeology* (pp. 865-888).
- Van Buren, M. (1996). Rethinking the Vertical Archipelago: Ethnicity, Exchange and History in the South Central Andes. *American Anthropologist*, 98, 338-351.
- van Dalen, P. (2008). *Los Ecosistemas Arqueológicos en la Cuenca Baja del Río Chancay - Huaral: su Importancia para el Desarrollo de las Formaciones Sociales Prehispánicas*. Lima: Juan Gutemberg Editores - Impresores.
- Vargas Ugarte, R. (1936[1604]). Historia Anonima de Trujillo. *Revista Historica*, 3, 1-48.
- Garcilaso de la Inca (2009). *Comentarios Reales de los Incas*. Lima: Universidad Ricardo Palma.

Vega-Centeno, R. (2004). Arquitectura Publica del Arcaico Tardio en el Valle de Fortaleza: Reflexiones Sobre las Sociedades Complejas Tempranas en la Costa nor-central. *Arqueología y Sociedad*, 15, 29-56.

(2012). Consumo y Ritual en la Construcción de Espacios Públicos para el Periodo Arcaico Tardío: el Caso de Cerro Lampay.

Villacorta, L. F. (2004). Los Palacios en la Costa Central Durante los Periodos Tardíos: de Pachacamac al Inca. *Bulletin de l'FEA*, 33(3), 539-570.

Weismantel, M. (1988). *Food, Gender and Poverty in the Andes*. Pittsburgh: Pittsburgh University Press.

Wengrow, D. (2001). The Evolution of Simplicity: Aesthetic Labour and Social Change in the Neolithic Near East. *World Archaeology*, 33(2), 168-188.

Wernke, S. (2006). Negotiating Community and Landscape in the Peruvian Andes: A Transconquest View. *American Anthropologist*, 109(7).

White, L. A. (1943). Energy and the Evolution of Culture. *American Anthropologist*, 335-356.

White, R. (1991). *The Middle Ground, Indians, Empires, and Republics in the Great Lakes Region 1650-1815*. Cambridge: Cambridge University Press.

Wiessner, P. (1983). Style and Social information in Kalahari San Projectile Points. *American Antiquity*, 253-276.

Wilcox, M. (2009). *The Pueblo Revolt and the Mythology of Conquest: An Indigenous Archaeology of Contact*. Berkley: University of California Press.

Wilson, D. (1981). Of Maize and Men: A Critique of the Maritime Foundations Hypothesis for the Origins of the State on the Coast of Peru. *American Anthropologist*, 83(1), 93-120.

Wobst, M. (1977). Stylistic Behavior and Information Exchange. In C. Cleland (Ed.), *For the Director: Research Essays in Honor of James B. Griffen*. Ann Arbor: University of Michigan Press.

Wolf, E. R. (1999). *Envisioning Power: Ideologies of Dominance and Crisis*. Los Angeles: University of California Press.

Yao, A. (2012). Sarmatian Mirrors and Han Ingots (100 BC–AD 100): How the Foreign became Local and Vice Versa. *Cambridge Archaeological Journal*, 22(01), 57-70.

Yoffee, N. (1995). Political Economy in Early Mesopotamian States. *Annual Review of Anthropology*, 24, 281-311.

(2005). *Myths of the Archaic State*. Cambridge: Cambridge University Press.-

Zechenter, E. (2988). Subsistence Strategies in the Supe Valley of the Peruvian Central Coast during the Complex Preceramic and Initial Periods. (PhD Dissertation), University of California at Los Angeles, Los Angeles.