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By the mid-twentieth century, when archaeologists had accepted that Wari was an independent and powerful pre-Hispanic society, research on the Nasca culture of the South Coast of Peru led to questions about the role and influence of Wari in coastal regions. Dorothy Menzel’s (1964) study of Middle Horizon ceramics was one of the first to try and define the relationship between the Wari state and the Nasca culture. Menzel recognized early on the expansive nature of Wari and the variability in the extent and type of influence it had in different areas of the central Andes. She also found that religion played a role in Wari expansion and that it was particularly important in Nasca, which had a close relationship both politically and ideologically with Wari. “Nasca thus seems to have enjoyed a special privileged position in the new empire, sharing its prestige in the provinces, perhaps somewhat in the way in which Greece shared in the prestige of the Roman Empire” (Menzel 1964:68). Menzel viewed Nasca as a center of prestige that influenced the developing Wari state, and once the state was established she thought Nasca’s prestige among other groups was enhanced because of its unique connection with Wari.

Menzel’s interpretation of the relationship between Wari and Nasca was based primarily on ceramics from several highland and coastal sites. She documented the influence of the Nasca ceramic style on the contemporary Early Intermediate Period Huarpca style of the Wari heartland, and on subsequent imperial styles of the Middle Horizon. This influence included imagery, use of color, slip-painting, and high-temperature firing (Benavides C. 1971; Cook 1984–1985; Knobloch 1976; Menzel 1964). Conversely, Wari pottery (especially the Chakipampa style) also contributed elements to the local Nasca style. Menzel’s analysis included pottery excavated from the Wari site of Pacheco in the Nazca Valley where many oversized Robles Moqo–style vessels were deliberately broken, interred in adobe chambers, and used as offerings in a similar manner to the offering deposit of Conchopata near the capital city of Huari.

Pacheco, with its impressive pottery, is the best known Wari site on the South Coast and has been central to interpretations of Wari expansion and control in the Nazca region. The site was first investigated by Julio C. Tello in 1927 after looters had uncovered a series of adobe rooms (Menzel 1964:24). Tello excavated over three tons of ceramics including many oversized urns. In 1930 Ronald L. Olson made some additional excavations and found an abundance of camelid bones and ceramic sherds of local and Wari nonceremonial types. Unfortunately, around 1953 Pacheco was bulldozed,
much of the site was destroyed, and it is now covered by agricultural fields (Menzel 1964:23). Menzel concluded that the site was an important ritual location, given the large offering deposit found there, and that a colony of people from the highlands lived at the settlement. Thorough scientific excavations at Pacheco were never undertaken, and the subsequent destruction of the site makes further investigation, and more detailed interpretations, difficult.

Since Menzel’s initial work, much more has become known about Wari both at the capital and in the provinces. Projects in the highlands and the coast have provided a wealth of information about many aspects of the Wari state. The Nasca region has also been the focus of archaeological investigations, and recent research has focused on societies of all time periods, including the Middle Horizon, and the periods before and after Wari. This diachronic approach has aided in our understanding of local society and the impact of Wari expansion and collapse on people of the region. Menzel’s pioneering work has been crucial in guiding research on the relationship between Wari and Nasca. Recent research in Nazca supports many of Menzel’s earlier ideas; however, new data reveal that the situation was more complicated than she initially proposed, and that in Nazca, as in other areas during the Middle Horizon, there was a diversity of responses to and interactions with the Wari state.

**The Nazca Drainage and the Middle Horizon**

Archaeological evidence of human occupation in the Nazca drainage goes back to the Middle Archaic (ca. 3500 BC), but it was in the Early Intermediate Period (AD 1–750) that the first regionally integrated complex society developed in the area. Known as the Nasca culture, this society developed out of cultural traditions from the Ica and Pisco valleys during the Early Horizon (800 BC–AD 1). The Nazca culture of the Early Intermediate Period is further subdivided into three periods: Early Nasca (AD 1–450), Middle Nasca (AD 450–550), and Late Nasca (AD 550–750). During Early Nasca a new polychrome ceramic tradition developed and was widespread over the South Coast of Peru. The large ceremonial center of Cahuachi was also established in this period, and there was a proliferation in construction of the Nasca lines (geoglyphs). Most archaeologists agree that a politically complex polity developed at this time, although there continues to be some debate over whether to classify it as a state, chiefdom, series of chiefdoms, or a heterarchy (Reindel and Isla 1999; Schreiber 1999; Schreiber and Lancho 2003; Silverman 2002; Vaughn 2004).

Middle Nasca (AD 450–550) was a transitional period during which underground aqueducts were constructed in the southern Nazca drainage, and there was movement of people into the middle parts of the valley (Schreiber and Lancho 2003). This appears to have been a period of drought that may have created stress in the region and led to new innovations (Schreiber and Lancho 2003; Silverman and Proulx 2002; Thompson et al. 1985). The ceramic style underwent a change in Middle Nasca from naturalistic to more abstract designs (Proulx 1968), and construction stopped at Cahuachi (Orefici 1993; Silverman 1993). In Late Nasca (AD 550–750) the population aggregated at large settlements (Reindel and Isla 1998; Schreiber 1999; Schreiber and Lancho 2003; Silverman 2002), and the ceramic style continued to change with warfare and warriors more commonly depicted (Proulx 1983; Silverman and Proulx 2002). Overall, Late Nasca was a time of reorganization and potentially greater political complexity, and it is during this period that the relationship developed between the Nasca and Wari people (Schreiber and Lancho 2003). By the Early Middle Horizon, Wari had established at least two settlements in the drainage, and large transformations occurred in the region.

