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## DATING THE WARI REMAINS AT ESPÍRITU PAMPA (VILCABAMBA, CUSCO)

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#### Introduction

In 2010 a large Wari occupation was found in the valley of Espíritu Pampa. Located within the Vilcabamba region on the eastern slopes of the Andes, this site is the first major Wari settlement to have been identified in the lowlands (at an altitude of 1500 m.a.s.l.). Continued excavations have uncovered four D-shape structures that, in Wari contexts, are associated with ritual activities. The excavations have also revealed numerous tombs, both within the buildings and outside of them. These include the most elaborate burial professionally excavated at a Wari site. In this article, we provide an overview of this lowland colony and three radiocarbon dates, which place the Wari occupation at Espíritu Pampa comfortably within the known period of Wari expansion efforts.

Traveling through the central Andes in the late 1540s, the Spanish foot soldier Pedro Cieza de León stopped to visit the ruins of an ancient city called Wari in the province of Ayacucho in highland Peru. An astute observer of antiquities, Cieza (1979 [1553] Part 1, Chapter 86, p. 249) surmised that the city, based on its ruinous state and unusual architecture, was constructed 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 around A.D. 600 (Williams 2001, 2002, 2006) and that rapidly declined between

A.D. 1000 and 1100 (Bauer and Kellett 2010; Williams 2001). This article provides three radiocarbon dates for the first major Wari installation found in the lowlands of Vilcabamba and describes the connections that this remarkable outpost may have held with the paramount city of Wari (Figure 1).

As the city of Wari was mapped in the 1970s, sprawling residential areas were identified surrounding the site and distinct zones of craft specialization and elite compounds were found near its center (Benavides 1991; Isbell and McEwan 1991). Field research within the Ayacucho Valley documented a hierarchical settlement system supported by terrace agriculture (Isbell and Schreiber 1978; Lumbreras 1974). Furthermore, analyses of the large corpus of Wari iconography revealed a complex religious system that shared some fundamental elements of the South Andean Iconic Series with populations located in the altiplano at Tiwanaku and elsewhere (Cook 1994, 2012; Isbell and Knobloch 2009).

As other monumental Wari sites were identified across the central Andes, scholars began to envision Wari as an expansionistic state, which conquered and incorporated various regions into its empire (Isbell and Schreiber 1978). 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 Huamachuco, La Libertad Region—these sites were presumed to be provincial centers that helped to define the territorial boundaries of state influence (Lumbreras 1974:165-174; McEwan and Williams 2012; Menzel 1964). Furthermore, many of the investigations promoted a fixed, sovereign territory approach to Wari studies, emphasizing the demarcation of boundaries between the Wari and other major polities, such as the altiplano state of Tiwanaku to the southeast.

More recent research on the Wari has begun to question the normative model of Wari society as a traditional expansionistic state, and has highlighted the variable nature and intensity of Wari hegemony across the Andes (Jennings 2006, 2010; Jennings and Craig 2001; Schreiber 1992:62). For example, a series of archaeological surveys and excavation projects in the Cusco region have revealed that Wari influence was largely focused in the areas immediately surrounding Pikillacta and its related settlements in the Huaro Basin (Glowacki 2002), and that Wari had little influence in many other nearby areas (Bauer 2004:62-67; Covey et al.: in press). The great variability in Wari influence has been noted by Schreiber (1992:69) who writes 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 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.*: in press). As more regional sur-

veys are completed, it is becoming 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. As Charles Stanish (2001) 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 they did not have the resources to build facilities everywhere they wanted. So as new Wari settlements are found, we need to consider if they fell within Wari controlled territory, or if they represent more isolated colonizing enterprises focused on gaining access to important resources (most likely for use in the political economy of the heartland).

## THE WARI SETTLEMENT AT ESPÍRITU PAMPA

Major Wari settlements have been found in a number of valleys across the central Andean highlands. However, until recently, no Wari remains had been found along the Amazonian slope to the east of Ayacucho and the northwest of Cusco (Valdez 2011). Part of the reason why the prehistory of the Andean eastern escarpment 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 piedmont held resources that were of great interest to highlanders, such as the Wari, including exotic bird feathers and coca leaves. It is also well documented that the Inca, as well as the Spanish, established a number of silver and gold mines in the Vilcabamba region (Regalado 1992:110-118).

