

8-30-2024

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Recommended Citation

Delgado González, Carlos and Guardapuella Aragón, Jaime (2024) "Huacaypata: The Sacred Qocha of the Incas," *Andean Past*: Vol. 14, Article 12.

Available at: https://digitalcommons.library.umaine.edu/andean_past/vol14/iss1/12

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HUACAYPATA: THE SACRED QOCHA OF THE INCAS

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INTRODUCTION

The city of Cusco has been the subject of study and discussion since the sixteenth century, when the first Hispanics arrived there and felt an enormous admiration for the city and its buildings. This is reflected in their documents, some with more realistic descriptions and others with more romantic ones. Since then, travelers who came to the city often described it, and made maps and drawings. In the last century historians, archaeologists, ethnographers, and architects have made various analyses from different points of view, most of them using, as a fundamental tool, the Hispanic chronicles and architectural data that have provided various approaches to understanding how the city arose, its foundation, its architectural planning, and the richness of its temples and palaces. Another group of researchers has worked with archaeological and historical data, reconstructing the Cusco of the fifteenth century, its intricate kinship relationships and genealogy, and its territorial and mental division into *hanan* and *hurin* (upper and lower). However, none of these archaeological, historical, and architectural studies has been able to determine and define sequentially the material evidence.

The present work focuses on the development of the city, drawing on archaeological data pertaining to the time prior to the Incas. It seeks to determine why the pre-Incas and Incas settled in an area that was previously a lagoon. From ethnographic and historical data, we propose that the area of Acamama, a swamp in earlier times, was a sacred space, a huaca, a *paqarina* or origin place, where the pre-Incas and Incas used enormous natural and human resources to transform it into the most important ceremonial plaza of Tawantinsuyo (Figure 1), around which they built palaces and temples. We must not forget that, below the current floor, a set of subterranean drainage and ritual canals was built, which articulated with the Saphy River, forming part of the micro-basin of the already sacralized river.

THE PROBLEM OF ARCHAEOLOGICAL DATA

The archaeological reconstruction of Inca Cusco and the communities that preceded it is shrouded by a cloak of uncertainty, despite the countless studies that have been done, because the disciplines of archeology and history have not been able to systematically corroborate each other. While historical data inform us of several peoples who occupied the Cusco Valley, including the Alcabistas, Antasayas, Huallas, and

Sauaseras, archaeologically, Killke-style ceramics are found both in the valley itself and on the slopes of the surrounding hills.

Archaeological data from various excavations in the historic center of Cusco and on its hill slopes, has generally been recovered during rescue work. Consequently, archaeological evaluations provide only partial, unsystematic information without radiocarbon dates. Various excavations and surveys have provided information on different events, structures, and funerary contexts, without noting changes in the occupation process of the area. The recovery of archaeological strata has not led to the differentiation of various moments of occupation in order to establish stratigraphic, typological, and architectural distinctions.

In addition, the ceramics of the pre-Inca ethnic groups, which archaeology has grouped together as Killke, do not exhibit major variations, and it is likely that the same style was used by different groups. Probably, differences were present in clothing, headdresses, hairstyles, or some other accessory they wore (Molina 2008 [1573]:6; Montesinos (1882 [1644]:42; Pachacuti Yamqui Salcamaygua 1993 [1613]:265).¹

Because Cusco is a permanently occupied area, the archaeological strata have generally been mixed with Inca, pre-Inca (Killke) and, in some cases, Colonial material, viewed without an understanding that this is part of the process of occupation and reoccupation and it is not necessarily the case that the strata are disturbed.

¹ It is typical in the Andes that the populations of various communities are differentiated by the design and color of the fabric of their clothing, as is the case with the present-day inhabitants of Willoq and Queros; or by some detail of their hats, as in Pitumarca; or by what they put on their heads, as with the community of Amaru in Písaq; as well as by hairstyle as in Maras and Chinchero. These differences are found in towns that are adjacent to each other, not necessarily in different geographical areas.

In addition, the city has been perpetually looted, experiencing clandestine excavations, which have caused its cultural strata to be disturbed.²

Archaeological reports have described occupation levels, in a cursory and not very analytical way, with pre-Inca material (Killke), initial Inca, Classic Inca, and Transitional³ materials presented. In the absence of a detailed analysis of the archaeological evidence, it would seem that all the architecture in the city corresponds to a single imperial Inca occupation. This statement is untrue, because it significantly overlooks the pre-Inca and early Inca evidence

² Reginaldo de Lizárraga provides an interesting description of the excavations that were carried out in the Qoricancha (Monastery of Santo Domingo) in search of treasure:

It is well known that there is a great gold mine beneath the ground of our house, but it is not known where. Some say, and it is still considered the most certain thing, that it is in the main chapel. Others say that it is in the orchard. They have dug in many places, but as of today nothing has been found. Don Carlos Inga made this suggestion: that they would let him dig under the main altar, and of what he would take out he would give some part, and if he did not find anything, he would return to rebuild what had been demolished, at his own expense, in the same way as before. The request was not approved, and so it remained (1909[1605]: Chapter LXXX).

[Es fama haber en nuestra casa gran mina de oro enterrado, pero no se sabe dónde; unos dicen, y aún se tiene por lo más cierto, que en la capilla mayor; otros, que en la huerta; han cavado en muchos lugares, pero hasta hoy no se ha hallado cosa alguna. Don Carlos Inga salía a este partido: que le dejasen cavar debajo del altar mayor, y de lo que sacase daría tanta parte, y si no hallase cosa alguna, tornaría a reedificar lo derribado, a su costa, de la misma manera que antes estaba. No se le admitió el partido, y así quedó.]

Presumably this was a common practice in the temples and palaces of the Incas.

³ The time between 1533 and 1570.

in the city. Excavations in Cusco should and must be done in a broad manner, differentiating small changes that would allow us to better understand the occupation process.

During the last ten years, there have been several works published that systematized the archaeological work done in Cusco. Ian Farrington (2013:7–10, table 1.2, figure 1.3) is the first to have ordered archaeological investigations of the Inca city by blocks and palaces. Mar and Beltrán-Caballero (2014) and Mar *et al.* (2021) provide an extensive description of the Inca architecture of Cusco on the basis of archaeological findings, describing the construction process (see Figure 2).

The chroniclers of the conquest who were the first to see Inca Cusco, such as Miguel de Estete (2017 [1534]), Pedro Pizarro (1978 [1571]), Juan Ruiz de Arce (1933 [1543]), and Pedro Sancho de la Hoz (2004 [1534]) present the most reliable data on that city, although several of their descriptions are exaggerated. The archaeological data reported for Cusco and its surroundings cast doubt on part of the early descriptions. Some claim that there were one hundred thousand houses in the surrounding area (Murua 1925 [1590]:13, Book 4, Chapter II; Sancho de la Hoz (2004 [1534]:128) a figure that seems quite exaggerated. Archaeological records do not show that the city and its surroundings could have had such a large number of inhabitants.⁴ In the 1980s, the National

⁴ As John Rowe (1967:60–61) warns us, the first estimates tend to be high, but, evidently, there were quite a few buildings and this is confirmed by archaeological evidence. There is so much destruction and erosion on the hillsides that we cannot use archaeological sites to obtain more accurate figures.

The Inca city was surrounded by settlements. Garcilaso mentions that the neighborhoods surrounding the city were Colcampata (San Cristóbal), Pumacurco (San Cristóbal), T'oqocachi (San Blas), Munaicenca, Rimacpampa (Limacpampa), Pumaqchupan, Cayaucachi (Cori-

Institute of Culture created a register of archaeological sites. Beginning in 1994, Brian Bauer (2018) conducted a systematic survey of the Cusco Valley, in which his team identified settlements of the Late Intermediate Period and the Inca Horizon on the slopes of the hills. These do not appear to have been densely settled. Ruiz de Arce states that there were about four thousand houses inside the city (1933 [1543]:368). Survey of structures (see Agurto 1979, 1987; Farrington 2013; Gasparini and Margolies 1977; Paredes 1999) and countless archaeological excavations between the Saphy and Tullumayo Rivers show that the architectural structures are not agglutinated to form densely placed buildings. In addition, occupation levels, as based on the stratigraphic record, are not dense, both in terms of portable materials (ceramics, bone remains, lithics, and debris from domestic activities). What we do have, in some areas, is evidence of offering events, levels of incinerated materials deposited during ceremonial and religious activities.⁵

Given this evidence, the question is: why did the Spaniards exaggerate this data? They may

pata), Chaquillchaca (by the road that goes to Contisuyo), Picchu, Quillipata, Carmenca (Santa Ana), and finally Huacapunco (1960 [1609]:311–313). An estimate of the population that lived around Cusco was made by López de Velasco who affirms that Cayacache (Parish of Belén) would have had about 2,400 people, the parish of Santiago 1,000 or 2,000 people, Nuestra Señora de los Remedios about 2,000 people, T'oqocachi (Parish of San Blas) about 2,600 people, Carmenca about 2,300 people, Colcampata (Parish of San Cristóbal) about 1,800 or 2,000 people, (López de Velasco 1894 [1571–1574]: 479–480). In accordance with archaeological data, these numbers seem to be closer to reality, as opposed to what was stated by the first chroniclers of the conquest.

⁵ Excavations on the slope of Arcopata (Carmenca) (Delgado 2007) and at T'oqocachi (Delgado 2022; Manotupa and Peña 2016) show a low density of archaeological material for the Inca Horizon. Likewise, the stratigraphic records of the various archaeological works carried out in the city show little cultural potential.

have misjudged unintentionally, or their misjudgment may have been motivated.⁶ It is probable that by magnifying the size of the population and the number of buildings they intentionally aimed to magnify the facts of the conquest. By exaggerating the numbers, the heroic deeds of this host of conquerors also increase proportionately. These documents were not written for archaeologists and historians of the twentieth and twenty-first centuries, but for the church and Spanish Crown of the sixteenth and seventeenth centuries who had religious, political, and economic interests.

Based on several chroniclers, some researchers argue that during the reign of Pachacutec and those of his successors, the Incas brought thousands of workers for the construction of the city and its surroundings. This statement is not corroborated by archaeological data. A thorough review of archaeological reports shows us an absolutely different reality. Archaeological investigations do not show a density of domestic settlements, Inca workers, or *mitayos* (conscripted term workers) on the slopes or in the suburbs of the Inca city. The archaeological record has not revealed extensive ceramics from other towns, only some fragments, in some areas near Cusco. So, we wonder if the archaeological record is correct, or if the data of the chroniclers indicating that thousands of workers arrived is incorrect or is an overestimation.

The transfer of thousands of workers would have entailed an immense logistical capacity on the part of the Inca state, requiring human and economic resources, food, herds for transportation, and areas in which to settle, even temporarily, adjacent to construction sites. It seems that at the time of the ascent of Pachacutec, the

Cusco state did not yet have sufficient resources to be able to build, in such a short time—only several decades—the entire infrastructure of the city and its adjacent areas. Therefore, we must see the construction of Inca Cusco as a long process of building, remodeling, and reconstruction that began with the Killke, and then continued with the first Incas, who are covered by a cloak of uncertainty.

Research on Cusco has always been strongly influenced by the data presented in historical documents from the sixteenth and seventeenth centuries that assign the role of the creator of a new order to Pachacutec, and assert that all the visible Inca structures were the product of his constructions, reconstructions, and reorganization, undermining the previous occupations, without understanding that the entire construction of the city was a prolonged process that evolved over much more time than a single reign.

Albert Meyers' (2019) analysis, made on the basis of radiometric dates from Inca sites in Chile, Bolivia, and Argentina, suggests that the Inca incursion into these places occurred some time before the fourteenth century. If this is the case, there is the question of why we have this gap, with approaches that are still used in Inca studies, that it is only around 1450 that the expansion into Qollasuyo began. If Meyers and other researchers are right in suggesting an early occupation of Qollasuyo, the monolithic chronology that has been used in Cusco will have to be rethought.

THE VALLEY OF CUSCO, ITS WATER SOURCES, AND STONE

Geologically Cusco was part of Lake Morkill, due to which it has large aquifers with groundwater filtration, with springs found throughout the city, marshy areas, and moist soils. Some mountains such as Senqa, Pachatusan, and

⁶ Spanish soldiers were all steeped in tales of chivalry. One of the strongest currents running through popular life in medieval Europe was the tales of knights-errant (Fleming 2016 [2009]:3).

Huanacauri were covered by snow caps, and the headwaters of the Saphy, Choquechaca, and Choco gorges are glacial rivers that have carried materials from the slopes, transporting them from the base of the hills to the valley floor (Ponce de León 1930:103–105).⁷

The Cusco Valley is wide with moderately sloping hillsides, and fertile lands. The hydrography of the city is marked by the confluence of several rivers. The waters of the Chakan and Saphy Rivers that come from the Senqa hill join in Pumaqchupam with the Choquechaca-Tullumayo River that descends through the Sapanatina ravine to form the Huatanay River. The Chunchulmayo, Qorimachahuayniyoq, Chocco, and Huancaro streams join the Huatanay River downstream from Pumaqchupam. To the south of the city, the valley opens up into a fan formed by the Huatanay River that cuts through the valley from the northwest to the southeast (Figure 3).

Geologically, the northern slopes of the Cusco Valley and the Saqsaywaman plateau have outcrops of rocks of the Yuncaypata group where limestone, sandstone, and shale rocks jut out (Carlotto *et al.* 2011:179). These materials were mainly used in the construction of river channels, in terraces, and in the construction of the settlements and huacas of Cusco. Diorite was extracted from the slopes of T'oqocachi and Saqsaywaman; andesite was used in the construction of the great palaces and temples, as it is an exogenous material from the quarries of Waqoto (Miranda and Zanabria 1995) and Piñipampa east of the city, which continue to be exploited to this day (Figures 3 and 4).

This period is marked by times of severe drought. Studies on the climate of the Andes

have shown changes from periods of intense rainfall and abundant water to periods of dry and extremely dry environments. Records from the Quelccaya ice cap, located between Cusco and Puno, indicate a dry period between A.D. 1160 and A.D. 1500 that was especially intense between A.D. 1250 and A.D. 1310 (Thompson *et al.* 1985:973). Isotopic paleoclimatic records from Lake Huaypo reveal episodes of aridity coinciding with those indicated by the Quelccaya ice cap (Mosblech *et al.* 2012:1369–1371). Similarly, studies from Lake Titicaca show several low water episodes between 900–500 cal BP coinciding with the collapse of Tiwanaku and the Late Intermediate Period (Abbott *et al.* 1997:170). These climatic factors must have had a fundamental influence on the settlement and occupation processes during this period. One of the great advantages of the Cusco Valley is that because it was previously a lake, it has extensive aquifers. This must be one of the reasons why the Killkes settled throughout this valley.

THE TRANSFORMATION OF CUSCO

The first question we should ask ourselves is why the initial inhabitants settled in this extremely humid area. The answer is that areas with environmental characteristics including forests, soils, and rivers are favorable places for life to thrive. There are resources such as water, pastures, birds, and grazing animals. Therefore, economic activity is greater than elsewhere, and economic resources are constantly renewed. Additionally, on the slopes of Cusco, there are building materials. On the slope of T'oqocachi there is a diorite quarry. In Saqsaywaman and on the northern slope of the city, there are limestone outcrops, and in the lower parts of the city there are sandstone outcrops and boulders. Lopez de Velasco describes the building materials available in Cusco:

⁷ This occurred in 1974 when a stone and mud avalanche ran down Choquechaca Street (personal communication Edmundo Delgado Sumar, 2020).

Although there is not much wood for building and there is a lack of firewood, there is an abundance of stone, lime and plaster, tile, and brick and good soil for walls and adobes, and very good, fine-grained building stone (1894 [1571–1574]:479).⁸

The transformation of the Cusco Valley has been a dynamic and perpetual process taking place over several centuries, a continual process of land use and modification of the territory, through social interactions that motivated the growth and emergence of an Inca state during the thirteenth century. It was not due to the emergence of a messianic leader who created a new order. Archaeological research posits that the consolidation of an early Inca state was not just a matter of victories and marriage relations, but, rather, a complex and prolonged process of social interactions that facilitated the emergence of a new regional authority (Bauer 2018; Covey 2006; Kosiba 2015).

We should not see the area where the city of Cusco was settled as only the flat part of the city surrounded by several hills that give it the configuration it has today. T'oqocachi Hill, located to the east, and modified by limestone terracing, is the site of the temple to thunder. The hillside between the San Cristóbal neighborhood and Saqsaywaman is made up of a group of terraces where part of the Inca city was later built. The slope west of the Saphy River to Ticatica was an area with the steepest slope, with highly eroded areas. To the west of the city are the gentler slopes of the hills that correspond to Coripata and Manahuañunca, an area where archaeological data show a higher density of

cultural remains from the Late Intermediate Period.

The construction process in the Andes has exhibited certain characteristics since the region was occupied by the first peoples to arrive there. It is a permanent process of construction-destruction-burial-construction. From the Formative, the settlers built their houses or temples, and these, at some point, were destroyed or covered. People began to build anew on these occupations. Such events are documented from the coast to the mountains and have been perpetual; for example, in the area of Cusco, the Formative site of Yuthu had several episodes of construction, until its final abandonment when it became a cemetery. The huaca of Huanacauri was also destroyed and covered by the Incas, probably upon the arrival of the Spanish (Delgado 2014). The Temple of the Sun of Ollantaytambo was not the result of a single design, but is the work of different generations of architects (Protzen 2005:110). The same occurred with the temple of Qoricancha; the green diorite blocks of its final construction were reused components. Consequently, we cannot see the construction process of a settlement as something linear, but, rather, as a perpetual process of change and transformation.

Generally speaking, this whole historical process can be divided into three phases. The first one runs from the formation of the people before the Incas until the rise of Inca Roca. The second phase is marked by the transformations made by Inca Roca, who appropriated the waters of *hanan* and *hurin* Chakan. This occurred in a time that encompasses myths, legends, heroic stories, and historical facts. This first great transformation of Cusco culminates with Viracocha Inca. The third phase is the rebuilding of Cusco by Pachacutec Inca Yupanqui and by Huayna Capac, and its subsequent development. This last phase is the best understood from historical and archaeological data.

⁸ [Aunque no hay mucha madera para edificar y está falta de leña, hay abundancia de piedra, cal y yeso, teja y ladrillo y buena tierra para tapias y adobes, y muy buena piedra de grano para edificar.]

The Inca city of Cusco has undergone countless modifications (see Figure 5). The levels of the pre-Hispanic occupation floors have undergone changes. Some streets of modern Cusco are below the Inca foundations, for example, the Santo Domingo, Conquista, and Awaqpinta Streets.

