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To cite this article: Bebel Ibarra (2024) Continuity and Change in the Cult of the Dead: Shaping Kin Formation in the Peruvian Andes (a.d. 1000–1600), *Journal of Field Archaeology*, 49:8, 713–731, DOI: [10.1080/00934690.2024.2370113](https://doi.org/10.1080/00934690.2024.2370113)

To link to this article: <https://doi.org/10.1080/00934690.2024.2370113>



Published online: 05 Jul 2024.



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Continuity and Change in the Cult of the Dead: Shaping Kin Formation in the Peruvian Andes (A.D. 1000–1600)

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ABSTRACT

This paper presents the results of archaeological investigations within funerary contexts at the site of Marcajirca (A.D. 1000–1600) in the north-central highlands of Peru. The results suggest the existence of various population groups, or ayllu members, that were buried at this site. Two contemporary types of tombs are predominant, funerary caves and chullpas, along with two belowground tombs, which are atypical in the region. Bioarchaeological analyses indicate that all the tombs were collective and that the remains were manipulated over time. The evidence from Marcajirca points to important changes in funerary patterns with respect to the previous period, including tombs being incorporated into residential places and, later in time, tombs as created, extra, private spaces by enclosing the chullpas within patios where rituals such as burning of offerings were practiced. The results are discussed within the context of the cult of the dead and the formation of ayllus.

ARTICLE HISTORY

Received 7 August 2023
Revised 13 May 2024
Accepted 21 May 2024

KEYWORDS

Peruvian Andes; chullpas;
burials; cranial modification;
kinship

Introduction

The site of Marcajirca was a large mortuary complex and a ceremonial and village settlement situated in the north-central Peruvian highlands. Occupied between ca. A.D. 1000 and 1600, it encompasses a vast span of time and witnessed numerous major sociopolitical transformations that occurred during the Late Intermediate Period (LIP), Late Horizon, and the early Colonial periods. The onset of the LIP includes a series of important social and political changes. For instance, the collapse of the Wari polity towards the end of the 1st millennium A.D. was followed by a widespread political fragmentation in societies, represented by small, dispersed settlements, internecine conflict, and local polity development (e.g., Arkush 2014; Covey 2008).

Overall, the LIP was a time of deep shifts in settlement patterns, from large sites on relatively flat areas to scattered and small settlements on mountainous hills with defensive positions (Arkush 2014; Bauer and Kellett 2010; Covey 2008; Ibarra 2021; Lavallée 1973; Parsons, Hastings, and Matos Mendieta 2004). Sites in the northern highlands occupied mountaintops (above 3800 masl) overlooking the valleys, which resulted in most of the settlements being visible among each other. The core area of these settlements is smaller in size compared with earlier time periods, ranging between 2 and 4 ha, and composed of several dozen predominantly circular and, in smaller numbers, square structures that are arranged on platforms or intentionally flattened areas surrounding a hill (Ibarra 2021). This widespread phenomenon occurred even in regions that were never under Wari influence, such as the eastern highlands of Ancash (Ibarra 2021, 2023). With the emergence of the Tahuantinsuyu, the highland societies were integrated into the control of the Inca state (e.g., D'Altroy 2014). However, this control did not last long, since the arrival of the Spanish marked a schism between the Prehispanic and European belief systems, particularly in the cult of the dead.

Change and continuity in tomb and burial patterns, as opposed to changes in settlement patterns, is more difficult to identify from a diachronic perspective. While we can see settlements move to other areas during different periods, this is not the case with tombs. For example, in our study area of the Puccha Valley, we observed that numerous sites moved to the top of the hills during the LIP, but their tombs did not, mostly located at lower elevations. In the mountains of Ancash, the scarcity of tombs and difficulty in identifying and dating them to previous periods such as the Early Intermediate (ca. A.D. 100–600) and the Middle Horizon (ca. A.D. 600–1000), along with the narrow span of time of Inca occupation in the northern highlands, complicate the identification of this shift during the LIP. Therefore, this article presents data that can be considered within a broader debate about the cult of the dead and its implications in social political formations. Marcajirca is a starting point in our objective of publishing the results of the Huari Ancash Archaeological Project.

Archaeological Research in the Puccha Valley

Marcajirca is situated in the Puccha Basin in the highlands of Ancash on the eastern side of the Cordillera Blanca, which is also known as the Conchucos region. This basin is formed by three valleys: Huaritambo, Mosna, and Puccha. The geography of the Puccha Basin is quite diverse; hills and mountains predominate and comprise several stacked ecological and production zones ranging from 2000–6000 masl (Figure 1). Each region had an impact on the locations of Prehispanic settlements, constraining access to some crops, particularly those cultivated in the warm valleys (Nesbitt et al. 2023). For example, maize, which was an important crop in the region during the LIP (Washburn et al. 2022), can only grow in areas up to 3200 masl.

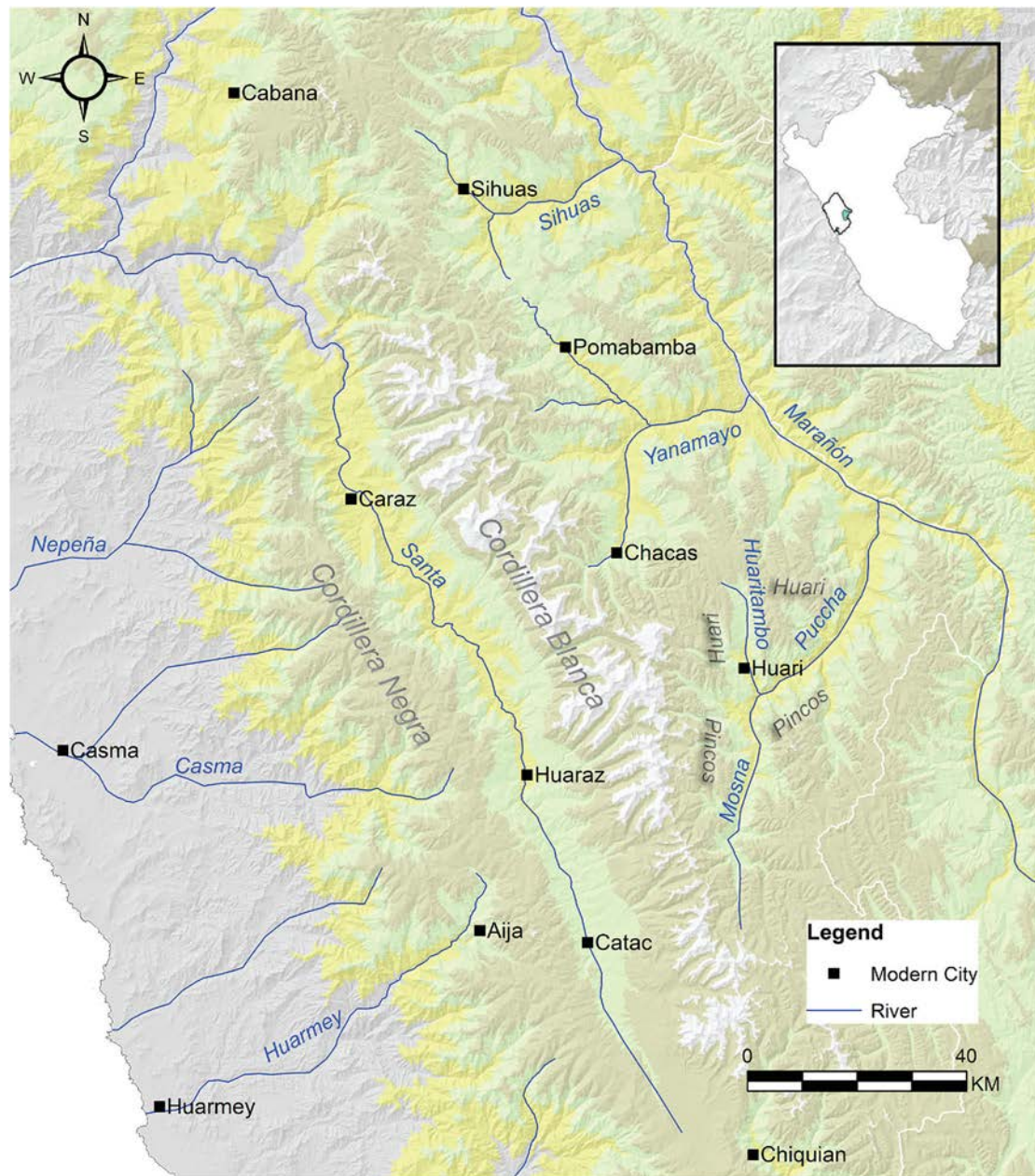


Figure 1. The highland of Ancash with main geographical features. Huari and Pincos refer to the territories of those ethnic groups.