In 2010, the first lowland Wari settlement was documented in the Espíritu Pampa area, a little more than 110 aerial kilometers to the southeast of the Wari capital in Ayacucho and

about 180 areal kilometers to the northwest of Pikillacta in the Cusco Valley (Fonseca 2011). The Espíritu Pampa Valley is within a broader region generally called Vilcabamba, which is well known for the role that it held as the final Inca stronghold during the mid-sixteenth century (Hemming 1970:425-440), although little archaeological work has been conducted there. Half a century ago there was a hint that the region might contain Wari materials when Gene Savoy (1970:81, 99) reported seeing what were certainly Wari vessels in the village of Puquiura and at Espíritu Pampa.1 However, because Savoy was viewed as an untrustworthy interpreter of prehistoric materials, his observations were ignored.

The Wari site at Espíritu Pampa was found by members of the Ministry of Culture when test excavations were conducted within a looted area approximately one kilometer from the monumental Inca remains in the valley.<sup>2</sup> Although there were few artifacts on its surface, numerous stones had been disturbed by the looters, suggesting that prehistoric remains might be found below. The test pits were expanded into broader area excavations when wall remains were identified at the site.

While it was long believed that the Wari had 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 complete surprise to most, perhaps all, Wari specialists.<sup>3</sup> By the

end of the 2010 field season it was clear that the Wari occupation at Espíritu Pampa included a dense array of structures, canals, walls, stairs, patios and stone-lined tombs. Two field seasons later, at the end of excavations in 2012, one small and three large D-shaped structures, a relatively rare architectural form that is associated with Wari ritual events (Bragayrac 1991; Cook 2001), had been unearthed along with numerous other buildings and galleries (Figure 2). Locally manufactured pots, as well as vessels that had been imported from the Wari heartland (Figure 3), were also recovered along with several large obsidian projectile points, a classic feature of Wari.<sup>4</sup> Even more surprising is the number of Espíritu Pampa burials and the wealth of the grave goods they contained (Fonseca 2011). In 2010, eleven tombs were excavated, several of which contained ceramic and metal offerings. Given the general scarcity of excavated Wari tombs, any one of these burials would normally have been noteworthy. However, the largest burial contained an astonishing assortment of objects and has gained international attention. The walls of the largest tomb were made of fieldstones laid in tiers found sealed with large capstones. Excavations revealed that the tomb held the remains of a single individual who had been buried with an impressive U-shaped silver pectoral, strikingly similar to one held in Stuttgart at the Linden-Museum (Figure 4; Bergh 2012:227-229). The burial also included a life-size silver mask, two staffs sheathed with silver, two gold bracelets, over 236 silver bangles, and almost 700 beads of different types of green stones (Fonseca 2011).

becoming clear that the Wari established and maintained a number of colonies in the eastern lowlands.

<sup>&</sup>lt;sup>1</sup> Savoy reports being shown Tiahuanaco style vessels in these areas, an understandable mistake for this time.

<sup>&</sup>lt;sup>2</sup> In Inca times the town was called Vilcabamba.

<sup>&</sup>lt;sup>3</sup> It is also worth noting that 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 (Wilbert Gamarra, personal communication, 2012). With these remains, it is

<sup>&</sup>lt;sup>4</sup> The results of two XRF tests conducted on one of the obsidian objects suggest that it came from the Alca-1 source in the Cotahuasi Valley, Arequipa Region, on the western slopes of the Andes (Ryan Williams, personal communication, 2011; see Rademaker *et al.* 2013).

The richness of the principal Wari tomb at Espíritu Pampa is unusual. Large mausoleums are known to have been built in the center of Wari itself, at Monjachayoq and Cheqo Wasi. However these tombs have provided few materials because they were looted prior to investigation by archaeologists. A likely set of elite tombs has also been identified in the Huaro Basin near Pikillaca (Zapata 1997), but these have also been looted. Other looted Wari fineries have been observed and recorded in Pomacanchi, in the Cusco Region (Chávez 1985, 1987; San Román 1979). In short, while various gold and silver Wari items housed in the world's museums and private collections attest to the presence of a ruling elite among the Wari (see Bergh 2012), centuries of looting have destroyed most of their burial contexts. Although certainly not representing the upper-most echelon of the heartland nobility, the Espíritu Pampa tombs represent the highest levels of Wari society so far encountered by archaeologists in situ.

