REPORTS

Tres Palos Revisited: Understanding the Middle Horizon in the Rio Grande de Nasca Drainage

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A recent survey in the Ingenio Valley provides new insight into the nature of the Middle Horizon on the south coast of Peru. A reconsideration of the Tres Palos I and II sites could provide a new perspective on Wari expansion into the region.

Keywords: Tres Palos I and II, Middle Horizon, Wari, Peruvian south coast

Nuestra prospección en el valle de Ingenio añade una nueva serie de datos para entender mejor la naturaleza del Horizonte Medio en la costa sur del Perú. Específicamente, una reconsideración de los sitios Tres Palos I y Tres Palos II permite matizar la perspectiva de la expansión Wari en la región.

Palabres claves: Tres Palos I and II, Horizonte Medio, Wari, costa sur del Perú

The drainage of the Rio Grande de Nasca is one of the key areas for understanding the Wari phenomenon in a regional context (Figure 1a). Based on the study of Dorothy Menzel (1964), archaeologists working in this area have argued that the influence of the highland Wari state appeared as an influential and intrusive factor during the Middle Horizon (MH; AD 650–1000; e.g., Schreiber 2001). However, the nature of its impact has never been clear. Our survey of the MH settlements in the Ingenio Valley and the middle Rio Grande Valley (Figure 1b) has yielded new data that are relevant to resolving this issue.

The Middle Horizon in the Rio Grande Drainage

The Rio Grande drainage (Figure 1a) has been the target of intensive archaeological surveys since the 1950s. Collectively, these studies have located hundreds of sites, and in combination with

excavation, the analyses of settlement patterns have helped archaeologists better understand diachronic changes in socioeconomic organization (Schreiber 2001; Silverman 2002; Sossna 2016).

We adopt the three geographic subregions of the Nasca region used by recent literature (e.g., Vaughn et al. 2016). The northern Nasca region (NNR) corresponds to the Ica Valley, whereas the Palpa and Viscas Valleys and our study area together correspond to the central Nasca region (CNR). The Nasca, Taruga, and Las Trancas Valleys pertain to the southern Nasca region (SNR). Recent advances in the CNR and SNR have provided an important baseline for modeling the complexity of the MH in this region.

During the MH in the Palpa and Viscas Valleys in the CNR, possible Wari centers with orthogonal architecture were constructed in the upper valley in association with surrounding residential occupations in the area more than 2,000 m asl (e.g., Isla and Reindel 2014; Sossna 2016). Yet, researchers report that almost all the

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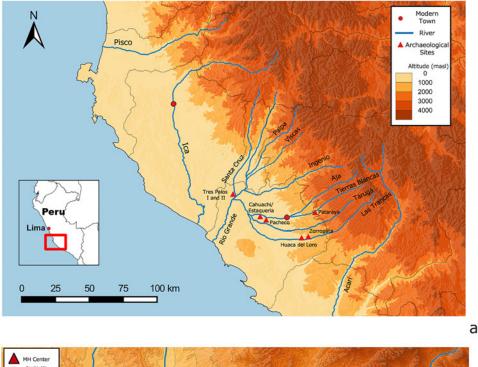




Figure 1. (a) Peruvian south coast; (b) Middle Horizon site distribution in the Ingenio Valley (illustration by Yuko Ito used with permission). (Color online)

important centers of the preceding Nasca culture were abandoned and replaced by cemeteries and small-scale village occupations in the middle valley (Isla and Reindel 2014).

The situation of the SNR seems quite different in that clear evidence of MH occupations is found in the middle Nasca Valley. Among them is the Pacheco site, a site best known for an impressive offering of typical MH ceramic vessels (Menzel 1964:24). Katharina Schreiber (2001) points out that Pacheco could have been an important Wari regional administrative center, but evidence is limited. Nonetheless, recent research demonstrates that the Nasca Valley was most intensively occupied during the MH (e.g., Conlee 2010).

Survey of the Ingenio Valley / Middle Rio Grande Valley and Tres Palos I and II

The Ingenio Valley, which comprised the main research area of our survey from 2013 to 2016, is one of the tributaries of the Rio Grande de Nasca drainage of the south coast of Peru. This drainage consists of multiple river valleys that unite as the Rio Grande flows into the Pacific Coast. Notably, in the Ingenio Valley, surface water is more abundant than in any other tributary of the Rio Grande (ONERN 1971).

The general settlement patterns of the MH presented in the map (Figure 1b) show that possible public centers were recognized in the

survey area, indicating there are at least two areas with concentrations of contemporaneous occupations. One area includes important MH sites that we identified as Tres Palos I and II (Figure 2a; Supplemental Table 1). These remains were first described in the academic literature in 1957 by William D. Strong; he divided Tres Palos into I and II and referred to both as "temples" (Strong 1957:Table 1) that constituted a single site (Silverman 2002). However, because they are physically separated and are located in different topographic situations, it seems reasonable to treat them as two different sites for now.