Archaeological surveys conducted in both the northern and southern Nazca drainage have located hundreds of sites of all time periods and have helped to clarify the nature of Middle Horizon settlement and the impact of the Wari state (Isla 2001; Reindel and Isla 1998; Schreiber 2001a; Schreiber and Lancho 2003; Silverman 2002). Notable differences exist between the northern valleys (Santa Cruz, Grande, Palpa, and Ingenio) and the southern valleys (Nazca, Taruga, Las Trancas) in the number and type of human settlements during the Middle Horizon. In the northern drainage there was a
dramatic decrease in sites, and the majority of those identified are cemeteries with little evidence for habitation (Browne 1992; Reindel and Isla 1998; Silverman 2002). Sites documented in the north date to early in the Middle Horizon and contain Loro ceramics, the local style with Wari influence dating to Epochs 1 and 2 (Reindel and Isla 1998). Despite the low density of Middle Horizon sites in the northern drainage, new mortuary practices have been identified here, suggesting a new political and social order that was imposed by Wari (Isla 2001). The site of Tres Pallos in the Ingenio Valley, which has been destroyed (much like Pacheco), contains the remains of tombs and Wari ceramics, and it may have been a Wari center (Isla 2001:556).

It is in the southern Nazca drainage that the clearest evidence of the Wari presence is found. The offering deposit site of Pacheco is located in the Nazca Valley not far from the large Early Nasca ceremonial center of Cahuachi, and Schreiber (2001a, 2001b), building on Menzel’s interpretation, thinks it was a Wari administrative center. In the upper Nazca Valley, in the Tierras Blancas tributary at 1,350 m, Schreiber has identified, and excavated, a small Wari enclosure called Pataraya associated with agricultural terraces (Schreiber 2001a, 2001b). Throughout the southern drainage Wari ceramics are found in both burial contexts and as surface artifacts at habitation sites (Schreiber 1992).

During the Middle Horizon the population decreased in the southern drainage but not as drastically as in the north. Habitation sites, as well as cemeteries, have been documented in each of the southern valleys. The majority of the Middle Horizon domestic sites in the south are small with the exception of Huaca del Loro in the Las Trancas Valley, the approximately 15 ha site where the local Loro ceramic style was defined (Strong 1957). The concentration of local people in the far south is thought to represent a small centralized polity that never came under direct rule by the Wari state (Schreiber 2001a). The establishment of a local center a considerable distance from the Wari-related settlements suggests resistance to the state that may have been initiated by local leaders (Conlee and Schreiber 2006; Schreiber 2001a). The resettlement of people into this area of the valley may not have been entirely out of choice; however, it did create opportunities for local leaders to obtain power in new ways (Conlee 2006).

The presence in Nasca of what are interpreted to be intrusive Wari sites and the dramatic shifts in local settlement patterns have led most researchers to consider that Nasca was incorporated into the Wari state; however, the nature of this integration remains debatable. The discovery of an offering deposit at Maymi in the South Coast Pisco Valley (Anders 1990), similar in some ways to the one found at Pacheco, has contributed to the view that the Wari presence on the South Coast was religious in nature. During the Early Intermediate Period, Nazca was the center of a prestigious and powerful ideology that was manifested in the widespread Nasca polychrome pottery, geoglyphs, trophy heads, and ceremonial center of Cahuachi. The adoption of Nasca iconography by Huarpa and Wari potters emphasizes that a shared belief system existed between the two regions. There is no evidence of the kind of intense, direct Wari political rule as there was in some areas of the highlands where large, standardized administrative centers were built and extensive agricultural projects were developed (Schreiber 1992). Pacheco and Pataraya were both small sites, and at Pacheco the nature of Wari presence remains unclear. However, the establishment of these sites and the dramatic changes in local settlements indicate there was more than just a shared religious tradition between the regions. Economic incentives may have played a role in Wari’s interest in Nazca and other areas of the South Coast, where crops that were desired by the state, such as cotton and coca, were grown and whose cultivation involved local people (Conlee and Schreiber 2006; Schreiber 2001b).

In general, the archaeological data support Menzel’s view of a close relationship between the Nasca people and the Wari state; however, the connection was not uniform throughout region. Wari appears to have invested in some areas, in particular the Nazca Valley of the southern drainage, and not in others. Likewise, local response to Wari varied from abandonment of settlements in the north, population aggregation in the far south, emulation through adoption of the Wari style at some settlements, and possibly direct incorporation in parts of the Nazca Valley.
Middle Horizon Burial Practices in the Nazca Drainage

Investigations at two sites in the southern drainage, La Tiza and Pajonal Alto, provide important information on the Middle Horizon in the Nazca region and local people’s relationship with the Wari state (Figure 6.1). Both settlements are multicomponent with local Middle Horizon habitation as well as burials. The focus here is on the burials of the Middle Horizon that include both a new type and an older burial tradition. Mortuary practices are a key component of the archaeological record and can provide insight into past populations’ religious beliefs, as well as various aspects of social and political organization.