As additional excavations were conducted at the site in 2011 and 2012, radiocarbon samples were collected, three of which were submitted for radiocarbon dating at the Accelerator Mass Spectrometry Laboratory at the University of Arizona (Table 1).<sup>5</sup> Each of the samples was taken from within a different D-shaped structure (see Figure 2).<sup>6</sup> Sample AA 100018 was collected from Building 4 and yielded an AMS calibrated date of A.D. 649-773 (95.4 percent confidence level). This building is especially interesting because a smaller D-shaped structure

was later built in the same location. The radiocarbon sample was found adjacent to the interior wall of the larger building and may date to the first construction episode at the site. Sample AA 100019 was collected from Building 2, a slightly larger D-shaped structure located across a small plaza from Building 4. This sample provided a somewhat later AMS calibrated date of A.D. 690-941 (95.4 percent confidence level). The third sample, AA100020, was taken from the interior of Building 1, a D-shaped structure nearly adjacent to Building 2. It yielded a similar AMS calibrated date of A.D. 670-965 (95.4 percent confidence level) suggesting that Buildings 1 and 2 were built around the same time (Table 1).

All three of the radiocarbon dates so far collected from Espíritu Pampa fall comfortably among dates which have been collected in Wari contexts in the Cusco region, as well as those collected from across the central Andes (see Bauer and Jones 2003:16 for Wari dates from Cusco; see Williams 2001 for Wari dates from across the central Andes). They are also consistent with, if not a little earlier than, the two available dates from D-shaped structures at Conchopata, a site within the Wari heartland (Ketteman 2002:33-34).

<sup>&</sup>lt;sup>5</sup> All dates in this report have been calibrated by Oxcal v. 4.1.7 (Bronk Ramsey *et al.* 2010; r:5 SHCal04 southern hemisphere atmospheric curve [McCormac *et al.* 2004]). We understand that there are limitations in the use of only three samples to date the Wari occupation at Espíritu Pampa and we hope that additional samples will be processed in the future.

<sup>&</sup>lt;sup>6</sup> The numbering of the D-shaped structures follows their excavation order, not their construction order.

<sup>&</sup>lt;sup>7</sup> The constitution of a new, but smaller, D-shaped structure at this location suggests to us that the site may have been abandoned and then briefly reoccupied near the turn of the first millennium.

AA No.	Sample ID	Material	d13C	F	14C age BP	AD/BC	Calibrated
AA100020	Espiritu	Carbon	-24.9	0.8536 + -0.0066	$1,272\pm62$	$678 \pm 62$	95.4 % 670 (87.3%) 902 cal AD
	Pampa						917 (8.1%) 965 cal AD
	Building 1						68.2% 710 (14.0%) 747 cal AD
							766 (54.2%) 888 cal AD
AA100019	Espiritu	Carbon	-19.8	0.8549+-0.0039	$1,259\pm37$	$691 \pm 37$	95.4% 690 (13.8%) 751 cal AD
	Pampa						761 (78.7%) 898 cal AD
	Building 2						922 (2.9%) 941 cal AD
							68.2% 777 (68.2%) 882 cal AD
AA100018	Espiritu	Carbon	-25.8	0.8424 + -0.0038	$1,378\pm36$	$572 \pm 36$	95.4% 649 (94.5%) 773 cal AD
	Pampa						68.2% 656 (52.6%) 708 cal AD
	Building 4						748 (15.6%) 766 cal AD

Table 1: Radiocarbon results from the D-shape structures at Espíritu Pampa.