FIRST CONSTRUCTION PHASE OF THE CITY OF CUSCO

Between A.D. 1000 and 1400, the Cusco Valley was populated by various peoples that Sarmiento de Gamboa (2007 [1572]:48) identifies as the Sauaseras, Antasayas, and Huallas, while Murua mentions the Lares, Poques, and Huallas (2001 [1590]:45). The Alcabistas and the Huayllacan occupied the lower part of Cusco. To the north, near Chinchero, were the Ayarmacas (Rostworowski 1970). Quave *et al.* (2019) suggest that the Ayarmacas would have also settled towards Maras, at the site of Yunkaray. To the south were the Pinagua (Espinoza 1974).

Sarmiento de Gamboa is one of the chroniclers who refers in more detail to the first settlers. Although his information is always confusing, there are some data that we must highlight, for example he mentions:

three foreign *sinchis* (war leaders) of this valley, one called Alcabisa, the second Copali-Mayta, and the third Culunchima. They joined certain campaigns, and came to the Valley of Cusco, where with the consent of the natives, they settled and populated it and became brothers and companions of the already mentioned old natives (Sarmiento de Gamboa (2007 [1572]:48).⁹

⁹ [. . . tres sinchis extranjeros de este valle, llamados el uno Alcabisa y el segundo Copali-Mayta y el tercero Culunchima juntaron ciertas campañas y vinieron al valle

This source does not refer to territorial disputes, but rather to a communal organization.

In the same way, reference is made to the fact that, in the process of settling, they had to remove other peoples, and the name of the Huallas is repetitive. The Alcabisas are always mentioned as among the first settlers and near the Qoricancha. They occupied the land from there to Santa Clara (Sarmiento de Gamboa (2007 [1572]:61). The displaced people were moved to the town of Cayaocachi¹⁰ that corresponds to the current Coripata, on a hill to the east of the Qoricancha.

Archaeological data systematically place Late Intermediate Period sites on the lower slopes of the northern part of Cusco. Climatic conditions must have encouraged the construction of agricultural and irrigation infrastructure that took advantage of the extensive aquifers in the Cusco Valley. The greatest transformation of this valley up to this point occurred during this period, with the creation of thousands of hectares of cultivated land associated with a set of irrigation canals. The productive surplus thus obtained allowed the emerging Inca elite to build the new works that the state required. Bauer (2018:225) suggests that terraces and irrigation canals were built up to almost the Huatanay River, intensifying agricultural production. This development is also reflected in the enlargement of villages on both banks of the Huatanay River (see Bauer 2018), especially on the right bank from the Huancaro River to Angostura and Sillkinchani. Towards the left bank, we have a group of settlements from the

del Cuzco, a donde por consentimiento de los naturales de él asentaron y poblaron y se hicieron hermanos y compañeros de los naturales antiquísimos ya dichos.]

¹⁰ Garcilaso de la Vega mentions that this neighborhood was to the west of Pumaqchupan and was occupied by more than three hundred and sixty people called Cayaocachi (1960 [1609]:312).

Cachimayo River to the Waqoto River. Here there are several groups of terraces built beginning in this period and continuing into the Inca Horizon.

During the Late Intermediate Period, people settled on the large hills on the west side of Cusco which descend towards the Saphy River and are separated by ravines and rivers such as the Chunchulmayo, Qorimachayniyoq, and Huancaro. Between the Huancaro and Qorimachayniyoq Rivers, the slopes of the hillsides are gentler. It is in this sector that the largest Killke settlements are found: Coripata and the Killke occupation at Qhataqasapata-llaqta. In this sector Bauer (2018) identified settlements with areas between five and thirty hectares. To the northwest, between the Sipaspujyo and Saqramayo ravines, the hills have a greater slope and, therefore, the settlements are small, between 0.25 and one hectare. The left bank of the Huatanay River, *i.e.*, the slopes from Saqsaywaman to the Waqoto River, has a lower density of Killke sites (see Bauer 2018). Towards the San Jerónimo sector, there are some settlements such as Raqaraqayniyoq, Cheqollo, and Kallampata associated with terraces such as Larapa and Patapata, which were reoccupied during Inca and Colonial times.

Killke-style ceramics have been reported as having been found on the slope of Saqsaywaman (Dwyer 1971; Lima 2011; Rowe 1944). Additionally, on the right bank of the Huatanay River, there was a dense occupation on the slopes of the hills, with settlements with domestic architecture and terracing. These were mostly reoccupied during the Inca Horizon (Barreda 1973; Bauer 2018; Claros and Mormontoy 1992; Rowe 1944). Some of these sites have been studied during archaeological surveys and excavations: Peqokaypata (Bauer and Jones 2003), Wimpillay (Barreda 1973), Ministry of Culture excavations at Lucerinas (Farfán 2009), Matagua (Catalán and Montufar

2007, Kosiba 2019), and Sillkinchani (Mormontoy 1995) (Figure 6, Table 1).

In the area bounded by the Saphy and Tullumayo Rivers, this style has been reported initially in the Qoricancha (Barreda 1973; Béjar 1990a; Rowe 1944). Later this ceramic style was found in various parts of the city, generally in very deep strata largely associated with construction fills. This is due to the rebuilding of Cusco by the Incas. It is likely that many materials have been buried (see Gonzáles Corrales 1984; Medina and Salas 2019; Porroa 2014; Valencia Zegarra 1991a, 1991b).

The area between the rivers is an elongated hill. It includes all the territory corresponding to the Qoricancha, Cusicancha, the Hotel Libertador, the palace of Inca Roca, the small square of Nazarenas, and Colcampata. The Qoricancha, where the Antasayas initially built the first huaca, is part of this hill that was cut to form a platform spanning from Arroyan Street in the north to Garcilaso Avenue in the south. This was slightly above the Huacaypata Plaza and the surrounding areas. For centuries, the ancient Peruvians chose this type of hill, because such locations do not suffer the impacts of river floods, are safer, have a view from on high of the territory, and offer the geographical conditions for displaying a series of symbols communicating a religious and political ideology. Therefore, the Qoricancha was not located in this place by chance. Its placement follows a pattern that already existed in the central Andes. The account that Fernando de Montesinos gives about the foundation of the city is interesting: Tupac Ayar Uchu walked to Cusco with his sisters and women. He, the only son of the Sun, had to build a city, and the place seemed good to the eldest sister who told her brother:

. . . to build the city there, saying: in those Cuscos, as if to say, in those stones where there are those stones

that seem to be heaps; and from here some say that the first city was called Cusco; and others say that the place where it was founded was surrounded by hills, and had some rocky mountains, and that it was necessary to level it with earth, and this term to level is said by this verb *cozcoani*, *cozcochanqui* or *chanssi*, and that from here it was called Cusco (Montesinos 1882[1644]:7–8).¹¹

In this respect, Pachacuti Yamqui Salcamaygua describes how the location of Qoricancha was chosen. There was a rocky place:

. . . where they stayed for some time. And from there they left for the place of Kuri Kancha, where they found a proper place for a settlement and where they found good water from *hurin* Chaqan and *hanan* Chaqan. Those are two springs. And then he cleaved a cliff that the natives from there, who are the Allqay Wikzas and Kullin Chimas and Kayaw Kachis called Quzqu Qaqa or Rumi. And from there it came to be called Quzqu Pampa. And the Incas later were called Quzqu Qhapaq or Quzqu Inca (1993 [1613]:263).¹²

¹¹ [. . . que edificase allí la ciudad diciendo: en esos cuzcos, como si dijera, en esas piedras donde están esas piedras que parecen amontonamientos; y de aquí dicen algunos que se llamó aquella primera ciudad Cuzco; y otros dicen que el sitio donde se fundó estaba cercado de cerros, y tenía algunos peñoles que fue necesario allanarlo con tierra, y este término de allanar se dice por este verbo *cozcoani*, *cozcochanqui* o *chanssi*, y que de aquí se llamó Cuzco.]

¹² [. . . en donde estuvieron algún tiempo. Y de allí se partió para el lugar de Kuri Kancha. En donde se hallaron lugar propio para una población. En donde halló buen agua de Hurin Chaqan y de Hanan Chaqan. Que son dos

These two sources, Pachacuti Yamqui Salcamaygua and Fernando de Montesinos, state that this place, that is, Qoricancha and Cusco, was a place of cliffs, where there were rocks, an area very different from the one we can see now.

The hill on which the Killkes built the first settlement has two elements that are fundamental to its planning: on the one hand, the space of the Qoricancha and, on the other hand, the area that includes the Huacaypata and its surroundings. Those are found at the confluence of the Saphy and Choquechaca-Tullumayo Rivers. In the conceptions of Andean peoples, this has a strong religious connotation, of fertility and of union. Fray Martin de Murua makes a reference to the union of the rivers:

. . . when near their towns and *chácaras* [cultivated fields] two rivers met and came together, they feared and revered them, so that they would not harm them . . . (2001 [1590]:418).

Likewise, Fernando de Montesinos mentions that *Tincuc* is the union of two rivers. This reference is made when sorceries for the union of two people were performed (1882 [1644]:119). In this regard, Teresa Valiente analyzes the term *tinkey* and concludes that it is the specific place where two or more rivers join together (2016:217). The union of the waters has a strong symbolic charge; they are submerged under the principle of duality-complementarity, and the union of both produces fertility.

This conception is not an invention of the Killkes or the Incas; it dates back several centu-

manantiales. Y después le divó una peña que los naturales de allí, que son los Allqay Wikzas y Kullin Chimas y Kayaw Kachis les llamaban Quzqu Qaqa o Rumi. Y de allí se vino a llamarse Quzqu Pampa. Y los Inqas que después se intitularon Quzqu Qhapaq, o Quzqu Inqa.]

ries earlier. The Middle Formative oracle of Chavín de Huantar is at the confluence of the Mosna and Wacheqsa Rivers. Likewise, the Early Formative site of Cerro Sechín is located a few kilometers from the junction of the Casma and Sechín Rivers. The Inca settlement of Ollantaytambo is at the confluence of the Urubamba and Patacancha Rivers.

Following the conception of *tinkuy*, the Incas replicated it in the placement of their most important settlements, for example, the Inca city of Tomebamba (Cuenca, Ecuador) is located between the Huatana and Tomebamba Rivers (Idovro 2000:87). Pumpu, an Inca settlement in the Bombon plateau in Junín is at the confluence of three rivers, the Upamayu (Mantaro) that rises in Lake Chinchaycocha,¹³ the Yawarmayu (Racracancha) that rises in Lake Punrun, and the Milwakarpa that rises in the springs of Cochamarca (Matos 1994:271). At the confluence of the Lurin River with the Pacific Ocean is the Inca Temple of Pachacamac, which has been occupied since the Lima Period with the Old Temple and the Painted Temple pertaining to that culture.¹⁴

The city of Cusco, at first glance, seems to have no evidence of Killke architecture on the surface (see Paredes 1999). However, this statement is not entirely true, because when the

¹³ Do you say in adoration “O Pleiades ladies, stars, lakes Chinchaycocha and Choclococha who sustain and have llamas and sheep multiply mine, and my sheep?” (Pérez Bocanegra 1631:132).

[Sueles decir adorado: O señoras cabrillas, estrellas, lagunas, chinchaycocha, choclococha, que sustentais, y teneis oujas, y corderos, multiplica las mias, y mis corderos.]

¹⁴ The settlement of Coripata is on the right bank of the Chunchullmayo River. In the lower part of the Chunchullmayo River there were eighteen water sources in the month of October, which indicates that there was a large amount of water in the river.

Incas occupied the city and transformed it, they used part of the walls and foundations of the previous period, as can be seen in the overlays of Awaqinta Street, not associated as floors, because the pre-Inca occupation levels were transformed by the Incas and incorporated into their new urban plan. Most of the Killke evidence consists of foundations of buildings¹⁵ and canals to transport and evacuate water. Likewise, the evidence of this period is buried underneath the Inca occupation.

The archaeological excavations inside this area have always shown a low density of Killke ceramic fragments, probably because this first occupation was destroyed and was used as part of construction fill during the Inca Horizon as can be seen in the Huacaypata. The architecture of this time is difficult to identify because it was part of the Inca reoccupation process.

The time when the canalization of the Saphy-Chakan and Choquechaca-Tullumayo Rivers began is a matter of discussion. Beltrán-Caballero (2013:54) suggests that the process of river canalization began several centuries before the establishment of the Incas. We do not have

¹⁵ Archaeologist José Gonzáles Corrales excavated in the Hotel Libertador and is the only one in Cusco who managed to differentiate Killke foundations typologically. He defined them as being of three types. The first is an eight-centimeter-wide foundation built of boulders, sandstone, and diorite joined with clay mortar. The second type is also eight centimeters wide and is laid on a layer of clay treated with gravel. It is built with diorite, limestone, and sandstone rocks joined with clay mortar with fine sand as a binder. The third type corresponds to foundations that have as andesite in addition to the stones used in the previous types. This type was found in the lower part of the Qoricancha, in the so-called solar apse and in other parts of the Qoricancha in the foundations below the Inca floor. This type also was found in the Killke site in the neighborhood of Independencia, in the Wilcarpay sector (Gonzáles Corrales 1984:41–42). We make this clarification because it has always been suggested that the use of limestone and andesite pertains exclusively to the Inca Horizon.

specific archaeological evidence to affirm that the canalization began during the Killke occupation, but, on the basis of archaeological remains, it was during this period that drainage works must have been carried out, including the draining of the swampy area of the Huacaypata and, consequently, the first works channeling the river with the construction of its retaining walls.

SECOND CONSTRUCTION PHASE OF THE CITY OF CUSCO: THE ASCENT OF INCA ROCA AND THE FIRST TRANSFORMATIONS

The second phase must have begun around A.D. 1300,¹⁶ probably with the rise of Inca Roca. The Killke peoples continued to occupy the hillsides and produce their own ceramics. For example, at Huarcocondo in Cusco we encounter Killke and Inca ceramics from the same time. These yield a date at the end of the fourteenth century (Kosiba 2010). In Ancasmарca, the Killke style continued until the middle of the sixteenth century, and Yunkaray was occupied until about A.D. 1450 (Quave *et al.* 2019). We do not have dates for the Cusco Valley, but several Late Intermediate Period settlements there, such as Killke, Qoripata, and Qhataqasapatallaqta have a continuous occupation, and shared the Killke and Inca styles for a long time.

It is from this time that the legitimization of power occurred through control of the waters of

hanan and *hurin* Chakan where these waters meet at the junction of the streams of Ñustapaqanawayqo and Qonchaqawayqo and form the Chakan River. It is from this place that the river basin is sacralized with the construction of huacas, and it is the place where ceremonies such as the Capac Raymi and Mayocati were performed, as well as the where a system of canals carrying water to the lower slopes of Chakan, Fortaleza, and Llaullipata was constructed (Sherbondy 2017:141).

In this process of legitimization of power, the Incas created the myth of the origin of the waters of Chakan, in which it is mentioned that it was Inca Roca who discovered and channeled the waters of *hurin* and *hanan* Chakan (Sarmiento de Gamboa (2007 [1572]:71). The account of Cieza de León is interesting. Cieza relates how Inca Roca discovered the waters in the high part of the hill that is called Chaca, in the middle of the prayer to the great Ticiviracocha, Huanacauri, and the Sun. He heard thunder and, when putting his left ear to the ground, much blood ran from it, and, suddenly, he heard a great roar of water below that place (2005 [1554]:378–379, Chapter XXXV). This story should be seen as the way the water that gives rise to the Saphy River was obtained. It crosses the city, and is used as a means to appropriate territories and incorporate them into symbolic and sacred dimensions. The canalization of the rivers began during this period (Guardapuella and Delgado 2022) (Figures 7–9).

The first Incas continued the process of draining Huacaypata that was initiated by the Killkes. This was an arduous and long-term task. Cieza de León tells us that during the reign of Sinchi Roca, the plaza was a small lake and that made it difficult for the Incas to construct their buildings (2005 [1554]: Chapter XXXI, p. 371). In Plateros Street there is evidence of limestone and andesite canals that led to the Saphy River

¹⁶ “Around 1300 A.D. the Incas formed an extensive cultural center in the Cuzco region by unifying more than a dozen previously independent groups, developed a clear state architectural style, built an extensive capital city, and were in the process of transforming the landscape with immense terrace systems” (Bauer 2018:253). The only discrepancy we have is whether this unification of peoples occurred. Quave *et al.* (2019:172), on the basis of excavation work at Yunkaray in Maras, argue that the Ayarmacas maintained some autonomy and competition with the Cusco Basin.

(Villena 2012). Drainage canals were identified during excavations in the Cusco Cathedral (Pérez 2001:36). Walter Zanabría supervised works of Seda Cusco in 1994 in the Calle del Medio (Portal de Carnes) where he found stone channels with Inca lithic elements, which went from the cathedral to the river (Farrington 2013:141; Fernández 2004:45). In the Confituria Portal, a Colonial canal built with reused blocks of andesite stone was also found (Oberti 1992).

Archaeological excavations reveal that some of the surrounding areas were filled with boulders and earth. The filling process of Cusco only occurred between the two rivers in the area that was converted from a swamp. This is confirmed by the Jesuit Antonio de la Vega who, writing about the construction of the church of the Society of Jesus, states:

Upon preparing the foundation, great difficulties were found, and the greatest was that, what was worked in one day, collapsed in another, and covered it up, because the whole site of our church and house consisted of shifting earth full of gravel; because formerly, all this soil of our house and this large square . . . was full of fountains or springs of water from which it was all made into a lagoon and a large swamp. And to remove this ugliness, the Incas diverted the waters of a river or stream that passes through the middle of the city (which in their language they call Huatanay) and covered the entire lagoon with rubble . . . so that the entire plaza became even and dry (Vega 1948 [1600]: 33).¹⁷

In the excavations of the church of the Society of Jesus (La Compañía), construction fill with fragments of Killke and Inca ceramics was found (Valencia Zegarra 1991a, 1991b).

In the drainage of the Plaza de Armas of Cusco, a stone floor was found and below it sections of walls of approximately nineteen meters, with a southeastern-northwestern orientation, built with unifacial lithic elements of diorite and limestone, placed on the water table and associated with fragments of Inca ceramics. These served as a dike in the water management system (Cornejo 1998; Fernández 2004). Similarly, fills to a depth of two meters were identified in the excavations of Mantas Street (Porroa 2014).

The right bank of the Saphy River was not filled because of its geomorphological configuration. It was above the left bank of the river, and archaeological excavations have not found fills draining this space.