La Tiza

Several years of research and excavation at the site of La Tiza have identified a local Middle Horizon habitation area, new elite mortuary practices, and the continuation of traditional burials dating to this time period. La Tiza is located in the central Nazca Valley, near the modern town of Nasca, in an area of abundant agricultural land and good access to water. Recently, occupation at this large settlement that spans over 30 ha was discovered to extend back to the Middle Archaic (ca. 3500 BC), although the majority of the site dates from the end of the Early Horizon (100 BC) through the end of the Late Horizon (AD 1532) and includes domestic areas and cemeteries.

The Middle Horizon domestic area is approximately 2 ha in size and consists of narrow terraces on which were constructed small stone structures. There are also roughly 5 ha of Middle Horizon mortuary structures, although overall area estimates are difficult because these tombs are mixed with earlier ones, and all are heavily looted. There is a concentration of tombs just east of the Middle Horizon habitation area, and others are found scattered among later and earlier domestic areas. At La Tiza the Middle Horizon habitation is the smallest of any time period (except for the Archaic, which has not yet been fully investigated). It is substantially smaller than that of the Early Intermediate Period, when habitation and cemetery areas covered approximately 12 ha, and the Late Intermediate Period, when habitation alone spanned at least 10 ha. The ceramics from the Middle Horizon domestic contexts and tombs date to Epochs 1 and 2. The local Loro ceramic style predominates; however, the Wari imperial styles of Viñaque and Chakipampa have also been found, usually associated with the tombs. Two calibrated radiocarbon dates from the Middle Horizon habitation area (from two different structures) of AD 653–774 and AD 664–829 (2σ, CALIB5.0, Stuiver et al. 1993) corroborate the ceramic data. There is no evidence of occupation (either habitation or burials) after AD 900, and reoccupation of La Tiza did not occur until about AD 1200 when new domestic areas dating to the Late Intermediate Period were established.

During the Middle Horizon a new type of elite tomb was used for burial at La Tiza and was constructed partially aboveground and built of stone walls with features such as doorways and possibly niches. In addition, some of these tombs were plastered and painted on the exterior. All of these tombs are looted, but many have partially intact architecture and burials. Looters have left behind a variety of artifacts and in some cases have
not disturbed the lowest levels. Several tombs that have now been cleaned and excavated have yielded a surprising amount of material and information.

Three separate tomb forms have been identified and recorded, and all are associated with elaborate grave goods (Table 6.1). The first type (Tomb Type 1) consists of small, round structures that measure approximately a meter in diameter with depths between 60 cm and 1 m. The walls consist of large, shaped stones at the base and smaller, flat stones at the top, a type of construction that is also found in Tomb Type 2 (Figure 6.2). Tomb Type 1 is the smallest type and is found dispersed around Middle Horizon domestic terraces. Three tombs of this type have been excavated and recorded (Tombs 1, 2, and 5). The roofs of all the tombs have been destroyed, and their shape and material are unknown. Tomb 1 contained Middle Horizon Loro ceramics, a few folded pieces of copper, a carved stone ornament, a needle with cotton fibers, large quantities of obsidian flakes, and part of an obsidian biface. There is a possible door on the eastern side. The lowest levels of this tomb were undisturbed and exhibit the preparation taken in its construction (Noriega and Conlee 2005). A burned area at the base may represent a symbolic preparation of the ground, which was covered with a level of fill that contained an abundance of camelid coprolites. On top of the fill was a compact mud surface that was probably the floor of the tomb on which the burials were placed.

Tomb 2 is located not far from Tomb 1 and was slightly larger and had more of a D shape. Artifacts associated with this tomb included fragments of textiles and most notably nine animal and human copper figures (Figure 6.3). A burned area was also identified, on top of which the tomb was constructed. Tomb 5 was located on a bedrock ridge to the east of Tombs 1 and 2, surrounded by several other Middle Horizon tombs. It contained several fragments of textile including part of a bag, two tupu pins, a grinding stone, and a few Middle Horizon ceramics mixed in with some Nasca sherds. There was evidence of white plaster on a small area of the exterior. All of these tombs (as well as all of those of the other two types) contained metal objects, and it has been noted that metal artifacts were much more commonly used in Middle Horizon burials than in those of other time periods in the Nazca region (Isla 2001; Menzel 1968). Fragments of human bone were found

