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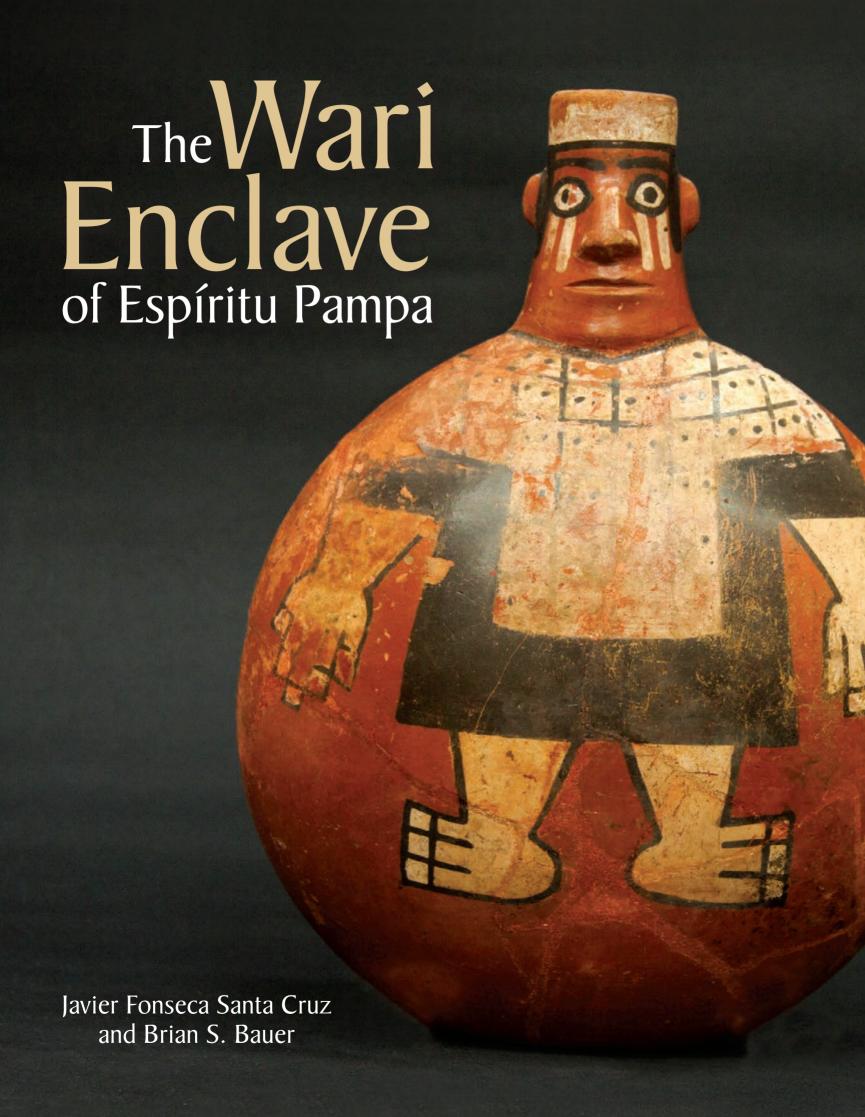
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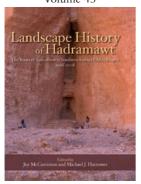


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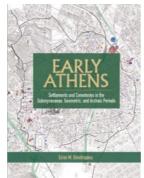
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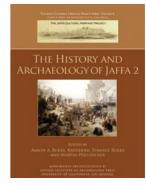
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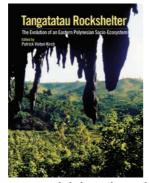
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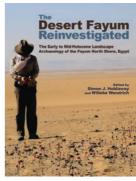
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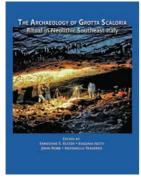
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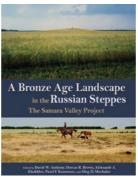
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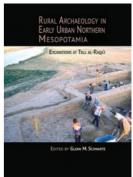
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# Wari Enclave of Espíritu Pampa

Javier Fonseca Santa Cruz and Brian S. Bauer

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# An Introduction to the Wari and the Site of Espíritu Pampa

he Wari Empire was the first expansionistic state to develop in the Andean highlands. Emerging in the area of modern Ayacucho (Peru) around AD 650 (Skidmore 2014; Tung 2012:35; Williams and Nash 2002, 2016), the Wari expanded to control much of the central Andes by the time of their collapse some four centuries later (Bauer and Kellett 2010; Williams 2001, 2002, 2006). A series of Wari settlements have been found across the highlands, representing what scholars believe to be a network of provincial centers, colonies, and areas of cultural influence. However, until recently, no Wari remains had been found along the Amazonian slope.

In 2010, a lowland Wari settlement (ca. 1,500 masl) was identified in the Vilcabamba region at the site of Espíritu Pampa, southeast of the former Wari capital in Ayacucho (Fonseca Santa Cruz 2011b). The Wari site of Espíritu Pampa was found by Javier Fonseca Santa Cruz, as he was directing a Ministry of Culture project to better define the Inca occupation of the region. Fonseca Santa Cruz noted that an area about a kilometer from the center of the Inca ruins was badly looted. Although there were few artifacts on its surface, the looters had unearthed many stone blocks, suggesting that prehispanic structures might be found below. Test excavations were first conducted and then expanded to create a broad area of excavation, when wall remains

were identified. Soon it became clear that an important Wari settlement had been found.

While it is long believed that the Wari established trade networks between their highland capital in Ayacucho and the Amazonian lowlands, the identification of a large Wari site in the Vilcabamba region came as a surprise to most, perhaps all, Wari specialists. By the end of the first field season (2010), the excavations revealed that the newly found occupation included a dense array of structures, low terraces, canals, and several elite burials. Given the general scarcity of excavated Wari burials, any one of the elite burials normally would have been noteworthy. However, the largest burial at the site contained a wide assortment of gold and silver objects, and it quickly gained international attention. The burial was about a meter across and 1.7 m deep, and it was sealed with two large, flat capstones. Excavations revealed that the burial held the remains of a single individual who had been interred with an impressive U-shaped silver pectoral (Figure 1.1). The burial also included a life-size silver mask, two staffs sheathed with silver, two gold wrist bands, and many silver sequins and greenstone beads (Fonseca Santa Cruz 2011b).

The richness and well-preserved nature of this principal Wari burial was unprecedented at the time of its discovery. We know that large mausoleums were built in the capital city of Huari, but these tombs

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Figure 1.1. The Lord of Vilcabamba. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.

were looted during late prehispanic or early colonial times (Ochatoma Paravicino et al. 2015; Pérez 2000). Evidence of other elite burials had been found at a few other Wari sites across the former realm (e.g., Chávez 1985, 1987; King 2012, 2013, 2016; Zapata 1997; also see Tung and Cook 2006), but most of these interments had also been looted. In short, the Wari site of Espíritu Pampa was an especially exciting discovery since its principal burial represented one of the highest-ranking Wari individuals to be found and it was recovered in an area that few believed that the Wari had occupied.<sup>2</sup>

The Ministry of Culture organized a symposium in Cusco in March 2011, titled "The Vilca Lords: In the Footsteps of the Wari in Antisuyu," that focused on the Wari remains at Espíritu Pampa. Since that time, the occupant of the elite burial has become known as the Lord of Vilcabamba. Following the symposium, Fonseca Santa Cruz directed excavations at the site for two additional field seasons (2011–2012). This field research revealed that the burial of the "Lord of Vilcabamba" rested near the center of an impressive Wari complex. By the end of their three field seasons

of excavations, Fonseca Santa Cruz's team had excavated three D-shaped structures and the area immediately around them. Similar D-shaped structures have been found at other Wari sites and are believed to be buildings of ritual importance (Cook 2001). Fonseca Santa Cruz's excavations also revealed more than 40 burials/ offerings, many of which contained notably Wari-style objects.

The discovery of the Wari site of Espíritu Pampa and its unparalleled contents offers scholars an important collection of artifacts and a new archaeological context in which to study the Wari (Fonseca Santa Cruz 2017). The burial/offerings included more than 70 ceramic vessels ranging from locally made plainwares to examples of finely crafted Chakipampa-style ceramics, a style associated with the expansionistic phase of the Wari. The excavations also recovered hundreds of metal (bronze, silver, and gold) objects, making the Espíritu Pampa materials one of the largest collections of Wari metals from a single site. The large number of complete artifacts recovered at the site, many of which appear to have been brought into the Vilcabamba region from Ayacucho and elsewhere in the Wari Empire, has already advanced our understanding of Wari material culture (Isbell 2016; Knobloch 2016). The location of the site, in the subtropical region of Vilcabamba, has also forced archaeologists to reconsider the territory of the Wari Empire and the mechanisms employed in its growth (Fonseca Santa Cruz and Bauer 2013).

This book presents a summary of the archaeological materials recovered at the Wari site of Espíritu Pampa. Our central argument is that the site was a Wari colony established in the Vilcabamba region. We suggest that many of the individuals, both men and women, who were buried in or near the D-shaped structures held high statuses within the colony. We also believe that many of these individuals were highlanders who may have come directly from the Ayacucho region and remained culturally distinct from the Montaña peoples that also occupied the Vilcabamba region during the time of Wari expansionism.

Over the past four decades, a large scholarly literature has developed that discusses the nature of the Wari and the means by which their expansionist state articulated with its far-flung colonies. To date, the emerging scholarship on the Wari has examined the impact of the Ayacucho state along the coast and across the highlands of Peru. The Wari site of Espíritu Pampa stands as a unique example of Wari's interest in, and penetration into, the subtropical eastern slope of the Andes.

### An Introduction to the Wari and the Site of Espíritu Pampa

Within the growing Wari literature, there has been a movement by scholars to see the Wari state not as a large, monolithic state but instead as a first-generation state whose power and influence were irregularly distributed across parts of Peru. Schreiber (1992) was the first to focus on the unevenness of Wari political control: with direct Wari control being evident in the Wari heartland of Ayacucho, in and around a small number of major colonies located at a distance from the capital, and perhaps along the road networks that connected them. The areas in between these concentrated nodes of Wari influence may have remained largely independent or were under more indirect forms of control, with relationships mediated by local lords who sometimes sought Wari patronage while at other times resisting closer contact with the Ayacucho state. In the past decade, Jennings (2010) and colleagues (e.g., Earle and Jennings 2012; Jennings and Yépez Álvarez 2015; Yépez Álvarez and Jennings 2012) have proposed a nuanced caveat to the longstanding model of uneven Wari influence across the Andes, suggesting that individuals in some areas may have selected to accept certain aspects of Wari cultural influence while remaining politically independent. In this model, Wari goods, ideas, and practices may have circulated well outside the nodes of direct state rule and in some cases were absorbed by local peoples, without the inhabitance necessarily deferring any local political or economic power to the Ayacucho state (Earle and Jennings 2012). While this "Wari globalism model" may illuminate the social conditions that existed in some areas of the Andes during the Middle Horizon, we feel that it should not be applied to the Wari site of Espíritu Pampa.

We believe the archaeological evidence is clear: the Wari site of Espíritu Pampa offers proof of high-level elites who were closely associated with the Wari state. The iconography of the objects contained within the most important burial found at the site offers direct references to the religion spread by the Wari during their expansion across the Andes, while other objects in particular, silver pectorals—found in numerous other burials appear to represent more politically charged objects, perhaps used to designate specific Wari officials with well-defined political authority (see Chapter 9). The Wari site of Espíritu Pampa also offers examples of Wari-style architecture; this is especially clear in the various D-shaped structures that have been excavated. This style of building was used by the Wari for important rituals (Cook 1994; Tung 2012). Several D-shaped structures are known from the Wari heartland cities (Huari and Conchopata) while a dozen others have been recorded at different Wari sites scattered across the Andes. Furthermore, many of the artifacts recovered at the site of Espíritu Pampa can be classified as Wari-style objects. For example, within the ceramics, we see Chakipampa-style and Huamanga-style vessels. Some of these vessels so closely match objects found in the Ayacucho region that we suggest that they may have been imported directly from this area of the highlands to the lowland settlement of Espíritu Pampa.

Our analysis also suggests that there was also a thriving local Montaña culture, located somewhere nearby but outside of the Wari walls of Espíritu Pampa. A local, non-Wari ceramic tradition is evident in some of the larger earthenware vessels recovered at the site. We propose that these vessels record trade that occurred between the Wari occupants and the endogenous people of the region Vilcabamba region. For us, the totality of the evidence supports the vision of Espíritu Pampa as being a large settlement (ca. AD 650-900) that was established by Wari highlanders in the economically diverse Vilcabamba region. In many ways, the Wari settlement of Espíritu Pampa can be best described as an important Wari enclave established in the densely wooded but thinly populated eastern slope of the Andes, and its inhabitants remained culturally distinct from the surrounding population for centuries.

### An Overview of the Wari

Traveling through the central Andes in the late 1540s, the Spanish foot soldier Pedro Cieza de León stopped to ponder the ruins of an ancient city in what would become the province of Huamanga (Figure 1.2). An astute observer of antiquities, Cieza de León (1976:249 [1553:Part 1, Chapter 86]) surmised that the city, based on its ruinous remains and unusual architecture, was constructed long before the Inca came to power. Andean archeologists now know that the ruins were the former capital of an early state that rose to prominence after AD 650 (Tung 2012:35) and that rapidly declined between AD 1000 and 1100 (Bauer and Kellett 2010; Williams 2001, 2002, 2006). We now call the ancient city "Huari" and the territory over which it once ruled "the Wari Empire."

Although the ancient city of Huari is vast and was one of the first archaeological sites of Peru to be recognized as pre-Inca in date, there are few references to it from the Colonial or Republican periods. The site was, however, "rediscovered" at the end of the nineteenth century as a growing curiosity developed in

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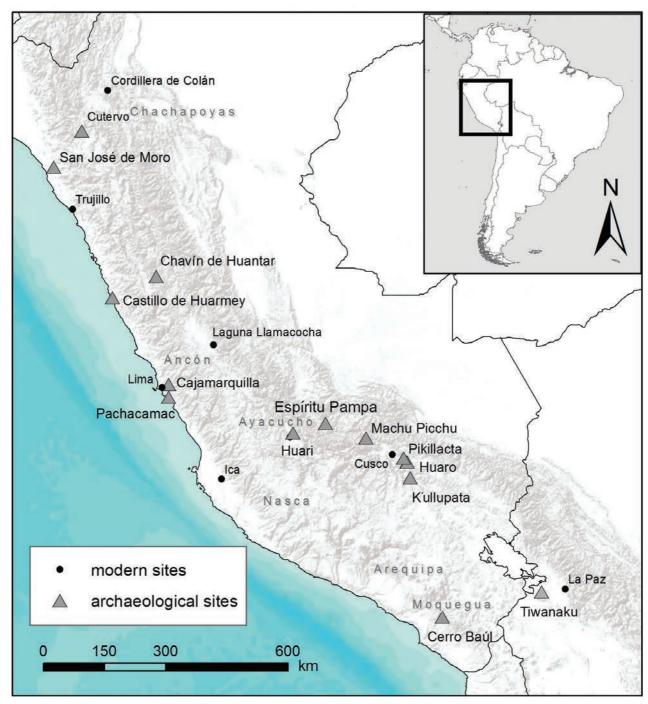


Figure 1.2. The central Andes of Peru showing many of the sites discussed in this book. Map by David Reid.

Peru over its prehispanic times. In 1888, Luis Carranza Ayarza, a prominent Ayacucho intellectual, used the information provided by Cieza de León to visit the site of Huari.<sup>4</sup> Carranza Ayarza noted that the ruins might be related to the much better known site of Tiwanaku in Bolivia or that they might be linked to the Chanka, an ethnic group that is best known for its contentious

relationship with the Inca in the late fourteenth or early fifteenth century. In 1923, the ruins of Huari were visited by Alberto Arca Parró, a future senator of the Ayacucho region. Arca Parró (1923) also proposed that the ruins were related to the Chanka, thus cementing a misunderstanding between the Wari and the Chanka that continues to reverberate today.<sup>5</sup>

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The renowned Peruvian archaeologist Julio Tello<sup>6</sup> visited the site in 1931, and encouraged local officials to conduct excavations there (Daggett 2007:86).7 By 1939, the concept of a Wari culture had been introduced (Tello 1942), but there remained considerable confusion between the Wari and the Chanka (Kroeber 1944:99; Tello 1942:Laminas 16, 17), as well as between Wari, Nasca, Tiwanaku, and what had long been called Coastal Tiwanaku influence at sites along the central and southern Peruvian coast (Uhle 1991). A small group of American scholars visited the site of Huari in 1944 in an attempt to resolve some of the confusion concerning its age and role in Andean history (Rowe et al. 1950). In addition to reviewing the site's history and documenting a sample of its buildings and surface pottery sherds, Rowe and colleagues linked the site of Huari with two other archaeological ruins outside of the Ayacucho region: Viracochapampa, near Huamachuco to the north, and Pikillacta, near Cusco to the south.

While various other researchers either visited or worked at the site in the 1940s and 1950s, the investigations of Wendell Bennett stand as a landmark study.8 Bennett, a leading US expert on the Andes, had already conducted excavations at the site of Tiwanaku in Bolivia and numerous other sites in Peru, when he started his excavations at Huari in 1950. His report, published after his untimely death, represents the first detailed study of the site and its various pottery styles. Bennett suggested that the site of Huari might be the source of much of the Tiwanaku-related materials that had been found along the central and south coast of Peru for more than 50 years (Bennett 1953:115; also see Larco Hoyle 1948) and that Huari itself might be the result of the expansion of Tiwanaku. Although Bennett's suggestions concerning the spread of Tiwanaku influences across the Andes have long since been discarded, his detailed description of the site of Huari and its ceramics still represents a critical reference for scholars interested in the Wari culture.

The place of Huari as the capital city of an independent, expansionist state was solidified, and more clearly separated from the history of Tiwanaku, by the works of Luis Lumbreras (1959, 1960a, 1969) and later by that of many other researchers who studied Wari remains within the Ayacucho region and elsewhere across the central Andes. As parts of the city of Huari were mapped, a task that continues until today, sprawling residential areas were identified surrounding the site, and distinct zones of craft specialization,

elite compounds, and mausoleums were found near its center (e.g., Benavides Calle 1984, 1991; González Carré et al. 1999; Isbell and McEwan 1991). Field research within the Ayacucho Valley also documented a hierarchical Wari settlement system that was supported by terrace agriculture (Isbell and Schreiber 1978; Lumbreras 1974).

Although the social nightmare caused by Sendero Luminoso (1980–1992) limited archaeological research in the Ayacucho region for over a decade, Wari studies continued away from the heartland during that period, most notably in the Cusco region and later in the Moquegua region. Furthermore, research finally began in earnest at the site of Tiwanaku and its colonies in Bolivia and southern Peru, which helped scholars better understand this contemporaneous but independent political polity. In the 1990s, once the political conditions had stabilized in Peru, excavations resumed in the Ayacucho region, particularly at the sites of Conchopata and Huari. In more recent decades, many projects, both academic and rescue, have focused on Wari sites across Peru contributing to an expanding literature. Tiwanaku and Wari are now seen as separate, independent states that shared aspects of a complex religious system (Cook 1994, 2012; Isbell and Knobloch 2009; Isbell et al 2018).

As Wari sites were identified across the central Andes, scholars began to better document areas of Wari expansion and influence. Because the three largest Wari sites outside of the Ayacucho area are found in widely separated regions—the site of Pikillacta in the Cusco region, the site of Cerro Baúl in the Moquegua region, and the site of Viracochapampa in the La Libertad region—these sites were presumed to be provincial centers, and they were used to help to define distinct territorial boundaries for the Wari state (Lumbreras 1974:165–174; McEwan and Williams 2012; Menzel 1964). In other words, many of the investigations promoted a fixed, sovereign territory approach to Wari studies, emphasizing the demarcation of clear boundaries between the Wari and other major polities, such as the Altiplano state of Tiwanaku and the coastal polities of the Moche.

More recent research on the Wari has questioned the normative model of Wari society as a state with fixed and recognizable boundaries, highlighting the variable nature and intensity of Wari hegemony across the central Andes (Jennings 2006, 2010; Jennings and Craig 2001; Schreiber 1992). Much of this research has been focused in the area southeast of Ayacucho.

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For example, a series of archaeological surveys and excavation projects in the Cusco region have revealed that Wari influence was focused in the areas immediately surrounding huge Wari occupation of Pikillacta (McEwan 2005) and its related settlements in the Huaro Basin (Glowacki 2002), but Wari influence quickly diminished as distance from these sites increased (Bauer 2004:62-67; Bauer, Aráoz Silva, and Hardy 2020; Bélisle and Covey 2010; Covey et al. 2013). Skidmore (2014) has proposed that the initial Wari occupation in the Cusco region began around AD 650 as Ayacuchobased farmers were attracted to this maize-rich region and established a series of small settlements in Huaro. She suggests that it was only after this initial colonization process that more powerful entities in the Wari heartland took interest in the Cusco region and began construction of the impressive site of Pikillacta with the intention of annexing the area within their expansionist state.

The Wari colonization of the Moquegua area has also been the subject of considerable research. In a series of studies, Williams and Nash (2016; Nash and Williams 2009) have shown that the Wari arrived in Moquegua around AD 650. There the Wari established the imposing site of Cerro Baúl as well as a series of smaller occupations in the region (Nash 2013; Nash and Williams 2004; Williams 2001, 2002). Similarly, Jennings and colleagues (e.g., Jennings and Yépez Álvarez 2015; Yépez Álvarez and Jennings 2012) have documented the Wari's irregular rule across various southerly regions, including the Cotahuasi Valley, the Majes Valley, and other parts of the Department of Arequipa. They remind us that areas where Wari-style artifacts have been recovered may not have necessarily been under direct or indirect control of the Ayachuco state. Individuals, villages, and smaller polities may have selected to absorb aspects of Wari cultural influence while remaining politically independent.

The great variability in Wari influence was noted many years ago by Schreiber (1992:69), who wrote that "the resulting mosaic of different levels of political control, ranging from very indirect to entirely imposed and direct, is documented in the archaeological record. In some areas more visible remains of the imperial occupation are to be expected; in other areas the evidence may be minimal." In other words, while we know that the Wari established numerous colonies and in a few locations constructed large installations, at great distances from their homeland, we can no longer assume that their influence in the intervening areas

was continuous, even, or direct (Covey et al. 2013). As more regional surveys are completed, it is evident that the Wari established an archipelago of colonies across the central Andes with large regions between them that reflect little or no evidence of state domination.9 In some areas, the influence of the Wari may have been strong, for example, along important roads, in areas of critical resources, or in areas immediately surrounding large Wari colonies. As Charles Stanish (2003) suggests for the Tiwanaku state, Wari was a first-generation state and it may not have encountered strong centers of resistance as it began its expansion. It appears that the Wari had the political might to establish colonies nearly anywhere they wanted but did not have the resources to build facilities everywhere. So as new Wari settlements are found, we need to consider if they fell within Wari-controlled territory or represent more isolated colonizing enterprises focused on gaining access to important resources.

### Archaeological Research at Espíritu Pampa

Wari settlements have been found in numerous valleys across the highlands of Peru. However, until recently, no unambiguous Wari remains had been found along the Amazonian slope to the east of Ayacucho. Part of the reason why the history of the eastern escarpment of the central Andes remains largely undocumented is that its rugged mountains, dense vegetation, and prolonged rainy seasons make research difficult. Yet it is also recognized that this densely forested area held resources that were of great interest to highlanders, such as the Wari, including exotic bird feathers, *chonta* wood (*Bactris gasipaes*), *vilca* seeds (*Anadenthera columbrina*), and coca leaves.

Our understanding of Wari interactions in the Amazonian slope changed in 2010 when Javier Fonseca Santa Cruz discovered a large Wari settlement near the town and archaeological site of Espíritu Pampa, a little more than 110 aerial kilometers to the southeast of the site of Huari in the Ayacucho Valley and about 180 aerial kilometers from the site of Pikillacta in the Cusco Valley. The area of Espíritu Pampa is located within a broader region called Vilcabamba, which is well known for the role that it held as the final Inca stronghold during the mid-sixteenth century (Bauer et al. 2015; Bauer et al. 2016; Hemming 1970:425-440; Lee 2000). The Incas occupied the Vilcabamba area for several generations. During that period, they constructed three major towns (Choquequirao, Vitcos, and Vilcabamba), established dozens of smaller settlements,

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and developed an extensive road network. In 1536, after his failed revolt against the newly arrived Spaniards in Cusco, Manco Inca retreated into the region of Vilcabamba, where he, followed by his three sons, resisted European hegemony for nearly 40 years. The Vilcabamba region fell to the Spaniards in 1572, when Viceroy Francisco Toledo directed a massive raid into it. During this raid, the last ruling Inca (Túpac Amaru) was captured and subsequently killed, marking the end of the Inca Empire (Guillén Guillén 2005).

During the Colonial and Republican periods, the Vilcabamba region remained largely neglected, except for its small-scale mines and sugar plantations.<sup>12</sup> The region gained some archaeological visibility in 1911 when Hiram Bingham entered it looking for the towns of Vitcos and Vilcabamba, the final capitals of the Incas (Figure 1.3). Although he found the town of Vitcos and reached the site of Espíritu Pampa, Bingham failed to recognize Espíritu Pampa as the Inca town of Vilcabamba (Bingham 1912, 1913, 1914; Bauer et al. 2015). Subtropical vegetation covered much of the Inca ruins, and Bingham left without understanding just how big the Inca site of Espíritu Pampa really was.

Bingham led two additional expeditions to the Cusco region, but he never returned to the site of Espíritu Pampa, and local scholars paid little attention to it (Bingham 1922, 1930). In the 1960s, with identification of the Inca town of Vilcabamba still not been resolved, Gene Savoy journeyed into the region to visit the site of Espíritu Pampa. His account provides the first evidence that the Vilcabamba region was occupied by the Wari. Savoy (1970:81, 84, 99) reported seeing what were certainly Wari vessels in the village of Puquiura and at the site of Espíritu Pampa. However, because Savoy was viewed as an untrustworthy interpreter of archaeological materials, his observations were ignored. The definitive identification of the archaeological site of Espíritu Pampa as the Inca town of Vilcabamba remained open until John Hemming's (1970) historical research and Vincent Lee's (2000) subsequent explorations of the site settled the matter.

The area of Espíritu Pampa is located on a small plain formed of colluvial soil at the confluence of the Chontamayo and Consevidayoc rivers within the San Miguel River drainage, a tributary of the Urubamba River. The plain is located at an altitude of about

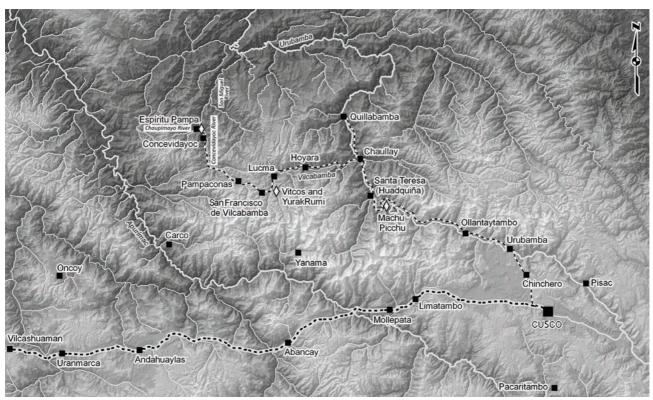


Figure 1.3. Bingham's research in the Cusco region in 1911 led him to the Inca site now called Espíritu Pampa.

One hundred years later, Javier Fonseca Santa Cruz would find Wari remains in the same remote region of the central Andes.

Map by Gabriel E. Cantarutti.

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1,500 m, in a hot, humid, and rainy climate, part of the eastern slopes of the central Andes. The area has an average temperature of around 23.6°C. According to observations of the Peruvian Meteorological Service (SENAMHI), annual rainfall at Quillabamba fluctuates between 876 and 1,133 mm, with a five-year average of 985.6 mm. May to June are the drier months while December through March are the wettest. This area of montane rainforest has long valleys, with undulating ridges, covered with thick vegetation. Espíritu Pampa was formally covered in towering trees and thick undergrowth, patches of which still survive. At the time of its discovery, the Wari site of Espíritu Pampa was located in a coffee field.

From 2003 to 2010, the Ministry of Culture (Cusco) sponsored a series of projects focused on the Inca remains of Espíritu Pampa. The Wari remains were found in 2010 when test excavations by Javier Fonseca Santa Cruz were conducted within a looted area approximately 1 km from the monumental Inca remains in the valley. By the end of that field season, the burial of the Lord of Vilcabamba had been excavated, and it was evident that the Wari occupation at Espíritu Pampa represented an important new discovery. Two field seasons later (2011 and 2012), continued excavations at the Wari site had exposed an area about  $20 \times 25$  m that held one small and three larger D-shaped structures (an architectural form that is associated with Wari ritual events), various rectilinear structures including a subrectangular building, a series of terraces, a small plaza area, and more than 40 burial/offerings, many of which contained elaborate goods (Figure 1.4). The excavations also revealed a complex arrangement of stone-lined canals, an important necessity in the center of any occupation located in the subtropics. The excavations also exposed the remains of three small circular buildings dating to Inca times. The Wari buildings and their associated artifacts provided an unprecedented opportunity to learn about the Wari in general and, more specifically, to understand elements of their expansion into the subtropics east of Ayacucho.<sup>13</sup>

### The Wari Site of Espíritu Pampa

By the end of the 2012 field season, excavations at the Wari site of Espíritu Pampa had identified a plaza surrounded by a series of D-shaped buildings.<sup>14</sup> In many ways, with a mixture of buildings and open areas, the site is reminiscent of the densest occupation areas at the site of Conchopata (Isbell 2001, 2004) in the Wari heartland and, to a lesser extent, the site of Cerro Baúl in Moquegua (Williams 2009). The building walls are

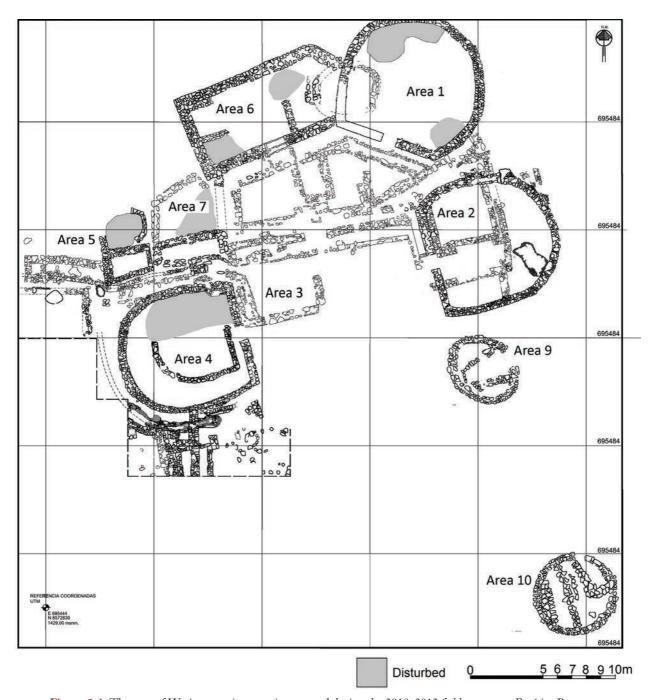
constructed of medium-sized stones, placed in double rows, and joined with mud mortar. Both the exterior and interior walls of the buildings are faced and some, if not all, were once covered with clay plaster. In a few places, the wall remains reach heights of over 1.5 m, while in many others, they stand less than 30 cm high.

At the center of the Wari site of Espíritu Pampa, two D-shaped buildings (Areas 2 and 4) stand facing each other across a small plaza (see Figure 1.4). Area 2 was built *over* previously constructed buildings and contained many impressive burials and offerings, while Area 4 contained only a few modest offerings. To the north of Areas 2 and 4 is a small space of terraces, and slightly further north is a subrectangular building (Area 6) and an additional D-shaped building (Area 1), both of which contained important burials and offerings. The subrectangular building is of special interest since the burial of the Lord of Vilcabamba was found within it. Other interments were found in Areas 5 and 7, which are smaller rectangular structures located on the western edge of the excavation.

Sometime after the construction of the other architectural features of the site, a much smaller D-shaped structure was built inside of Area 4 and a small, informal building was constructed within the patio (Area 3). These later constructions give the impression that the site was abandoned for a time and then briefly reoccupied. All of the areas described above (Areas 1–7) contained Wari-style pottery, dating them to the Middle Horizon. During the course of work at the site, two circular buildings (Areas 9 and 10), now known to date to the Inca occupation of the region (AD 1400–1572) were also excavated. Additional Wari remains were found below each of these Inca period, circular buildings, suggesting that there are still many buried Wari structures to be identified at the site. 15

The Wari site of Espíritu Pampa was first detected because a large number of stones littered its disturbed surface. The scattered stones were the result of looting at the site, some of which, according to local residences, took place in the 1970s. The looting disturbed parts of Areas 1, 4, 5, 6, and 7, and it is likely that the looters encountered some elite burials. For example, one looter's pit dug in Area 6 exposed an elaborate burial next to where the Lord of Vilcabamba was found, and another looter pit in Area 1 contained the remains of a large rectangular burial made with stone slabs. The original contents of these looted burials are not known, but they appear to have been elite interments as well.

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**Figure 1.4.** The area of Wari occupation remains exposed during the 2010–2012 field seasons at Espíritu Pampa.

\*\*Based on a map by Javier Fonseca Santa Cruz.\*\*

### The Burials and Offerings

Despite the looting that had occurred, many of the burials and offerings found at the site during the course of excavations were undisturbed. A few of the burials were simply pits dug into the ground. However, most were conical or cylindrical in shape and lined with upright-standing stone slabs, small tiered stones, or

sometimes both (Figures 1.5–1.7). Most of these cist burials were a meter or so deep and often less than a meter wide. Their relatively small size suggests that they contained only one individual.

Such cist burials were common in the Wari heartland (Benavides Calle 1984; Brewster Wray 1990; Isbell 2004; Tung 2012; Tung and Cook 2006). However,

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several of the cist burials at the Wari site of Espíritu Pampa also contained one or two elongated stone slabs standing upright, like stelae (Figure 1.5). In addition, the location of some the cists was marked by small stone platforms, colored clays, or other means.

Several of the burials at the site were sealed with a single large stone or a few elongated stones, which had a hole drilled through their centers. These holes are common features of Wari burials in the Ayacucho region, where occasionally, the holes are found with stone plugs shaped like champagne corks (Benavides Calle 1991:Figure 9; Isbell 2004:13).16 There is little doubt that the holes in the lids of the burials were used to facilitate the giving of liquid offerings to the dead. The tradition of offering liquid continued until Inca times, as Spanish chroniclers describe the Incas making liquid offerings in the central plaza of Cusco (Bauer 2004:115), at other shrines of the empire (e.g., Bauer and Stanish 2001:204-206), and to the dead (e.g., Guamán Poma de Ayala 1615:293). Several of the cists at the Wari site of Espíritu Pampa site not only had holes drilled through stones that sealed the top of the burial but also had holes drilled through their stone floors, directly underneath of which were placed large ceramic bowls that served as catch basins.

There were also a few exceptional burials at the Wari site of Espíritu Pampa that did not conform to the general stone-lined, conical/cylindrical form described above.<sup>17</sup> Generally, the larger the burial, the more likely it was to deviate from the more standardized stone-lined, conical/cylindrical form. For example, the Lord of Vilcabamba burial (Context 6.7) is about 1 m wide and 1.7 m deep, almost twice as deep as most other burials found at the site (Figure 1.8). While other deep burials have been found at Huari and Conchopata (Brewster Wray 1990; Cook 1994; Ochatoma Paravicino and Cabrera Romero 2001), the size and shape of this burial are reminiscent of a burial found at the Wari site of Batán Orco in the Cusco region (Zapata 1997). Although the contents of the Batán Orco burial are not known, since it was looted in the early 1950s, it is believed to have contained gold and silver objects and an elite individual.

A boot-shaped burial was found in Area 5 (Context 5.1). This burial contained a wide range of metal and ceramic offerings as well as the remains of an individual. While boot-shaped burials are not uncommon along the central and south coast of Peru, they are generally not associated with the Wari. 18 Two other burials



**Figure 1.5.** A cist lined with small tiered stones and containing two stela-like slabs (Context 9.2). A circular silver pectoral was recovered near the center of this cist and a bronze axe was found on the right side. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.

### An Introduction to the Wari and the Site of Espíritu Pampa



Figure 1.6. A cist made with upright-standing stone slabs (Context 6.5). Various offering materials can be seen on one side of the cist, including a block of yellow clay, a circular silver pectoral, and a silver circular diadem pin. Two silver tupus and two bronze tupus (shawl pins used by females) were also recovered. The other side of the cist, now empty, may have contained the interred individual. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.

at the Wari site of Espíritu Pampa were subrectangular in shape and had a line of upright-standing slabs dividing them into chambers (Contexts 1.5 and 6.8; Figure 1.9). Both of these burials had been looted, although one (Context 1.5) still contained offerings, including three bronze axes, 17 silver sequins, and the shattered remains of an elaborate ceramic vessel. All of the offerings were found on one side of the burial, suggesting that the individual was placed on the other side. The second subrectangular burial (Context 6.8) was located adjacent to the burial of the Lord of Vilcabamba (Context 6.7). This interment was, however, completely looted and the standing stones that had once run down its center had been pulled from their positions and discarded nearby.



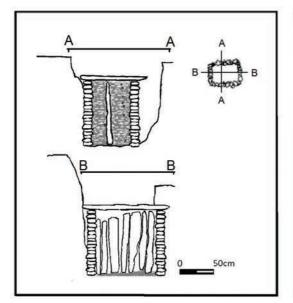
Figure 1.7. A burial sealed with two large flat slabs (Context 1.3). A small hole has been drilled near the center of the burial. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.

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Figure 1.8. The Lord of Vilcabamba was found in a deep cist burial.

Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.



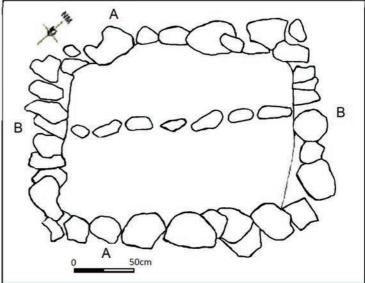


Figure 1.9. Drawings of Context 1.5, a subrectangular burial with a line of upright-standing slabs running down its center.

Ministerio de Cultura, drawing by Javier Fonseca Santa Cruz.

Finally, Context 2.2, the principal burial of Area 2, had an especially unusual form. Its location was marked by two circular disks, one on top of the other (Figures 1.10 and 1.11). There was a small hole in the center of the marker that was covered by a small

stone. The burial shaft measured 1.30 m deep and entered a rectangular chamber that measured 50 cm wide and 60 cm high. This rectangular chamber was built above a larger, bell-shaped chamber with a sloping, stone floor. The final chamber was constructed

An Introduction to the Wari and the Site of Espíritu Pampa



**Figure 1.10.** Two clay disks, one placed on top of the other, marked the location of Context 2.2. A small hole, which was covered with a small stone, was drilled in the center of these disks. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.

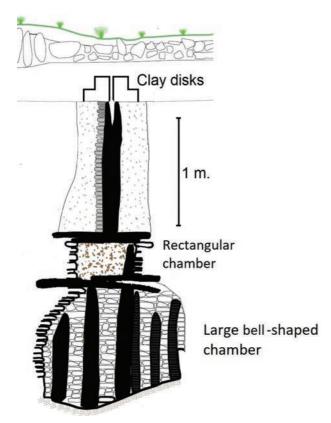


Figure 1.11. The principal burial of Area 2 (Context 2.2). Ministerio de Cultura, drawing by Javier Fonseca Santa Cruz.

with a series of large upright-standing stone slabs with small tiered stones filling the spaces in between them. A second small hole was made at the deepest point of the burial, and an open-mouth vessel was placed below the hole, apparently as a catch basin of liquids. A range of ceramic, metal, and obsidian artifacts were recovered within this elaborate burial.

All the undisturbed burials at the Wari site of Espíritu Pampa were filled with a fine, loose, dark soil and their interior walls were frequently covered with a colored, most often gray or yellow, clay. Many of the burials also showed evidence of having had offerings burned within them, and several had a sprinkling of cinnabar on their floor. The burials of the site held a wide range of ceramic, metal, and lithic items. Some interments contained objects, representing the high end of Wari craftsmanship, while others contained only a few plainware pots. In some cists, bits of textiles were recovered, although these were limited to small patches that were in contact with an oxidizing metal object (see Appendix 2).

Although many of the burials excavated at the site had not been disturbed by looters, because of the wet conditions of the region, no bones were recovered. In a few of the burials, the remains of adult

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teeth survived because teeth enamel is the hardest part of the human skeleton, but even these were in poor condition. In this respect, it is important to note that because of the poor preservation at the site, it was at times difficult to determine if a deposit was a burial or an offering. As a result, our classifications of burials versus offerings are based on the size, shape, and construction of the feature; the organization of materials within it; and whether human remains (i.e., teeth) were found.

# Dating the Wari Remains at Espíritu Pampa

Nine carbon samples collected during the 2010 to 2012 excavations at the Wari site of Espíritu Pampa were submitted for radiometric analysis at the Accelerator Mass Spectrometry Laboratory at the University of Arizona (Appendix 1).<sup>20</sup> Three carbon samples were taken from the floors of different D-shaped structures, while six other samples were taken from materials recovered within different burials at the site (see Figure 1.12).<sup>21</sup>

### The Floor Dates

The first sample (AA100018) was collected from the floor of Area 4 adjacent to its southern interior wall. This building is interesting because unlike other D-shaped structures exposed during the 2010 to 2013 excavations, no burials were found within it—only small offerings of shattered pottery. Area 4 is also interesting since a much smaller D-shaped structure was later built within it. The carbon sample recovered on the floor of Area 4 yielded an accelerator mass spectrometry (AMS) date of AD 572 ± 36 (calibrated AD 649–773; 95.4 percent confidence level). This is currently the earliest date from the site, and it suggests that the Wari expanded into the Vilcabamba region during the second half of the seventh century AD.

The second floor sample (AA100019) was collected from inside Area 2, a D-shaped structure located across a small plaza from Area 4. This sample provided an AMS date of AD  $691 \pm 37$  (calibrated AD 690-941; 95.4 percent confidence level), suggesting that a second construction phase occurred at the site more than a century after its establishment.

The third floor sample (AA100020) was taken from the interior of Area 1, a D-shaped structure adjacent to Area 2. The floor of Area 1 yielded an AMS date similar to the floor of Area 2, AD  $678 \pm 62$  (calibrated AD 670-965; 95.4 percent confidence level).

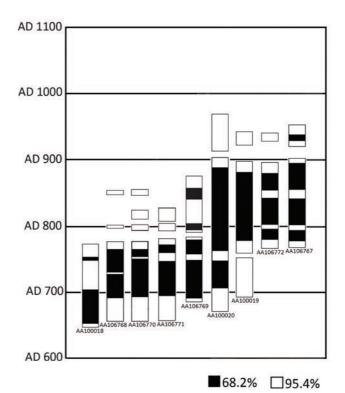


Figure 1.12. Radiocarbon dates from the Wari site of Espíritu Pampa.

### The Burial Dates

Six carbon samples recovered from within different burial contexts were also submitted for dating. Three samples came from burials within the main complex of structures. This included Context 1.9 (Sample AA106769) in Area 1 that provided an AMS date of AD 711 ± 25 (calibrated AD 686–875; 95.4 percent confidence level) and Context 1.12 (Sample AA106771) that provided an AMS date of AD 699 ± 22 (calibrated AD 677–863; 95.4 percent confidence level). Carbon from Context 2.10 (Sample AA106768), within Area 2, yielded an AMS date of AD 685 ± 22 (calibrated AD 666–859; 95.4 percent confidence level).

The three other samples came from Areas 9 and 10, slightly to the south of the plaza complex. These samples came from Wari remains that rested underneath circular structures at the site that were occupied during Inca times. Carbon from Context 9.2 (Sample AA106770) came from a burial that included a bronze axe, a bronze spear-thrower hook, and, perhaps most important, a poorly preserved silver circular pectoral. The sample produced an AMS date of AD 686 ± 28 (calibrated AD 666–861; 95.4 percent confidence level). Two additional samples were taken from the Wari occupation level exposed in Area 10. These two samples

#### An Introduction to the Wari and the Site of Espíritu Pampa

(AA106768 and AA106772) provided the closely spaced AMS dates of AD 783 ± 26 (calibrated AD 772–954; 95.4 percent confidence level) and AD 763 ± 25 (calibrated AD 769–940; 95.4 percent confidence level).

The nine radiocarbon dates from the Wari site of Espíritu Pampa can be combined with the observed construction phases to develop an approximate occupational sequence. It appears that Area 4 was constructed first, perhaps marking the foundation of the settlement. At the same time, or perhaps soon afterward, the terraced area north of the patio area was built. This was followed by Areas 1, 2, and 9. Later, most likely in the ninth century AD, Area 10 was developed. A final D-shaped structure was later built inside Area 4, around the same time that a small informal building (Area 3) was constructed in the plaza of the site. The construction of the final, but smaller, D-shaped structure inside of an earlier building and the filling in of the plaza area suggest to us that the site may have been abandoned toward the end of the ninth century and then briefly reoccupied.

### Espíritu Pampa within the Realm of the Wari

All of the radiocarbon dates so far collected from the Wari site of Espíritu Pampa fall comfortably among the dates that have been collected from other Wari contexts in the Ayacucho region (Isbell 2001; Ketteman 2002), as well as those collected from other areas across the central Andes. The dates suggest that the Wari entered the Vilcabamba region relatively early during their expansionist period. The foundation date is consistent with, if not a little earlier than, the two available dates from D-shaped structures at Conchopata, the second most important site within the Wari heartland (Ketteman 2002:33-34). The foundation date also appears to be slightly earlier than those recovered at the sites of Tenahaha (Jennings and Yépez Álvarez 2015) and Pataraya (Edwards and Schreiber 2014) in the Arequipa and Nasca regions, respectively. However, they match well with Wari dates from the Cusco region (Bauer 2004:67; Bauer and Jones 2003:16; Glowacki 2005; Sillar et al. 2013:25; Skidmore 2014:332), as well as the far southern realms, including the site of Beringa (Owen 2010:65; Tung 2007:264, 2012) and Cerro Baúl (Williams 2001:78, 2009).

Although additional radiocarbon dates and excavations are needed from across the site to fully document its occupation periods, it is interesting to note that the current data suggest that the Wari presence at Espíritu

Pampa may have waned after AD 900.22 This appears to be different from elsewhere across the central Andes, where a convergence of dates supports a hypothesized territorial collapse near the turn of the first millennium AD, perhaps with the core Ayacucho area remaining solidified for a century or two more (Finucane et al. 2007). For example, in the Cusco region, Wari activities seem to have ended around AD 1000 (Bauer and Jones 2003; Glowacki 2005; Skidmore 2014:330–351). Similarly, in the Andahuaylas region, there is a radical change in settlement patterns from valley bottom sites to defensively positioned hilltop sites between AD 1000 and 1100 (Bauer and Kellett 2010). This documents the collapse of Wari power in the region and the onslaught of widespread regional warfare that characterizes much of the Late Intermediate Period (AD 1000–1400). Furthermore, other Wari sites, including Cerro Baúl in the Moquegua region (Williams 2001, 2009; also see Green and Goldstein 2010), Tenahaha in the Cotahuasi Valley (Jennings 2010), Pataraya in the Nasca drainage (Edwards and Schreiber 2014), and Camaná in Majes (Malpass 2001) appear to have been abandoned sometime around AD 1000.

#### Notes

- 1 Parts of this introductory chapter have been published by *Andean Past* in Fonseca Santa Cruz and Bauer (2013).
- 2 The following year, impressive Wari burials with high-ranking elites were found at the site of Castillo de Huarmey on the central coast of Peru (Giersz and Makowski 2014).
- 3 Los Señores Vilca: tras las huellas de los Wari en el Antisuyu.
- 4 The Cieza de León description of the ancient city is mentioned by Rivero y Ustáriz and von Tschudi (1851:294), but they did not identify the site itself.
- 5 The Chanka were based in the Andahuaylas region (Bauer et al. 2010). Their development occurred largely independent of the important events that took place in the Ayacucho region during the Middle Horizon (AD 650–1000). Confusion between the Wari and the Chanka continues today since some archaeologists indiscriminately call all Late Intermediate Period sites in the central Andes "Chanka," and others confuse the Middle Horizon expansion of the Wari with the Chanka-Inca conflict that occurred several centuries later.
- 6 In 1929, Luis M. Gamio published a short description of the ruins and a few drawings of Huari statues. The drawings were immediately republished by Tello (1929:165) in his book *Antiguo Perú*. Two years later, Tello and Lila

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- O'Neale visited the site. Several ceramic fragments collected at the site by O'Neale were later published by Kroeber (1944:99, Plate 39).
- 7 Such excavations appear to have occurred, since after Manuel Pozo (1933) visited the site in 1933, he urged that research at Huari should continue.
- 8 See Lumbreras (1960a, 1975) and Isbell and McEwan (1991) for comprehensive reviews of early investigations at the site of Huari. See Jennings (2010) for an extended discussion of recent Wari research across the central Andes.
- 9 In the 1970s, John Murra (1972) published his research on what has now become known as Andean Vertical Economy, documenting that during Inca times, different ethnic groups established settlements outside of and at times a great distance from their homelands to exploit the wide range of ecological zones located along the slopes of the central Andes.
- 10 At the time of the excavations described in this report, the nearest road was a four-hour hike from Espíritu Pampa at the "community" of Azulmayo, where there was a small weekly market. In more recent years, that road has been extended to the town of Espíritu Pampa.
- 11 Espíritu Pampa is at the upper limits of coca production. Currently, only a few families have small fields where coca is grown for their own consumption.
- 12 Sugarcane was introduced into the region by the Spaniards soon after the fall of the Inca Empire and it continued to be a major crop well into the twentieth century. Although sugarcane continues to be grown elsewhere in the province, coffee is currently the most important cash crop of Espíritu Pampa.
- 13 As we were conducting the artifact analysis for this work, the Ministry of Culture was unable to provide us access to numerous of the artifacts recovered during the excavation since their locations in storage were not known.
- 14 Continued excavations at the site during 2014 and 2015 identified an even larger D-shaped structure south of the plaza area (del Pezo Benavidez and Sumire Quispe 2015).
- 15 No evidence of a Late Intermediate Period (AD 1000–1400) occupation has been found in the Espíritu Pampa area. It is possible that the population shifted to ridgetop

- settlements after the Middle Horizon, as has been recorded elsewhere in the Vilcabamba region (Bauer et al. 2015; Saintenoy 2011).
- 16 It is worth noting that none of holes in the undisturbed cist burials at the Wari site of Espíritu Pampa had plugs. Nevertheless, a stone plug was found at the site as an isolated artifact (Isbell 2016:54).
- 17 Isbell (2004) offered the first description of differing Wari burial styles. His classifications were later updated and expanded by Tung and Cook (2006).
- 18 Lumbreras (2000) mentions a boot-shaped burial at Conchopata (cited by Tung 2012:82).
- 19 The inclusion of cinnabar powder within Wari burials has been noted in many other areas; for example, see Tung (2012:68).
- 20 The shortage of radiocarbon dates for Huarpa and Wari contexts in the Ayacucho region is a glaring issue that handicaps our understanding of the growth and development of the Middle Horizon Andean states. Terrorist activities ended more than 20 years ago in the Ayacucho region, and since then, there have been large-scale excavations at the site of Huari. Nevertheless, with the notable exception of work at Conchopata (Isbell 2001; Ketteman 2002; Tung 2012), there are few new radiocarbon dates to help place the critical cultural developments that occurred in the Ayacucho region into absolute time. Radiocarbon dates are being run in Wari contexts across the central Andes (e.g., in Cusco, Nasca, Majes, and Moquegua) to help understand the expansion of the Wari state, but these will remain of limited use in understanding issues of state development until comparable sets of dates have been established in the Wari homeland.
- 21 All dates in this report have been calibrated by Oxcal v. 4.1.7 (Bronk Ramsey et al. 2010), and the SHCal04 Southern Hemisphere atmospheric curve has been applied (McCormac et al. 2004).
- 22 In this way, the Wari site of Espíritu Pampa may be like the site of Beringa, which was founded around AD 650 and appears to have been abandoned around AD 850 (Tung 2007:264).