During this period, the construction of the city must have begun with a system of terraces to create flat areas on which the city was built. This work was a perpetual and ongoing process; we have evidence of this terracing on the slopes

¹⁷ [Al abrir los cimientos, se hallaron grandes dificultades y la mayor fue cuando se trabajaba en un día se derrumbaba y cubría en otro, por ser todo el sitio de nuestra iglesia y casa, tierra movediza y lleno de cascajal; porque antiguamente, todo este suelo demuestra casa y de esta plaza grande . . . estaba lleno de unas fontanas o manan-

tiales de agua de lo que resultaba estar todo ello hecho una laguna, y pantano grande. Y para quitar esta fealdad los incas divirtieron las aguas de un río o arroyo que pasa por medio de la ciudad (a quien en su lengua llaman Huatanay) y toda la laguna la cubrieron de cascajo... con lo que vino a quedar toda la plaza pareja y enjuta.]

of the hills of T'oqocachi,¹⁸ Colcampata,¹⁹ Carmenca,²⁰ Picchu, and in the nucleus of the city.²¹ The PER-39 project elaborated a hypo-

¹⁸ Delgado (2022) has identified portions of terraces in Tandapata Street. In Choquechaca, portions of terraces were identified that follow the contour lines of the slope (Yarahuaman 2019). Manotupa and Peña (2016) analyzed sixteenth century historical sources and determined that this sector consisted of terraces, corn fields, potato fields, and huts. Excavations in Suytucato Street revealed an Inca burial (Béjar 1976).

¹⁹ Alfredo Valencia Zegarra found sections of terrace walls in Colcampata (1984). To the west of Colcampata, in the Salesian school and in the garden of the school, there are sections of limestone terraces (Aguilar 2002; Zanabria 2000).

Vásquez and Apaza (2019) recorded all the archaeological evidence found in the neighborhood of Colcampata, from north of Huacaypata Plaza, to the esplanade of Colcampata, identifying sections of walls, types of bonding, and the use and reuse of materials, to propose a hypothetical plan of all this space, including the construction of terracing, with long terraces with platforms between forty and eighty meters wide running parallel to the banks of the Saphy and Tullumayo Rivers. They also plotted the distribution of compounds.

²⁰ On Carmenca, there was a set of terraces that covered the hill depicted in the plan that Father Gaspar de Villagra painted in 1643 (see Figure 21), seven years before the Cusco earthquake of 1650. The occasion was a dispute over the boundaries between the parishes of Santa Ana and the Hospital de los Naturales (today San Pedro). Visible on the plan is a set of terraces (Rowe 1989). In Arcopata, the small square of Santa Ana, in several sections of walls, limestone blocks reused in the construction of Colonial ovens were identified (Delgado 2007, 2013). Excavations conducted by the Ministry of Culture Cusco branch in the church and in the square of Santa Ana (Carmenca) have revealed an important Inca occupation associated with ceramic fragments, levels of charcoal, ash, and animal bones (Bustinza 2008).

²¹ In the nucleus of Cusco, the Municipality of Cusco and the Guaman Poma de Ayala Center conducted a survey of the architectural structures of that part of the city. Sections of walls pertaining to terraces and Inca compounds were identified (Paredes 1999). Mar and Beltrán-Caballero (2014); see also Mar *et al.* (2021) also conducted a survey of the city. Archaeological excava-

thetical reconstruction of the terraces of Inca Cusco, based on the evidence of wall sections and according to contour lines (Agurto 1979) (Figure 10). The houses that made up the Inca compounds were built on these terraces. The lower parts of some were made of stone and finished with adobe, while others were entirely made of stone.

The Incas used the materials found in the Cusco Valley. They built with diorites, sandstone, limestone, boulders, and adobes. The diorite that was initially used by the Killkes, continued to be used during the early Inca Horizon. The Incas incorporated it into Inca Roca's palace of Hatunrumiyoc (Figure 11) prior to the construction of buildings ordered by Pachacutec. Probably the foundation of Hatunrumiyoc corresponds to the early Inca Horizon. This is demonstrated by the limestone wall that covered part of the diorite wall in the Inca Roca passage.

Archaeological evidence has shown a continuity in the construction process. One of the best sectors encompasses the blocks of Inticahuarina, San Agustín, Qoricancha, and Nazarenas where one can observe the continuity and reuse of limestone, diorite, sandstone,²² and

tions identified the remains of walls and foundations in Huaynapata Street (Socualaya 2006), in Suecia Street (Zapata 2003), in Choquechaca Street (Oberti 2002), and in Afligidos Street (Vargas Troncoso 2014). In a visit we made in 2009 to the archaeological excavations at the Marriott Hotel, we were able to see limestone walls that probably correspond to platforms. In the archaeological monitoring plan for the construction of the Sheraton Hotel on Saphy Street, several sections of platform walls were identified on the hillside, oriented in the same direction as the axis of the river. A section of limestone wall and reused lithic elements were also found at the Ima Sumaq commercial building 256 (Rodríguez 2005).

²² When Sinchi Cozque returned to Cusco he "ordered the houses to be made of stone, which was taken from the same site, filling the void with earth and small stones. They also brought large stones from other places that we

boulders. We can see several constructions of limestone walls with cellular bonding on Killke foundations built with diorite, sandstone, and limestone (see Arroyo 2005; Gonzáles Corrales 1984). Also, as part of the PER-39 project, excavations were conducted in the Qolcampata sector north of the city of Cusco and were able to define the system of Inca platforms built with limestone, on which Paullo Inca's palace was constructed. In the lower strata were found fragments of Qotakalli ceramics, a style that is dated to between A.D. 400 and 600 (Valencia Zegarra 1984). Archaeological excavations in the former Beaterio de las Nazarenas have revealed several sections of foundations of Inca walls built with limestone, sandstone, and diorite that correspond to several compounds (Colque 2001).

THIRD CONSTRUCTION PHASE OF THE CITY OF CUSCO: PACHACUTEC INCA YUPANQUI AND THE REBUILDING OF INCA CUSCO

The reorganization of Cusco is attributed to Pachacutec who ruled approximately from A.D. 1400 or a little earlier, and who depopulated two leagues around Cusco to give the lands and waters to the Inca *panacas* (royal kin groups) (Sarmiento de Gamboa 2007 [1572]:97). Pachacutec ordered the old houses to be removed and the site leveled. Subsequently streets were laid out. This statement is interesting, because it confirms that the place was previously occupied by a population and their dwellings.

Betanzos narrates how Pachacutec saw Cusco before rebuilding it:

have not been able to find out from where . . ." (Montesinos 1882 [1644]:25–26).

[Mandó hacer las casas de piedra, que se sacaba del mismo sitio, llenado el vacío de tierra y piedras menudas; también traían las piedras grandes de otras partes que no se ha podido averiguar de dónde . . .]

Thus, he himself went around, together with the lords, looking at the site where the city of Cuzco was founded, all of which was mostly swamps and springs, as history has already told you. The houses of the inhabitants living there were small, and low, and poorly built, and without proportion of the art of town, and what streets there were. Thus, as there is today next to this city a town called Cayacache, it was at that time the houses and town that now are the great city of Cuzco (Betanzos 1999 [1551]:48, Chapter XI).²³

As explained above, the initial construction of Cusco occurred several centuries earlier.

Ernesto Vargas Paliza (2007:31) states that Pachacutec rethought the planning of the city and outlines three stages: the first with the rebuilding of the Temple of the Sun, the second with the channeling of the Saphy and Choquechaca rivers, and the third with the construction of the Aqllawasi, Hatuncancha, Amarucancha, and other buildings. For his part, Farrington (2013) starts from the idea that the Incas were expert planners of orthogonal cities. Hyslop (2016:74) notes that the idea that Pachacutec designed Cusco from its foundations is weak and does not agree with archaeological data. Since the occupation and construction of the city is a continuous and dynamic process we cannot see it as a rigid, unalterable unit, with a single plan, as most researchers have postulated. The city must have been perpetually transformed by its

²³ [. . . ansi mismo anduvo mirando juntamente con los señores el sitio do la ciudad del Cuzco estaba fundada todo lo cual e lo más dello eran ciénagas e manantiales como ya la historia os lo ha contado e las casas de los moradores della vivían eran pequeñas e bajitas e mal edificadas e sin proporción de arte de pueblo que calles tuviese e bien ansi como es el día de hoy junto a esta ciudad un pueblo que llaman Cayacache era en aquel tiempo las casas e pueblo que agora es la gran ciudad del Cuzco.]

subsequent rulers, when the needs of the new Incas and the *panacas* that occupied the city required.

During this time the city underwent its greatest transformation, with the construction of streets, plazas, palaces, and temples. As part of this work, terraces and platform walls were cut through, to open streets and portals. We have good examples, such as the andesite access portal in Choquechaca Street. To open Cabracancha Street, the Incas broke the platform wall of Tullumayo Avenue and the corners were built with blocks of green diorite (Figure 12). The Incas replicated these portals in some other Cusco streets, as we can see in Awaqpinta Street, where only one side is preserved, since the flank that corresponded to the side of the temple of Qoricancha was destroyed and reused in the modification of the construction of the temple, by the Incas and, later, in the construction of the Convent of Santo Domingo, during the Colonial occupation (Figure 13). Such portals are repeated in several Inca places including Huánuco Pampa and Ollantaytambo.

In 2021, when the city of Cusco undertook infrastructural works in Zetas Street which runs from the small Qoricancha Plaza to Limacpampa Grande, a limestone wall consisting of large blocks was found. This is a terrace wall that was constructed earlier than the corner made of green diorite stones (Figure 15).

During this period, the use of andesite²⁴ as a building material proliferated, generally for the construction of palaces around the Huacaypata Plaza, its surroundings, and in the Qoricancha (Figures 14, 16, and 17). Outside the central

core, there are andesite buildings such as in Colcampata and Choquechaca Street. On the outskirts of the city, there are also buildings made of andesite that correspond to huacas, such as in Pukin Cancha and Huaca Pachatosa (Delgado and Aráoz 2012). There are also reused andesite blocks in Transitional, Colonial, and Republican constructions (Figure 5).

During excavations in Triunfo Street, a foundation and andesite wall were found that would correspond to Hatuncancha associated with Inca ceramic fragments and some Chimú and Collao fragments (Zanabria 1998), in Cusicancha (Vargas Paliza 2007). In Santa Catalina Street Ernesto García excavated a building and identified a foundation of an Inca structure and a stone channel with a slate stone floor at a depth of 3.20 meters (García 2005). To the south of this excavation, Eulogía González excavated the second patio of the Regional Education Office and found a section of a Colonial wall built with Inca lithic elements of andesite and limestone associated with Inca, Colonial, and Republican fragments (González Costillas 2010).

Excavations at the Casa Concha located on Santa Catalina Ancha Street revealed several sections of Inca walls corresponding to the enclosures (*canchas*) associated with Inca polychrome, Orcosuyo Inca, and Chucuito Inca ceramic fragments, all this underneath the structure of the Colonial house (Paz and Allcator 2002; Instituto Nacional de Cultura, Cusco 2007). Years later, the National Institute of Culture, found portions of a room (the north and west walls) made of andesite with trapezoidal windows during archaeological excavations in Enclosure 116. Associated with the foundation of the enclosure was a cist with a burial of an adult woman and a child associated with Inca ceramics, an Inca-Chimu vessel, and metal objects (Instituto Nacional de Cultura, Cusco 2006:61–63). During the following exca-

²⁴ The andesite is an exogenous material that was brought from the Waqoto quarries in a volcanic dome approximately fifteen kilometers to the east. Andesite also came from Rumiqliqqa further south.

vation season, two Inca offerings were recovered, the first a large vessel (*urpu*) used as a funerary container. The second is an offering consisting of an aryballos surrounded by small objects (Instituto Nacional de Cultura, Cusco 2008:41–44).

Ian Farrington (2013:123) suggests that the use of pink-black andesite seems to be related to the importance of the structure (Figures 17–18). It has been suggested that the difference in the use of large blocks in relation to smaller blocks is because of the function of the building (*ibid.*: 123). A more detailed analysis leads us to see that the size of the stone blocks of different types has to do with the importance of the buildings; for example the Qoricancha has extremely large blocks and is the main temple of the Incas.²⁵

Saqsaywaman is built with huge blocks and corresponds to the temple of Illapa; the Temple of the Sun in Ollantaytambo presents gigantic blocks. If we look at the buildings around the Huacaypata Plaza, the blocks are smaller than

²⁵ The archaeologist Raymundo Béjar (1990a) conducted the largest excavations in the Qoricancha, inside the first cloister, in the courtyard, and in the esplanade (see Figure 14). He found several offering deposits, with decorated Inca ceramics used as offerings, as well as some ceramic fragments from other regions such as the highlands, the coast, and from what is now Arequipa. Luis Barreda also excavated in the Qoricancha and found objects that also show that the place was a ceremonial center. These include gold plates, spondylus, and a solid gold sculpture ten centimeters high which he called Korichaska (Barreda 1973:79).

Beyond the hill of Qoricancha, from the western slope in the direction of the Saphy River towards the lower slope of Pumaqchupan, there is little cultural material. Massive excavations in the esplanade of Qoricancha revealed archaeological garbage without architectural remains. The same is the case towards the southwest of Qoricancha (Flor Huaycochea personal communication, 2020). Towards the south of Qoricancha, near Pumaqchupan, there was also no evidence of pre-Hispanic architecture, and only a few fragments of Inca ceramics (Ferrandiz 2018).

those of Qoricancha, but larger than the buildings around it, such as Cusicancha. This conception is not an Inca invention. It was already established with Killke buildings and by the first Incas, who used some large blocks of green diorite in the foundation of the Qoricancha, and in the palace of Inca Roca (Figure 19).

Archaeological excavations have shown in countless cases that andesite constructions are superimposed on limestone walls. In San Agustín Street, two sections of Inca enclosures with andesite walls and limestone and boulder foundations and a part of a clay floor were found at a depth of 1.50 meters below the current floor (Silva 2002). In the Qasana Palace, adjacent to Plateros Street, a limestone foundation similar to the limestone wall facing the Huacaypata Plaza was found associated with Inca utilitarian ceramics (Castillo Tecse 1999). In the same way, limestone continued to be used for the construction of the terracing that served to overcome the great unevenness of the terrain, as well as for the construction of the perimeters of the city blocks and their interiors. Farrington states that limestone is found mostly in the periphery, and that it is found in walls, compounds, and in Awaqpinta, Cabracancha, Santa Mónica, Pumacurco, Ladrillos, and Tullumayu Streets, and in the terraces to the west of the city, and in the great wall of the terrace along Santa Clara, which has small rectangular andesite footings, as well as in the flanks of Carmenqa, San Blas, and south of Avenida el Sol (2013:123). Agurto (1987) suggests correctly that its use is due to the availability of the material as on the hillside of Colcampata (Figure 20). We must understand that this type of stone was probably used since the Killke Period, and certainly since the early Inca Horizon, and it continued to be used until the Colonial era. Part of the limestone blocks used during this time must have been removed from older constructions and reused. An interesting detail is that the Incas, in the process of giving greater rank

and importance to the limestone buildings, inserted access portals of andesite, as in Choquechaca Street.

Adobe supported by stone walls must have been part of the design of these structures. Paredes (1999:123) identifies original sections corresponding to gables in Block 31, in Márquez Street, in the Cartagena house in Pumacurco, and inside the Cusicancha palace on an andesite wall.

The archaeological data have shown little evidence of occupation on the right bank of the Saphy River, only on the terraces adjacent to the Cusipata Plaza. Garcilaso de la Vega (1960 [1609]:318) provides an extremely interesting description of the western part of the Huacaypata Plaza, mentioning that this plaza was called Cusipata, stating that the plazas were joined together, covered with wood with slabs on top, and that later the Spaniards removed the wood to be reused, and built four bridges. Garcilaso affirms that there were no buildings in this space, and that it was an area reserved for the Incas who would succeed to the throne (*ibid.*). It is logical to think that, the Incas being excellent planners, they had to foresee a place for the palaces and houses of their successors. Archaeological data do not confirm that this space is free of evidence from the Inca Horizon or earlier periods. In this regard, during the excavation of Mantas Street in 2014, a diorite stone structure was found on the right bank of the river (Medina and Salas 2019; Porroa 2014), which was covered with soil incorporating charcoal and ash, not as a result of an accumulation of successive events, but rather as a filler to cover it.

The archaeological record has revealed cultural material on the right bank of the Saphy River, northwest of the plaza of Huacaypata. In the old hospital of San Juan de Dios, anthropologist Justo Torres found Inca ceramics in a disturbed stratum (Alegria 2003:190–191).

Julihno Zapata later excavated in the same place, discovering the foundations of Inca structures on the fourth terrace (cited in Farrington 2013:145). In the courtyard of the Municipality of Cusco, during the construction of the convention hall, archaeologist Walter Zanabria found Inca terrace walls, Inca ceramic fragments, and a colonial canal and, between the town hall and the José Antonio restaurant on Santa Teresa Street, a limestone and green diorite foundation has been discovered (*ibid.*). On the hillside between Arcopata Street and the Santa Ana Church in the Carmenca neighborhood there is evidence of terrace walls (Figure 21).

To the west of the Cusipata Plaza, in the direction of the platforms of the San Francisco Plaza and continuing to the Ayahuayco Ravine, there is little archaeological evidence of occupation levels; archaeological excavations have not revealed domestic middens.²⁶ In Gaspar de Villagra's 1643 map (Rowe 1989), there is an empty area without houses, only showing the slopes of the hill, which corresponds to the back of the Santa Clara Church, the Central Market, Cascaparo, and Enafer's land up to the Chunchulmayo River. This information corroborates the archaeological data from the excavations where no archaeological evidence of architecture and domestic waste have been reported (Figure 22).

The chroniclers claim that the space from Cusipata to the San Francisco Church was terraced, but should not be seen as unimportant areas. Because its configuration was part of a monumental landscape and a planned design, it cannot be excluded from the layout of the city, as these terraces and those found towards the

²⁶ Excavation pits have not yielded cultural material, for example, in Trinitarías and Ayacucho Streets (González Costillas 2008, 2011), in Desamparados Street (Vera 2011), or in Cascaparo Chico (Vicuña 2017).

slopes of Carmenca, Colcampata, T'oqocachi, Tullumayo, and Limacpampa were also part of the configuration of Inca Cusco. In trying to fit the plan of Cusco into the figure of a puma, some researchers have ignored the buildings in these areas. This approach was initially questioned by Zuidema (1983) and later by Barnes and Slive (1993) who suggested that this idea is not well supported by historical and archaeological information. Agurto (1987:104) suggests that the figure of Cusco in the form of a puma should have remained constrained when the city grew due to urban expansion. In this regard, Gasparini and Margolies (1977) suppose that the puma shape would have covered a larger part of the city. The two rivers that cross the city have always been seen as its limits. In this perspective, the plans that have been drawn up always present archaeological evidence within this delimitation and with architectural structures absent on the right bank of the Saphy River and on the left bank of the Tullumayo River. These representations are not entirely accurate.

If we consider the terracing and the peripheral neighborhoods, we will have a different reading, planned from a macro perspective, taking as a reference water courses such as rivers and streams in which the pre-Incas and Incas had to build works such as retaining walls, terraces, and drainage channels to avoid constant landslides. The theory that Cusco had a puma shape needs to be analyzed or defined from a broader perspective, considering its full geographical configuration and without excluding part of the archaeological evidence.