Although Tres Palos I was described only as a "wooden-stake temple" in Strong's published report (1957:Table 1), Helaine Silverman cites observations in his unpublished field notes from October 1952 that Tres Palos I consisted of a reshaped natural terrace, right-angle platform, and room constructions with walls made from paniform (loaf-shaped) adobes. Strong's notes emphasize the abundant "wood-stakes" that were visible on the site's surface (Silverman 2002; Silverman and Proulx 2002).

Silverman located Strong's site of Tres Palos I during her survey in 1989 and found that the preservation of the site had deteriorated (Silverman 2002). When we visited the site in 2016, the destruction of Tres Palos I site was even more advanced, and we only recognized 12 wooden stakes with diameters between 15 and 25 cm (Figure 2b). This site is located at the mouth of a ravine on the slope of a low natural hill, and its total area is approximately 1.8 ha. On the southeastern edge, there were also looted rectangular funeral chambers made of paniform adobes and plastered walls (Supplemental Figure 1). Around the looters' pits, we documented human remains, ceramic sherds, and textile fragments, which could have pertained to looted burials. Notably, the diagnostic sherds collected at the site included the Chakipampa and Loro styles, both pertaining to the MH (for the identifications of pottery styles and discussion of iconographies in the text, see Supplemental Text 1).

Strong (1957:4, Table 1) described Tres Palos II as a "round temple" based on its similarity with the circular structure found in his earlier research at Huaca del Loro in the Trancas Valley. He

briefly mentioned the circular structure and "looted rectangular tombs enclosed with adobe walls similar to those at Huaca del Loro" (Strong 1957:39–40), but his field notes, according to Silverman and Proulx (2002:277), provide more details: "The Round Temple at Huaca del Loro almost appears to be framed within a square (Strong 1957: Figure 16). His field notes on October 19, 1952, suggest that the circle-in-a-square pattern existed at Tres Palos II."

For the next nearly six decades, Tres Palos II was left unexplored, and it was regarded by some as a lost site. For this reason, its importance has not been fully appreciated or even considered (e.g., Isla 2001; Schreiber 1989; Silverman 2002; Silverman and Proulx 2002). Based on our surface observations, it is now possible to provide a fuller description of the entire site and a discussion of its possible importance within the drainage.

The whole area of Tres Palos II is approximately 12 ha and can be divided into four sectors (Figure 3a, Sector A–D; Supplemental Table 1). Sector A is in the northwestern margin of the site. Abundant archaeological remains such as paniform adobes, mortars and grinding stones, human remains, and architectural materials such as reed bundles wound by ropes (Figure 3b) can be seen on the surface, which might suggest its function as a cemetery or a residential area. Although small adobe constructions were exposed by looters' pits, they did not seem to be arranged along a specific axis. Almost all the diagnostic sherds on the surface are in the Loro style.

Sector B is located to the southeast of Sector A and is characterized by badly looted rectangular chambers of square adobes (Figure 3c). They are arranged along the northeast—southwest axis, with a large amount of human remains scattered around. Surface pottery includes sherds of fancy Atarco and Loro styles, suggesting the existence of burials with rich offerings. This idea is also supported by a large amount of fiber mass and a *Spondylus* fragment.

Sector C, the central part of the site, is characterized by room complexes that consisted of square-shaped and paniform adobes (Supplemental Figure 1). A large number of human bones and textile fragments were dispersed around the looters' pits, suggesting that at





Figure 2. (a) Google Earth image showing Tres Palos I and Tres Palos II (©2020CNES/Airbus/©2020 Google); (b) Tres Palos I with an example of a wood stake (©The Yamagata University Institute of Nasca). (Color online)

least some of them had been used as funeral facilities at the time of the site's abandonment, as described by Strong (1957; see also Conlee 2010). Although the shapes and extension of these room complexes are unknown, it is easily

observable that many of the walls connect or cross one another at a vertical angle and that some of the walls are more than 50 m in length (Figure 3d). The chambers are constructed in accordance with the northeast—southwest axis,



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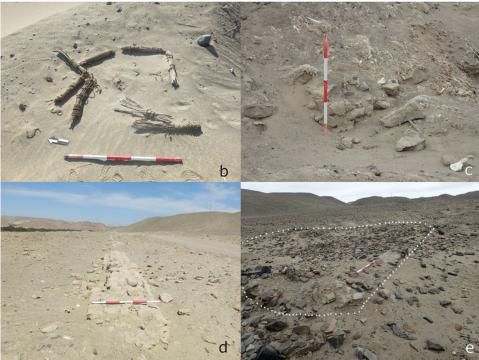


Figure 3. (a) Sectors of Tres Palos II (©2020CNES/Airbus/©2020 Google); (b) architectural materials in Sector A; (c) square abode chamber in Sector B; (d) straight wall of Sector C; (e) possible D-shaped structure in Sector D. (b–e ©The Yamagata University Institute of Nasca.) (Color online)

as is the case in Sector B, and were probably converted later into funeral facilities. A few examples of painted walls (Supplemental Figures 2 and 3) are recognized from better-

preserved sections. Most of the pottery sherds pertain to the MH, including the Atarco and Chakipampa styles; this suggests influence from the Wari state.