# Area I: A D-Shaped Structure

rea 1 is a D-shaped structure (Figure 2.1). The straight wall of the building is 8.10 m long, and the structure is about 9.60 m deep. Its single door faces southwest and is about 1 m wide. Carbon collected on the floor of the building provided an AMS date of AD 678 ± 62 (AD 670-965 calibrated; 95.4 percent confidence level).1 At the time of the excavation, two loci within the building had been looted. The largest looted area was a crescent-shaped pit (ca. 7.0 × 2.5 m), dug along the curved wall. This looting episode disturbed Context 1.5, the principal burial of the structure, as well as Context 1.6, a stone-lined cist. The other major looted area was located in the southeast corner of the building. At the close of the excavation, a total of 13 offering/burial contexts had been identified within Area 1.

Excavations began with the removal of the first and second levels, an organically rich, semicompact gravelly soil followed by wall collapse. These levels contained small amounts of plainware pottery and a few Wari-style ceramic fragments. The floor of the structure (Level 3) was composed of irregular patches of hard-packed, yellow and brown clays mixed with gravel. There were areas of the floor, especially in the northeast sector of the building, that showed evidence of burning. These burned areas also contained the highest density of broken pottery.

The looted area along the north wall of the building contained several large (ca. 120 × 25 cm) stone slabs, taken from the principal burial (Context 1.5), as well as the burial's semicircular ( $58 \times 8$  cm) capstone. The capstone had a hole (4 cm) drilled through its center. Excavations in the looted area also recovered a miniature, face-neck vessel (EP 2010-98<sup>2</sup>,  $5.1 \times 3.0$  cm, Figure 2.2). This Wari-style vessel is covered with a thin red paint. The individual depicted on the vessel wears a tunic decorated with white circles, outlined in black, with red centers. This tunic design is reminiscent of those found on some Wari textiles (see Bergh 2012c:173; Pollard Rowe 2012:200). The facial features of the figure are slightly raised and painted in white. The upper third of the spout is painted red with black horizontal bands. Similar miniature vessels have been recovered from Wari sites in the Ayacucho region. Most notably, a large cash of miniature vessels was found at the site of Huari (González Carré and Soto Maguino 2004: Figures 19, 20).

#### Context I.I

Context 1.1 was found near the center of Area 1, directly beneath the hard-packed earthen floor (Figure 2.3). Unlike the many other burial/offerings at the site, which are generally contained within stone-lined cists, this feature was a relatively shallow pit. The context included a wide range of metal and ceramic objects.

### Chapter 2

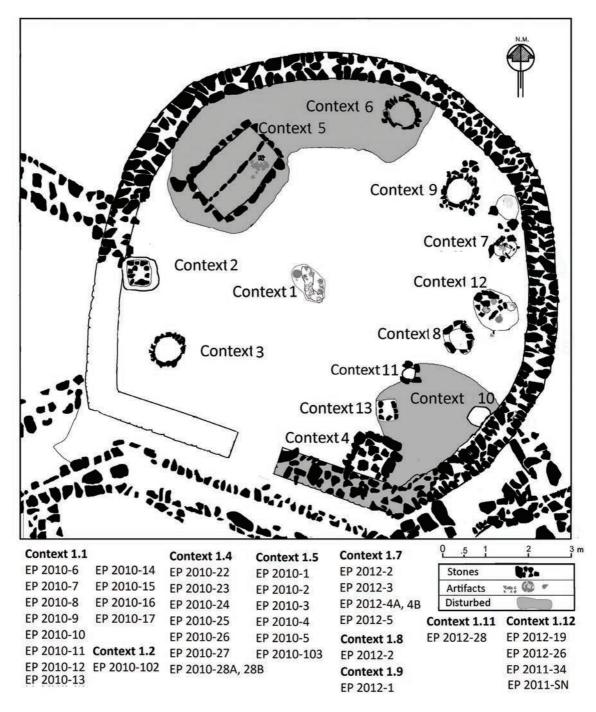


Figure 2.1. Area 1 after excavations. This D-shaped structure contained a minimum of 13 burials/offerings.

Among the metal artifacts recovered in Context 1.1 were two sets of poorly preserved, paired silver bands. The first pair of bands appear to be wrist bands (EP 2010-18, EP 2010-19) each of which measure about 7.6  $\times$  6.7 cm. These bands are made of silver sheet rolled into cylindrical forms (see Figure 9.2). The second set

of silver bands (EP 2010-17, Figure 9.3) is larger, with each band measuring about  $23 \times 9$  cm. Both of these larger bands display a series of lace holes at one end.

Three bronze *tupus* were also recovered in Context 1.1. One of the *tupus* (EP 2010-12, Figure 2.4) had a cotton string with 23 small calcite beads oxidized onto

### Area I: A D-Shaped Structure



Figure 2.2. A miniature face-neck vessel recovered in Area 1. The figure wears a red tunic with white dots. *Ministerio de Cultura*, photograph by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-98.

it and two patches of fabric, one on top of the other (see Appendix 2). The other two *tupus* were recovered nearby but were less well preserved.

A set of five bronze chisels (EP 2010-11, 2010-13, 2010-14, 2010-15, 2010-16), which had originally been wrapped in a cotton textile, was also recovered (Figure 2.5). The handles of these tools were made of *chonta* wood while the distal ends were hammered and then ground to a sharp edge. Several of the chisels show evidence of use, indicating that they had been used before being placed within the offering.

Context 1.1 also held six ceramic vessels, three of which were found in a line, resting against each other (see Figure 2.3). The first vessel is a Wari-related face-neck jar with an ovoid body, a flat base, and light traces of polychrome paint (EP 2010-07, 16.10 × 12.80 cm, Figure 2.6). The facial features are lightly modeled and contain eyes, ears, swollen cheeks, a triangular nose, and a protruding chin. Although the exterior of the vessel is poorly preserved, traces of red and black decorations can be seen over an orange, polished slip. The rim above the face contains traces of a red band outlined by black lines. Face-neck vessels are rather common items within burials in the Wari heartland and elsewhere in its territories.



Figure 2.3. Context 1.1 was near the center of Area 1 directly under the hard-pack clay floor of the building. It contained a range of metal and ceramic items. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz*.

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Figure 2.4. A bronze tupu recovered in Context 1.1 with a cotton string with 23 calcite beads oxidized onto it. There are also two patches of textiles oxidized to the surface of the tupu. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-12.

The second vessel recovered in Context 1.1 is a Wari-related double-body, plainware jar (EP 2010-6,  $14.5 \times 9.5$  cm, Figure 2.7). The vessel is composed of two linked bodies; the upper is oval while the lower is more spherical. It also contains a short, straight neck and a flat base. Although the exterior surface of the vessel is eroded, light traces of polychrome paint (red, black, and cream) can be detected. This pot is made of a reddish paste that appears to be similar to that of EP 2010-8, a doubled-spouted vessel that was recovered in the same offering. Double-body vessels have been found at sites within the Ayacucho region, and examples are currently on display in the archaeology laboratory at the Universidad Nacional de San Cristóbal de Huamanga. Other double-body vessels have been found elsewhere in areas of Wari influence (Bazán 2001:393, 397; Knobloch 2012:133; Menzel 1964:Plate VIII, Figure 24; 1968b:168, Figure 24).







Figure 2.5. A set of bronze chisels was found wrapped in cloth in Context 1.1. Some retained their wooden handles. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz, artifact numbers, top to bottom, EP 2010-13, EP 2010-15, and EP 2010-11.

Area I: A D-Shaped Structure



Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-07.

The third vessel recovered within Context 1.1 is a coastal-style, doubled-spout vessel with a thin, arching strap-handle (EP 2010-8,  $12.5 \times 14.1 \times 12.0$  cm, Figure 2.8). The vessel is ellipsoid in shape with the upper half being larger than the lower half. The spouts

are distinctly conical. The pot is eroded; however, remains of polychrome paints (black, red, and cream) can be seen. It is made of a reddish paste that appears to be similar to that of EP 2010-6, a doubled-body vessel that was recovered next to it. Although the shape of this

### Chapter 2

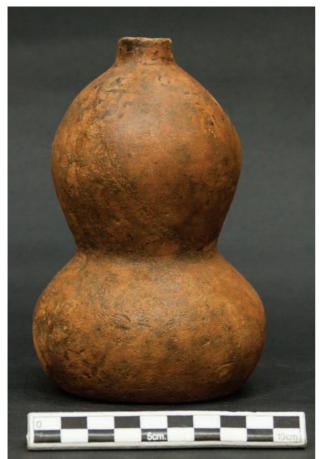




Figure 2.7. A Wari-related, double-body jar from Context 1.1. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-6.





Figure 2.8. A coastal-style, doubled-spouted vessel from Context 1.1. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-8.

vessel and the form of its spouts suggest a coastal influence (Isbell 2016:64), similar vessels have been found in Wari burials in the Ayacucho region (Valdez et al. 2002:398) and elsewhere in areas of Wari influence (Bazán 2001:417–431; Knobloch 2012:133).

The fourth pot recovered in Context 1.1 is an incurring bowl with a flat base (EP 2010-10, 7.8 × 11.3 cm, Figure 2.9).<sup>3</sup> The bowl contains a red band with a series of nested white and black Xs on its rim. Its body is divided in half: with one side painted white and the other black. Other black-and-white bowls, as well as bowls with Xs along the rim, have been recovered on the coast of Peru near Ica. For examples of similar bowls, see Alcalde et al. (2001:551), Isla (2001:571), Isla and Reindel (2014), and Menzel (1964:Plate IX, 1968b:169).

#### Area I: A D-Shaped Structure





Figure 2.9. A coastal-style, incurring bowl recovered in Context 1.1. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-10.



Figure 2.10. A Cacaopampa-style open-mouth vessel recovered in Context 1.1. Note the raised, incised band running along its midsection. Ministerio de Cultura, photograph by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-09.

The fifth vessel found in Context 1.1 is a Cacaopampastyle (locally produced) open-mouth pot (EP 2010-9, 10  $\times$  19.5 cm, Figure 2.10). It was found resting upside down, slightly apart from the other vessels. It has a rounded bottom and curved lower sides while the area above the shoulder is straight. The rim and the lip are missing. Its exterior, above the shoulder, is covered with light red paint, and there is a slightly raised band, decorated with zigzagging slashes, around its midsection.

A badly fragmented head jar was also recovered within the area of Context 1.1 (EP 2010-21, Figure 2.11). The head jar contains a raised nose and oval eyes. The remaining ear is also raised and continues

incised lines marking ear folds. The figure wears a hat or a headband. Although eroded, the vessel retains evidence of polychrome paints (black, red, and cream). The vessel is similar, although not identical, to another head jar (see Context 1.11, EP 2012-28) that was found in this same building in 2012.<sup>4</sup>

### Context 1.2

Context 1.2 was a stone-lined, cylindrical cist, approximately 1 m deep and 80 cm wide, positioned against the west wall of the building (Figures 2.12 and 2.13). The location of the cist was marked by a small ( $50 \times 50 \times 30$  cm) rectangular platform built of tiered stones. The top of the cist was sealed with several slabs and the walls were constructed with tiered stones. The floor of the cist was covered with gray clay, underneath of which was a single, flat, circular stone slab with a hole drilled through its center. The top and bottom of the cist were intact, but looters had entered the chamber by removing a section of its wall. Two small poorly preserved bronze *tupus* (EP 2010-102), suggesting that the interred was a female, and a few shell fragments were recovered on the floor of the cist.

### Context 1.3

Context 1.3 was a cylindrical cist made of tiered stones located near the southwest corner of the building. The cist was found below the hard-packed floor of the building, and its capstones were covered by a cap of yellow clay, gravel, and crushed stones. The top of

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**Figure 2.11.** A badly fragmented head jar vessel from Context 1.1. *Ministerio de Cultura, photographs by Javier Fonseca Santa Cruz, artifact number EP 2010-21.* 



Figure 2.12. Context 1.2, a looted cist, can be seen on the left and the sealed cist of Context 1.3 can be seen on the right of this photograph. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.

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Figure 2.13. Context 1.2. Two small tupus were recovered on the floor of this looted cist. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.

the cist was sealed by two stone slabs. A hole, about 4 cm in diameter, had been drilled between them (see Figure 1.7). The chamber was approximately 90 cm wide and 70 cm deep. A second hole, approximately 6 cm in diameter, was drilled through the stone floor of the cist. No cultural materials were recovered from this context. Perhaps the cist was constructed in anticipation of future use or an individual had initially been placed within it but was later removed to be buried elsewhere. Alternatively, given the poor organic preservation at the site, the cist may have once contained an individual who was accompanied with no grave goods. If this was the case, this sealed cist would appear to be empty since the organic materials would have long disappeared.

### Context 1.4

The location of Context 1.4 was marked by a small, rectangular stone platform ( $100 \times 90 \times 20$  cm) built adjacent to the southeast corner of the building. The area beneath the platform was scarred by a burning event certainly related to the interment process. The

burned area rested above two connected, conical cists, both constructed of standing stone slabs. The cists were sealed with a stratum of yellow clay mixed with crushed stones and gravel followed by a series of horizontal stone slabs. The larger of the two cists once contained the body of an individual while the smaller cist was used to hold offerings. The floors of both cists were composed of single stone slabs.

The fill of the larger of the two chambers contained a bifacially-worked obsidian knife (EP 2010-28A) and a retouched obsidian scraper (EP 2010-28B). Three poorly preserved metal items were also recovered on the floor of this chamber, including two corroded bronze *tupus* (EP 2010-22, EP 2010-23), suggesting that the interred individual was a female, and the remains of a silver pectoral (EP 2010-24). Although difficult to see, the pectoral is decorated with a series of geometric designs in high-relief, including lines of single circles, parallel rows of chevrons, and zigzagging lines (Figure 2.14) (see Chapter 9 for additional information). The recovery of several human incisors and premolars near the bottom of this chamber indicates that an individual was buried within it.



**Figure 2.14.** The remains of a silver pectoral recovered in Context 1.4. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-24.* 

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Figure 2.15. The smaller of the two chambers of Context 1.4 held three ceramic vessels and a bronze chisel. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz*.



Figure 2.16. A tall, Huamanga-style, incurving bowl from Context 1.4. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-26.

The second, smaller cist of Context 1.4 contained three bowls and a small bronze chisel (Figure 2.15). The area around these objects contained fine gray clay and a light dusting of cinnabar. The first vessel, a tall,

slightly incurving, Huamanga-style<sup>5</sup> bowl with a rounded base, was found upside down (EP 2010-26,  $8.6 \times 10$  cm, Figure 2.16). The exterior of the vessel is painted red, and it contains a wide black band across its middle

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Figure 2.17. A straight-sided, outward-flaring bowl from Context 1.4. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-25.

that is decorated with a geometric pattern in white lines. The form and decoration of this bowl are reminiscent of Huamanga-style bowls found at sites across the Wari heartland, including Huari, Conchopata, and Aqo Wayqo (Cabrera Romero and Ochatoma Paravicino 2016:312, 313, Figures 20 and 21; González Carré 1999) as well as other sites toward the coast (Alcalde et al. 2001:551; Isla 2001:571; Isla and Reindel 2014:220).

The second vessel found in Context 1.4 was a Huamanga-style, straight-sided, outward-flaring bowl, with panel decorations on its interior (EP 2010-25, 9 × 19 cm, Figure 2.17). The vessel is covered with a thin coat of orange paint, and its rounded lip is decorated with a yellow and a black line. Its interior holds two matching, rectangular panels with a crossed-circle design and a complex arrangement of filler motifs, in black, white, yellow, and orange. Vessels with similar designs have been recovered at the site of Huari and at numerous other sites across the Wari heartland (Anders 1986:486; Bennett 1953:53; Brewster-Wray 1990:599; 2016:309, 310; González Carré et al. 1999; Ochatoma Paravicino 2007:123; Wagner 1981:303).

The third vessel was a Wari-related plainware bowl with straight, outward-flaring sides (EP 2010-27,  $6.8 \times 19.8$  cm, Figure 2.18). Parts of the exterior and interior of this vessel were covered in a fine, bright yellow powder. Apparently, this powder aided in the preservation of small bits of textile that were also found attached to the bowl.





Figure 2.18. A Wari-related plainware bowl with straight, outward-flaring sides recovered from Context 1.4. Ministerio de Cultura, photograph by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-27.

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### Context 1.5

Context 1.5 consisted of a looted rectangular cist (200 × 85 cm), with slightly curved ends, made of tiered stones. The roof of the chamber was composed of a series of stone slabs while the floor was made of natural clay. This burial, located within the northwest quadrant of the Area 1, may have been the principal tomb of the structure. The cist was divided lengthwise into two chambers by a line of thin standing stone slabs, each of which measures some 180 cm in length (Figure 2.19). Evidence of burning was noted within both chambers, certainly part of the burial rites. A few minute, poorly preserved bone fragments were noted on the floor of the northern chamber, perhaps belonging to the interred individual, along with scattered patches of gray gravel. An unusual greenstone, carved in the shape of a tooth, was recovered in the churned earth of this context and presumably was once associated with the burial (Figure 2.20).9 Savoy (1970:99) reports being shown a similar tooth when he visited the area in 1964.

Despite having been looted, several grave goods were found within this burial. The artifacts were recovered in a jumble in one corner of one chamber, perhaps pushed there during the looting process. Among the burial goods was a finely crafted but badly



Figure 2.20. A carved molar made of greenstone found in Context 1.5. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-103.

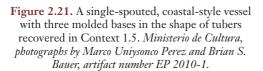
broken tripodal bottle with a single straight spout (EP 2010-01,  $21 \times 12.5$  cm, Figure 2.21). This coastal-style vessel contains a single strap-handle that connects the shoulder of the pot with the midsection of the spout. Both the handle and the spout are painted brown. The globular midportion of the vessel contains a thick, horizontal brown band, above which are four orange panels, each containing a "Roseta de Raya Cortada" surrounded by four white circles with dots in their centers (Isbell 2016:63). There are two light-brown and two brown



Figure 2.19. Context 1.5 was a stone-lined, roughly rectangular burial that was divided lengthwise into two chambers by a line of thin standing slabs. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.

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rosetas. The orange panels are separated by vertical brown and white bands. The three modeled bases of the vessels are painted white and appear to be tubers, perhaps yuccas. Knobloch (2016:109) has classified this as an Atarco-style vessel, suggesting a connection with the central coast. Similar single-spouted, tripodal vessels with tuber legs have been recovered at coastal sites (Gayton 1927:Plate 94e; González Carré et al. 1997:Figure IV-46; Shady Solís 1982:97; Ubbelohde-Doering 1966:Figure 117) and the Museo Nacional de Arqueología, Antropología e Historia del Perú in Lima contains several others (Figure 2.22).

Three bronze axes (EP 2010-2, EP 2010-3, and EP 2010-4) were recovered within the same area as the shattered, tripodal vessel (Figure 2.23) as well as 17 poorly preserved, undecorated silver sequins (see Figure 9.5). All of the axes have unique shapes. They all also display edge wear, indicating that they have been used. Two of the three axes had bits of textiles oxidized onto them, suggesting that they were wrapped in cloth at the time of the burial. Furthermore, one of the axes (EP 2010-2) still retained part of the twine that once held it to a wooden shaft. An additional bronze axe was recovered in Context 9.2 of the site. This is

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Figure 2.22. A single-spouted vessel with three molded bases. Museo Nacional de Arqueología, Antropología e Historia del Perú; artifact number 1096; photograph by Brian S. Bauer.

noteworthy since axes are rare items to be recovered at Wari sites and a review of the written works provided in the bibliography of this report found only one comparative example (Przadka-Giersz 2014:110–111). The shape of these Wari axes raises the possibility that many of the axes that are now thought to be Inca (e.g., Carcedo Muro et al. 1998:Figures 160, 161) may well date to the Middle Horizon.

#### Context 1.6

Context 1.6 was a cylindrical cist made of tiered stones located along the north wall of the structure. The cist had been badly damaged by looters and contained no cultural materials.

#### Context 1.7

Context 1.7 consisted of a small offering placed in a rock-lined pit  $(50 \times 50 \text{ cm})$  along the east wall of Area 1 (Figure 2.24). Near the top of the pit was a molded female figurine (EP 2012-2; 29.5 × 13 cm, Figure 2.25). Made with a fine paste and covered with an orange slip, the figurine has well-sculpted physical features, with







**Figure 2.23.** Three bronze axes found in Context 1.5. The first axe blade contains a flat poll, shallow notches, and a long, flaring blade (12.7 × 6.7 × .07 cm). Part of the twine that held the axe blade to a wooden shaft is preserved. The second axe contains a flat heel, shallow notches, and a long, flaring blade (11.5 × 6.3 × .06 cm). The third axe contains a flat heel, large notches, and a long, trapezoidal blade (9.4 × 7.2 × .06 cm). *Ministerio de Cultura*, *photographs by Javier Fonseca Santa Cruz, artifact numbers [top to bottom] EP 2010-2*, *EP 2010-3*, *and EP 2010-4*.

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Figure 2.24. Context 1.7 was an offering. Note the female figurine (EP 2012-02) near the top of the offering pit and the *tupus* further down. *Ministerio de Cultura*, *photograph by Javier Fonseca Santa Cruz*.



Figure 2.25. A female figurine was recovered at Espíritu Pampa in Context 1.7. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-2.

large oval eyes, a slightly rounded nose with small depressions for nostrils, finely carved lips, an almost flat chin, and a short neck. The figurine has molded ears and incised lines marking ear folds. Her shoulders are slightly asymmetric and her arms are bent across the ribcage at a 90° angle. Her fingers are marked by small incised lines and her breasts are represented with small appendages. She stands on flat feet with toes represented by incised lines. Her right foot was broken sometime before the offering was made. Her hair and eyebrows are painted in black. Her vulva is marked by an inscribed line. Figurine molds and fragments of similar figurines have been recovered at the sites of Huari (Figure 2.26) and Conchopata and elsewhere in the heartland (Benavides Calle 1984:Figure XXII; Brewster-Wray 1990:633; Lumbreras 1960b:Lamina VIIj; Ochatoma Paravicino 2007:168, 203, 204).

Evidence of burning and calcified bone fragments was also noted in the pit fill, and two roughly triangular pieces of obsidian, both about  $3.5 \times 3.0$  cm, were recovered near the bottom of the pit. Above the obsidian pieces were two sets of differently shaped silver *tupus*. The first set of *tupus* contained small, slightly oval heads with minute, decorative nibbles and long stems (EP 2012-3, EP 2012-5, Figure 2.27). The second set

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Figure 2.26. A female figurine recovered at the site of Huari. On display at the Huari site Museum, Ayacucho, 2017, photograph by Brian S. Bauer

of *tupus* (EP 2011-4A/B, Figure 2.28) was found fused together and contained much larger circular heads (6.3 cm). The tips of the fused *tupus* had been bent in different directions. These *tupus* also contained an unusual combination of silver, bronze, and arsenic (see Chapter 7). The association of these four *tupus* with a female figurine supports the notion that *tupus* were markers of female identity during Wari times in the Andes.

### Context 1.8

Context 1.8 consisted of a small ( $62 \times 50$  cm) conical cist, perhaps an offering, defined by standing stone slabs, in the southeast quadrant of the building. Both the top and the bottom of the cist were composed of single stones. At the time of excavation, the top of the cist had collapsed slightly inward. Excavations yielded a large sherd of local pottery, the remains of a single bronze *tupu* (EP 2012-02), and a poorly preserved piece of sheet silver ( $3 \times 9$  cm).



Figure 2.27. One of two unusual-shaped silver *tupus* (Context 1.7). The small head of the *tupu* is topped with two small nubbins. *Ministerio de Cultura*, *photograph by Javier Fonseca Santa Cruz*, *artifact number EP 2012-05*.



Figure 2.28. Two silver tupus with large heads recovered in Context 1.7 Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-4A/B.

### Context 1.9

Context 1.9 was a cylindrical cist made of tiered stones  $(62 \times 90 \text{ cm}, \text{Figure 2.29})$ . The cist was sealed with two large stone slabs, each about 70 cm long and 40 cm wide, with a 4-cm hole drilled near their center. The floor of the burial was made with a single stone slab. A poorly preserved silver, circular pectoral (EP 2012-01, Figure 2.30) was recovered in the burial resting upright against one of the walls. This piece measures about 23 cm in diameter and has two lines of embossed circles running around its outer edge (for a more complete description, see Chapter 9). Carbon recovered near the base of the shaft provided an AMS date of AD  $711 \pm 25$  (AD 686-875 calibrated; 95.4 percent confidence level).<sup>12</sup>

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**Figure 2.29.** Context 1.9 was a cylindrical shaft made of tiered stones. It contained an upright-standing circular pectoral. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-01.



Figure 2.30. A silver circular pectoral from Context 1.9. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-01.

#### Context 1.10

This context, apparently an offering, was composed of a small pit dug into the natural subsoil. It is located in the southeast quadrant of the building, adjacent to and slightly under its curved wall. The top of the pit was sealed with four stone slabs. Since part of this offering extended under the wall, it appears that it was made before the building was constructed. The pit contained a Cacaopampa-style neckless vessel (EP 2012-27, Figures 2.31 and 2.32). The vessel is relatively large, measuring 30 cm high and 42 cm wide. It has a small (10 cm) flat base and a globular body with a distinct shoulder. The lip of the vessel has been removed, leaving a circular, flat mouth 23 cm across. The smooth but unpainted exterior surface of the vessel contains black spots due to fire and the interior of the vessel has an unevenly wiped surface. Soil from within the vessel yielded two plainware fragments and a few small bits of carbon.

### Context I.II

Context 1.11, apparently an offering, was encountered in the southeast quadrant of the building. It consisted of a small ( $50 \times 50$  cm), stone-lined pit. A Wari-related plainware, straight-sided bowl—now badly broken—was placed upside down in the pit. Below the bowl

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Figure 2.31. Context 1.10 contained a single, locally produced vessel. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-27.



Figure 2.32. A large vessel from Context 1.10. Ministerio de Cultura, photograph by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2012-27.

was a fragmented head jar (EP 2012-28, Figure 2.33) with a flat base and a slightly flaring rim. The face has a prominent nose and oval eyes. The molded ears have incisions to illustrate ear folds. Although poorly preserved, the remains of brown, black, and white paint over a thin red slip can still be seen on the surface of

the vessel. The vessel is incomplete; approximately 40 percent is present and poorly preserved. Based on the shape of the ears, which are similar to those found on the female figurine (Context 1.7) and the other head jar found at the site (Context 1.1), we suggest that the vessel holds an Ayacucho connection.<sup>13</sup>

### Area I: A D-Shaped Structure



Figure 2.33. A broken head jar was recovered in Context 1.11. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-28.

### Context 1.12

Context 1.12 was located on the east side of the structure near the midpoint of the curved wall (Figure 2.34). This feature consisted of a shallow pit, approximately 60 cm in diameter, the bottom of which was lined with a loose arrangement of stones. A single rectangular stone, marking the location of the offering, stood upright on one side of the pit.

A Wari-related flask was found standing upright beside the stone marker (EP 2012-26, 23 × 19 × 5.4 cm, Figure 2.35). The vessel contains a semiflat base and a short, straight neck. There is a single, pierced nubbin on the shoulder of the vessel. Although the vessel is eroded, patches of brown, orange, and white paint can be detected. Vessels of this shape are frequently found within Wari burials and offerings (Castillo Butters 2000:Figure 16; Chávez 1985:Figure 36; Espinoza Martínez 2015; Giersz and Pardo 2014; Isla and Reindel 2014:222). Similar vessels were found in Contexts 2.7, 6.1, and 6.5 at Espíritu Pampa.

The remains of a small, light-brown bag (*chuspa*) made of vicuña fiber was also recovered on the floor of the pit (EP 2012-55, Figure 2.36). Although the bag has been damaged by fire, five circular silver sequins survived, each of which was attached to the exterior of



Figure 2.34. Context 1.12, a shallow, stone-lined pit, contained a wide range of objects. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz*.

#### Chapter 2



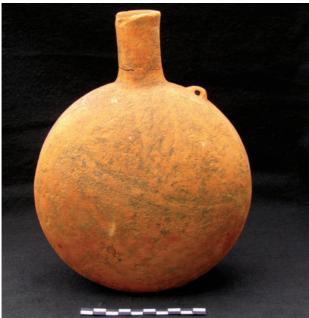




Figure 2.35. A Wari-related flask from Context 1.12. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-26.



**Figure 2.36.** The burned remains of a brown vicuña wool bag decorated with circular silver sequins was found in Context 1.12 (EP 2012-55). The sequins are tied to the bag by thread passed through two holes. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-55.* 

the bag by thread passed through two pinholes. Fiftyone small stone beads (EP 2012-34), ranging in color from cream to dark green, were recovered within the bag. The poorly preserved remains of a silver pectoral (EP 2012-19) were also recovered on the floor of the pit. An embossed circle could be seen on the surface of the pectoral, suggesting that it was similar in style to other circular pectorals recovered at the site. Two ceramic spindle whorls and a bronze *tupu* were also found in the pit. Carbon recovered near the floor of this cist provided a calibrated AMS date of AD  $699 \pm 22$  (AD 677-863 calibrated; 95.4 percent confidence level). 14

### Summary

Area 1 was defined as a D-shaped building, part of which had been looted sometime in the past. The excavations revealed a hard-packed floor, patches of which had been scarred by small burning events. Continued excavations beneath the floor revealed the remains of 13 offering/ burials. The most elaborate burial of the building was a rectangular, stone-lined cist (Context 5) that was divided in the middle into two chambers. Although this burial had been disturbed, it still contained impressive grave goods, including three bronze axes, a series of silver sequins, and a finely made coast-style vessel.

The complex construction of Context 1.5, as well as the fine metal objects that were interred within it, suggests that the individual who was buried there was of elite status. Four other individuals buried within

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Area 1 also appear to be of especially high status as they were buried with silver pectorals (Context 1.4, Context 1.9, Context 1.12) or silver bands (Context 1.1). Four of the burials within Area 1 contained the remains of *tupus* (Contexts 1.1, 1.2, 1.4, 1.5, and 1.8). In the Andes, there are strong links between *tupus* and female-identifying individuals (see Chapter 8), suggesting that the individuals who were buried with these items were women. The assignation between *tupus* and femininity is also illustrated in Context 1.7, an offering that included a female figurine and two pairs of silver *tupus*.

Area 1 is currently the best-dated structure at the Wari site of Espíritu Pampa, with three carbon samples having been submitted for AMS dating. Carbon from the floor of the structure provides a date of AD 678 ± 62 (AD 670-965 calibrated; 95.4 percent confidence level), while samples recovered from two of the burials (Contexts 1.9 and 1.12) yielded AD 711 ± 25 (AD 686-875 calibrated; 95.4 percent confidence level) and AD 699 ± 22<sup>17</sup> (AD 677-863 calibrated; 95.4 percent confidence level), respectively. The results suggest that the burials may date later than the floor.

#### Notes

- 1 Sample AA100020.
- 2 The artifact numbers used in this work are those assigned to the objects when they were submitted to the Ministry of Culture at the end of each field season.

- 3 Isbell (2016:68) classifies this as a Huamanga-style vessel while Knobloch (2016:106) classifies it as an Ica-Pachacamac-style vessel.
- 4 Other head jars have been found in various sites in the Ayacucho region (e.g., Bragayrac 1991:Figure 13).
- 5 Huamanga is a catchall-style group that is defined and identified in different ways by scholars in Peru or abroad.
- 6 Knobloch (2016:106), working from Menzel (1964), has classified this as an Ica-Pachacamac-style vessel (EP 2010-26).
- 7 This vessel is of such fine quality that Menzel (1964:41) might have called it Viñaque (Knobloch 2016:104).
- 8 Knobloch (2016:107) suggests that such panels may stand as markers of ethnic groups, but this idea is based on little evidence.
- 9 Two similar teeth, although made of *Spondylus*, were found by Paulsen (1968) in a tomb in Ica.
- 10 Also see Knobloch (2016:109) and Isbell (2016:63).
- 11 Since all three axes were created in molds, it is possible that matching axes will be found in other contexts at the site.
- 12 Sample AA106769.
- 13 Knobloch (2016:108) suggests that the vessel shares similarities with portrait vessels produced on the central coast of Peru.
- 14 Sample AA106771.
- 15 Sample AA100020.
- 16 Sample AA106769.
- 17 Sample AA106771.



# Area 2: A D-Shaped Structure

rea 2 is a D-shaped structure. Its single straight wall runs approximately north-south and measures 8.80 m in length. The curved wall is about 24 m long, and the building is 10 m deep. The single door of the building is 1.10 m wide and faces west onto a small, central plaza. The building also faces but is not exactly aligned with Area 3, another D-shaped structure on the other side of the plaza. There is a relatively large rock outcrop on the eastern half of the building.

The removal of the forest humus revealed a level of stones that covered the entire interior of the building. This deposit of stones appears to have been set down to seal the room, most likely at the time of abandonment, although some of it may also be attributed to wall fall over the centuries. Excavations within the building, below the stone level, exposed a hard-packed clay floor. On the floor were patches of burned areas, presumably the result of ritual activities carried out while the building was in use. Fragments of undecorated ceramics, lithic tools (grinding stones and hammer stones), and one obsidian scraper (EP 2010-1) were recovered on the floor of the building. Carbon collected from the floor provided an AMS date of AD 691 ± 37 (AD 691-941 calibrated; 95.4 percent confidence level).<sup>2</sup> Excavations below the floor level revealed a complex arrangement of low walls (Figure 3.1). As excavations continued and a map of the site was developed, it became clear that these

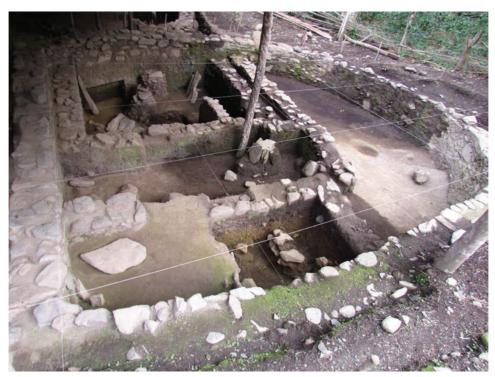
walls were related to two rectangular buildings that predated Area 2. Fourteen burials and offerings were also found beneath the floor of Area 2 (Figure 3.2).

### Context 2.1

The first context in this D-shaped building was an offering placed in the largely open east half of the structure near a large natural outcrop. The offering was found just below the original floor of the building. The context was composed of a small stone-lined cist with a complete, but broken, cooking vessel (EP 2011-2,  $21.0 \times 28.8$  cm, Figures 3.3 and 3.4) placed in its center. The vessel contains a globular body, a short neck, a slightly flaring rim, and a rounded lip. The mouth of the vessel is wide and irregularly shaped. The vessel stands on a flat base and has no handles. The undecorated exterior, which shows evidence of slight polishing, was covered with soot. The interior surface was smoothed with a damp cloth before firing.

An obsidian biface (EP 2011-31,  $8.5 \times 5.5$  cm, Figure 3.5) was found near the cooking vessel. The distal portion (lower right in the photograph) has been retouched to form a sharp edge that shows use-ware, while one of the lateral edges contains a concave area (upper left in the photograph) that may have served as a notch. Portable X-ray fluorescence analysis indicates that the obsidian came from the Alca-1 obsidian source (Sierra Palomino 2013a).

#### Chapter 3



**Figure 3.1.** Area 2 looking north. The floor of the structure has been removed and a series of straight walls, relating to early rectangular buildings at the site, have been exposed. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.* 

### Context 2.2

Context 2.2 was the largest and most distinct burial found within Area 2. The location of the burial, slightly northeast of the midpoint of the structure, was marked by two circular disks, made of mud plaster, sitting one on top of the other, that rose above the hard-packed clay floor of the building (see Figure 1.10). The lower disk measured 68 cm in diameter and 15 cm high, while the upper smaller disk measured 30 cm across and 10 cm high. This two-tiered, cake-like feature contained a small (5 cm) hole in its center that was covered by a piece of slate. A set of three finely polished quartz crystal beads (EP 2011-30, Figure 3.6) was found beside the cake-like marker, but their relationship with the burial is not clear.

The cake-like marker of Context 2.2 was built above a semicircular shaft, about 40 cm wide and 130 cm deep (see Figure 1.11). Elongated stone slabs formed the west side of the shaft while the east side was made with small, tiered stones and clay mortar. The floor of the shaft was constructed of flagging stones through which a small hole had been drilled. The removal of the flagging stones revealed a wider (60 cm) rectangular chamber, built with tiered stones and clay mortar, which

was about 50 cm high. This rectangular chamber had a floor of elongated stones. The removal of this second floor exposed a larger, semirectangular chamber (77  $\times$  64 cm) that reached a maximum depth of 80 cm. Parts of the wall of the chamber were made with small tiered stones and clay mortar while other parts were lined with standing, elongated stones. The sloping base of the cist was covered with various flat stones, and a 3-cm wide hole had been made at its deepest point. A large open-mouth vessel (EP 2012-38) was found below the floor, centered on the hole.

A range of ceramic, metal, and obsidian artifacts were recovered on the final floor of this elaborate burial (Figure 3.7). A straight-sided, Chakipampa-style bowl with a flat base and a flat rim was recovered lying upside down on the floor (EP 2012-36,  $7.0 \times 13.0$  cm, Figure 3.8). The bowl is covered with an orange slip and one of its exterior sides contains a tricolored snake motif outlined with black lines, while the other side contains the same motif but only in white. The snakes have distinctly triangular heads, mouths depicted with a single line, eyes represented by circles with dots, and slightly upturned tails. The body of the tricolored snake consists of three horizontal but slightly undulating bands

Area 2: A D-Shaped Structure

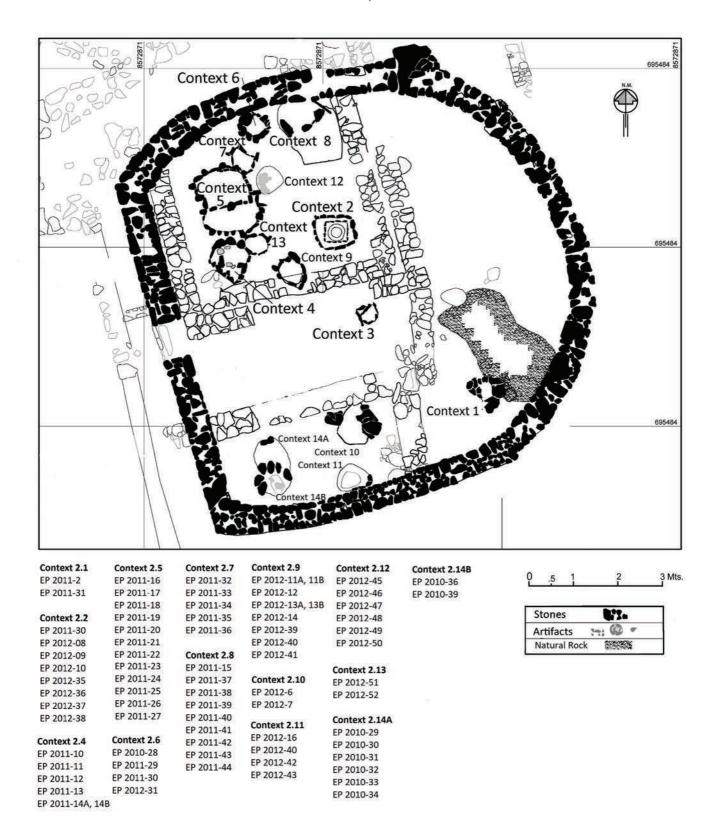


Figure 3.2. Area 2 after excavations.

### CHAPTER 3



Figure 3.3. Context 2.1 was a small stone-lined cist. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.





Figure 3.4. A small plainware vessel recovered in Context 2.1. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-2.



**Figure 3.5.** An obsidian biface found in Context 2.1. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2011-31.

Area 2: A D-Shaped Structure



Figure 3.6. Three quartz beads recovered near Context 2.2. The thread holes have been drilled from both sides of the beads. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz, artifact number EP 2011-30.



Figure 3.7. Context 2.2 contained a wide range of offerings of the floor of its deepest chamber.

Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.

of different colors (red, cream, and gray). The middle band also contains a line of black dots. The interior of the bowl displays some black spots, suggesting that something was burned in it at the time of the burial. This vessel is similar, but not identical, to another straight-sided bowl (EP 2011-8) found in Context 2.4. These two near-matching bowls found in adjacent burials suggest that the two ritual contexts were roughly contemporaneous. Images of similar triangular-headed snakes have been recorded on bowls from the site of Huari (Ochatoma Paravicino et al. 2015:66).

The second vessel recovered on the floor of Context 2.2 was a small, orange-slipped, single-spout, Wari-related bottle (EP 2012-35, 19.5 × 15.5 cm, Figure 3.9). The bottle contains a flat base, a globular body, and a straight neck and rim. It has a relatively wide mouth and a small pierced adornment near the junction of the body and the neck. It is not decorated, nor does it have a handle. Similar vessels have been found at sites in the Ayacucho, Callejón de Huaylas, and Huaro regions (Ochatoma Paravicino and Cabrera Romero 2001:195; Ponte 2000:233; Mary Glowacki, personal communication, 2016).

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**Figure 3.8**. A Chakipampa-style straight-sided bowl with triangular-headed snake designs was found upside down on the floor of Context 2.2. This vessel is similar to another bowl (EP 2011-8) found in Context 2.4. *Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2012-36*.



Figure 3.9. A Wari-related single-spout, straight-necked bottle found in Context 2.2. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2012-35.

### Area 2: A D-Shaped Structure







Figure 3.10. A Wari-related straight-sided drinking vessel found in Context 2.2. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2012-37.

The third ceramic item found on the floor of the burial is a straight-sided drinking vessel with a flat base and a rounded lip (EP 2012-37,  $10.0 \times 8.0$  cm, Figure 3.10). The vessel is covered with a brown slip. Its upper exterior is decorated with two horizontal gray bands outlined in red. An undulating cream line runs between these two bands. Parts of the exterior surface have been discolored by fire, most likely as part of the burial activities.

The fourth and final pot found associated with Context 2.2 was a wide Cacaopampa-style, open-mouth vessel with a small flat base (EP 2012-38, 15 × 32 cm, Figure 3.11). The exterior and the interior lip of the bowl were painted red. A raised, slightly undulating horizontal band decorated with a line of thumb impressions runs around the exterior midsection of the vessel. The interior of the bowl contains the faint remains of parallel white lines over a dark background as well as black patches, likely soot from contact with fire. This bowl was found under the floor of the final chamber, directly beneath the small hole that was drilled through its floor. The vessel appears to have been placed in this location as a catchment for liquids that were poured into the burial.

A bifacially worked obsidian point  $(4.5 \times 3.0 \text{ cm}, \text{Figure } 3.12)$ , made from a flake, was also recovered on the floor of Context 2.2. The basil end of this roughly triangular point is notched and lightly ground. Portable X-ray fluorescence analysis indicates that the obsidian was obtained from the Alca-1 source (Sierra Palomino 2013a).

The final chamber also contained the remains of six poorly preserved bronze *tupus*. Two of the *tupus* 





Figure 3.11. A Cacaopampa-style vessel was found under Context 2.2 beneath a small hole that had been drilled into the stone floor. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2012-38.

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**Figure 3.12.** A bifacially worked obsidian point was recovered on the floor of Context 2.2. *Ministerio de Cultura*, *photograph by Javier Fonseca Santa Cruz*.

contained highly ornamented heads (EP 2012-8, EP 2012-9, ca. 13.50 × 7.50 cm, Figure 3.13). These *tupus* have an incised line running along the edge of their circular heads and ovals on their faces. The stems of the *tupus* retain bits of oxidized textile. Decorated *tupus* such as these have also been recovered at other Wari sites (Jennings et al. 2015; Velarde et al. 2015). The other four *tupus* appear not be have been decorated. The remains of five semicircular bronze bells were also found on the final floor of the cist.

#### Context 2.3

Context 2.3 consisted of a roughly rectangular cist ( $55 \times 55$  cm) made of standing slabs near the center of Area 2 (Figure 3.2). The west wall of the cist and its seal were

composed of single stones. Two ceramic vessels were found on the exterior of the west wall: the first vessel was a somewhat crude, doubled-spouted vessel with a strap-handle (EP 2011-4, 13.0 × 13.0 × 11.60 cm, Figure 3.14). This pot is covered with a self-slip and is ellipsoid in shape, with the upper half being larger than the lower half. The spouts are tubular and the base is flat. A similar, but much finer, doubled-spouted vessel was recovered in Context 1.1. By the end of the Middle Horizon, doubled-spouted vessels with strap-handles could be found along the entire coast of Peru, but they are rarely found in the highland or Montaña areas (Isbell 2016:64).

The second vessel was a small, somewhat crude Wari-related single-spouted vessel with a globular body and flat base (EP 2011-3,  $13.1 \times 10.0$  cm, Figure 3.15). A short strap-handle runs from the shoulder of the vessel to midway up the slightly conical spout. The exterior of the vessel is covered in a red slip, and there are patches of surface burning, perhaps the results of rituals preformed during the offering event.

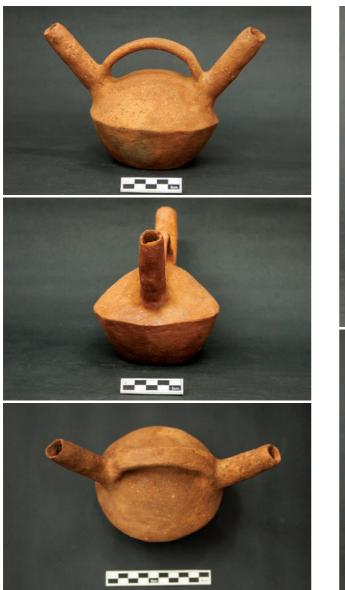
### Context 2.4

Context 2.4 was a straight-sided, stone-lined cylindrical cist, measuring about 85 cm wide and 145 cm deep, located in the northwest area of Area 2 near the doorway (Figures 3.2 and 3.16). Walls of the cist were made with elongated stones, and in some areas, tiered stone blocks joined with clay plaster were used. The top of the cist was covered with a stack of horizontally



Figure 3.13. Incised bronze tupus from Context 2.2. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number, left to right, EP 2012-8, EP 2012-9.

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**Figure 3.14.** A coastal-style, doubled-spouted vessel with a bridge strap-handle from Context 2.3. *Ministerio de Cultura*, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-4.



**Figure 3.15.** A Wari-related single-spouted vessel recovered in Context 2.3. *Ministerio de Cultura*, *photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-3.* 

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**Figure 3.16.** This photograph shows the location of several cists within the northwest area of Area 2. Context 2.4 was covered with a cap of small stones (lower right). The shaft of Context 2.3 (center right); the capstones of Contexts 2.5 (lower center), 2.7 (center left), and 2.6 (center, far left); and the elongated stones of Context 2.8 (upper left) can also be seen. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.



**Figure 3.17.** Context 2.4 contained a range of burial offerings. A line of cobble-sized stones was found on the floor of the cist that may have been used to prop up a mummy bundle. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.

#### Area 2: A D-Shaped Structure

layered elongated slabs. Under these stones was a cap of small stones, set rather like shingles, more than 50 cm in depth. The removal of these small stones revealed that the roof of the cist was formed with a series of nine long slabs and that there was a small hole at its center. The floor of the cist, the center of which was also marked by a small hole, was also formed by slabs. There was a crescent-shaped line of cobble-sized stones on the floor of the burial (Figure 3.17). Several adult molars and bits of cinnabar powder were recovered at the bottom of the cist within the crescent-shaped area. This suggests that the cobble-sized stones were used to prop up a mummy bundle, parts of which had been dusted with cinnabar.

A total of 12 grave goods, which included four ceramic vessels and eight bronze *tupus*, were recovered in Context 2.4. One of the vessels, a plainware pitcher, was relatively large (EP 2011-5, 25.2 × 19.4 cm, Figure 3.18). This was the last of the offerings to be placed in the burial and was found approximately halfway between the floor and the top of the cist. The pitcher has a conical base, a globular body, a short flaring neck, and a slightly arching strap-handle that runs from its rim to its shoulder. The exterior of the vessel was undecorated and covered in soot. Similar pitchers are common finds in the Ayacucho region and have been specifically noted at the site of Aqo Wayqo (Ochatoma Paravicino 2007:113; Ochatoma Paravicino and Cabrera Romero 2001:148).

Two Wari-style domestic pots with side spouts were recovered sitting upright on the floor of the cist. The first of these is a relatively small undecorated pot with a flat base, a globular body, a short neck, a slightly flared rim, and a wide mouth (EP 2011-6, 11.4 × 13.1 cm, Figure 3.19). The vessel contains a horizontal strap-handle on one shoulder and a side spout on the other. There are slight smoke stains on the exterior of the vessel. The second side-spouted vessel is slightly larger than the first, with a flat base, a globular body, a short neck, a slightly flared rim, and a wide mouth (EP 2011-7,  $16.6 \times 15.4$  cm, Figure 3.20). This vessel also contains a horizontal strap-handle on one shoulder. The exterior of the vessel is painted with a thin red paint and is now covered with soot and smoke stains. Similar domestic pots with side spouts have been recovered in the Ayacucho region as well as in coastal sites (Bennett 1953:41, Figure G; Edwards 2010:313; Ochatoma Paravicino 2007:117; Ochatoma Paravicino and Cabrera Romero 2001).

A Chakipampa-style straight-sided bowl with a flat base and rim was also recovered on the floor of Context 2.4 (EP 2011-8,  $7.2 \times 14.3$  cm, Figure 3.21). A single black line runs around the bowl just below the rim. The bowl is covered with a red slip and its exterior contains two tricolored snake motifs, outlined with black lines. The distinctly triangular head of the snakes is in cream,



**Figure 3.18.** A Wari-related domestic single-handled pitcher recovered in Context 2.4. *Ministerio de Cultura*, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-5.

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Figure 3.19. A Wari-related plainware vessel with a side spout recovered in Context 2.4. *Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-6.* 

Figure 3.20. A Wari-related plainware vessel with a side spout recovered in Context 2.4. *Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-7.* 

with the mouth depicted with a single line and their eyes with circles and dots. The bodies of the snakes contain three horizontal bands that turn upward at the tail. The upper band is painted gray while the middle band is painted cream and contains a horizontal line of dots. The third band is painted red, and it also contains a horizontal line of dots. A nearly identical vessel was found in Context 2.2, and other vessels with similar

triangular-headed snakes have been found at the site of Huari (Ochatoma Paravicino et al. 2015:66).