With the arrival of the Spaniards and the redistribution of plots of land, the sector from Cusipata to the west began to change its use from terraces dedicated to agriculture to administrative and domestic purposes. In some areas near the Cusipata Plaza, there is evidence of buildings from the Transitional Period, such as

the Casa del Inca Garcilaso (Garcilaso Museum) associated with Transitional and Colonial Inca material. Miriam Aráoz (personal communication, 2020) informs us that in the house of San Juan de Dios and in the first cloister of the Convent of San Francisco, limestone and andesite blocks were found reused in Colonial and Republican buildings associated with Inca, Colonial, and Republican ceramics. In the Basilica of La Merced, the foundation of the crypt, at the height of the main altar, is built with reused limestone, andesite, and diorite blocks (Alegría 2003). This material must have corresponded to that already found in this sector. Archaeological monitoring in Almagro Street revealed a great deal of Inca and Transitional Inca ceramics, limestone, and andesite blocks reused in Colonial and Republican constructions, and a clay support for vessels (Ccan-saya 2014).

It was during this stage that the Huacaypata Plaza underwent its greatest transformation as the buildings of Amarucancha, Hatuncancha, Sunturhuasi, Aqllawasi, Coracora, Casana, and Pucamarca surrounding the plaza were constructed (see descriptions by Bauer [2018] and by Rowe [1990, 2003]). The Huacaypata Plaza had a thin layer of sand, where thousands of people gathered for certain ceremonies during the year. Polo de Ondegardo (1990 [1571]:97–98) and Betanzos (1999 [1551]: Chapter XI, p. 51) mention that figurines were buried in the plaza. This was corroborated by archaeological work done by the National Institute of Culture, in 1996 (Fernández 2004).

The Incas continued the channeling of the Saphy and Choquechaca-Tullumayo Rivers. The chronicler Pedro Cieza de León relates that the retaining walls were built with stone slabs at their bases and stone walls above (2005 [1554]: 379, Chapter XXXV) and Betanzos (1999 [1551]:58) narrates how Inca Yupanqui had the two streams repaired.

. . . as he saw that those two streams that the city had in the middle were very harmful to it because, as the rains came every year, they came in flood and, as they came, they always ate the land and were widening and entering where the city was and this was detrimental to the city and to its inhabitants. In order to build his buildings and the houses he planned to construct there, it was necessary to repair the two streams first. Once they were repaired, he could build any building without fear that the floods would destroy it (Betanzos 1999 [1551]:57).²⁷

These repairs lasted four years:

. . . the Inca and the lords and the other caciques went about strengthening and repairing the banks of these two streams of the city of Cuzco that you have already heard about, always going about as they did about the workmen who did the work, urging as much haste as they could to carry out and finish the repairs and strengthening as soon as possible. In this work they spent four years giving themselves the shortest possible time to accomplish and finish the work. . . (Betanzos 1999 [1551]:60).²⁸

²⁷ [. . . como viese que aquellos dos arroyos que la ciudad tomaban en medio que eran gran perjuicio della porque como las lluvias viniesen cada año ellos venían de avenida e como así viniesen siempre comían la tierra y se iban ensanchando e metiendo por do la ciudad era y que aquello era perjuicio para la ciudad y para los moradores della y que para hacer su edificio y casas que en ella pensaba edificar que era necesario reparar primero las veras de aquellos dos arroyos y que estos reparados podría edificar todo cualquier edificio sin temor que las tales avenidas se lo deshiciesen.]

²⁸ [. . . el Ynga e los señores e los demás caciques anduvieron fortaleciendo y reparando estas veras destos dos arroyos de la ciudad del Cuzco que ya habeis oído andando siempre así él como ellos sobre los tales obreros que

This quote is very clear in stating that Pachacutec had the two stream beds repaired, not that he built them. This construction began with the first Incas, probably around A.D. 1300.

THE SACRED LAKE OF HUACAYPATA

It has always been the intention to study Inca Cusco on the basis of its monumental architecture. Since the arrival of the Spanish, this was a cause of wonder and admiration. However, the role played by its buildings, their spatial distribution, and their architectural details has been overestimated. The importance of the city's geographical location and its geomorphological features have been underestimated.

In the Cusco area, there remained one of the relicts of Lake Morkill, the Huacaypata marsh,²⁹ referred to by several chroniclers. Betanzos describes it in this way:

Alcavicca and the rest of the surroundings of this small town was a swamp of reeds. This swamp caused the springs of water from the mountains and the place where the square and the houses of the Marquis Don Francisco Pizarro, who later won this city, are now. The same was the case with the site of the houses of Commander Hernándo Pizarro. The place and the site

en la tal obra andaban dándoles la más priesa que podían a que con toda brevedad hiciesen y acabasen los tales reparos y fortalecimientos en la cual obra estuvieron cuatro años dándose la brevedad que les fue posible a hacer e acabar. . . .]

²⁹ Masini *et al.* (2020) carried out ground penetrating radar work in the Cusco Plaza de Armas and concluded that the site was a swamp, and that there are probably some underground pipes present.

where this city is now was also a swamp. . . (Betanzos 1999[1551]:17).³⁰

Cieza de León also made reference to this wetland:

In the center, near the hills where most of the population was, there was a good sized plaza which they say was formerly a quivering bog or lake, and that the founders with a mixture and stones flattened it and made it as it is now (2005 [1554]:240).³¹

He continued stating:

Some of the Indians native to this place affirm that, where the great plaza was, which is the same as the one it now has, there was a small lake and a bog that made it difficult for them to work on the large buildings they wanted to begin to build, but since this was known by King Sinche Roca, he tried with the help of his allies and neighbors to undo that swamp, blocking it with large slabs and thick wood, smoothing over with earth where the water and mud used to be, in such a way that it remained as we now see it (2005 [1554]: 371, Chapter XXXI).³²

³⁰ [Alcavicca y lo demás de entorno desde pueblo pequeño era una ciénaga de junco hierba cortadera la cual ciénaga causaban los manantiales de agua que de la sierra y lugar do agora es la plaza y las casas del Marqués Don Francisco Pizarro que después esta ciudad ganó y lo mismo era en el sitio de las casas del Comendador Hernándo Pizarro y ansi mismo era ciénaga en el lugar y sitio do es en esta ciudad. . . .]

³¹ [En el comedio cerca de los collados de ella donde estaba lo más de la población había una plaza de buen tamaño. La cual dicen que antiguamente era tremedal o lago, y que los fundadores con mezcla y piedra lo allanaron y pusieron como ahora está.]

³² Algunos de los indios naturales de él afirman que, adonde estaba la gran plaza, que es la misma que ahora tiene, había un pequeño lago y tremedal de agua que le

This can be corroborated with data from the excavation of the palace of Quishuarcancha (Cusco Cathedral) where the water table was found a few meters below the surface and where there was water seepage (Pérez 2001:40), as well as in the excavations of the Compañía Church (Valencia Zegarra 1991a, 1991b).

As already explained, the location of the Killke and Inca settlement at the junction of two rivers has a strong symbolic charge, an Andean concept that dates from the first settlements of the Formative. Later this concept was replicated in the founding of the cities of Tomebamba, Pumpu, and Ollantaytambo. The sacralization of the Chakan-Saphy River was one of the first tasks of the Incas. Sherbondy (1986:49–50) states that these waters had a greater ritual and mythological importance, which is absolutely logical, because these waters cross the most important sacred city of the Andes, where the families, *ayllus*, and royal *panacas* of the Incas lived. Likewise, the Puqro canal located at the headwaters of the Choquechaca River was also the object of rituals. The flow of the canal carried material including Inca ceramic fragments, incinerated material, and bone remains from events such as offerings and feasts that took place at the canal (Antezana *et al.* 2018; Uscachi 2006). At its start, this canal flows by the huacas of Calispuquio and Sapan-tiana.

The space that encompasses the Huacaypata Plaza (Figure 23) included a spring that had abundant water filtrations from the northern slope and from the hill that is between the plaza and the Tullumayo River. This corresponded to

era dificultoso para el labrar los edificios grandes que querían comenzar a edificar; mas como esto fuese conocido por el rey Sinche Roca, procuró con ayuda de sus aliados y vecinos deshacer aquel palude, cegándolo con grandes losas y maderos gruesos, allanando por encima donde el agua y lodo solía estar con tierra, de tal manera que quedó como ahora lo vemos.

a pre-Inca huaca. From a review of the 328 huacas of Cusco described by Bernabé Cobo, Bauer mentions that 96 are springs or water sources, 95 are rocks, and the rest include hills, mountain passes, fields, tombs, ravines, roads and palaces (2000:24).

The Cusco Cathedral was built on the site of the temple of Teqsi Wiraqocha, in the Kishuarcancha, at the foot of the sacred lagoon. One of the heads of the spring is under the altar of Unu Punko,³³ located in the part of the wall opposite the main entrance, at the rear of the nave, on the lectern side (to the right as one faces the main altar). To this day this space has a strong symbolic charge:

Before the well was closed, the devotees of the Lord of Unu Punko, periodically drew water in small jugs with great religiosity . . . They used to take this liquid to their homes for some rites pertaining to the fertility of the land and the reproduction of livestock (Valencia Espinoza 2007:47).³⁴

HUACAYPATA: ETYMOLOGY AND GEOGRAPHIC POSITION

In the first book of Acts of the Spanish foundation of Cusco, the name Huaccay-Pata appears on March 23, 1534 (Covarrubias 1960a: 13). In the following paragraphs of the document the toponym appears as Huaccaypata.

The term Huacaypata must be very old, predating the Incas and Killkes.³⁵ This toponym exhibits a marked relation to its geographical environment, as we will see below. The meaning of this word should not be understood as confined to a simple translation.

The term Huacaypata derives from two words:

Huaccay: the cry (González Holguín 1989 [1608]:165). Fray Domingo de Santo Thomas defines the term *guacay* as barking dog (2006 [1560]:623), and the term *waqayni* as a bellowing, screech, or weeping (*bramido, chillido, llanto*) (*ibid.*). On the other hand, Diego Torres Rubio (1619), when referring to a person, uses the term *huacani* meaning to cry (*llorar*). Antonio Ricardo (1625) defines *huacay huacaylla* as a thing that moves one to tears (*cosa que mueve a lágrimas*) and *huacaycuni* as to cry tenderly (*llorar tiernamente*). Lira and Mejía (2008:322), summarizing earlier sources, state the following: *wáqay*: crying, weeping, lament, effusion of tears with sobs and great sorrow, lament or complaint

³³ Unu punko significa “señor de la puerta de agua” (Valencia Espinoza 2007:48).

³⁴ [Antes de ser cerrado el pozo, los devotos del señor de Unu Punko, periódicamente sacaban el agua en pequeños cántaros con mucha religiosidad . . . solían llevar este líquido a sus viviendas para algunos ritos, de la fertilidad de la tierra, reproducción del ganado.]

³⁵ “In times past, this place had been called añaz-ccuchho. Today they call it unupunco, because it exists near a slope whose waters pass by a channel that runs behind the main altar and along the right nave, drains in another channel that leaving the end of Jesús and María via the low part of the atrium, goes into the Huatanay. . . . The truth is that, as the temple is embedded in a hill and the subsoil of Cusco is abundant in water, behind the cathedral there are three springs, which drain at one end of Jesús and María” (Vargas B. 1956:53–54). [En tiempos, idos había llamado este sitio, añaz-ccuchho, y hoy lo llaman unupunco, por existir cerca una vertiente cuyas aguas pasando por un canal que, por detrás del Altar Mayor y por la nave de la derecha, va a desaguar en otro canal que saliendo de un extremo de Jesús y María por la parte baja del atrio, va al Huatanay”. “...Lo cierto es que, como el templo esta encajado en un cerro y en el subsuelo del Cuzco es abundante en aguas, tras del templo existen tres vertientes, que desaguan por un extremo del de Jesús y María.] Monsignor Isaías Vargas was the Vicar General of the Archdiocese of Cusco. *Añas* means skunk in Quechua and *ccucho* means corner.

accompanied by cries, sighs and spirited expression of pain (*lloro, llanto, lamento, efusión de lágrimas con sollozos y gran pena, lamento o queja acompañada de llanto, suspiro, viva expresión de dolor*).

The definition of *pata* corresponds to a raised place, a platform. Antonio Ricardo (1625) translates it as ledge, step, platform or terrace (*poyo, grada, anden*). However, we should not understand it as a place where there is a stone wall that forms a terrace. The term *pata* is much broader, and refers to an elevation, an elevated terrain that would form a relatively flat area. In Cusco, there is an entire space that formed a relatively flat mound that ran to the north from Tigre Street, continued along Ataud Street, to Purgatorio Street, and the small square of Nazarenas (San Antonio), covering the blocks of Cusipata, Qoricancha, Pampa del Castillo, and Plaza de Santo Domingo and extended to Pantipata Street (see Figure 24).

In 1900, the engineers Enrique Silgado and Mauro Valderrama drew up a plan for Cusco's water system. It is interesting that, on their plan, they take note of elevations that do not vary significantly. On this plan, the area that should have corresponded to this *pata* or platform has been hypothetically indicated (Figure 24). Inside this area, and in its adjacent zones, the term *pata* is repeatedly used in street names, for example: Huaynapata (Hurinapata), Pantipata, Cozco-pata.

As we have seen, the word *huacay* means to cry, or to make cry. This meaning should not be understood literally. In this mound we have the heads of springs (*puquios*). When the water emerges, it comes out dripping, little by little. Huacaypata can be understood as a hill where water comes out from different places, like dripping, or like crying. That is, it would be the hill that cries. This term refers to this entire hill and to this group of *puquios* (*ñawis*, literally the

eyes of springs). Enrique Urbano (1981: XXXVII) when referring to the *ñawi* or *puquio* eyes argues that they symbolically represent everything that the land possesses and produces, not only because water for agriculture emerges from the springs, but because animals emerge from the *ñawis*.

This initial conception, from which the name of the plaza is derived, was emphasized during Inca festivities, rites, and ceremonies. There are references to men, women, and animals crying. For example, the feast of Uma Raymi Quilla that took place in the Huacaypata during October, is described by Guaman Poma de Ayala as follows:

This month they sacrificed to the huacas and to the principal idols and gods, another hundred white rams, so that they would send them water from heaven. They tied other black rams in the public square, and they did not feed the said tied rams, in order to help them to cry. Likewise, they tied the dogs. As the dogs saw the people shouting and yelling, they would also howl and bark. Those who did not bark would be beaten with sticks. In this way they would make great cries, both men and women (1993 [c. 1615]:189).³⁶

For the Cusco area, Sarmiento de Gamboa makes an important reference to an *ayllu* called Huacaytaqui Ayllu, one of the important *ayllus* of *hanan* Cusco (2007 [1572]:53). The translation of this term is to sing while crying. To this

³⁶ [En este mes sacrificauan a las uacas, principales y dioses, para que les enbiasen agua del cielo otros cien carneros blancos. Y atauan otros carneros negros en la plasa pública y nos les dauan de comer a los dichos carneros atados, para que ayudasen a llorar. Acimismo atauan a los perros; como uían dar bozes a la gente y gritos, también de su parte daua olladas, ladrando y a los que no ladraua, le dauan de palos. Y acá hazían grandes llantos, acá hombres como mugeres . . .]

day, there are still *chaimas*, women dedicated to singing while crying, who participate in important ceremonies in Cusco's religious calendar, such as the fiesta of the Lord of the Earthquakes (el Señor de los Temblores).

Sarmiento de Gamboa, referring to the arrival of the Ayar brothers in Cusco, says that they sank rods in a place of fertile land called Huanay Pata (*ibid.*:57–58). *Huanay*, according to González Holguín means alteration (*enmienda*) (1989 [1608]:177). According to Diego de Torres Rubio (1619) it means to alter. Literally it means to alter the top or terrace. Sarmiento de Gamboa states that the land is fertile and that the soil is crumbly (2007 [1572]:58),³⁷ oily, and dense. This term could also refer to *Huacay pata* because, if it is fertile and humid land due to its many water sources, the land would be muddy.

The term *Huacaypata* would not refer to the feelings of sadness, pain, and sorrow, but to fertility, which occurs when there is an abundance of water to produce food and for animal procreation. As described by Sarmiento de Gamboa (1989 [1608]:59) when referring to Manco Capac's crying when Ayar Cachi died, this action served to fertilize the land.

HUACAYPATA AND THE SYMBOLISM OF THE WATER FOUNTAINS

The part of Cusco that is between the Saphy and Tullumayo Rivers has several huacas that correspond to springs, water sources that are detailed below:³⁸

³⁷ The word used is *migajón*, a flexible dough.

³⁸ Perez Bocanegra in his priests' manual *Ritual y formulario* refers to the things the Indians worshiped: "Forgetting God, they worshiped the huacas, the hills, the fountains, or rivers, the sun, the moon, the stars, Venus, lightning, and other things, as in the time of the Inca" (1631:130).

The fountains that are considered by Cobo to be huacas (Figure 10, Table 2) are not all those that existed in Cusco. There are others in several places (Figure 24). For example, the fountain of Unu Punku, located in the Cathedral of Cusco (Kiswarcancha), those found in the convents of Santo Domingo (Qoricancha),³⁹ ⁴⁰ Las Nazarenas, San Francisco, La Merced, and

³⁹ During excavations undertaken between 1974 and 1979 in front of the curved wall of the Qoricancha, adjacent to Arrayan Street, two fountains were found in the area of the platforms, which had offerings in the floors of the basins and below them, consisting of bronze and silver pins (*tupus*), little llama figurines made of spondylus, and Inca ceramic fragments (Gibaja 1990:219). Reginaldo de Lizárraga provides a brief description of these fountains: "the garden will be a little less than half a block. It has a fountain where two water spouts fall, one a little brackish, the other a little better. It was not known from where or by where the one came, until the river, in a great flood, took two or three slabs, or, at least, it took them out of their place, under which the water was channeled to the Garden of the Sun" (1909 [1605]: Chapter LXXX).

[Será la huerta poco menos de media cuadra; tiene un pilar donde caen dos caños de agua, el uno un poco salobre, el otro algo mejor. No se sabía de donde o por dónde venía el uno, hasta que el río, con una avenida grande se llevó dos o tres losas, a lo menos las sacó de su lugar, por debajo de las cuales venía encañada el agua a la Huerta del Sol.]

⁴⁰ In our monastery there is still a large stone basin, octagonal on its exterior. Its basin, wherever it is measured, must be more than a rod and a half across, and more than a rod and a quarter in depth. This basin was filled with a quantity of chicha, chosen from what the Inca drank, so that the Sun would drink, and what was taken up, these barbarian people believed that the Sun drank. The mouth of this fountain was covered with a sheet of gold, in which the Sun was sculpted (Lizárraga 1909 [1605]: Chapter LXXX).