<table>
<thead>
<tr>
<th>Tomb #</th>
<th>Type</th>
<th>Diam/Size (m)</th>
<th>Depth (m)</th>
<th>MNI</th>
<th>Features</th>
<th>Grave Goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomb 1</td>
<td>1</td>
<td>1.00</td>
<td>0.60</td>
<td>Unknown</td>
<td>Possible door</td>
<td>Loro pottery, folded copper, ornament, needle, obsidian flakes, obsidian biface</td>
</tr>
<tr>
<td>Tomb 2</td>
<td>1</td>
<td>1.50</td>
<td>1.00</td>
<td>6</td>
<td></td>
<td>Textile fragments, copper animal and human figurines</td>
</tr>
<tr>
<td>Tomb 3</td>
<td>2</td>
<td>2.90</td>
<td>1.25</td>
<td>3</td>
<td>Plaster and paint</td>
<td>Loro pottery, shell bird pendants, copper ornaments, shell beads, textile fragments</td>
</tr>
<tr>
<td>Tomb 4</td>
<td>3</td>
<td>2.60 × 2.10</td>
<td>0.90</td>
<td>2</td>
<td>Possible door, plaster and paint</td>
<td>Loro pottery, weaving implements, spindle whorls, miniature bottle, shell beads, copper llama head</td>
</tr>
<tr>
<td>Tomb 5</td>
<td>1</td>
<td>0.80</td>
<td>0.90</td>
<td>3</td>
<td>Plaster</td>
<td>Loro pottery, textile fragments, tupu pins, grinding stone</td>
</tr>
<tr>
<td>Tomb 6</td>
<td>3</td>
<td>2.70 × 2.40</td>
<td>1.30</td>
<td>6</td>
<td>Plaster and paint</td>
<td>Loro and Viñaque pottery, partial mummy bundle, Spondylus shell, textile fragments, shell beads, worked bone, spindle whorls</td>
</tr>
</tbody>
</table>
Figure 6.2 Profile view of Tomb 5 showing the construction technique used in Tomb Type 1 and Tomb Type 2.

Figure 6.3 A sample of artifacts found associated with the elite Middle Horizon tombs at La Tiza.
associated with all three tombs, and while Tomb 1 did not have enough intact bone to estimate a minimum number of individuals (MNI), Tomb 2 had a MNI of six, which included four adults, one child, and one adolescent (Michele Buzon, personal communication 2009). Tomb 5 had a MNI of three, which included one adult, one child, and one adolescent (Sarah Cross, personal communication 2008).

Tomb Type 2 has construction similar to Type 1 with a round shape, large stones at the base, and small, flat stones at the top (see Figure 6.2), but it is larger in diameter (Figure 6.4). Only one of these (Tomb 3) has been excavated, and it was 2.90 m in diameter with a depth of 1.25 m. This tomb was located to the west of the smaller round tombs in an area of Late Intermediate habitation. Associated artifacts included shell bird pendants, copper ornaments, shell beads, textile fragments (including part of a belt or headband), and Middle Horizon ceramics (primarily Loro) mixed with Late Intermediate ceramics from the domestic terraces (see Figure 6.3). Pieces of white mud plaster that were painted red were found on the exterior of the tomb. Judging from the skeletal remains associated with the structure, there were at least three adult individuals interred in the tomb (Sarah Cross, personal communication 2008).

The third tomb type is square to rectangular in shape and constructed with double-coursed stone walls (see Figure 6.4). Two tombs of this type were excavated, both of which were located on the ridge east of the Middle Horizon habitation terraces where several aboveground tombs were constructed on bedrock. Both tombs were located in an elevation of the site lower than the round tombs. Tomb 4 (2.60 × 2.10 m) was almost a meter deep and had a doorway on the east side. It contained many grave goods including weaving implements, spindle whorls, a miniature bottle, small shell beads, a copper llama head, and Loro pottery. Remnants of white plaster were found on the exterior along with red and yellow paint. It was estimated that at least two adults were buried inside. Tomb 6 (2.7 × 2.4 m), located nearby, was also square, plastered white, painted red and yellow, and 1.3 m deep. This was the most heavily looted of all the tombs, and there was no intact floor. A partial mummy bundle that consisted of part of a torso wrapped in cotton batting and textiles was found inside the tomb. There was also a complete skull of a female aged twenty-five to thirty-five years old (Conlee et al. 2009). Several pieces of worked Spondylus and many fragments of textiles were found associated with the tomb (see Figure 6.3). In addition, there were polishing stones, spindle whorls, shell beads, and worked bone. There were several types of Middle Horizon 1 and 2 ceramics including Loro and Viñaque. The remains of disturbed skeletal
material in this tomb have an MNI of six, including the adult female, one infant, two children, one adolescent, and one older adult.

In addition to the elaborate aboveground tombs constructed in the Middle Horizon, there was also a continuation of local burial practices at La Tiza. A Middle Horizon individual was found buried in a pit inside of a domestic structure in a seated, flexed position facing south with a complete Loro polychrome bowl (Figure 6.5). It is interesting to note that the fill associated with the body contained an abundance of camelid coprolites similar to those found in Tomb 1. The individual was a male between thirty and forty years old. A calibrated radiocarbon date of AD 661–849 (2σ, CALIB5.0, Struvier et al. 1993) was obtained from a hearth associated with the burial. This type of burial in a pit with the individual placed in a seated and flexed position was the most common type of burial in the region from the beginning of the Nasca culture through the end of the Late Intermediate, a period of almost fifteen hundred years. At La Tiza, burials from the Nasca culture, Middle Horizon, and Late Intermediate have been found in this style, indicating that it is the most traditional and enduring burial practice in the region. During the Middle Horizon at La Tiza, this traditional regional burial style was practiced along with the new elite burials.
Pajonal Alto

The small village of Pajonal Alto, located in the Taruga Valley, one valley to the south of La Tiza (see Figure 6.1), also contains Middle Horizon habitation and burials. This settlement was first inhabited during a transitional period between Late Nasca and the Early Middle Horizon and was occupied through Middle Horizon Epochs 1 and 2. The village was subsequently abandoned and then reoccupied in the middle of the Late Intermediate Period (ca. AD 1300), and the majority of the habitation dates from this period through the Late Horizon (Conlee 2003). There is evidence for a small domestic area in the Middle Horizon, and two adjacent cemeteries appear to contain some burials dating to this period. Only one unit was excavated at the village that contained Middle Horizon domestic debris, although pottery of this period was found in several areas on the surface and in sections of the eroded river cut on the southern edge of the site (Conlee 2000). Because of the limited Middle Horizon domestic contexts that were excavated, no general conclusions could be made except that the settlement was much smaller during this period than it was in the later Late Intermediate and Late Horizon.