Eight bronze *tupus*, most of which contained small amounts of oxidized textiles, were recovered within the circular area defined by the cobble-sized stones on the floor of the burial. Their positions suggest that the *tupus* were attached to a mummy bundle that is no longer preserved. The smallest four *tupus* form

### Area 2: A D-Shaped Structure



Figure 3.21. A Chakipampa-style straight-sided bowl with triangular-headed snakes recovered in Context 2.4. A similar vessel was found in Context 2.2. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-8.





Figure 3.22. Two pairs of small, poorly preserved matching bronze tupus oxidized together were recovered in Context 2.4. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact numbers, clockwise from upper left,, EP 2011-9 and EP 2011-14.

two matching pairs. Each pair was recovered oxidized together (EP 2011-9 and EP 2011-14, Figure 3.22). The other four *tupus* are larger, and since they all appear to have been the same size, we suggest that they too represent two matching pairs (e.g., EP 2011-10, EP 2011-11, EP 2011-12, EP 2011-13; Figure 3.23).

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Figure 3.23. Other bronze tupus recovered in Context 2.4. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact numbers, clockwise from upper left, EP 2011-10, EP 2011-11, EP 2011-13, and EP 2011-12.

### Context 2.5

Context 2.5 is situated in the northeast quadrant of Area 2, just north of Context 2.4 (Figures 3.2, 3.16). The location of the burial was marked by a patch of clay, beneath which was a shaft more than 120 cm deep and about 90 cm wide. Part of the shaft was lined with small tiered stones with clay mortar, and other parts were supported by elongated stone slabs.

The bottom of the shaft contained a compact level of small stones above several large horizontal slabs. The removal of these slabs revealed a bell-shaped chamber below. The interior of the chamber was divided into two equal-sized spaces by a line of elongated, upright-standing slabs. One side of the chamber held offerings, and the other side most likely held the interred individual.

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Six ceramic vessels were included in the burial. The first and largest of the vessels is a Wari-related undecorated pot with a horizontal strap-handle on one shoulder and a spout on the other (EP 2011-16,  $37.0 \times 46.6$  cm, Figure 3.24). The vessel has a conical but ultimately flat base, an oval body, a short neck, a slightly flared rim, and a wide (29.6 cm) mouth. The poorly preserved remains of textiles were found attached to one side of this pot. Similar vessels have been found at





Figure 3.24. A large Wari-related undecorated sidespouted vessel found in Context 2.5. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-16.

sites within the Ayacucho region and are on display in the archaeology laboratory at the Universidad Nacional de San Cristóbal de Huamanga (also see Lumbreras 1960b:Lamina XI-O). This vessel type has also been found at the site of Pikillacta (Glowacki 1996:704). Similar, although smaller, side-spouted vessels were found in Context 2.4.

A straight-sided, outward-flaring bowl with a flat base was recovered from Context 2.5 (EP 2011-27, 7 × 17 cm, Figure 3.25). This Huamanga-style vessel is covered with a thin orange paint, and its rounded lip is decorated with a now eroded black line. The vessel contains very slight protrusions on two sides near the rim. The interior of the vessel is eroded, but the faint remains of two sets of double red bands, outlined in black, can be seen running from rim to rim. The space between these bands contains the remains of geometric figures (most likely once pendant rectangles) painted in black.





Figure 3.25. A Huamanga-style straight-sided, outwardflaring bowl recovered in Context 2.5. *Ministerio de Cultura*, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-27.

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An elaborately decorated polychrome (black, orange/yellow, light purple, white/gray, and red), straight-sided bowl was also found in Context 2.5 (EP  $2011-17, 6.0 \times 9.6 \text{ cm}$ , Figure 3.26). This Chakipampastyle (Menzel 1964:28) vessel, influenced by late Nasca stylistic norms, contains a stylized animal outlined in black. The animal, which is shown in profile, has a toothed mouth, an upturned nose, a circle-and-dot eye, and a curved tail. Double recurved rays emerge from the head, back, and tail of the animal. The vessel contains a deep red slip and a glossy finish. White circles outlined in black with dots in their centers are used as filler elements. Identified early on (Lumbreras 1960a:177), the same animal can be seen on a wide range of other Wari vessels (Figure 3.27) recovered in the Ayacucho region (Bennett 1954:Plate 6F; Cavero Carrasco 1985:Laminas 28 and 29; Lumbreras 1960a:177, 1960b:Lamina VIIi) and on the south and north coasts (Bergh 2012a:268, 269, Object 23; Castillo Butters 2000:Figure 16; González Carré et al. 1997:Figure IV-10; Knobloch 2012:126; Lavalle 1984:125, 129, 139, 329). The animal also appears in Nasca Phase 9 pottery (Menzel 1964:29, 1968a; Ravines Sánchez 1968:Figures 85, 86) and may have its origins in monkey motifs found in Nasca 7 ceramics (Menzel 1964:9, 11; Proulx 2006:97-101, Plate 7). The two sides of the vessel are separated by columns of vertical, multicolored chevrons bordered on both sides by white and gray bands. Menzel (1964:15) notes that such columns of chevron are common in Chakipampastyle vessels.

Context 2.5 also contained a low-quality face-neck vessel with a globular body and flat base (EP 2011-19,  $17.0 \times 13.60$  cm, Figure 3.28). This Wari-related vessel is covered with a light red paint and contains polychrome figures, outlined in black, red, cream, white, and gray. The vessel has a single, straight spout with a small pierced nubbin on its back where the spout connects with the body of the vessel. The bulging face has molded features, including eyes, ears, a nose, and a mouth. The rim of the vessel is painted with horizontally running chevrons of alternating colors. The front of the vessel contains a large panel with what appears to be the figure's arms and three-fingered hands. Above these appendages are two roughly symmetrical squiggly features, each of which is surrounded by a series of white and gray circles with central dots. Similar bottles, with flat bases, globular bodies, and anthropomorphic figures, are common features of Wari grave lots. For example, similar vessels have been recovered by Glowacki (personal communication, 2016) at the site of Ccotocotuyoc in Huaro, by Espinoza Martínez (2015) at the site of K'ullupata in Pomacanchi, and at several sites in the Ayacucho region (Cabrera Romero 1996:Lamina 32; Ochatoma Paravicino and Cabrera Romero 2001:182, 183, 196).

Also included within the burial was a small Warirelated plainware (EP 2011-24,  $9.0 \times 9.0$  cm, Figure 3.29). The undecorated pot has a globular body, a flat base, and two arching strap-handles that connect the flaring lip to the shoulder of the vessel. The exterior of the pot contains some sooting, suggesting that the vessel was exposed to fire at some time. While the shape of the vessel is a bit nondescript, it is worth noting that other vessels with arching strap-handles have been recovered in the Ayacucho heartland (Ochatoma Paravicino et al. 2015:150).

Last, an undecorated Wari blackware drinking vessel fired in a reduction atmosphere was found within Context 2.5 (EP 2011-20, 11.4 × 9.0 cm, Figure 3.30). The vessel has a cylindric shape and a flat base. Various researchers report finding other examples of black drinking vessels at the site of Huari and in Wari sites in the greater Cusco region (Bauer 1999; Bennett 1953:66–68; Skidmore 2014; Mary Glowacki, personal communication, 2016). Six poorly preserved bronze *tupus* (EP 2011-18, EP 2011-21, EP 2011-22, EP 2011-23, EP 2011-25, and EP 2011-26) were also found within the cist. Several of these *tupus* had oxidized pieces of textile attached to them.

#### Context 2.6

Context 2.6, a cylindrical stone-lined cist measuring about 45 cm in diameter and 64 cm in depth, was located at a tangent to the north wall of the structure (Figures 3.2, 3.16, and 3.31). The walls of the cist were made of tiered stones and mud plaster, while both the cap and the base were formed by single slabs. Four ceramic vessels were found within this cist. The first vessel, a locally produced incomplete Cacaopampastyle open-mouth vessel, was found upside down (EP 2011-29, Figure 3.32). The vessel has a small pedestal base, and the faint remains of red paint can be seen on its exterior. A raised, horizontal band that holds a single line of thumb impressions runs around the exterior midsection of the vessel. The interior contains the remains of bold geometric design painted in red over a light background.

The second vessel was a locally made plainware, relatively large neckless vessel with a conical base (EP

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Figure 3.26. A Chakipampa-style straight-sided bowl with a stylized animal motif recovered in Context 2.5. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-17.

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Figure 3.27. A Chakipampa-style straight-sided bowl with a stylized animal motif from the Larco Museum. The form of this animal, with its head thrown back and distinct three-pronged recurving rays, is slightly different from the animal on the Espíritu Pampa straight-sided bowl. Museo Larco, artifact number ML031733, photograph by Brian S. Bauer.

2011-28,  $28 \times 45$  cm, Figure 3.33). The rim of the vessel had been removed and the pot was placed upside down in the center of the cist. The vessel has no handles. The slightly polished but undecorated exterior was covered with soot. The interior surface was wiped with a damp cloth before firing.

A polychrome (red, cream, black, and gray), Warirelated face-neck bottle was also found upside down within Context 2.6 (EP 2011-30, 20.0 × 14.6 cm, Figure 3.34). This vessel has a globular body, a flat base, and a straight spout with a small pierced nubbin on its back near to where the spout connects with the body. The







Figure 3.28. A Wari-related face-neck vessel recovered in Context 2.5. *Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-19.* 

### Area 2: A D-Shaped Structure



Figure 3.30. An undecorated Wari blackware drinking vessel found in Context 2.5. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-20.



Figure 3.29. A Wari-related plainware vessel in Context 2.5. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-24.

bottle is covered with a light red paint. The bulging face has molded features, including eyes, ears, a nose, and a mouth. The remains of white paint cover most of the face, although the eyes are outlined in black and three thin black lines run down the cheeks. The front of the vessel contains two panels defined by white bands outlined in black. The panels are filled with the faint designs in different colors, also outlined in black.

The fourth and final vessel found in Context 2.6 was a polychrome Huamanga-style drinking vessel (EP 2011-31,  $9.3 \times 8.6$  cm, Figure 3.35) with thin red

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Figure 3.31. Context 2.6 was a cylindrical stone-lined cist that contained four ceramic vessels. *Ministerio de Cultura*, photographs by Javier Fonseca Santa Cruz.





Figure 3.33. A Cacaopampa-style neckless vessel found in Context 2.6. The rim of the vessel was removed before the burial. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2011-28.



**Figure 3.32.** An incomplete Cacaopampa-style open-mouth vessel found in Context 2.6. Note the raised line of thumb impressions running along its exterior midline and the complex designs on its interior. *Ministerio de Cultura*, photographs by Javier Fonseca Santa Cruz, artifact number EP 2011-29.

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background paint. The cup has a rounded bottom, a flat base, and slightly curving sides, a form that was first termed "lyre-shaped" by Lumbreras (1960a:158). The upper half of the cup is demarked by a horizontal gray band outlined with white and black lines, above which is a series of step designs and dotted circles also outlined in black and white lines. The cup was found standing upright on the floor of the cist. Drinking vessels of this form are frequently recovered at Wari sites.<sup>3</sup>

## Context 2.6. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-30.

## Context 2.7

Context 2.7 is located on the northwest side of Area 2, between Contexts 2.5 and 2.6 (Figures 3.2 and 3.16). It is a straight-sided, roughly rectangular cist made of perpendicularly set stone slabs reinforced with a mud mortar (Figure 3.36). The cist measures some 58 × 40 cm and is about 60 cm deep. It was sealed with a single stone slab. Several human molars were recovered near the bottom of the cist. A Wari-style flask was found

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Figure 3.35. A Huamanga-style drinking vessel from Context 2.6. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-31.



Figure 3.36. Context 2.7 was a roughly rectangular cist lined with standing stone slabs. It held a ceramic vessel as well as four bronze *tupus*. *Ministerio de Cultura*, *photograph by Javier Fonseca Santa Cruz*.

lying on its side near the wall of the cist (EP 2011-32,  $19 \times 16$  cm, Figure 3.37). This vessel contains a semiflat base and a short, slightly flaring spout. The upper half of the spout contains a horizontal band of red and white chevrons, now difficult to see, and the

lip was painted black. There is a single small, pierced nubbin at the base of the neck. The two faces of the vessel are painted black, and the two lateral sides, now badly eroded, once contained columns of red and white chevrons.

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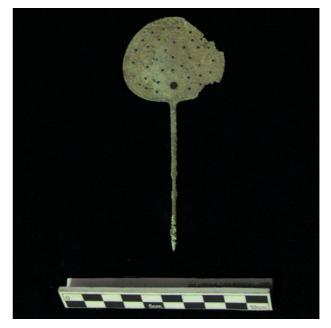


Figure 3.37. A Wari-style flask was recovered in Context 2.7. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-32.

Two undecorated bronze *tupus* (EP 2011-35 and EP 2011-36, Figure 3.38) and two bronze *tupus* that had circular heads decorated with small holes (EP 2011-33 and EP 2011-34, Figure 3.39) were also recovered on the floor of this cist. Ochatoma Paravicino and Cabrera Romero (2001:112) have reported finding *tupus* with small holes in the Wari heartland.



**Figure 3.38.** One of two matching bronze *tupus* from Context 2.7. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2011-36.* 



**Figure 3.39.** One of two matching bronze *tupus* decorated with small holes from Context 2.7. *Ministerio de Cultura*, *photograph by Javier Fonseca Santa Cruz*, *artifact number EP 2011-33*.

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### Context 2.8

Context 2.8 was a large, poorly defined oval pit, about 100 × 70 cm, adjacent to the north wall of Area 2 (Figures 3.2, 3.16, and 3.40). Its location was marked by three elongated, upright-standing stone slabs, but unlike so many other features within this building, the sides of the pit were not stone lined. Two differently Cacaopampa-style bowls (EP 2011-37, EP 2011-44) and an open-mouth vessel (EP 2011-15) were recovered below these slabs. In what must have been a final act of the offering, these vessels had been inverted and intentionally broken. The first bowl (EP 2011-37,  $14.50 \times 36.20$  cm, Figure 3.41) has a flat lip, straight-flaring sides, a convex bottom, and a flat base. Both the interior and the exterior of this undecorated bowl are covered in soot and fire stains. The second bowl (EP 2011-44,  $10.20 \times 25.4$  cm, Figure 3.42) is irregularly shaped, with a flat lip, divergent sides, and a flat base. Its exterior is covered with thin red paint and shows fire stains. The interior surface of this bowl contained evidence of cinnabar. The open-mouth vessel (EP 2011-15, 14.20 × 29.00 cm, Figure 3.43) has partially straight sides, a flat base, a slightly curved bottom, and a flat lip. Its interior is painted a brownish-red. The faint remains of two sets of four white lines, running rim to rim across the center of the vessel, can be seen.



Figure 3.41. A Cacaopampa-style bowl recovered in Context 2.8. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2011-37.

The pit contained several perpendicularly placed stone slabs that divided it into two areas, each of which contained objects. The northern area held a single large undecorated storage vessel. The southern area held three upright-standing ceramic vessels. The largest vessel is a locally produced open-mouth vessel with a flat base, concave sides, and an irregular, flat rim (EP 2011-39, 24.4 × 49.0 cm, Figure 3.44). The exterior of this storage vessel contains two undulating, inscribed zigzagging lines while its interior is painted a brownish-red. Two sets of six white lines run rim to rim across the center of the vessel, forming an "X"



Figure 3.40. Context 2.8 contained a wide range of materials. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.

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Figure 3.42. A Cacaopampa-style straight-sided flaring bowl that contained cinnabar residue recovered in Context 2.8. *Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-44.* 





Figure 3.43. A Cacaopampa-style open-mouth vessel with faint white lines across its interior from Context 2.8. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-15.

design. The four quadrants defined by the "X" each contain crosses outlined in white. The fill within the vessel contained bits of carbon, perhaps the remains of an offering.

A Wari-style flask was also recovered on the floor of Context 2.8 (EP 2012-38, 16.8 × 15.2 cm, Figure 3.45). The vessel has a semiflat base and a straight spout and rim. There is a single small, pierced nubbin at the base of the spout. This polychrome vessel has been painted red, over which a series of designs have been added. The lip of the spout contains a faint horizontal band of chevrons. The upper portions of the vessel contain panels with an elaborate "S," a motif that has been called a fleur-de-lis (Ochatoma Paravicino and Cabrera Romero 2001:192), painted in cream and outlined in black. The "S" has double-curved rays, some

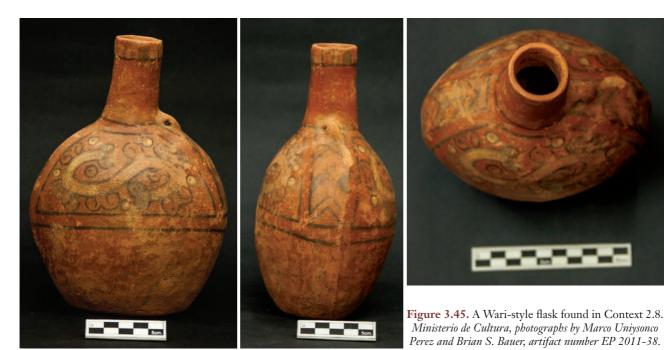
painted in gray, emerging from it and a series of white circles with central dots surrounding it. The two narrower sides of the vessel have vertical rows of multicolored chevrons. A similar vessel was found by Mary Glowacki (personal communication, 2016) during her excavations in the Huaro region of Cusco. Vessels with similar "S" motifs have been recovered in the Ayacucho region (Menzel 1964:14), as well as on the central coast (Alcalde et al. 2001; Shady Solis 1982:97) and the north coast (Castillo Butters 2000:Figure 29).

A small undecorated Wari blackware pot with a short flaring neck, a flat base, and a global body was also found in Context 2.8 (EP 2011-40,  $10.4 \times 9.2$  cm, Figure 3.46). This vessel contained patches of soot as well as minute fragments of textiles attached to its exterior.

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Figure 3.44. A large Cacaopampa-style open-mouth vessel from Context 2.8. Note the incised zigzagging line on its exterior and the painted interior. *Ministerio de Cultura*, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-39.



Perhaps the most notable finds of this cist were, however, three differently shaped whistles that were recovered resting on the floor near the neckless bowl. One of the whistles is tubular in shape with a single windway leading to two chambers (EP 2011-41,  $12.20 \times 1.90$  cm, Figure 3.47). Both chambers are closed on their distal ends, and their open proximal ends serve as finger holes. This whistle is painted with red and black lines and contains a single air hole toward the end of the windway.

The second whistle is in the shape of a bird in flight with short wings, a triangular head, bulging eyes, and a pierced nubbin on its underside (EP 2011-42,  $6.70 \times 3.80$  cm, Figure 3.48). The instrument contains a

single windway, at the tail of the bird, followed by an air hole and two parallel finger holes on the back of the bird. A thin, brownish-red paint covers most of the bird, and a series of horizontal white lines mark the dorsal side of the tail.

The third whistle recovered in Context 2.8 is an anthropomorphic figure (EP 2011-43,  $7.10 \times 2.60$  cm, Figure 3.49). The figure has a hat, a large face, and a rounded body with no legs. It is covered with a white slip and decorated with red and black lines. The mouth of the figure has been made with a slit, while the eyes are shown as black dots encircled by red lines. The windway of the whistle is through the head of the

### Area 2: A D-Shaped Structure



Figure 3.46. A small Wari blackware pot with a flaring neck was recovered in Context 2.8. Ministerio de Cultura, photograph by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-40.



Figure 3.47. A tubular whistle painted with red and black lines found in Context 2.8. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-41.







Figure 3.48. A whistle in the shape of a bird in flight found in Context 2.8. *Ministerio de Cultura*, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-42.

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Figure 3.49. An anthropomorphic whistle from Context 2.8. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-43.

figure, the air hole is located in the neck, and there are two parallel finger holes in the stomach region. There is a small nubbin on the back of the figure.

#### Context 2.9

Context 2.9 was a straight-sided conical cist made with large stone slabs and tiered blocks. It was located against an interior wall in the northeast quadrant of Area 2 (Figures 3.2 and 3.50). The mouth of the cist

measured about 50 cm across and was covered with nine slabs placed in different directions. The slightly sloping walls of the cist measured about 85 cm high, and most of the base was covered by a single stone slab through which a 5-cm hole was drilled. There was also a single upright-standing, stake-like stone slab on the interior of the cist that ran from the base through the roofing materials. This elongated slab may have been used to mark the location of the cist.

Three ceramic items were found on the floor of Context 2.9. The first ceramic item is a Huamanga-style bowl with a flat base and straight-divergent sides (EP 2012-41,  $6.5 \times 15$  cm, Figure 3.51). The bowl is eroded but the interior and exterior appear to have been covered with orange paint. The interior also contains the faint remains of a multicolored, geometric design. The second ceramic item is a Huamanga-style spoon (González Carré and Soto Maquino 2004; Ochatoma Paravicino 2007:119; Ochatoma Paravicino and Cabrera Romero 2001:176), which was found resting within the bowl (EP 2012-40,  $10.0 \times 4.5$  cm, Figure 3.52). The broken handle of the spoon contains a series of red, gray, and white bands, outlined in black. The head of the spoon is divided into four quadrants by white lines. Two of the quadrants are filled with a black net motif, and the other two quadrants are painted red. The back of the spoon



Figure 3.50. The floor of Context 2.9. Note the bowl, the spoon, and the llama figurine.

Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.

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Figure 3.51. An eroded Huamanga-style bowl from Context 2.9. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-41.



Figure 3.52. A Huamanga-style spoon with a broken handle found in Context 2.9. *Ministerio de Cultura*, photograph by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-40.

is painted orange. The third ceramic item found on the floor of the cist is a llama figurine vessel, similar in shape to the better-known stone llama figurines, or *conopas* of the Inca (EP 2012-3,  $7.0 \times 13.5$  cm, Figure 3.53). It was found beside the bowl and spoon. The figurine contains a globular body, a wide mouth with a rounded rim, a flat base, a molded llama head, and tail. The vessel was burnished and then painted brown, over which a series of vertical red lines were drawn.

Three pairs of bronze *tupus* were also found on the floor of the cist (Figure 3.54). Two different pairs were recovered fused together, while the other two *tupus* were found in separate locations (EP 2012-12 and EP 2012-14).

#### Context 2.10

Context 2.10, located in the southwest quadrant of Area 2, was a partially stone-lined cylindrical cist measuring approximately 60 cm wide and 80 cm deep (see Figure 3.2). The location of the cist was marked by two upright-standing stone slabs. The cist was sealed by several horizontal slabs and a level of gravely clay. The cist had a hard-packed earthen floor on which three items were recovered. The first item was a broken cooking vessel with a conical base, a globular body, and a short neck. The exterior of this pot was covered in soot. The second item was a poorly preserved silver plume-pin (EP 2012-6), similar in size to those found in Context 6.7. The third was a poorly preserved concentration of fragmented silver sheet, which may have once been a pectoral, but its fragmented condition and its poor state of conservation prevent a definitive identification (EP 2012-7, Figure 3.53).

#### Context 2.11

Context 11 was found near Context 10 but tangent to the south wall of Area 2 (Figure 3.2). It consisted of a partially stone-lined cylindrical pit, about 60 cm wide and 130 cm deep, dug into the sterile subsoil. The context had been sealed with several flat stone slabs that later collapsed into the cist. The floor was marked by a flat stone slab.

Two similar Huamanga-style polychrome bowls (EP 2012-40, EP 2012-42) with flat bases and straight-flaring sides had been placed upside down, one on top of

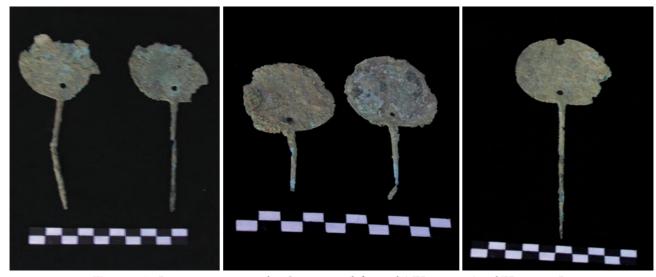
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**Figure: 3.53.** A llama figurine vessel found in Context 2.9. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2012-39.







**Figure 3.54.** Bronze *tupus* recovered in Context 2.9: (left to right) EP 2012-11A and EP 2012-11B (found fused together); EP 2012-12A and EP 2012-12B (found fused together) and EP 2012-12. *Ministerio de Cultura, photographs by Javier Fonseca Santa Cruz.* 

Area 2: A D-Shaped Structure



**Figure 3.55.** A poorly preserved silver plume (lower left) was found with a concentration of fragmented silver sheet, believed to be the remains of a pectoral, in Context 2.10. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz, artifact numbers EP 2012-6 and EP 2012-7.



**Figure 3.56.** The first of two near-matching Huamanga-style bowls found on the floor of Context 2.11. *Ministerio de Cultura*, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2012-40.

the other, on the floor of the cist. The lower bowl (EP 2012-40) measures  $9 \times 19.5$  cm, while the upper bowl (EP 2012-42) is slightly larger, measuring  $9 \times 20.5$  cm (Figures 3.56 and 3.57). Both vessels were covered with an orange slip. The interior surfaces of the vessels contain two panels of nested rectangles, drawn with black and white lines. The rectangles also contain a solid black line, a white line, and a dotted black line running horizontally across their midpoints. Both

vessels have fire stains, suggesting that they were near a burned offering at the time of the burial.

A third, slightly smaller, Huamanga-style polychrome bowl with a flat base and straight- flaring sides was recovered nearby on the floor of the cist (EP 2012-43,  $5 \times 11$  cm, Figure 3.58). This bowl was found lying on one side and was slightly crushed. The exterior of the vessel is painted red, while its interior contains alternating straight black lines and wavy-red

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Figure 3.57. The second of two near-matching Huamanga-style bowls found on the floor of Context 2.11. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2012-42.



Figure 3.58. A Huamanga-style bowl found in Context 2.11. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2012-43.

horizontal lines over white. A similar but not identical bowl (EP 2012-5) was recovered in Context 2.13. Other comparable bowls have been recovered in excavations in the Wari heartland (Bennett 1953:53; Cabrera Romero and Ochatoma Paravicino 2016:318, Figure 27). The Espíritu Pampa vessel held a mixture of burned white stones, bone, wood, carbon, and an unidentified bronze item. These remains may represent a final offering before the cist was sealed. Two poorly preserved possible silver plumes and several small fragments of plate silver were also recovered near the base of the cist (EP 2012-16, Figure 3.59).

#### Context 2.12

Context 2.12 is located near the center of the northwest quadrant of Area 2, adjacent to Content 2.5 (Figure 3.2). This context consisted of a pit, 130 cm deep and 56 cm wide at its base. Unlike most of the cists at Espíritu Pampa, the pit was not lined with stones (see Isbell 2004:8, 18: type 1 burial). The context held six vessels, all of which were placed on one side of the floor of the pit (Figure 3.60). An interred individual may have been placed on the other side. Carbon recovered near the floor of the pit provided an AMS date of AD 685 ± 27 (AD 666–859 calibrated; 95.4 percent confidence level).<sup>4</sup>

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**Figure 3.59.** Two poorly preserved possible silver plume-pins and a few small fragments of plate silver were recovered near the base of the Context 2.11. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-16.* 

The first object encountered was a relatively large Wari-style face-neck jar (EP 2012-49, 28 × 24 cm, Figure 3.61), with a flat base, a globular body, and two vertical strap-handles. The face is made with a mold in high relief. It contains oval eyes outlined by incised lines, a broad nose, and a straight-line mouth. Models for such faces have been recovered during excavations at sites in the Ayacucho region (Ochatoma Paravicino

2007:195–198). The two sculpted ears have been placed at a distance from the molded face. The upper neck of the vessel is straight-sided and slightly flaring. The lip has been heavily damaged. The vessel is covered in a light orange slip. Although now it is difficult to see, the upper portion of the vessel, between the handles and the face, contains a series of horizontal panels defined by parallel black lines, inside of which are a series of cream, gray, and red "S" motifs outlined in black.

The second vessel found in Context 2.12 is a small Wari-style bottle with a single spout, a flat base, and a globular body (EP 2012-50, 16 × 13 cm, Figure 3.62). It contains a wide, straight neck and a slightly flaring rim. The vessel is covered with an orange slip. A similar but not identical vessel (EP 2012-35) was recovered in Context 2.2. Other Wari-related bottles with a single spout have been found at sites in the Ayacucho (Ochatoma Paravicino and Cabrera Romero 2001:195), Callejón de Huaylas (Ponte 2000:233), and Cusco (Mary Glowacki, personal communication, 2016) regions.

Four Wari blackware vessels were also found in Context 2.12. This style of ceramic was first identified by Bennett (1953:67, 68) during his early work at the site of Huari. Of the eight Wari blackware vessels recovered at the Wari site of Espíritu Pampa, four were found in this burial. The first Wari blackware vessel was a burnished bottle with a flat base; a single, slightly



Figure 3.60. Context 2.12 was a pit that contained six ceramic vessels. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.

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Figure 3.61. A Wari-style face-neck vessel recovered in Context 2.12. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-49.



Figure 3.62. A Wari-style bottle recovered in Context 2.12. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-50.

convergent cylindrical spout; and a narrow, vertical strap-handle (EP 2012-47,  $15.5 \times 13.0$  cm, Figure 3.63). The area immediately below the neck of the vessel is decorated with a horizontal band defined by straight white lines, between which run two wavy lines. The globular body of the vessel, above its clear inflection point and below the horizontal band, is covered with a net-like design of narrow white lines. The white decorations on the vessel are, however, difficult to see since the pot was fired in a reduction atmosphere.

The second Wari blackware vessel was a small burnished pot with a single, small vertical strap-handle and a short, wide outward-flaring neck and rim (EP 2012-45,  $14 \times 13$  cm, Figure 3.64). The lip of the vessel is damaged. Its globular body is decorated with a delicate design in phantom white lines, which are difficult to see because the vessel was fired in a reduction atmosphere. The rim of the vessel is decorated with a horizontal band of fine vertical white lines. The base of the neck also contains a horizontal band, composed of two parallel white

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Figure 3.63. A decorated Wari blackware bottle recovered in Context 2.12. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-47.



**Figure 3.64.** A small decorated Wari blackware vessel recovered in Context 2.12. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-45.* 

lines, between which runs a snake-like design. There are also clusters of densely drawn thin white lines that descend from this band. Furthermore, areas of the exterior of the vessel are now covered with what appear to be small rectangular areas of red paint. This vessel is similar in form to a vessel found in Context 2.8 (EP 2011-40), and others have been recovered in the Ayacucho region (Ochatoma Paravicino 2007:249e).

The third and fourth Wari blackware vessels recovered within this context are both small, nondecorated

drinking vessels. One of the drinking vessels is burnished and has a flat base and thin, straight, slightly divergent sides (EP 2012-46,  $10.5 \times 11$  cm, Figure 3.65). The other drinking vessel is about the same size and shape but cruder with distinctly thicker sides (EP 2012-48,  $10.5 \times 10$  cm, Figure 3.66).

#### Context 2.13

Context 2.13 was situated within the northwest quadrant of Area 2 (Figure 3.2). It was located just to the

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Figure 3.65. A nondecorated Wari blackware drinking vessel recovered in Context 2.12. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-46.



**Figure 3.66.** A nondecorated Wari blackware drinking vessel recovered in Context 2.12. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-48.

east of Context 2.4 and south of Context 2.5. Context 2.13 was a small, nearly square stone-lined cist, measuring 47 cm east-west, 34 cm north-south, and 32 cm deep (Figure 3.67). The top was sealed with two stone slabs, and the floor was composed of a single stone slab. The cist included two ceramic vessels.

One of the two vessels found in Context 2.13 was a "bilobed" vessel (EP 2012-52,  $8 \times 18$  cm, Figure 3.68).

The exterior of this pot is painted a dark orange and contains complex geometric designs outlined with double-incised lines. The distal end of the vessel has a slightly raised face that could be human or, as suggested by various local workers on the project, may represent a monkey. The style of this vessel is unlike that of any other pot found at the site. Although the ceramic styles of different Montaña groups are poorly

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Figure 3.67. Context 2.13 held two vessels. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.



Figure 3.68. An unusual "bilobed" Montaña-style vessel recovered in Context 2.13. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2012-52.

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Figure 3.69. A bowl with a complex black and red over white interior design was recovered in Context 2.13. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2011-51.

known, it seems likely that this piece was produced by indigenous people of the area. Support for this suggestion comes from the work of Raymond (1972, 1982) at the sites of Granja de Silvia and Quimpiri along the lower Apurimac River. While his excavations did not record any "bilobed" vessels, he has documented numerous vessels with geometric designs made with double-incised lines.

The second vessel recovered in Context 2.13 is an especially fine example of a Huamanga-style bowl, with a flat base and straight-flaring sides (EP 2012-51, Figure 3.69). The exterior of the vessel has been painted red, and the interior is decorated with alternating straight black lines and wavy red lines over a white background. The interior center of the bowl has been divided into four quadrants. Two of the quadrants are filled with red dots while the other two are filled with black dots. Although not identical, the similarities that are shared between this vessel and one of the bowls recovered in Context 2.11 (EP 2012-43) suggest that they are contemporary. Other similar bowls have been found in the Wari heartland (Ochatoma Paravicino and Cabrera Romero 2016:310, Figure 18).

#### Context 2.14A

The southwest corner of Area 2 contained two closely spaced contexts, the relationships of which were difficult to determine because some looting had occurred in this area. They may represent two chambers, divided by a stone wall, of a single burial.

Context 2.14A included a pit approximately 60 cm wide and 100 cm deep dug into the southeast side of the Area 2. It contained a large collection of ceramic vessels and lithic materials (Figure 3.70). The collection is especially interesting since most the ceramics included within the cache appear to be for domestic use.

The first object recovered in Context 2.14A was the head of a small zoomorphic figurine painted red, perhaps representing the bear (EP 2010-29,  $4.1 \times 3.3$  cm, Figure 3.71). Vessels with similar adornments attached to them, as well as the molds to produce the adornments, have been recovered in excavations in the Ayacucho region. The figurine was placed within one of four undecorated Wari-related plainware bowls stacked one on top of the other in the pit. Three of the bowls had flat bases and straight but irregularly formed divergent sides (EP 2010-30,  $8 \times 19.9$  cm; EP 2010-31,  $8.5 \times 20.3$  cm; EP 2010-33,  $7 \times 16.8$  cm; Figures 3.72-3.74). The fourth bowl has a small pedestal base (EP 2010-32,  $9 \times 20.3$  cm, Figure 3.75). Each of the bowls contained bits of carbon and cinnabar, likely the result of offerings made at the time of the burial. Although these are plainware vessels, their straight, outward-flaring sides are reminiscent of Huamanga bowls from the Ayacucho region.

Two large plainware jars were also recovered in Context 2.14A. The first was placed upside down near the center of the pit. This vessel has a conical base; a globular body with a short, damaged neck; and a wide-flaring mouth with a heavily eroded lip (EP 2010-35,  $33 \times 18$  cm, Figure 3.76). It contains no handles and its base was covered with soot. The second jar

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**Figure 3.70.** Context 2.14A contained a large collection of ceramic vessels. Also note the obsidian point in the lower-left corner of this photograph. *Ministerio de Cultura*, *photograph by Javier Fonseca Santa Cruz*.



Figure 3.71. A fragmented, molded bear head was recovered in a bowl within Context 2.14A. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-29.

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**Figure 3.72.** A domestic bowl recovered in Context 2.14A. *Ministerio de Cultura*, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-30.



Figure 3.73. A Wari-related plainware bowl recovered in Context 2.14A. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-31.



Figure 3.74. A Wari-related plainware bowl recovered in Context 2.14A. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2019-33.

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Figure 3.75. A Wari-related plainware bowl recovered in Context 2.14A. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-32.





Figure 3.76. A domestic jar. Ministerio de Cultura, photographs by Javier Fonseca Santa Cruz, artifact number EP 2010-35.

recovered in Context 2.14 was found sitting upright on one side of the pit. It contains two small side handles, a diamond-shaped body, and a distinctly flaring mouth and rim. The bottom of the vessel was covered with soot (EP 2010-34,  $27.8 \times 22.3$  cm, Figure 3.77).

The four large bifacially worked obsidian points were recovered resting as a group on the floor of this pit along with a piece of pink quartz (EP 2010-27A/B, EP 2010-38A/B, Figure 3.78). Portable X-ray fluorescence analysis indicates that the points are made from obsidian from the Alca-1 source (Sierra Palomino 2013b).

#### Context 2.14B

Tangent to and immediately south of Context 2.14A was a stone-lined cist, the top of which had been disturbed by looters, but it appears that they did not reach the floor of the burial (Figure 3.2). While the walls of the cist were poorly defined, the base was formed by a single stone slab 72 cm long and 42 cm wide. Two large ceramic sherds had been placed under one corner of the stone slab to help level it. Like many of the cist bases at Espíritu Pampa, this slab had a 6-cm wide hole through it center.

Excavations revealed a number of important items resting on the floor of the cist. The most notable artifact

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Figure 3.77. A jar with a funnel-shaped rim. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-34.



Figure 3.78. Four obsidian points were found in Context 2.14B. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, left to right, artifact number EP 2010:37A/B, EP 2010:38A/B.

was a pectoral made of sheet silver, which appears to portray a bird with spread wings (EP 2010-38,  $24.0 \times 11.4$  cm, Figures 3.79 and 3.80). The two ends of the wings are marked with poorly preserved animal heads (felines?) in profile. The lower edge of the pectoral, including the tail portion of the bird, contain rows of vertical chevrons, similar to those seen on the silver pectoral from Context 1.4.

The large head of the bird, which is shown in profile, rises above the pectoral near its midpoint. Although poorly preserved, the head of the bird appears to face left, and its single eye contains a "weeping motif" common to Middle Horizon art.<sup>5</sup> Two small thread holes can be seen above the human head where the object was attached to cloth (see Chapter 9 for more details on this pectoral).

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**Figure 3.79.** The stone base of Context 2.14B. Note the silver pectoral, the two bronze spear points, and the hole that was drilled through the center of the slab. *Ministerio de Cultura*, photographs by Javier Fonseca Santa Cruz.

Several other items were also recovered in this cist. There were two long, narrow bronze spear points with tapered shanks on the bottom of the cist (EP 2010-39, 11.0 × .08 cm, Figure 3.83). A similar point was found in Context 6.11, and others have been recovered at the sites of Conchopata (Rios 1987:11) and Ccotocotuyoc (Mary Glowacki, personal communication 2017). Furthermore, various small greenstone beads and evidence of powdered cinnabar were also noted on the floor of the cist.

### **Summary**

Area 2 was defined by the foundation of a D-shaped building. Excavations beneath the floor of the building revealed the remains of two rectangular structures as well as 14 burials/offerings, the forms and contexts of which varied greatly. The location of the most elaborate burial, Context 2, was indicated by a two-tier, circular marker that contained a small hole in its center. Beneath the marker was a shaft that led to a small rectangular chamber, underneath which was a bell-shaped chamber. Three ceramic vessels, one of which was a fine Chakipampa-style bowl, were recovered on the floor of the final chamber along with three pairs of bronze tupus. Like several other burials at the Wari site of Espíritu Pampa, there was a hole drilled into the floor and a large vessel, apparently to catch liquids, which would have been poured into the context as offerings.

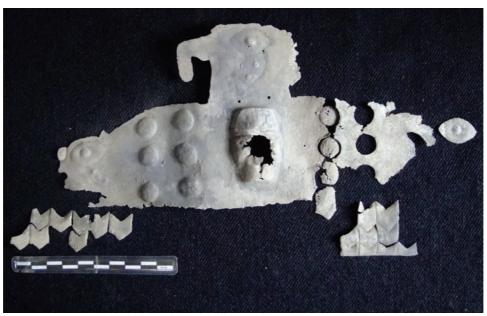
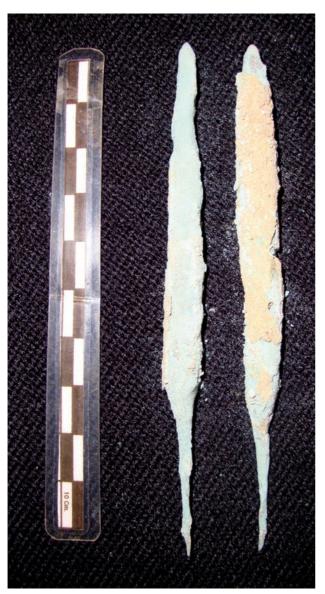


Figure 3.80. The silver pectoral in the shape of a bird with spread wings recovered in Context 14B. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-36.

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**Figure 3.81.** Two bronze spear points with tapering shanks from Context 2.14B. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-39.* 

Because of the complexity of Context 2, we presume that the person who was buried within it was of high status. Two other individuals buried within Area 2 also appear to have been of high status as they were buried with silver pectorals (Context 2.10 and Context 2.14). Four of the burials within Area 2 contained multiple pairs of *tupus* (Contexts 2, 4, 5, 7, and 9). Since *tupus* are traditionally associated with females in the Andes, it is likely that these interments were women.

Two carbon samples from Area 2 were submitted for AMS dating, one from the floor and one from a burial. They yielded closely spaced dates (AD  $691\pm37$  and AD  $685\pm27$ ) but rather different 95.4 percent confidence levels. Carbon from the floor of the building (Sample AA 100019) provide a calibrated AD 691 to 941 (95.4 percent confidence level) range while the sample recovered from within the burial, Context 12 (Sample AA 106768), offered a calibrated AD 666 to 859 (95.4 percent confidence level) range. Taken together, these samples suggest that the building was in use during the eight century AD.

#### Notes

- 1 A similar level of rock fill has been found in a D-shaped structure at the site of Huari (Ochatoma Paravicino et al. 2015:70–75).
- 2 Sample AA100019.
- 3 For example, see Ochatoma Paravicino (2007:128, Figure A) and Ochatoma Paravicino and Cabrera Romero (2001:lower figure opposite p. 101).
- 4 Sample AA106768.
- 5 Anita Cook (personal communication, 2019) notes that the direction of the weeping eye motifs indicates that the figure may have been facing left. In this interpretation, the element thought to represent the bird's beak would have been the ear of a right-facing face.



## Areas 3, 4, 5, and 7

n this chapter, we examine the results of the excavations that took place in four closely spaced architectural units: Areas 3, 4, 5 and 7. These four units are located in the southwestern quadrant of the 2010 to 2013 research area (see Figure 1.4). Areas 3, 5, and 7 are relatively small, rectangular areas, while Area 4 is a D-shaped structure. Each of these areas provided notably different research results.

#### Excavations in Area 3

Area 3 is a rectangular structure built on the west side of the plaza, tangent to Area 4 (Figures 1.4 and 4.1). The structure is open to the north. The southwest interior corner of the building contained a grinding anvil and a hand grinding stone. The removal of the forest humus and a thin level of eroded materials revealed a hard-packed floor made of yellow and brown clay. A scattering of undecorated ceramic fragments was recovered on the floor. No burial contexts or offerings were found within the building. Because this structure intrudes into the plaza area and is tangent to Area 4, it appears to be one of the final structures built at the site. The grinding stone and the open north wall lend an air of informality to the building, suggesting that it was constructed when the site was in decline, if not already abandoned.

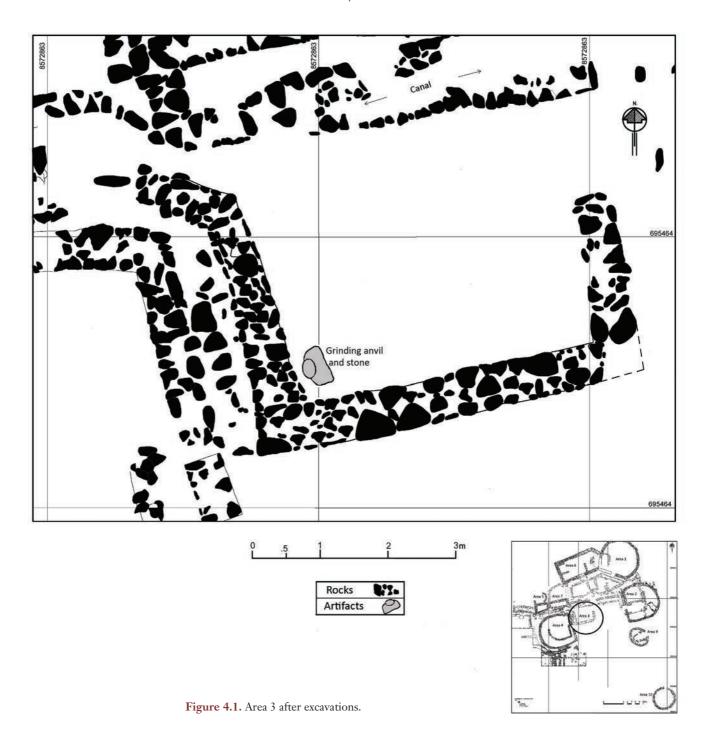
#### Excavations in Area 4

Area 4 is a D-shaped structure located on the west side of the central plaza (Figures 1.4 and 4.2). The straight wall of the D-shaped structure runs approximately north to south. The straight wall is about 7 m long and the building is about 9 m deep. The building contains a single doorway that faces east onto the patio. This D-shaped structure faces but is not exactly aligned with the D-shaped structure of Area 2, which is located on the other side of the plaza.

Sometime after the construction of Area 4, a smaller D-shaped structure was built within it. Although poorly preserved, it appears that this smaller building had a straight wall measuring about 5 m long and was approximately 6 m deep. From the unusual superimposition of these two D-shaped structures, we suspect that the site was abandoned for a short period of time, after which people returned and built the small D-shaped structure within Area 4. Later still, looting took place at the site, which destroyed parts of both structures.

Excavations within Area 4 followed naturally occurring levels. Some pottery fragments, mostly plainwares churned up during the looting activities that occurred within the building, were found in the upper levels. Like the other large D-shaped structures at the site, the interior also contained a vast number of

#### Chapter 4

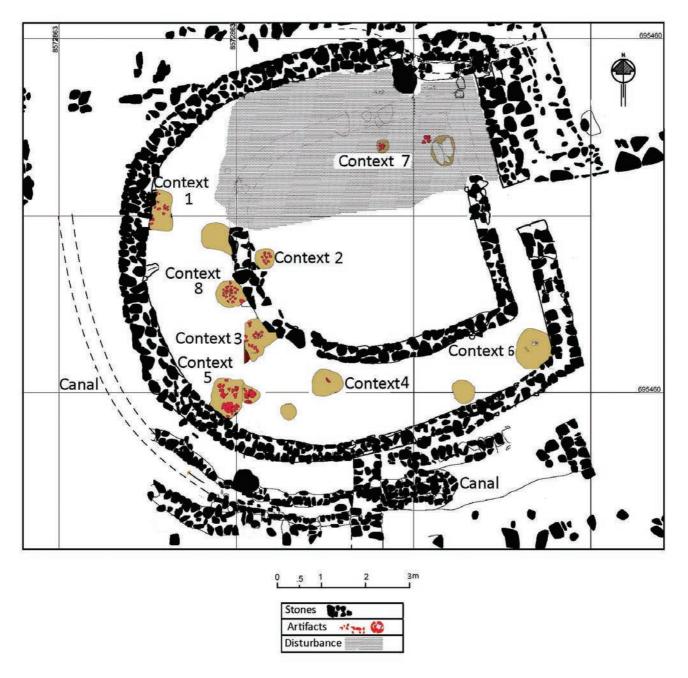


small stone slabs and cobbles, much of which appear to have been intentionally placed within the building at the time of its abandonment or perhaps the result of wall fall (Figure 4.3). The excavations revealed that the internal walls of the structure had once been plastered and painted yellow.

Although badly disturbed in some areas, the original, hard-packed earthen floor of Area 4 could be

distinguished and was discolored in various places by burning events. Carbon recovered on the floor of Area 4 provided an AMS date of AD 572 ± 36 (calibrated AD 649-773; 95.4% percent confidence level). This is the earliest date we have from the Wari site of Espíritu Pampa, and it is a relatively early date for Wari remains outside of the Ayacucho region. The excavations also revealed several small stake-like stones protruding up

Areas 3, 4, 5, and 7



**Figure 4.2.** Area 4 after excavations. This area contained two D-shaped structures, one built inside the other. Looters have destroyed parts of both structures.

through the floor. It was later found that these stones marked the locations of eight shallow offerings, all of which contained shattered pottery (Contexts 1–8).<sup>2</sup>

Context 1 was a 45-cm-wide pit that contained fragments of a plainware vessel. Soot on the exterior of the vessel indicates that it was used for cooking. Context 2 was located tangent to the northwest wall of the structure. It was 60 cm in diameter and contained the shattered

remains of at least one plainware, closed-mouth vessel and a broken Huamanga-related straight-sided bowl. Context 3 was some 55 cm in diameter and contained the remains of at least one plainware vessel. Context 4, a 40-cm-wide pit, contained the fragmented remains of a single plainware, soot-covered vessel with curved walls and a single vertical strap-handle. Context 5 was an irregularly shaped pit,  $40 \times 80$  cm, dug adjacent to

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Figure 4.3. The interior of Area 4 was filled with small stones. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.

the southwest wall. It contained the broken remains of a plainware, closed-mouth vessel. Context 6 was located in the southeast corner of the building. The offering pit was about 58 cm in diameter and contained the remains of a Cajamarca-style bowl with white paste and a plainware, closed-mouth vessel. Context 7 was found within the large looted area of the building. It was a small pit, about 24 cm in diameter, with the shattered remains of one plainware, closed-mouth vessel and a Huamanga-related bowl with straight divergent walls and a flat base. There may have also been a capped cist in this area of the building, but looting precluded a definitive identification. The final offering pit, Context 8, measured 90 ×50 cm and was located between Contexts 1 and 3. It contained the remains of a single plainware vessel.

In summary, excavations revealed that the offerings made in this building were modest, consisting of one or two ceramic vessels each. Most of the pots were plainwares and several showed evidence of having been used for cooking. Two of the pits (Contexts 2 and 7) contained Huamanga-related bowls but not of exceptionally high quality. One offering (Context 6) contained a shattered Cajamarca-style bowl. Although we have only one carbon sample (Sample AA100018), it is tempting to speculate that this building was constructed during an

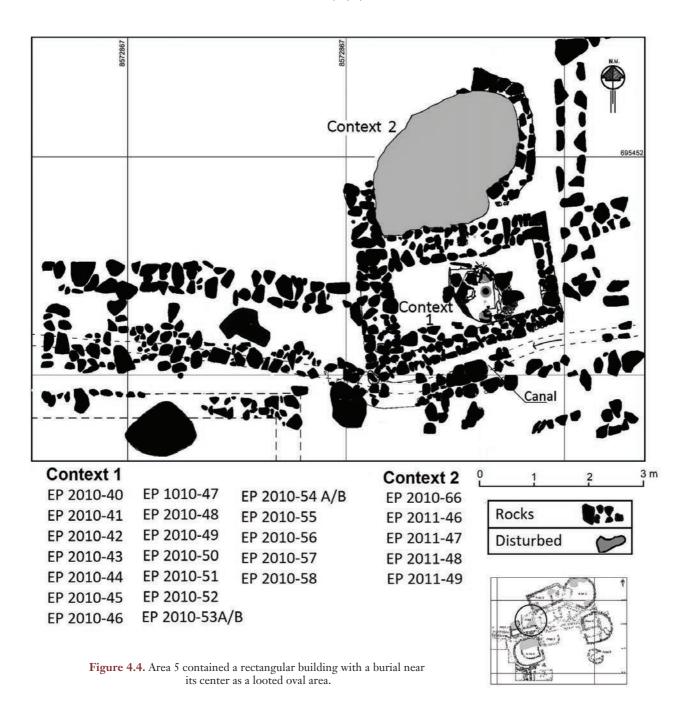
early phase of Wari expansionism during which they had already developed close cultural contacts with the Cajamarca region. It should also be noted that while rituals were certainly held within Area 4, it was not used for burials. In contrast, during later times, elite burials began to be included within the other, similarly sized, D-shaped structures (Areas 1 and 2) constructed around the plaza.