[Permanece en nuestro convento una pila grande desta piedra, ochavada por de fuera, que de hueco debe tener, por cualquiera parte que la midan, más de vara y media, y de fondo más de vara y cuarta. A esta pila hinchian con cantidad de chicha, escogida de la que el Inga bebía, para que bebiese el Sol, y lo que en ella se embebía creía esta gente bárbara que el Sol lo bebía; cubría la boca desta pila una lámina de oro, en la cual estaba el Sol esculpido.]

in Arones Street (corner of the Sivirichi school). In the Hatuncancha there was a water fountain and another fountain in Ticatica (Covarrubias 1960c:328–329). There are also the springs on the slope of the Salesian school associated with Inca canals built with limestone.

Until Colonial times, the problem of water seepage in the central area of Cusco was notorious. Excavations at the Casa Concha determined that there was a continual concern for draining groundwater and for waterproofing the floor levels with clay (Paz and Allcacontor 2002).

We must trace the importance of this space of Huacaypata from the myths of origin, or *paqarinas*, related to the mythical lake. We do not have a specific reference for Cusco, but, in the literature for other areas, there are abundant relevant references. Most huacas in the Andes are water sources, lagoons, springs, or rivers that were the places of origin of many people who are linked to petrified characters.

Pachacuti Yamqui Salcamaygua describes the *paqarinas*:

. . . as in general the Indians were so idiotic and dim, with little ability, and being so lazy, they chose their *paqarisqa*, or *paqarimusqa*. Some choose lagoons, others springs, others living rock, and others hills and ravines. Thus each province took and chose its *paqarisca*. . . . The prime *paqaririm* was the Paqari Tampu, so that all the provinces and natives would say *paqarisqanchik llusqisqanchik*, or *machun-chikpa paqarisqan* [Nacimos salimos, nacimos o brotamos de los antiguos/Being born, we

left or sprung up from the ancient ones] (1993 [1613]:266).⁴¹

This quote reaffirms that a place of origin or *paqarina* could be a lake or spring.

Francisco de Avila collected several myths. One of them tells how the Huacasas of Allauca went to the Puruy spring to worship Anchicara, who took care of the lagoon and who turned into stone with his children. They offered llamas to the lagoon (2009 [1598]:157–158). Other stories refer to Tisci Viracocha, who is linked to Mama Cocha and the myth of Manco Capac and Mama Ocllo in Lake Titicaca. It was said about Lake Choclococha in Huancavelica:⁴²

. . . and to travel lighter they threw their coca bag [?] that they carried full of corn in a pampa next to some hills, and in a lagoon that they called Acha. They say that in the hot season the lagoon dried up and because of the humidity of that place the corn sprouted and produced cobs. Because of this that place was called Choclo-cocha (Murua 1925 [1590]:31, Book 4, Chapter VIII).⁴³

⁴¹ [Y como en general los indios eran tan idiotas y torpes con poca facilidad, y por ser tan haraganes los escogieron por su *paqarisqa*, o *paqarimusqa*, unos a las lagunas, otros a los manantiales, otros a las peñas vivas, y otros a los cerros y quebradas. De modo que cada provincia tomaron y escogieron para sus *paqariscas*. . . . La causa de *paqaririm* fue el Paqari Tampu, para que todas las provincias y naturales dijese *paqarisqanchik llusqisqanchik*, o *machun-chikpa paqarisqan*.]

⁴² The Chancas of Andahuaylas traced their origin to a mythical ancestor named Anco Huallu who emerged from Lake Choclococha (Bauer *et al.* 2013:25).

⁴³ [. . . y por ir más ligeros echaron su cocari que llevaban de maíz en una pampa junto a unos cerros, y en una laguna que ellos llamaban Acha, en la cual laguna dicen que con el tiempo de los calores se secó la dicha laguna y con la humedad de aquel asiento brotó el maíz y produjo choclos y por este respeto fué llamado aquel asiento y

In addition, Cristóbal de Albornoz refers to the Angaraes and Soras as:

. . . descending from a lagoon called Choclo Cocha and this way all the provinces of Peru, each one in its own way, applied whatever was said about its origin (Albornoz [1582] in Duviols 1967:20).⁴⁴

Albornoz continued: “Choclo cacha, a big lake in the puna of Guaytara, was greatly venerated. It was born from rivers, and many sacrifices were made to it” (*ibid.*:29).⁴⁵ In the province of Tarma “the huaca of Chinchaycocha is a lagoon. It was greatly revered and served by the Incas” (*ibid.*:30).⁴⁶ “Auquivilca, the huaca of the Chinchay Cochis Indians, is a lake next to the town of Llaca. It is said that the Caxamalca Indians descend from this lake” (*ibid.*).⁴⁷

Likewise, there are works by ethnographers who have collected origin myths in different parts of the Andes.⁴⁸ For example, the four

lugar Choclo-cocha.]

⁴⁴ [. . . descender de una laguna llamada Choclo Cocha y desta manera todas las provincias del Pirú, cada cual de su modo aplicando cualquiera de las cosas dichas a su nacimiento.]

⁴⁵ [Choclo cacha, laguna grande en la puna de Guaytara, de grande beneración, que nascen della rios, y le hazían muchos sacrificios.]

⁴⁶ [Guaca prencipal de los indios chinchacochas, es una laguna. Fue muy reverenciada y servida de los ingas] [Laguna que fue la Guaca principal de los indios Chinchaycochas, fue muy reverenciada y atendida por los incas]

⁴⁷ [Auquivilca, guaca de los indios chinchay cochis, es una laguna junto al pueblo de Llaca. Dizen los indios caxamalca descender desta laguna.]

⁴⁸ There will always be questions about using ethnographic sources and those who treat them as if they had little value, because they may have changed through time and lost their real contexts. On the other hand, it is also

Mayo brothers left Lake Yaurihuari to found Andamarca in Ayacucho Department (Ossio 1986). David and Rosalinda Gow (1975) collected a myth in the heights of Ocongate in Cusco Department that the springs and lakes are the owners of cattle.

Cusco being the most important Inca city and the one about which we have the best descriptions, it is also the one that has suffered the most destruction, modification, reconstruction, and continuous reoccupation of its soil, with the consequent modification of its architecture. Therefore, the reading of its evidence leads us to several errors. We will review some data presented by Inca cities that were built following the urban plan of Cusco.

South of Cusco is the Temple of Wiracocha in Raqchi, in the district of San Pedro, and the province of Canchis, which has an artificial lake of approximately fifty meters in diameter that is connected through a channel with a polished stone fountain two hundred meters from the Inca temple (Béjar 1990b:118).

The Inca city of Tomebamba, in Ecuador, has similar characteristics in terms of the location of the city, its types of buildings, and their names (Idrovo 2000). This city has, in addition to all these similar elements, an interesting water management system. The Incas built a canal, baths, and the reservoir or lake of Viracochabamba, located on the left bank of the Tomebamba River. In this regard, in the first book of Cabildos de Cuenca (town council records), it is said:

reasonable to ask why these ethnographic accounts have been transmitted over time, although they have probably undergone some changes. These ethnographic sources cannot be considered in isolation, but they reaffirm what was written by the chroniclers of the sixteenth and seventeenth centuries.

. . . that the best place to found and populate the said city of Cuenca is the seat that is called Paucarbamba, which on one side is and borders with the Tambos Reales on the river bank of the said province, and on the other a lagoon called Viracochabamba . . . (Garcés 1938 [1557–1563]:10).⁴⁹

The Inca city of Cajamarca has canals and basins that obtain water from a reservoir at the foot of the Santa Apolonia hill, which is supplied by means of the pre-Inca canal of Cumbemayo.⁵⁰ The canals and fountains were described by Francisco de Jerez before the capture of Atahuallpa (2017 [1534]:82). The plaza of the Inca settlement of Pumpu was also divided in two, in the same way as the Cusco plaza. At Pumpu the division is made by a water canal built by the Incas and by an *ushnu*, a sacred Inca platform. The water from the rivers was not used for human consumption, but canals and aqueducts were built to capture water from the nearby springs (Matos 1994:123, 274–275).

In Huánuco Pampa,⁵¹ water was brought from a spring located 1.5 kilometers away. This filled a large pool and a well-made bath complex (Morris 2013:232). Monica Barnes (2016: 180–181, figure 2, p. 184) published and analyzed the excavations of Luis Barreda in Huánuco Pampa and states that he excavated the part of the so-called bath or fountain that includes the pools and their surroundings. She included Barreda's plan of one of the pools with indications of the water intake and drainage.

The city of Vilcashuaman in Ayacucho Department has certain similar characteristics. Cieza de León describes it in this respect:

And another, not small stone, that is, at the present time, in the middle of this square, served as a basin, where they sacrificed and killed the animals and little children (according to what they say), whose blood they offered to their gods. . . .

In the middle of this square was a gently flowing irrigation channel brought there with much fine work. And the lords had their secret baths for themselves and their wives (2005 [1554]:234–235).⁵²

⁴⁹ [. . . que de donde mejor se podrá fundar y poblar la dicha ciudad de Cuenca, es el asiento que se dice Paucarbamba, que por la una parte está y alinda con los Tambos Reales en la ribera del río de la dicha provincia, y por ótra una laguna que se llama Viracochabamba. . . .]

⁵⁰ The Cumbemayo canal has a strong symbolic and ritual significance. There is evidence of huacas from the Formative. The hill of Santa Apolonia is a rocky outcrop that was a very ancient huaca where the Incas made some carvings. Its sacred character was maintained until the eighteenth century (Ravines 1976:119).

⁵¹ Huánuco Pampa occupies an alluvial-pluvial terrain supplied with water mainly due thawing dating back to the last glacial era (Perú, Ministerio de Cultura 2015). To this day, the Huánuco Pampa plain has wetlands and ponds, and is a favorable territory for raising camelids. Miguel de Estete, during his passage through this territory, noted that here there were many camelids, and that Huánuco Pampa had other towns subject to it (2017 [1534]:99).

⁵² [Y en otra piedra no pequeña, que está en este tiempo en mitad de esta plaza a manera de pila, donde sacrificaban y mataban los animales y niños tiernos (a lo que dicen) cuya sangre ofrecían a sus dioses. . . . Por medio de esta plaza pasaba una gentil acequia traída con mucho primor. Y tenían los señores sus baños secretos para ellos

In this respect González *et al.* (1981:51–52) located sections of a system of water channels in the city coming from several springs.

These data show us something interesting. The water taken in Cajamarca, Vilcashuaman, Huánuco Pampa, and Pumpu does not come from the waters of the rivers, but from springs, through a set of canals. In Inca Cusco, there were many water sources that Cobo mentions as huacas. One of these was the one located in the Qoricancha (Convent of Santo Domingo).⁵³

Polo de Ondegardo offers an extremely interesting indication that the land of the square of Huacaypata had a great symbolic value. It was covered with sand that had been brought from the sea:

They removed the soil from the whole Cusco plaza. It was taken to other places to be something greatly esteemed, and they filled it with sand from the seacoast, to a depth of two palms and a half, and in some parts more. They planted it all over it many

y para sus mujeres.]

⁵³ In the Second Book of the Cabildos de la Ciudad [town council], a claim of the settlers about this fountain is mentioned: “Your Honors dealt with the water fountain of the Convent of Santo Domingo, which they had inside their monastery, the fountain that formerly belonged to the city. It was commanded with all justice, to order the Procurator Gerónimo de Costilla, to report the way the fountain of the city was put into the monastery, given that it had belonged to the city, since time immemorial. . . .” (Covarrubias 1960b:351).

[Sus Mercedes trataron de la fuente de agua del Convento de Santo Domingo, que tenían dentro de su Monasterio, fuente que antiguamente pertenecía a la ciudad, proveyeron en justicia, mandar al Procurador Gerónimo de Costilla, para que informe de la manera como la fuente de la ciudad fue metida al monasterio, siendo así que pertenece a la ciudad, desde tiempos atrás. . . .]

vessels of gold and silver and sheep and little men of the same materials, which have been taken out in great quantity, all of which we have seen. The whole plaza was made of this sand when I went to govern that city 1990 [1571]:97).⁵⁴

This quote is quite important, in that it is stated that earth was taken from this plaza and moved to other places because it was highly esteemed. This shows us that the space of Huacaypata was already sacred. To sacralize other places, other materials were taken from Cusco, as in the case of the site of Saraguro in Ecuador where there are andesite blocks from the quarry of Rumiqolqa.⁵⁵

THE CEREMONIAL PLATFORM ON MANTAS STREET (HUACAYPATA PLAZA)

During work done in 2014 adjacent to the Huacaypata Plaza, so that Mantas Street could carry vehicular traffic, the Municipality of Cusco performed an intervention in the course of which important archaeological findings were made. Unfortunately these were covered up without further archaeological studies. Evidence discovered then indicates that, on both sides of the Saphy River, there were architectural structures of great importance that do not appear in the descriptions found in sixteenth and seventeenth century documents. On the left bank of the Saphy River, adjacent to the vault of the

⁵⁴ [. . . que toda aquella plaza del Cuzco le sacaron la tierra propia y se llevó a otras partes por cosa de gran estima, y la hincharon de arena de la costa del mar como hasta dos palmos y medio, en algunas partes más; sembraron por toda ella muchos vasos de oro y plata y ovejuelas y hombrecillos pequeños de lo mismo, lo cual se ha sacado en mucha cantidad, que todo lo hemos visto; de esta arena estaba toda la plaza cuando yo fui a gobernar aquella ciudad.]

⁵⁵ This was determined by X-ray florescence analysis (Ogburn 2004:419).

contemporary canalization, a rectangular ceremonial platform of 5.10 meters in the north-south direction was found. It must have had a width of 4.0 meters, according to the projection of the stairways, and a height of 1.85 meters. It consisted of finely worked polygonal masonry with cushion (*almohadillado*) bonds (Figures 25–27). There are six stairways attached to its sides. These have three staggered levels. Other stairways had been buried (Figures 28 and 30). To reach the height of the platform, there must have been nine steps of finely carved stone blocks, which were covered with a thick layer of earth, ash, and charcoal). The upper part of the front wall of the platform had two water channels that were closed with other blocks of andesite (Figure 29). In addition to the staircase on the right side, these walls must have been made upon the arrival of the Spanish, to prevent the rites that took place here.

In relation to the stairways that have a staggered form, there is a similarity with the zigzag signs related to hierarchy, power, and authority located in ceremonial places of great importance.⁵⁶

We must clarify that this structure is at least one meter below the current level of the Compañía Church. Therefore, the two channels of the front wall were buried by covering them with stone slabs. This structure must have been a little higher than it is now, that is, it is pres-

⁵⁶ In thinking about this type of staircase, we must take account of where this type of design occurred and understand how important it is to determine the number of breaks presented by the architectural elements. In the same way, the number of jambs in a span also lent importance to the structure. Examples of these staggered symbols can be found in the huacas of Suchuna, Chakan, Qespiwara, Sipaspuquio, and Inkilltambo (Saqsaywaman), in the Temples of the Sun in Ollantaytambo and Machu Picchu, in the Temple of Wiraqocha in Raqchi, in the Temple of Iñak Uyu on the Island of the Sun (Lake Titicaca), and in the central plaza of Maukallaqta, among other places.

ently lacking one or two wall courses. In addition, the level of the Inca plaza must have been a little above this structure (see Figure 27).

Behind the platform in the lower part there are different sections of walls. The deepest is an L-shaped structure, 11 meters long in its east-west dimension and 1.10 meters wide in its north-south dimension. It was constructed with diorite blocks and overlaid with adobes (see Figure 31). Over the diorite, a 2 meter limestone wall with a north-south orientation is superimposed (see Figure 32).

On the right bank of the Saphy River there is a diorite ceremonial structure measuring 1.60 meters by 2 meters with a large amount of earth, clay, ash, and charcoal, material that is not the product of continuous accumulation, but of intentional filling (see Figure 33).

All these structures were broken and partially destroyed when Cusco's potable water master plan was executed, with the installation of pipes, sewage networks, and telephone wiring, during the past thirty years.

Today, the idea is maintained that this Mantas Street structure was a bridge over the Saphy River that led to the Cuntisuyo (Medina and Salas 2019; Porroa 2014), an hypothesis based on the assumption that the roads met at a point to form a cross. The statement that these roads leave the Huacaypata Plaza in that form was meant by the chroniclers to be metaphorical. It serves only to express the idea that they leave from the same place; these four roads would not have crossed.⁵⁷ The study of Inca bridges was initiated by Regal (1972) and by

⁵⁷ For example, Garcilaso mentions that the Collasuyo road started from Limacpampa, and Bauer (2000) suggests that the road to Chinchaysuyo did not start from the corner of Plateros Street, but a little farther north. Therefore, these roads would not cross in the way that has been represented in the Qhapaq Ñan system.

Hyslop (2015). These scholars have not reported Inca bridges with this type of abutments and channels at the top as in Mantas Street. Inca architecture is symmetrical (see Agurto 1987; Bouchard 1976; Gasparini and Margolies 1977; Hyslop 2016). Because it is understood that on the right bank of the Saphy River we do not have the same architectural structure, we could hypothesize that it was destroyed when the river was channeled. If so, why is the Inca diorite fountain preserved and not part of the bridge abutment? We must consider that the plazas of Huacaypata and Cusipata were two sacred spaces where diverse activities, ceremonies, and daily rites were carried out, and not a place of transit.

The structure found in Mantas Street has certain similarities with the *ushnu*s described by the chroniclers, and it is necessary to make some comparisons. There is no consensus among the chroniclers in their descriptions of the *ushnu* of Huacaypata. Here we present a table of the information they provide (Table 3).

The earliest chroniclers do not report an *ushnu* in the Huacaypata Plaza. Pedro Pizarro calls it a stone (*pedra*). Betanzos and Cieza de León refer to a stone like a sugar loaf (*pedra como pan de azúcar*). (See Meddens *et al.* [2010] for loaf-shaped stones found at an *ushnu* in Ayacucho.) However, Molina and the anonymous chronicler (1906 [1565?]) call it an *ushno*. We return to Zuidema's idea (1989:551) that the Cusco *ushnu* was probably an insignificant construction in itself and must have been completely covered during periods of time when it had no ritual importance, while the rest of the time it was the object of high veneration (*ibid.*:453). Zuidema makes a very interesting analysis of the term *ushnu*, based on ethnographic and linguistic work. He concluded that this term pertains to astronomy and to the symbolic action of sucking large amounts of

rainwater and fermented chicha, and that one of its most important elements would be the basin.

It has always been a goal to study the Cusco *ushnu*, in comparison with those of other places such as Huánuco Pampa, Vilcashuaman, Pumpu, Curamba, Tarahuasi, and Tambo Colorado, among others,⁵⁸ although these are

⁵⁸ Rowe (2003) suggested that the *ushnu* was round like a teat and was the centerpiece of a stone basin where the Incas poured chicha and that all this was on a stone platform in the middle of the plaza. This postulate has remained in force and other researchers, making comparisons with other *ushnu*s outside Cusco, assume that there was a platform in the middle of the Huacaypata Plaza (Fernández 2004; Monteverde 2011). During archaeological excavations in the middle of the plaza by the National Institute of Culture, no evidence of the foundations of a probable platform was found. "The wall at its head or upper part nowhere reaches the level of the Inca floor. It is always 0.70 meters below it and sealed by it, so it is has been determined that it was a subterranean wall and fulfilled the function of a subterranean dike to protect the western area and drain the waters of springs and rivers, to the south, as it has a three percent slope on that side and, upon reaching the extreme southern part of the square, the water was conducted to the Watanay River through canals" (Fernández 2004:175).