One Middle Horizon burial, a child aged three to five years old, was found underneath a midden that dated to the Late Intermediate and Late Horizon. The child was placed in a seated position facing west and was buried with large fragments of a ceramic vessel (Figure 6.6). This was a typical local burial practice for children beginning in Early Nasca and is known to have continued through the Late Intermediate Period. There were several indications that the child was not healthy at the time of death. Cribra orbitalia, a porosity of the bone that is usually a result of infection, was found in the eye orbits, and one of the lesions was active at the time of death. Periostitis was present on the long bones, and almost all of these lesions were active at the time of death. The distribution of these reactions probably indicates the effects of a nonspecific generalized disease and not injury or localized infection (Conlee 2000; Kellner and Conlee 1998). There were also carious lesions and an abscess in the deciduous teeth of

Figure 6.6 Middle Horizon child burial from Pajonal Alto.
the child. All of these indicators suggest that the child was under a lot of physiological stress.

**Regional Transformations in Burial Practices**

The burials found at La Tiza and Pajonal Alto reflect changes on a broader, regional level that coincided with the Wari presence in the Middle Horizon. Elsewhere in the Nazca drainage, studies by Carmichael (1988, 1995) and Isla (2001) have documented transformations in mortuary traditions in the Middle Horizon. During this period traditional burial practices were continued by some segments of the population, and new forms were used by others. Carmichael (1988, 1995) found that burial form and offering type were consistent throughout the Nasca culture of the Early Intermediate Period, indicating that burial patterns were conservative. Burials in pits, most commonly with the individual in a flexed position and accompanied by at least one whole pot, were the most widespread burial type of the Nasca culture (Carmichael 1988), and this tradition continues in the Middle Horizon as seen in the adult male burial at La Tiza. Child burials in large ceramic vessels (or with large fragments of these) were common in the Nasca culture for children six years of age and younger, and this practice continued in the Middle Horizon but was less frequent (Isla and Reindel 2006). The Middle Horizon child burial at Pajonal Alto is an example of this tradition.

The most elaborate type of Nasca culture burials was in *barbacoa* tombs that were oval or square chambers with log roofs. These had varying depths, with the deepest approximately 8 m reported at the site of La Muña in the northern drainage (Isla and Reindel 2006:385). These tombs were for the highest status individuals of the Nasca culture, and all those recorded contained one individual (Isla and Reindel 2006). This tomb type continued to be used into the Middle Horizon, but the roofs were more substantial, and the tombs were not filled in, probably in order to more easily reenter and inter additional individuals (Isla 2001). In addition, archaeologists have identified a new tomb type that consisted of square or rectangular tombs with large stone-slab roofs that have been found at the Wari site of Pataraya in the upper Nazca Valley and also in the upper elevations of Las Trancas Valley (Isla 2001; Schreiber 2001).

The use of plaster and paint on the exterior of the tombs at La Tiza appears to be a new practice during the Middle Horizon. Isla (2001:565) has noted that some tombs found at the Middle Horizon sites of Atarco and Huaca del Loro in the southern Nazca drainage had white or yellow paint on the walls. Plaster and paint were commonly used on buildings at the Early Nasca ceremonial center of Cahuachi (Orefici 1993), although no specific mention of this treatment on Early Intermediate Period tombs has been made. There is evidence of white plaster being used on the exteriors of compounds at the capital of Huari, and some of the ceremonial buildings at the city were painted red (Isbell and Vranich 2004).

Other architectural traditions of the Middle Horizon on the coast also used white plaster and red and yellow paint (Nelson et al., this volume).

The most dramatic changes in Middle Horizon burial practices in the Nazca drainage were in the treatment of the body and the number of persons interred together. Both Carmichael (1988, 1995) and Isla (2001; Isla and Reindel 2006) found that during the Early Intermediate most tombs contained one individual. Isla (2001:578) calculates that 99 percent of the recorded burials of this period were of a single individual. In the Middle Horizon this changed, and of the tombs that Isla has documented, only 65 percent of tombs contained one individual, and the rest had two or more people. We do not know if the multiple burials found in the region, including those from La Tiza, were individuals buried together at the same time or sequentially interred over many years. Even with un-looted contexts and well-controlled dating this can be difficult to determine. Another important change in the Middle Horizon is the first evidence of mumification in Nazca, and mummy bundles become common. Isla (2001) has observed evidence of mummy bundles in many cemeteries that are associated with the local Middle Horizon Loro culture and in particular dating to Epoch 2. This is a trend that extends to other coastal valleys where the large and elaborate mummy bundles of the *falsa cabeza*, or false head, type are found. Elaborate mummy bundles were used for the first time on the Central Coast during Middle Horizon 1B and
are found at sites including Pachacamac, Nievería, and Ancón, with most dating to Epochs 2 and 3 (Angeles and Pozzi-Escot 2001; Gayton 1927; Kaulicke 1997; Segura and Shimada, this volume; Uhle 1905). Tung (2007) has also reported Middle Horizon mummy bundles at the site of Beringa in the Majes Valley on the far South Coast. These changing burial practices are reflected at La Tiza where evidence of multiple burials and mummy bundles is found for the first time associated with the new elite Middle Horizon mortuary structures.