During the last two decades, surveys and excavations, combined with radiocarbon dating at multiple sites, have determined an occupation between 1200 B.C. and A.D. 1600 in the area. The early occupations (1200–700 B.C.) are related to the Chavin and upper Huallaga styles (Nesbitt and Ibarra 2023; Nesbitt, Johnson, and Ibarra 2021), and human remains correspond to offering contexts during building construction, as in the cases of Chavin de Huantar and Canchas Uckro (Burger 2019; Ibarra 2021; Nesbitt et al. 2023). The research has also determined an early appearance of the Recuay archaeological culture around A.D. 100/200, continuing to A.D. 900 (Ibarra 2021, 2023; Nesbitt, Ibarra, and Fuyuki 2020). The largest Recuay settlements, with areas varying between 100 and 200 ha, are composed of patio groups, ceremonial platforms (called *pirushtus* and with similar layouts to LIP *ushnus*), and monumental architecture with massive retention walls (Herrera 2005; Lau 2010b; Orsini 2014). The construction of chullpas arose with the Recuay archaeological culture, and various radiocarbon dates from excavations of tombs at the site of Coronajirca

(about 1 km west of Huari) have determined that free-standing chullpas started to be erected around A.D. 350 (Ibarra 2023). The use of chullpas occurs parallel with underground tombs (with one or several chambers) and cists. In contrast, no funerary caves have been recorded for this period (Ibarra 2021, 2023). Recuay was probably not a centralized polity in what is its traditional territory (Ancash highlands)—instead, some settlements controlled large valleys; still, all of them shared the same set of traits (Ibarra 2021, 2023; Lau 2010a; Lau et al. 2023).

The LIP in the Puccha Basin, and particularly in the Huaritambo Valley, marks a major change in settlement patterns. The large Recuay settlements were replaced by dozens of small towns or villages between 2 and 4 ha in size. These were located on the highest peaks of the hills above 3800–4000 masl. These small settlements are generally composed of two to three platforms, on which circular houses are built (many sites have only a few houses). LIP settlements are often distributed in close proximity to each other (2–3 km). In southern Conchucos, they generally lack

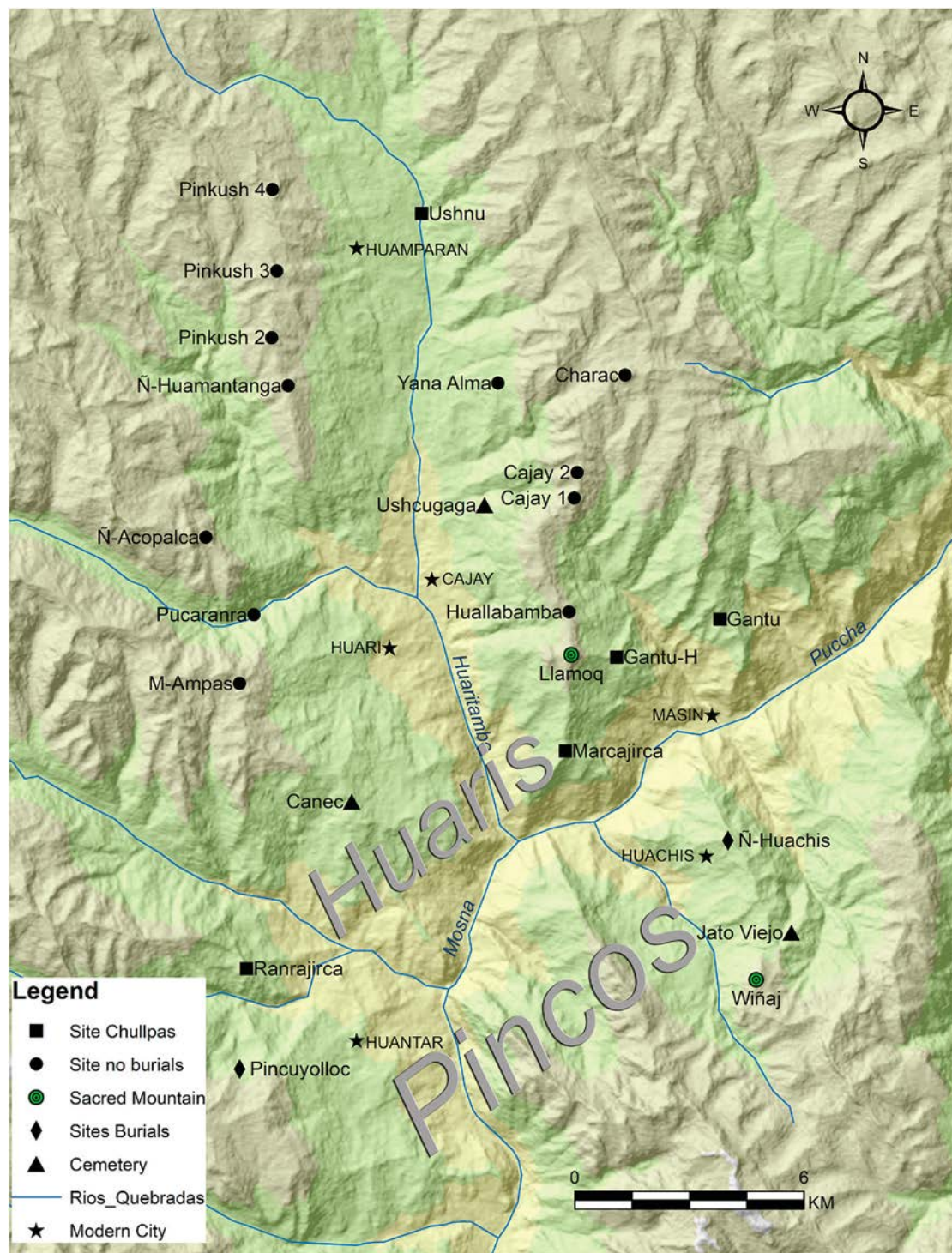


Figure 2. Distribution of the types of sites and burials in the valleys of Huaritambo, Mosna, and Puccha. “Sites no burial” have no evidence of tombs. “Site burial” refers to those sites with burials (cave, cist, shelter, etc.) other than chullpas.

defensive elements such as walls or ditches. Several of these settlements are located directly above the Recuay sites; for example, Pinkush IV at 4300 masl on top of a mountain and directly above the Recuay site of Huamparán, at 4000 masl.

During the LIP, the Puccha region exhibits a whole landscape of burials. Systematic survey aimed at identifying regional mortuary patterns has determined the existence of: 1) tombs of multiple forms (caves, chullpas, underground burials, and shelters), 2) settlements without burials, and 3) isolated cemeteries mostly composed of funerary caves (Figure 2) (Ibarra 2021). Burial caves are found directly in the rock outcrops and exhibit minimal construction,

generally only enough to achieve the goal of creating an access or a doorway. Chullpas are aboveground chamber tombs that are roofed and free standing. Underground tombs are dug directly into the ground, and human remains are simply placed there. There is no wall or any construction associated with this type. Shelter tombs are constructions with two or three walls, built beneath natural boulders, usually along cliffsides next to a rock shelter. They can have their own roof or use the boulder itself as a roof. These are sometimes referred to as *machay*, a Quechua word for cave that is sometimes used by other archaeologists working in the Ancash highlands (e.g. Grávalos and Bria 2021; Herrera 2005; Orsini 2014).

Because of this diversity, the Puccha Basin constitutes an ideal sample for studying LIP political organization and funerary practices. Ethnohistorical accounts point to the existence of two ethnic groups in the region in the 16th century A.D.: the Huaris and the Pincus, located north and the south of Puccha River, respectively (Ibarra 2009; León 2018). Both are associated with a sacred mountain or *apus* (locally called *jircas*). *Apus* are thought of as spirits that live in the mountains around communities; they are creator gods imposing order. These *apus* have a dedicated shrine located on the mountaintop and are places of pilgrimage (Gose 2016; Reinhard 2005; Sanchez Garrafa 2014, 65; Topic, Topic, and Cava 2002). Two sacred mountains have been identified in the study region, and both have architectural remains consisting of buildings with concentric walls and square platforms on their summits that were probably used as shrines (both at 4300 masl). The first, called Wiñaj, is situated in Pincu territory, while the second, Llamoc, is in Huari territory. Archaeological excavations have been performed in both, and radiometric dates suggest Wiñaj has an occupation dating back to 300 B.C. (see Ibarra 2021), while in Llamoc, no organic material was recovered, but the ceramic styles correspond to those of the Recuay and LIP periods.

Marcajirca

Marcajirca is the most intensively studied LIP site in the region and contains the largest number of documented LIP burials in the entire northern highlands of Peru (Ibarra 2021). The only reference to the site appears in one of the maps of Julio C. Tello's exploration of the region; however, there is no description of it (Tello 1960). The site was registered in 1997 by our project as a part of an archaeological inventory sponsored by the Provincial Municipality of Huari. Between 1999 and 2000, systematic surveys were carried out, and the first plan of the site was created. Excavations began in 2005 and continued uninterrupted until 2014, completing 10 field seasons. In 2007, the Municipality of Huari sponsored a conservation program, which made it possible to completely clean the site and make a more detailed plan using a total station. Also in 2007, a bioarchaeology program was initiated that continued until 2014 and has been replicated in all the sites investigated by the project.

Marcajirca is situated on Llamoc's southern slope and extends throughout the top ridge for almost 2 km, from 3650–3900 masl. The core area is about 4 ha (400 × 100 m) and is enclosed by a 160 m long wall in the north and a steep cliff in the south. The northern part of the core area is referred to as upper Marcajirca. Here, there are multiple terraces, walls, and ushnu remains. The ushnus are ceremonial structures where various rituals, like offerings to the gods, were performed. Ushnus were an important component of Inca architecture, who extended their use throughout Tawantinsuyu. However, ushnus were being built in the Andes probably even prior to Inca times (see Staller 2008). Three ushnus or artificial round platforms were built in upper Marcajirca; these are aligned and over 2 m in height. No other type of structure was built around them, suggesting that this area was used for ceremonial purposes. These structures closely resemble an Inca ushnu (Hyslop 1990). Recently, we learned that the Qhapac Ñan Program has revealed a circular ushnu at the Inca administrative center of Huaritambo, a few kilometers north of Marcajirca.