#### Excavations in Area 5

Area 5 included a rectangular structure, defined by low standing walls, that measured 1.78 m east to west and 1.22 m north to south as well as a tangent, badly looted oval area (Figure 4.4). Excavations in the rectangular structure began with the removal of the forest humus, under which was a level of stones. The removal of the stones revealed a compact earthen floor, beneath which was a "boot-shaped" burial (Context 5.1) sealed with several stone slabs. At a depth of about 60 cm, evidence of a burned offering that included the remains of a rodent (most likely a guinea pig [Cavia porcellus]) and a long, thin, silver plume-pin (EP 2010-40, 17.5 × 2.0 cm, Figure 4.5), was found within the shaft of the burial.

At a depth of about 1 m, an elongated slab was found inserted into the east side of the shaft. This slab functioned as a step for those entering and leaving the burial (Figure 4.6). The floor of the burial, which was

Areas 3, 4, 5, and 7



found at a depth of about 1.80 m and was made of flat stones, contained a wide range of ceramic offerings. Directly below the stone step, against the side of the burial shaft, were two nested, nearly identical, geometric-on-light polychrome bowls with short pedestal bases (EP 2010-41, EP 2010-42,  $20.5 \times 8.0$  cm, Figure 4.7). The interiors of the bowls are painted with a complex arrangement of black and red geometric figures

(wavy lines, triangles, concentric circles, panels, 8s,

etc.) on a cream background. Their exteriors contain

a series of alternating red and black lines on an orange background. This style of vessel was first identified by Bennett (1953:68) at the site of Huari, and since that time, others have been recovered within Wari deposits across the former realm. At the time of Bennett's work, the inspirational source of the geometric-on-light vessels was unknown, but it is now believed, based on their decorations and pedestal bases, to reflect a Cajamarca influence (Isbell 2016:65, 66; Knobloch 2016:105, 107; Watanabe 2016).

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**Figure 4.5.** A silver plume-pin was found as part of an offering made within the shaft of the boot-shaped burial. *Ministerio de Cultura*, *photograph by Javier Fonseca Santa Cruz*, *artifact number EP 2010-40*.



**Figure 4.6.** The shaft of the boot-shaped burial (Context 5.1). Note the stone step on the side of the shaft and the many vessels on the floor. *Ministerio de Cultura*, *photograph by Javier Fonseca Santa Cruz*.

Directly below the geometric-on-light polychrome bowls, also adjacent to the shaft of the burial, was a locally produced face-body pot. This vessel contained two handles, a short inverted neck, and a flaring rim (EP 2010-43, 15.5 × 20.0 cm, Figure 4.8). One of the handles has been broken off and the remaining handle has four small incisions, suggestive of fingers, where it connects to the rim of the pot. One side of the vessel is decorated with a molded face that was painted dark red. The eyes are made of slits in the clay, rather than the more commonly seen "coffee bean"–shaped eyes of the central Andes. The ears, nose, and mouth are slightly raised. There are small protuberances near each handle. At the time of recovery, the lower parts of the vessel were covered in soot, suggestive of cooking.

Two other bowls were found, one inside the other, on the floor of the burial. The larger vessel, a Huamangarelated bowl (EP 2010-44,  $6.5 \times 17.9$  cm, Figure 4.9), has straight flaring sides, a rounded lip, and a flat bottom. It is

eroded, but the remains of polychrome motifs can be seen on its interior. The second, smaller bowl (EP 2010-45,  $5.5 \times 14.2$  cm, Figure 4.10) is a curved-sided, flat-bottomed, Chakipampa-style vessel (Isbell 2016:58). This bowl is covered with orange-red, now somewhat eroded, paint. The exterior of this bowl contains two representations of a stylized reptile, separated by vertical columns of white, orange, and maroon chevrons set between red and gray columns. The stylized reptile is in profile, with a large head, a circle-and-dot eye, a notable eyebrow, and two upright-standing white ears. The animal has a rectangular mouth with "N"-shaped canines and a curling nose. It has a long body that ends in an upturned fishlike tail, the end of which is painted in red, white, and gray. There are six circles with center dots, painted red, white, and gray, along the body of the animal. The legs resemble red boots with white, rounded tips. One of the reptiles has a gray body while the other is red. The animal has a prominent white dorsal ridge (Lumbreras

Areas 3, 4, 5, and 7



Figure 4.7. The two geometric-on-light polychrome bowls found in Context 5.1. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact numbers, EP 2010-41 [left], EP 2010-42 [right].

1960a:177; Tello 1942:94), and it has been noted on vessels recovered at various Wari sites in the Ayacucho heartland and at Pikillacta (Glowacki 1996:661, 668; Isbell 1977:134, 116; Ochatoma Paravicino and Cabrera Romero 2001:19). The animal has been called "Animal con Espalda Zigzag" or el "Dragon" (Isbell 2016:57–59; also see Menzel 1964:11, 1968a:Plate 28).

Near the center of the burial shaft was a concentration of ceramic vessels resting on several stone slabs. These included two nearly identical, Chakipampa-style (Isbell 2016:56, 57), straight-sided, flat-bottomed bowls (EP 2010-47,  $9.5 \times 25.5$  cm, Figure 4.11 and EP 2010-46,  $9.5 \times 27.5$  cm, Figure 4.12). These finally polished, red-slipped bowls were found placed upside down, one inside of the other. The exterior design of the smaller of the two bowls (Figure 4.11), which was protected from humidity, was better preserved than that of the larger outer bowl (Figure 4.12).

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Figure 4.9. A Huamanga-related bowl with the faint remains of polychrome motifs was found on the floor of Context 5.1. *Ministerio* de Cultura, photographs by Javier Fonseca Santa Cruz, artifact number EP 2010-44.

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**Figure 4.10.** A Chakipampa-style bowl with a stylized reptile was recovered in Context 5.1. This animal is a known Wari motif and has been identified on vessels at a number of different sites. *Ministerio de Cultura*, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-45.

These bowls contain three images of a double-headed creature called the Ayacucho Serpent by Menzel (1964:15, Figure 17, 1968a). The creature is outlined in black and painted on a cream background. It contains a rectangular, toothed mouth and prominent red and gray whiskers. The eyes are formed by concentric red and white circles. Its body is composed of conjoined circles that contain nested white and red circles. Two sets of double-recurving rays protrude like feet from each of the conjoined circles. The three images of the creature on the vessel are similar but not identical. Two of the images are painted gray and contain two circular body parts, while the third image is painted red and contains only one circular body part. The three images are separated by stacked, rectangular panels that contain amorphic, four-tipped ray designs that are commonly seen in Chakipampa and Nasca pottery.

The unique nature of the Ayacucho Serpent makes it easily recognizable (Lumbreras (1960a:176–177;

Tello 1942:94). Bowls with similar serpents have been found at the site of Huari and various others in the Wari heartland,3 in the Andahuaylas region (Joel Grossman, personal communication, 2016), and in the Cusco region (Mary Glowacki, personal communication, 2016). Some of these vessels appear so similar that they may have been produced in the same workshop, a hypothesis that could be explored through geochemical testing. The serpent-like creature is also seen on bowls recovered at sites on the central coast4 and elsewhere in the Wari realm (e.g., Bazán 2001:357). Illustrations of the creature are not limited to bowls, as shown on a double-spouted, Nievería-style vessel found near Cajamarquilla and currently held at the Art Institute of Chicago (Knobloch 2013:126; Menzel 1964:Figure 17).

The two bowls with the Ayacucho Serpent motif were found resting on top of two other broken bowls, with straight, slightly flaring sides, rounded lips, and flat bottoms. One is a Huamanga-related bowl that has

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serpent motif is a widespread design on Wari vessels and has been found at sites in the highlands and along the coast. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-46.

interior designs including vertical black and red bands, outlined with white lines (EP 2010-55, 4.5 × 10.0 cm, Figure 4.13). The second of the broken bowls is a Huamanga-related vessel that is undecorated except for an orange slip (EP 2010-56,  $4.0 \times 11.0$  cm, Figure 4.14).

Two additional ceramic objects were recovered within the same concentration of vessels on the floor of Context 5.1. The first is a small, undecorated vessel fired in a reduction atmosphere (EP 2010-57,  $4.8 \times 8.5$ cm, Figure 4.15). The shape of the vessel suggests that it may have been used to hold lime for coca chewing. Slightly further north was a large, two-handled, locally produced face-body vessel with a short inverted neck and a flaring rim (EP 2010-43, 19.5 × 20 cm, Figure 4.16). There are two small protuberances on the body, one near each handle. The face is partially covered with a bright orange pigment. The ears, nose, and mouth are slightly raised. Fire marks on the exterior of the vessel indicate that it had been used in cooking.

Four silver tupus were also recovered lying flat on the floor of the shaft. Two of the tupus (EP 2010-49, EP 2010-50, Figure 4.17) were large and found near each other, although in separate locations. The best preserved of these larger tupus contained a small piece of light-brown cotton textile fused to one of its surfaces. The other two silver tupus were medium sized and were recovered one on top of the other (EP 2010-53A, EP 2010-53B, Figure 4.18).

The boot-shaped burial also contained a small (80 cm wide and 90 cm high) chamber that extended beyond the shaft. This area was partially filled with earth at the time of the interment, leaving a small open space. A flat-lipped pot with a single basket-style strap-handle

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Figure 4.12. The second of two straight-sided Chakipampastyle bowls with the Ayacucho Serpent motif found in Context 5.1 These bowls were found upside down and nested one inside the other. The bowl shown in this picture was the outer of the two bowls, so its designs are less well preserved. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-47.

was found resting on a flat stone slab in this open space (EP 2010-58,  $13 \times 20$  cm, Figure 4.19). The vessel is covered with a polished red slip (Figure 4.20). Similar vessels have been found in the Wari heartland and at Pikillacta (Bennett 1944:41, 43; Glowacki 1996:694; Isbell 2016:58–59).

The chamber area of the boot-shaped burial also contained two pairs of differently sized bronze *tupus*.





Figure 4.13. A Huamanga-related bowl decorated with vertical black and red bands, outlined with white lines, was found in Context 5.1. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-55.

Two medium-sized bronze *tupus* were found one on top of the other (EP 2010-54A, 2010-54B, Figure 4.21) while two large bronze *tupus* (EP 2010-51, EP 2010-52, Figure 4.22) were found in different locations on the floor of the chamber. The poorly preserved remains of teeth, some with worn crowns, as well as bits of cinnabar, were recovered in this area of the burial.

#### Context 5.2

Directly north of the rectangular structure in Area 5 was a large, disturbed space. This disturbed area contains a crescent-shaped wall only a few tiers high, all that remained of what was once an oval construction estimated to be about 2.5 m long and 1.0 m wide. Near the center of this disturbed area was the looted remains

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Figure 4.14. A Huamanga-related undecorated bowl from Context 5.1. Ministerio de Cultura, photographs by Javier Fonseca Santa Cruz, artifact number EP 2010-56.



Figure 4.15. A small vessel was found within Context 5.1. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-57.

of a stone-lined cist made with elongated slabs set vertically into the ground. On the bottom of the cist, along one side, was a rectangular silver pectoral with a human face in high relief that had escaped the view of the looter (EP 2010-66, 17.5 × 14.4 cm, Figure 4.23; also see Chapter 9 for a more detailed description).

Four bronze items were also found near the bottom of the looted cist. The first of these is an oval-shaped spear-thrower hook (EP 2011-49). A similar spear-thrower hook was found in Context 9.2. Other bronze spear-thrower hooks have been recovered during excavations at Wari sites in Andahuaylas (Lucas Kellett, personal communication, 2012) and at the site of Castillo de Huarmey on the central coast (Giersz and Pardo 2014:Figure 81). Two poorly preserved bronze *tupus* (EP 2011-47, EP 2011-48) and a small piece of sheet bronze (EP 2011-46, 10.2 × 5.8 cm), were also recovered in the disturbed area surrounding the cist. The recovery of a

spear-thrower hook along with two *tupus* in this context is especially interesting since it suggests that individuals of female gender could be buried with weapons. As with many other cists of the site, there was evidence that a burning event occurred within this context.

#### Excavations in Area 7

Area 7 is an irregularly shaped, quadrilateral room with a maximum length of 5.70 m (north-south) and 3.40 m (east-west) located immediately east of Area 5 (Figure 4.24). About 40 percent of its interior has been disturbed by looters. As a result of these activities, the surface of the room was covered with loose rocks and soil when the project began. With removal of the looters' debris, as well as the forest floor and wall fall, a hard-pack occupation surface was identified. There was an area of burning on this surface, about .50 m in diameter, presumably part of a ritual event.

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**Figure 4.16.** The second of two face-body pots recovered in Context 5.1. *Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-48.* 



Figure 4.17. Two large silver tupus recovered in Context 5.1. The first tupu has a small piece of textile still attached to it. Ministerio de Cultura, photographs by Javier Fonseca Santa Cruz, artifact number; left to right, EP 2010-49, EP 2010-50.



Figure 4.18. A pair of medium-sized silver tupus recovered one on top of the other in Context 5.1. Ministerio de Cultura, photographs by Javier Fonseca Santa Cruz, artifact numbers EP 2010-53A, EP 2010-53B.

The west wall of the room had been bisected by the construction of a conical, stone-lined cist, sealed with six slabs of slate. The cist (Context 7.1), which clearly postdates the construction of the room, was made of a mixture of elongated stone slabs and tiered stones. The cist was about 90 cm deep and about 100 cm wide at its mouth. The interior of the cist contained two upright-standing, stake-like stone slabs and two slightly worked, cobblestone-sized, rectangular stones rested on its floor. No other materials were recovered in the cist.

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**Figure 4.19.** The boot-shaped burial contained an open space where a vessel had been placed before the shaft was sealed. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-58.



**Figure 4.20.** A vessel with a basket-style strap-handle was recovered in Context 5.1. *Ministerio de Cultura*, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-58.

#### Areas 3, 4, 5, and 7



**Figure 4.21.** A pair of medium-sized bronze *tupus* was recovered from within the chamber of Context 5.1. *Ministerio de Cultura*, *photograph by Javier Fonseca Santa Cruz*, *artifact numbers EP 2010-54A and EP 2010-54B*.

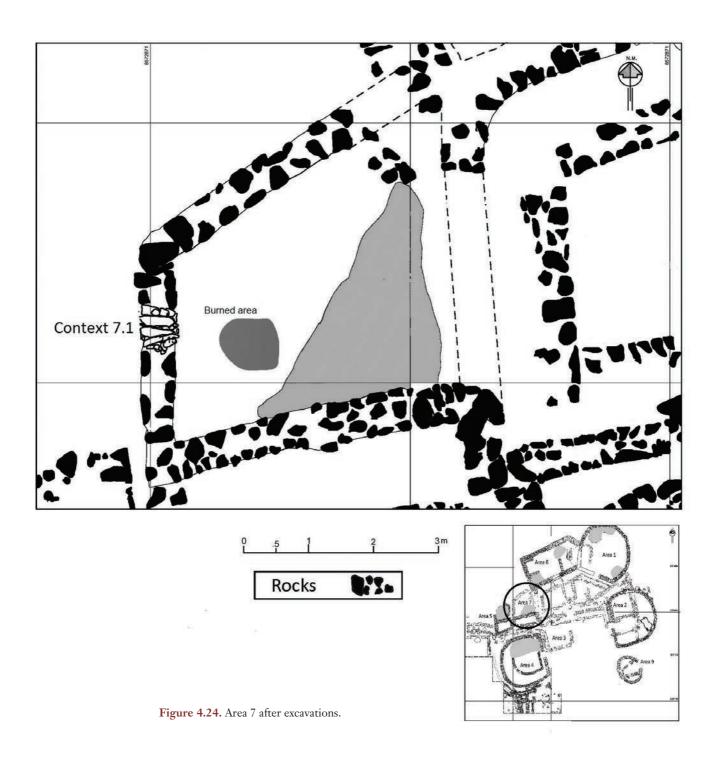


Figure 4.23. The silver pectoral recovered in Context 5.2. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-66.



Figure 4.22. Two large bronze tupus were found in different locations within the chamber of Context 5.1. Ministerio de Cultura, photographs by Javier Fonseca Santa Cruz, artifact numbers, left to right, EP 2010-51 and EP 2010-52.

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Areas 3, 4, 5, and 7

#### **Summary**

Excavations in Areas 3, 4, 5, and 7 yielded very different results. Area 3 appears to be an informal structure built in an open area, most likely when the site was in decline. Area 7 is a small rectangular structure, one wall of which was later disturbed by the construction of a conical, stone-lined cist.

Area 4 consists of two D-shaped structures one inside of the other. Radiocarbon testing of charcoal collected from the floor of the larger D-shaped structure suggests that it was the first D-shaped structure to be built at the site. This sample also suggests that the Wari expanded into the low-lying regions north of its homeland rather early during their period of expansionism. Nevertheless, the recovery of a Cajamarca-style bowl within an offering in this building indicates that the Wari had already developed close cultural contacts with the Cajamarca region at the time of its use. Furthermore, when the early date of Area 4 is combined with other dates from the site, it is clear that the Wari occupied the region for several centuries. The final D-shaped structure constructed at the site appears to be the small D-shaped structure built within Area 4. We believe that this final D-shaped structure may represent a brief reoccupation of the site, after a period of abandonment.

Area 5 contained two important burials: Contexts 5.1 and 5.2. Context 5.1 was a boot-shaped burial with

a large number of artifacts, including 12 ceramic vessels that ranged from cooking vessels to finely made Chakipampa-style bowls. This burial also contained various metal items, including four bronze and four silver *tupus*. Unfortunately, Context 5.2, an oval area located near to Context 5.1, was badly looted. Nevertheless, a rectangular silver pectoral was recovered near the bottom of the looters' pit along with a bronze spear-thrower hook and two bronze *tupus*. The identification of these two well-endowed burials documents that the interment of elite individuals were not restricted to the interior Areas 1, 2, and 3 of the site. Furthermore, the presence of *tupus* in both Contexts 5.1 and 5.2 suggests that the interred individuals were females.

#### **Notes**

- 1 Sample AA100018.
- 2 No human remains or metal objects were recovered within the offerings of Structure 4.
- 3 Benavides Calle (1984:Lamina X), Bennett (1953:79), Brewster-Wray (1990:607, Figure 67), Ochatoma Paravicino et al. (2015:69), Cook (1994:Lamina 35:h), González Carré et al. (1999), Isbell (2016:56), Knobloch (2013:126, 127), Lumbreras (1960a:177), and Pozzi-Escot et al. (1994:275).
- 4 Such as Cajamarquilla (Mogrovejo and Segura 2000:579) and Huaca 20 in Lima (Mac Kay and Santa Cruz 2000:594).



# Area 6 and the Lord of Vilcabamba

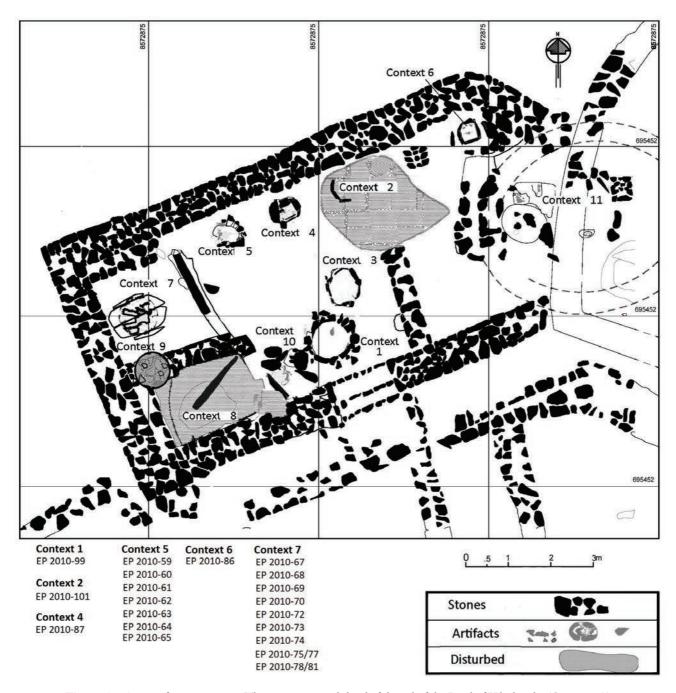
rea 6 is a roughly rectangular enclosure measuring about  $12.65 \times 4.88$  m (Figures 5.1 and 5.2). The south side of Area 6 has an entranceway and a set of three stairs, each measuring 140 cm long and 30 cm deep, that led up-slope from this enclosure toward the plaza of the site. Area 6 also has two internal secondary walls. One of these walls begins near the stairs and runs roughly north to south. It is 65 cm wide and 170 cm long. The original length of this wall is not known since one end has been destroyed by a looters' pit. The second interior wall is about 3 m long and divides the west end of Area 6 into two rectangular compartments. Both of these compartments once contained elaborate burials. Unfortunately, the southwest corner of Area 6 was looted decades before the start of this project. However, the intact burial of the Lord of Vilcabamba was found in the northwest corner. The northeastern corner, where Area 6 abuts with Area 1, is slightly convex. While the chronological relationship between these two areas is difficult to determine since in Inca times, a circular structure was built in this area of the site, it appears that Area 6 predates Area 1.

Excavations in Area 6 began with the removal of the forest humus, the looters' debris, wall fall, and other materials deposited since the abandonment of the site. With the removal of these levels, the excavations revealed the original occupation floor of the enclosure, which was composed of compact yellow clay, mottled with brown. Excavations beneath the floor revealed a minimum of 11 burials and offerings.

#### Context 6.1

Context 6.1 was a slightly conical, stone-lined cist, 90 cm in diameter and 75 cm deep, dug near the base of the stairs on the south side of Area 6 (Figure 6.1). The cist was capped with three flat stone slabs, and the shaft was composed of eight vertically positioned stone slabs. A fine flask, decorated with a forward-facing human, was found leaning against the wall of the cist (EP 2010-99,  $24 \times 18.5$  cm, Figure 5.3). The individual has a white hat and is wearing a tunic covered with white sequins (representing shell or silver), each of which contains two thread holes. The figure on the flask has a modeled nose, mouth, and ears, and two sets of white lines stream from each of the eyes (i.e., tear motifs). Knobloch (2012, 2016, 2018) believes that this same sequin-covered individual is represented on other Wari vessels and corresponds to an individual she calls "Agent 103."1 Knobloch (2016:100) has classified this vessel as

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**Figure 5.1.** Area 6 after excavations. This area contained the shaft burial of the Lord of Vilcabamba (Context 6.7) as well as a number of other important interments.

a coastal, Atarco-style ceramic, but it should be noted that similar vessels have also been found at other Wari sites in the highlands, such as K'ullupata (Espinoza Martínez 2015). Excavations at the site of El Castillo de Huarmey on the coast of Peru have also provided other excellent examples of this vessel type (Figure 5.4; also see Giersz and Pardo 2014).

#### Context 6.2

Context 6.2 was a poorly preserved stone-lined cist near the north wall of Area 6 that was disturbed by looters. The context was defined by three upright slabs arranged in a crescent and attached with a yellow clay mortar. Several fragments of a Wari blackware drinking vessel were found adjacent to the stone slabs (EP

Area 6 and the Lord of Vilcabamba



**Figure 5.2.** Area 6, looking east. The sealed, elite burial of the Lord of Vilcabamba is at the bottom left. A looted second elite burial can be seen in the bottom right. Other sealed cists can also be seen within the structure. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz*.





Figure 5.3. A flask depicting an individual wearing a sequin-covered tunic was recovered in Context 6.1. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-99.

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Figure 5.4. One of two twin flasks from the Wari site of Castillo de Huarmey (see Giersz and Pardo 2014). The Castillo de Huarmey flasks are very similar to the flask recovered in Context 6.1 at the Wari site of Espíritu Pampa.

Courtesy of the Ministerio de Cultura: Museo Nacional de Arqueología, Antropología e Historia, photograph by Brian S.

Rauer

2010-101). Although broken, it is clear that the vessel had a thick, horizontal, raised band near its lip (see Isbell 2015:66).

#### Context 6.3

Context 6.3 was a stone-lined, conical cist located near the center of Area 6, just west of the dividing wall. It was sealed with four slabs that had collapsed inward. The cist measured about 100 cm in diameter and 75 cm deep. Its base was defined by a single stone slab. Seven cobble-sized stones had been placed on the floor of the cist along its interior edges (Figure 5.5). No human remains or artifacts were recovered in this cist. It is possible that this cist was empty and waiting to be used or that it once held an interment, perhaps supported by the ring of stones, but none of the remains have survived because of the damp conditions of the region.

#### Context 6.4

Context 6.4 was a slightly conical cist, capped with three slabs, located near the north wall. The cist was composed of eight elongated, upright-standing stone slabs and measured 50 cm wide and 95 cm deep (Figure 5.6). A conical pendant, made of rolled silver foil with two thread holes at its proximal end, was found on the south side of the cist (EP 2010-87,  $5.8 \times 1.0$  cm, Figure 5.7). Nearby was a rectangular mass of fired clay and a small rectangular stone.

#### Context 6.5

Context 6.5 was a conical cist, located near the north wall of the enclosure, which was capped with five stone slabs. The cist was lined with 12 elongated stones and tapered slightly inward. It measured about 100 cm wide at its mouth and 90 cm at its base. The cist contained various offerings as well as the remains of human teeth (Figure 5.8).<sup>2</sup>

The first object encountered in Context 6.5 was a silver, circular, two-plumed diadem pin (EP 2010-60,



**Figure 5.5.** Context 6.3 was empty, apart from a series of cobbles arranged around its base. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.

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Figure 5.6. Like many cists at Espíritu Pampa, Context 6.4 was made of elongated stone slabs. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.



Figure 5.7. A silver pendant was found in Context 6.4.

Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz,
artifact number EP 2010-87.

31 × 20.4 cm, Figure 5.9). This impressive artifact was found resting on its side against the west wall of the cist. There is a line of small embossed circles running around the edge of the diadem pin and a second line of embossed circles crossing from side to side through its middle. These embossed circles are similar to those found on many of the circular pectorals recovered at the site (see Figure 5.10). The interior of the diadem pin was once decorated with 25 cutout silver sequins, which were attached through single thread holes. Five of these cutouts remain attached to the artifact. Two plumes emerge from the top of the diadem, the ends of which have been damaged.

A poorly preserved silver circular pectoral was found lying on the floor of the cist (EP 2010-65, Figure 5.10). The border of the pectoral is decorated with a series of embossed circles. Although the central design is poorly preserved, it is clear that this pectoral contains a meandering-line design similar to those found on several other known examples of silver circular pectorals found at the site and elsewhere in the Wari realm.

Two large silver *tupus* (EP 2010-61, EP 2010-62,  $14.2 \times 6.1$  cm, Figure 5.11) and two small bronze *tupus* (EP 2010-63, EP 2010-64,  $5.2 \times 2.9$  cm) were found on the floor of the cist, indicating that the interred person

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Figure 5.8. Context 6.5, a conical cist made of elongated stone slabs, contained various offerings and the teeth of an interred individual. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.



Figure 5.9. A silver, circular, two-plumed diadem pin decorated with small embossed circles and cutout silver sequins was found in Context 6.5. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-60.



Figure 5.10. Context 6.5 contained a poorly preserved silver circular pectoral with a meandering-line design. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-65.

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Figure 5.11. One of two large silver tupus found within Context 6.5. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-61.

may have been female. A rectangular block of bright yellow clay and scattered bits of cinnabar were also found within the cist.

Last, a ceramic flask was recovered on the floor of the cist. The flask, now slightly eroded, contains a stylized human head in profile outlined with a white band, perhaps representing sheets of silver or pieces of shell (EP 2010-59, 20 × 8 cm, Figure 5.12). The figure also has a distinctive ear and an earplug. The spout of the vessel is red, the upper half of the body is orange, and the bottom half is a brownish-black. Knobloch (2012, 2016) has documented the same personage, whom she calls Agent 103, on different vessels recovered at Wari sites in both the highlands and the coast (Figure 5.13). She has classified this particular pot as an Atarco-style vessel (Knobloch 2016:99). The two narrow sides of the vessel contain thick white lines decorated with S designs.

#### Context 6.6

Context 6.6 was a cylindrical-shaped cist located in the northwest corner of Area 6. The cist measured approximately 70 cm in diameter and about 80 cm deep and was constructed with stone blocks, river stones, and elongated slabs (Figure 5.14). It was sealed with three large flat stones. Within the cist was a single, upright-standing stone slab. A Huamanga-style bowl fragment, a polishing stone, two small stone pestles, a stone mortar (EP 2010-86, Figure 5.15), and a poorly preserved piece of bronze were recovered on the floor of the cist.

#### Context 6.7

This context corresponds to the burial of the individual who has become known as the "Lord of Vilcabamba." At the time of its discovery, the burial represented the highest-ranking individual recovered at an excavated Wari site. This high-ranking burial highlights the importance that the Vilcabamba region, and more specifically the Espíritu Pampa area, held for the Wari.

The burial was located in a small rectangular construction, approximately  $2 \times 3$  m, in the northwest corner of Area 6. At the time of the excavation, the surface of Context 6.7 was covered with debris from a looting event that occurred immediately to the south of it, in Context 6.8. As a result of the nearby looting, a number of large stone slabs, some more than 2 m long, lay across Context 6.7. Ironically, the large size of these lithic elements and their secondary placement over Context 6.7 may have aided in the preservation of this important burial.

A thin level of gray clay followed by a thin level of hard-packed yellow clay served to seal the funerary context. Beneath the clay levels were two large,  $150 \text{ cm} \times 65 \text{ cm}$ , symmetrically shaped capstones (Figure 5.16). A hole, 5 cm wide, had been drilled between these two capstones, marking the center of the burial.

The removal of the capstones revealed a burial cist measuring about 1 m across and 1.7 m deep. (Figure 5.17). Deep burials are unusual at Wari sites, but a number have been recorded since the 1990s (e.g., Isbell et al. 1991:41, 42), with perhaps the best-known example being found at the site of Batán Orco (Zapata 1997:198–199), a burial that may have also held an elite individual. Other notable examples of deep, stone-line shafts have been found at Pikillacta; two separate shafts held cashes of greenstone figurines (Cook 1992) while two more recently excavated examples held a mixed-metal/*Spondylus* figurine assemblage (Arriola Tuni and Tesar 2011; Cuba Muniz y Amachi Plores 2019.).

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Figure 5.12. A flask (cantimplora) with a face in profile was found in Context 6.5. Ministerio de Cultura, photographs by Marco Uniysonco Perez, Brian S. Bauer, and Javier Fonseca Santa Cruz, artifact number EP 2010-59.



Context 6.7 was well prepared and finished by the Wari. The shaft is constructed of some 26 courses of river cobbles and small stone blocks and was plastered with gray clay.<sup>3</sup> Near the top of the shaft on the northwest side are four small stone pegs of different dimensions, as well as two small D-shaped holes painted with cinnabar (Figure 5.18). The floor of the burial is composed of a single slab.

The interior of the burial was filled with a fine, very dark soil, intermixed with gray clay plaster that had eroded from the sides of the shaft. A thin lens of yellow clay was found near the bottom of the shaft, followed by a thin lens of gray clay, beneath which was the remains of a single individual, presumably interred in a mummy bundle, and a wide range of silver and gold offerings (Figures 5.19 and 5.20). While some of the offering materials were well preserved, many were damaged by a fire that was set on the floor of the tomb near the mummy bundle during the interment rituals or at some later time.<sup>4</sup>

The most impressive item contained within the burial was a large silver Y-shaped pectoral embossed with various designs (EP 2010-67,  $65 \times 53$  cm, Figure 5.21). Both arms of the pectoral are topped with rounded-nose feline heads in profile and the pectoral ends in a large crescent. As will be discussed more fully in Chapter 8, the artistic style reflected in this remarkable

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**Figure 5.13.** A cup held by the Museo Larco shows the same figure as seen on a flask recovered in Context 6.5 at the Wari site of Espíritu Pampa. *Courtesy of the Museo Larco, negative number ML010484a.* 



Figure 5.15. Two stone pestles and a mortar were among the artifacts found on the floor of Context 6.6. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-86.



Figure 5.14. Context 6.6 was a stone-lined cist. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.

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**Figure 5.16.** Context 6.7 with the capstones still in place. Note the small hole drilled at the center of the shaft. *Ministerio de Cultura*, *photograph by Javier Fonseca Santa Cruz*.



**Figure 5.17.** Context 6.7 with the capstones removed. *Ministerio de Cultura*, *photograph by Javier Fonseca Santa Cruz*.

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**Figure 5.19.** Excavating Context 6.7. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.

Figure 5.18. The shaft of Context 6.7 was once covered with gray plaster. Note the two small holes and the stone pegs sticking out from the wall. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.



**Figure 5.20.** The Lord of Vilcabamba was buried with a large number of items. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.* 

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Figure 5.21. Context 6.7 contained a magnificent Y-shaped pectoral (EP 2010-67). Note the silver mask (EP 2010:68) near the pectoral and the axe on the other side (EP 2010-69)). Various other burial goods can also be seen in this photograph. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.



Figure 5.22. A silver mask was found beside the pectoral in Context 6.7. Note the bright red cinnabar below the chin of the mask. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.

silver pectoral falls within what is becoming to be called the Southern Andean Iconographic Series (SAIS) style, which was used by both Wari and Tiwanaku (Isbell et al. 2018).

Tangent to the pectoral was a life-size silver mask with raised facial features (EP 2010-68,  $20.2 \times 18.5$  cm, Figure 5.22). The outer edge of the mask had been pounded flat, and a series of thread holes indicate that the mask was once attached to a mummy bundle. Faint skin impressions on the oxidized underside of the mask

document that it was in direct contact with the face of the interred individual. The remains of nine adult teeth were recovered beneath the mask, which, according to an analysis conducted by Elva Torres Pino within the Physical Anthropology Office of the Dirección Desconcentrada de Cultura del Cusco, still contained microscopic pieces of muscle tissue. The presence of erupted third molars indicates that the individual was at least 21 years of age. A study of periodontitis and transparency of the dental roots, following Lamendin et al. (1992), suggests the individual was aged between 25 and 35 years.

The remains of three necklaces, containing some 687 greenstone beads of mixed materials (e.g., malachite, calcite, lapis lazuli, and serpentine), were recovered in the area around the mask (Figure 5.23). This same area was also marked by bits of cinnabar,



Figure 5.23. Three necklaces with various types of greenstone beads were recovered in Context 6.7. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact numbers EP 2010-75, 76, 77.

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Figure 5.24. Four silver plumes found within the burial of the Lord of Vilcabamba. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact numbers [left to right] EP 2010-78, EP 2010-79, EP 2010-80, and EP 2010-81.

suggesting that the parts of the mummy bundle were painted red, a practice that has been noted in other Wari burials.<sup>5</sup> Four silver plumes (Figure 5.24), each measuring about 11 cm long and 4 cm wide, were recovered, together with bits of oxidized cloth, near the top of the death mask on the floor of the burial, suggesting that they once adorned the head of the interred individual. Similar plumes have been found in other Wari contexts.

The remains of an elaborate axe and a staff were also recovered on the floor of Context 6.7, both of which are made of *chonta* wood wrapped in silver lamina (Figure 5.25). A compositional analysis of the silver ribbons on the axe and on the staff found them to be similar to most of the other silver items recovered at the site (Sierra Palomino 2013a). In contrast, a compositional analysis of the axe blade indicates it is composed of a complex alloy made of copper, silver,

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**Figure 5.25.** A poorly preserved but elaborate axe (EP 2010-69) and a staff fragment (EP 2010-70) were found in Context 6.7. Both objects are covered with silver lamina. The axe blade is made from an unusual combination of copper, silver, tin, and gold, suggesting that it was made in the Late Titicaca region. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.

tin, and gold (in deceasing percentages) as well as a number of trace elements. As discussed in Chapter 8, the use of tin in this axe blade is interesting because it is thought that tin alloys were developed in the Lake Titicaca region during Tiwanaku times (Lechtman 2005:133). Accordingly, this axe blade may represent an imported item from the Lake Titicaca region, perhaps even from Tiwanaku.

Two nearly identical gold arm bands (EP 2010-72,  $10.8 \times 22.2$  cm, Figure 5.26) were found within the burial, below the pectoral. From the position of these arm bands, it appears that the individual was wearing them at the time of the interment. The arm bands



**Figure 5.26.** Two gold arm bands were recovered in Context 6.7. The left band was damaged by fire. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-72.* 

contain embossed, anthropomorphic rounded-nose feline heads in profile (for more details, see Chapter 8), which are relatively common within the SAIS artistic tradition. One of the bands was slightly damaged by the burning event that took place within the burial.

There were also some 230 oval to circular silver sequins and five larger rings of silver lamina found on the floor of the burial (EP 2010-74, Figure 5.27). Many of these items had been damaged by fire, and each contained a pair of thread holes. Since several Wari figurines and drawings show individuals wearing sequin-covered tunics (see Figure 5.3), it is reasonable to assume that these sequins were once attached to a tunic.

Fourteen silver panels, each measuring about 7 cm square, were recovered mixed in with the sequins (EP 2010-73, Figure 5.28). Each panel contains an embossed, anthropomorphic feline head in profile as well as two thread holes. Seven of the heads faced right while the other seven faced left. Several of the panels retained the remains of cinnabar paint, which originally covered them. Like the rounded-nose feline heads in profile show on the gold arm bands (EP 2010-72) and on the Y-shaped pectoral, the feline heads on these silver panels fall within the SAIS artistic tradition.

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Figure 5.27. A large number of silver sequins and five larger silver rings were recovered in Context 6.7. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-74.

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**Figure 5.28.** Small silver panels with anthropomorphic feline faces in profile found within Context 6.7. These examples still retain the remnants of cinnabar paint. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-73.

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#### Context 6.8

Context 6.8 was a rectangular looted space, measuring approximately  $2.5 \times 1.70$  m, in the southwest corner of Area 6. This context was separated from Context 6.7 by a small wall. The large number of stone slabs in the looters' debris from this area suggests that it once contained a rectangular cist with a series of thin, long stone slabs running down its center, similar to the major cist of Area 1. Although this was likely an important burial, no artifacts were recovered because of looting.

#### Context 6.9

Context 6.9 was a conical, stone-lined cist found abutting the western wall of Area 6, below the secondary wall that was built to separate Contexts 6.7 and 6.8 (Figure 5.29). The position of this cist indicates that it predates the wall and perhaps the two major burials of this area. Context 6.9 was made from elongated stone slabs and slightly oval in shape. It measured about  $70 \times 1.30$  cm wide and 1.6 m deep. It was capped with four stones and its base was composed of a single, semicircular stone slab. The sides of the cist were covered with a gray clay mortar that had eroded in places into the cist. The base of the cist was covered with a thick 2.5-cm level of clay that showed signs of burning. A bronze tupu (EP 2010-85,



**Figure 5.30.** A bronze tupu from Context 6.9. *Ministerio* de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-85.



Figure 5.29. A silver circular pectoral was found on one side of Context 6.9.

Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.

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**Figure 5.31.** A circular silver pectoral with a six-petal design found in Context 2.9. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-84.* 

Figure 5.30) and a well-preserved silver circular pectoral (EP 2010-84, Figure 5.31) that measures 29.5 cm in diameter were recovered on the floor of the cist. The pectoral contains small embossed circles and a six-petal design. It is similar to other circular pectorals found at the site and elsewhere in the Wari realm (see Chapter 9).

#### Context 6.10

This context represents a highly disturbed stone-lined cist that was located between Context 6.1 and Context 6.8 (Figure 5.32). The same looting episode that destroyed Context 6.8 also damaged Context 6.10. The cist contained one, perhaps more, rectangular, upright-standing stone slabs. Despite being looted, a silver circular pectoral 26 cm in diameter was recovered on the floor of the cist (EP 2010-82, Figure 5.33). The six-petal design of this pectoral is similar to but does not mirror the pectoral found in Context 6.9. Immediately west of the pectoral was the remains of a necklace with various silver thimble-shaped beads (Figure 5.33; also see Chapter 9).



**Figure 5.32.** Context 6.10 had been looted but its position was still marked by a single, upright-standing slab. The floor of the cist contained a silver circular pectoral and the remains of a necklace with silver thimble-shaped beads. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz, artifact numbers EP 2010-82 and EP 2010-83.

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**Figure 5.33.** A silver circular pectoral with a six-petal design and a necklace with thimble-shaped silver beads was recovered within Context 6.10. *Ministerio de Cultura*, *photograph by Javier Fonseca Santa Cruz*, *artifact numbers EP 2010-82 and EP 2010-83*.



Figure 5.34. Twelve rectangular pieces of mica with thread holes were found in Context 6.11. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-93.

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#### Context 6.11

Context 6.11 was located near the southeast corner of Area 6. It included the area near and within a circular burial pit that was capped with a single round stone slab. The pit, which was cut into the subsoil, was 92 cm in diameter and 20 cm deep. The area above the burial was disturbed during Inca times by the construction of a circular structure and by later looting activities at the site.

The context contained a range of objects. Twelve rectangular pieces of mica, each measuring around 2.5 × 2 cm and containing thread holes, were recovered within the pit (EP 2010-93, Figure 5.34). A bronze spear point (EP 2010-94, Figure 5.35), similar to two other points found in Context 2.14B, was also found within the pit. Furthermore, two large obsidian bifaces (EP 2010-95, EP 2010-96, Figure 5.36), both sourced



Figure 5.35. A bronze point from Context 6.11. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-94.



Figure 5.36. Context 6.11 contained two large obsidian points. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact numbers [left to right] EP 2010-95 and EP 2010-96.

to the Alca-1 deposits by portable X-ray fluorescence (P-XRF), were found on the bottom of the burial along with two small bronze *tupus* that were oxidized together along with a piece of textile (EP 2010-89; see Appendix 1), an unidentified bronze object with a piece of textile oxidized to it (EP 2010-91; see Appendix 1), and the remains of a rectangular silver pectoral (EP 2010-92, Figure 5.37) with pieces of textile oxidized onto it. The context also yielded a concentration of charred *chonta* wood, a badly deteriorated textile with silver bangles, an unidentified object made of sheet bronze (EP 2010-88A), a small bronze chisel (EP 2010-88B), a poorly preserved bronze *tupu* (EP 2010-97), an undecorated ceramic spindle whorl (EP 2010-90), and fragments of adult human premolars and molars.

#### **Summary**

Although parts of Area 6 were looted before the start of this project, excavations within this low-lying, sub-rectangular structure yielded remarkable remains. The interior of Area 6, like those of the two D-shaped structures to its east, contained a large number of burials and offerings. At least 11 such contexts were identified and almost all were stone-lined cists that were capped by flat stones.

The most noteworthy of the burial/offerings is Context 6.9, a burial that held the remains of the Lord of Vilcabamba. This individual, who appears to have died in his late 20s, was buried with an impressive Y-shaped pectoral. This Wari elite was also buried with two gold armbands, a life-size silver mask, a ceremonial axe and staff, and clothing covered with various types

#### Area 6 and the Lord of Vilcabamba



Figure 5.37. The remains of a silver rectangular pectoral with pieces of oxidized textiles was recovered in Context 6.11. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-92.

of silver sequins and square panels. As will be discussed in Chapter 8, the axe blade is made of a complex alloy (containing copper, silver, tin, and gold) suggesting that it was from the Lake Titicaca region, an area that was controlled by Tiwanaku. The exotic origin of the axe blade would have been known to those who saw it, adding to the ethos of this ritual implement. In addition, several items within Context 6.7 fall within what is known as the Southern Andean Iconographic Series (SAIS), an artistic tradition that reached its

apex during the Middle Horizon and frequently links elite individuals with a cosmology that was shared by both Wari and Tiwanaku.

While it is likely that the Lord of Vilcabamba was the highest-ranking individual interred in Area 6, he was not the only elite individual buried there. There is a looted area immediately south of his tomb that may well have held another impressive interment. Two other burials in Area 6 (Contexts 6.9 and 6.10) contained silver circular pectorals, both of which are decorated with six-petal designs. Another cist (Context 6.5) contained a third silver circular pectoral, with a meander-line design, as well as an elaborate diadem pin. Yet another (Context 6.11) contained a silver rectangular pectoral. Three of the burials contained tupus (Contexts 6.5, 6.9, 6.11), suggesting that the interred may have been females. The clustering of these elite burials, female and presumably male, within a small area is unprecedented for Wari research in the highlands and speaks to the overall importance of the site.

#### Notes

- 1 In this regard, it is worth noting that the individual buried within Context 6.7 was wearing a textile covered with silver sequins.
- 2 The teeth included incisors, molars, and premolars.
- 3 This same gray clay was used in many other cists at the site. The workers involved in the project suggested that the clay was quarried near the village of Concevidayoq some 4 km away.
- 4 It is worth noting that no ceramic items were included in the burial.
- 5 Another concentration of cinnabar was also found within the Y-shaped area of the pectoral.
- 6 One of the textiles appears to be made of whitish-gray camelid hair and the other of light-brown cotton (see Appendix 2).



# The Circular Structures: Areas 9 and 10

large number of circular structures are spread across the Espíritu Pampa area (Bauer et al. 2015:77–78). Their locations are marked by low foundation walls that generally stand less than 50 cm high. The circular buildings range in diameter from 3 to 9 m, and they tend to have single doorways, marked by upright-standing slabs. Bingham noted some of these circular buildings during his first visit to the site in 1911. He writes,

In one of the clearings we located the ruins of a village which had eighteen or twenty primitive circular dwellings. All that remained were walls from two to three feet in height with a single door opening. . . . These houses were arranged in an irregular group. In the woods not far away there seemed to be the remains of other circular houses of about the same size [Bingham 1914:185–186].

Bingham (1922:293) believed that the circular buildings were constructed at the time of the Inca occupation by the indigenous people of the region or by a native group that the Incas brought into the region.

In 1964, some 50 years after Bingham visited the Inca ruins of Espíritu Pampa, Gene Savoy returned to the site, and he also commented on the numerous cir-

cular buildings that were spread across the area. Savoy (1970) proposed that these structures were the remains of Machiguenga speakers, such as those who were living at the site when Bingham first visited. Later researchers (Bauer et al. 2015) believed that the circular buildings dated to Inca times but noted that it was possible that they could predate the Inca occupation of Espíritu Pampa.

As part of the research plan at the Wari site of Espíritu Pampa, two circular structures (Area 9 and Area 10), both clearly visible on the surface, were selected for excavation in 2012. Although both of these circular buildings were located near the newly exposed D-shaped structures, it was believed that they postdated the Wari presence in the region. Nevertheless, excavations were needed to securely date the structures and to probe for evidence of earlier occupations beneath them. In this short chapter we report on the results of those excavations.

#### Area 9

Excavations were conducted in what was termed Area 9, a circular building located only a few meters south of Area 2, to better understand the history of the circular buildings of Espíritu Pampa (see Figure 1.2).<sup>1</sup> The removal of the forest humus and the wall collapse

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Figure 6.1. Two wall segments and two sealed cists, all dating to the Middle Horizon, were found beneath an Inca floor in Area 9. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.

exposed the original floor of the building that was made of compact clay. The floor of this circular building contained a scatter of broken domestic ceramics and a few lithic tools. The remains of several fragmented Inca aryballos were also recovered, confirming that the circular building was in use during Inca times.

The removal of the Inca period floor exposed a segment of a pre-Inca wall and an area of extremely dense wall fall and stones. The recovery of Wari-related vessel fragments among these remains dated them to the Middle Horizon. Further excavations revealed the remains of a second, thinner wall and, deeper still, the tops of two cists (Figure 6.1). Both of the cists were sealed with three lenses of different-colored clay (yellow, white, and red) and covered with large stone slabs.

The first cist, Context 9.1, was cylindrical in shape and made with tiered stones. It was about 100 cm wide and 90 cm deep. Its walls and floor were plastered with gray clay. The floor of the cist was formed with flat stones. A single standing elongated stone slab once stood in the center of the cist, but it had slumped to one side. Excavations within the cist yielded the remains of three eroded bronze *tupus* (EP 2012-18, EP 2012-19, and EP 2012-20), along with 57 blue-green stone beads (EP

2011-55). A concentration of cinnabar, several patches of decaying *chonta* wood, and the remains of adult human molars were also recovered near the bottom of the cist.

The second cist of Area 9, Context 9.2, was similar to the first, although it contained two standing stone slabs (see Figure 1.5). The cist floor was covered in yellow clay and its center was marked by a large flat stone with a hole drilled through its center. Small pieces of plant fiber and cinnabar were found on the floor as well as minute bone and teeth fragments. Bits of carbon from a burning event were also noted on the floor along with a shattered, open-mouth, plainware vessel. The carbon provided a calibrated radiocarbon date of AD 686 ± 28 (AD 666–86 calibrated; 95.4 percent probability).<sup>2</sup>

Three metal artifacts were recovered from the cist. The first was a bronze axe. The axe blade (EP 2012-23) contains a flat heel, shallow notches, and a long, flaring blade ( $11 \times 6$  cm). It was recovered with part of its *chonta* wood handle still attached to it (Figure 6.2). The second metal artifact was a bronze spear-thrower hook (EP 2012-24, Figure 6.3), in the form of an elongated sphere with a flat appendage. A similar hook (EP 2010-49) was recovered in Context 5.2 and others have been found at other Wari sites both in the highlands and along the coast.

The Circular Structures: Areas 9 and 10



**Figure 6.2.** A bronze axe blade with parts of the *chonta* wood handle still attached. *Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-23.* 

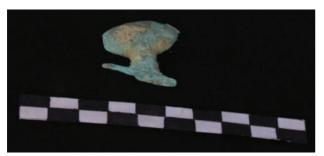


Figure 6.3. A bronze spear-thrower hook from Context 9.2. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-24.

The third metal artifact was recovered in this cist was a poorly preserved silver circular pectoral (EP 2012-22, ca. 21 cm in diameter; Figure 6.4). The perimeter of the pectoral was marked by two rows of embossed circles, and additional embossed circles may have once been near its center. Although poorly preserved, it is clear that this pectoral is similar in style to the other circular pectorals recovered at the Wari site of Espíritu Pampa (see Chapter 9).

#### Area 10

Area 10 was a circular structure located approximately 10 m south of Area 9. Excavations occurred in Area 10 during 2012 with the removal of the forest humus followed by the wall collapse. The door of the building faced north to northwest and measured less than a meter wide. The excavations exposed the original floor of the building that contained the remains of broken plainware ceramics, a T-shaped tupu (EP 2011-25, Figure 6.5) made with a copper-tin alloy (see Chapter 8), a stone hoe, and a miniature ceramic vessel. A small fragment of white and blue majolica pottery was also found on the floor, confirming that the building was inhabited during the early contact period. A grinding anvil and a hand grinding stone were found along the wall, opposite the door. The original floor level also contained several small rectangular areas defined by slate slabs that appeared to have been for storage.