[El muro en su cabecera o parte superior en ninguna parte alcanza el nivel del piso inka, siempre se halla 0.70 m promedio por debajo de éste y sellado por el mismo, por lo que se precisa que fue un muro subterráneo y cumplía la función de un dique subterráneo para proteger el área occidental y evacuar las aguas de manantes y fluviales, hacia la parte sur, ya que tiene un declive hacia dicho lado en 3%, y que al llegar a la parte extrema sur de la plaza era conducida al Watanay por medio de canales.]

"However, no structure was found, not even at the foundation level, that corresponded to the memorable *ushnu*, next to the present basin of the Plaza de Armas, and neither in other trenches somewhat close to it" (*ibid.*:179).

[Sin embargo, no se halló ninguna estructura ni siquiera a nivel de cimiento que correspondiera al memorable usnu, junto a la actual pileta de la plaza de Armas y tampoco en otras trincheras algo próximas a ella.]

Fernandez concludes with the following: "The *ushnu* must

later than that of Huacaypata. As Zuidema (1989) points out, these are a late development. Therefore, they were built in another social context, during the expansion of the Inca state.

The structure in Huacaypata Plaza was a stone like a sugar loaf and a fundamental constituting element is the drain (*pila*). Concerning this element, Miguel de Estete's description of the celebration that took place during 1534 as part of the coronation of Manco Inca is interesting:

Having returned to the city of Cusco, the said captain Almagro and the Spaniards and the Inca, with the victory of having driven the enemies out of the land, the pleasure of the Inca and the natives of it was so great that he agreed to make grand festivities in the city square, celebrations and dances, helping every day so that many people, with much work, could fit in this way into the square, bringing to the said festivities all their deceased grandparents and relatives. After having gone to the temple accompanied by many people, and offering prayers to

have been on the yellowish sand stratum and on the western side of the subterranean dike like most of the structures in the surroundings of the Inka plaza" (*ibid.*:181).

[El usnu debió hallarse sobre el estrato de arena de color amarillento y al lado occidental del dique subterráneo al igual que la mayoría de estructuras del entorno de la plaza inka.]

What is described are the base of a section of wall, a probable canal, and a dike. We must understand that the pre-Inca and Inca built canals and infrastructure to bring water to the lowest point, which is the corner of Huacaypata and Mantas Street. Therefore, walls or canals in the middle of the plaza do not necessarily indicate that they were components of an *ushmu*.

the Sun, then, in the morning, they went to the burial place where each one was in order, embalmed, as it is said, and seated in their chairs. With much veneration and respect, all in order, they took them out of there and brought them to the city, each one having his litter and men. . . . For each one of them a tent was set up where each of the dead was placed by his followers seated in the chair, surrounded by pages and women. . . . They were all placed in order, and from eight in the morning until nightfall they were there without leaving the feasts, eating and drinking there, as freely as the people of better esteem could do with wine, because although the wine they drank was made of roots and corn, like beer, it was enough to make them drunk, because they are a very weak-headed people. They were so many people and such good vintners, men as well as women, and there was so much decanted into those hides, because all they do is drink and not eat, that it is certain, without any doubt, that two wide drains, more than half a rod wide flowed under slabs into the river, that should have been made for the cleaning and drainage of the rains that fell in the square or by chance, the most certain for that effect, ran all day with the urine of those who urinated in them in such abundance, as if they were a fountain that flowed there. Certainly, according to the quantity of what they drank, and the people who drank it, it is not surprising, although to see it is marvelous and something never seen before (Miguel de Estete 2017 [1535]:274–275).⁵⁹

⁵⁹ [Vuelos a la ciudad del Cuzco, el dicho capitán Almagro e españoles e Inga, con la victoria de haber echado los

Pedro Pizarro makes extremely interesting observations about the rites of the mummies in the plaza, how they ate and drank and what was burned:

There were people in this Cusco who commanded admiration. All served these dead, who, as I have said, were brought out to the plaza, seated in order, each one according to his antiquity and here their man servants ate and their woman servants drank. For the dead, they made for them some lamps, placed in front of them a wooden object that they had carved and cut very similarly, and made very

enemigos de la tierra, fue tanto el placer del Inga y de los naturales de ella, que acordó de hacer grandes fiestas en la plaza de la ciudad, de bailes y danzas, ayundando cada día tanta cantidad de gente que con mucho trabajo cabían en la plaza, trayendo a las dichas fiestas todos sus abuelos y deudos muertos en esta manera: después de haber ido al templo muy acompañado y hecha oración al Sol, luego por la mañana iba al enterramiento donde estaba cada uno por orden, embalsamados, como es dicho, y sentados en sus sillas, y con mucha veneración y respeto, todos por orden los sacaban de allí y los traían a la ciudad, teniendo cada uno su litera y hombres. . . . Para cada uno de ellos estaba armada una tienda donde se puso cada uno de los muertos por su concierto, sentado en la silla, cercado de pajes y mujeres. . . . Puestos todos por su orden, desde las ocho de la mañana hasta la noche estaban allí sin salir de las fiestas, que allí comían y bebían, tan a discreción como lo podían hacer las gentes de mejor estima con el vino, porque aunque el que ellos bebían era de raíces y maíz como cerveza, bastaba para embeodarles, porque es gente de muy flacas cabezas. Era tanta gente y tan buenos mojonos, así ellos como ellas, y eran tanto lo que envasaban en aquellos cueros, porque todo su hecho es beber y no comer, que es cierto, sin duda ninguna, que dos vertederos anchos, de hueco de más de media vara que vertían por debajo de losas en el río, que debían ser hechos para la limpieza y desaguadero de las lluvias que caían en la plaza o por ventura, lo más cierto para aquel efecto, corrían todo el día orines, de los que en ellos orinaban; en tanta abundancia, como si fueran fuente que allí manara; cierto, según la cantidad de lo que bebían y la gente que lo bebía no es de maravillar, aunque verlo es de maravilla y cosa nunca vista.]

dry, and when this was lit, they burned here everything that was placed in front of the dead, so that they would eat everything that they ate, which they consumed here in this fire. They had also in front of these dead some large pitchers (which they called *birques*) of gold, or of silver, or of clay, each one as he wished, and here they poured the chicha that they gave to the dead, showing it to them, and they brought one dead person to the other, and the dead to the living, and the living to the dead. When with these *birques* full, they poured [the chicha] onto a round stone that they considered to be an idol, in the middle of the square, and they made a small pool around it, from where it was drained through some pipes they had made below the earth. This stone had a golden cover that encased it and totally covered it. Likewise, they had made a sort of round hut with mats, with which they covered it at night (1978 [1571]: chapter 15).⁶⁰

⁶⁰ [Hera ber la xente que en este Cuzco auia, que ponía admiración; toda la mas della seruia a estos muertos que tengo dicho, que cada día los sacauan a la plaza, sentandolos en rrengle, cada uno según su antigüedad, y allí comían los criados y beuían y las criadas. Para los muertos hazíanles unas lumbres delante dellos de una lena que tenían labrada y cortada muy ygal, y muy seca, y encendida esta, quemauan aquí todo aquello que al muerto le auían puesto delante para que comiese de todo lo que ellos comían, que aquí en este fuego lo consumían. Tenían también delante de estos muertos unos canxilones grandes (que ellos llamauan birques) de oro, u de plata, u de barro, cada uno como quería, y aquí echauan la chicha que al muerto le dauan, mostrandose la, combidandose unos muertos a otros, y los muertos a los biuos, y los biuos a los muertos. Pues llenos estos birques, los derramauan en una piedra rredonda que tenían por ydolo, en mitad de la plaza y hecha alrrededor una alberca pequena, donde se consumía por unos canos que ellos tenían hechos por deuaxo de tierra. Esta piedra tenía una funda de oro que encaxaua en ella y la tapaua toda, y asimismo tenía hecho una

As we have seen in the description of the structure underneath Mantas Street, this is below the level of the floor that should have pertained to the Inca plaza of Huacaypata and the channels were also covered by stone slabs (There are traces of the missing blocks on the structure). The two channels that are visible conform to the description of Miguel de Estete that they had a dimension of half a rod.⁶¹ When we described the second and third construction phases of the city, we described the Inca channels in El Triunfo Street, those that are in the middle of the plaza, and others, all running towards the lowest point of the Huacaypata Plaza, that is, the corner of Mantas Street, a gradient that exists even at present. Zuidema's sucking also conforms to the collection of the waters of the Huacaypata marsh and the fountains that existed around it. The waters that flowed through the basin of the Mantas channel not only collected the urine of the fiesta participants, but also subterranean waters.

In pre-Hispanic Peru, drinking large quantities of chicha made from corn and other plants reaffirmed the unity of the population, as well forging a strong relationship with the deities. The chroniclers of the sixteenth and seventeenth centuries profusely describe the large quantities of chicha that were drunk during various Inca ceremonies and rites. In his study on *queros* Thomas Cummins states:

Queros and *aquillas* had been ritual instruments among the Incas, used to carry out communication between the power of the deities and the rulers, and between those rulers and their subjects (2004:450).

manera de buhuelo de esteras texidas, rredondo, con que la cubrian de noche.]

⁶¹ A vara is 83.5 centimeters and half a vara corresponds to 41.5 centimeters. The channel of the Mantas structure has a width of 42.5 centimeters and a height of 30 centimeters.

We must understand that the act of drinking and getting drunk cannot be seen as an act of perdition, as some chroniclers wrote, but rather, the act of drinking has a strong symbolic, ritual charge in the community.⁶² Human urine is part of the cycle of water and fertility, especially during drinking festivals (Cummins 2004:87). Therefore, these acts of drinking, as stated in historical documents, should not be perceived as acts of drinking for the sake of drinking, but as intrinsically linked to ritual activities that took place in the Huacaypata Plaza, following a tradition in the Andes established in ancient times.⁶³

But the act of drinking is also strongly related to the act of burning the food or whatever is brought as an offering. We have evidence of

⁶² A prayer recorded by Pérez Bocanegra is extremely interesting concerning the relationship of urine with the provision of water: "Do you say to the fountains, to the lakes, and to the springs, adoring them, and taking care of them, and dancing in their honor, and dressing a jug like a woman, and giving them something to eat: 'O mother fountain, lagoon, or spring, give me water without ceasing, urine without ceasing?'" (1631:133).

[¿Dizes a las fuentes, y a las lagunas, y a los manantiales, adorándolas, y haziéndoles bailes, y vistiendolas como mujer en vn cantarillo, y dádoles de comer. O madre fuente, laguna, ó manantial, dame agua sin cessar, orina sin parar?]

In a study in the Sonqo community in Cusco Department, Catherine Allen (2008) suggests that drinking is a communal process, where contracts are sealed and the relationship is asymmetrical between those who invite and those who are invited. A study in communities of Ayacucho and Cusco suggests that collective drunkenness in the Andes reaffirms the values of the group; drunkenness catalyzes rivalries or friendships forged during the course of life, and these parties make the participants fraternize, dance, and sing. Solidarity and communion between community members and the sacred is emphasized, as is abundance, the reproduction in the realm of animals, as well as that of men (Castillo Guzman 2001).

⁶³ Higher consumption of chicha is linked to higher maize production from the Middle Horizon onwards.

these acts encountered in the course of several excavations. In the excavations in Mantas Street, the stairways were covered with a thick layer of earth, ash, and charcoal. In the Huacaypata Plaza, levels of incineration strata occur on both sides of the river. In the previous quotation from Pedro Pizarro, it is mentioned that they burned everything they had put on the dead person. During festivities, offerings, food, and other sacrifices were burned, and these had to be thrown on the basin or onto its surroundings, as it was revealed in the stairways of Mantas. From there the offerings were transferred to the Saphy River.

In 2009, the Dirección Desconcentrada de Cultura intervened in the Limacpampa Grande Plaza, which is located east of the Qoricancha, on the left bank of the Tullumayo River. Archaeological excavations there found some finely carved limestone walls and a staircase leading to the bottom associated with water channels, and it is suggested that this place was an *ushnu* (Benavente 2009). In this regard, Cobo mentions that the first huaca of the fifth ceque was located in the square of Hurinaucaypata. This was a stone called *ushnu* (1956 [1653]:39, chapter XIV). In addition, this plaza had another huaca that is the first huaca of the second ceque:

It was a plain called Limapampa, where the *chacara* (cultivated field) of Diego Gil was made. They made the feast here when they picked the corn, so that it would last and not rot (*ibid.*: chapter XV, p. 46).

The Limacpampa Grande discovery has something in common with that of Mantas Street, in that both have stairways that lead to the river, are associated with water channels that run from springs, as well as levels of incineration of cultural material (see Figure 34).

As has been explained, the formation of the Inca city is intimately linked to the Chakan River water that comes from the north. We must keep in mind that when Cristóbal de Molina (2008 [1573]:109) described the *Mayocati*⁶⁴ rite during which the Indians made dams in stretches of the upper parts of the Sapimayo River (now called the Saphy River) they threw the materials that had been part of the rituals, such as food, headbands (*llaautos*), flowers, and coca. He also states that they threw in the ashes and coals of the sacrifices they had made throughout the year. It is logical to wonder where the consumed material that was used in the *Mayocati* rite came from, that is, where these ceremonies and sacrifices were performed. In the excavations of Mantas Street, the Limacpampa Plaza, Plateros Street, Arrayan Street (Intipampa), and Intiqawarina, large amounts of burnt material were found.

The material from the excavation of the Intiqawarina Street was analyzed by Durand and Verástegui (2009) who differentiated various ceramic types based on paste. Among these they identified Killke, Inca, Orcosuyo, and Pacajes styles and concluded that the diversity of pottery demonstrates dynamic social activities (meetings, feasts, banquets, lodging), as well as religious ones (pilgrimages, rituals) during the Inca Horizon (*ibid.*:131).

In 1996, I participated in the excavations of Arrayan Street, adjacent to the Qoricancha. We excavated in the middle of the street, and found a finely carved andesite wall that retained the western slope that was the boundary of the Intipampa Plaza. In front of, and attached to, this structure there was an accumulation of material more than two meters high consisting

⁶⁴ *Mayo* means river in Quechua (González Holguín 1989 [1608]:236) and *catini* means to go behind, or to do one thing after another (*ibid.*:667). A good translation is; to accompany or follow the river.

of earth, charcoal, ash, Inca ceramic fragments, beads, and bones. All these materials corresponded to offerings or feasts that were held at the foot of the wall. When we reached the end of the wall, we found a stone channel that ran parallel to it (see Fernández 1999). Garcilaso made the following statement:

The Intipampa Plaza (Plaza of the Sun) in front of the Qoricancha was where the non-Inca arrived to deliver their offerings, because they could not enter the temple (1960 [1609]:312).⁶⁵

Medina and Salas (2019), as part of the analysis of the ceramic material from Mantas Street, identified fragmentary Inca ceramics (Classic, Pacajes, Orcosuyo, Taraco, and Chimu Inca)⁶⁶ that generally correspond to decorated ceramics. Shapes found include plates, bowls, jars, vases, dishes, and stone vessels. These are forms used for serving or for offering. Also encountered were finely decorated pots and pitchers used to transport liquid and solid foods, objects without traces of use.⁶⁷

During excavations in the premises of the Rectorate of the University of Cusco, on the corner of Saphy and Tigre Streets, Zapata (1992) found an intensive occupation evinced by Inca ceramic fragments, animal bones, ash lenses, charcoal, spondylus, and a stone channel (cited by Farrington 2013:260). As part of

⁶⁵ [La plaza de Intipampa (Plaza del Sol) delante del Qoricancha donde llegaban los que no eran incas a entregar sus ofrendas porque no podían ingresar al templo.]

⁶⁶ Fragments of Chimu Inca ceramics were found at Arcopata (Delgado 2013) and at Muyuqmarka in Saqsaywaman (Quispe 2005).

⁶⁷ The archaeological material from the offerings we excavated in Arcopata, Tandapata, Huaca Pachatosa, and Tipón shows no traces of use (Delgado 1998, 2013, 2022; Delgado and Aráoz 2012).

various offering rites, or as associated with huacas, the act of burning is frequent, not only inside the Inca city, but also outside it.⁶⁸ As we have seen in two fundamental areas, these acts of burning were carried out adjacent to the Temple of the Sun (Qoricancha), and in the Huacaypata Plaza.

Another important fiesta was that of the Coya Raymi. During this there occurred a general cleansing of the whole city, during which all the inhabitants went to the fountains and rivers to bathe, saying that in this way illnesses would be expelled (Cobo 1956 [1653]: Chapter XXIX, p. 139). Rivers and other water sources were also used for ritual cleansing on other occasions. Betanzos (1999 [1551]: Chapter XIV, p. 67), Cobo (1956 [1653]: Chapter XIII, p. 19), and Molina (2008 [1573]:101) indicate that the common people and the elites participated in ritual baths and cleansings in their waters. One huaca used for this purpose is Calispuquio, which is located east of the Suchuna sector in Saqsaywaman.

CONCLUSIONS

The Spanish chroniclers focused their descriptions of Cusco on the palaces and temples of the Incas. This orientation has been carried forward to this day, with countless studies on Inca architecture, urban planning, construction processes, and construction materials. Another group of researchers have focused their studies and analyses in determining the social divisions of Cusco into *hanan* and *hurin*, and how these articulated with the territorial division into four parts. However, the importance of the space chosen by the pre-Incas and Incas on which to found a city has been underestimated. Its geo-

⁶⁸ A ceremonial fountain associated with a large amount of charcoal and ash was found at the huaca Pachatosa (Delgado and Aráoz 2012), as well as in an offering in Arcopata (Delgado 2013).

geographical location at the confluence of two rivers, the Huacaypata Lake that was a *paqarina* of origin located on a natural plain (*pata*), along with its huacas (water sources) inside the city, are the factors that shaped the city. These are the natural elements that were present before construction began. These were the compelling factors that the Incas had to take into account in designing their city. Urban planning prior to Pachacutec created solutions in which these huacas were incorporated in the development and plan of the city, a process that was long and continuous.

The sacred lake of the Incas was a space that existed far back in time, well before the Killkes and Incas. It is a place connected to the filtrations of waters, water sources in the entire area of Huacaypata. Its name is closely linked to its geographical aspect and to fertility, which was replicated in the festivities and ceremonies that were performed there.