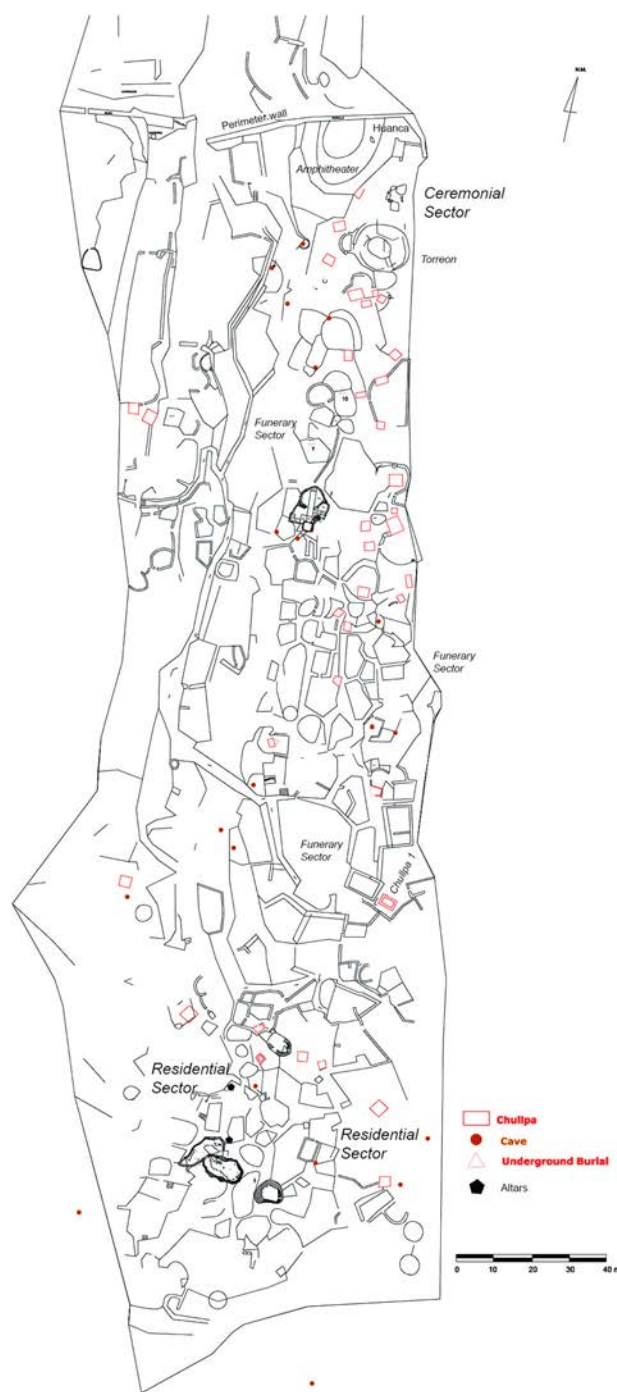


Figure 3. Sectors of Marcajirca and the distribution of the different types of tombs and ceremonial features, with Huanca and altars located in the residential sector.

The core area of Marcajirca has been the focus of all the excavations, mapping, and analyses. This area is composed of three sectors: 1) funerary—the central part, 2) residential—on the southern end, and 3) ceremonial—at the northern extreme, next to the perimeter wall (Figure 3). These sector designations are primarily based on the predominance of the types of buildings (i.e. houses, tombs, and shrines). Their functionality was defined from the material recovered during excavations.

The residential sector occupies the southern part, and it is composed of 43 houses, mostly circular, although a number are of irregular shape or created by adding walls between houses. Twelve houses were excavated, revealing pottery blackened by soot, burned animal bones, and stone mortars, suggesting domestic activities. Hearths were present in 10



Figure 4. A) One of the altars located in the residential sector. B) One of the three ushnus in upper Marcajirca. C) The ceremonial sector is located in the extreme north of the core area, next to the first perimeter wall. Excavations were conducted at the base of the Huanca, the Amphitheater's stage, and inside of the Torreón and Chullpa 15.

houses, while guinea pig corrals were found in two houses. Two altars were identified on the western side; they were built using large boulders as a base and leveled using small rocks as a retaining wall, creating a flat space on the top. Altar 1, which is the largest, has a small staircase. A flat stone with carved and painted red dots was found on top of Altar 2, yet its function is unknown (Figure 4A). Painted stones were offerings in some LIP sites (Jennings et al. 2021). Similar structures in the Cordillera Negra are called *Huanca* (upright stones) by Lane, Pomeroy, and Lujan (2018). Those altars are smaller than the ushnus in upper Marcajirca (Figure 4B), but from the top, the viewer has visual dominion over the residential sector. Seven chullpas and four funeral caves were built in this sector, and all are located inside courtyards.

The ceremonial sector is composed of two large buildings: the Amphitheater and the Torreón (Figure 4C). Because of their layout and size, it is quite clear that they were not used for domestic purposes. The Amphitheater occupies a semicircular depression of 21 × 20 m next to the first perimeter wall, which was modified with a series of platforms and stairs. The bottom of the Amphitheater structure is flat and is reminiscent of a stage. From the central, lowest part, a ca. 15 m

long set of stairs leads all the way to the top. Two platforms are situated on either side of the stairs, probably functioning as grandstands, and one of them contains a Huanca.

The Amphitheater stage and space in front of the Huanca have been excavated. Only a few ceramic sherds were recovered from the stage, but excavations near the Huanca revealed traces of burning or hearths, along with 90 fragments of animal bones directly associated with it. This suggests that people were offering food and burning it as a part of a Huanca offering, a similar ritual to the one performed in chullpas. The presence of two chullpas as a part of Amphitheater's upper platform (see Figure 4C) indicates that the Amphitheater was built later than the chullpas, suggesting an increase of ceremonial practices in Marcajirca that probably were not related to the cult of the dead.

The Torreón is a large circular building located to the right of the Amphitheater, with an external diameter of 15 m, internal diameter of 6 m, and height of about 3 m, and contains an internal bench. The access at the top is reached via a set of wide (3.4 m) stairs ending with a doorway (0.8 m) (see Figure 4C). The Torreón structure was excavated completely, but only a few undiagnostic sherds were found on the surface. There was no associated floor, and

the stratigraphy indicates that at the time of this structure's abandonment, the surface was deliberately destroyed and filled with small and medium blocks of stone. Unlike the Amphitheater, which would have held many participants, in the Torreón only a small group of people gathered at a time, suggesting that the activities were different and that the Torreón was possibly meant for the leaders of the community. It also appears that the Torreón had been built prior to the chullpas. Therefore, there were already established rituals and ceremonies when the cult of the dead intensified at the site.

Excavations in Marcacajirca

Due to its size and variety of components, different excavation strategies, material analyses, and sampling were performed in the main sector. For example, some excavations were oriented to corroborate ethnohistorical information, like Guaman Poma's (2009 [1615]) observation that rituals to the dead consisted of burning food and llama fat. Therefore, several excavations were placed directly in front of chullpa and cave entrances to locate the vestiges of burning areas or hearths, thus determining if such rituals were practiced.

Chronology is important for determining when changes occurred—however, when studying tombs, we face a challenge in determining when the tombs were built and for how long they were used. In Marcacajirca, the time of construction was determined through radiocarbon dating of organic material from tombs' structural elements, such as wood from the roof and straw in stucco. To determine the span of use, human teeth from several individual remains were dated; those samples also provide important isotopic information (Washburn et al. 2022; see discussion below).

Most of the archaeological contexts inside the tombs consisted of commingled and disarticulated bones with no stratigraphy. As a result, information about body treatment, position, and orientation was lost. A thorough analysis of commingled skeletal elements was made difficult because of the disarticulated and fragmented state. Commingled remains are often ignored or not analyzed properly due to time and logistical constraints. However, in Marcacajirca, excavations were performed inside of caves and chullpas with an objective to recover human remains and determine the MNI. As a sign of respect for the community and due to the large number of human remains, a detailed inventory was completed on-site, and the remains were reburied.

A total of 61 operations were excavated in Marcacajirca; 34 correspond to residential contexts or houses and two to ceremonial buildings like the Torreón and the Amphitheater. The other 25 operations correspond to funerary contexts: 17 in chullpas, seven in funeral caves, and one in a shelter tomb. Nine chullpas were excavated in the inside and front parts simultaneously; eight chullpas were excavated solely in the front area near the access. The excavations inside of chullpas, caves, and the shelter tomb covered the total internal area of tombs, while excavations in the front part were usually a 1 × 1.5 m grid. Thus, out of a total of 37 chullpas registered at the site, 17 were excavated. Out of a total of 22 funeral caves, seven were excavated (five in the funerary sector and two in the residential sector), as well as the only shelter tomb. This strategy was designed to gather data from all sectors and later compare the results from each type of tomb.