Figure 6.4. A silver circular pectoral was found in Context 9.2. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-22.



Figure 6.5. A copper-tin T-shaped tupu was recovered on the floor of Area 10. Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-25.

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**Figure 6.6.** Excavations below the Inca circular structure revealed a series of architectural elements indicating that additional Wari foundations at the site remain to be documented. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.

The removal of the Inca floor level revealed a series of architectural elements dating to the Middle Horizon, including part of a circular wall, perhaps belonging to another D-shaped structure, a rectangular corner, and a canal. These architectural elements indicate that the Wari remains at the site are much larger than those that were exposed during the 2011 to 2012 excavation seasons.

#### **Notes**

- 1 In 2010, the remains of a circular building that had been constructed overlapping Areas 1 and 6 were excavated. However, because of looting at the site, this circular structure was poorly preserved and its age could not be determined.
- 2 Sample 106770.



# The Ceramics of the Wari Site of Espíritu Pampa

n this chapter, we discuss the ceramic vessels recovered within the burials and offerings at the Wari site of Espíritu Pampa between 2010 and 2012. Since individual descriptions of each of the pots have already been presented in Chapters 2 to 6, here we will speak in broader terms and discuss the different categories of ceramics that can be recognized at the site. From the architectural and artifactual remains, we believe that many of the people who lived at Espíritu Pampa during the Middle Horizon were colonists from the highlands, perhaps even from the Ayacucho region. But questions remain. For example, "How did the inhabitants of the site make use of local ceramic resources?" "How did they interact with the indigenous populations of the Vilcabamba region?" and "How closely did the colonists associate themselves with their homeland region?" While none of these questions can be answered with full certainty, insights can be gained through a discussion of the ceramic vessels recovered at the site.

Among Andean archaeologists, the study of Wari ceramics is infamous for the host of names that are applied to different styles. Although Dorothy Menzel created a Wari ceramic typology (1964, 1968a, 1968b) decades ago, there is still much confusion as different archaeologists have attempted to organize the ceramic materials recovered in their surveys and excavations

into this understandably complex classification system. Excavations at the site of Huari itself and elsewhere in the Wari realm have failed to resolve the confusion as different researchers struggle to compare the materials recovered in their projects to Menzel's ceramic sequence that was largely developed from coastal vessels and that grouped different styles into temporal periods without the aid of radiocarbon dates.

Advances have been made with the separation of the Early Intermediate Period ceramic style of Huarpa (Knobloch 1991, 2010; Leoni 2006) from the later Wari-related ceramics of the Ayacucho region. Furthermore, Wari researchers, particularly Knobloch (1983, 1991, 2010), have confirmed the general stylistic groups first described by Menzel, but much more work still needs to be done, especially within the Wari heartland itself, before we can place the study of Wari ceramics on a secure footing and situate the development of Wari ceramics into an absolute time frame. The standardization of terms remains a critical issue, and different researchers continue, for example, to apply stylistic terms such as Orkos, Atarco, Chakipampa, and Viñaque in inconsistent and overlapping ways. This is especially true for the so-called Huamanga-style, which is frequently used as a loosely defined fallback classification for Wari heartland ceramics.

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We are no exception to the above critique as we have struggled to classify the Espíritu Pampa ceramics into previously described categories. Following the works of Skidmore (2014) and Lau (2010), we write of "Wari-related" objects when discussing vessels that appear to reflect general Ayacucho esthetics. We use more specific terms, like Chakipampa, Huamanga, and Wari blackware, on a more limited range of objects that display classic and well-established features of these styles. We also defer to the works of Knobloch (2016) and Isbell (2016) to classify some of the most striking ceramic vessels recovered at the site. Perhaps most important, we provide illustrations of many of the ceramic vessels recovered at the Wari site of Espíritu Pampa so that other researchers can see and improve on our initial ceramic classifications.

#### Cacaopampa-Style Ceramics

A range of locally produced pots were recovered during the course of the 2010 to 2012 excavations at the Wari site of Espíritu Pampa. We use the term Cacaopampa, the name of the field where the Wari site was found, to distinguish the ceramic vessels that we believe were produced at or near the settlement and do not appear to follow clear Wari conventions. Some of these items are so generic in shape that they lend little information beyond their functional classification (e.g., undecorated bowls), while others display unusual shapes and hitherto unrecorded designs, suggesting that they are the products of non-Wari individuals of the Montaña. Unfortunately, because the archaeology of the lower Urubamba is almost nonexistent, and the little work that has been conducted during the course of gas exploration and road construction projects is rarely published, it is difficult to compare the Cacaopampa vessels with those of other sites of the region.1

Cacaopampa ceramics are rather crude and bulky. Initial visual examinations of the ceramic pastes with the aid of a 10′ hand lens suggest the presence of quartz, feldspar, mica, and sand (Sierra Palomino 2013c). Forms include bowls, jars, open-mouth vessels, large neckless vessels, and body-face vessels. The large size and substantial weight of many of these vessels, as well as their crude production, indicate that they were not produced for long-distance trade but instead were made for local consumption.

#### Cacaopampa Bowls, Pots, and Jars

Cacaopampa bowls pots and jars vary in size (Figure 7.1). The bowls are rather generic in shape with flat

lips, slightly concave sides, and flat bases (e.g., Context 2.8, EP 2011-37; Context 2.8, EP 2011-44) while the pots are nondescript and have a variety of rim forms (Context 2.1, EP 2011-2). Two differently shaped, large, locally produced jars were also recovered within a single deposit. One of the jars has a short neck and a wide-flaring mouth (Context 2.14A, EP 2010-35) while the other has a diamond-shaped body and a distinctly flaring mouth and rim (Context 2.14A, EP 2010-34). Soot was present on all vessels, indicating that they were used for cooking.

#### Cacaopampa Neckless Vessels

Two large Cacaopampa neckless vessels were also recovered during the excavations (Figure 7.2). They have flat to conical bases, globular bodies with distinct shoulders, and undecorated exteriors. In both cases, the lip of the vessel has been removed, and they have fire marks on their outsides, suggesting that they were once used for cooking. One of the neckless vessels was found resting upside down in a cist (Context 2.6, EP 2010-28), protecting the other grave goods, while the other neckless vessel was used as a catch basin for liquid offerings underneath the floor of a cist (Context 1.10, EP 2012-27). Similar vessels have not been recorded in the Ayacucho region, but we note that undecorated vessels such as these are often frequently underreported in publications.

#### Cacaopampa Open-Mouth Vessels

The locally produced open-mouth vessels are among the most distinct and interesting ceramics recovered at the Wari site of Espíritu Pampa since they clearly reflect non-Wari stylistic conventions (Figure 7.3). Their bases vary from round to flat to pedestal. Their lower sides are curved while their upper sides tend to be more vertical. Their midsections, which are inflection points, are frequently marked with a raised band decorated with an incised zigzagging line or a slightly undulating band of thumb impressions. The exteriors of the open-mouth vessels are often painted red, while the interiors tend to be covered with geometric designs, represented by groups of parallel white lines over a dark background or dark geometric figures over a light background (Figure 7.4). Of the five examples recovered, one was used as a catch basin for liquid offerings beneath the floor of a cist (Context 2.2, EP 2012-38), and the others were included as grave goods (Context 1.1, EP 2010-9; Context 2.8, EP 2011-15; Context 2.6, EP 2011-29; Context 2.8, EP 2011-39).

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#### Cacaopampa Face-Body Vessels

Two globular face-body vessels were recovered in a single burial (Context 5.1, EP 2010-43, Figure 4.8 and EP 2010-48, Figure 4.8). Both vessels have pairs of slightly arching handles that attach to the rim and shoulder (Figure 7.5). The handles have small incisions, suggestive of fingers, and small protuberances near each han-

dle were most likely used to help lift the pot. One side of each of the vessels has a modeled face with distinctly shaped noses, ears, and slightly raised chins. The eyes and the mouth are represented by incisions. The local workers involved in the project proposed that the shape of the faces and the locations of the ears are suggestive of the *maquisapas* (spider monkeys; *Ateles chamek*) that,

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Figure 7.2. A Cacaopampa neckless vessel. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2010-28.

until recently, inhabited the Vilcabamba region. One of the faces is covered with a red pigment while the other is covered with a yellow pigment. Both vessels also show exterior soot.

#### Montaña Exotica

One ceramic vessel that was recovered from Context 2.13 is unlike anything else found at the site (Figure 7.6). The vessel is a small bilobed pot (EP 2012-52, Figure 3.68). The exterior was covered with a dark orange slip and then decorated with geometric designs made with double-incised white lines. Given the designs and relatively fine nature of this piece, it could represent a valued item produced by a Montaña group.

#### Wari-Related (Plainware) Ceramics

Numerous ceramic vessels were recovered within the burials and offerings of the Wari site of Espíritu Pampa that appear to be for domestic use and that share close



Figure 7.3. The exteriors of four Cacaopampa open-mouth vessels. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact numbers [clockwise from upper left] EP 2010-09, EP 2011-39, EP 2011-15, and EP 2012-38.

#### The Ceramics



mouth vessels. The first two examples show white-on-dark interior designs while the far-right example shows a darkon-light interior design. Ministerio de Cultura, photographs by Marco Uniysonco Perez, Javier Fonseca Santa Cruz and Brian S. Bauer, artifact numbers [clockwise from upper left] EP 2012-38, EP 2011-15, and EP 2011-29.



Figure 7.5. Two face-body vessels were recovered within Context 5.1. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact numbers [left to right] EP 2010-43 and EP 2010-48.

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Figure 7.6. A bilobed-shaped vessel recovered at the Wari site of Espíritu Pampa appears to be produced by a Montaña group. Ministerio de Cultura, photograph by Marco Uniysonco Perez and Brian S. Bauer, artifact number EP 2012-52.

similarities with vessels found in the Ayacucho region (Figures 7.7–7.9). These include vessels with side spouts (Context 2.4, EP 2011-6; Context 2.4, EP 2011-7; Context 2.5, EP 2011-16), a pitcher (Context 2.4, EP 2011-5), a two-handled cooking vessel (Context 2.5, EP 2011-24), single-spout bottles (Context 2.3, EP 2011-3; Context 2.8, EP 2011-40), a double-bodied vessel (Context 1.1, EP 2010-6), and a number of bowls with straight outward-flaring sides (e.g., Context 1.4, EP 2010-27; Context 2.14A, EP 2010-30; Context 2.14A, EP 2010-31; Context 2.14A, EP 2010-32; Context 2.14A, EP 2010-33; Context 5.1, EP 2010-56; Context 5.1, EP 2011-44). We hypothesize that most of these Wari-related plainware vessels were produced with local clays following highland templates, suggesting



Figure 7.7. Two small vessels with side spouts and a two-handled cooking vessel. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifacts numbers [clockwise from upper left] EP 2011-6, EP 2011-24, and EP 2011-7.

#### The Ceramics



**Figure 7.8.** Examples of different Wari-related domestic vessels recovered at Espíritu Pampa. From left to right: a side-spouted vessel (EP 2011-16), a pitcher (EP 2011-5), and a double-body vessel (EP 2010-6). *Ministerio de Cultura*, photographs by Marco Uniysonco Perez and Brian S. Bauer.



Figure 7.9. Three examples of Wari-related plainware bowls with straight outward-flaring sides [left to right] (EP 2010-31, EP 2010-27, EP 2010-32). *Ministerio de Cultura, photographs by Javier Fonseca Santa Cruz.* 

that some of the Espíritu Pampa colonists were producing cooking vessels reflective of their homeland traditions while living in the Montaña.

#### Wari-Related (Finer-Ware) Ceramics

A large set of finer-ware ceramic vessels within the Espíritu Pampa collection reflects vessel shapes and designs long associated with the Wari heartland. These vessels are of relatively good craftsmanship, an observation that, when combined with their finer pastes, suggest that many may be imports into the region. Nevertheless, we are hesitant to place these specific vessels into Menzel's (1964, 1968a) typology for Wari ceramics since they are eroded and their decorations are difficult to see. So for now, we are calling them Wari-related vessels (Figures 7.10 and 7.11). Our collection includes four face-neck vessels (Context 1.1, EP 2010-7; Context 2.12, EP 2012-49;

Context 2.5, EP 2011-19; Context 2.6, EP 2011-30), two single-spout bottles (Context 2.2, EP 2012-35; Context 2.12, EP 2012-50), three flasks (Context 2.7, EP 2011-32; Context 1.12, EP 2012-26; Context 2.8, EP 2011-38), a vessel with a basket handle (Context 5.1, EP 2010-58), and a drinking vessel (Context 2.2, EP 2012-37).

#### Wari-Related Head Jars

Two fragmented Wari-related head jars were recovered during the course of excavations at Espíritu Pampa (Figure 7.12). Both have a flat base and a molded face. Both portraits are wearing hats, which become the mouth of the vessel. They also have carved ears similar to those seen on a female figurine found in Context 1.7 (EP 2012-02). Although both are eroded, they retain patches of polychrome paints (black, red, and cream) and appear to have been made from the same reddish paste.

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Figure 7.10. Three Wari-related face-neck vessels. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact numbers [left to right] EP 2011-19, EP 2011-30, and EP 2010-7.

# Wari Blackware Decorated and Wari Blackware Undecorated-Style Vessels

Wari blackware decorated and Wari blackware undecorated-style vessels include pottery that was fired in a reducing atmosphere. This style was first defined by Bennett (1953:68) at the site of Huari and later adopted by Lumbreras (1960a, 1960b) and Menzel (1964, 1968a). When decorated, these vessels are frequently painted with white lines that can appear somewhat silvery or ghost-like after the firing process (Figure 7.13). The Wari blackware-style vessels recovered at the Wari site of Espíritu Pampa included drinking vessels (Context 2.5, EP 2011-20; Context 2.12, EP 2012-46; Context 2.12, EP 2012-48), single-spout bottles (Context 2.12, EP 2012-45; Context 2.12, EP 2012-47), and an object of unknown function (Context 5.1, EP 2010-57). It is worth noting that this style was found in a limited number of contexts, with four of the pieces coming from Context 2.12. This context also yielded an AMS date of AD 685 ± 27 (AD 666–859 calibrated; 95.4 percent confidence level).

#### Huamanga-Style Ceramics

The term *Huamanga pottery* has emerged as the dominant label for a wide range of ceramics recovered in the Ayacucho region (Cabrera Romero and Ochatoma Paravicino 2003, 2016; Ochatoma Paravicino and Cabrera Romero 2001; Pozzi-Escot 1991). Because the Huamanga pottery classification is now used with-

in most Ayacucho-based ceramic studies and illustrations are widely available, we take the pragmatic step to use it in this study, even though it still requires additional refinement. It should be noted that some of the vessel forms and motifs now classified as Huamanga pottery are included within Menzel's classifications of lower-end Viñaque, Chakipampa, and Okrco vessels. It is useful to think of Huamanga pottery as the local Middle Horizon style of the Ayacucho Basin (Cook 2004:159; Owen 2007:288–289).

A number of Huamanga-style, straight-sided, outward-flaring bowls were recovered within the Wari burials of Espíritu Pampa, including (Figure 7.14) two black-and-red over white bowls (Context 2.11, EP 2012-43; Context 2.13, EP 2012-50), two near-identical black-and-white over orange bowls (Context 2.11, EP 2012-40; Context 2.11, EP 2012-42), one polychrome over orange bowl, and various eroded bowls that contain evidence of multicolored bands and other designs (Context 2.11, EP 2012-43; Context 5.1, EP 2010-55; Context 2.5, EP 2011-27; Context 2.11, EP 2012-41; Context 1.4, EP 2010-25). Other Huamanga-style ceramics recovered included a drinking vessel (Context 2.6, EP 2012-31), a spoon (Context 2.9, 2012-40), and a tall incurving bowl (Figure 7.15). The overall quality of these vessels is so high that we believe that most were imported from the Ayacucho region for use at Espíritu Pampa.

#### The Ceramics



Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact numbers [clockwise from upper left] EP 2012-35, EP 2011-32, EP 2010-58, EP 2012-37, EP 2011-38.

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Figure 7.12. Two Wari-related portrait vessels. Ministerio de Cultura, photographs by Javier Fonseca Santa Cruz, artifact numbers [left to right], EP 2010-21 and EP 2012-28.



Figure 7.13. An undecorated Wari blackware drinking vessel and two Wari blackware decorated single-spout bottles. All of these vessels came from the same burial. *Ministerio de Cultura, photographs by Javier Fonseca Santa Cruz, artifact numbers [clockwise from upper left] EP 2012-46, EP 2012-48, EP 2012-47 and EP 2012-45.* 

#### The Ceramics



Figure 7.14. Examples of Huamanga-style straight-sided bowls. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact numbers [clockwise from upper left] EP 2012-43, EP 2012-50, EP 2010-25, and EP 2012-40.

### Geometric-on-Light Polychrome Bowls (Cajamarca Influenced)

Wari geometric-on-light polychrome bowls were identified by Bennett (1953:68) during his early work at the site of Huari and are now thought to reflect a Cajamarca influence. Two nearly identical geometric-on-light polychrome bowls with pedestal bases were recovered, one inside the other, on the floor of a boot-shaped burial (Context 5.1) (Isbell 2016:65; Knobloch 2016:105). Their interiors contain complex arrangements of black-and-red geometric figures on a cream background, while their exteriors contain a series of alternating red and black lines on an orange background (Figure 7.16).

#### Chakipampa-Style Vessels

Chakipampa ceramics are among the most widespread ceramic style of the Wari (Knobloch 1991; Menzel 1964, 1968a). Developed in the Ayacucho region, the style spread with the expansion of the state and is now seen by archaeologists as a marker of Wari influence in the highlands and along the coast.<sup>4</sup> Chakipampa ceramics tend to have a red background while the closely related Okros style tends to have more of an orange background (Menzel 1964:17). However, at times, it is difficult to separate the two styles since there is a considerable mingling between them (Menzel 1964:18).

Many of the colors and designs found on both Chakipampa-style and Okros-style ceramics are related

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Figure 7.15. Examples of Huamanga-style ceramics. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact numbers [left to right] EP 2012-31, EP 2012-41, and EP 2010-26.



Figure 7.16. Two geometric-on-light bowls were found within the same burial (Context 5.1). Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact numbers [left to right] EP 2010-41 and EP 2010-42.

to those found on late Nasca pottery, but the direction of influence between these two cultures has not been firmly established (Knobloch 1991, 2010; Menzel 1964, 1968a; Proulx 2006). It is currently believed that elements of Nasca ceramics were introduced into the Ayacucho region during the late-Early Intermediate Period since they appear in Cruz Pata ceramics, a preexpansion pottery style of the Ayacucho region (Leoni 2006:291) and in early forms of Chakipampa and Okros pottery (Menzel 1964:10–18). Central highland and central coastal ceramic traditions became even more entwined when Wari expanded from Ayacucho

and established colonies in the Nasca region (Isbell and Knobloch 2006).

At Espíritu Pampa, the Chakipampa-style vessels were restricted to Areas 2 and 5 (Figure 7.17). They included two straight-sided bowls with triangularly headed snakes (Context 2.4, EP 2011-08; Context 2.2, EP 2012-36), a straight-sided bowl with stylized monkeys (Context 2.5, EP 2011-17), two straight-sided bowls with "Ayacucho serpents" (Context 5.1, EP 2010-46; Context 5.1, EP 2010-47), and a bowl with slightly curving sides with stylized reptile designs (Context 5.1, EP 2010-45).

#### The Ceramics



Figure 7.17. Examples of Chakipampa-style bowls. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact numbers [clockwise from upper left] EP 2012-36, EP 2011-8, EP 2010-47, EP 2010-45 and EP 2011-17.

#### Coastal-Style Ceramics

A few vessels recovered at the Wari site of Espíritu Pampa appear to reflect ties with the coast. For example, two eroded double-spouted vessels with bridge handles were found (Context 1.1, Figure 7.18). These types of vessels have also been recovered at highland Wari sites (Bennett 1944), but they appear to have been more widely used on the central and southcentral coast of Peru during the Middle Horizon (Isbell 2016:64). One of the double-spouted vessels recovered at Espíritu Pampa (EP 2010-8) is finely made and may represent an import. The other double-spouted vessel

(Context 2.3, EP 2011-3) is made of a coarser ware and its overall form is rather crude, suggesting that it may represent a locally produced vessel.

Three of the finest vessels from the Wari site of Espíritu Pampa have been classified by Knobloch (2016:99, 100, 109) as being Atarco-style ceramics (Figure 7.19). This pottery style was determined by Menzel (1964:47) based on a set of vessels recovered in the Nasca region. The Atarco-style vessels within the Espíritu Pampa collection, according to Knobloch, include a tripod vessel (Context 1.5, EP 2010-1) and two flasks (Context 6.5, EP 2010-59; Context 6.1,

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Figure 7.18. Two double-spouted vessels with bridge handles. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact numbers [left to right] EP 2010-8 and EP 2011-4.

EP 2010-99). An additional vessel, an incurving bowl (Context 1.4, EP 2010-10), has been classified by Knobloch (2016:106) as Ica-Pachacamac style, based on vessels reported by Menzel (1964:Figures 26, 27).

#### Summary and Discussion

In the above, we have grouped most of the ceramic vessels recovered at the Wari site of Espíritu Pampa into general stylistic classifications based on differing artistic practices. In doing so, we hope to gain insights into how the individuals living at the site interacted with other populations living in the region, the inhabitants of the Ayacucho area, and people living elsewhere within the Wari realm. We began this study with the general belief that many of the people living at the site were highland colonists, perhaps from the Ayacucho region. In the end, our analysis of the ceramic styles served to strengthen that belief.

Within our interpretation of the site, it is important to note that when the Wari settlers entered the Vilcabamba region, they were not entering an unoccupied area; instead, they established their settlement in a region already populated by Montaña peoples with distinctly non-Wari traditions. Unfortunately, because the lush vegetation of the Vilcabamba region makes archaeological survey work difficult, the history and distribution of Montaña settlements will be challenging to reconstruct. Nevertheless, we know that contact did occur. Evidence of the indigenous Montaña population of the region comes in the form of large vessels made with non-Wari designs, particularly the Cacaopampa

open-mouth vessels and the face-body vessels. The simplest explanation for the presence of these vessels at the site is that they were obtained by trade between the Wari occupants and a nearby Montaña group. It is logical that trade between the highlanders and the local peoples is reflected in the largest and heaviest ceramic pieces recovered at the site, since by their very nature, these vessels are difficult to transport and are more likely to be locally made. It would have made great practical and economic sense for the highlanders to absorb these large vessels, the products of local craft traditions, into their daily lives while at the same time importing smaller items from the Ayacucho region and elsewhere.

The recovery of large non-Wari ceramics at Espíritu Pampa suggests that there was at least one lowland group, with distinctly different cultural affiliations, living in the region at the same time as the Wari enclave. Using analogies from the following millennium, when the Inca extended their empire into the Vilcabamba region (ca. AD 1400), or later still, when the Spaniards first led expeditions into the same region (AD 1570s), we can suggest that the people who were living in the region when the Wari arrived were members of a swidden-based agricultural society who most certainly spoke a different language from the highlanders. Both groups would have seen the other as "foreign," but it seems that trading relationships were established.

While the larger vessels recovered at the site speak of interactions between the Wari settlers and at least one local Montaña group, many of the smaller vessels

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Figure 7.19. Three Atarco-style vessels and an Ica-Pachacamac-style bowl as defined by Knobloch (2016:99, 100, 106, 109) recovered at Espíritu Pampa. Ministerio de Cultura, photographs by Marco Uniysonco Perez and Brian S. Bauer, artifact numbers [clockwise from upper left] EP 2010-1, EP 2010-59, EP 2010-10 and EP 2010-99.

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reflect the colonists, close ties with the Ayacucho heartland. While exploring the possible evidence of Wari enclaves in the Camaná Valley, Owen (2010) suggests that settlements established and maintained by colonists will contain high-end materials produced in what he calls "corporate" styles of the homeland, as well as locally produced vessels that reflect both the fine wares and the utilitarian wares of the core cultural region (also see Moseley 2001:78–79). By the term *corporate*, Owen is referring to styles that reflect some kind of institutional association that is promoted by the culture at large. As noted by Owen (2010:61), corporate styles "embody specific, complex iconography that could have conveyed particular messages for institutional purposes; were made to very high standards, . . . and were distributed to, or accurately duplicated in, the distant periphery." Such objects are also of "high technical quality, fine craftsmanship, and high labor costs" and reflect a high level of standardization (Owen 2010:57).7 At Espíritu Pampa, we have a small number of ceramic vessels produced in the "corporate" Ayacucho-based Chakipampa style. Because of their unambiguous cultural references to elements of Wari's core cosmo-vision and their superior production, it is easy to imagine the use of these vessels, along with those made in the closely related Atarco and Ica-Pachacamac styles, within state-sponsored events that occurred at the site.

Within the Espíritu Pampa ceramic collection, we also have many vessels below the levels of corporate styles (e.g., Chakipampa) that, nevertheless, follow cannons of ceramic production set in the Ayacucho region. These fall under what Owen (2010:58) has called "core folk traditions." They are "designed, made and distributed in less institutional modes, such as by households, or village-level specialists" replicating to a greater or lesser degree homeland traditions. He writes, "Core folk traditions in the peripheries . . . may range from close, 'high-fidelity' replications of the core tradition to derived, 'low-fidelity' variants, as long as the shared features are distinctive enough to imply a historical connection" (Owen 2010:58). They can be further divided into fine wares, which tend to be used for serving, and utilitarian wares, often used for cooking.

Most of the ceramic vessels recovered in the Espíritu Pampa burials and offerings fall within an Ayacucho-based folk tradition of ceramic production. These include Wari-related ceramics (fine ware and domestic), Wari blackware (decorated and undecorated) ceramics, Huamanga-style ceramics, and geometric-on-light bowls. In fact, many of the vessels includ-

ed within these classifications are so similar to vessels recovered in the Ayacucho region, it is possible that they represent imports from the highlands, a proposition that can be explored with additional geochemical testing. In other words, close cultural affiliations with the Wari heartland are reflected in all levels of pottery consumption at the site of Espíritu Pampa: from the most ornate (e.g., Chakipampa) vessels that were most likely produced for important events to the most quotidian pots that were used to cook daily meals. In short, it appears that with the important exception of a few especially large vessels that were manufactured by an indigenous group of the region, the Wari colonialists of Espíritu Pampa selected to bring their entire ceramic-making traditions with them as they left the highlands and entered into the eastern slopes of the Andes.

#### **Notes**

- 1 There have been a few archaeological projects conducted in the Lower Apurimac River; however, they have not recovered materials that are closely related to the Cacaopampa materials (Raymond 1972, 1982, 1988, 1992; Raymond, personal communication, 2017).
- 2 Isbell (2016:70, 82) suggests that these vessels reflect the Qachisqo-style ceramics of the Late Intermediate Chanka culture. Given the nearly century-long confusion in the literature concerning Chanka and Wari cultures, such classifications need to be carefully considered. In this case, Bauer finds the similarity between Cacaopampa vessels and Chanka vessels superficial at best, while Fonseca Santa Cruz does see some possible similarities.
- 3 Raymond (1972:162-172) illustrates a number of facebody vessels from the lower Apurimac Valley. These vessels differ from those recovered at Espíritu Pampa as the faces contain coffee bean-shaped eyes and much smaller noses.
- 4 Menzel divides Chakipampa ceramics into a number of substyles. We were not able to apply her substyles to the materials recovered at Espíritu Pampa.
- 5 It is, of course, not uncommon for colonists to mix with local peoples, so it is also possible that some of these vessels were made by Montaña peoples who came to live within the Wari settlement.
- 6 An exception to this statement is the uniquely decorated, bilobed-shaped pot (EP 2012-52) that was recovered in Context 2.13. The small size, fine quality, and ornate designs of this vessel suggest that it was a high-valued object produced by a non-Wari individual.
- 7 For a discussion of high-end ceramic production at the site of Conchopata, see Wolff (2012).



# The Bronze Objects from the Wari Site of Espíritu Pampa

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opper and copper-based alloys were among the most widely used metals in the Andes, with archaeologic evidence indicating copper use as early as 3,000 years ago (Burger and Gordon 1998; Cortés and Scattolin 2017) and the smelting of copper-based ores at ~700 to 50 BC (Eichler et al. 2017). Sophisticated bronze production developed subsequently in various regions of the Andes, particularly during the Middle Horizon, when bronze production became a common metallurgical tradition (Lechtman 2014).

In this chapter, we first briefly outline what is currently known concerning Wari and Tiwanaku bronze production. We then turn to describe the bronze objects recovered from the Wari site of Espíritu Pampa. Compositional analyses of selected bronze materials from the site are also reported, allowing us to compare the compositions of the Espíritu Pampa bronzes with broader patterns of metallurgical practices in the Andes.

#### Middle Horizon Bronze Signatures: Wari and Tiwanaku

Bronze was most commonly used by Middle Horizon populations for the manufacture of various domestic items such as tweezers, needles, knives, axes, chisels, points, and, perhaps most important, shawl pins (generally referred to as tupus). In several seminal studies on Andean bronze production, Heather Lechtman has shown that a variety of bronze alloys were in use during the Middle Horizon (Lechtman 1980, 1981, 1997, 2003a, 2005, 2014; Macfarlane and Lechtman 2016). The three most commonly used Middle Horizon bronze alloys include (1) copper-arsenic bronze (Cu-As), (2) copper-tin bronze (Cu-Sn), and (3) a ternary bronze of copper, arsenic, and nickel (Cu-As-Ni). Based on her analyses of bronze objects recovered from Wari and Tiwanaku sites, Lechtman (2003b) proposed a Middle Horizon "bronze divide" whereby the more northerly positioned Wari and affiliated settlements predominantly used copper-arsenic bronze,1 while the more southerly located Tiwanaku and their outlying centers used the ternary alloy of copper-arsenic-nickel as well as tin-bronze to a lesser degree.

These special trends are primarily based on geography, as abundant sources of sulfarsenide minerals, such as enargite ( $Cu_3AsS_4$ ) and tennantite ( $Cu_{12}As_4S_{13}$ ), which are used in copper-arsenic bronze production, are found in a broad area stretching from southern Ecuador to northern Bolivia.<sup>2</sup> In contrast, the source of tin in the Andes is restricted to a single cassiterite [Sn0,] ore field that runs across the Altiplano

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from the Titicaca region into northwestern Argentina (Lechtman 2003b).<sup>3</sup>

Our current knowledge of bronze production within the Tiwanaku sphere of influence is confined to a small number of sites where compositional analyses have been conducted on archaeologically recovered metals (Table 8.1). For example, a large assemblage of bronze artifacts has been geochemically analyzed from the site of Tiwanaku and nearby site of Lukurmata (Lechtman 1997, 2003a). By around AD 600, both sites exhibited all three major bronze alloy types, with the ternary copper-arsenic-nickel alloy appearing at Lukurmata as early as AD 100 to 400 and later becoming the dominant bronze alloy at Tiwanaku between the Late Tiwanaku IV and Early Tiwanaku V phases (AD 600-900) (Lechtman 2003a:405). Due to the rarity of nickel deposits in the Andes and the general absence of nickel in bronzes tested from more northerly locations, 4 it was initially thought that the ternary copper-arsenic-nickel alloy was concentrated in the Tiwanaku cultural sphere (for a review, see Lechtman 2014).5

The use of tin-bronze during the Middle Horizon, as noted above, was also predominantly restricted to the south-central Andes (Lechtman 2003b). Tin was used in bronze production as early as the Formative Period in northwestern Argentina (500 BC to AD 450) (González 2004) and was present at Tiwanaku and Lukurmata by the Late Tiwanaku IV times (c. AD 600) (Lechtman

2003a). Although the ternary copper-arsenic-nickel alloy was present at these sites prior to tin-bronze, the latter became the dominant alloy type during late Tiwanaku times and continued as such well into the Late Intermediate Period. These regional patterns were broken during the Late Horizon when the Inca consolidated control of the southern tin sources for their use in imperial state bronze production (Lechtman 2007).

The Wari appeared to have relied on binary copper-arsenic bronze (Cu-As) that corresponds to the major enargite belt of the central cordillera. At the major state centers of Conchopata in Ayacucho and Pikillacta in Cusco, 90 percent of the metal artifacts are composed of copper-arsenic bronzes ranging from 0.5 to 3.75 weight percent arsenic (Lechtman 2005; Macfarlane and Lechtman 2016). Lead isotopic analyses on the Conchopata materials indicate local production with ores likely coming from the Julcani mineral source only 68 km away (Macfarlane and Lechtman 2016:59). All but one of the bronze artifacts at both Conchopata and Pikillacta were likely produced locally. The only exception is a tupu fragment recovered in Pikillacta that was composed of the ternary Cu-As-Ni alloy (Lechtman 2005), suggesting a more southerly source of production. Excavations at the elite Wari mausoleum of Castillo de Huarmey in the coastal valley of Huarmey in central Peru recovered exquisite metal burial offerings (Giersz and Pardo 2014).

Table 8.1. Distribution of bronze alloy types for Wari- and Tiwanaku-affiliated sites during the Middle Horizon (Lechtman 2003a, 2003b, 2005; Dussubieux and Williams 2009; Velarde and Castro de la Mata 2014; Jennings et al. 2015; Velarde et al. 2014; Macfarlane and Lechtman 2016.)

Site	Affiliation	Number of Specimens per Alloy Type*								
		Cu	Cu-Pb	Cu-As	Cu-As-Ni	Cu-Sn	Cu-As-Sn	Cu-As-Ni-Sn	Total	
Espíritu Pampa	Wari	_	_	14	8		2	_	24	
Castillo de Huarmey	Wari	3	_	1	_	_	_	_	4	
Cerro Baúl	Wari	4	_	20	2	3	_	2	31	
Conchopata	Wari	1	1	17	_	_	_	_	19	
Pikillacta	Wari	3	_	26	1	_	_	_	30	
La Real	Wari	1	_	7	2	_	_	_	10	
Tenahaha	Wari	_	_	_	11	_	_	_	11	
Tiwanaku	Tiwanaku	1	_	1	16	9	_	1	28	
Lukurmata	Tiwanaku	_	_	_	3	5	_	_	8	
Omo	Tiwanaku		_	1	2	1	_	_	4	

<sup>\*</sup>For complex alloys of bronze, silver, and/or gold, this table only represents the underlying bronze alloy type.

#### The Bronze Objects

The few analyzed copper objects include a ceremonial trapezoidal plaque, a needle, and a spindle whorl composed of pure copper. Additionally, a knife blade composed of a copper-arsenic alloy with 1.73 weight percent arsenic was analyzed, fitting ranges observed at Conchopata and Pikillacta (Velarde and Castro de la Mata 2014:235).

Not surprisingly, the Wari versus Tiwanaku bronze divide becomes more complicated on Wari's southern periphery. At Cerro Baúl, Wari's southernmost colony and administrative center, located in the upper Moquegua Valley, a wide variety of bronze alloys indicate its geographic and sociopolitical position with neighboring Tiwanaku settlements. Arsenic bronzes, typical of the central Andes, only constitute 65 percent (n = 20) of the analyzed artifacts, followed by the traditionally Tiwanaku-type alloys, including 6.5 percent (n = 2) of the Cu-As-Ni ternary alloy, 9.7 percent (n = 2)4) of Cu-Sn, and 6.5 percent (n = 2) of the rare Cu-As-Ni-Sn (Dussubieux and Williams 2009; Lechtman 2003a). The presence of bronze artifacts containing nickel and tin allowed Lechtman (2005:144) to suggest that these were Tiwanaku items introduced to Cerro Baúl, perhaps through exchange with the Tiwanaku settlement of Omo located a short distance away in the middle Moquegua Valley.

While only four bronze artifacts from the site of Omo, the largest Tiwanaku site in the Moquegua region, have been analyzed, one is a copper-arsenic alloy, two are composed of a ternary Cu-As-Ni alloy, and one is a copper-tin alloy supporting the argument that Omo residents maintained ties to the Titicaca heartland (Lechtman 2003a). While the diplomatic nature of Wari and Tiwanaku's relationship within this colonial frontier remains contested (Goldstein 2013), some levels of exchange of elite prestige items, such as bronze *tupus* and other personal effects, can be expected across cultural borders.

The view of Wari and Tiwanuku's relationships in southern Peru is further complicated by recent compositional analyses from the department of Arequipa, including the Middle Horizon occupations at the site of Tenahaha in the Cotahuasi Valley and the site of La Real in the Majes Valley (Jennings et al. 2015; Velarde et al. 2015). Compositional analyses of 10 copper-based artifacts from burials at La Real indicate one pure copper *tupu*, seven copper-arsenic bronze objects, and two items made of ternary Cu-As-Ni bronze. Eleven *tupus* were analyzed from the site Tenahaha, with all recording ternary alloy (Cu-As-Ni) compositions with

relatively low nickel ranges of 0.43 to 1.06 weight percent (Jennings et al. 2015:69). Although the source of the nickel is not known, Jennings et al. (2015) suggest these ternary bronzes were manufactured locally rather than being acquisitions of long-distance exchange. If correct, this complicates the argument that the presence of nickel is a Tiwanaku or at least a south-central Andean technological signature. Conversely, Macfarlane and Lechtman (2016:62–63) observe that, like obsidian, bronze objects may have traveled through Middle Horizon exchange networks that crossed the river valleys of Arequipa, and such trade would have blurred differences between Wari and Tiwanaku spheres of influence.

#### Bronze at Espíritu Pampa

A range of bronze objects were recovered within the offerings and burials at the Wari site of Espíritu Pampa, which included chisels (n = 8), axes (n = 4), points (n =3), spear-thrower hooks (n = 2), bells (6), round-headed tupus (n = 50+), and several unidentified objects. The total number of bronze artifacts recovered at the site is not known for certain, because all of the bronze objects were oxidized and many were fragmented and in a poor state of preservation. Nevertheless, with more than 75 bronze objects, the Wari site of Espíritu Pampa collection represents one of the largest sets of bronze materials so far recovered from a Wari site. Below we briefly summarize the bronze objects found at the Wari site of Espíritu Pampa according to their function, and we outline what is known concerning their excavation context and their production technologies.

#### Chisels

Seven of the eight bronze chisels found at the Wari site of Espíritu Pampa were recovered within a single context in Area 1 (Context 1.1), and of these, six were wrapped together with a cotton textile (Figure 8.1). Several of these chisels still retain the remains of their chonta wood handles. Their working ends have been hammered and then ground into a bevel, and several show evidence of use. The eighth chisel was found within Area 6 (EP 2010-88B). While we expect that chisels were not uncommon tools of the Wari, few have been specifically recorded as being recovered in archaeological contexts. Exceptions to this statement include a cache of bronze chisels recovered at the Wari site of Castillo de Huarmey on the coast of Peru (Przadka-Giersz 2014:114) and a single chisel reported by Anders (1986:246) from the site of Azangaro.

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Figure 8.1. A set of bronze chisels found wrapped in a cotton textile in Context 1.1 at the site of Espíritu Pampa. *Ministry of Culture, photograph by Javier Fonseca Santa Cruz*.

#### Axes

Axes in the Andes, as elsewhere in the world, held a variety of functions (Owen 2012:125–129) and appear to have been especially valued objects in Wari times. Five bronze axe blades were recovered at the Wari site of Espíritu Pampa, all found in high-status burials. One of the axe blades (EP 2010-69) was recovered still attached to its shaft within the principal burial of the site. This axe blade is made of a complex alloy composed largely of bronze, silver, and tin (see below for its compositional analysis). The presence of a tin-bronze in the central Andes suggests either the exchange of this artifact northward or, far less likely, the movement of tin in its raw form.

Three of the other axe blades (EP 2010-02, EP 2010-03, EP 2010-04) were recovered within a single high-status burial (Context 1.5). They had been pushed to one end of the burial when it was looted (Figure 8.2). Two of these axe blades contained bits of textiles attached to them, suggesting that they were wrapped in cloth at the time of the interment. The

fourth recovered axe blade (EP 2012-23) was found in Context 9.2 along with the remains of a silver circular pectoral (EP 2012-22) and a bronze spear-thrower hook (EP 2012-24). This axe blade was recovered with part of its *chonta* wood handle still attached to it. The only other axe blade that has been reported from a Wari context comes from the site of Castillo de Huarmey. Like the three axes blades from Context 1.5 at Espíritu Pampa, the Castillo de Huarmey specimen was also found wrapped in a textile (Przadka-Giersz 2014:110–111).

#### **Points**

During the 2010 to 2012 excavations at the Wari site of Espíritu Pampa, three spear points with tapering shanks were recovered. Two of the spear points (EP 2010-39A/B) were found in Context 2.14, along with a silver bird-shaped pectoral (see Figure 3.81). The third spear point (EP 2010-94) was recovered in Context 6.11 along with a range of other artifacts, including a rectangular silver pectoral (see Figure 5.35). Similar spear points have been identified at other Wari sites,

#### The Bronze Objects



Figure 8.2. Three bronze axes (EP 2010-02, EP 2010-03, EP 2010-04) were found at one end of burial Context 1.5. Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact numbers EP 2010-02, EP 2010-03, and EP 2010-04.

including the site of Conchopata (Rios 1987:11) in the Ayacucho region and the site of Cotocotuyoc in the Cusco region (Mary Glowacki, personal communication, 2017).

#### **Spear-Thrower Hooks**

Many of the depictions of Middle Horizon Wari deities show them holding spear throwers. Spear throwers require a small hook near the proximal end to hold the butt end of the spear in place before it is launched in a high-arching movement of the arm and wrist. Two nearly identical bronze spear-thrower hooks were recovered in separate burials at the Wari site of Espíritu Pampa (Contexts 5.2 and 9.2; see Figure 6.3). The hooks are elongated and spheroid, and they contain flat appendages used to attach the hook to the spear thrower (EP 2010-49, EP 2012:24). Similar spear-thrower hooks have been recovered at other Wari sites both in the highlands in Andahuaylas (Lucas Kellett, personal communication, 2018) and on the central coast at Castillo de Huarmey (Giersz and Pardo 2014: Figure 81).

#### Tupus

One of the quintessential metal artifacts recovered in excavations of later period contexts in the Andes are tupus (or shawl pins), which are made of bronze, silver, or gold-based alloys. Although museums across the world house hundreds, if not thousands, of these artifacts, it has only been in recent years that tupus have become the focus of serious studies (Dussubieux and Williams 2009; Gero 1992; Gordon 2012a, 2012b; Jennings et al. 2015; Lechtman 2003a, 2005, 2014; Owen 2012; Velarde et al. 2015). In the largest study of Inca metal artifacts published to date, Owen (2012) illustrates the great size and shape range of tupus. Nevertheless, it is clear that round-headed tupus, with a long stem and a single hole punched through the head near to where the stem and head intersect, are the most common form. Based on the few well-preserved examples of Inca tupus recovered still attached to cloth—generally found in high-altitude offering sites—we know that the hole in the oval tupu heads served as a thread hole to attach the pin to the shawl or to attach two or more tupus together (McEwan 2016).

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From the drawings of Guaman Poma de Ayala, which show tupus being worn exclusively by women, and cultural traditions that continue in many Andean regions today, it is believed that these shawl pins were used predominantly, if not exclusively, by females in the prehispanic Andes (Ochatoma Paravicino and Cabrera Romero 2001:107-113; Velarde et al. 2015:170; Vetter Parodi 2007:107; Angeles Falcón 2018:507, 508). Guaman Poma de Ayala shows small tupus being used horizontally to pin the ends of shawls together, while larger examples appear to be more ornamental and were displayed vertically as pectoral adornments (Figure 8.3). Archaeologically, tupus are frequently, but not always, found in matching pairs. While there is the occasional exception, tupus are generally recovered with female interment, and they are commonly used by researchers to suggest a female gender identity of those individuals who are interred with them (Tung 2012; Tung and Cook 2006).

Tupus have a long history of manufacture in the Andes. As noted by Velarde et al. (2015:170), ovalheaded tupus date as far back as the Early Horizon, and these authors note that "this tupu form is remarkably resilient and persists with very little variation into the Inca Period." Technological studies conducted on Wari metal artifacts by Lechtman (2003a, 2005, 2014), Jennings et al. (2015), and Velarde et al. (2015) suggest that a more limited range of tupu shapes existed during the Middle Horizon than in Inca times and that most Wari tupus contain flat, oval heads. A much smaller percentage of Wari tupus have bent T-shaped heads (Lechtman 2005; also see Ochatoma Paravicino et al. 2015:128), and a very small number had uniquely shaped heads.



**Figure 8.3.** Guaman Poma de Ayala (1615:120) provides a drawing of Mama Huaco, the legendary first queen of the Incas, wearing large, vertically hung silver *tupus*, while her attendants use smaller horizontal shall pins. Elsewhere in his chronicle, Guaman Poma de Ayala (1615:293) shows a large group of women (*acllacona*) wearing small horizontal *tupus*.

#### The Bronze Objects

Among reported Wari finds, bronze alloy *tupus* appear to be relatively common in the Ayacucho heartland<sup>9</sup> and in the Wari provinces<sup>10</sup> while examples of silver Wari *tupus* are rarely reported. The burials and offerings at the Wari site of Espíritu Pampa yielded some 14 silver *tupus* and about 50 bronze alloy *tupus*.

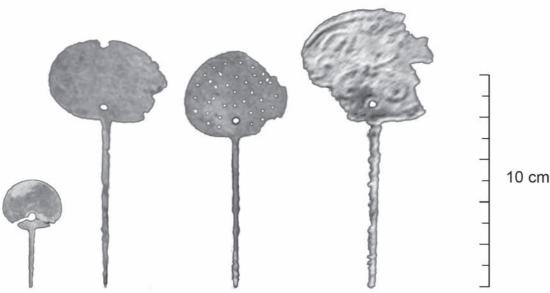
While a great many of the bronze alloy *tupus* found at Espíritu Pampa are poorly preserved, all of those that still retain evidence of their original shapes indicate a flat round head and a long shaft (Figure 8.4). This design corresponds to the "classic" Wari *tupu* style identified at other Middle Horizon sites for the central and south-central Andes.

Almost all of the tupus were recovered in pairs, with a maximum number of eight tupus being found in one burial cist (Context 5.1). Generally, the contexts containing tupus at the site held either silver or bronze tupus but typically not both, however one burial (Context 5.1) did contain two pairs of bronze tupus (EP 2010-51, EP 2015-52, EP 2010-54A/B) and two pairs of silver tupus (EP 2010-49, EP 2010-50, EP 2010-53A/B). Most of the bronze tupus were undecorated, although the heads of one pair (EP 2012-08, EP 2012-09) were decorated with punctations and incisions, and the heads of another pair were ornamented with small holes (EP 2011-33, EP 2011-34). Similar but not identical punctate markings have been noted on other tupus found in the Wari heartland at Aqo Wayqo (Ochatoma Paravicino and Cabrera Romero 2001:112). In southern Peru at the sites of Tenahaha and La Real in Arequipa

and Cerro Baúl in Moquegua, punctate markings are also observed on *tupu* heads, although in more stylized fashions (Dussubieux and Williams 2009; Lechtman 2003a; Velarde et al. 2015).

It has been noted that tupus are almost exclusively worn by women, at least during Inca times through the ethnographic present, and indicate the gender-specific use of this material class (Gero 1992). The archaeological recovery of *tupus* in Wari burials of biologically sexed females (Velarde et al. 2014, 2015) and correlations to site activity areas have led archaeologists to suggest gendered spaces. For example, a number of bronze tupus were recovered from the Wari brewery on the summit of Cerro Baúl in Moquegua, where the brewing of chicha (a fermented drink) was likely a gender-proscribed activity (Moseley et al. 2005). As markers of gendered identify, it is important to note that about half of burials and offerings at Espíritu Pampa contained tupus. This suggests that many of the interred individuals, including some that contained a wide range of ceramic, lithic, and metal offerings at the site, were women.

Measurements taken on *tupu* head widths, head lengths, and maximum length that include the pin are reported in Table 8.2. As indicated by Figure 8.5, bronze *tupus* exhibit a wider range of small to large sizes compared to silver *tupus* also recovered at Espíritu Pampa. Most *tupus* were found in pairs of identical size and design and were likely produced together in a single production setting (further supported by



**Figure 8.4:** Examples of various bronze *tupu* forms recovered from Espíritu Pampa (left to right: EP 2010-63, EP 2012-14, EP 2011-33, and EP 2012-08.)

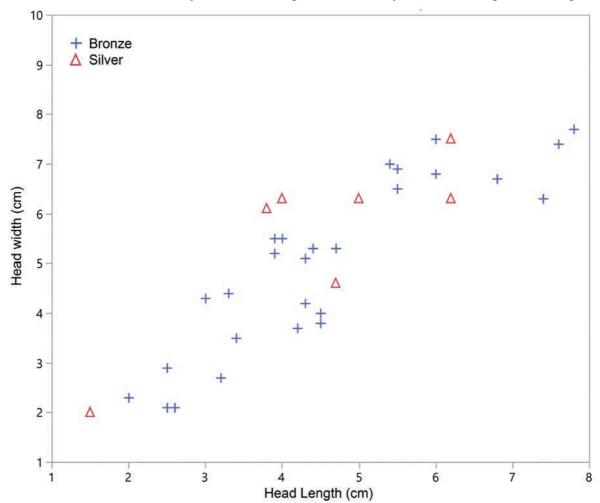
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Table 8.2. Measurements of bronze tupus recovered from Espíritu Pampa.

Artifact ID	Context	Maximum Length	Head Width	Head Length	
EP 2010-12	1.1	10.5	3.7	4.2	
EP 2010-102A	1.2	4.8	2.1	2.5	
EP 2010-102B	1.2	4.3	2.1	2.6	
EP 2010-22A	1.4	7.3	4.2	4.3	
EP 2010-22B	1.4	2.8	2.3	2	
EP 2012-08	2.2	13.5	6.5	5.5	
EP 2012-09	2.2	13	7.5	6	
EP 2012-10	2.2	9	3.5	3.4	
EP 2011-09A	2.4	7.6	2.9	2.5	
EP 2011-09B	2.4	7.6	2.9	2.5	
EP 2011-13	2.4	13.5	7.7	7.8	
EP 2011-14A	2.4	8.7	2.7	3.2	
EP 2011-14B	2.4	8.7	2.7	3.2	
EP 2011-11	2.4	15	7.4	7.6	
EP 2011-12	2.4	14	6.8	6	
EP 2011-10	2.4	14.6	7	5.4	
EP 2011-18	2.5	Incomplete	Incomplete	Incomplete	
EP 2011-33	2.7	11.4	5.1	4.3	
EP 2011-34	2.7	9	5.5	4	
EP 2011-35	2.7	13.6	9.3	Incomplete	
EP 2011-36	2.7	13.5	6.9	5.5	
EP 2012-11A	2.9	11	5.3	4.4	
EP 2012-11B	2.9	11	5.2	3.9	
EP 2012-13B	2.9	8	4.3	3	
EP 2012-14	2.9	12	5.5	3.9	
EP 2012-12	2.9	12	5.5	Incomplete	
EP 2012-13A	2.9	8	4.3	3	
EP 2010-51	5.1	11.3	6.3	7.4	
EP 2010-52	5.1	13.7	6.7	6.8	
EP 2010-54A	5.1	8.3	4.4	3.3	
EP 2010-54B	5.1	8.3	4.4	3.3	
EP 2010-89A	6.11	9.4	4	4.5	
EP 2010-89B	6.11	10.8	3.8	4.5	
EP 2010-63	6.5	5.2	2.9	2.5	
EP 2010-64	6.5	5.1	Incomplete	2.4	
EP 2010-85	6.9	11	5.3	4.7	

#### The Bronze Objects

**Figure 8.5.** Biplot of bronze (+) and silver (Δ) *tupu* heads width versus head length indicating a greater range of bronze *tupu* sizes. There is a continuum of bronze tupus, from small to large, while the silver *tupus* tend toward being medium to large.



the chemical characterization of *tupu* pairs discussed below). However, hierarchical cluster analysis using head width, head length, and maximum length did not relate to spatial patterning at the site, with most areas containing a range of small to large *tupu* sizes.