It is understandable that the Spaniards did not comprehend the importance of the Huacaypata Plaza, because they saw it covered with sand and probably with stone floors, without understanding that, from the point of view of Andean cosmovision, the process of draining the plaza was a symbolic and ritual act. The buildings that were constructed around it were not its most important elements. It was the Huacaypata Plaza itself where daily ceremonies were held, where the mummies of the Incas went out with their court, and where the most important public ceremonies of the Inca festive calendar were held. Craig Morris excavated and studied Huánuco Pampa for several years and concluded that the plazas were the most important ritual spaces in the city (Morris 2013:236).

A part of the sacralization of this entire space was the foundation of the Qoricancha by the Killkes and its rebuilding by the Incas. The Cusco people, in a process of the legitimization

of their territory, created the mythical origin of the waters of *hurin* and *hanan* Chakan and the sacralization of the entire Chakan-Saphy River Basin by Inca Roca. Then, the city was built, and terraces were the elements that modified and shaped it. Palaces and temples were constructed, maintaining the importance of the sacred Huacaypata Lake and water sources that were an essential part of the Cusco huacas.

We have discussed the form that Cusco may have taken. The most popular conception is that it was built in the figure of a puma in different positions, forcing its architectural structures into a mold. If Cusco had some specific form, we should rethink it, but not from the perspective of architecture, but, rather, from the configuration of its landscape beyond the two rivers that delimit the core of the city.

We do not attempt to assert that the structure found in Mantas Street is an *ushnu*, but it is a ceremonial structure that shares some characteristics similar to those of the *ushnus* described by the chroniclers. The structure that was found below the floor level of the plaza was part of the rites that were performed there, and as explained by Zuidema (1989), it enabled the act of sucking the subterranean waters of the lake, of the water sources, of the rains, of the drinks or fluids, including chicha, and of the offerings of ashes that were poured during continual ceremonies. It served as a basin that led all these liquids to the Saphy River, which, after a long journey, would become the Wilcamayu (Vilcanota or Urubamba) River that would take the offerings to Mamaqocha, the sea.

Archaeological evidence and historical accounts reveal the existence of platforms, fountains, basins, open canals, and subterranean channels that formed an important part of the natural and artificial symbolic elements, as an *axis mundi*, articulated through the rites and ceremonies with high symbolic content that

were performed in this sacred space. The festivals and rituals in honor of the gods, as well as the ancestors, were intimately related to natural and artificial symbolic elements and to the places where power was legitimized and where people were linked with their deities.

The public ceremonies that took place in the Huacaypata Plaza corresponded to the ordinary and extraordinary festivities of purification where abundant chicha was consumed, raw and cooked offerings were made, and animal sacrifices were performed on the mythical lake.

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*Translation from the Spanish by Monica Barnes,
David Fleming, and DeepL*

Structure/street	Description	Source
Qoricancha/street	Excavated in the enclosure of the Monastery of Santo Domingo; only pits 9S/18E and 9S/19 adjacent to Ahuaqinta Street found to be undisturbed. 192 sherds initially called Canchón, and later named Killke, recovered.	Rowe 1944:44–46
Qoricancha	During excavations in Qoricancha in the 1970s, Killke ceramics found. Barreda stated that this was the most important ceremonial center of the Killke.	Barreda 1991
Qoricancha	Various Inca enclosures inside the first cloister and patio excavated. Fragments of Killke ceramics found.	Béjar 1990a:68–77
Qoricancha	The Qoricancha terrace excavated. Fragmentary Killke ceramics found.	Personal communication, Raymundo Béjar, 2016
Casa Concha (Santa Catalina Ancha Street)	Archaeological work recovered fragments of Killke ceramics not associated with built structures, but used as fill.	Paz and Allcacontor 2002
Casa Concha (Santa Catalina Ancha Street)	At a depth of 1.20 m, a platform or terrace wall facing northwest was found. This was of ordinary diorite masonry related to the Late Intermediate Period.	Instituto Nacional de Cultura, Cusco 2006:58
620 Intiqawarina Street	In Intiqawarina Street, sections of Killke walls of diorite and sandstone were found. These may have been enclosures reoccupied and reconstructed with andesite during the Inca Horizon.	Rodríguez 2004; Arroyo 2005
Arrayán Street	INC excavations in 1996 identified canals of diorite, terrace walls, and domestic architecture.	Fernández 1999, 2004
Hotel Libertador (San Agustín and Zetas Streets)	Killke wall foundations reported.	González Corrales 1984
608 Avenida Sol	A Killke canal of diorite was found in the lower part of the Qoricancha terrace.	Oberti 1997
Cusicancha	The INC conducted various excavations and found building foundations, stone canals, and human burials.	San Román <i>et al.</i> 2002
Limacampa Grande Plaza	Fragments of Killke pottery found in the archaeological levels.	Benavente 2009
La Compañía	Fragments of Killke pottery found in the deepest levels	Valencia Zegarra 1991a
Plateros Street between 1 st and 2 nd blocks	Fragments of Killke pottery and some diorite blocks re-used in the Colonial-Republican period found.	Villena 2012
Triunfo Street	Excavations at the side of the cathedral revealed Killke and Inca canals	Rossell 2009
Mantas Street	At the corner of Mantas Street and Huacaypata Plaza, at a depth of 2 m below the present surface, adobes built upon a diorite stone foundation were found, together with construction fill and, at the right edge, a diorite fountain.	Porroa 2014; Medina and Salas 2019
Pukamarka at Banco Wiese, 315 & 314 Maruri Street	Foundations of Killke walls found.	Maza 1995
Almagro Street	Scattered Killke fragments found.	Ccansaya 2014
169 Qoricalle Street	Archaeological work found a wall foundation with a single double-bonded course on bedrock, made of different stones, probably from the Killke Period.	Soculaya 2006
298 Choquechaca Street	Archaeological work identified two sections of rustic wall foundations built of mid-sized diorite blocks bonded with mud mortar.	Yarahuaman 2019
Marriott Hotel Santa Catalina Ancha Street	Excavator Irwin Ferrándiz encountered foundations of green diorite and fragments of Killke ceramics.	Visited by Carlos Delgado 2009
Coripata	Fragments in Killke style reported.	Rowe 1944
Coripata	Killke strata found at the base of exposed profiles.	Cumpa 1988
Qhasapatalaqa	Archaeological excavations revealed that this was a Killke settlement. Only the remains of the foundations of rectangular enclosures built of rounded sandstone boulders were found.	Candia 1992, 1995
Muyuqmarka Saqsaywaman	Excavations revealed Killke ceramics defining Phases A, B, and C-D with a C14 date of A.D. 1180±140.	Dwyer 1971
Muyuqmarka Saqsaywaman	Archaeological excavations established 4 types: 1) terrace walls of green diorite, 2) three rectangular diorite enclosures, 3) free-standing walls of limestone and diorite with ordinary bonding. The 4 th type was a rectangular enclosure built of limestone with ordinary bonding.	Lima 2011
Mount Killke	The Pukin and Killke hills southwest of Cusco were surveyed; the Killke site yielded abundant Cusco Polychrome and Canchón pottery.	Rowe 1944:52

Table 1: List of archaeological excavations in Cusco and nearby areas from which Killke material was reported.

Huacas	Ceque	Description	Probable location
Viroypacha	Ch 2:4	"It is a pipe of decent water" [...es un caño de razonable agua...] (Cobo 1956 [1653]: Chapter XIII, p. 16).	Sapantiana (Bauer 2000:59)
Canchapacha	Ch 3:2	"There was a source in Diego Maldonado Street" [Era una fuente que estaba en la calle de Diego Maldonado] (Cobo 1956 [1653]: Chapter XIII, p. 17).	
Ticicocha	Ch 3:3	"There was a source inside the house of the said Diego Maldonado. This source was that of the coya or queen Mama Occlo" [Era una fuente que estaba dentro de la casa que fue del dicho Diego Maldonado. Fue esta fuente de la coya o reina Mama Ocllo] (Cobo 1956 [1653]: Chapter XIII, p. 18).	
Curicollo	Ch 4:3	"It was the house of Curi Ocllo, wife of Amaro Tupa Inca, which was in Colcapata; and they also worshiped a source that was next to it" [Era la casa de Curi Ocllo, mujer que fue de Amaro Tupa Inca, la cual estaba en Colcapata; y adoraban también una fuente que estaba junto a ella] (Cobo 1956 [1653]: Chapter XIII, p. 20).	Colcampata
Aucaypata	Ch 5:4	"It was the main plaza, called Aucaypata, which it also is today" [Era la plaza principal, llamada Aucaypata, que al presente también lo es] (Cobo 1956 [1653]: Chapter XIII, p. 22).	Huacaypata was a swamp
Cajana	Ch 6:5	"It was the palace of Huaynacapac, called Cajana, within which was a lake named Ticcicocha" [Era el palacio de Huaynacapac llamado Cajana, dentro del cual había una laguna nombrada Ticcicocha ...] (Cobo 1956 [1653]: Chapter XIII, p. 25).	Tecsecocha (Bauer 2000:70)
Aucaipata	Ch 8:3	"There was a source named Aucaipata that was next to where the Cabildo is now, in which the priests of Chuncuilla said the thunder bathed" [Era una fuente llamada Aucaipata que estaba junto á donde ahora está la casa de Cabildo en la cual decían los sacerdotes de Chuncuilla que se bañaba el trueno] (Cobo 1956 [1653]: Chapter XIII, p. 27).	López de Velasco noted about a water source in Cusco that "... there is in the middle of the city a source of good water, drawn from half a league away" [Hay en medio de la ciudad una fuente de buena agua, traída de media legua della] (1894: [1571–1574]:479). Bauer proposes that this could correspond to the third huaca of the eighth ceque of Chinchaysuyo, which was located on the northern perimeter of the plaza (2000:75).
Mudcapuquiu	Co 1:2	"There was a small fountain emerging from the houses that were those of Antón Ruíz. They offered it shells, only" [Era una fontezuela que sale debajo de las casas que fueron de Antón Ruíz. Ofrecíanle sólo conchas] (Cobo 1956 [1653]: Chapter XV, p. 45).	At the lower end of Tullumayo Street (Bauer 2000:109).
Pomachupa	Cu 1:3	"There was a flat patch of land in the neighborhood thus named, and from there they made offerings to the two small streams that ran through it" [Era un llano que estaba en el barrio así llamado, y desde allí se ofrecía á aquellos dos riachuelos que por allí corren] (Cobo 1956 [1653]: Chapter XVI, p. 58).	"Pumapchupan: that is, lion's tail, because this neighborhood comes to an end at a point, at two gullies that join there" [Pumapchupan: quiere decir cola de león, porque aquel barrio fenecce en punta, por dos arroyos que al fin dél se juntan] (Garcilaso 1960 [1609]:312).
Pilcopuquiu	Cu 10:1	"The first was a source called Pilcopuquiu, that was in the garden of Santo Domingo" [La primera era una fuente dicha Pilcopuquiu, que está en la guerta de Santo Domingo] (Cobo 1956 [1653]: Chapter XVI, p. 65).	Bauer (2000:149) suggests that this could correspond to the sources that are found in front of the curved wall of the Qoricancha.
Usno	An 5:1	"The first was a stone called Usno that was in the Hurinaucaypata plaza; this was the first huaca to which those who were made orejones would sacrifice" [La primera era una piedra llamada Usno que estaba en la plaza de Hurinaucaypata; era ésta la primera guaca á quien ofrecían los que se hacían orejones] (Cobo 1956 [1653]: Chapter XIV, p. 39).	Located on the left edge of the Tullumayo river in the present Limacpampa Grande plaza.
Uscucalla		"Uscucalla were rounded stones in the Cusco river" [Uscucalla, que eran piedras en el rio del Cuzco, redondas] (Albornoz [1582] in Duviols 1967:26).	Probably found in the Saphy River.

/... continued

Table 2. *Huacas that were fountains, water sources in Inca Cusco, according to historical records.*

Huacas	Ceque	Description	Probable location
Colque Machacuay		“The waters that Cusco has and had are not to be rejected, for that of Colque Machacuay, which means snake of silver, and which is outside Cusco, above the parish of Santiago, is the sweetest, delicious and light” [Las aguas que tiene y tuvo el Cuzco, no son para deschar, porque la de Colque Machacuay, que significa culebra de plata, y esta fuera del Cuzco, encima de la parroquia de Santiago, es dulcísima, sabrosa y delgada] (Murua (2001 [1590]:490).	Behind the church of Santiago to the west of the Inca city.
Ticatica		“Cuzco had other sources of very good water, which was brought in pipes from outside the city, and they called this Ticatica” [Otra fuente tiene y fuentes el Cuzco de muy regalada agua, que se trae en caños de fuera de la ciudad, y dicen Ticatica] ((Murua (2001 [1590]:490).	Found in the city’s neighborhoods to the northwest on Mount Ticatica.
Hancaipata paccha		“...which is a water source that is in the city” [ques una fuente questá en la ciudad] (Albornoz [1582] in Duviols 1967:26).	Probably corresponds to a water source in the same Huacaypata Plaza.

Table 2 (cont'd). *Huacas that were fountains, water sources in Inca Cusco, according to historical records.*

Chronicler	Location	Form	Description	Comments
Juan de Betanzos	In the middle of the plaza of Cusco	Fountain	<p>“... [Inca Yupanqui] had placed in the middle of the square of Cuzco, where the pole of the gallows is now, a stone made like a sugarloaf pointed on top and covered with a strip of gold. He also had this stone worked the same day he ordered the statue of the Sun made” (Betanzos 1996, trans. Hamilton and Buchanan, pp. 47–48).</p> <p>This is followed several lines below by: “When the stone was placed in the middle of the square of Cuzco, first a large hole was made there where all the people of Cuzco, old and young alike, offered to the Sun as many pieces of gold as they saw fit. Afterward, they filled up the hole and built a stone font about one-half estado high.” (Betanzos 1996, trans. Hamilton and Buchanan, p. 48).</p> <p>[...hizo poner en medio de la plaza del Cuzco donde ahora es el royo una piedra de la hechura de un pan de azúcar puntiaguda para arriba y enforrada de una faja de oro la cual piedra hizo así mismo labrar el día que mandó hacer el bulto del sol.]</p> <p>líneas abajo prosigue: [... la piedra se puso en medio de la plaza del Cuzco hizo se en ella un gran hoyo primero donde todos los de la ciudad chicos y grandes ofrescieron al sol las piezas de oro que les pareció y esto ofrescido cerraron el hoyo encima del cual hicieron y edificaron una pila de cantería de altor de medio estado] (Betanzos 1999 [1551]:50–51).</p>	Betanzos describes this as being in the form of a sugarloaf, and notes that afterwards they buried pieces of gold and then built a stone font about one-half estado high (an estado is the height of a standing person, so a half-estado would be approximately 82 cm).
Pedro Cieza de León	Plaza of Cusco (no precise location)	Sugarloaf	<p>“In the main square of Cusco was the war-stone that was large, shaped like a sugarloaf, well wrapped, and full of gold”</p> <p>[...que en la gran plaza de la ciudad del Cuzco estaba la piedra de la guerra que era grande, de la forma y hechura de un pan de azúcar, bien engastada y llena de oro...] (2005 [1554]:352).</p>	Cieza de León does not make specific reference to an <i>ushnu</i> .
Pedro Pizarro			<p>“Then with these pitchers full, they poured [the chicha] onto a round stone they considered to be an idol, in the middle of the square, and they made a small pool around it, from where it was drained through some pipes they had made below the earth. This stone had a golden cover that encased it and totally covered it. Likewise they had made a sort of round hut with mats with which they covered it at night.</p> <p>Where they seated this statue that they said was of the Sun, they had placed in the middle of the plaza a small bench, all decorated with highly painted capes of feathers, and here they placed the statue, with a scone on either side, holding the torch upright. Then they offered food and drink to this sun, in the order in which they feed the dead. Then when they burned the sun’s food, an Indian stood up and cried out so that everyone heard, and hearing his voice, everyone both in and outside the plaza sat down, and without speaking or coughing or fidgeting, waited quietly until the food was consumed by the fire, which did not take long, as the wood was very dry. All the ashes left by these fires were poured into the fountain that, as I said, was in the middle of the plaza, with a stone rounded like a teat from which chicha poured.”</p>	

/...continued

Table 3. Descriptions of the Ushnu in the Huacaypata plaza.

Chronicler	Location	Form	Description	Comments
Pedro Pizarro (continued)			<p>[Pues llenos estos birques, los derramauan en una piedra rredonda que tenian por ydolo, en mitad de la plaza y hecha alrededor una alberca pequena, donde se consumia por unos canos que ellos tenian hechos por deuaxo de tierra. Esta piedra tenía una funda de oro que encaxaua en ella y la tapaua toda, y asimismo tenia hecho una manera de buhuelo de esteras texidas, rredondo, con que la cubrian de noche.</p> <p>Para donde asentauan este bulto que ellos dezian hera el sol, tenian puesto en la mitad de la plaza un escano pequeno, todo guarnescido de mantas de pluma muy pintadas, y aqui ponian este bulto, y el un hachero de una parte y el otro de la otra, teniendo la hacha derecha. Pues dauan de comer a este sol por la horden que tengo dicho la dauan a los muertos, y de beuer. Pues quando que-mauan la comida del sol, leuantauase un yndio y daua una voz que todos le oyan, y oyda la boz, todos quantos auia en la plaza y fuera della se sentauan, y sin hablar ni toser ni menearse, estauan callados hasta que se consumia la comida que echauan en el fuego que tenian hecho, que no tardaua mucho, por ser la lena muy seca. Todas estas cenizas que quedauan de estos fuegos que hazian, las echauan en este pilon que digo estaua en mitad de la plaza y piedra rredonda a manera de teta donde echauan la chicha] (1978 [1571]:Chapter XV).</p>	
Cristóbal de Molina	In the middle of the plaza of Cusco	Fountain	<p>“In the middle of the square was the gold usño in the shape of a fountain where they sacrificed chicha” [...en la plaza en medio della a do estaua el usño de oro que hera a manera de pila a donde hechauan el sacrificio de la chicha...] (2008 [1573]:155).</p>	Indicates that it is an <i>ushnu</i> and, at the same time, a fountain
Anonymous			<p>“They called the September moon Cituaquilla. In that month all the Indians from the region gathered in Cusco, and all came together in the main plaza, called Haocaypata, and there they sacrificed to the Sun with many ceremonies, at a stone pillar in the middle of the plaza, with its theater called Osno, and they sacrificed animals and fine clothing and many other things, and they poured much chicha on the foot of the theater, saying that they offered these to the Sun” (1906 [1565]:158).</p> <p>“Thus, to take the point of the Sun, between the two fountains in the middle, there was another fountain in the middle of the plaza, of very well worked stone and about an estado high, at a place marked for this purpose, that they called Osno, and from there they took the point of the Sun between the two fountains, and being adjusted, it was the general time to plant in the valleys of Cusco and its region” (1906 [1565]:151).</p> <p>[La luna del mes de setiembre llamauan Cituaquilla. Este mes se juntauan en el Cuzco todos los indios de toda la comarca, y juntos todos en la plaza principal, llamada Haocaypata, y allí hazían sus sacreficios al Sol con muchas cerimonias, en vn pilar de piedra que tenían en medio de la plaza, con su teatro llamado Osno, y los hazfan de corderos y rropas de precio y otras muchas cosas, y al pie del teatro vertfan mucha chicha; dezían que la ofrescían al Sol] (1906 [1565]:158).</p>	<p>The Anonymous Chronicler indicates that he had not seen what was in the middle of the plaza, and that he wrote what others had told him.</p> <p>Probably when he refers to the middle, he was on the boundary between Huacaypata and Cusipata.</p>

/...continued

Table 3 (cont'd). Descriptions of the Ushnu in the Huacaypata Plaza.