The mapping determined a total of 37 chullpas: eight are located inside courtyards, 11 in front of open spaces, and 18 were not related to either courtyards or open spaces. Also, a total of 22 funerary caves were identified, of which seven are located inside courtyards. Courtyard wall foundations are associated with the upper stratigraphic layer (the chullpa foundations are lower), indicating that the chullpas were enclosed by courtyards after they were built. It is important to consider the fact that modern farmers have dismantled the courtyards in Marcacajirca in order to gain more land for cultivation, and possibly, most of the open spaces correspond to dismantled courtyards.

The funerary sector occupies the central part of Marcacajirca on a plateau bordered by a rocky steep slope on the east and a cliff on the west. A total of 63 irregularly shaped structures and two plazas were identified in this sector. The tombs are composed of 28 chullpas, 14 burial caves, two underground burials, and one rock shelter tomb. Excavations in this sector were organized to establish the structures' functions, identify rituals for the dead mentioned in historical accounts, and to determine the MNI. A total of 39 operations were excavated in this sector, and 19 correspond to domestic contexts: they revealed mortars, ceramics with traces of soot, animal bones, spindle whorls, and other elements indicating that domestic activities were performed. The other 20 operations correspond to funerary contexts (14 chullpas, five caves, and one tomb shelter). Operations were set up inside structures, as well as inside and outside of chullpas and caves (Table 1).

Chullpas

Chullpas are the predominant type of burial in Marcacajirca ($n = 37$). This number constitutes an ideal sample for evaluating different interpretations of them. Some scholars (e.g., Gil García 2002) have proposed that chullpas were oriented toward sacred mountains. During the Inca period, chullpas were associated with the cult of the sun and were oriented to the east. Other scholars have argued that chullpas were used as open sepulchers that granted physical access to the corpse (Isbell 1997), that they were elite burials (Hyslop 1990), or that they functioned as ancestral territorial landmarks (Kesseli and Pärssinen 2005). William Isbell (1997) has strongly argued that chullpas (and other forms of open sepulchers) were the material expression of a distinctive form of corporate social organization known as the *ayllu*.

In Marcacajirca, chullpas are quadrangular in shape, with average external dimensions of 3 × 2.5 m., and their doorways or accesses are always located on the wider side of the structure (Figure 5). Most chullpas ($n = 34$) are single storied, and only three are two stories. This diversity in architecture is most likely the result of multiple groups of builders from different areas of the Puccha Basin, a supposition based on strontium isotope analysis (Washburn et al. 2022). Chullpa accesses are predominantly elevated (unlike Recuay chullpas, which are at ground level). Ninety percent of the chullpas with corbel roofs were of conical shape, a building technique consisting of placing small slabs on top of each other until the roof was sealed, resulting in the conical shape. The most complex roof belongs to Chullpa 1; its roof has collapsed completely, but it is still possible to observe nine imprints of large pieces of wood that crossed from side to side to help hold the roof. Wood was not only used

Table 1. Chullpas at Marcajirca and their main architectural features and associations.

Chullpa	Access Orientation	Masonry Finish	Architectural Association	Hearth	Excavation Location
1	north-northeast	stucco	open space in front	no	front
2	north-northeast	N/A	open space in front	yes	front
3	south	stucco	open space in front	yes	front
4	west	stucco	inside Plaza 1	no	front, back
5	north	stucco	inside Structure 6F	yes	front, back
6	south	pachilla	none	yes	front, inside
7	south	pachilla	open space in front	no	front, inside
8	west	pachilla	none	no	front, inside
9	south-southwest	stucco	none	no	front, inside
10	northeast	pachilla	inside Structure 9R	no	front
11	west-northwest	N/A	inside Structure 40R	N/A	not excavated
12	north	stucco	open space in front	N/A	not excavated
13	north-northeast	pachilla	none	yes	front, inside
14	south	pachilla	none	yes	front, inside
15	south	N/A	none	no	front, inside
16	west-northwest	stucco	inside Structure 13F	N/A	not excavated
17	west	pachilla	none	no	front
18	north-northeast	N/A	none	N/A	not excavated
19	south	N/A	none	N/A	not excavated
20	south	stucco	none	yes	front
21	north	pachilla	none	N/A	not excavated
22	west	N/A	open space in front	N/A	not excavated
23	south	pachilla	open space in front	N/A	not excavated
24	west	stucco	none	N/A	not excavated
25	south-southwest	pachilla	none	N/A	not excavated
26	north-northeast	pachilla	inside Structure 19F	yes	front, inside
27	west	N/A	none	N/A	not excavated
28	south	N/A	none	N/A	not excavated
29	south	pachilla	inside Structure 35F	N/A	not excavated
30	east	pachilla	inside Structure 41F	no	front, inside
31	south	N/A	open space in front	N/A	not excavated
32	north-northeast	N/A	none	N/A	not excavated
33	north	stucco	open space in front	N/A	not excavated
34	west-northwest	stucco	open space in front	N/A	not excavated
35	east	pachilla	none	N/A	not excavated
36	south-southwest	N/A	open space in front	N/A	not excavated
37	north	N/A	none	N/A	not excavated

for roof support, as seen in Chullpa 1, but also inside the chullpas as hangers. Two pieces of wood (Chullpa 1 and 7) were dated to A.D. 1438–1518 and A.D. 1184–1267, respectively (see discussion of chronology below).

Chullpa masonry analysis examined three variables: 1) building stone size, 2) use of pachillas (or chinking stones; small flat rocks placed between larger stones), and 3) the presence of plaster. After the study, it was found that 89% of chullpas were built using angular stones (20 × 40 cm in size) and 11% with flat stones (8 × 40 cm) (Figure 6A). Fourteen chullpas were built using pachillas (Figure 6B). The remaining 23 used simple masonry that could be covered with stucco. Evidence of stucco was found in 11 chullpas, and in 12 chullpas it was not possible to determine its presence due to their poor state of preservation. The plaster was white and then painted red and employed only on chullpas without pachillas (Figure 6C). The advantage of the pachilla technique is that the walls of the building turn out very smooth, and plaster is not required. Based on the radiometric dates, chullpas built employing the pachilla technique are generally earlier than those with plaster. Chullpas 10 and 17 were built with these techniques and have the earliest dates at the site (Table 2). Pachilla was a technique widely used by the Recuay in monumental or funerary architecture and continues into the LIP (Ibarra 2021; Lau 2010a; Orsini 2014).

The chullpa doorways are small (40 × 50 cm) and elevated above ground level. Small entrances suggest that bodies were placed in small bundles, which is different from the coast, where bodies were wrapped in several layers of fabric with offerings (e.g., Kaulicke 2001). In Marcajirca, the bodies

were dried and bound with fiber ropes and covered by a single layer of fabric; the remains of both were found in excavations. A similar technique was used farther to the north with Chachapoyas mummies in chullpas (Guillen 2004). Ethnohistorical documents contain no information on how the bodies were dried. Guaman Poma mentions that the dead Inca body was embalmed prior to burial and the dead were observed for five days (Guaman Poma 2009 [1615], 208). Dry, cold weather conditions, as in Marcajirca, may have been adequate for natural mummification to occur. Inside the chullpas, it is very dry and cold even when the sun is very strong outside. However, I believe that it is also possible that the courtyards around chullpas would have created a private space for body preparation or preliminary mummification prior to it being placed in the chullpa.

The doorway orientation is not homogeneous: facing north (13), west (8), south (14), and east (2). The chullpas oriented towards the east are the only two story chullpas (Figure 6E). Chullpas built during the Inca occupation of the region, such as Chullpa 1 (Figure 6D), are oriented towards the north, where Llamoc—the local sacred mountain—is located. Towards the west lies the Cordillera Blanca with its prominent snow-capped peaks. Importantly, another LIP settlement with dozens of funeral caves is located in that direction. A total of 12 chullpas are oriented north towards Llamoc; this orientation supports Llamoc's role as an apu of the region. However, most of the chullpas (14) are south-oriented and yet, according to contemporary ethnography, no sacred mountain is recognized in that direction. Chullpa 20 has two accesses: one oriented south and the other north, although it seems that the north access was