### Portable X-Ray Fluorescence Analysis of the Wari Bronze Artifacts from Espíritu Pampa

Application of portable X-ray fluorescence (P-XRF) provides an easily transportable, fast, and nondestructive elemental analysis, critical for archaeological collections such as the Espíritu Pampa metals. A range of detectable light and heavy elements are recorded by the excitement of a specimen through the bombardment of X-rays. This allows researchers to determine the chemical composition of the surface of archaeological materials that may contribute

to characterizing the processes through which raw resources were collected, stages of manufacture, and actual use of specific objects.

A sample of the bronze artifacts recovered from Espíritu Pampa was subjected to P-XRF to ascertain a qualitative understanding of their elemental compositions. Due to the rapid, nondestructive, and inexpensive nature of this analysis, P-XRF has seen widespread use in South America for the study of archaeological metals (Aldenderfer et al. 2008; Garrido and Li 2017; Martinón-Torres and Uribe-Villegas 2015; Zori and Tropper 2013; Zori et al. 2013). This instrumentation is especially useful for large archaeological or museum collections where the export of artifacts is not feasible. For this study, weight percentages of the major elements of interest (copper, arsenic, tin, nickel, gold, silver, and zinc) are reported (Table 8.3).

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Table 8.3. P-XRF elemental surface compositions of bronze artifacts recovered from Espíritu Pampa with associated alloy type.

Specimen ID	Provenience	Artifact	Alloy Type	Lab#	Ag wt	As wt	Au wt	Cu wt	Ni wt	Sn wt %	Zn wt %	Other* wt %
2010-04	1.5	Axe blade	Cu-As	ME 89	0.28	1.02	0.17	98.47	n.d.***	n.d.	0.05	n.d.
2010-11	1.1	Spatula	Cu-As	ME 92	0.14	2.8	0.63	96.29	n.d.	n.d.	0.11	0.04
2010-12	1.1	Тири	Cu-As	ME 40	0.34	5.46	0.79	93.39	0.01	n.d.	n.d.	0.02
2010-88a	5	Knife blade	Cu-As	ME 39	0.21	2.85	0.38	96.55	0.01	n.d.	n.d.	n.d.
2010-02	1.5	Axe blade	Cu-As	ME 90	0.45	0.52	0.12	98.39	0.41	n.d.	0.09	0.03
2010-03	1.5	Axe blade	Cu-As	ME 91	0.2	4.47	0.82	94.05	0.36	n.d.	0.1	0.01
2011-14	2.4	Тири	Cu-As	ME 58	0.15	5.03	0.94	93.37	0.44	n.d.	0.05	0.02
2010-69	5.7	Axe— lamina	Cu-As- Ag-Au	ME 82	21.17	5.87	1.45	71.11	0.15	n.d.	0.11	0.14
2011-10	2.4	Тири	Cu-As- Au	ME 60	0.2	6.9	1.33	91.4	n.d.	n.d.	0.13	0.04
2011-11	2.4	Тири	Cu-As- Au	ME 61	0.11	5.82	1.06	92.89	0.01	n.d.	0.07	0.04
2011-12	2.4	Тири	Cu-As- Au	ME 62	0.02	9.47	1.65	88.78	0.01	n.d.	0.05	0.02
2012-24	9.2	Atlatl hook	Cu-As- Au	ME 72	0.36	10.22	1.79	87.23	0.3	0.01	0.06	0.03
2010-97	6.11	Тири	Cu-As- Au	ME 38	0.7	7.39	1.26	90.28	0.27	n.d.	0.06	0.04
2011-26	2.5	Тири	Cu-As- Au-Ag**	ME 63	1.3	10.03	1.56	86.09	0.47	0.44	0.04	0.07
2011-33	2.7	Тири	Cu-As- Ni	ME 64	0.12	2.24	0.36	96.12	1.11	n.d.	0.04	0.01
2011-34	2.7	Тири	Cu-As- Ni	ME 65	0.12	4.14	0.66	93.69	1.33	0.01	0.03	0.02
2011-35	2.7	Тири	Cu-As- Ni	ME 66	0.14	1.37	0.23	96.25	2.01	n.d.	n.d.	0.01
2011-36	2.7	Тири	Cu-As- Ni	ME 67	0.22	1.53	0.25	95.97	2.02	n.d.	n.d.	0.01
2012-12	2.4	Тири	Cu-As- Ni	ME 68	0.1	5.25	0.9	89.33	4.36	n.d.	n.d.	0.05
2011-22	2.5	Тири	Cu-As- Ni-Ag	ME 57	2.29	2.27	0.4	94	1.02	n.d.	n.d.	0.02
2012-13	2.9	Тири	Cu-As- Ni-Au	ME 76	0.07	9.88	1.97	86.55	1.32	n.d.	0.1	0.11
2012-23	9.2	Axe blade	Cu-As- Ni-Au- Ag	ME 71	1.23	8.92	1.86	86.54	1.35	0.02	0.05	0.04
2010-69	5.7	Axe blade— fastener	Cu-As- Sn-Ag- Au	ME 82	15.85	4.01	3.39	58.24	0.11	18.13	0.08	0.19
2010-69	5.7	Axe blade	Cu-As- Sn-Ag-Au	ME 82	23.89	8.57	5.38	40.23	0.27	21.48	0.07	0.11
2011-25	9	T-shaped object	Cu-Sn	ME 77	0.55	0.05	0.01	67.17	n.d.	31.95	0.14	0.14

n.d. = not detected.

<sup>\*</sup>Other wt % = Mo, Co, Mn, Cr, Ti, Cd, Pd, Nb, In, Ru, Pb.

<sup>\*\*</sup>Contains traces of tin <0.5 wt %.

#### The Bronze Objects

It is important to clarify that P-XRF results are not representative of intact metal compositions due to the surficial nature of the analysis. As such, experts have described in detail the limitations of P-XRF toward the analysis of metals (Orfanou and Rehren 2015; Shugar 2013; Tykot 2016). Analytical concerns include the heterogeneity and layering of certain metals, as well as postdepositional processes such as metal corrosion that can incorporate the surrounding soil matrix. The leaching of certain elements over time can also distort surface elemental values. However, in regards to copper and bronze archaeological materials, the use of P-XRF has provided qualitative data useful to detect native versus smelted copper (Dussubieux and Walder 2015), as well as bronze alloy types based on the ratios and compositions of key elements (Dussubieux and Williams 2009; Garrido and Li 2017; Zori et al. 2013).

As in the case with the Espíritu Pampa collection, high priority was given to a nondestructive analysis provided by P-XRF. To avoid any damage to the collection, no intensive cleaning or cutting was conducted in compliance with curatorial protocols. Consequently, where possible, the analysis was conducted on clean metal surfaces avoiding areas of corrosion, residual soil, or patina. For some artifacts, two to three readings were taken on different parts of the object with averaged values presented. Where multiple readings were taken, compositional differences did not greatly vary for the elements of interest. Accuracy measures for the analysis also indicate acceptable instrumental accuracy ranges (Table 8.4).<sup>12</sup>

**Table 8.4.** Accuracy of measurements as indicated by the average percent error for elements of interest.

Element		Ag	Cu	Sn	Pb	As	Ni
Average error %	0.0447	0.0075	0.0116	0.0934	0.1040	0.0505	0.1473

#### Bronze Alloys at Espíritu Pampa

The application of P-XRF, although surficial in analysis, has allowed us to place the 19 analyzed bronze artifacts from Espíritu Pampa into distinct alloy groups (Table 8.1). Compared to the Wari metal assemblages at other central Andean sites such as Pikillacta (Lechtman 2005) and Conchopata (Macfarlane and Lechtman 2016), the Espíritu Pampa assemblage exhibits a wide variety of alloy types. This includes the traditional Wari copper-arsenic binary (Cu-As) alloy as well as the ternary copper-arsenic-nickel (Cu-As-Ni) alloy typical of the Titicaca

region. A number of the analyzed objects also exhibit considerable amounts of gold and silver, suggesting that color and hue were important considerations achieved through complex alloying and experimentation. Two of these complex alloys contain high percentages of tin, most certainly indicating an origin from the Tiwanaku sphere of influence in the south-central Andes (Table 8.3). Here we provide further compositional detail on these Middle Horizon Wari bronzes while acknowledging the surficial and thus qualitative nature of these initial analyses by P-XRF.

#### **Binary: Copper-Arsenic**

Following Lechtman (1996a), we consider all copper-arsenic alloys with arsenic concentrations of 0.5 weight percent or more as alloy bronzes and those with arsenic concentrations below 0.5 weight percent as arsenical coppers (also see Hosler et al. 1990). Of the copper-based artifacts tested from Espíritu Pampa, all contain arsenic contents above 0.5 weight percent and are thus considered arsenic bronzes.<sup>13</sup> Alloys containing 0.5 weight percent or more arsenic have noted benefits to mechanical properties of hardness and malleability, whereas alloys containing more than 7 to 8 weight percent arsenic can become too brittle to work cold (Lechtman 1996a). A comparative review of Middle Horizon Wari and Tiwanaku arsenic bronzes indicates that arsenic contents typically range between 1 and 4 percent (Dussubieux and Williams 2009; Jennings et al. 2015; Lechtman 2003a, 2003b, 2005; Velarde and Castro de la Mata 2014). Arsenic compositions of the Espíritu Pampa materials provide a mean of 5.3 weight percent and a wide range of 0.5 to 10.2 weight percent (Table 8.3). At Espíritu Pampa, the binary alloy of copper-arsenic bronze comprises the widest variability of artifact type, including tupus, axe blades, and two unknown objects. This fits the traditional central to northern Andean bronze signatures typical at other Wari sites.

#### Ternary: Copper-Arsenic-Nickel

As noted above, the use of ternary copper-arsenic-nickel alloy has been a focus of recent attention for Middle Horizon metallurgical studies, and its use appears to have been centered in areas of Tiwanaku influence (Lechtman 2003a:405). However, as compositional analyses of Middle Horizon bronzes have increased over the past decade, this alloy type has been identified outside of the Titicaca region and is present in southern Peru at the sites Cerro Baúl, Omo, La Real, and Tenahaha (Table 8.1). Prior to this study, the

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northernmost presence of this alloy was identified at the Wari administrative center Pikillacta in the department of Cusco where a single *tupu* fragment indicated a nickel content of 3.44 percent and was argued to be manufactured south of Lake Titicaca (Lechtman 2005:142). A review of the nickel content in ternary bronzes of the south-central Andes indicates a typical range of 1 to 4 weight percent.

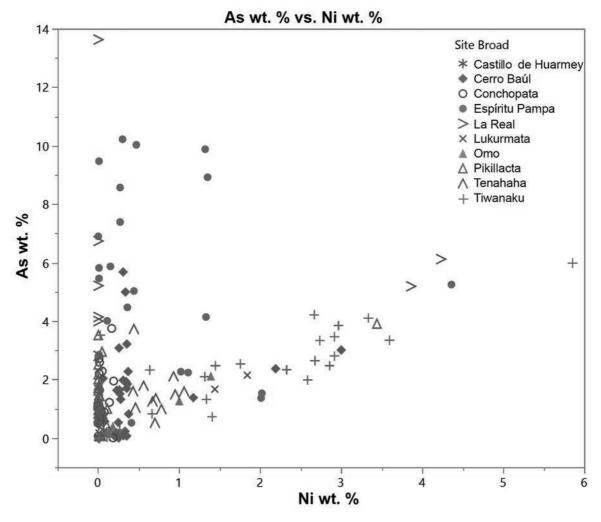
Most of the Espíritu Pampa bronzes indicate low trace levels of nickel (similar to other central Andean Wari bronzes), while a third of the assemblage does not exhibit nickel content above detectable ranges (Figure 8.6). For the purposes of this analysis, we only consider artifacts with nickel above 1.0 weight percent for consideration as ternary bronzes. Of these, the range of nickel for Espíritu Pampa materials is 1.0 to 4.4 weight percent (Table 8.3). While nickel deposits

are incredibly rare in the Andes, Espíritu Pampa is located near known areas of nickel-rich ore (Lechtman 2003b:Figure 3). However, without isotopic analyses, we cannot for certain ascertain whether these ternary bronzes are products of exchange with communities in the south-central Andes.

#### Complex Alloys: Silver, Gold, Tin

Nearly all bronze artifacts from Espíritu Pampa exhibit trace levels of silver and/or gold. Of these, six *tupus* and one spear-thrower hook indicate gold contents ranging from 1.0 to 2.0 weight percent, and two *tupus* and one axe blade range between 1.2 and 2.3 weight percent silver. This is not atypical since all three precious metals can occur naturally together, especially silver and copper, and are thus easily cosmelted (Caley and Shank 1971; Petersen 1970).

Figure 8.6. Comparison of arsenic and nickel contents of Wari and Tiwanaku bronzes by site. Espíritu Pampa artifacts (represented by filled circles) overlap closely with south-central Andean sites such as Tiwanaku, La Real, Tenahaha, and Cerro Baúl.



#### The Bronze Objects

Another consideration is the purposeful alloying of silver and gold material with a copper or bronze stock to alter the final surficial appearance. While gold alloyed with bronze is rare for Wari and Tiwanaku materials, copper-silver alloys have been previously documented at Wari state centers such as Pikillacta and Conchopata<sup>14</sup> (Lechtman 2005; Macfarlane and Lechtman 2016).

The wide range and variability of copper alloys at Espíritu Pampa are most clearly demonstrated with artifact EP 2010-69, a ceremonial axe interred with the main Lord of Vilcabamba burial (Figure 8.7). P-XRF analysis indicates that the axe blade is a bronze-silvergold alloy that used a bronze stock of copper-arsenic-tin (Lab ID: ME82a). The blade is fastened to its handle by a circular metal fastener of an almost identical alloy composition (Lab ID: ME82b). The blade and fastener contain 23.9 to 15.9 weight percent silver and 5.4 to 3.4 weight percent gold, respectively. The handle itself has an underlying base of dark chonta wood wrapped largely in ribbons of almost pure silver lamina containing 2 to 3 weight percent copper. Below the fastener, the handle also has a complex lamina of a binary copper-arsenic bronze alloyed with silver (21.2 weight percent) and gold (1.5 weight percent) (Lab ID: ME82c).

Specimen EP 2010-69 is also highly significant due to the presence of tin within the composition of the axe blade and fastener. Prior to the analysis of the Espíritu Pampa materials, no bronze artifact containing tin had been recovered from secure Middle Horizon archaeological contexts north of the south-central Andes.<sup>15</sup> The bronze component of the axe blade (ME82a) is a ternary copper-tin-arsenic bronze with 21.5 weight percent tin and 8.6 percent arsenic. The bronze fastener of the axe blade to the handle has a similar ternary composition with 18.1 weight percent tin and 4.0 weight percent arsenic (Table 8.3). The ternary bronze of copper-arsenic-tin is rare but not unusual as copper-arsenic-tin-nickel bronzes have been identified at Tiwanaku and Cerro Baúl in the south-central Andean region (see Table 8.1). The weight percent of tin in the axe blade and fastener is unusually high<sup>16</sup> and is above the solid solubility limit of tin in copper (13.5 percent) that results in a very brittle metal (Lechtman 2014:406). Since high tin contents in bronze will result in a yellow-gold color, properties of appearance were likely more important over mechanical properties, especially considering its further alloying with silver and gold, completing the symbolic ternary of Andean metallurgy.

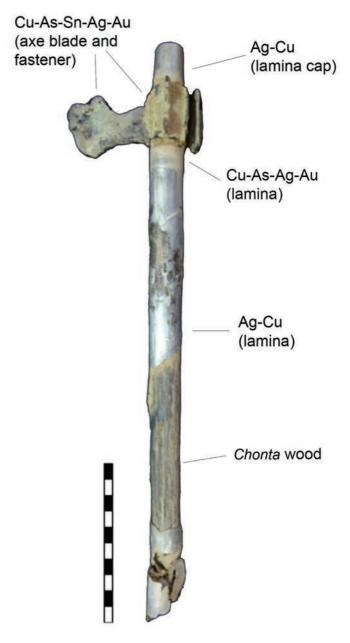


Figure 8.7. The ceremonial axe interred with the Lord of Vilcabamba contains a wide range and variability of copper alloys. Figure by Julio Cesar Sierra Palomino, artifact EP 2010-69.

The identification of tin-bronze far north of the Titicaca region at a securely dated Wari, elite context makes this find very noteworthy. While it is possible that the production of the ternary copper-arsenic-nickel alloy occurred in various places in the Andes, the only source of tin is geographically restricted to a cassiterite [Sn0<sub>2</sub>] ore field running from the Titicaca region of Bolivia and across the Altiplano into northwestern

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Argentina (Lechtman 2003b). The production of tinbronze can either involve the alloying of tin stock to copper/bronze stock or the cosmelting of tin-laden and copper-laden ores. While the wide range of alloy types at Espíritu Pampa indicates experimentation with bronze metallurgy (Figure 8.8), it is likely that the axe blade, a highly prestigious item, traveled northward from the Titicaca region where tin-bronze production was well known and the near-exclusive bronze type during Late Tiwanaku V (AD 800–1100) (Lechtman 2003a). Binary copper-tin axes, with only trace amounts of arsenic, have been reported from Tiwanaku and Lukurmata (Lechtman 2003a:407, 408), although these T-shaped axes are stylistically different from the Espíritu Pampa specimen.

A single *tupu* (EP 2011-26) also contained low amounts of tin (0.44 weight percent) as well as nickel (0.47 weight percent). The low traces of tin in this

specimen may be due to recycling of copper-tin material or, more likely, may be a factor of the surficial analysis of P-XRF where corrosion may be an issue. In a P-XRF study of Early Iron Age Cypriot bronzes, Charalambous et al. (2014:210) report that uncleaned surface readings may indicate tin weight percent as low as 0.6, while fresh cleaned surfaces of the same object yielded 18.0 weight percent tin. Without further surface treatment of *tupu* EP 2011-26, we cannot adequately determine if it is a true copper-tin bronze, although this is highly likely, and would also represent long-distance exchange with the Titicaca region or affiliated communities.

#### Tin Bronze as a Late Horizon Signature

During the Late Horizon, tin-bronze became the official imperial bronze alloy of the Inca, and objects made of this alloy, as well as tin stock material, were

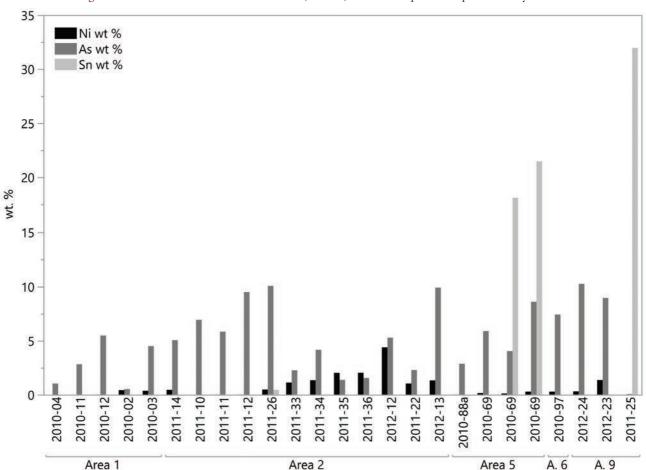


Figure 8.8. Elemental concentrations of nickel, arsenic, and tin of Espíritu Pampa bronzes by site area.

ID

#### The Bronze Objects

distributed far across the Andes (Lechtman 2007). Relatively close to Espíritu Pampa, excavations at Machu Picchu recovered pieces of pure tin in the form of sheets as well as lumps for local tin-bronze production (Gordon 2012a:12). Artisans would section off pieces of pure tin for alloying with copper stock. At Espíritu Pampa, a single Late Horizon bronze artifact (EP 2011-25) recovered in a circular building (see Chapter 6) was tested by P-XRF for this analysis (Table 8.3). This T-shaped object was recovered in Area 10, a small circular building dating to late-Inca times. Compositional analysis indicates the specimen is a copper-tin alloy, fitting the pattern of Inca bronze production. Trace elements also distinguish this artifact from the Middle Horizon bronze assemblage, as it is the only artifact with arsenic contents below 0.5 weight percent and is the single artifact with detectable traces of lead (0.03 weight percent), although not at a large enough compositional level that would indicate purposeful alloying. Even with the surficial analysis by P-XRF, the patterning of Late Horizon versus Middle Horizon bronzes at Espíritu Pampa lends confidence to this study's methodology.

#### Discussion

The study of the bronze assemblage at Wari Espíritu Pampa has implications toward our broad understanding of the production and consumption of bronze in its many alloy forms during this time period. Previous studies of Middle Horizon metals have indicated a geographic and cultural divide between the central and south-central Andes based on Wari versus Tiwanaku cultural spheres. However, the diversity of bronze alloy and material types at Espíritu Pampa provides a more nuanced perspective from a clear Wari elite context close to the Ayacucho heartland. Initial compositional analyses of these materials indicate that Espíritu Pampa follows central Andean metallurgical traditions of using arsenic-bronze, while indicating a wide range of experimentation of alloying with silver and gold, as well as the ternary copper-arsenic-nickel alloy thought to have been geographically restricted to the far south. More surprising is the presence of tinbronze in the form of an axe blade and fastener that comprises one of the most elaborate offerings found with the major burial of the Lord of Vilcabamba. This is the farthest north that tin-bronze has been found outside of the Titicaca region during the Middle Horizon and likely indicates long-distance exchange between Wari and Tiwanaku elites. The presence of Alca-1 obsidian, sourced to the Arequipa highlands in southern Peru, also indicates that Espíritu Pampa was participating in broader exchange networks to the south.<sup>17</sup> Future compositional and isotopic analyses of these materials will help provide much-needed details on the production and provenance of the Espíritu Pampa bronzes (such as the ternary copper-arsenic-nickel alloys), while these initial findings illustrate the complexities of Wari's far-flung interactions as indicated by the metal material record.

#### Notes

- 1 Extensive scholarship on metallurgical traditions of the north coast of Peru also documents the smelting of arsenic-copper ores by Moche and Sícan cultures (Bezur 2003; Lechtman 1981; Shimada 1985; Vetter et al. 1997).
- 2 Smaller deposits of sulfarsenide minerals have also been identified in northwest Argentina and central Chile (González 2004; Lechtman 2003a).
- 3 The source of nickel that was used within the ternary bronze favored by Tiwanaku centers remains undefined as deposits of this mineral are rare in the Andes (Macfarlane and Lechtman 2016).
- 4 Caley and Shank (1971:184) report a handful of objects from central and northern Peru that contained nickel, including a rattle from Batán Grande (2.68 weight percent Ni) and a copper fragment recovered near modern-day Chimbote (0.62 weight percent Ni). However, the authors note that the spectrometric and gravimetric results did not agree, requiring us to be cautious about this early study.
- 5 For example, at San Pedro de Atacama, located in a desert oasis in the northern reaches of the Atacama Desert of Chile, more than half of the analyzed bronzes were composed of this ternary alloy (Lechtman and Macfarlane 2005, 2006; Macfarlane and Lechtman 2016).
- 6 Future isotopic analyses may help to untangle issues of long-distance exchange versus local bronze production.
- 7 Additional lamina of pure silver and a copper-silver-gold alloy are used to wrap the handle of the axe.
- 8 Middle Horizon tin-bronze axes have been recovered from Tiwanaku and Lukurmata (Lechtman 2003a), San Pedro de Atacama (Lechtman and Macfarlane 2005, 2006), and various sites in northwestern Argentina (González 2004).
- 9 See González Cárre et al. (1999:101), Isbell (1977:117, Figure L), Lumbreras (1960a), Ochatoma Paravicino and Cabrera Romero (2001:107–113), Ochatoma Paravicino et al. (2015:128), and Rios (1987).

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- 10 See Bauer and Jones (2003:15), Dussubieux and Williams (2009), Jennings et al. (2015), Lechtman (2003a, 2005), Velarde and Castro de la Mata (2014), and Velarde et al. (2015).
- 11 Analyses were conducted by Julio Cesar Sierra Palomino (2013a) of the Departamento Fisicoquímico, Dirección Desconcentrada de Cultura–Cusco. For this study, a Niton XL3T 950 Goldd+ portable X-ray fluorescence device was used to measure the major metal compositions and trace elements of select Espíritu Pampa artifacts. This instrument uses a geometrically optimized large-area drift detector with an Ag anode of 50 kV and a 200-μA tube. The X-ray beam spot is about 3 mm in diameter, with spectra acquired using metal/alloy standards with a total data acquisition time of 200 seconds for each specimen.
- 12 Accuracy measurements are calculated by the Niton Goldd+ for each run with the averaged error (as percentage) reported for each element of interest within an acceptable range of <8 percent for elements of copper, arsenic, nickel, silver, and gold and <11 percent for trace elements of lead, tin, and zinc.

- 13 Arsenic values were determined in association with the Niton XL3T 950 Goldd+ portable XRF spectral data.
- 14 Lechtman (2005:146) reports a metal fragment analyzed as a Cu-As-Ag alloy from Pikillacta with 5.80 weight percent silver (MIT3938). At Conchopata, Macfarlane and Lechtman (2016:57) report three Cu-As-Ag alloys, including a hand tool (MIT5290) and mace head (MIT6022) with silver ranging from 0.55 to 0.82 weight percent, respectively, and a more definitive copper-silver alloy nail with 8.06 weight percent silver (MIT5298).
- 15 The northernmost tin-bronzes have been reported from the Moquegua Valley of far southern Peru from the Tiwanaku-affiliated site Omo and the Wari-affiliated site Cerro Baúl (Lechtman 2003b).
- 16 Compositional studies of axes from northwestern Argentina have shown ranges of tin can be as high as 17.8 weight percent (González and Buono 2007:194).
- 17 A total of 12 obsidian artifacts were also analyzed by the Niton Goldd+ P-XRF by Julio Cesar Sierra Palomino (2013b) and correspond to the Alca-1 subsource.



# The Gold and Silver Objects from the Site of Espíritu Pampa and Elsewhere in the Wari Realm

Brian S. Bauer, David A. Reid, Javier Fonseca Santa Cruz, and Julio Cesar Sierra Palomino

n this chapter, we describe the gold and silver objects recovered at the Wari site of Espíritu Pampa and compare them with other objects that have been found elsewhere in the central Andes. What began as a description of the rare metal objects from Espíritu Pampa soon expanded to include similar gold and silver objects recovered at other Wari settlements or, more frequently, decontextualized objects held in museum collections.1 As the research progressed, it became apparent that there was a dearth of data on the gold and silver metal objects of the Wari, with a few notable exceptions (Boone 1996; Giersz and Pardo 2014). This is the result of several factors, including the large-scale looting of many Wari sites, the scattering of objects across the world in different collections, and the lack of large, unquestionably Wari metal collections that can serve as touchstones when assessing isolated metal pieces that lack contextual information. The last of these factors—the absence of touchstone collections of elite Wari metal items—is especially important in sorting out which objects might be related to the Wari and which can be attributed to the Tiwanaku or a host of other cultures that flourished across the Andes during the Middle Horizon (AD 600-1000).

The separation of Middle Horizon objects into artistic traditions, such as "Wari" or "Tiwanaku," is

fraught with difficulties because both of these early Andean states were heavily invested in a shared iconographic tradition, now referred by some as the "Southern Andean Iconographic Series" (SAIS) (Cook 2012; Isbell et al. 2018; Isbell 2018; Isbell and Knobloch 2006, 2009). These shared artistic conventions reflected a widespread cosmology, one that the dominant powers within both Tiwanaku and Wari accepted and promoted through their separate state ideologies. First identified on the famed "Gateway of the Sun" and other stone carvings at the site of Tiwanaku more than a century ago, this shared iconographic tradition was also noted early on at a host of other archaeology sites, on the coast of Peru (Means 1931; Tello 1923:230-235, Figures 32-37; Uhle 1991) and elsewhere, perhaps most notably at the site of Huari (Bennett 1953; Lumbreras 1960a, 1969). At the core of this worldview appear to have been at least two types of supernatural beings: "staff gods," called such because they hold "staffs" in each hand (these beings are depicted in a front-facing stance), and kneeling or running "profile deities." The profile deities are frequently portrayed as human or anthropomorphic (felines and birds) beings. When flanking a staff god, the profile deities are considered to be attendant and subservient to the staff god.

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Although references to this shared iconography as specifically "Tiahuanaco," "Tiahuanaco related," or "Tiahuanacoid" have long faded, Isbell and colleagues (Isbell and Knoblock 2009; Isbell et al. 2018) have proposed a new nomenclature that highlights the pan-Southern Andes origins of this worldview. Isbell et al. (2018:429) write, "Perhaps most important, SAIS decouples the iconography, religious practices, and their developmental process from Tiahuanaco, which for more than a century has been imagined as the precocious 'origin center' where all significant evolution took place." Although recognizing that the SAIS concept is not without critics and that the application of this term may conflate and homogenize more nuanced prehispanic cultural systems, it will be used in this work when discussing the shared iconography of the Middle Horizon states.

The combination of a central figure with flanking profile figures is found in monumental stoneword (i.e., at the site of Tiwanaku) on extremely high-end ceramics recovered at different coastal and highland sites (Cook 1983, 2012) as well as on numerous silver and gold objects. However, they are also found individually on a wide range of artifacts made of other materials (see Bergh 2012a, 2012b, 2012c, 2012d; Isbell et al. 2012; Young-Sanchez 2004) such as small wood containers (Bergh 2012d:242-243, Figure 133) and wooden snuff tablets (Isbell and Knobloch 2009:179, Figure 15; Torres 2018), feather and shell objects (King 2012; Bergh 2012c), and textiles (Haeberli 2018). The pre-Middle Horizon origins of this iconographic tradition has been most conveniently shown by Haeberli (2018) in radiocarbon dated textiles associated with the Pucara culture of the Lake Titicaca region.

Frequently, the profile deities are shown as holding a staff in one hand (occasionally with a decapitated human head attached at the bottom) and in the other hand an axe and a decapitated human head (Cook 2012; Isbell and Knobloch 2009).<sup>2</sup> The SAIS deities regularly have eyes with decorated tear-bands descending from them. Ray-like appendages that end in snake heads, round-nosed felines in profile, hookbeaked birds in profile, ears of maize, and feather motifs, among other things, frequently radiate from the anthropomorphic beings as well (Cook 1983, 1984, 1994, 2012; Isbell and Knobloch 2006, 2009). The heads of the staff gods tend to have a halo of motifs radiating out from them while the heads of the profile figures often have adorned headgear (Figure 9.1).

The standardization of these cosmogonic beings by both Tiwanaku and Wari craftspeople made them readily identifiable and easily interpretable by those who saw them (Owen 2010:57). While the portrayal of one or more of these figures on objects generally appears not to illustrate specific narrative scenes,<sup>3</sup> they certainly did make reference to widely known accounts that would have been familiar to anyone who saw such iconography. The iconography is most clearly displayed on textiles and on ceremonial pots, suggesting they were probably used together in ritual or political events. Together, they told a story familiar to the participants. The objects did not exist in isolation as opposed to how they might appear in archaeological contexts or in a museum collection (Anita Cook, personal communication, 2018).

The figures most likely make reference to mythic personages and events and the incorporation of them into the highest levels of craft production are part of a universal process through which elites attempt to associate themselves with the primal powers of the universe (Bauer 1996; DeMarrais et al. 1996; Sahlins 1981, 1985). As noted by Owen (2010:57), objects that are produced within such corporate styles "are likely to be of high technical quality, fine craftsmanship, and high labor costs, since they should covey a positive impression of their institutional sources." In the case of the Wari and Tiwanaku, the SAIS is portrayed on a vast variety of fine objects made in a wide range of mediums, including metal, stone, wood, fibers, feather, and shell (see Bergh 2012a, 2012b, 2012c, 2012d). Knobloch (2000, 2012:131) emphasizes that elites wore and used items displaying the SAIS to reinforce their god-like authority and make their close association with these entities undeniable.

The SAIS was once thought to have begun in, and exuded from, the site of Tiwanaku in modern-day Bolivia, where it is magnificently displayed on the Gateway of the Sun, but it is now known to have deeper and wider cultural origins. Precursors of the SAIS have been identified in earlier cultural traditions, such as that of Pucara (Chávez 2002; Cook 2012; Haeberli 2002, 2018; Isbell et al. 2018) and perhaps Atacama (Isbell and Knobloch 2006, 2009), but the possible vectors of diffusion and the likely centers of incubation remain poorly understood. It is widely stated, although not yet convincingly demonstrated with radiocarbon dates, that Wari expansion began from the Ayacucho region around AD 550 or 600. Our earliest date from Espíritu Pampa suggests a possible foundation date in

The Gold and Silver Objects

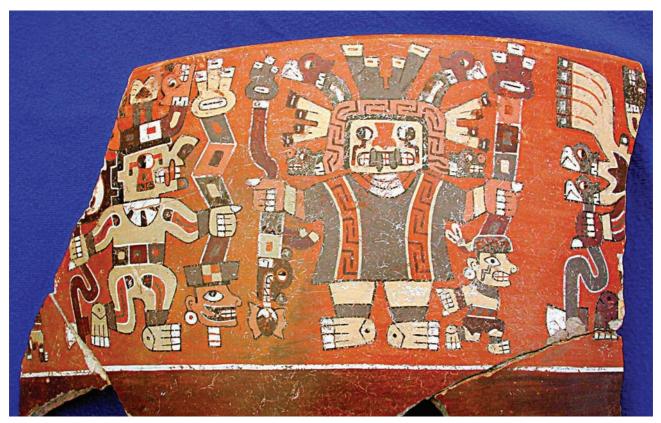


Figure 9.1. A Wari depiction of the staff god (center) and profile deities (left and right) on pottery from Conchopata.

Photograph by Bill Isbell. Courtesy of the Proyecto Arqueológico Conchopata.

the second half of the seventh century AD (AD 650–700),<sup>4</sup> and we propose that the acceptance of the SAIS was an intimate part of that expansion process. Others feel that the SAIS came to the Ayacucho region slightly later, around AD 700 to 850 (Haeberli 2018:144; Isbell and Knobloch 2006; Knobloch 2012:127) and that it was accepted by Tiwanaku around the same time (Isbell and Knobloch 2009:189–199). Regardless of when exactly the SAIS was accepted by elites within Wari and Tiwanaku (and in what order), the fact that these two contemporary Andean states (both with far-flung realms and distant colonies) shared core iconographic elements for centuries greatly complicates the task of assigning cultural affiliations to individual objects.<sup>5</sup>

The three largest overviews of Wari art published in the past 30 years offer expansive descriptions of Wari ceramics and cloth but provide limited insights into Wari gold and silver works. Lavalle's (1984:166–171) and Bazán's (2001:440–453) volumes on Wari art each offer fewer than 10 examples of silver or gold objects, and many of the artifacts that they show cannot be affiliated with the Wari with certainty. Bergh's (2012a)

outstanding work on Wari art provides a small but well-defined set of Wari silver and gold objects with references to the Espíritu Pampa finds but stops short of providing a comprehensive overview of Wari gold and silver artisanship. In a similar fashion, the major edited volumes on Wari culture published in the past few decades (Isbell and McEwan 1991; Jennings 2010; Kaulicke and Isbell 2001) provide only glancing references to Wari metalworking in general, let alone specifics on gold and silver objects.

Of course, many museums have some provenienced Wari objects of precious metal within their collections, and there are numerous published descriptions of individual or relatively small numbers of gold or silver objects that have been recovered during the course of excavations. For example, Ochatoma Paravicino et al. (2015:128) recovered two small disks, a short necklace, and a magnificent miniature gold figurine associated with *Spondylus* shells at the site of Huari, and Brewster-Wray (1990:569a) found a small feline made of gold foil there as well. A small number of gold or silver items have also been found at sites across the

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Wari's territorial holdings. For example, Arriola Tuni and Tesar (2011), Ochatoma Paravicino (2007:263), Rios (1987), Schreiber (1992:251), Skidmore (2014), Williams and Isla (2002), and Velarde et al. (2015) report finding a few objects made of precious metals in Wari contexts. Nevertheless, these objects appear to represent personal items or relatively limited offerings rather than large-scale symbols of royalty that were interred with high-ranking individuals.

As Bergh and Jennings (2012:23) note, we still lack basic descriptions and quantifications of Wari gold and silver works. As the result of an odd confluence of climatic and site preservation factors, we may currently know more about the high Wari arts of textile and featherwork manufacture than their products in elite metals. The absence of a well-identified corpus of Wari gold and silver objects has even left some art historians to initially question if fine metalwork was a high-priority medium among the Wari (Stone-Miller 1994:150).

### Wari Gold and Silver Work

As suggested above, for an expansionist state that controlled much of the central Andes and whose influence was felt along much of the central and south coast of Peru, little is known of Wari gold and silver work. The royal tombs and mausoleums of its capital city were looted centuries ago (Pérez 2000; Ochatoma Paravicino et al. 2015), and modern excavations at the site have recovered few metal objects beyond personal items (e.g., shawl pins, needles, tweezers) and woodworking tools (e.g., chisels, axes), and these are generally produced in bronze. Most of the gold and silver objects held within the elite burials of the capital appear to have been robbed and melted down long ago and have thus disappeared into the ether of history.

Valuable metal objects produced for provincial Wari lords, or what we might call "regional governors," are also rare. Gold and silver objects obtained by important personages of other contemporary polities with whom the Wari state held close interactions are also exceptionally uncommon. Likewise, the gold and silver status objects of elite leaders of independent polities that selected to emulate the SAIS style have not been well recorded. For example, while a small number of extremely fine Wari vessels have been recovered in the tombs of Late Moche elites (Castillo Butters 2012), presumably as "exotic pottery to display status" (Topic and Topic 2010:206), these burials have not been accompanied by gold or silver objects displaying the SAIS. The south coast Nasca peoples placed gold

plumes, tear motifs, and face-masks on their mummies, but the relationship of Nasca cultural practices to those of Wari is still not well understood.

Nevertheless, we know that elite classes of Wari personages existed outside of the heartland since their burials have been occasionally discovered. For example, in late July 1952, a set of elite Wari tombs was found and looted at the site of Batán Orco near the town of Huaro in the Department of Cusco (Reichlen 1954). These objects were first classified as Tiwanaku, but additional research at the site by Julinho Zapata (1997) made it clear that they are related to the Wari. It is likely that the most elaborate tomb of Batán Orco held the remains of a high-ranking member of the Wari, an individual who perhaps had administrative responsibility for overseeing the vast Wari site of Pikillacta and densely settled Wari colony in Huaro. Newspaper reports from the time of the looting suggest that the tomb contained many gold objects (El Comercio [Lima] 1952a-s; El Comercio [Cusco] 1952), but few were recovered by officials, so the exact contents of the burial remain unknown.

Other looted tombs elsewhere in the former realm provide evidence of lower-level Wari lords or individuals who might have been some kind of client-chiefs of the Wari. For instance, in the mid-1980s, Jorge Chávez reported on a set of silver objects that have been found in the Pomacanchi area.6 Composed of ornamental plumes, bracelets, bells, bands of metal, small silhouettes, and a poorly preserved silver object that we now know was a circular pectoral (see below), it is difficult to determine if these materials were originally from one or more burials (Chávez 1985, 1987). Nevertheless, this provincial assemblage has long represented one of the largest collections of known Middle Horizon metal artifacts.7 Other elite Wari tombs may have been found in the Churunga Valley of Arequipa (King 2012, 2013, 2016). Materials from this site, largely known because of its featherwork, are now housed in different museums in Peru, the United States, and Europe.

The discovery of elite Wari tombs at the site of Castillo de Huarmey on the coast of Peru has also provided impressive funerary items, but the gold or silver objects appear to be largely limited to coastal-style ear plugs, spindle whorls, wrist bands, and a bowl (see Giersz and Pardo 2014). Most recently, in April 2017, a collection of some 92 gold and silver objects recovered during looting on the summit of Cerro Ilucán near the town of Cutervo (Cajamarca) was turned over to the local municipality. The finds were first reported in the

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newspaper La Republica (April 27)8 and immediately received national attention. They included, but are not limited to, miniature silver weapons (clubs, slings, spear throwers, and an axe), gold and silver personal adornments, four pairs of small silver sandals, a pair of gold and silver ear plugs, a gold band, a silver lid, a variety of silver beads, a rectangle pectoral, and a circular pectoral. Also included within the looted items were various objects of unknown use. As news of the surrendered objects spread among the citizens of Cutervo, a few other residents also donated found objects to the municipality, including a miniature silver club and a gold plume. As first reported by Walter Alva, many of these gold and silver objects display hallmarks of Wari manufacture,9 and accordingly, they have been included within this study.<sup>10</sup> Evidence of other looted Wari elite burials is scattered across the world in private collections and public museums. The museum pieces, not surprisingly, represent some of the most magnificent pieces of Wari metal art. Some are now available for the public to review online, while others remain largely unrecognized and hidden within archaic cataloging systems.

### The Espíritu Pampa Collection

The collection of gold and silver artifacts from the Wari site of Espíritu Pampa, one of the largest groups of rare metal objects recovered from a Middle Horizon site, contributes to our understanding of Wari prestige metalworking in several ways. Most important, it represents one of the few cases where a significant number and a wide range of Wari gold and silver objects have been recovered from a single site under the supervision of an archaeologist (Fonseca Santa Cruz 2010, 2011a, 2011b, 2011c, 2012, 2017). Furthermore, many of the pieces have undergone portable X-ray fluorescence tests by Julio Cesar Sierra Palomino (2013a). The large quantity of gold and silver objects recovered from Espíritu Pampa offers the chance to define the general confines of Wari metalworking at a level that has never been achievable before. This understanding of Wari metalwork can then be applied to provenienced and unprovenienced objects in different collections across the world, which in turn greatly enhances the overall data set of Wari gold and silver objects.

The Wari site of Espíritu Pampa is well positioned as a type-site for elite Wari metalworking since it is located only 110 km from the Wari capital in Ayacucho. Its location on the eastern slopes of the Andes, relatively near the heartland but well outside any possible

sphere of Tiwanaku influence, minimizes one important complicating factor. Unlike the Wari sites located in the south-central highlands or in the southern coastal valleys, which were also inhabited by other hierarchical polities, the Wari site of Espíritu Pampa was comparatively secluded from the cross-pollinating winds of iconographic fashions.

The most spectacular items found at the Wari site of Espíritu Pampa come from Context 6.7, the highest-ranking burial (see Figure 1.2). This shaft burial contained the remains of a single individual, who has become known as the Lord of Vilcabamba, as well as a large number of other silver and gold objects that ranged from oval sequins to a large Y-shaped pectoral (Fonseca Santa Cruz 2011c; Isbell 2016; Knobloch 2016). As will be discussed below, some of these items reflect tenets of the SAIS.

The 2010 to 2013 excavations conducted at the Wari site of Espíritu Pampa provide, however, a wide range of other precious metal objects as well, including three sets of wrist/ankle bands (two silver and one gold), hundreds of small silver sequins, five silver ring sequins, 14 silver sequins with an anthropomorphic feline face in profile, 19 silver thimble-shaped beads, 14 silver *tupus*, one silver death mask, one silver rapped shaft, one silver rapped axe, one silver circular diadem pin, one large silver Y-shaped pectoral, four noncircular silver pectorals, and at least six silver circular pectorals (see Appendix 3). These items are presented below, and when possible, we compare them to other metal objects believed to be produced by the Wari in other collections.

#### Wrist/Ankle Bands

Three sets of wrist/ankle bands were recovered during excavations at the Wari site of Espíritu Pampa. Such bands are frequently depicted on the major deities shown on Wari pottery and are not unusual items to be found in elite burials in the prehispanic Andes. One pair of silver wrist bands from Espíritu Pampa is made of undecorated, trapezoid sheet metal folded to form slightly conical shapes (Context 1.1, EP 2010-18/19, Figure 9.1). The ends of the bands are poorly preserved, and the form of these wrist bands is generic enough that they carry little stylistic information. Nevertheless, it is worth noting that they are similar to the silver wrist bands recorded in the Pomacanchi collection by Chávez (1987:6, Figures 23–25).<sup>12</sup>

The second set of silver wrist/ankle bands found at Espíritu Pampa is also poorly preserved. They appear

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Figure 9.2. Although generic in form, these two silver sheet wrist bands from Content 1.1 are similar to wrist bands recovered in the Pomacanchi region. *Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-18/19.* 

to have been rectangular in shape, and both had thread holes on at least one end (Content 1.1, EP 2010-17, Figure 9.3).

A third set of wrist bands was recovered in the principal burial of Espíritu Pampa (Content 6.7, EP 2010-72). They are made of a gold alloy (see Table 9.1) and are ornately decorated (Figure 9.4). Each band contains two pairs of embossed, anthropomorphic, round-nosed feline heads in profile. The heads contain round eyes, stylized tear-bands, and triangular ears. The mouths display canine teeth and are slightly open. Such roundnosed feline heads in profile are common within the SAIS and are especially well known for their appearances as terminal elements on a wide range of objects (see Cook 2012; Isbell 2016:75). Each feline is shown wearing a headdress, which is also common within the SAIS. In the Espíritu Pampa gold wrist band examples, the headdresses are decorated with three central feathers placed between two birds. Importantly, each gold wrist band also has a line of nine evenly spaced embossed circles across each end. The artistic work displayed on both bands and their geochemical signatures are so similar that it is certain that they were produced by the same workshop as a matching pair. One of the wrist bands has been lightly darkened from being exposed to a fire that apparently burned within the burial.

The two gold wrist bands recovered at the Wari site of Espíritu Pampa can be compared with a single gold wrist band housed in the Museo de América in Madrid (Museo de América, Accession Number 07476 [http://ceres.mcu.es]). The central panel of the Museo de América wrist band contains images of two not identical front-facing figures holding a bow in one hand and a hunted animal in the other. Dogs are shown on both sides of the figures. Most important for this study, the Museo de América wrist band contains a row of evenly spaced embossed circles along each end. Although the Museo de América gold wrist band does not strictly adhere to the canons of the SAIS, the stylistic similarities that it shares with the two gold wrist bands from Espíritu Pampa suggest that it too was produced for Wari elites.

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**Figure 9.3.** A poorly preserved pair of silver wrist/ankle bands from Content 1.1. Note the small thread holes on the right end of each band. *Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-17.* 



**Figure 9.4.** The two gold wrist bands found in the principal burial of Espíritu Pampa. Each of the bands contains four round-nosed, anthropomorphic feline heads in profile as well as a row of nine embossed circles above and below the figures. *Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-72.* 

### Sequins

Two groups of silver sequins were recovered at the Wari site of Espíritu Pampa. Seventeen poorly preserved, undecorated silver sequins were found in a looted, rectangular, stone-lined tomb (Context 1.5, EP 2010-5, Figure 9.5). Because of the looting, it is impossible to know how many other sequins were originally in the burial. The recovered sequins are roughly rectangular with a curved lower end. Each sequin contains two pairs of thread holes.

A much larger collection of undecorated oval silver sequins and five rings of silver sheet were recovered in the principal burial of Espíritu Pampa (Context 6.7, EP 2010-74). Many of the sequins were damaged by fire, but it is clear that they were originally attached to cloth through a pair of thread holes located on their upper edges. Since Wari ceramics can show individuals wearing sequin-covered tunics, and one such vessel was recovered at Espíritu Pampa, it is reasonable to assume that these sequins were once attached to such a costume (see Figures 5.3 and 5.27).

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**Figure 9.5.** Seventeen sequins were recovered from a looted burial at Espíritu Pampa (Content 1.5). Note that each sequin contains two pairs of thread holes near their top. *Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-05.

In this respect, it is worth noting that four gold teardrop-shaped sequins and 11 rings of gold sheet were recovered at Cerro Ilucán near the town of Cutervo (Figure 9.6). Neither the silver sequins from Espíritu Pampa nor the gold sequins from Cerro Ilucan are stylistically complex, and we would not be able to determine that they were produced during Wari times without their close association with other Middle Horizon materials.

### **Profile Sequins**

The principal burial at Espíritu Pampa contained 14 roughly rectangular silver sequins embossed with an anthropomorphic feline head in profile (Fonseca Santa Cruz 2011c, Isbell 2016), which fall within the SAIS style. Seven of these figures face right while the other seven face left. The faces include oval eyes, tear-bands, and rectangular mouths with N-shaped incisors (Context 6.7, EP 2010-73, Figure 9.7). Each figure wears a head-band decorated with a line of circles. A line of chevrons,

perhaps representing hair, runs along the top and down the back of each face. No ears are shown. Each of the sequins was originally attached to cloth through the use of two thread holes. Several have remnants of cinnabar on their surface, indicating that they were originally painted with this rich red pigment.<sup>13</sup> While speculative, the metal specialist for this project believes, based on variations in design details and tool marks, that there were at least four different craftsmen involved in the production of these 14 panels (Sierra Palomino 2013a:24).

Since feline heads in profile are ubiquitous within the SAIS, the Espíritu Pampa profile sequins bring to mind many gold and silver objects in different collections, including a pair of pendants held at the Houston Museum of Fine Arts (Figure 9.8). While slightly more ornate in both craftsmanship and design, the Houston pendants also contain a profiled face and a headband decorated with a line of circles.<sup>14</sup> It is also worth noting that the chevrons found on the Espíritu Pampa profile

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**Figure 9.6.** Four gold teardrop-shaped sequins and 11 rings of gold sheet were recovered at Cerro Ilucán. *Courtesy of the Town Council of Cutervo, photograph by Brian S. Bauer.* 

sequins are not unlike the chevron designs found on two rectangular silver sheet pieces recovered by looters on Cerro Ilucán (Figure 9.9) and that bands of chevron are common motifs on different forms of Wari pottery (Menzel 1964:12).

### **Thimble-Shaped Beads**

A necklace with 19 thimble-shaped silver beads was found in a looted burial at the Wari site of Espíritu Pampa (Context 6.10, EP 2010-83, Figure 9.10). Each of the beads contained a pair of thread holes on two facing sides. The necklace was found near a silver pectoral (EP 2010-82), which is described below.

#### **Tupus**

In total, 10 silver *tupus* were recovered during excavations at the Wari site of Espíritu Pampa. Four silver *tupus* (EP 2012-3, EP 2012-4A/B, and EP 2012-5) were recovered in an offering that also included a female

figurine (Context 1.7). These four *tupus* consisted of two different-sized pairs. The smaller *tupu* set contained slightly oval heads with small nubbins. The larger *tupus* (EP 2012-4A/B), which were joined together by surface corrosion, were more classical in form. Four other silver *tupus*, two sets of pairs, were found in a boot-shaped burial (Context 5.1, EP 2010-53A/B, EP 2010-49, EP 2010-50), and another pair was found in a cist burial (Context 6.5, EP 2010-61, EP 2010-62) (Figure 9.11).