Multiple burials were also a common practice in the Wari heartland during the Middle Horizon and replaced the individual graves and cemeteries of the Early Intermediate Period (Isbell 2001, 2004; Isbell and Cook 2002; Ochatoma and Cabrera 2001). There is evidence that some tombs were reopened and additional bodies interred, and sometimes bones were removed and perhaps grave goods were changed (Isbell 2004; Isbell and Cook 2002). The capital city of Huari had evidence of multiple burials in the Moraduchayuq compound (Isbell et al. 1991) and in the royal subterranean slab tombs in the Monjachayuq Sector (Isbell 2004). The elaborate Wari tombs with multiple burials and evidence of reentry are thought to be indicators of ancestor veneration or worship, which was focused on the deceased elites (Isbell and Cook 2002:287–288). Other Wari sites in the central highlands contained multiple burials, including Azángaro (Anders 1986), Batan Urqu at the Huaro complex (Zapata 1997), and Jincamoco (Schreiber 1992). Multiple burials in tombs associated with Wari ceramics are also reported outside of the central highlands during the Middle Horizon. In the Cotahuasi Valley in Arequipa large tombs containing multiple individuals were built at this time, and there is evidence both that they were repeatedly reentered with objects and that individuals were moved into and out of these structures (Jennings, this volume).

The tomb shape and construction technique at La Tiza have some similarities to those found at Conchopata where one Wari tomb type was constructed by excavating into bedrock using cracks in the rock, and these tombs always contained multiple burials (Isbell 2004; Isbell and Cook 2002). At La Tiza one concentration of Middle Horizon tombs is along a ridge where they were constructed on the bedrock. Burial goods in the Wari heartland contained similar funerary items to those found in the tombs at La Tiza and elaborate tombs of the Middle Horizon documented elsewhere in the Nazca drainage. These items include Spondylus, copper tupu pins, and shell beads (Isbell and Cook 2002; Isla 2001).

During the Middle Horizon, in many areas that were interacting with the Wari state, there is a dramatic change in mortuary practices most often associated with the introduction of multiple burials. Isbell (this volume) has cautioned that the mortuary variation in the Middle Horizon is too great to attribute it to centralized Wari political control. However, there appears to have been some type of new and widespread ideology that expressed itself in the treatment of the dead. The mortuary variability documented in the Middle Horizon may itself be the commonality in many places during this time. In the Nazca region burial practices were conservative throughout the approximately seven hundred years of the Nasca culture, and new forms were not adopted until the Middle Horizon associated with Wari influence.

**Middle Horizon Immigrants and Population Movements**

Given the presence of Wari sites in the Nazca region, and the documented changes in settlement patterns and burial practices, we would expect that there was an influx of foreigners from the highlands into the Nazca region during the Middle Horizon. In addition to using material correlates such as architecture, ceramic style, and burial practices to detect immigrant populations, isotopic analysis of human remains is another way to identify local versus foreign individuals. Strontium isotope analysis was conducted on burials from La Tiza and Pajonal Alto and has provided important information about the origins of populations and migrations in the Nazca region (Conlee et al. 2009). The burials that were analyzed from La Tiza date to the Nazca culture, the Middle Horizon, and the Late Intermediate Period, and the one burial from Pajonal Alto dates to the Middle Horizon.

Although strontium isotope analysis is a relatively new technique, research has already illustrated the feasibility and the potential of this type of analysis to elucidate...
residential mobility in the archaeological record (e.g., Ambrose and Krigbaum 2003; Bentley 2006; Burton et al. 2003; Knudson and Price 2007; Price et al. 2008). Strontium is found in rock, groundwater, and soil, and the concentrations vary according to local geology so that regions are distinct (Faure 1986). Because the strontium present in soil and groundwater is incorporated into the plants and animals of a region, the strontium composition of an individual’s diet will be reflected in his or her skeletal material and will mirror the isotopic composition of the geological region in which a person lived before death. Tooth enamel forms during early childhood and will reflect the isotopic composition of the area where a person lived during this time. Through analysis of strontium in teeth and skeletal material it is possible to determine where a person lived as a child and as an adult (Bentley 2006). This technique allows for the identification of first-generation immigrants from geologically distinct areas.