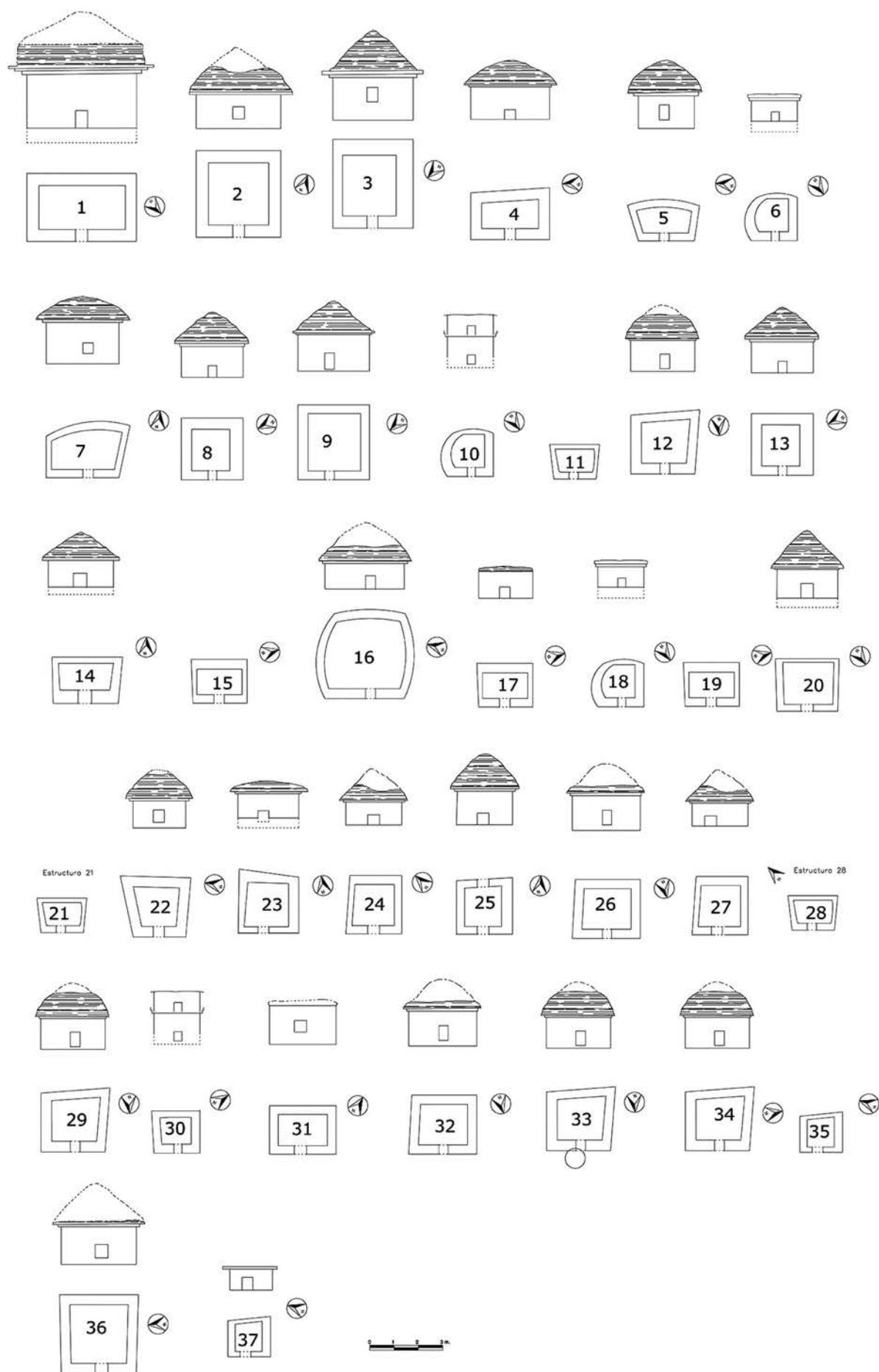


Figure 5. Chullpa typology and access orientation of all the chullpas in Marcajirca. Numbers refer to chullpa number.

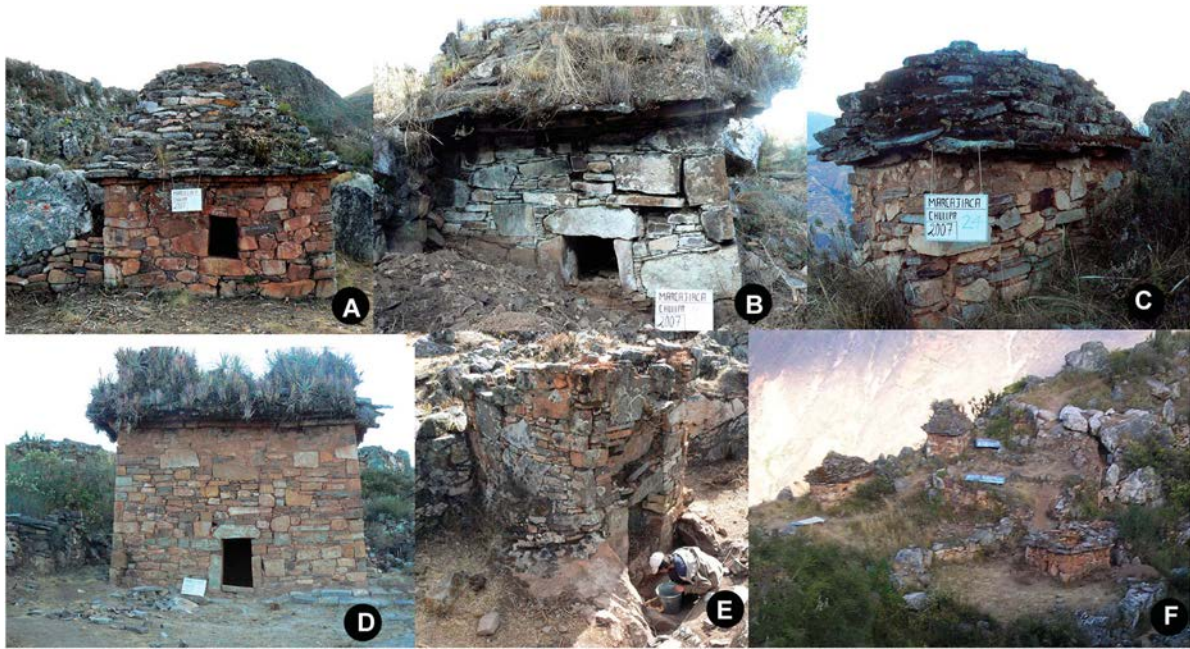


Figure 6. A) Chullpa built with medium-sized stones. B) Chullpa built using pachillas, reminiscent of Recuay masonry. C) Chullpa with white stucco remains. D) Chullpa 1, built during the Inca period. E) Two story chullpa. F) Chullpa in courtyard.

built later, suggesting that people shifted their tomb's orientation towards Llamoc. This shift points to the importance of Llamoc during the LIP in the region.

Excavations in front of chullpas aimed to identify rituals associated with the cult of the dead. Hence, 17 chullpas were excavated in this manner, and remains of hearths or burned areas were found at eight of them (see Table 1). The location of these hearths excludes the possibility of their use for daily food preparation: cooking fires were mostly placed near walls. The excavations produced calcified camelid bones (white-blueish color) and charcoal (Figure 7). Animal bone finds corroborate the information from the 16th century A.D. chroniclers, describing how food was burnt outside the tombs as a part of the cult of the dead. Other offerings consisted of small animal shaped figurines like snails and camelids; samples of these were found next to accesses. Figurine offerings have a long tradition: miniatures of camelids are found in Recuay tombs, as well as Inca burials (Ibarra 2021; Lau 2010b).

The excavations also focused on determining the relationship between tombs and courtyards (Figure 6F). Operations were extended from the chullpa to the surrounding wall creating a courtyard. We noticed that courtyard foundation layers were higher than those of chullpas; therefore, the courtyards were built after the chullpas (see Figure 7). I propose that Marcajirca's people encircled chullpas, creating courtyards, because more private space was needed for rituals. During the observation and burying of the body, many community members participated, but later, and throughout the years, the ceremonies were performed by direct descendants in reduced numbers. It is not possible to determine when during the LIP the courtyards were built. It is possible that residents from different parts of the valley buried their dead in Marcajirca, and the duality of the chullpa/courtyard enhanced the cohesion of descendants.

The interior of eight chullpas were also excavated with the goal of determining the MNI and the nature of materials associated with human remains. The burials here were composed of large quantities of commingled and disarticulated

human remains. The bodies were wrapped with fiber ropes, but also, later, the disarticulated bones were again wrapped, creating more space for new bundles. Material recovered from chullpas and caves correspond to diverse objects made of animal bone, metal, clay, wood, crystal, and corn and marine shells, as well as ceramic vessels (see discussion below).

The funeral caves

A total of 22 caves were identified in Marcajirca. They are mostly concentrated within the core area and located in outcrops and under boulders. The nature of outcrops allows removing blocks of stone, creating cave-like spaces. In those under the large boulders, walls were built, creating doorways (Figure 8). Almost every boulder and crack was used for funerary purposes, suggesting that Marcajirca reached importance as a place for the cult of the dead during the late LIP. Courtyards were also built around some caves, as occurred with chullpas. I believe the reasons for this were similar and meant to create more private space for rituals. It is important to note however, that caves and chullpas did not share the same courtyards, indicating that different groups of people oversaw rituals. The high number of individuals buried in caves suggests practices, like in chullpas, included wrapping disarticulated bones and placing them farther in the back, thus creating more space. Manipulation of human remains was a very common practice during the LIP (see Velasco 2023). Six caves were excavated, and the recovered material is diverse and even includes exotic marine shells.

Rock shelter tomb

These are aboveground burials built next to a cliff or large boulder emulating a chullpa, but unlike caves, they are visible from the outside. There is only one in Marcajirca, and it is composed of a semi-circular wall that creates an internal space and is roofed using the corbel technique (Figure 9A).

Table 2. Set of radiometric dates from Marcajirca. All the dates were calibrated using OxCal 4.4 with SHCal20.