The three D-shaped structures and the exceptionally fine metalwork recovered in the tombs at Espíritu Pampa mark the site as an important Wari occupation. It is known that the Inca established a number of mines in the greater Vilcabamba region (Bauer and Aráoz n.d.; Regalado 1992:110-118, so its mineral wealth may also have been of interest to the earlier state of Wari. Alternatively, as Espíritu Pampa is at the upper limits of effective coca production, the Wari settlement may have served as an important node in the collection and transportation of this important lowland resource to the Wari capital. Whatever resources were being extracted by the Wari from the Vilcabamba lowlands, it is clear that they required the establishment of a state-supported installation which may have been occupied for more than two hundred years. The occupation also required, and apparently supported, a level of elites seen at few other Wari settlements. Several of the decorated metal objects buried within the elite tomb at Espíritu Pampa, and some of the finer ceramic vessels, reflect a religious ideology that is strongly aligned with ritual practices of the Wari heartland (Fonseca 2011). Nevertheless, the identification of a strategic installation in a region at a distance from its heartland is consistent with the archipelago model of other Wari colonies found elsewhere in the Andes and is uniform with well established Andean modes of production (Murra 1972, 1985).

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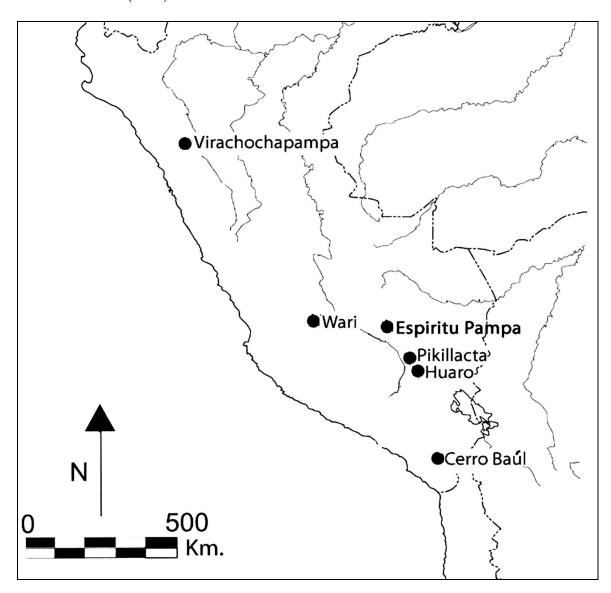


Figure 1: Map of some of the Wari sites mentioned in the text (after Jennings 2006:268).

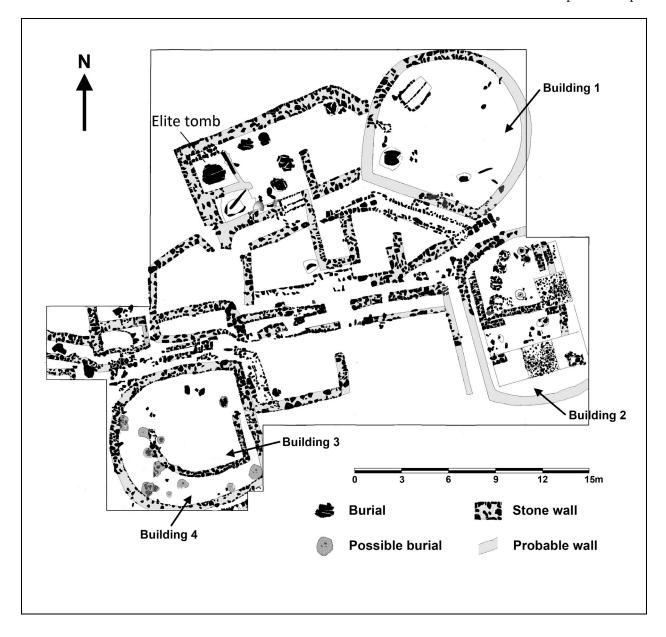


Figure 2: Simplified plan of excavations at the Wari site of Espíritu Pampa.



Figure 3: Wari bottle found at Espíritu Pampa.



Figure 4: Silver pectoral ornament as found in situ in a Wari context at the Espíritu Pampa site.

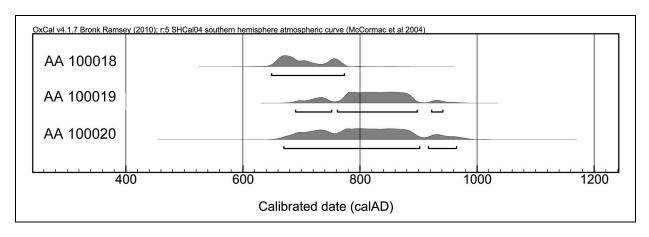


Figure 5: Radiocarbon results at the 2-sigma range (95.4 percent confidence level) from three D-shaped structures at Espíritu Pampa.