The local strontium signature of the region around the sites of La Tiza and Pajonal Alto was defined by testing soil, archaeological faunal remains (mice and guinea pigs), and modern faunal remains (mice and guinea pigs) (Conlee et al. 2009). Using the standard method of faunal mean ± 2 standard deviations, the local range based on these samples is 0.70559–0.70727. Fieldwork at La Tiza between 2004 and 2006 resulted in the excavation of eight intact burials including the Middle Horizon individual buried in the local style. The skeletal material and teeth of each of these burials were analyzed to determine their strontium ratios and compare them with the local range. Strontium analysis was also conducted on the teeth of the female individual found in looted Tomb 6 dating to the Middle Horizon and on the Middle Horizon child burial from Pajonal Alto (Table 6.2).

The results of the study have documented that all seven individuals who date to the pre-Wari Nasca culture and the post-Wari Late Intermediate Period at La Tiza fall into the local strontium range (Conlee et al. 2009). The Middle Horizon individual at La Tiza who was buried in the local tradition also had a local signature. However, the other two Middle Horizon individuals, the child from Pajonal Alto and the woman from the looted elite tomb at La Tiza, fall outside of the local range, indicating that both were born outside of the local area. Because the cranium from the looted tomb could not be directly associated with any particular skeletal material, it was not possible to test if the woman had spent much of her adult life in the local region or if she had very recently moved to Nazca. At present, the precise region where both individuals were born is unknown. They fall closest in range to the local signature at Chokepukio in the Cuzco region, but at this time no definite conclusion about their place of birth can be made (Andrushko et al. 2009; Conlee et al. 2009).

The presence of a nonlocal adult female buried in the new elite tomb type suggests that this mortuary practice may have been brought in by people who were not originally from the Nazca region. This woman may have married into the community, or she may have been a member of a larger group that settled in the area. This is similar to a discovery at the Central Coast site of Ancón where a young woman from an elite burial was wrapped in elaborate textiles, buried with Chakipampa ceramics, and had a strontium signature similar to that of the Wari heartland (Slovak et al. 2009). In contrast, the child at Pajonal Alto was buried in a local style despite the fact that the strontium signature indicates he or she was not originally from the village. In addition, the evidence of infection and possible malnutrition suggests the child was under stress, possibly as a result of immigration to the Nazca region.

Previous investigations on Middle Horizon settlements in the Nazca region had indicated this was a time of great change and population movement. This appears to have been in part initiated by local people, as seen in the abandonment of settlements in the northern drainage and a congregation of people in the far south at the site of Huaca del Loro. The new Wari sites in the middle and upper Nazca Valley along with the new mortuary practices found throughout the drainage also indicate a foreign intrusion into the region during this period. This foreign influence was not just the result of trade in ideas, commodities, or religious practices but was also the result of foreign people in the region. There was likely settlement by some Wari people, who may have held administrative or economic leadership positions, and they lived at the Wari sites. There was probably an alliance of
| Burial | Site       | Material       | Cultural Affiliation | Age  | Sex     | Burial Location                     | \(^{87}\text{Sr}/^{86}\text{Sr} |}
<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>La Tiza</td>
<td>Bone*</td>
<td>Middle Nasca</td>
<td>22–29</td>
<td>Male</td>
<td>Round stone-lined tomb</td>
<td>0.70690</td>
</tr>
<tr>
<td>2</td>
<td>La Tiza</td>
<td>Bone</td>
<td>Middle Horizon</td>
<td>30–40</td>
<td>Male</td>
<td>Pit in domestic structure</td>
<td>0.70667</td>
</tr>
<tr>
<td>2</td>
<td>La Tiza</td>
<td>Enamel (P₄)</td>
<td>Middle Horizon</td>
<td>0.70640</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>La Tiza</td>
<td>Bone</td>
<td>Late Intermediate</td>
<td>25–35</td>
<td>Possible female</td>
<td>Pit in domestic structure</td>
<td>0.70662</td>
</tr>
<tr>
<td>3</td>
<td>La Tiza</td>
<td>Enamel (P₄)</td>
<td>Late Intermediate</td>
<td>0.70662</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>La Tiza</td>
<td>Bone</td>
<td>Late Intermediate</td>
<td>12–18 months</td>
<td>Juvenile</td>
<td>Pit above Burial 6</td>
<td>0.70686</td>
</tr>
<tr>
<td>4</td>
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<td>Enamel (I₁)</td>
<td>Late Intermediate</td>
<td>0.70682</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>La Tiza</td>
<td>Bone*</td>
<td>Late Intermediate</td>
<td>14–15</td>
<td>Probable male</td>
<td>Pit in domestic structure</td>
<td>0.70643</td>
</tr>
<tr>
<td>6</td>
<td>La Tiza</td>
<td>Bone</td>
<td>Late Intermediate</td>
<td>18 months</td>
<td>Juvenile</td>
<td>Inside of large olla</td>
<td>0.70655</td>
</tr>
<tr>
<td>6</td>
<td>La Tiza</td>
<td>Enamel (P₄)</td>
<td>Late Intermediate</td>
<td>0.70643</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>La Tiza</td>
<td>Bone</td>
<td>Early Nasca</td>
<td>45+</td>
<td>Female</td>
<td>Pit in domestic structure</td>
<td>0.70635</td>
</tr>
<tr>
<td>7</td>
<td>La Tiza</td>
<td>Enamel (C)</td>
<td>Early Nasca</td>
<td>0.70655</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>La Tiza</td>
<td>Enamel (C)</td>
<td>Early Nasca</td>
<td>9–10</td>
<td>Juvenile</td>
<td>Wall</td>
<td>0.70677</td>
</tr>
<tr>
<td>8</td>
<td>La Tiza</td>
<td>Bone</td>
<td>Early Nasca</td>
<td>0.70691</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>La Tiza</td>
<td>Enamel (M₁)†</td>
<td>Middle Horizon</td>
<td>25–35</td>
<td>Female</td>
<td>Looted tomb</td>
<td>0.70747</td>
</tr>
<tr>
<td>10</td>
<td>Pajonal Alto</td>
<td>Enamel (M₂)</td>
<td>Middle Horizon</td>
<td>3–5</td>
<td>Juvenile</td>
<td>Pit</td>
<td>0.70770</td>
</tr>
<tr>
<td>10</td>
<td>Pajonal Alto</td>
<td>Bone</td>
<td>Middle Horizon</td>
<td>0.70733</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Conlee et al. 2009.