N°	Site	Lab Code	B.P.	Error	CAL A.D. (95%)	Material	Provenance	Layer
1	Marcajirca	LTL2623A	669	45	1280–1395	Tooth	Cave 7B	1
2	Marcajirca	LTL2624A	891	45	1132–1276	Charcoal	Chullpa 10	3
3	Marcajirca	LTL2625A	701	50	1274–1400	Charcoal	E3R	2
4	Marcajirca	LTL2626A	361	50	1460–1648	Tooth	E7F	2
5	Marcajirca	LTL3850A	599	40	1379–1442	Tooth	Cave 18	5
6	Marcajirca	LTL3851A	708	30	1281–1391	Tooth	Cave 19	1
7	Marcajirca	LTL3852A	668	40	1289–1395	Tooth	Cave 19	1
8	Marcajirca	LTL3853A	840	40	1177–1285	Tooth	Cave 19	1
9	Marcajirca	LTL8165A	432	40	1438–1518	Wood	Chullpa 1	Roof
10	Marcajirca	Yu 4523	865	20	1184–1267	Wood	Chullpa 7	Wall
11	Marcajirca	UC185294	485	15	1453–1459	Bone	Chullpa 26	1
12	Marcajirca	UC185295	565	15	1400–1434	Bone	E10	1
13	Marcajirca	UC185296	430	15	1451–1501	Bone	Chullpa 6	1
14	Marcajirca	UC185297	485	15	1433–1459	Bone	E7F	1
15	Marcajirca	UC185298	480	15	1433–1460	Bone	Cave 19	1
16	Marcajirca	PSUAMS4540	490	15	1431–1457	Bone	E10	1
17	Marcajirca	PSUAMS4541	595	15	1390–1424	Bone	E10	1
18	Marcajirca	UC1250729	685	15	1295–1390	Tooth	Chullpa 26	1
19	Marcajirca	UC1250730	560	15	1401–1436	Tooth	Chullpa 6	1

**Figure 7.** Excavation in Chullpa 26 revealed the presence of a hearth in front of the access and, later, the construction of a courtyard.

This tomb was partially destroyed, as well as looted. Nevertheless, a complete cranium with a healed fracture was recovered from it. This tomb faces the valley (east) and is located

directly under rock art depicting possible camelids in red. The context of other rock shelter tombs in the valley (e.g., Ushcugaga, see Figure 2) corresponds to isolated cemeteries,



Figure 8. Funerary caves at Marcajirca.

located far from residential settlements, which also have rock art.

Underground burials

Two underground burials were identified in Marcajirca, and they are unique in the region, since this type of burial was not common in the highlands during the LIP. Both burials were found during the excavations in Structures 7 (E7) and 10 (E10) of the funerary sector. Both are composed of a large pit next to the walls of the structure, and there are no architectural elements related to them. Most of the human remains in both burials were articulated, including adults, sub-adults, and infants (Figure 9B). Individuals were mixed up, as if discarded in a space defined by large rocks. Both burials can be considered primary and undisturbed. The remains were not buried deeply, approximately 30 cm underground. The anatomical position of the bones suggests they were seated in a flexed position; however, no rope (or bundling) evidence was found. Unlike other burials, no offerings or objects were found, indicating this was not a part of the cult of the dead. The context of both underground burials suggests that they occurred as a single event; they can be considered mass graves. The analysis of human remains determined an MNI of 12 and 48 for burials E7 and E10, respectively (Washburn et al. 2022). One hypothesis is that the individuals died due to an unidentified epidemic, based on the fact that the remains mostly have no traces of perimortem violence. Radiometric dates (Ibarra 2021; Washburn et al. 2022) suggest the burial event occurred between the

Inca occupation and the Spanish arrival. Researchers propose that some diseases arrived before the Spanish initiated the conquest of Peru, and this was the cause of death of Inca Huayna Capac in Quito (Cook 1998).

Analysis of Human Remains at Marcajirca

The overall context of human remains inside the burials was found to be commingled and unarticulated. The majority exhibited post-mortem damage ranging from loss of bone cortex to significant weathering, breaking, and warping due to sun and moisture exposure and other natural elements. Many of the bones also had apparent post-mortem discoloration, including white (sun-bleached), brown, green, gray, and black shades. Much of the brown, green, and gray discoloration appeared to be from moss, fungi, root, and other plant growth. Some of the black and gray discoloration, particularly that which was present on remains, may have been caused by modern burning. The presence of few articulated bones indicates that the bodies were buried in a flexed position with the legs bent up to the chest and wrapped with ropes and light textiles (Figure 10A). Disarticulated bones were likewise wrapped with fiber ropes and moved behind the older remains to provide room for newly wrapped bodies.

Determination of MNI included all types of burials: chullpas ($n = 7$), caves ($n = 6$), and underground ($n = 2$). MNI was not done for the single rock shelter tomb, as it was poorly preserved, and the single skull found was most likely was moved by the locals. The total MNI is 620 (Table 3). Adult and juvenile remains were classified by age in most of the



Figure 9. A) Rock shelter tomb associated with rock art and B) underground burial E10.

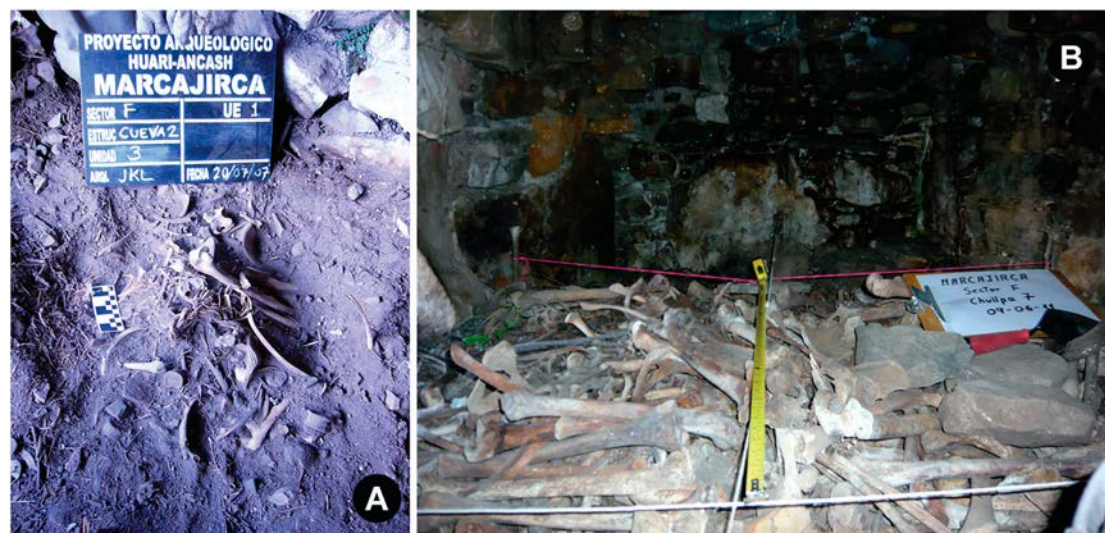


Figure 10. A) Assemblage of bone wrapped up with vegetal ropes and B) commingled and disarticulated bones, the main context of all the chullpas and caves.

burials. The MNI suggests an intense use of burials through time that involved multiple interments during different moments of the chullpas' and caves' lives. It was not a result of a single burial event. For example, Chullpa 3 measures 2.2×2.5 m, and a MNI of 66 was determined, which means an average of 13 individuals per m^2 . This number makes it improbable that all individuals were interred at the same time. Rather, the bodies inside chullpas collapsed and disarticulated, and then bones were wrapped with ropes or spread homogeneously on the floor, thus creating more room for new bodies (Figure 10B).

Cranial modification and ethnicity

Andean scholars use cranial modification for explaining population migration under the assertion that skull modification is a sign of ethnicity or population diversity (e.g., Pomeroy et al. 2009; Tung 2008; Verano, Titelbaum, and Ibarra 2016). A total of 33 modified crania were recovered at Marcacajirca. The types, based on the classification set by Dembo and Imbelloni (1938), correspond to annular (erect and oblique), posterior flattening, and bilobular, as described by Pomeroy and colleagues (2009). The analyses at Marcacajirca indicate that posterior flattening is the most common modification ($n = 14$). Additionally, this modification is a result of unintentional alteration from using cradles (Verano, Titelbaum, and Ibarra 2016). The types annular erect

($n = 11$) and oblique ($n = 7$) constitute the most common intentional cranial modification and, finally, only one individual exhibits bilobular modification (Figure 11). Cranium sex determination was based on robusticity and gracility, resulting in 12 females, 13 males, and eight undetermined. There is a prevalence of annular oblique modification in females ($n = 4$) in comparison to males ($n = 1$). In contrast, the annular erect type predominates in males ($n = 6$) more than in females ($n = 4$).

Today, human skulls are commonly removed from chullpas and caves by the people of the communities surrounding Marcacajirca and taken to their homes. People believe that skulls can be used as guardians to protect homes from spirits and robbers. The same roles were assigned to the ancestors during Prehispanic times.

Cave 19 was found intact, and 16 crania corresponding to all the modification types mentioned above were recovered from it, along with numerous objects. Teeth from three individuals with cranial modification (two annular oblique [females] and one annular erect [male]) provided dates of CAL A.D. 1281–1391, CAL A.D. 1289–1395, and CAL A.D. 1177–1285, respectively. This data indicates that different types of cranial modification were practiced contemporaneously by the members of the same group buried in the same cave. Therefore, cranial modification was not a practice identifying different ethnic groups; a common practice in individuals of both sexes, the reasons behind this can be multiple and could indicate social identity, lineage, etc. (see Torres-Rouff 2020; Velasco 2018).