#### Silver Mask

The principal burial at the Wari site of Espíritu Pampa contained a life-sized silver mask (Context 6.7, EP 2010-68, Figure 9.12; also see Figures 5.21 and 5.22). The mask contains bulging, slightly oval, irisless eyes. It also has an overtly large triangular nose, slightly puffed cheeks, and stern mouth. The mask contains a narrow, flattened border through which a series of

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Figure 9.7. Two of the 14 sequins showing an anthropomorphic feline head in profile from the principal burial at Espíritu Pampa.

Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-73.



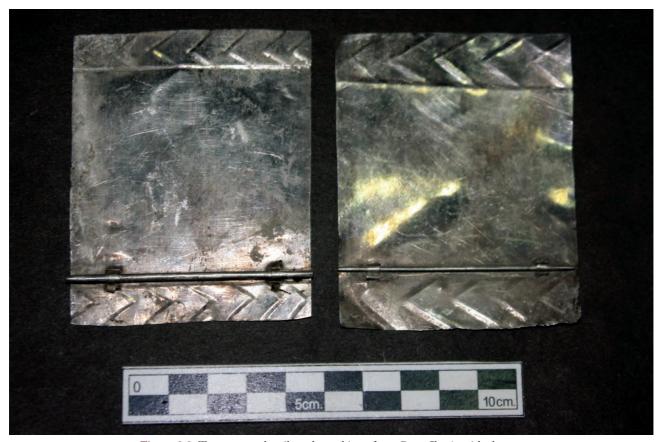
**Figure 9.8.** A pendant containing a face in profile with headband. *Courtesy of the Museum of Fine Arts, Houston, gift of Alfred C. Glassell Jr., Accession Number 2010.830.2 [11.9* × 6.7 cm] www.mfab.org/art/detail/136367.

holes has been punched. These served as thread holes to attach the mask to a mummy bundle that once surrounded the interred individual. Although the face on the mask cannot be called a portrait, it is certainly less stylized than the rest of the items in the burial. In other words, while the elite individual of this grave was buried with many adornments decorated with the SAIS, his face remained human even in death. This silver mask is analogous to many of the wooden and metal mummy bundle masks found at sites on the coast of Peru (e.g., Flores Espinoza 2013:46).<sup>15</sup>

#### **Plumes**

Six silver plumes were recovered during the 2010 to 2012 excavation seasons at the Wari site of Espíritu Pampa. <sup>16</sup> Four of the plumes were found in the principal burial (Context 6.7; see Figure 5.24), three of which (EP 2010-79, EP 2010-80, EP 2010 81) are split down the middle while the fourth (EP 2010-82) is too poorly preserved to know its original form. The fifth silver plume (Context 5.1, EP 2010-40; see Figure 4.5) appears to

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**Figure 9.9.** Two rectangular silver sheet objects from Cerro Ilucán with chevron designs on two ends. *Courtesy of the Town Council of Cutervo*, *photograph by Brian S. Bauer*.



**Figure 9.10.** A necklace of thimble-shaped silver beads from Espíritu Pampa. *Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-83.* 

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Figure 9.11. Examples of silver tupus. Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact numbers [clockwise from upper left] EP 2012-05, EP 2012-04 A/B, EP 2010-62, and EP 2010-49.

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Figure 9.12. When buried, the elite individual in the principal grave of Espíritu Pampa wore a silver mask. Note the thread holes that surround the mask that were used to attach it to a mummy bundle. Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-68.



Figure 9.13. Six silver plumes were recovered from the Wari site of Espíritu Pampa. This gold plume was found on Cerro Ilucán. Courtesy of the Town Council of Cutervo, photograph by Brian S. Bauer.

have been rather long and narrow, and it was placed as an offering within the fill of a boot-shaped tomb. The sixth (Context 2.10, EP 2012-06) silver plume was found within another burial, but its form cannot be deduced because of poor preservation (see Figure 3.65).

Gold or silver plumes are not rare in elite tombs in the Andes, having been found with interred individuals of many different cultures. Various metal plumes have been recovered within Wari contexts. For example, a gold plume was recently turned into the Town Council of Cutervo that was recovered during looting activities on Cerro Ilucán (Figure 9.13).<sup>17</sup> An unusually large collection of silver plumes has come from the Pomacanchi region (Chávez 1987). The Pomacanchi collection contained a total of 22 plumes, the majority of which contained a square plaque with an incised front-face deity.<sup>18</sup> However, the Pomacanchi collection also contained a single tufted plume, which may be analogous to EP 2010-40 of the Espíritu Puma collection. This is not a firm match since the form is rather generic.

#### Circular Diadem Pin

A silver circular diadem pin was also recovered at the Wari site of Espíritu Pampa (Context 6.5, EP 2010-60, Figure 9.14). There is a single row of small embossed circles running around the edge of the diadem similar to those seen on the silver circular pectorals found at the site (see below). Two other horizontal lines of embossed circles cross the center of the diadem. The interior of the circular diadem pin is decorated with cutout silver sequins that are attached to the piece by means of single silver wires. Five of the sequins were recovered in place within the diadem. The circular diadem pin also contains two plumes that emerge from the top of the piece. Unfortunately, these are poorly preserved, and it is not certain how they terminated.

Although there are no known duplicates of the Espíritu Pampa circular diadem pin, its shape, plumes, and dangles bring to mind a finely made half-circular diadem pin made of silver and gold held by Dumbarton Oaks (Figure 9.15). The Dumbarton Oaks example

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Figure 9.14. A two-plumed silver circular diadem pin with cutout silver sequins found at Espíritu Pampa. Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-60.

contains six gold rays, each ending in round-nosed felines shown in profile, emerging from a crescent arch. The arch itself ends in round-nosed felines shown in profile (for a full description, see Cordy-Collins 1996). The space defined by the arch contains nine cutout circular sequins. The Dumbarton Oaks piece has been attributed to the Lambayeque Period of the northern coast of Peru. This is possible, since other Wari items have been found in elite graves in the far north, most notably at the site of San José de Moro (Castillo Butters 2012), indicating that Wari contact, if not influence, occurred in the northern coast region (Chapdelaine 2010).<sup>20</sup>

#### Axe and Staff

The distal end of an elaborate axe and a broken staff, both composed of *chonta* wood wrapped in ribbons of silver sheet, were recovered on either side of the principal burial at Espíritu Pampa (Figures 5.25, 8.7, 9.16). Portable X-ray fluorescence analysis found the

composition of the silver ribbons on the axe handle and the staff to be similar to most of the other silver items recovered at the site (Sierra Palomino 2013a). In contrast, portable X-ray fluorescence analysis of the axe blade indicates a ternary alloy made of copper, silver, and tin (in decreasing percentages) (see Chapter 8). The axe blade also contains much smaller percentages of gold and iron (the latter most likely representing soil contamination) and a number of other trace elements (Sierra Palomino 2013a). The combination of copper, silver, and tin contained within the axe blade is unusual and has not been detected in any other metal items recovered at the Wari site of Espíritu Pampa. The physical inclusion of an axe and a staff within the highest-ranking burial at Espíritu Pampa is also intriguing, since these are both central elements of the SAIS (Isbell 2016:71; Isbell et al. 2018).



**Figure 9.15.** A gold and silver half-circular diadem pin. The two ends of the central arch of the diadem contain round-nosed felines in profile ends, and the area below contains a series of cutout circle sequins. *Courtesy of Dumbarton Oaks, Pre-Columbia collection, Accession Number B 472 [12.5 x 33.1 cm].* 

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Figure 9.16. A poorly preserved but elaborate axe (left) and a staff (right) from the principal burial at Espíritu Pampa. Both objects are covered with silver sheet in the form of ribbons. It is likely that the axe blade, made with an alloy of copper, silver, and tin, was imported from the Tiwanaku region. Ministry of Culture, photographs by Javier Fonseca Santa Cruz, artifact numbers EP 2010-69 [axe] and EP 2010-70 [staff].

#### The Y-Shaped Pectoral

One of the most noteworthy burial goods found within the principal burial of Espíritu Pampa is a large silver Y-shaped pectoral (EP 2010-67) embossed with various designs (Fonseca Santa Cruz 2010, 2011b; Isbell 2016). Both arms of the pectoral, which would have reached the shoulders of the individual wearing it, are topped with round-nosed feline heads in profile (Figure 9.17). The eyes of the felines are oval, with descending, decorated tear-bands; the ears are portrayed as small triangles; and the canine teeth are depicted with Ns. The thick-lipped mouths of the felines form open rectangles. Rectangular bands delineate the feline heads from the rest of the pectoral (Figure 9.18). Below each of the two feline heads, along the outer edge of the pectoral, is a line of three complex circle designs, composed of a central circle orbited by eight smaller circles. These complex circle designs recall motifs found on the numerous silver circular pectorals recovered at the site (see below). A line of 10 larger but simpler circles are arranged along the interior border of the Y-shaped pectoral, and three thread holes can be seen at the base of the Y. On either side of the midsection of the pectoral are two triangular, fringe-like designs that have been repaired in places to prevent the thin sheet from cracking. The pectoral ends in a large impressive crescent. As a whole, this is a remarkable example of Wari metalcraft and one that falls squarely within the SAIS style.

A nearly identical large silver Y-shaped pectoral is preserved at the Linden Museum in Stuttgart (Bergh 2012c; Isbell 2016; Knobloch 2016). One difference between the Espíritu Pampa Y-shaped pectoral and its twin in Stuttgart is that the round-nosed felines in Stuttgart contain circular rather than oval eyes. Most other details appear to be the same, even the fringe areas midway down the pectoral that have required extra support (Figure 9.19). The Linden Museum also contains two miniature silver Y-shaped pectorals (Figure 9.20). Although these items have been damaged by having been folded into roughly rectangular shapes, it is clear that they represent smaller versions of the larger examples described above. The major difference is the round-nosed felines on the miniature versions have slightly oval eyes, and their noses are represented by complex circle designs rather than plain circles.

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Figure 9.17. The Y-shaped pectoral found at Espíritu Pampa.

Ministry of Culture, photograph by Javier Fonseca Santa Cruz,

artifact number EP 2010-67.



Figure 9.18. Both arms of the Y-shaped pectoral (EP 2010-67) from Espíritu Pampa terminate with round-nosed feline heads in profile. The fanged mouths of the felines form open rectangles. Also, note the oval eye and tear-band in this figure. Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-67.



**Figure 9.19.** A large silver Y-shaped pectoral at the Linden Museum. Courtesy of the Linden Museum, photograph by A. Dreyer, Accession Number M31039 [55 × 44 cm].

The three Y-shaped pectorals at Stuttgart are so similar to the Espíritu Pampa Y-shaped pectoral that it seems likely that they were produced in the same workshop. The Wari site of Espíritu Pampa contains several large looted burials, raising the possibility that the Stuttgart pectorals may be from that site.

It is also important to compare the Wari silver Y-shaped pectoral from Espíritu Pampa to a gold Y-shaped pectoral held in the Museo de Oro in Lima (Borsano et al. 1982; Instituto Nacional de Cultura 1986:133; Mujica Gallo 1959:118-119, Plate 113). The overall design of the Museo de Oro's pectoral is clearly different from the Espíritu Pampa example, but they do share some interesting attributes, including Y-shapes, appendages ending in round-nosed feline heads in profile (with open rectangular mouths), crescent-shaped bases, and the use of large embossed circles.<sup>21</sup> There are also several clusters of complex circle designs, composed of a central circle orbited by smaller circles, a motif that is common among the silver circular pectorals of Espíritu Pampa and on the Y-shaped pectoral at the Museo de Oro. The Museo de Oro's

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Figure 9.20. Two small silver Y-shaped pectorals at the Linden Museum. Courtesy of the Linden-Museum, photograph by A. Dreyer, Accession Number M31039 [17 × 17 cm, 17 × 16 cm].

pectoral differs from the Espíritu Pampa Y-shaped pectoral in the use of small embossed circles as both broader and filler elements as well as the depiction of a front-face creature in its center. The identification of five Y-shaped pectorals (four silver and one gold) from at least three different contexts raises the possibility that Y-shaped pectorals were widely used by the Wari to project elite status on individuals. A nonsystematic review of Wari textiles and ceramics has not, however, identified any images of individuals wearing Y-shaped pectorals. Given that they may have been worn by elites in different areas of the realm, there is a possibility that such images will eventually be identified.

#### **Noncircular Pectorals**

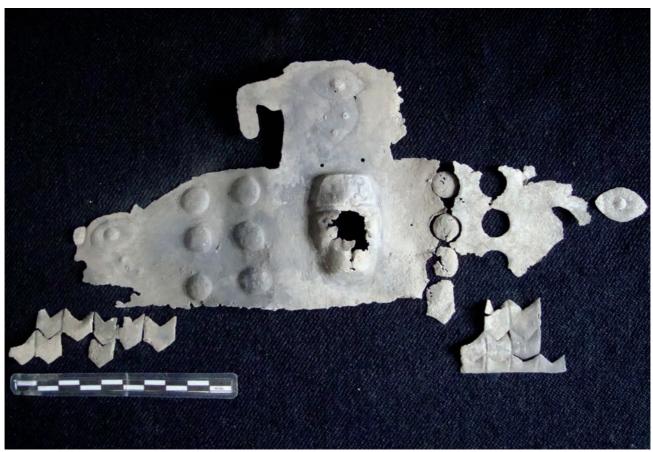
In addition to the silver Y-shaped pectoral discussed above, at least four other noncircular silver pectorals, of different sizes and shapes, were recovered at the Wari site of Espíritu Pampa during the 2010 to 2012 field seasons. The first of the noncircular silver pectorals contains what appears to be a full-winged bird-of-prey image (Context 2.14B, EP 2010-36, Figure 9.21). This bird-shaped pectoral is about 80 percent complete. The head of the bird is shown in profile, facing left, with an oval eye, a decorated tear-band,<sup>22</sup> and a hooked beak. The ends of the wings contain what appear to be round-nosed feline heads in profile. The two shoulder

areas of the bird are marked by two rows of embossed circles. The tail fathers of the bird are not complete but may have been represented by rows of chevrons. In the center of the pectoral, in high relief, is a human head wearing a four-cornered hat, like those used by Tiwanaku and Wari (Figure 9.22).<sup>23</sup> Two thread holes above the human head were used to attach the pectoral to cloth.

The Los Angeles County Museum of Art contains a silver figure that resembles, in some respects, the Espíritu Pampa bird pectoral (Figure 9.23). The bird is shown with outstretched wings, and its head is presented in profile. The head, which faces right, contains an oval eye, a decorated tear-band, and a hooked beak. Although its original provenience is unknown, this complete figure helps us understand what the decorated tail of the Espíritu Pampa pectoral might have looked like.

While artistically distinct, the Espíritu Pampa bird pectoral can also be compared with three other bird pectorals and a plume that have been found on the central coast of Peru and are housed in the Metropolitan Museum of Art in New York, the Houston Museum of Fine Arts, and the Staatliche Museum in Berlin (Figure 9.24).<sup>24</sup> While the designs shown on these coastal objects are vastly more complex than those on the Espíritu Pampa piece, they share similarities, including

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**Figure 9.21.** A bird-shaped silver pectoral from Espíritu Pampa. *Ministry of Culture*, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-36.



Figure 9.22. Detail of the raised human head with hat in the center of the bird-shaped silver pectoral from Espíritu Pampa. Note the two thread holes above the head and the rows of embossed circles on the shoulder areas of the bird. Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-36.

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Figure 9.23. A full-winged silver bird with a chevron decorated tail. Courtesy of the Los Angeles County Museum of Art, Accession Number M.2003.31 [20 × 26.35 cm], www.lacma.org.



Figure 9.24. A full-winged silver bird pectoral from the central coast of Peru. Courtesy of the Houston Museum of Fine Arts, gift of Alfred C. Glassell Jr., Accession Number 2004.2533 [16.8 × 18.7 × 0.6 cm], https://www.mfah.org/art/detail/69067.

a combination of embossed circles, raised faces, chevrons, and round-nose feline faces in profile. All four objects also recall the SAIS, but they present it in uniquely expressive ways, displaying a coastal-specific style that will be referred to here as the central coast Wari-derived metal style.



Figure 9.25. A pectoral with a human head and headgear from Espíritu Pampa. Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-66.

The second noncircular silver pectoral recovered at the Wari site at Espíritu Pampa shows a human head in high relief staring outward (Context 5.2, EP 2010-66, Figure 9.26). The pectoral contains a human face in high relief, with oval (irisless) eyes, protruding ears, and a closed mouth with drawn lips. The ears are outlined, and there are two thread holes above the head. Most of the nose is missing. The figure wears a headband and there are two thread-holes above the face where the pectoral was attached to cloth. Traces of oxidized threads that were preserved near the base of the pectoral suggest that it rested on a weft-faced cloth. While we know of no other Wari metal pectoral similar to this piece, the serious face and the headgear mirror many other Wari figures portrayed in ceramic, stone, and other media (Bergh 2012a; Cook 1992).

The third noncircular pectoral appears to have been rectangular in shape with a line of repeating motifs running down its midline (Context 6.11, EP 2010-92, Figure 9.26). The shape of the fourth pectoral (Context 1.4, EP 2010-24, Figure 9.27) is difficult to determine because of its poor preservation, but it

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Figure 9.26. The remains of a silver rectangular pectoral from Espíritu Pampa. Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-92.



**Figure 9.27.** The remains of a silver pectoral from Espíritu Pampa. Note the maize design attached to an oval motif in the central fragment and the chevron, zigzag, and embossed circles on the other fragments. *Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-24.* 

is clear that it contained a series of chevron designs, a lineal edge decorated with embossed circles, a zigzag pattern, and a maize motif attached to what appears to be an oval that may have depicted the end of a staff.<sup>25</sup> Similar maize motifs atop staffs are rather common elements within the SAIS. There are two thread holes above the maize design through which this silver pectoral was attached to fabric. The recovery of two *tupus* within this burial suggest that the pectoral may have been worn by a woman.

As this is a summary of important Wari metal objects, it is important to add a description of a rectangular pectoral recovered on the summit of Cerro Ilucán to the above discussion of Wari pectorals. The rectangular pectoral from Cerro Ilucán measures about 30 cm long and 15 cm high and contains a series of thread holes along its upper and lower edges (Figure 9.28). The Cerro Ilucán pectoral contains two human heads, each wearing a hat, in high relief. Both appear to be wearing ear spools, indications of high rank. The left head contains oval eyes, a distinct nose, a stern mouth, and smooth headwear (Figure 9.29). The right head displays similar facial features but wears headgear decorated with a row of rectangular sequins (Figure 9.30). This figure corresponds to an individual that Knobloch (2012, 2016) calls Agent 103 that has been identified on a number of other Wari artifacts, including a ceramic vessel at Espíritu Pampa.

#### **Silver Circular Pectorals**

Excavations in six different burials and offering contexts within the Wari site of Espíritu Pampa provided examples of silver circular pectorals. Two other contexts at the site contained likely silver circular pectorals (Context 1.12, EP 2012-19; Context 2.10, EP 2012-06), but their poor states of preservation prevent definitive identifications concerning their specific styles.

Carbon recovered near the floor of one cist (Context 1.12) that held a likely silver circular pectoral (EP 2012-19) provided an AMS date of AD 699 ± 22 (calibrated AD 677–863; 95.4 percent confidence level). And another carbon sample from a different cist in same area (Context 1.9), with a likely circular pectoral (EP 2012-1), offered an AMS date of AD 711 ± 25 (calibrated AD 686–875; 95.4 percent confidence level). A third carbon sample was recovered in cist Context 9.2, which also contained a silver circular pectoral (EP 2012-22) and yielded an AMS date of AD 686 ± 28 (calibrated AD 666–861; 95.4 percent confidence level). These dates leave no doubt that the circular pectorals date to the period of Wari expansionism.

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Figure 9.28. A rectangular pectoral recovered on the summit of Cerro Ilucán. Courtesy of the Town Council of Cutervo, photograph by Brian S. Bauer.



Figure 9.29. Detail of one of two raised heads on a rectangular pectoral from Cerro Ilucán. This individual wears a smooth hat. Courtesy of the Town Council of Cutervo, photograph by Brian S. Bauer.



Figure 9.30. Detail of one of two raised heads on a rectangular pectoral from Cerro Ilucán. This individual wears headgear decorated with a row of rectangular sequins. Knobloch (2012, 2016) has identified a number of other Wari objects that contain the same individual, who she calls Agent 103. Courtesy of the Town Council of Cutervo, photograph by Brian S. Bauer:

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Figure 9.31. A silver circular pectoral with a six-petal design from Espíritu Pampa. *Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-82.* 



Figure 9.32. A silver circular pectoral with a six-petal design from Espíritu Pampa. Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2010-84.

The first silver circular pectoral (Context 6.10, EP 2010-82) is about 26 cm in diameter (Figure 9.31). A single row of embossed circles runs around the outer edge of the disk and is separated from the central design by a raised line. The center of the pectoral is decorated by two concentric circles between which orbit eight small embossed circles. The space between the border circles and the center of the pectoral is decorated with a thick undulating line, creating a six-petal design, which weaves between 12 embossed circles. There are two thread holes through which the pectoral would have been attached to a garment. This pectoral was found in a disturbed context, but a neckless of 19 silver thimble-shaped beads (EP 2010-83) was found beside it.

The second silver pectoral (Context 6.9, EP 2010-84) recovered at the Wari site of Espíritu Pampa contains a double row of embossed circles around its border and a cluster of seven circles orbiting a central circle at its midpoint (Figure 9.32). The space between the border circles and the midpoint of the pectoral is decorated with a thick embossed line, creating six-petal designs, which weave between 12 embossed circles. Six pairs of additional embossed circles are used as filler elements, creating a dense overall design. There are two thread holes through which a pectoral was attached. A bronze *tupu* (EP 2010-85), believed

to be a marker of female identity, was recovered near the pectoral.

The third silver pectoral (Context 6.5, EP 2010-65) from the Wari site of Espíritu Pampa is poorly preserved (Figure 9.33). It once measured more than 20 cm in diameter, and the border was decorated with one, or perhaps two, rows of embossed circles. The center of the pectoral is marked with two concentric circles. The space between the border circles and the midpoint of the pectoral is decorated with a thick embossed line that forms a complex meandering design around a series of embossed circles. Two sets of *tupus*, one of silver and the other of bronze (EP 2010-61; EP 2010-64), were recovered within the same burial along with an impressive circular two-plumed diadem pin (EP 2010-65).

The fourth silver pectoral (Context 9.2, EP 2012-22, Figure 9.34) found at the site is also poorly preserved. This piece was once about 21 cm in diameter and contained a double row of embossed circles around its border. It is difficult to tell if the disk contained other designs. This pectoral was recovered along with a bronze axe and a bronze spear-thrower hook. The fifth silver circular pectoral (Content 1.9, EP 2012-1, Figure 9.35) was about 23 cm in diameter and contained a double row of embossed circles around its border and a raised line. Although the disk is not well

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**Figure 9.33.** A silver circular pectoral with a meandering-line design from Espíritu Pampa. *Ministry of Culture, photograph and drawing by Javier Fonseca Santa Cruz, artifact number EP 2010-65.* 



Figure 9.35. A silver circular pectoral from Espíritu Pampa. Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-01.



Figure 9.34. A silver circular pectoral from Espíritu Pampa. Ministry of Culture, photograph by Javier Fonseca Santa Cruz, artifact number EP 2012-22.

preserved, it can be seen that the center of the pectoral is marked with two concentric circles, between which orbit a line of 8 and a line of 14 embossed circles. The sixth circular pectoral (Context 1.12, EP 2012-19) was very poorly preserved, but the remains of embossed circles can be seen on several fragments, suggesting that its decorations were similar to the other circular pectorals found at the site.

While each of the silver circular pectorals recovered at the Wari site of Espíritu Pampa is unique, their decorations are remarkably similar. Their borders are marked by one or two rows of embossed circles, their centers contain complex arrangements of concentric and orbiting circles, and at least most of the pectorals contain a thick embossed line that undulates around scattered, embossed circles, creating a petal or a meandering-line design. This core group of attributes can be found in at least five other silver disks that have been recovered outside of the Vilcabamba region. For example, on December 13, 2012, the newspaper Diario Ahora (Amazonas and Cajamarca) reported that a circular disk and at least seven large obsidian bifaces had been found in the Santuario Nacional Cordillera de Colán (Department of Bagua Grande, Province of

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Utcubamba, Peru). Like Espíritu Pampa, the Colán area is well outside of the region traditionally thought to have had Wari influence. Nevertheless, the large obsidian bifaces are typical of those distributed by the Wari across the Andes (Burger et al. 2000), and there is no doubt that the silver disk was produced in the style that has now been identified at Espíritu Pampa (Isbell 2016:76; Knobloch 2016:155, note 16). The border of the Colán disk is marked by a line of embossed circles, and its center contains two concentric circles between which are seven orbiting circles (Figure 9.36). There is also a thick line that forms a five-petal design, similar but slightly more angular to those seen in the Espíritu Pampa examples.

Another example of an Espíritu Pampa–style silver disk comes from the Pomacanchi region (Chávez 1985, 1987). Although the disk was poorly preserved, its border contains at least one row of embossed circles, and its center is marked with two concentric circles between which seven circles orbit (Figure 9.37). The disk also displays the remains of a thick embossed meandering-line design.

The Ministry of Culture in Peru holds another example of an Espíritu Pampa–style silver circular pectoral. This disk is about 31 cm in diameter and contains a border marked by two lines of embossed circles. Its center includes two concentric circles between which a

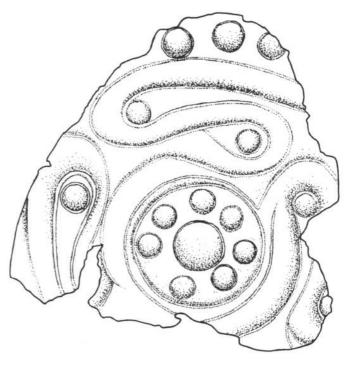


Figure 9.37. The remains of an Espíritu Pampa–style silver circular pectoral with a meandering-line design from the Pomacanchi area. *After Chávez 1985:42*, *Figure 31*.



Figure 9.36. A silver circular pectoral with a five-pedal design found in 2012 in the Santuario Nacional Cordillera de Colán. Courtesy of Diario La Abora: Amazonas y Cajamarca, photograph by Alberto Pintadi V.



Figure 9.38. An Espíritu Pampa–style silver circular pectoral with a meandering-line design. Ministry of Culture, Museo Nacional de Arqueología, Antropología e Historia del Perú, Accession Number 1096, photograph courtesy of Milosz Giersz.

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Figure 9.39. A silver disk, with a meandering-line design, looted from Cerro Ilucán in 2017 is similar to other circular pectorals found at Espíritu Pampa and elsewhere in the Wari realm. Courtesy of the Town Council of Cutervo, photograph by Brian S. Bauer:

line of 8 circles and a line of 11 circles orbit. The area between the decorated edge of the disk and its central motif is filled with a meandering-line design (Figure 9.38).

The fourth Espíritu Pampa–style silver pectoral found outside of the Vilcabamba region was recovered by looters at the summit of Cerro Ilucán in 2017 (Figure 9.39). The pectoral measures approximately 16 cm across. The border of the pectoral contains a single row of embossed circles. The center of the disk is marked by two concentric circles between which eight embossed circles orbit. The area between the border and the concentric inner circles is decorated by a meandering-line design.

A few objects in different museums around the world appear to show Wari people wearing circular pectorals that may be similar to those found at Espíritu Pampa. For example, the Houston Museum of Fine Arts holds two metal and shell objects that portray individuals wearing circular disks (Figure 9.40).

Finally, and perhaps most interestingly, the Museo Larco in Lima has a remarkable stone figurine that is shown wearing a circular pectoral (Figure 9.41). The pectoral contains a single row of circles around its edge, and its center is marked with two concentric circles. The area between the decorated edge of the disk and



**Figure 9.40.** Two shell and gold ornaments showing individuals wearing circular disks. The Museum of Fine Arts, Houston, gift of Alfred C. Glassell Jr., Accession Numbers 2010.1032 [6.6 × 3.5 × 0.8 cm, right], https://www.mfab.org/art/detail/95849, and 2010.1030 [6.6 × 3.6 × 0.7 cm, left], https://www.mfab.org/art/detail/95837.

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Figure 9.41. A stone figurine wearing an Espíritu Pampa-style circular pectoral with a meandering-line design. Photograph by Brian S. Bauer, artifact number Museo Larco; ML301403, height, 67 mm.

its central motif is filled with a meandering-line design, nearly identical to those described on the other pectoral above. The disk is worn by the figure with a double ribbon that passes around his neck. The piece is believed to have come from the Cusco region.<sup>29</sup>

### Portable X-Ray Fluorescence Analysis of the Wari Silver and Gold Artifacts from Espíritu Pampa

In this section of our study, we report on our application of portable X-ray fluorescence for the analysis of the surface compositions of various gold and silver objects recovered from the site of Espíritu Pampa.

#### Gold

The recovery of gold Wari items is rare, so little is known concerning Wari gold working. Our portable X-ray fluorescence results indicate that the two Espíritu Pampa gold wrist bands (EP 2010-72A and B) are composed of almost identical readings of gold (69.6–69.7 weight percent), silver (27.3–27.7 weight percent), and copper (2.8–3.0 3 weight percent) (Table 9.1). This particular ternary alloy composition raises a question of whether the wrist bands represent the use of native placer gold deposits or an intentionally produced alloy. In this respect, we note that the portable X-ray fluorescence of the wrist bands from

Espíritu Pampa is similar to that of six gold objects from the site of Chavín de Huántar that have averaged compositions of 71.4 percent Au, 24.9 percent Ag, and 3.6 percent Cu (Lechtman 1984:271-276, 1996:60–61). The ternary composition of the Espíritu Pampa gold wrist bands is also similar to three Wariaffiliated objects made of ternary alloys, including a gold ceremonial vessel from the Museo de America containing approximately 77.7 weight percent Au, 18.5 weight percent Ag, and 3.9 weight percent Cu (Rovira 1994:325), as well as a gold ear ornament and a gold spindle whorl from the Wari mausoleum at the site of El Castillo de Huarmey on the coast of Peru with respective compositions of 65.8 to 87.2 weight percent Au, 30.4 to 7.7 weight percent Ag, and 3.8 to 5.1 weight percent Cu (Velarde and Castro de la Mata 2014:235).30

While there is a trend toward greater production of intentional gold alloys with copper and silver after the Early Horizon in the Andes (Lechtman 2014; Rovira 1994)—the so-called *tumbaga* alloys—the close match between the composition of the gold artifacts from Espíritu Pampa and of those objects recovered in other archaeological sites separated by both time and space strongly suggests that the Espíritu Pampa gold wrist bands were produced from a naturally occurring ternary placer deposit common in the Andes.

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Table 9.1. Metal composition of two gold wrist bands from Espíritu Pampa by weight percent.

Artifact #	Provenience	ID	Au %	Cu %	Ag %	Total %
EP 2010-72	6.7	Wristband 1	69.7	3.0	27.3	100.0
EP 2010-72	6.7	Wristband 2	69.6	2.8	27.7	100.0
% RSD			0.2	4.6	0.9	

#### Silver

Of the approximately 320 silver objects recovered from the Wari site of Espíritu Pampa, 42 were selected for portable X-ray fluorescence analysis, including wrist bands (n = 3), sequins (n = 5), profile sequins (n = 11), thimble-shaped beads (n = 2), tupus (n = 4), a funerary mask (n = 1), plumes (n = 4), axe handle sheet (n = 2), pectorals (n = 8), and circular pectorals (n = 2). All of these objects, with the exception of two, contain very consistent portable X-ray fluorescence readings of 95 to 99 weight percent silver with minor trace elements of gold, copper, arsenic, and lead (Table 9.2). The two outliers are a pair of tupus (EP 2012-4A/B) that were recovered fused together through natural oxidation. These tupus contained significant percentages of copper (9.7-23.8 weight percent) and arsenic (1.3-2.6 weight percent), suggesting that they are composed of an intentionally produced alloy of silver and bronze.<sup>31</sup>

The presence of arsenic and copper in these two silver tupus is intriguing. Based on analyses from major Wari and Tiwanaku centers, Lechtman (2003b) has proposed a Middle Horizon "divide" whereby the Wari predominantly used arsenic bronze, while Tiwanaku and outlying centers in the south-central Andes used the ternary alloy of copper-arsenic-nickel as well as tin-bronze. Following her work, we can say that the recovery of two tupus at Espíritu Pampa is consistent with what we know concerning the distribution of arsenic-bronze in the Andes during the Middle Horizon. Due to their high silver content (72.8–87.8 weight percent), these silver-copper-arsenic alloys are likely the result of melting stock silver and stock arsenic-bronze together rather than the combined smelting of silver and copper ores (Gordon and Knopf 2007:45). Regardless of how exactly the metal of these two tupus was produced, it is clear that they are nearly identical and yet are different from the other silver objects recovered at the site of Espíritu Pampa, perhaps representing the products of a different workshop or even a different region.

Due to the paucity of silver objects from known Middle Horizon contexts, Wari production techniques

of silver are not well known. While much of the decorated Espíritu Pampa silver assemblage is similar stylistically (making references to the SAIS), trace elements measured by portable X-ray fluorescence indicate at least two production techniques. Prior studies of prehispanic silvers have attempted to differentiate between the use of native silver that is found in a very pure form versus lead-based argentiferous ore that can contain less than 1 percent silver (Gordon and Knopf 2007; Howe and Petersen 1994; Zori and Tropper 2013). The extraction of silver through the smelting of lead-silver ores (a process called cupellation) leaves trace amounts of lead within the final silver product. In an extensive study of silver production in the ancient Mediterranean, it has been established that silver obtained by cupellation will retain 0.05 to 2.5 percent lead (Gale and Stos-Gale 1981:175). This range has been supported by Andean studies, such as Howe and Petersen's (1994) analysis of silver artifacts produced through cupellation from the Mantaro region that exhibit a range of 0.2 to 1.64 percent lead and, in most cases, 0.2 to 0.7 percent lead. However, the analysis of silver extraction is complicated by the fact that the presence of lead trace elements in a sample may not automatically correlate to cupellation but may be a result of small amounts of lead within native silver deposits or the use of lead as a solvent during the smelting process.

Turning to the Espíritu Pampa artifacts, more than half (n = 26) of the silver artifacts sampled for this study exhibit small trace amounts of lead (below 0.05 weight percent), suggesting a minor presence of lead within native silver deposits.<sup>32</sup> Of the remaining specimens with lead contents above 0.05 percent, only two artifacts fall within the cupellation lead content range of 0.2 to 1.64 percent as reported by Howe and Petersen (1994) for similar Andean assemblages. These include the two circular pectorals EP 2012-1 and EP 2010-65 that contain respectively 0.47 weight percent and 0.27 weight percent lead.<sup>33</sup> Evidence of cupellation within Wari contexts should not be surprising, as indirect evidence of Middle Horizon lead-silver smelting has been

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Table 9.2. Metal composition of silver artifacts from Espíritu Pampa by weight percent.

Artifact #	Lab ID	Provenience	Artifact Type	Ag %	As %	Au %	Cu %	Pb %	Sn %	Other* %
EP 2010-17	ME35	1.1	Wrist band	99.1	0.1	0.0	0.5	0.18	0.0	0.1
EP 2010-19	ME95	1.1	Wrist band	99.0	0.1	0.0	0.8	0.05	0.0	0.0
EP 2010-19	ME94	1.1	Wrist band	98.9	0.1	0.0	0.8	0.05	0.0	0.0
EP 2010-19	ME34	1.12	Pectoral	97.1	0.0	0.6	2.0	0.07	0.0	0.2
EP 2010-24	ME36	1.4	Pectoral	99.3	0.4	0.1	0.1	0.02	0.0	0.0
EP 2010-65	ME32	6.5	Circular pectoral	96.8	0.0	0.0	1.9	0.27	0.0	1.0
EP 2010-67	ME81	6.7	Pectoral	97.8	0.2	0.2	1.7	0.03	0.0	0.1
EP 2010-68	ME93	6.7	Mask	98.9	0.1	0.2	0.8	0.03	0.0	0.1
EP 2010-73	ME48	6.7	Profile sequin	98.4	0.3	0.2	1.2	0.0	0.0	0.0
EP 2010-73	ME42	6.7	Profile sequin	99.0	0.2	0.1	0.8	0.01	0.0	0.0
EP 2010-73	ME41	6.7	Profile sequin	98.4	0.2	0.4	0.8	0.02	0.0	0.1
EP 2010-73	ME46	6.7	Profile sequin	96.7	0.1	0.4	2.7	0.02	0.0	0.1
EP 2010-73	ME51	6.7	Profile sequin	96.8	0.1	0.2	2.9	0.02	0.0	0.1
EP 2010-73	ME45	6.7	Profile sequin	97.7	0.0	0.3	1.9	0.02	0.0	0.1
EP 2010-73	ME44	6.7	Profile sequin	97.2	0.1	0.3	2.3	0.02	0.0	0.1
EP 2010-73	ME47	6.7	Profile sequin	96.4	0.1	0.4	2.8	0.03	0.0	0.2
EP 2010-73	ME50	6.7	Profile sequin	97.1	0.1	0.3	2.5	0.03	0.0	0.1
EP 2010-73	ME43	6.7	Profile sequin	96.9	0.2	0.7	2.0	0.03	0.0	0.1
EP 2010-73	ME49	6.7	Profile sequin	97.6	0.1	0.4	1.5	0.12	0.0	0.1
EP 2010-74	ME85	6.7	Sequin	98.4	1.2	0.2	0.2	0.0	0.0	0.0
EP 2010-74	ME83	6.7	Sequin	95.9	0.1	0.2	3.8	0.02	0.0	0.1
EP 2010-74	ME84	6.7	Sequin	96.8	0.1	0.1	3.1	0.04	0.0	0.0
EP 2010-79	ME55	6.7	Plume	98.1	0.1	0.1	1.6	0.06	0.0	0.0
EP 2012-04B	ME75	1.7	Tupu	87.8	1.3	0.2	9.7	0.0	0.0	0.9
EP 2012-06	ME33	2.1	Pectoral	97.1	0.0	0.4	2.0	0.06	0.0	0.4
EP 2012-1	ME70	1.9	Circular pectoral	97.2	0.0	0.3	2.1	0.47	0.0	0.0
n.d.	ME78	n.d.	Sequin	97.6	0.0	0.0	2.2	0.11	0.0	0.0

n.d. = no data.

previously demonstrated. Cooke et al. (2009) attribute a continuous increase in lead and galena contaminates within lake sediments from Llamacocha in the central Andes to Wari state expansion during the Middle Horizon period. Direct evidence comes from the Wari site of Hatun Cotuyoc in the Cusco region, where Skidmore (2014:234–235) recovered pieces of galena on an occupation floor as well as several fragments of shallow thick-walled ceramic vessels (believed to be crucibles used during the smelting process) in a nearby trash context. Portable X-ray fluorescence results

suggest that the silver used to produce two of the circular pectorals (EP 2012-1 and EP 2010-65) likely came from source silvers very different from those used to produce the majority of the other silver objects recovered at the site or are the products of different production techniques where lead was used as an additive or solvent during the smelting process.

The use of portable X-ray fluorescence provides an initial understanding of the underlying chemical compositions of the Espíritu Pampa silver and gold assemblage. The overall uniformity in raw materials and

<sup>\*</sup>Other: includes trace elements of Zn, Ni, Co, Ti, Cd, Pd, In, Ru, Pt.

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production techniques for the majority of the objects, alongside the high stylistic affinity, suggests that a centralized workshop was involved in the production of these elite items. The evidence of cupellation for two of the circular pectorals is consistent with known Wari production techniques from the Cusco region (Cooke et al. 2009; Skidmore 2014), while two outlying *tupus* are indicative of silver-copper alloying, a process seen later in the region during the Late Horizon (Gordon and Knopf 2007).<sup>34</sup>

### Summary and Discussion

In this chapter, we have described the ornate gold and silver objects recovered at the Wari site of Espíritu Pampa between 2010 and 2012. We have also compared those objects to other artifacts made of rare metals found elsewhere in the former Wari realm. The discussion helps to fill an important gap in our understanding of the Wari, since to date, there has been little scholarship on Wari and Wari-derived objects made of gold or silver.

The chapter began with a brief description of the SAIS, a set of religious images that has long been associated with both Wari and Tiwanaku expansionism but is now believed to have much deeper origins (Isbell and Knobloch 2009; Isbell et al. 2018). We have shown that while all of the gold and silver objects recovered at the Wari site of Espíritu Pampa are unique in their form and execution, several reflect the cosmology that was shared by both Wari and Tiwanuku. This is especially apparent among the items associated with the individual known as the Lord of Vilcabamba. The metalwork from Espíritu Pampa supports the long-held observations of Wari scholars that the elites of Ayacucho accepted and promoted the cosmology, which is now referenced as SAIS, during their expansionist period and that this artistic tradition was replicated at the highest levels of craft production, much of which we believe were state controlled.

An initial study of the chemical compositions of a subset of the gold and silver artifacts from the Wari site of Espíritu Pampa assemblage also provides useful insights. Elemental analysis indicates a uniformity across much of the production techniques and raw materials used, and in consideration of the high stylistic affinity of these objects, it can be proposed that most of the Espíritu Pampa metals were produced within the same or closely related workshops. Of the few objects likely imported to the site from very distant regions, the most notable was laid beside the Lord of Vilcabamba.

This burial is thought to hold a high-level member of Wari society, akin to a regional governor (Isbell 2016). Although the burial contained no ceramics, the individual was interred with various exceptionally high-quality metal objects, including a ceremonial axe that contains a blade composed of a copper, silver, tin, and gold alloy that likely comes from the Tiwanaku area. Rising above the level of simple sequins and plumes, it can be said that all of the major metal artifacts in the burial of the Lord of Vilcabamba reflect elements of the SAIS. This individual's burial goods illustrate how closely the ideas of the state, power, rare metals (i.e., affluence), and the cosmology presented in the SAIS were linked (Bauer 1996; DeMarrais et al. 1996).

It has been well documented that numerous societies outside of the central highlands, some of which appear to have been under Wari rule and others that may have been more independent, also accepted the religious beliefs manifested in the use of the SAIS. For example, during the Middle Horizon, several polities along the central coast of Peru, including those associated with the sites of Pachacamac, Cajamarquilla/Nieveria, and Ancon, each produced their own versions of the SAIS on what has been called Wariderived ceramics (Knobloch 2012; Menzel 1964). With this study, we can now begin to recognize a Wari-derived metal tradition that emerged from the same coastal areas.

This study has also contributed to the identification of a new artistic tradition of metalcraft within the Wari state that is reflected in silver circular pectorals. At least six, possibly eight, silver circular pectorals were recovered at Espíritu Pampa that shared the same iconography. Three additional examples recovered in the Colán, Cutervo, and Pomacanchi areas, as well as an additional example from the Museo Nacional in Lima, were also identified and suggest that the style was spread across the Wari realm. Furthermore, a number of Wari figures portrayed in other media are now recognized as wearing similar pectorals. It seems clear that the individuals who wore these pectorals must have held especially high social positions, and they may even reflect close association with the political elite of the Wari.

The Espíritu Pampa–style silver circular pectorals are decorated with embossed circles and thick wavy lines. This artistic tradition of metalcraft makes no visual references to the SAIS or any known southern coastal style.<sup>35</sup> Furthermore, no close matches with the Espíritu Pampa–style pectorals have been found among

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items known to have been produced along the north coast, but with the vast metal production of the Moche, this remains a possibility. Accordingly, in the absence of comparative traditions elsewhere in the Andes, and in recognition that this style was widespread in the former Wari realm, we suggest that its designs were derived from yet to be defined early Middle Horizon Ayacucho aesthetics and traveled across the Andes with the spread of the Wari. <sup>36</sup> As such, these objects may reflect an essence of political power associated with the Wari state that was viewed somehow separate from the cosmology that they shared with more southern entities, such as Tiwanaku.

#### **Notes**

- 1 When writing of "rare" or "elite" metals, we are referring to gold and silver and are excluding copper and bronze, which were more widely available in prehispanic times.
- 2 Cook (2012:109) notes there are many hybrids of the central, front-face figure and the profile deities, suggesting that these images were very frequently reformulated or adapted to local circumstances.
- 3 Two important exceptions to this statement include the portrayal of the "Captive Staff God" as well as the "Fire-Making Theme" shown on two textiles (Haeberli 2018:145). These textiles appear to make reference to two specific narrative scenes that would have been known by the viewers.
- 4 Sample AA100018.
- We recognize that the SAIS was a multiregional phenomenon that lasted for centuries. This means that in some cases, a Wari versus Tiwanaku classification may be a false dichotomy; accordingly, we have tried to be especially conservative in our assignment of objects to either of these cultures.
- 6 Recent excavations by Hector Espinoza Martínez (2015; Gamarra Gamio and Espinoza Martínez 2015) suggest that these objects are originally from the site of K'ullupata. Work by the Ministry of Culture at K'ullupata is ongoing, and they have recovered additional evidence of Wari burials. However, the site may also have Tiwanakurelated materials, complicating our understanding of its artifacts. It would not be surprising if the inhabitants of K'ullupata were drawing inspiration from both Wari and Tiwanaku since their community was located between these two powerful entities.
- 7 Part of the Wari Pomacanchi collection is now housed in the Princeton University Art Museum. We do not describe the Pomacanchi collection in detail in this report since it has already been presented (Chávez 1985, 1987).

- 8 http://larepublica.pe/sociedad/869859-cajamarca-encuentran-piezas-de-oro-y-plata-en-la-ciudad-de-cutervo
- 9 https://peru.com/actualidad/nacionales/piezas-oro-y-plata-halladas-cutervo-corresponderian-cultura-wari-noticia-511977
- 10 The Cerro Ilucán objects were found while we were writing up the Espíritu Pampa remains. Bauer visited the town of Cutervo in May 2017 to see the collection. We thank Carla Maritza Díaz García and Araceli Miranda Leon for helping arrange the trip to Cutervo.
- 11 It is likely that there were other high-ranking individuals buried at the site. For example, there is an elaborate burial beside Context 6.7, but because it was looted, we do not know what it once contained.
- 12 For example, see http://artmuseum.princeton.edu/collections/objects/32729.
- 13 The painting of metals is a tradition frequently documented on the coast, but it has not been well documented at highland Wari sites.
- 14 For a stylistically similar crown, see Mujica Gallo (1959:52, 53, Plate 15). Numerous requests were made to the Museo de Oro in Lima for permission to reproduce this object, but they all remained unanswered.
- 15 Patricia Knobloch (personal communication, 2017) drew our attention to one such mask in the Museo Larco (collection number ML10094), which, although made of copper, shares similarities with the Espíritu Pampa mask.
- 16 For a small number of other silver objects, it was not possible to determine if they were *tupus* or plumes because of their poor preservation.
- 17 This gold plume was found independently from the large lot of artifacts looted in April 2017.
- 18 The incised front-face deity on these plumes is very similar to those found on Tiwanaku disks recovered in Lake Titicaca (Reinhard 1992) and elsewhere in the Tiwanaku area.
- 19 A silver circular pectoral (EP 2010-65) with a meandering-line design was found in the same burial as this circular diadem pin.
- 20 Although somewhat tangential to the topic at hand, it can also be noted that a gold collar at the Houston Museum of Arts (Accession Number 2002.4307) and the collar on a ceramic piece at the Cleveland Museum of Art (Accession Number 1997.1) also end in round-nosed felines in profile that are similar to those shown on the Dumbarton Oaks diadem pin. These collars, with their feline head ends and prominent circles, also seem to reflect the essence of the Y-shaped pectorals found at Espíritu Pampa with its feline head ends and embossed circles.

### The Gold and Silver Objects

- 21 Numerous requests were made to the Museo de Oro in Lima for permission to reproduce a photograph of this object, but they all remained unanswered. For a stylistically very similar crown, see Mujica Gallo (1959:52–53, Plate 16).
- 22 As mentioned in Chapter 3, Anita Cook (personal communication, 2019) notes that the direction of the weeping eye motifs indicates that the figure may have been facing left.
- 23 Similar raised portraits can be found on other examples of Wari metalwork (see Chávez 1987:Figures 14, 15, 19, 47) and Bergh (2012c:Figures 227, 217).
- 24 For a full-winged silver bird pectoral from the central coast of Peru, see the Metropolitan Museum of Art (gift and bequest of Alice K. Bache, 1974, 1977; Accession Number 1974.271.54). For another full-winged gold pectoral from the central coast of Peru, see Ethnologisches Museum der Staatlichen Museen zu Berlin (Accession Number VA 2878). For a gold plume in a similar style from the central coast of Peru, see Ethnologisches Museum der Staatlichen Museen zu Berlin (Accession Number VA 31797).
- 25 There may be two thread holes above the maize motif.
- 26 Sample AA106771.
- 27 Sample AA106769.
- 28 Sample AA 106770.
- 29 It is also worth noting that a pair of silver ear ornaments at the Metropolitan Museum of Art may reflect a similar a metalworking tradition. These ear ornaments appear to have a feline-headed serpent at the end of the posts (Bergh 2012c:227, 228). They also have concave frontals that are decorated with a border of embossed circles comparable with the border decorations seen on the Espíritu Pampa–style circular pectorals.

- 30 Other gold objects from the site of Castillo de Huarmey were made of binary alloys of gold-silver (Velarde and Castro de la Mata 2014). See Boone (1996, Volume 1) for various other studies concerning Middle Horizon objects contained within the Dumbarton Oak collections.
- 31 It is worth mentioning that these two *tupus* were found in the same offering pit with another pair of stylistically and compositionally different silver *tupus* (EP 2012-03, EP 2012-05).
- 32 In comparison to the other largest Wari silver assemblage at Castillo de Huarmey, eight analyzed silver artifacts contained no detectable amounts of lead, suggesting native silver was used (Velarde and Castro de la Mata 2014:235).
- 33 Although the lead contents of these two specimens contribute only minimally to the entire weight percent of the object, the instrumental error per elemental reading for these two objects is so small to be negligible (e.g., EP 2012-1 contains 0.466 percent lead and has an error of 0.007 percent).
- 34 Gordon and Knopf (2007) compare Late Horizon silver-copper artifacts recovered from Machu Picchu to compositional values of experimental alloys. The two Espíritu Pampa silver-copper alloys contain similar elemental compositions to those of Machu Picchu (such as a *tupu* containing 81 percent Ag and 19 percent Cu).
- 35 Knobloch (2016:155, n. 16) suggests that this artistic tradition may be related to Chachapoyas pottery appliqué.
- 36 This is a speculative suggestion since there are no known motifs that match this style in the Early Intermediate Period ceramic style (Huarpa) of the Ayacucho region.



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Pampa, few thought that the Wari had ventured deep into the subtropical regions east of Ayacucho. Now, however, it is clear that the Wari established a settlement in the Vilcabamba region, and there is little doubt that evidence of additional Wari sites will be found within the region. In retrospect, the early expansion of the Wari into the ecologically rich subtropical regions east of its capital city makes economic sense, and their expansion may anticipate the Inca and the Spanish movements into the same region many centuries later.