Sector D is located near the southern edge of the site and corresponds to the area around what Strong called a "round temple." Based on our field observation, it seems probable that a "D-shape," rather than a "round temple" (Silverman and Proulx 2002; Strong 1957; Figure 3e) is a better descriptor for this building. The fieldstone and mud mortar wall of this building is 70-90 cm thick and finished with a coat of white plaster. The curved section measures approximately 10 m in diameter, and the flat part of the possible "D" is 9 m in length; however, the presence of an entrance could not be confirmed because stones from the collapsed walls covered a major part of it. We recommend that it be evaluated very carefully through excavations whether this building forms a "D-shape" or "round temple," because a "D-shape" temple is a Wari religious template and suggests the marked influence of the Wari state on the area (e.g., Cook 2001). In this regard, a Chakipampa-style sherd with typical Wari iconography was recognized in this area.

Chronological Identifications of Tres Palos I and II

The pottery sherds and architectural remains allowed us to tentatively estimate the chronological positions of these two sites (Supplemental Text 1). In both sites, most of the diagnostic sherds correspond to the Loro style, which is common in the SNR during the Middle Horizon (Spivak 2015). However, we also found other styles showing much clearer Wari influence. Whereas Tres Palos I specimens include Chakipampa-style sherds, we recognized both Chakipampa and Atarco styles in Tres Palos II. In the MH chronology, the Chakipampa style is a marker of MH1, which corresponds to the initial Wari expansion, whereas the Atarco style pertains to MH2A, the time of an apparent hiatus of the Wari state (e.g., Menzel 1964).

The adobes differed between these two sites. Only paniform and irregular shaped adobes were recognized at Tres Palos I, in contrast to square-shaped adobes at Tres Palos II. Whereas paniform adobe continued from the Early Intermediate period (EIP) to the MH (Kerchusky 2018), the square-shaped adobe could have

been used solely after the EIP (Silverman 1993).

These data suggest that these two sites chronologically overlapped during the MH, at least during MH1, although Tres Palos II might have had a longer period of use until MH2. This possible chronological difference might suggest that Tres Palos II had a longer history of interactions with the Wari state.

Discussions and Conclusions: The Wari Phenomenon from the Rio Grande Drainage

Our survey at Tres Palos I and Tres Palos II suggests that they are different sites with different architectural features, even though both simultaneously functioned as important centers during the MH. It seems reasonable to interpret Tres Palos I, which was characterized by wood stakes, as one of the ritual spaces distributed in the SNR at least from the Late Nasca, which continued until the MH in association with the Loro and other Wari pottery styles (Oreficci 2018; Spivak 2015).

In contrast, the architecture of Tres Palos II seems to be directly related to the expansion of the Wari state. In addition to the possible D-shape construction located in Sector D, Sectors B and C with their long straight walls and room complex may have formed orthogonal cellular architecture associated with the Wari architectural style (Isbell 1991). Both the site size and architectural features differentiate Tres Palos II from other contemporary sites, such as the village site of Zorropata (Kerchusky 2018) or the Wari outpost of Pataraya (Edwards and Schreiber 2014). This could suggest direct control by the Wari state over both political administration and religious ideology. If one follows this view, Tres Palos II might be interpreted as part of an administrative hierarchy in which it was one of the largest centers in the Rio Grande drainage. This would imply that direct control by the Wari state extended close to the point where all the tributaries in the Grande Valley were united in a single administrative unit. It also could suggest that the Wari state placed an important ceremonial/administrative center in an important node of traffic and exchange.

This interpretation raises an important question of how these different types of sites, Tres Palos I and II, functioned simultaneously and how they are related. This is an important topic in relation to the expansion of the Wari state and the local reaction to it in the south coast of Peru, which requires further evaluations by excavations at Tres Palos and other sites in the Ingenio Valley.

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Data Availability Statement. Data of the Middle Horizon Ingenio Valley settlement pattern, yielded by the Yamagata University Nasca Projects, are available by request to Yuichi Matsumoto (ymatsu@human.kj.yamagata-u.ac.jp).

Supplemental Material. For supplemental material accompanying this article, visit https://doi.org/10.1017/laq.2021.94.

Supplemental Text 1. Stylistic identifications of pottery sherds from Tres Palos I and Tres Palos II.

Supplemental Table 1. Location of Tres Palos I and Tres Palos II.

Supplemental Figure 1. Rectangular rooms in Tres Palos II, Sector C.

Supplemental Figures 2 and 3. Painted walls in Tres Palos II, Sector ${\bf C}$.

Supplemental Figure 4. Possible D-shaped structure in Tres Palos II, Sector D.

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