Less attention is given to examining how different cranial modifications are present in a single site or even in a single tomb. Individuals of both sexes with different types of cranial modifications, male (tabular) and female (annular), are reported in the Chiribaya region in southern Peru during the LIP (Buikstra, Tomczak, and Rakita 2005, 79). Marcacajirca's Cave 19 is unique in the Andes, with multiple types of cranial modifications in a single tomb, challenging the assumption of ethnic connotation.

Prestige and Exotic Objects from Burials

The variety and number of objects found inside tombs (besides ceramics) is diverse, and such variety makes it

Table 3. Minimum Number of Individuals (MNI) at Marcacajirca. Analyses to determine juveniles and adults were performed by Dr. Anne Titelbaum.

Tomb	MNI	Juvenile	Adult
Cave 1	14	6	8
Cave 2	68	18	50
Cave 3	72	N/A	N/A
Cave 7B	25	N/A	N/A
Cave 18	9	1	8
Cave 19	30	9	21
Chullpa 3	66	30	36
Chullpa 6	34	14	20
Chullpa 7	77	24	53
Chullpa 8	36	6	30
Chullpa 13	55	16	39
Chullpa 14	36	11	25
Chullpa 26	38	11	27
E7	12	N/A	N/A
E10	48	14	34
Total	620	160	351



Figure 11. Different types of cranial modification at Marcacjirca. A) Annular erect, B) annular oblique, and C) bilobular.

complicated to determine status. For example, stone weapons, including maces and round stones or missiles, were found both in caves and chullpas (Figure 12A); gourds for drinking chicha (beer made of corn) and serving plates were found also in both types of burials. Ceramic spindle whorls, stone, and bone are also common both in chullpas and caves. Objects that are considered exotic, like marine shells ($n=7$), were recovered from five chullpas and one cave. All shell fragments are pierced, which indicates that they were used as pendants. The shells correspond to

Spondylus spp., *Mesodesma donacium*, and *Argopecten purpuratus* (Figure 12B). *Spondylus* had an important function in Prehispanic cultures, as it was considered the food of the gods and a symbol of high status (Glowacki 2005, 260). It played an important role in Inca ceremonies and was the principal object offered to the gods as a sacrifice when asking for favorable climate conditions for the harvest and for health (Murra 2002, 49). In the Ancash highlands, *spondylus* has been found in a non-funerary context dating to the LIP (Lane, Pomeroy, and Lujan 2018; Orsini and Benozzi 2016).



Figure 12. Different material recovered from inside and outside the chullpas and caves at Marcajirca. A) Stone axes and clubs; B) marine shell, including *spondylus*; C) metal pins; D) wood Inca kero; E) animal bone pendant; F) animal bone sniffer; and, G) wood and animal bone needles.

Other exotic objects include four small, pierced copper discs found in Caves 18 and 3 and Chullpas 13 and 26 (Figure 12C). The small size of these discs (3 cm) and the hole in them suggest that they were beads or parts of a necklace. A small, wooden carved *kero* cup was found in Cave 3 (Figure 12D), and it can be considered a miniature, since it is only 6 cm tall. The carved designs on the kero clearly indicate an Inca style; keros were considered ceremonial cups by the Incas. Samples of keros found in tombs are scarce and miniature keros even more so; an example found on the central coast of Peru is associated with a single individual's tomb and has been interpreted as a diplomatic object exchanged

between the Incas and the local population (Ramos Vargas 2015); a similar interpretation has been given to several normal sized keros found in funerary contexts in the north of Chile (Horta 2013, 108). The Marcajirca sample constitutes the only miniature kero (so far) found in the northern highlands of Peru. Hence, because chullpas and caves are collective burials, it is hard to say if such objects were associated with a single individual or the entire ayllu.

Animal bone objects are represented by a llama bone flute (Cave 19). Flute traditions are very ancient in the Andes, and a flute can be considered a personal object of herders. Also found were pendants in the form of small disks or figurines

(Figure 12E) and snuffers: there are long and short ones (Figure 12F) and are found both in chullpas and caves. The presence of snuffers suggests the consumption of hallucinogens such as *Anadenanthera peregrina* or *willca*. *Willca* is a plant that grows in the Amazon Basin and the eastern flank of the Andes (Torres and Repke 2006, 7), and Marcajirca is located on the path to the upper Amazon region. Other objects are two types of needles, with a head and without; those with heads were for holding or securing a cover (like pins) and resemble the copper *tupus* (pins) found in Recuay tombs. Needles without heads were most likely used for sewing (Figure 12G). The material variability (exotic and prestige) found in caves and chullpas and the amount of offerings (goods and food) were similar between both types of tombs, which indicates that there were no pronounced social status differences among the population of Marcajirca.

Radiocarbon Dates and Chronology

The chronology of Marcajirca is based on a suite of 19 radiocarbon dates that were obtained from chullpas and caves. All measurements were calibrated using Oxcal v 4.4 with the SHcal 20 curve (Hogg et al. 2020) (see Table 2). Dates place the period of Marcajirca's inception and main occupation in the LIP (ca. A.D. 1000–1470). As previously discussed, it seems that chullpas were slightly earlier than funerary caves, and this is probable because the chullpa tradition came from the previous Recuay period (ca. A.D. 200–900), while funerary caves were not utilized by the Recuay in the Puccha Basin. This correlates with the dates from Chullpas 7 and 10, both of which were built using the pachilla technique, as in the Recuay era, and these two chullpas have the earliest dates from the site: CAL A.D. 1184–1267 and CAL A.D. 1132–1276, respectively.

In the case of Cave 19, the dates of LTL3851A (CAL A.D. 1281–1391) and LTL3852A (CAL A.D. 1289–1395) correspond to two female crania with annular oblique modification, while LTL3853A (CAL A.D. 1177–1285) belongs to a male individual with annular erect modification. This indicates the simultaneous practice of skull modification with differences by sex. The date of UCI185298 (CAL A.D. 1433–1460), from the first metacarpal of an adult, demonstrates that Cave 19 was used continuously for at least 400 years and that this was also probably the case for most of the tombs at the site.

Caves become the predominant type of burial throughout all the regions of the settlement during the LIP in terms of quantity, and this is due to the minimal labor required for their use (Ibarra 2021). Dates indicate that chullpas and caves functioned contemporaneously as ritual places for the cult of the dead, such as in Cave 18 (CAL A.D. 1379–1442) and Chullpa 26 (CAL A.D. 1453–1459). Both types of tombs were used over a long span of time, and this also correlates with the MNI. However, Marcajirca was also active during the Inca period, or the Late Horizon (ca. A.D. 1470–1532), and new chullpas were built during the Inca occupation of the region. Chullpa 1, the largest and most distinctive chullpa at the site, does not have a conical roof, despite the use of corbel assisted by long wood beams. One of those beams was radiocarbon dated, resulting in a date of CAL A.D. 1438–1518, placing it into the Inca occupation of the region. Marcajirca shows evidence of Inca influence via ceramics of

Cuzco origin and rectangular buildings (Ibarra 2016). The Inca occupation of the region did not cause critical changes in the cult of the dead, and rituals and burying continued to be performed, though in some cases, Inca objects such as keros were included in the offering (see Figure 12D).

Discussion

The study of mortuary contexts constitutes an important component for examining social interaction. Tombs were spaces of negotiation among individuals, where the living could manipulate the dead for their political interests (Hodder 1982; Parker Pearson 2000). Also, they provide information on ancestor veneration (McAnany 2013), kinship formation (Bentley 2022; Ensor 2013), ritual practices (Fitzsimmons and Shimada 2011), and relationships with the natural and cultural landscape (Scherer 2015). Thus, data recovered from Marcajirca examines the mortuary context from the perspective of the cult of the dead. The cult of the dead is a series of actions that living people perform for all dead people. These actions can be expressed with the construction of tombs and, periodically, rituals that include offerings. With these actions, the living seek to create a link with the dead and turn them into participants in daily life. The degree of participation will vary based on their importance in the society while they were alive.

From a cult of the dead perspective, it is to be expected that the groups that participated in the various rituals can be identified. In the Andes, during the beginning of the Spanish conquest, the ayllu was the predominant type of social organization throughout the highlands. An ayllu is commonly defined as a group of people of the same kin with a common ancestor. Its size varied from small-sized villages to thousands of members. Ayllu members held rights over the land, where all the members received usufruct rights for their subsistence. Group members were descendants of a founding ancestor and mostly worshiped a sacred mountain or huaca (e.g., Espinoza Soriano 1981; Isbell 1997, 13; Ramírez 2005, 135; Rostworowski 2007, 135; Zuidema 1973). Traditionally, the study of ayllu has depended extensively on ethnohistorical data or modern ethnography (e.g., Allen 1988; Bastien 1985; Doyle 1988; Salomon 2015; Weismantel 2006). The ayllus have a correlation with the chullpas, since these tombs housed dozens of biologically and socially related individuals for centuries. The organization of rituals as a part of the cult of the dead suggests a strong and multi-generational social cohesion.