Although the site of Espíritu Pampa is contained within the Department of Cusco, and modern access to the site is gained by traveling down the Urubamba River, the site is much closer to the former capital city of Huari (a distance of 110 km) than it is to Pikillacta, the largest Wari site in the Cusco region (a distance of 180 km). To travel from Espíritu Pampa to the city of Huari requires crossing the mountains to the west of the site and then dropping down into the Apurimac River Valley, between the towns of Santa Rosa and Lechemayo. That section of the valley is wide and well suited for agriculture, so it seems likely that the Wari established settlements there as well. After leaving the Apurimac River Valley, the traveler would have had to

cross several mountain passes, on either side of the San Miguel region, before arriving in the Huamanga Basin. This difficult route is seldom traveled today. Not surprisingly, because of its remoteness, dense vegetation, difficult terrain, and a long history of political unrest, little archaeological work has been conducted along this possible corridor (cf. Raymond 1972, 1992). Nevertheless, additional research in the area between the city of Huari and the site of Espíritu Pampa may well document a series of Wari sites that will help us to fill in the history of this largely unexplored area.

The finding of the Wari site of Espíritu Pampa was a fortuitous discovery, made while the Ministry of Culture was attempting to better understand the sprawling Inca occupation of the area. The Inca established a series of settlements in the Vilcabamba area, two or three generations before European/American contact. One of the largest towns, then called Vilcabamba, was at Espíritu Pampa. Manco Inca retreated to this region in 1536 after his failed rebellion against the Spaniards. For the next three decades, Manco Inca, followed by each of his three sons, remained in the Vilcabamba region and resisted European hegemony. The last embers of the Inca Empire were extinguished in 1572 as the Spaniards and their indigenous allies led a massive raid into the region and stormed the town of Vilca-

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bamba. Tupac Amaru, the last remaining son of Manco Inca, was captured in that raid and soon after was executed in Cusco (Bauer et al. 2015, 2016; Guillén Guillén 2005; Hemming 1970; Lee 2000).

Although Hiram Bingham briefly visited the ruined Inca city of Vilcabamba at Espíritu Pampa in 1911, the nature and actual history of the site remained little understood for many decades (Hemming 1970; Lee 2000). Archaeological work in the ruins began in the early 2000s when the Ministry of Culture began a longterm excavation project to document what is often referred to as the "last capital" of the Incas. In 2010, after completing a series of remarkable excavations within the Inca town (see Bauer et al. 2015), Javier Fonseca Santa Cruz directed a field season to define the extent of the Inca occupation in the valley. During this work, he was drawn to a small but badly looted field about 1 km from the center of the Inca town. Excavations soon revealed that there were many structures and burials within the field that dated to Wari times.

Under the auspice of the Ministry of Culture, Fonseca Santa Cruz directed three field seasons of excavations at the Wari site of Espíritu Pampa (2010–2012).<sup>2</sup> At the close of the 2012 excavations, some 40 burials/ offerings, many of which were contained within stonelined cists, had been found at the site. Some of the cists were sealed with large flat stones and a few of these had holes drilled through their tops to facilitate liquid offerings. Several of the cists also had stela-like standing stones within them while others contained different chambers for the offerings and the interments. The excavations also revealed several D-shaped buildings and a range of other structures, terraces, and platforms. The unusual location of Espíritu Pampa, its notable architecture, and the high status of many of the individuals interred at the site offer important insights into the sociopolitical organization of the Wari state and how it expanded into the eastern slope of the Andes.

### The Site and Its Date

The first three field seasons of excavations at the site revealed the remains of at least three D-shaped structures, a rectangular platform, and various terraces all grouped around a small plaza. Numerous burials and offerings were found within two of the D-shaped structures and the rectangular platform. The excavations also revealed that after a brief period of abandonment, a fourth but much smaller D-shaped structure was built at the site. More recent excavations have shown that there is an even larger D-shaped structure on the

southern end of the patio area (del Pezo Benavidez and Sumire Quispe 2015).

Nine carbon samples collected from different burials and floor levels of the site were submitted for radiocarbon dating. The earliest sample (AA100018; AD 572 ± 36; calibrated AD 649–773; 95.4 percent confidence level), which was collected from the interior of Area 4, suggests that the site was established sometime after AD 650. This is a relatively early date, but it is consistent with other early dates that have been reported from the Cusco (Bauer 2004:67; Bauer and Jones 2003:16; Glowacki 2005; Sillar et al. 2013:25; Skidmore 2014:332), Beringa (Owen 2010:65), and Moquegua (Williams 2001:78, 2009) areas. While the exact order of the building constructions is still not clear, it is certain that the center grew and was modified over the course of the following centuries.

Radiocarbon samples suggest that people continued to live at the site perhaps as late as AD 900. Based on the stratigraphy of the site, we suggest that it was briefly reoccupied after its initial abandonment. In short, the radiocarbon samples indicate that the site was founded early during the period of Wari expansionism and that the Wari may have completely withdrawn from the area as the empire began to wane sometime around the first millennium. This time frame is in sync with the ceramic styles recovered at the site and the emerging consensus on the period of Wari expansion. Many centuries later, the Incas arrived in the region and a series of small, circular domestic structures were built across the valley, including in the area formally occupied by the Wari.

### The People and Their Ceramics

The excavations at the Wari site of Espíritu Pampa recovered an exceptionally large number of intact ceramic vessels dating to the Middle Horizon. These vessels have been classified under the following types: local Cacaopampa, Wari-related (finer ware and domestic), head jars, Wari blackware, Huamanga-style, geometric-on-light polychrome, coastal-style, and Chakipampa-style. Chakipampa ceramics are among the most distinct ceramic styles of the Wari, and it is believed that Chakipampa ceramics spread across the Andes with the expansion of the Wari state from Ayacucho (Menzel 1964). The exceptionally fine craftsmanship and the standardization of Chakipampa vessels suggest that their production was achieved through closely connected workshops, perhaps located within the heartland.

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With the recovery of various Chakipampa ceramics in cists at Espíritu Pampa, there is little doubt that the site held close ties with the Ayacucho region. Members of the Espíritu Pampa community were, however, also participating in broader exchange networks that brought materials from great distances to the site. For example, a small number of vessels reflect ceramic traditions of the central and south-central coast. These vessels may have arrived at Espíritu Pampa directly from the coast, or they may have passed through intermediate hands, perhaps first arriving in the Ayacucho region and then being disseminated to more provincial settlements like Espíritu Pampa.

Naturally, during the course of the excavations, the finely produced ceramic pieces held our attention. However, during the laboratory phase of the project, we became increasingly intrigued by the more utilitarian vessels. As we worked with these pieces, it became evident that most of the utilitarian ceramics reflect what Owen (2010:58) has called "core folk traditions." In other words, most of the serving vessels as well as the cooking vessels follow cannons of ceramic production developed in the Ayacucho region. These vessels were most likely produced by households or village-level specialists, either in Ayacucho or Espíritu Pampa, or both.

While their exact place of production is important and in the future may be determined through chemical studies, what is critical to this current study is that the wide range of serving and cooking vessels used at the site of Espíritu Pampa was made following Wari norms. This is to say, the central aesthetics reflected by most of the ceramics, from the fanciest vessels (i.e., the Chakipampa-style ceramics) to the most basic cooking pots, are derived from the Ayacucho region. This suggests that the people who produced these vessels, and most likely the individuals who used them, identified with the Ayacucho region. It appears that the Wari colonists of Espíritu Pampa selected to bring their entire ceramic-making traditions with them as they left the highlands and entered into the eastern slopes of the Andes.

There were, however, some important exceptions to the general pattern of Ayacucho-based ceramic styles recovered at the site. A limited number of vessels display distinctly non-Wari designs and forms, apparently the aesthetics of a local Montaña population. There is no doubt that there were other people living on the eastern slopes of the Andes long before, and long after, the Wari began a eastward expansion from

the Ayacucho Basin, and the non-Wari design vessels recovered at the site document that the Wari settlers came into contact with some of them.

Both groups, the highlanders and lowlanders, appear to have overcome the linguistic and other cultural differences that would have separated them and apparently conducted trade. Within these trade relationships, the highlanders were especially interested in gaining access to large, heavily, and presumably locally produced ceramic vessels for various different uses, including general storage vessels and as catch basins within their burials. The fact that these non-Wari vessels made references to Montaña aesthetics, rather than those of the Ayacucho region, appears not to have been a concern for the inhabitants of the Wari site. The Montaña vessels may not have been placed in prominent positions within socially or politically charged contexts.

### The People and Their Obsidian

The obsidian objects recovered at the site appear to record a different long-distance trade route that existed during the Middle Horizon. All 12 of the obsidian artifacts tested, most of which were large bifaces classic of the Wari, are made of Alca-1 obsidian mined in the Cotahuasi region (Sierra Palomino 2013b). Alca-1 obsidian has also been found at Middle Horizon sites in the Cusco region (Bélisle 2015:191; Burger et al. 2000:324; Skidmore 2014), which is situated about midway between Espíritu Pampa and the Cotahuasi Valley. This leaves open the possibility that the members of the Espíritu Pampa community were also participating in exchange networks to bring obsidian, and perhaps other materials, directly from the southern highlands.

### The People and Their Metals

The 2010 to 2012 excavations at Espíritu Pampa provide examples of more than 75 bronze objects. As such, this is one of the largest collections of bronze items recovered from a single Wari site. The bronze artifacts include chisels, axes, points, spear-thrower hooks, and bells, but the most common bronze items recovered were *tupus*. All the *tupus*, which numbered over 50, contained rounded heads. Most of the *tupus* were undecorated, although the heads of two pairs did contain small nubbins, and a few others were decorated with perforations. The *tupus* were recovered in pairs, with one burial containing four sets. Our initial compositional study of the bronze objects supports the observed trend of the Wari using a copper-arsenic alloy.

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However, we also detected a range of alloys, including various copper-arsenic-nickel tupus, which have been made from locally extracted ores.

Two gold wrist bands were recovered from the Lord of Vilcabamba burial. They contained almost identical compositions of gold-silver-copper. We believe that these objects were made from native placer gold, rather than an intentionally made alloy. Of the more than 300 silver objects (including wrist bands, sequins, beads, tupus, plumes, and pectorals) found at the site, 42 were selected for compositional analysis. Most of the silver items from the site contain very similar compositions, again most likely representing the use of naturally occurring silver ores. Two *tupus* were recovered, however, that contained significant percentages of copper and arsenic, suggesting an intentionally produced alloy.

### The Lord of Vilcabamba and Other Wari Officials

The highest-ranking individual so far identified at the site, now known as the Lord of Vilcabamba, was placed in a deep burial. While no ceramic vessels were included with this individual, he appears to have been interred within a mummy bundle with a rich array of metal objects.<sup>3</sup> He was dressed in a garment covered with oval silver sequins. The same garment, or another within the bundle, contained 14 small rectangular panels that display rounded-nose felines in profile.

When buried, the Lord of Vilcabamba wore two gold wrist bands decorated with rounded-nose feline faces shown in profile, three necklaces made with greenstone beads, and a large Y-shaped silver pectoral adorned with rounded-nose felines in profile. A life-sized silver mask covered his face. A ceremonial silver-sheathed axe with a bronze blade was placed on his left side while a silver-sheathed staff was placed on his right. Parts of the mummy bundle were sprinkled with cinnabar powder. We believe that a fire was lit on the floor of the tomb during the interment rights, since many of the artifacts recovered in the burial were damaged by fire.

The axe included within the burial is of special interest since the blade is composed of a bronze alloy that includes copper, silver, and tin. The use of tin in the axe blade is especially noteworthy, since tin alloys with copper were used in the Lake Titicaca region during Tiwanaku times (Lechtman 2003b, 2005:133). A small number of Tiwanaku-style ceramic vessels have been found in the southernmost Wari center of Cerro Baúl (Williams and Nash 2016), and other Tiwanaku-style

objects have been recovered in an offering context at the site of Huari (Ochatoma Paravicino et al. 2015:112) so we know that selected Tiwanaku and Tiwanaku-style objects did penetrate into Wari territories. Accordingly, the axe blade appears to represent an imported item from the Titicaca region, and it is possible that it was produced by Tiwanaku craftspeople. The unusual composition of the axe blade and its importation over a great distance, as well as its possible cultural associations with Tiwanaku, certainly would have added to its prestige value.

The iconography displayed on the Y-shaped pectoral, the wrist bands, and the rectangular sequins within the Lord of Vilcabamba burial make direct references to what scholars now call the "Southern Andean Iconographic Series [SAIS]" (Isbell and Knobloch 2009; Isbell et al. 2018). This widespread cosmology was promoted by elites, and most likely others, within both Wari and Tiwanaku. Images reflective of this worldview are also found on several of the ceramics recovered in other burials at the site. It was once thought that this iconography began with Tiwanaku. Now, however, it is believed that the SAIS emerged before, and independently of, both Tiwanaku and Wari, yet it was also intimately related to the expansion of each of these polities. Supernatural beings, referred to as "staff gods" and others known as "profile deities," are hallmarks of this iconography. Representations of profile deities appeared as round-nosed felines within the burial of the Lord of Vilcabamba. The identification of elements of the SAIS within the burial goods of the Lord of Vilcabamba reconfirms that there was an imitate connection between this iconography and a class of elite Wari individuals during the Middle Horizon.

Work at Espíritu Pampa also revealed the existence of a different kind of Wari official, one who appears to have also been present at other state installations. Six different cists at the site contained silver circular pectorals that varied between 21 and 28 cm in diameter. Two other cists contained poorly preserved silver objects that may also have been circular pectorals. Carbon recovered within pectoral-containing cists place these objects squarely within the Middle Horizon. Similar silver pectorals have been found at three other Wari sites, two in the far north, in the Cajamarca region, and one in the southern province of Pomacanchi. Yet another example is held by the Museo Nacional in Lima, but its original provenance is not known. We have also identified a Wari stone figurine who is shown wearing such a pectoral, and several other objects show individ-

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uals wearing similar-looking disks. The designs of these pectorals, which are composed of embossed circles and thick wavy lines, fall outside of the SAIS. Nevertheless, the individuals who wore the circular pectorals must have also held high social positions among the Wari. The uniformity of the circular pectoral designs and their recovery from various sites across the Wari realm speak to the institutionalization of authority in those who wore them. With the recovery of the elaborate remains of the Lord of Vilcabamba as well as the discovery of these silver pectorals, we are seeing evidence of a multilevel state bureaucracy with the Wari.

Bone preservation was extremely poor at the Wari site of Espíritu Pampa, and frequently only the remains of teeth were recovered at the bottom of the cist. Nevertheless, it was noted that many of the burials contained bronze or silver *tupus*. These items were used as shawl pins and are generally seen as markers of female identify in the Andes. The recovery of *tupus* in cists that also contained human remains indicates that some of the elite individuals buried at the site were females. For example, the individual of Context 6.5 (a capped, stone-lined conical cist) was buried with a coastal-style flask, a silver circular two-plumed diadem pin made of silver, a circular pectoral made of silver, and two pairs of *tupus*, one made of silver and the other of bronze.

#### Espíritu Pampa in Reflection

The goal of this book has been to provide detailed descriptions of the excavations and the objects recovered at the Wari site of Espíritu Pampa during 2010 to 2012 and to place those results within the emerging scholarship of the Andean Middle Horizon. Although research at the site of Espíritu Pampa is still just beginning, and we have yet to even define its size, it is clear that the site held an important role within the expansionist ambitions for the Wari. The identification of elite burials at the site suggests that some members of the community held important positions within the Wari state. This is especially true for those who were buried with silver pectorals and the individual now known as the Lord of Vilcabamba.

So what role did the Lord of Vilcabamba hold within the Wari sphere? Isbell (2016:39) suggests that the principal burial at Espíritu Pampa is reflective of a third-level lord, or what might be called a provincial governor. We concur and point out that analogous positions existed in the time of the Inca, who began to rule the Andes four centuries later. Numerous Spanish writers note that at the height of the Inca Empire,

the Cusco-based rulers appointed regional governors to oversee the state's interests in important provinces. These provincial lords were called tucuyrico, which is generally translated as "he who sees all." The name is derived from the various accounting tasks and inspections that these individuals carried out in their assigned provinces. For example, Damián de la Bandera (1965:178 [1557]) writes, "In each province there was a governor and they were a captain of the Inca, which was called tucuyrico, which is to say, 'he who sees all." Cobo (1979:199-200 [1653: Bk. 12, Chap. 25]) provides a little more information, writing, "In these provincial capitals there was in residence a tocricuc or representative of the Inca; this official had the power to administer justice and punish offenses in accordance with their seriousness. . . . He went out to visit his district at certain times; he had the tributes and royal revenues collected and placed them in the warehouses, replenished the supplies at the tambos [waystations], took a census of the children that were born each year and those who reached the age to pay tribute, and listed those who no longer had this obligation."4 We know that the Inca appointed such regional governors across the Andes, including to oversee lowland areas of coca production (Bauer et al. 2010:112-113; Julien 2002:185). Knowing the important role that regional governors held in most state societies and the more specific roles of the tucuyrico within Inca rule, it is possible to speculate that the individual interred at the Wari site of Espíritu Pampa held a similar hierarchical position within the Wari realm.

The exceptional burial and the various D-shaped structures at Espíritu Pampa mark this site as an especially important occupation for the Wari. Both the Inca and the Spanish established mines in the greater Vilcabamba region (Bauer et al. 2015, 2016; Ocampo Conejeros 2013; Regalado de Hurtado 1992:110–118), so the mineral wealth of this region may have also been known to earlier highland colonists. The Wari settlement may have also served as an important node in the collection and transportation of other lowland resources (including coca, exotic bird feathers, *chonta* wood, and *vilca* seeds) to the Wari capital.

Whatever resources were being extracted by the Wari from the Vilcabamba region, it is clear that they required the establishment of a state-supported installation that was occupied for hundreds of years. The settlement also required, and apparently supported, a level of elites seen at few other Wari sites. The decorated metal objects contained within the principal burial at

#### Chapter 10

Espíritu Pampa, and some of the finer ceramic vessels found in other burials, reflect a religious ideology (the Southern Andean Iconographic Series) that is strongly aligned with ritual practices of the Wari. Other objects (i.e., silver circular pectorals) marked other high-ranking individuals, who most likely held specific positions within the state hierarchy.

From the archaeology evidence recovered during our work at the site, it appears that the site of Espíritu Pampa represents a case of highland colonists, perhaps arriving directly from the Ayacucho region, establishing a Wari enclave in region that was already thinly populated by Montaña peoples. As such, it provides an important case study of Wari colonists both interacting with a local group while at the same time maintaining close lines of communication with their homeland and its cultural traditions and institutions.

#### **Notes**

- 1 For example, in 2011, several Wari vessels, now on display at the Museo Amazónico Andino de Quillabamba, were unearthed during construction work in the town of Quillabamba. Based on those remains, it is possible to suggest that the Wari established and maintained other colonies in the eastern lowlands. There are also reports of Wari remains being found at the village of Chontabamba and near the pass of Kollpacasa.
- 2 After a year hiatus, the Ministry of Culture began excavations again in 2013.
- 3 The absence of *tupus* within this burial suggests, but does not definitively indicate, that the interred was a male.
- 4 For additional information, also see Discurso (1906:152 [ca. 1570]), González Holguín (1989:344 [1608]), Santillán (1950:48–49, 51 [1563]), and Sarmiento de Gamboa (2007:127–128 [1572: Chap. 35).



# Radiocarbon Dates from the Wari Site of Espíritu Pampa

Lab#	Sample ID	Material	d13C	F(d13C)	<sup>14</sup> C Age BP	AD/BC	Calibrated
AA100018	Espíritu Pampa Area 4 Floor	Charcoal	-25.8	$0.8424 \pm 0.0038$	1,378 ± 36	572 ± 36	95.4% 649 (95.4%) 773 cal AD 68.2% 656 (52.6%) 708 cal AD 748 (15.6%) 766 cal AD
AA100020	Espíritu Pampa Area 1 Floor	Charcoal	-24.9	$0.8536 \pm 0.0066$	1,272 ± 62	678 ± 62	95.4% 670 (87.3%) 902 cal AD 917 (8.1%) 965 cal AD 68.2% 710 (14.0%) 747 cal AD 766 (54.2%) 888 cal AD
AA106768	Espíritu Pampa Area 2 Context 2.12	Charcoal	26.7	$0.8542 \pm 0.0029$	1,265 ± 27	685 ± 27	95.4% 666 (92.6%) 778 cal AD 792 (1.2%) 803 cal AD 842 (1.5%) 859 cal AD 68.2% 689 (40.3%) 730 cal AD 736 (27.9%) 768 cal AD
AA106770	Espíritu Pampa Area 2 Context 9.2	Charcoal	26.3	0.8544 ± 0.0029	1,264 ± 28	686 ± 25	95.4% 666 (90.7%) 778 cal AD 792 (1.6%) 804 cal AD 814 (0.9%) 824 cal AD 841 (2.2%) 861 cal AD 68.2% 690 (59.4%) 752 cal AD 759 (8.8%) 768 cal AD
AA100019	Espíritu Pampa Area 2 Floor	Charcoal	19.8	$0.8549 \pm 0.0039$	1,259 ± 37	691 ± 37	95.4% 690 (13.8%) 751 cal AD 761 (78.7%) 898 cal AD 922 (2.9%) 941 cal AD 68.2% 777 (68.2%) 882 cal AD
AA106771	Espíritu Pampa Area 1 Context 1.12	Charcoal	26.0	$0.8558 \pm 0.0024$	1,251 ± 22	699 ± 22	95.4% 677 (87.2%) 779 cal AD 791 (2.5%) 805 cal AD 811 (2.1%) 827 cal AD 68.2% 694 (58.7%) 746 cal AD 763 (9.5%) 772 cal AD
AA106769	Espíritu Pampa Area 1 Context 1.9	Charcoal	23.8	$0.8571 \pm 0.0027$	1,239 ± 25	711 ± 25	95.4% 686 (63.9%) 780 cal AD 788 (31.5%) 875 cal AD 68.2% 691 (44.6%) 749 cal AD 761 (12.3%) 778 cal AD 792 (5.2%) 803 cal AD 843 (6.1%) 858 cal AD
AA106772	Espíritu Pampa Area 10	Charcoal	27.0	$0.8627 \pm 0.0027$	1,187 ± 25	763 ± 25	95.4% 769 (93.3%) 895 cal AD 928 (2.1%) 940 cal AD 68.2% 778 (12.1%) 793 cal AD 802 (34.2%) 844 cal AD 854 (21.9%) 881 cal AD
AA106767	Espíritu Pampa Area 10	Charcoal	26.8	0.8648 ± 0.0028	1,167 ± 26	786 ± 26	95.4% 772 (82.2%) 902 cal AD 920 (13.2%) 954 cal AD 68.2% 777 (11.2%) 792 cal AD 803 (25.3%) 844 cal AD 857 (27.4%) 894 cal AD 930 (4.3%) 938 cal AD



# Wari Textiles Preserved at the Wari Site of Espíritu Pampa

Jeffrey C. Splitstoser and Brian S. Bauer

ocated about at about 1,400 masl, the site of Espíritu Pampa is situated in the vast high jungle region of Peru that covers much of the eastern slope of the Andes. With its high temperatures and seasonal monsoons, there is little hope for the preservation of organic materials at the site. Nevertheless, a combination of burning events that took place within the Wari burials during the interment rituals, as well as the close contact that some of the textiles had with oxidizing metals, has resulted in the preservation of a few small pieces of cloth. Descriptions of these fragments have been developed from the photographs provided below. While the findings describe rather basic weaving materials and techniques, the results are noteworthy since no other descriptions exist of Wari textiles recovered in a subtropical context.

Artifact EP 2010-89 includes two small bronze *tu-pus* that were oxidized together and recovered in Context 6.11, a capped cist found in Area 5. One of the *tupu* heads contains two difference pieces of textiles. Textile 1 is larger and covers most of the *tupu*, while Textile 2 is smaller and seems to have once covered part of Textile 1 (Figure A2.1). Textile 1 is lighter colored than Textile 2 and looks to be whitish gray. It is composed of warp-predominant plain weave made

with S(2z) yarns and appears to be made of camelid hair.\* Textile 2 is light brown and has a warp-predominant (almost warp-faced) plain weave made with S(2z) yarns and appears to be of cotton. Textile 2 consists of two webs whip-stitched together (only a single stitch remains) with two S(2z) yarns. Web I has an intact weft edge, and Web II has a warp selvage whose first shot has four or more yarns, and the second and third shots may have two yarns each.

Artifact EP 2012-SN is a small bag, found in Context 1.12, composed of at least two different fabrics that were decorated with slightly concave silver disks, each with two holes that were used to attach the disk to the outside of the bag (Figure A2.2). Textile 1 is whitish-gray, balanced to warp-predominant plain weave with S(2z) yarns that are probably of camelid hair. Textile 2 has a rich light-brown color made of warp-faced plain weave with S(2z) yarns, most likely vicuña. The yarns in Textile 2 are similar in color to the yarns in Textile 2 from EP 2010-89 but appear to be thinner and more tightly twisted.

EP 2010-12 is a bronze *tupu* that had a string of small 23 calcite beads oxidized onto it and two patches of fabric that were recovered in Context 1.1 (see Figure 2.3). The textiles are layered. Textile 1 appears

<sup>\*</sup> The wool and cotton determinations are based on photographs and need to be confirmed with the actual specimens.

#### Appendix 2



Figure A2.1:. Two pieces of textiles were found fused to two tupus (EP 2010-89) recovered in Context 6.11. (Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.)



Figure A2.2. Artifact EP 2012-SN is a small bag, composed of at least two different fabrics and covered with silver disks, that was found in Context 1.12. (Ministerio de Cultura, photograph by Javier Fonseca Santa Cruz.)



**Figure A2.3.** EP 2010-91, a bronze object with several folds of textile, was found in Context 6.11. (*Ministerio de Cultura*, photograph by Javier Fonseca Santa Cruz.)

to be cotton and is not touching the metal. It is light brown and has a warp-predominant to warp-faced plain weave with S(2z) warps and wefts. Unfortunately, the photograph is not of sufficient detail to determine the structure of Textile 2, which is touching the metal. The cord, likely a Z(2s(2z)), which holds the beads, is of cotton and has a final twist of Z.

EP 2010-91 is a flat bronze object with a fabric attached to one of its faces from Context 6.11. The textile consists of at least three pieces that are layered (Figure A2.3). All pieces share the same light-brown color, cotton material, and weave structure, which is warp-predominant plain weave with S(2z) or S(3z) warps and S(2z) wefts, suggesting they were once part of a single fabric.

#### Wari Textiles Preserved at Espíritu Pampa

In summary, it appears from photos that there are three "styles" of fabric present: all plain weave that differ in their color (white and light brown), weave density (balanced to warp faced), yarn quality ("regular" and fine), and possibly their material (cotton or camelid hair) (Table A2.1).

Table A2.1. Attributes of Wari textile styles found at the site of Espíritu Pampa.

	Textiles with This Style						
Style	Style Textile # Contexts		Color	Plain Weave Density	Yarn Structure	Material	
1	1	EP 2010-89	Whitish	Balanced to warp	5(2.)	Camelid hair	
1	1	EP 2010-SN	VVIIIUSII	predominant	S(2z)	Camend nair	
2	2	EP 2010-89			S(2z)	Cotton	
2	1	EP 2010-12	Light brown	Warp predominant to			
	3	EP 2010-91	8	warp faced	= (==)		
3	2	EP 2010-SN	Light brown	Warp faced	S(2z)	Camelid hair	



# Areas and Contexts at the Wari Site of Espíritu Pampa 2010–2012

Area	Context	Description	Human Remains	Artifact Number	Artifact Description	Figure Number
1	1	Shallow pit	None			Figures 2.1, 2.3, 8.1
				EP 2010-6	Wari-related double-body plainware	Figures 2.7, 7.8
				EP 2010-7	Wari-related face-neck jar	Figures 2.6, 7.10
				EP 2010-8	Coastal-style, doubled-spouted vessel	Figures 2.8, 7.18
				EP 2010-9	Cacaopampa-style open-mouth vessel	Figures 2.10, 7.3
				EP 2010-10	Coastal-style incurving bowl	Figures 2.9, 7.19
				EP 2010-11	Bronze chisel	Figures 2.5, 8.1
				EP 2010-12	Bronze <i>tupu</i> with a cotton string with 23 calcite beads	Figure 2.4
				EP 2010-13	Bronze chisel	Figures 2.5, 8.1
				EP 2010-14	Bronze chisel	Figure 8.1
				EP 2010-15	Bronze chisel	Figures 2.5, 8.1
				EP 2010-16	Bronze chisel	Figure 8.1
				EP 2010-17	Two silver bands	Figure 9.3
				EP 2010-18	Silver band	Figure 9.2
				EP 2010-19	Silver band	Figure 9.2
				EP 2010-20	Bronze tupu	None
				EP 2010-21	Head jar	Figures 2.11, 7.12
1	2	Disturbed, stone- lined cylindrical cist: 80 cm wide and 100 cm deep	None			Figures 2.1, 2.12, 2.13
				EP 2010-102	Two bronze tupus	None
				Other	Shell fragments	None
1	3	Capped, stone- lined cylindrical cist: 90 cm wide and 70 cm deep	None		None	Figures 2.1, 1.13
1	4	Two capped and connected, stone-lined, conical cists	Teeth			Figures 2.1, 2.15

#### Appendix 3

	1		Remains	Number	Artifact Description	Figure Number
				EP 2010-22	Bronze tupu	None
				EP 2010-23	Bronze tupu	None
				EP 2010-24	Silver pectoral	Figures 2.14, 9.27
				EP 2010-25	Huamanga-style bowl	Figures 2.17, 7.14
				EP 2010-26	Huamanga-style bowl	Figures 2.16, 7.15
				EP 2010-27	Wari-related plainware bowl	Figures 2.18, 7.9
				EP 2010-28A, EP 2010-28B	Obsidian knife and scraper	None
				None	Bronze chisel	None
				Other	Fine gray clay and a light dusting of cinnabar	None
1	5	A disturbed, stone-lined rectangular cist (200 x 85 cm), divided lengthwise into two chambers by standing slabs	Small pieces of bone			Figures 2.1, 2.19
				EP 2010-1	Coastal-style tripodal bottle	Figures 2.21, 7.19
				EP 2010-2	Bronze axe	Figures 2.23, 8.2
				EP 2010-3	Bronze axe	Figures 2.23, 8.2
				EP 2010-4	Bronze axe	Figures 2.23, 8.2
				EP 2010-5	Seventeen silver sequins	Figure 9.5
				EP 2010-103	Greenstone tooth	Figure 2.20
				None	Greenstone bead	None
1	6	Disturbed cylindrical, stone-lined cist	None		None	Figure 2.1
1	7	Rock-lined pit	None			Figures 2.1, 2.24
1	,	Rock-inica pit	110116	EP 2012-2	Female figurine	Figure 2.25
				EP 2012-3	Silver <i>tupu</i>	None
+				2012-4A, 4B	Two silver tupus	Figures 2.27, 9.11
				EP 2012-5	Silver tupu	Figures 2.27, 9.11
+				None None	Obsidian fragments	None
				Ttolic	Obstanti ruginents	110110
1	8	Capped, conical, stone-lined cist: 62 cm wide and 50 cm deep	None			Figure 2.1
				EP 2012-2	Bronze tupu	None
				None	Fragments of silver sheet	None
				None	Pieces of plainware pottery	None

#### Areas and Contexts at the Wari Site of Espíritu Pampa 2010–2012

Area	Context	Description	Human Remains	Artifact Number	Artifact Description	Figure Number
1	9	Capped cylindrical, stone-lined cist: 62 cm wide and 90 cm deep	None			Figure 2.1
				EP 2012-1	Silver circular pectoral	Figures 2.30, 9.35
				C-14	AD 711±25 (AD 686-875 [95.4 percent confidence level]). Sample AA106769	Appendix 1
1	10	Capped pit	None			Figures 2.1, 2.31
				EP 2012-27	_	Figure 2.32
				Other	Two plainware fragments, a few small bits of carbon	None
1	11	Stone-lined pit	None			Figure 2.1
				none	Wari-related, plainware bowl	None
				EP 2012-28	Head jar	Figures 2.33, 7.12
1	12	Stone-lined pit	None			Figures 2.1, 2.34
				EP 2012-19	Fragments of circular silver pectoral	None
				EP 2012-SN	Bag with silver sequins	Figure 2.36
				EP 2012-26	Wari-related flask	Figure 2.35
				EP 2012-34	Fifty-one stone beads	None
				None	Two spindle whorls	None
				None	Bronze tupu	None
				C-14	AD 699±22 (AD 677-863 [95.4 percent confidence level]). Sample AA106771	Appendix 1
2	1	Small stone- lined cist	None			Figure 3.2
				EP 2011-2	Cacaopampa-style vessel	Figures 3.3, 3.4, 7.1
				EP 2011-31	Obsidian biface	Figure 3.5
2	2	Capped large, complex, burial chamber	None			Figure 3.2, 3.7
				EP 2011-30	Three quartz crystal beads	Figure 3.6
				EP 2012-8	Incised bronze tupu	Figures 3.13, 8.4
				EP 2012-9	Incised bronze tupu	Figure 3.13
				EP 2012-10	Bronze tupu	None
				EP 2012-35	Wari-related single-spout bottle	Figures 3.9, 7.11
				EP 2012-36	Chakipampa-style bowl	Figures 3.8, 7.17
				EP 2012-37	Wari-related straight-sided drinking vessel	Figures 3.10, 7.11
				EP 2012-38	Cacaopampa-style open-mouth vessel	Figures 3.11, 7.3, 7.4

#### Appendix 3

Area	Context	Description	Human Remains	Artifact Number	Artifact Description	Figure Number
				None	Four bronze <i>tupus</i> , five semicircular bronze bells	None
				None	Obsidian point	Figure 3.12
2	3	Capped, stone- lined rectangular cist; 55 cm wide x 55 cm long	None			Figure 3.2
				EP 2011-3	Wari-related plainware vessel	Figure 3.15
				EP 2011-4	Coastal-style double-spout vessel with high bridge handle	Figures 3.14, 7.18
2	4	Capped, straight- sided, stone- lined cylindrical cist; 85 cm wide and 145 cm deep	Teeth fragments			Figures 3.2, 3.16, 3.17
				EP 2011-5	Wari-related plainware pitcher	Figures 3.18, 7.8
				EP 2011-6	Wari-related plainware vessel with a side spout	Figures 3.19, 7.7
				EP 2011-7	Wari-related, plainware vessel with a side spout	Figures 3.20, 7.7
				EP 2011-8	Chakipampa-style bowl	Figures 3.21, 7.17
				EP 2011-9A,B	Two bronze tupus	Figure 3.22
				EP 2011-10	Bronze tupu	Figure 3.23
				EP 2011-11	Bronze tupu	Figure 3.23
				EP 2011-12	Bronze tupu	Figure 3.23
				EP 2011-13	Bronze tupu	Figure 3.23
				EP 2011- 14A,B	Two bronze tupus	Figure 3.22
				Other	Cobble-size stones and cinnabar powder	Figure 3.17
2	5	Capped, stone- lined cylindrical cist; 90 cm wide and 120 cm deep. The floor was divided by upright-standing slabs.	None			Figures 3.2, 3.16
				EP 2011-16	Wari-related plainware vessel with a side spout.	Figures 3.24, 7.8
				EP 2011-17	Chakipampa-style bowl	Figures 3.26, 7.17
				EP 2011-18	Bronze tupu	None
				EP 2011-19	Wari-related face-neck vessel	Figures 3.28, 7.10
				EP 2011-20	Wari blackware undecorated drinking vessel	Figure 3.30
				EP 2011-21	Bronze tupu	None
				EP 2011-22	Bronze tupu	None

#### Areas and Contexts at the Wari Site of Espíritu Pampa 2010–2012

Area	Context	Description	Human Remains	Artifact Number	Artifact Description	Figure Number
				EP 2011-23	Bronze tupu	None
				EP 2011-24	Wari-related plainware vessel with two arched handles	Figures 3.29, 7.7
				EP 2011-25	Bronze tupu	None
				EP 2011-26	Bronze tupu	None
				EP 2011-27	Huamanga-style bowl	Figure 3.26
2	6	Capped, straight- sided, stone- lined cylindrical cist; 45 cm wide and 64 cm deep	None			Figures 3.2, 3.31
				EP 2010-28	Cacaopampa-style neckless vessel	Figures 3.33, 7.2
				EP 2011-29	Cacaopampa-style neckless vessel	Figures 3.32, 7.4
				EP 2011-30	Wari-related face-neck bottle	Figures 3.34, 7.10
				EP 2012-31	Huamanga-style drinking vessel	Figures 3.35, 7.15
2	7	Capped, straight-sided, stone-lined, roughly rectangular burial; 58 cm long, 40 cm wide, and 60 cm deep	Teeth fragments	Context 2.7		Figures 3.2, 3.16
				EP 2011-32	Wari-style flask	Figures 3.37, 7.11
				EP 2011-33	Bronze tupu	Figure 8.4
				EP 2011-34	Bronze tupus	None
				EP 2011-35	Bronze tupu	None
				EP 2011-36	Bronze tupu	Figure 3.38
2	8	Large, oval pit, about 100 cm by 70 cm, divided into two areas	None			Figures 3.2 and 3.40
				EP 2011-15	Cacaopampa-style open-mouth vessel	Figures 3.43, 7.3, 7.4
				EP 2011-37	Cacaopampa-style bowl	Figure 3.41
				EP 2011-38	Wari-style flask	Figures 3.45, 7.11
				EP 2011-39	Cacaopampa-style open-mouth vessel	Figures 3.44, 7.3
				EP 2011-40	Wari blackware vessel	Figure 3.46
				EP 2011-41	Tubular whistle	Figure 3.47
				EP 2011-42	Bird-shaped whistle	Figure 3.48
				EP 2011-43	Figurine whistle	Figure 3.49
				EP 2011-44	Cacaopampa-style bowl	Figure 3.42
				Other	Large, plainware storage vessel	None

#### Appendix 3

Area	Context	Description	Human Remains	Artifact Number	Artifact Description	Figure Number
2	9	Capped, straight- sided, stone- lined, conical cist; 50 cm wide and 85 cm deep	None			Figures 3.2, 3.51
				EP 2012-11A and 11B	Bronze tupus	Figure 3.54
				EP 2012-12	Bronze tupu	None
				EP 2012-13A and B	Bronze tupus	Figure 3.54
				EP 2012-14	Bronze tupu	Figures 3.54, 8.4
				EP 2012-39	Llama figurine vessel	Figure 3.53
				EP 2012-40	Huamanga-style spoon	Figure 3.52
				EP 2012-41	Huamanga-style bowl	Figures 3.51, 7.15
2	10	Capped, partially stone-lined, cylindrical cist; 60 cm wide and 80 cm deep. The location of the cist was marked by two upright-standing stone slabs.	None			Figure 3.2
				none	Plainware vessel	none
				EP 2012-6	Silver plume-pin	Figure 3.55
				EP 2012-7	Possible pectoral	Figure 3.55
2	11	Capped, partially stone-lined, cylindrical pit; 60 cm wide and 130 cm deep	None			Figure 3.2
				EP 2012-16	Two silver plume-pins	Figure 3.9
				EP 2012-40	Huamanga-style bowl	Figures 3.57, 7.14
				EP 2012-42	Huamanga-style bowl	Figure 3.57
				EP 2012-43	Huamanga-style bowl	Figures 3.58, 7.14
2	12	Pit: 56 cm wide and 130 cm deep. AMS calibrated date of AD 685±27 (AD 666-859 [95.4 percent confidence level]).	None			Figures 3.2, 3.60
				EP 2012-45	Decorated Wari blackware vessel	Figures 3.64, 7.13
				EP 2012-46	Undecorated Wari blackware drinking vessel	Figures 3.65, 7.13
				EP 2012-47	Decorated Wari blackware bottle	Figures 3.63, 7.13

#### Areas and Contexts at the Wari Site of Espíritu Pampa 2010–2012

Area	Context	Description	Human Remains	Artifact Number	Artifact Description	Figure Number
				EP 2012-48	Undecorated Wari blackware drinking vessels	Figures 3.66, 7.13
				EP 2012-49	Wari-style face-neck jar	Figure 3.61
				EP 2012-50	Wari-style bottle	Figures 3.62, 7.14
2	13	Capped, nearly square, stone- lined cist; 34 cm wide and 32 cm deep	None			Figures 3.2, 3.68
				EP 2012-51	Huamanga-style bowl	Figure 3.69
				EP 2012-52	Montaña-style bilobed vessel	Figures 3.68, 7.6
2	14A	Pit: 60cm wide and 100 cm deep	None			Figures 3.2, 3.70
				EP 2010-29	Fragmented, molded bear head	Figure 3.71
				EP 2010-30	Wari-related plainware bowl	Figure 3.72
				EP 2010-31	Wari-related plainware bowl	Figures 3.73, 7.9
				EP 2010-32	Wari-related plainware bowl	Figures 3.73, 7.9
				EP 2010-33	Wari-related plainware bowl	Figure 3.74
				EP 2010-34	Cacaopampa-style jar	Figures 3.77, 7.1
				EP 2010-35	Cacaopampa-style jar	Figures 3.76, 7.1
				EP 2010-37	Two obsidian points	Figure 3.78
				EP 2010-38	Two obsidian points	Figure 3.78
2	14B	Disturbed stone- lined cist				Figures 3.2, 3.79
				EP 2010-36	Silver pectoral	Figure 3.80
				EP 2010-39	Two bronze points	Figure 3.81
				Other	Greenstone beads and cinnabar powder	None
4	1	Challavy nit			Errormonts of a plainware vessel	Figure 4.2
**		Shallow pit			Fragments of a plainware vessel  Fragments of a plainware vessel and	
4	2	Shallow pit			a Huamanga-style bowl	Figure 4.2
4	3	Shallow pit			Fragmented plainware vessel	Figure 4.2
4	4	Shallow pit			Fragmented plainware vessel	Figure 4.2
4	5	Shallow pit			Fragmented plainware vessel	Figure 4.2
4	6	Shallow pit			Fragmented Cajamarca-style bowl and a plainware vessel	Figure 4.2
4	7	Disturbed shallow pit			Fragmented Huamanga-style bowl and a plainware vessel.	Figure 4.2
4	8	Shallow pit			Fragmented plainware vessel	Figure 4.2
5	1	Capped, boot- shaped burial; 90 cm in wide and 180 cm deep	Teeth fragments			Figure 4.4

#### Appendix 3

Area	Context	Description	Human Remains	Artifact Number	Artifact Description	Figure Number
				EP 2010-40	Silver plume-pin	Figure 4.5
				EP 2010-41	Geometric-on-light polychrome bowl	Figures 4.7, 7.16
				EP 2010-42	Geometric-on-light polychrome bowl	Figures 4.7, 7.16
				EP 2010-43	Cacaopampa-style, face-body, plainware vessel	Figures 4.8, 7.5
				EP 2010-44	Huamanga-style bowl	Figure 4.9
				EP 2010-45	Chakipampa-style bowl	Figures 4.10, 7.17
				EP 2010-46	Chakipampa-style bowl	Figures 4.11, 7.17
				EP 2010-47	Chakipampa-style bowl	Figure 4.12
				EP 2010-48	Cacaopampa-style, face-body, plainware vessel	Figures 4.16, 7.5
				EP 2010-49	Silver tupu	Figure 4.17
				EP 2010-50	Silver tupu	Figure 4.17
				EP 2010-51, EP 2010-52	Bronze tupus	Figure 4.22
				EP 2010- 53A, EP 2010-53B	Silver tupus	Figure 4.18
				EP 2010- 54A, EP 2010-54B	Bronze tupus	Figure 4.21
				EP 2010-55	Huamanga-related bowl	Figure 4.13
				EP 2010-56	Huamanga-related bowl	Figure 4.14
				EP 2010-57	Small, undecorated vessel	Figure 4.15
				EP 2010-58	Plainware vessel with basket-style strap handle	Figures 4.19, 4.20, 7.11
				Other	Cinnabar powder	
5	2	Oval construction, badly disturbed, 2.5 m long and 1.0 m wide, with stone-lined cist	None			Figure 4.4
				EP 2010-66	Rectangular silver pectoral	Figures 4.23, 9.26
				EP 2011-46	Bronze sheet metal	None
				EP 2011-47	Bronze tupu	None
				EP 2011-48	Bronze tupu	None
				EP 2011-49	Bronze spear-thrower hook	None
6	1	Capped, stone- lined conical cist; 90 cm wide and 75 cm deep	None			Figure 5.1
				EP 2010-99	Coastal-style flask	Figures 5.3, 7.19
6	2	Disturbed, stone- lined cist	None	EP 2010-101	Undecorated Wari blackware drinking vessel	See Isbell 2015:66

#### Areas and Contexts at the Wari Site of Espíritu Pampa 2010–2012

Area	Context	Description	Human Remains	Artifact Number	Artifact Description	Figure Number
6	3	Capped, stone- lined conical cist; 100 cm in diameter and 75 cm deep	None	Other	Seven cobble-sized stones	Figures 5.1, 5.5
6	4	A capped conical cist; 50 cm in diameter and 95 cm deep	None			Figures 5.1, 5.6
				EP 2010-87	Silver pendant	Figure 5.7
6	5	A capped, stone- lined conical cist; 100 cm in diameter and 90 cm deep	Teeth fragments			Figures 5.1, 5.8
				EP 2010-59	Coastal-style flask	Figures 5.12, 7.19
				EP 2010-60	Silver, circular, two-plumed diadem pin	Figures 5.9, 9.14
				EP 2010-61	c-14	Figure 5.11
				EP 2010-62	Silver tupu	Figures 5.8, 9.11
				EP 2010-63	Bronze tupu	Figures 5.8, 8.4
				EP 2010-64	Bronze tupu	Figure 5.8
				EP 2010-65	Silver circular pectoral with a meandering-line design	Figure 5.10
				Other	A rectangular block of yellow clay and scattered bits of cinnabar	Figure 5.8
6	6	A capped, stone- lined cylindrical cist; 70 cm in diameter and about 80 cm deep	None			Figures 5.1, 5.14
				EP 2010-86	Two stone pestles and a mortar	Figure 5.15
				Other	A Huamanga-style bowl fragment, a polishing stone, and a piece of bronze	Figure 5.14
6	7	A capped, stone-lined shaft burial; 1 m wide and 1.7 m deep	Teeth, including third molars			Figures 1.1, 5.1, 5.15- 5.20, 9.18
				EP 2010-67	Large silver Y-shaped pectoral	Figures 1.1, 5.20, 5.21, 9.17
				EP 2010-68	Silver mask with raised facial features	Figures 5.21, 5.22, 9.12
				EP 2010-69	Bronze axe with a <i>chonta</i> wood handle wrapped in silver lamina	Figures 5.20, 5.21, 5.25, 8.7, 9.16
				EP 2010-70	Staff made of <i>chonta</i> wood wrapped in silver lamina	Figures 5.25, 9.16
				EP 2010-72	Two gold arm bands	Figures 5.26, 9.4

#### Appendix 3

Area	Context	Description	Human Remains	Artifact Number	Artifact Description	Figure Number
				EP 2010-73	Fourteen small panels (ca. 7 cm) with feline faces in profile	Figures 5.28, 9.7
				EP 2010-74	100+ silver sequins and five rings of silver lamina	Figure 5.27
				EP 2010-75, EP 2010-76, EP 2010-77	Three necklaces containing greenstone beads	Figure 5.23
				EP 2010-78	Silver plume-pin	Figure 5.24
				EP 2010-79	Silver plume-pin	Figure 5.24
				EP 2010-80	Silver plume-pin	Figure 5.24
				EP 2010-81	Silver plume-pin	Figure 5.24
				Other	Cinnabar pieces and pounder	None
6	8	Disturbed, rectangular, stone-lined cist with a series of thin, long stone slabs running down its center	None			Figure 5.1
6	9	Capped, stone- lined, oval cist; 70 x 130 cm across and 160 cm deep	None			Figures 5.1, 5.29
				EP 2010-84	Silver circular pectoral with a six petal design	Figures 5.29, 5.31, 9.32
				EP 2010-85	Bronze tupu	Figure 5.30
6	10	Disturbed, stone- lined cist	None			Figures 5.1, 5.32
				EP 2010-83	Nineteen thimble-shaped silver pedants	Figures 5.32, 5.33, 9.10
				EP 2010-82	Silver circular pectoral with a six petal design	Figures 5.32, 5.33, 9.31
6	11	Capped, circular burial pit; 92 cm in diameter and 20 cm deep	Fragments of adult premolars and molars.			Figure 5.1
				EP 2010-88A	Unidentified bronze item	None
				EP 2010- 88B	Bronze chisel	None
				EP 2010-89	Two bronze <i>tupus</i> with oxidized textile	Figure A2.1
				EP 2010-90	Undecorated ceramic spindle whorl	None
				EP 2010-91	Unknown bronze object with oxidized textile	Figure A1.4
				EP 2010-92	Rectangular silver pectoral with pieces of oxidized textiles	Figures 5.37, 9.25

#### Areas and Contexts at the Wari Site of Espíritu Pampa 2010–2012

Area	Context	Description	Human Remains	Artifact Number	Artifact Description	Figure Number
				EP 2010-93	Twelve rectangular pieces of mica with thread holes	Figure 5.34
				EP 2010-94	Bronze spear point	Figure 5.35
				EP 2010-95	Obsidian biface	Figure 5.36
				EP 2010-96	Obsidian biface	Figure 5.36
				EP 2010-97	Bronze tupu	None
				EP 2010	Charred chonta wood	None
				EP 2010	Textile with silver bangles	None
7	1	Capped, stone- lined, conical cist; 100 cm wide and 90 cm deep	None	None	Two cobblestone-sized rectangular stones	Figure 4.24
9	1	Capped, stone- lined, cylindrical cist: 100 cm wide and 90 cm deep	Teeth fragments, including adult molars			Figure 6.1
				EP 2012-18	Bronze tupu	None
				EP 2012-19	Bronze tupu	None
				EP 2012-20	Bronze tupu	None
				EP 2011-55	57 greenstone beads	None
				Other	Concentrations of cinnabar and <i>chonta</i> wood	None
9	2	Capped, stone- lined, cylindrical cist: 100 cm wide and 90 cm deep	Fragments of teeth and bone			Figures 1.5, 6.1
				EP 2012-22	Circular silver pectoral	Figures 6.4, 9.34
				EP 2012-23	Bronze axe	Figure 6.2
				EP 2012-24	Bronze spear-thrower hook	Figure 6.3
				Other	Fragmented open-mouth plainware vessel	None
				Other	Small pieces of plant fiber and cinnabar	None
				C-14	AD 686 +/- 28 (666-861 AD [95.4% probability]). Sample AA 106770.	Figure 1.12; Appendix 1
10	1			EP 2011-25	T-shaped bronze <i>tupu</i>	Figure 6.5



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# The Vari Enclave of Espíritu Pampa

he Wari State was the first expansionistic power to develop in the Andean highlands. Emerging in the area of modern Ayacucho (Peru) around AD 650, the Wari expanded to control much of the central Andes by the time of their collapse around AD 1000. This book describes the discovery and excavation (2010–2012) of a major new Wari site (Espíritu Pampa), located in the subtropical region of Vilcabamba (Department of Cusco). While it was long believed that the Wari established trade networks between their highland capital and the Amazonian lowlands, the identification of a large Wari site in the Vilcabamba region came as a surprise to most Wari specialists. It features a central plaza surrounded by a series of D-shaped structures, and more than 30 burials, many of which contained finely crafted silver, gold, bronze, and ceramic objects.

#### Contributors

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Front: A flask depicting an individual wearing a sequin-covered tunic from Context 6.1. Ministerio de Cultura, photograph by Marco Unisyonco Perez and Brian S. Bauer.

Above: A large silver Y-shaped pectoral at the Linden Museum. Courtesy of the Linden Museum, photograph by A. Dreyer.



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