*No tooth samples were available because the burial was headless.

†No bone sample because head, not the cranium, could not be associated with particular skeletal material.
these Wari people with local elites who benefited from the relationships through acquisition of material goods such as fine Wari pottery, *Spondylus*, and metal artifacts. The burial data and strontium analysis also suggest that not all of the foreigners were elites. Instead, the influx of people from the highlands may have also included support personnel or people looking for better economic opportunities who were not under state supervision.

A Reassessment of Nasca and Wari Relationships

The changes in mortuary practices in the Middle Horizon as documented in this and other studies provide import insight into the impact the Wari state had on the region. The relationship between the Nasca and Wari people was a complicated one. As Menzel noted in her analysis, the pottery styles of the two regions reveal a closeness that may represent shared religious beliefs, economic ties, and political integration. The Nasca people likely obtained prestige in the Middle Horizon through their connection to Wari as Menzel proposed; however, the evidence suggests only certain Nasca people benefited from this relationship. There appear to have been close ties between some segments of the Nasca population who lived in the Nazca Valley of the southern drainage and the Wari state. Here at La Tiza new mortuary practices reflect the development of new statuses during this period. This new mortuary tradition was practiced alongside older local burial styles, and only certain people were being buried in the new style. The presence in these new tombs of more elaborate grave goods suggests the people buried in them were of high status and had a close connection with the Wari state. Wari appears to have created new opportunities for local people, and new types of elites emerged. At least some of the people buried in these tombs were recent immigrants to the region as suggested by the strontium signature of the woman buried in one of the tombs. Additional isotopic analysis needs to be conducted in order to make more concrete conclusions; however, the preliminary data indicate that there was not just an influx of foreign ideas and artifacts during the Middle Horizon, but also an influx of foreign people.

Not everyone in Nazca had ties with the Wari people or benefited from their presence. Previous research in the Nazca region documented dramatic changes in settlement patterns in the Middle Horizon, including a decrease in sites, especially in the northern drainage, and an aggregation of people in the southern drainage to the far southern Las Trancas Valley away from the Wari sites in the Nazca Valley. The research at La Tiza and Pajonal Alto corroborates this pattern with smaller Middle Horizon habitation areas than those found in the previous or subsequent periods.

Another important finding from the excavations at La Tiza and Pajonal Alto is that both sites appear to have been abandoned after Middle Horizon 2, and there is no evidence of occupation at either site after AD 900 until reoccupation between AD 1200 and 1300. This is a pattern that is reflected in the region as a whole where most of the evidence for Wari influence comes from Middle Horizon 1 and 2. There is little evidence for a later Wari presence as has been documented in other areas, and there appears to have been an abandonment of most sites after Epoch 2. Interactions between Wari and Nasca began in the Early Intermediate Period during the seventh century AD, and this relationship that began early also ended early. This suggests a major disruption that occurred in late ninth or early tenth century AD and which impacted all people of the Nazca drainage whether they had close ties with Wari or not. In the subsequent Late Intermediate Period the elite burial practices that were new in the Middle Horizon were abandoned, as were the ceramic and artifact styles associated with Wari.

Research on the transformations that occurred in the Middle Horizon, and the relationship between the Wari state and people in diverse areas of the central Andes, has developed greatly in the last fifty years. Menzel’s pioneering work helped to establish the ceramic chronology for the period and provided a framework to study interactions between Wari and other polities. After several decades of research in Nazca and the Wari heartland, we see that the relationship between the two societies appears to have been more complex than initially proposed and mirrors the contemporary view of Wari in various areas of the Andes. In Nazca, as elsewhere, the
complicated interactions between local people and the Wari state helped to create the dynamic and innovative culture of the Middle Horizon.

ACKNOWLEDGMENTS

Funding for the research at La Tiza was supported by the National Science Foundation (BCS-0314273), the John Heinz III Fund Grant Program for Latin American Archaeology, and the Research Enhancement Program at Texas State University. Research at Pajonal Alto was provided by a National Science Foundation Dissertation Improvement Grant and a Humanities and Social Science Grant from the University of California, Santa Barbara. Thanks go to Aldo Noriega who is the codirector of the La Tiza project and who helped to excavate and analyze the tombs discussed in this paper. Michele Buzon, Sarah Cross, and Corina Keller provided bioarchaeological analysis of the burials used in this study.

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