Within this context, challenges arise in how to correlate the definition of ayllu with the archaeological record, considering that chullpas and caves correlate with ayllus (see Isbell 1997). Thus, several researchers throughout the Andes have addressed this issue in recent years (e.g., Ibarra 2021; Jennings and Berquist 2022; Kellett 2022; Mantha 2022). Hence, based on all the evidence presented, the question arises: how many ayllus existed in Marcajirca and how did they participate in the cult of the dead? The results of strontium analysis undertaken in human remains from chullpas and caves in Marcajirca indicate three clusters of similar values located at various sites in the valley (Washburn et al. 2022, fig. 9). This information can be interpreted as the existence of three groups of people buried at the site—people who came from different parts of the valley. Additionally, ¹³C isotopic dietary analysis suggests a diet that did not

include C_4 plants (maize), with minimal consumption for certain individuals. This would indicate that people resided in different ecological regions. John Murra (2002) stated that ayllus had lands in various ecological zones to access products not available in their area, and some of the strontium values correspond to the territory of the Pincu ethnic group neighboring the Huaris in the south (see Figure 2). Biethnic populations have been described by Duviols (1973); therefore, it seems that marriage between people from different ethnic groups was practiced.

The analysis based on the tombs' different masonry also reveals the presence of at least three groups of builders: 1) those who built using pachilla, 2) those who covered their tombs with stucco, and 3) those who did not use either of these two techniques. The presence of the rock shelter tomb associated with rock art indicates that it corresponds to a different group of people. Tombs of this type have been identified in the northern end of the Huaritambo Valley. Finally, there are three intentional types of cranial modifications. However, the fact that individuals with diverse modifications were found in a single tomb could suggest this practice was independent of the ayllu to which they belonged. The discovery of dozens of needles in Cave 19 suggests individuals were engaged in textile production and probably herding camelids. At the moment, it is not possible to determine groups of people buried in caves. Caves have minimal architecture, and the cultural material is similar to that from chullpas. Therefore, data combining isotopes, bioanthropology, and architecture indicates that the members of at least three ayllus were buried in Marcajirca. This information is a starting point and, in the future, this data will be integrated and compared with information from other tombs and settlements in the valley that have been excavated, dated, and analyzed.

The ayllus also had a hierarchy based on their distance from the founding ancestor. The ayllu of higher hierarchy had their ancestor, or *mallqui*, mummified, which was also recognized and venerated by the ayllus of the lower hierarchy. Yet, some lower-ranking ayllus also had their own *mallquis*. Commonly, the *mallquis* were buried with other people of the same lineage (Doyle 1988, 242; Duviols 2003, 443; Ramírez 2005, 126; Mantha 2022). However, there is no special denomination for those segments; therefore, all are referred to as ayllus. A recent work of Jose Carlos De la Puente (2023) states that some ayllus were resettled by the Incas, and then those ayllus claimed a high lineage, because in their original village, they were closer descendants of the founding ancestor. Ayllu members periodically addressed their ancestors through rituals that involved direct, physical interaction between the living and the dead, represented by mummies, body parts (bones and hair), and other objects, such as textile bundles or monoliths called Huancas (Duviols 1979; Kaulicke 2001). Such practices played a central role in the reproduction of ethnic identities, territorial rights, and political hierarchies, and this definition of an ayllu and its traits correspond to what the Spanish wrote during the 16th century A.D. (Isbell 1997).

Most of the rituals identified in Marcajirca correspond to the burning of offerings or foods in front of the chullpas. Although food offering was part of the cult of the dead in general (e.g., Ondergardo 2023 [1566]), the presence of hearths in front of chullpas would indicate the importance of the tomb or a particular individual, a *mallqui*. More

than half of the excavated chullpas have hearths (eight out of 17), which indicates a strong cult around them. However, it is almost impossible to identify the dominant ayllu segment, because each segment had its *mallqui*, including the less important ones. Peter Kaulicke (2001) points out that not every dead person is an ancestor (*mallqui*?), so it is important to identify the context of these *mallquis*. Here, Marcajirca is important: the tombs are collective, with dozens of individuals placed over hundreds of years along with their offerings and the hearths in front of chullpas, effectively indicating a practice of a *mallqui* cult. However, some questions arise: how was the cult of the dead practiced for those individuals (non-*mallquis*) buried in the same chullpa? It is very likely that rituals were similar: burning offerings and gatherings. However, the *mallquis* would have had a particular day (as the chronicles point out: e.g., Guaman Poma 2009 [1615]) in the enclosed courtyards.

Perhaps a clue to identifying a particular *mallqui* and its level of importance within the ayllu buried at Marcajirca is found in Chullpa 1, dating to the Inca occupation. The members of this ayllu built the largest tomb on the site (see Figure 6D)—its height and area are double that of the others. Chullpa 1 is next to three perfectly square structures with building techniques that are different from other structures (see Figure 3). All those buildings, including the chullpa, were probably built under the influence of Inca architects from the Administrative Center of Huaritambo, located in the valley. The Incas needed the regional leader and the elite to control the conquered territories and favored them with gifts such as textiles and, perhaps, designed houses and tombs. The Incas had already influenced the architecture of the neighboring town of Ñawpamarca de Huachis in Pincu territory during the LIP through rectangular constructions, some even with double jambs (Ibarra 2016). Thus, most likely the builders of this chullpa (which is with stucco) were the most important ayllu at that time. However, extensive excavations in the front identified not a hearth but rectangular structures around this chullpa. Sadly, this chullpa was extensively looted, as even the foundations inside were removed, and no material was found inside during our intervention.

The ayllu also venerated a common ancestor called Huanca, who was considered the founder of the town or historical ancestor (see Itier 2021, 8). The evidence of rituals surrounding a Huanca stone located within the Amphitheater (the most important ceremonial structure at the site) indicates that the beginning of ritual here occurred when the town was already established. The construction of the Amphitheater postdates the chullpas, so the materialization of the historical ancestor was possible because of competition between the different *mallquis* during the LIP, suggesting the ayllus were in a constant state of change. Ayllus also worshiped a sacred mountain, who was the mythical ancestor, and this mountain was a constant presence. This is the case for Llamoc, located east of Marcajirca. References to its worship are widespread in the Ancash highlands. A recent study by Cesar Itier (2021) points out that the huacas were mobile objects and that they were named after their place of origin. The name Llamoc is repeated in numerous ethnohistorical sources (e.g., Duviols 2003; Itier 2021); consequently, Llamoc was the mythical ancestor, certainly from Marcajirca, whose antiquity dates back to the end of the Early Horizon period.

Conclusions

Marcajirca's tomb variety is the result of multiple different groups of people being buried there. The population lived in the valley and was buried in Marcajirca, as is suggested by the multiple residential sites in the area without burials. During the LIP, some of those groups kept the mortuary traditions pertaining to chullpa construction and the use of pachillas originating during the previous Recuay period. However, an important change, a shift from burial outside of residential areas to tombs embedded in houses, was introduced. This reflects the importance of the cult of the dead as a strategy of cohesion for social groups or ayllus. The chullpa is the longest-lasting mortuary building or collective tomb type in the Andes, and its use indicates the continuity and importance of the cult of the dead. They originated in the Ancash highlands during the Recuay period (ca. A.D. 350) and were built with large stone slabs and columns, with roofs, and were bigger and heavier than chullpas of the LIP, with chullpa construction lasting until the Inca period (Ibarra 2021).

The examination of goods and exotic objects found inside the chullpas suggests no pronounced difference in status. The fact that the same quality of goods is found in caves and chullpas corroborates this argument. At Marcajirca, there is no evidence of isolated individual burials. Hence, I believe that many of the recovered objects belonged to the ayllu and were reused for generations, since most of them were ritual items, for example shells and keros. Individuals buried within chullpas were probably related to each other biologically; bone studies have determined the presence of degenerative diseases like dwarfism and brachydactyly, which are genetically transmissible (Titelbaum, Ibarra, and Naji 2015; Titelbaum et al. 2021).

Scholars have debated about the use of chullpas as territorial markers (e.g., Kesseli and Pärssinen 2005). But this is difficult to define: for example, if entering a territory was highly controlled or if chullpas were located along an access route. The route that runs through the valley from south to north is far from Marcajirca, and the chullpas at other LIP sites are found in reduced numbers (one to four chullpas); therefore, suggestions of chullpas being political territory markers needs more research.

Domestic activities in Marcajirca merged with rituals for the dead; this conclusion is based on the number of houses (over 100 across the site) and the significantly high number of individuals participating in preserving rituals. Today, many people live in their *chacras* (cultivation lands) while farming, but they also have houses in the village, though they reside there only during celebrations like patronal or saint festivals. This is also described by the Spanish chroniclers and visitors during the Colonial period: people did not reside in the village and lived in the *chacras*, resulting in difficulty in controlling their idolatries (e.g., Arriaga 1968 [1621]). Accordingly, different ayllu from the valley had a residence or house in Marcajirca, which was used when practicing the cult of the dead rituals and was their base during pilgrimages to Llamoc.

Geolocation Information

The site of Marcajirca is located at the following UTM coordinates: E 266033, N 8963394, Zone 18L.

Acknowledgments

This field research was supported through the field school of Proyecto Arqueológico Huari—Ancash between 2004 and 2023. The writing process was supported by a fellowship from ACLS (American Council of Learned Societies) and postdoctoral research fellowship from Pontificia Universidad Católica del Perú. I want to thank Carlos Escobar Silva for constant support during the excavation process. Analysis of the human remains was undertaken by several physical anthropologists that participated in the project: Stephan Naji, Oscar Loyola, Melisa Lund, Anne Titelbaum, and Eden Washburn. Jason Nesbitt and Margarita Brikyte collaborated in the correction of the manuscript.

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