Chronicler	Location	Form	Description	Comments
Anonymous (continued)			[Es así, que, para tomar el punto del Sol, entre los dos pilares de en medio, tenían otro pilar en medio de la plaza, pilar de piedra muy labrada, de vn estado en alto, en vn paraje señalado al propósito, que le nombrauan Osno, y desde allí tomauan el punto del Sol en medio de los dos pilares, y estando ajustado, hera el tiempo general de sembrar en los valles del Cuzco y su comarca.]	
Cristóbal de Albornoz		Fountain	“Usno was a fountain made of gold where the Sun drank in the plaza.” [Usno era un pilar de oro donde bevian al Sol en la plaza] (Albornoz [1582] in Duviols 1967:26).	
Bernabé Cobo	Hurin Huacaypata	Stone	“The fifth ceque was named Payan, in which there were ten huacas. The first was a stone named Usno that was in the Hurinaucaypata Plaza; this was the first huaca to which those who had been created <i>orejones</i> made offerings.” [El quinto ceque tenía por nombre Payan, en que había diez guacas. La primera era una piedra llamada Usno que estaba en la plaza de Hurinaucaypata; era ésta la primera guaca á quien ofrecían los que se hacían orejones] (1956 [1653]: Chapter XIV, p. 39).	This was not found in Huacaypata, but in the present plaza of Limacpampa Grande.

Table 3 (cont'd). Descriptions of the Ushnu in the Huacaypata Plaza.

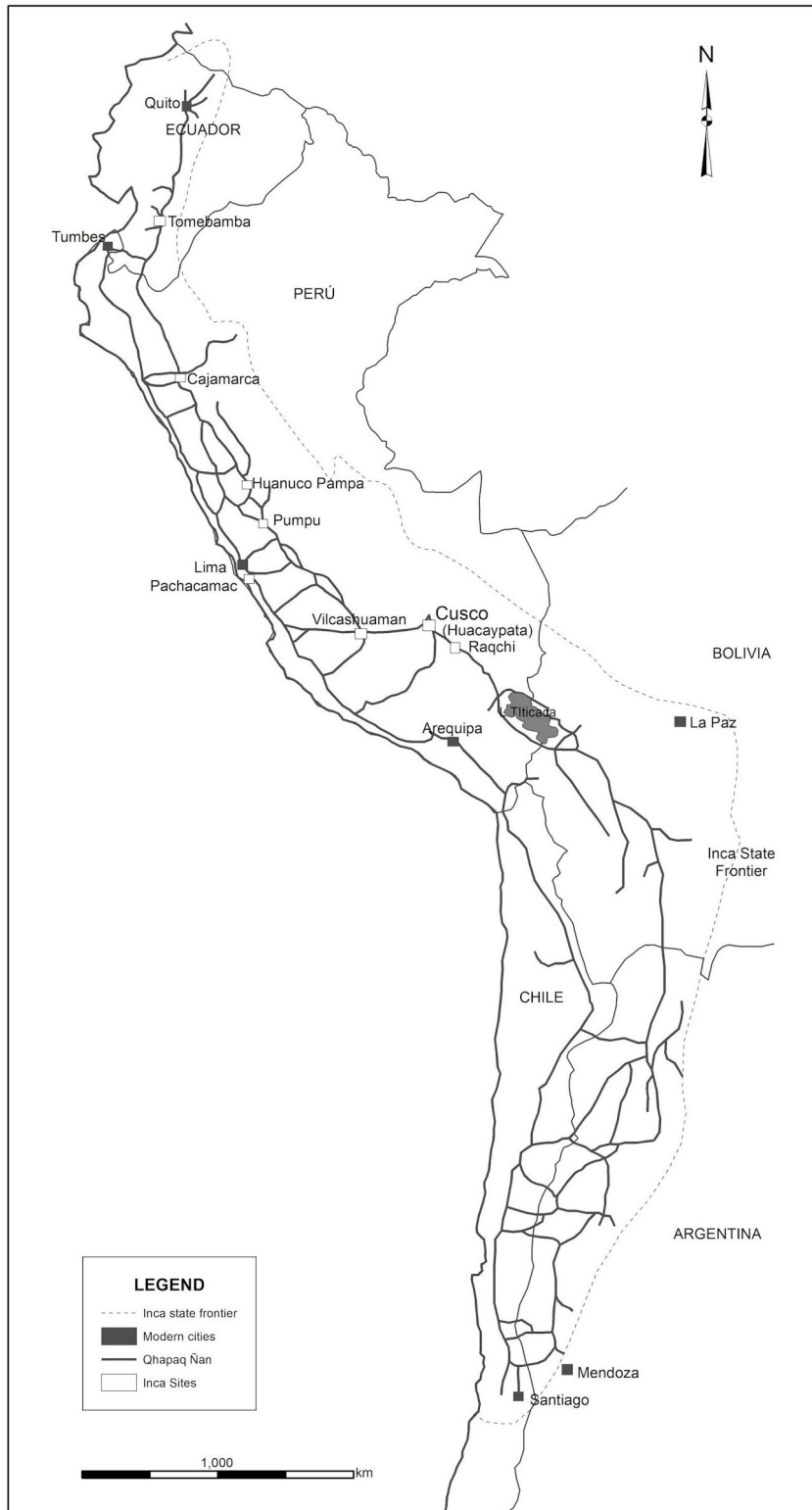


Figure 1. Map of Tawantinsuyu showing important Inca settlements.

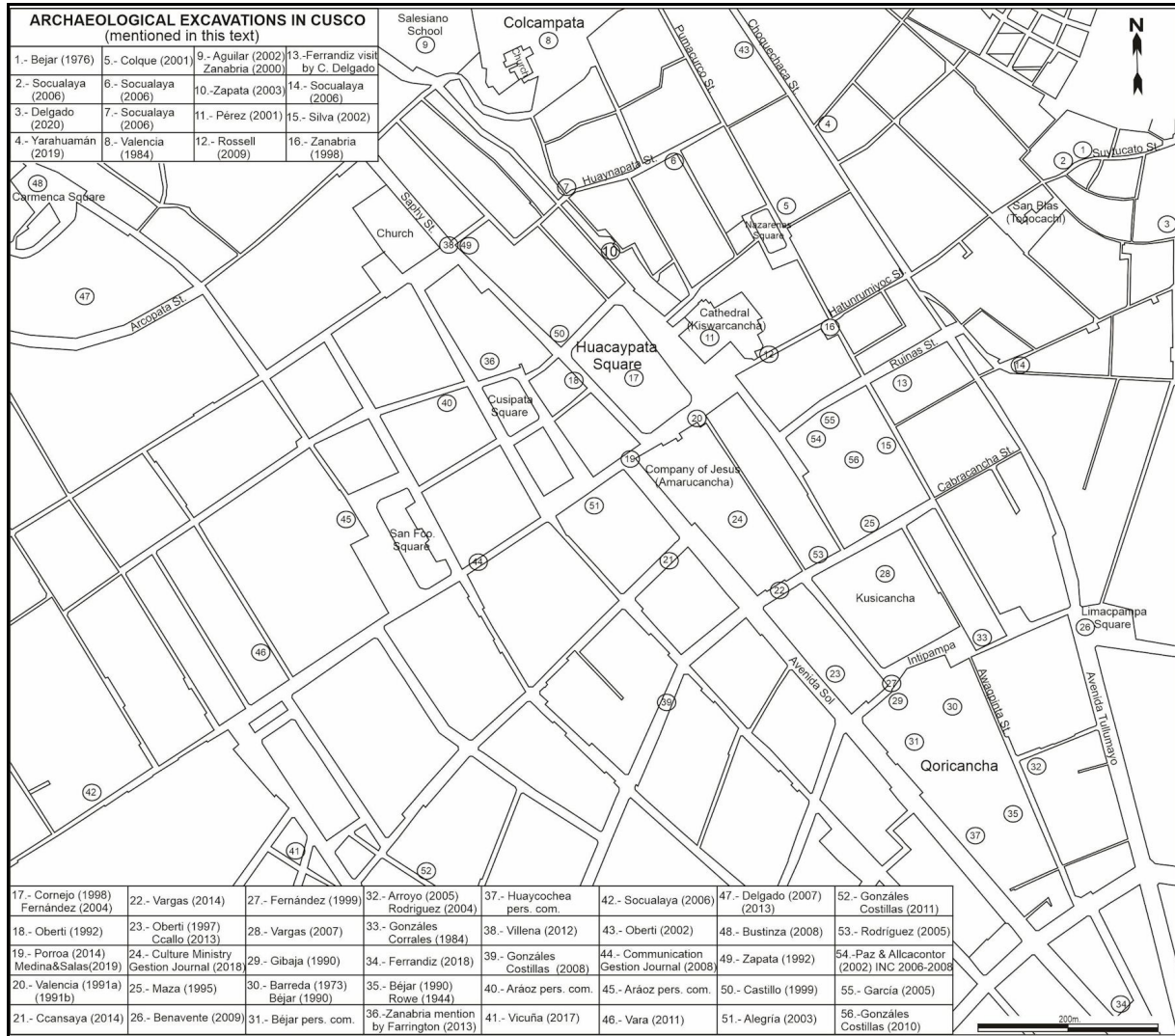


Figure 2. Plan of the center of Cusco showing the locations of archaeological excavations mentioned in this article.

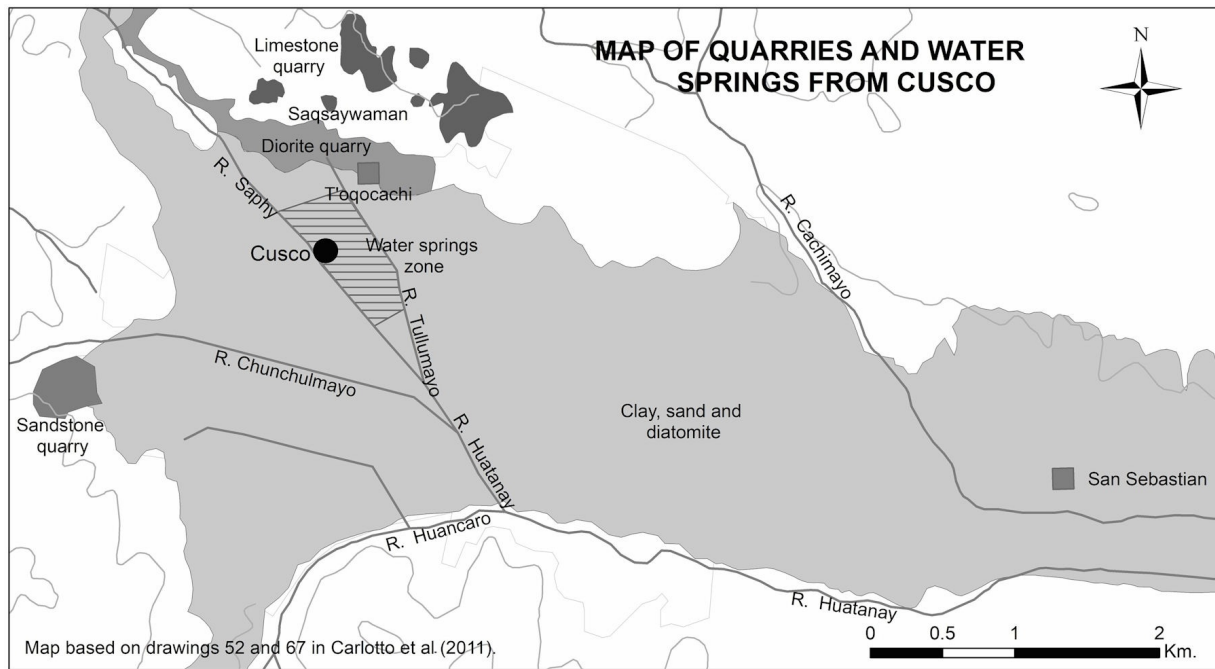


Figure 3. Map showing the locations of quarries used by the Incas and the extent of the aquifer in the area of the Huatanay River.

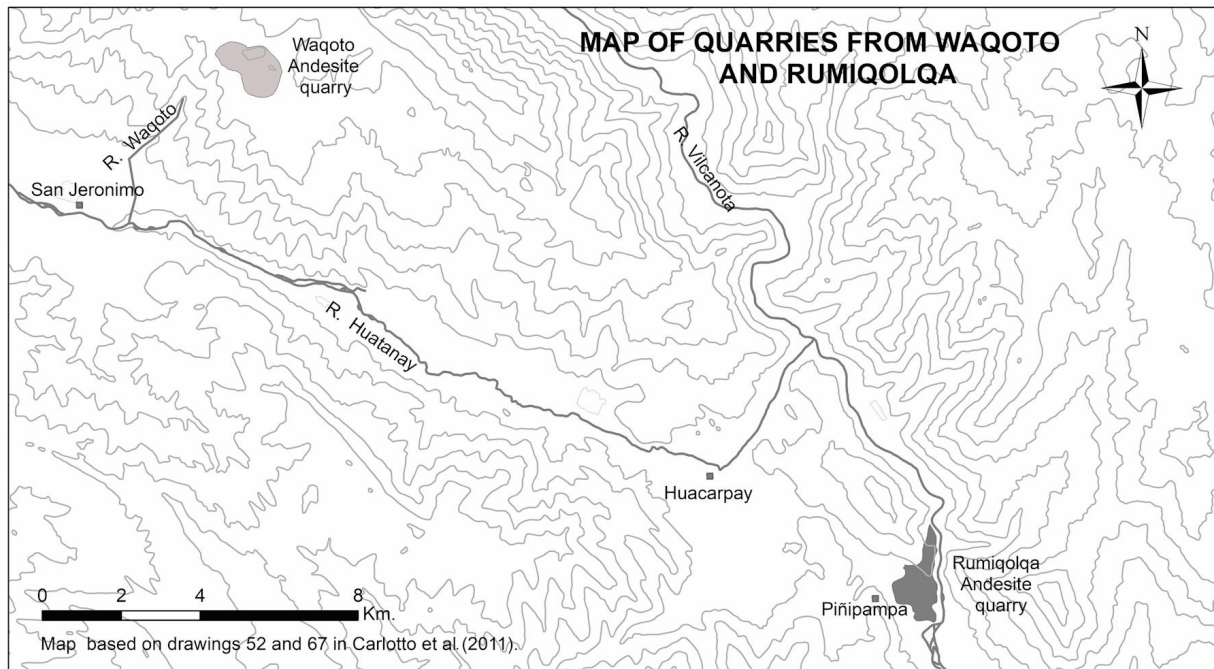


Figure 4. Waqoto and Rumiqolqa quarries in the valleys of the Huatanay and Vilcanota Rivers.



Figure 5. View of the corner of an Inca street that bisected Pampa del Castillo Street. To the viewer's right is a Transitional wall. Below the dotted line is the wall's foundation.

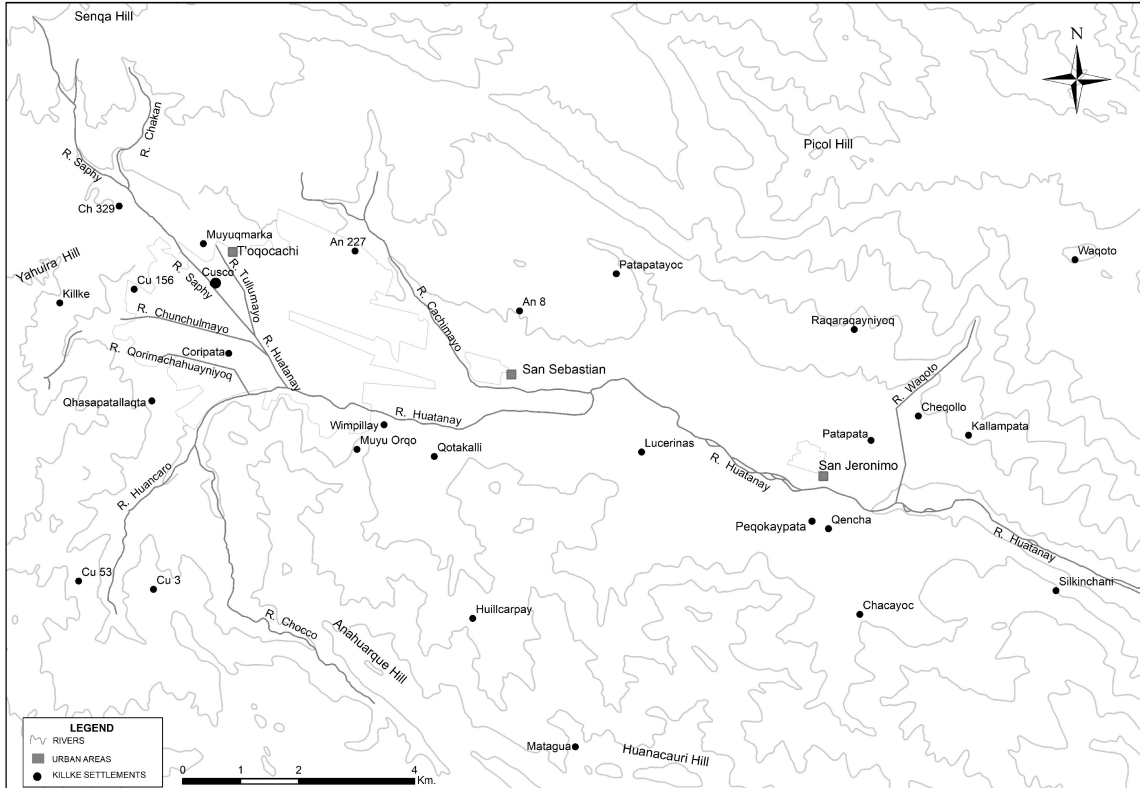


Figure 6. Map of the Huatanay Valley showing Killke settlements.



Figure 7. View of the canalization of the Saphy River. Photo courtesy of the Fototeca Andina, Centro Bartolomé de las Casas. Photograph by Hermanos Cabrera, c. 1920.



Figure 8: Wall of the canalization of the Saphy River between Plateros Street and the Huacaypata Plaza. Photograph courtesy of Benigno Zamalloa.



Figure 9: View of the canalization of the Tullumayo River. Photograph by Max Uhle, 1915.

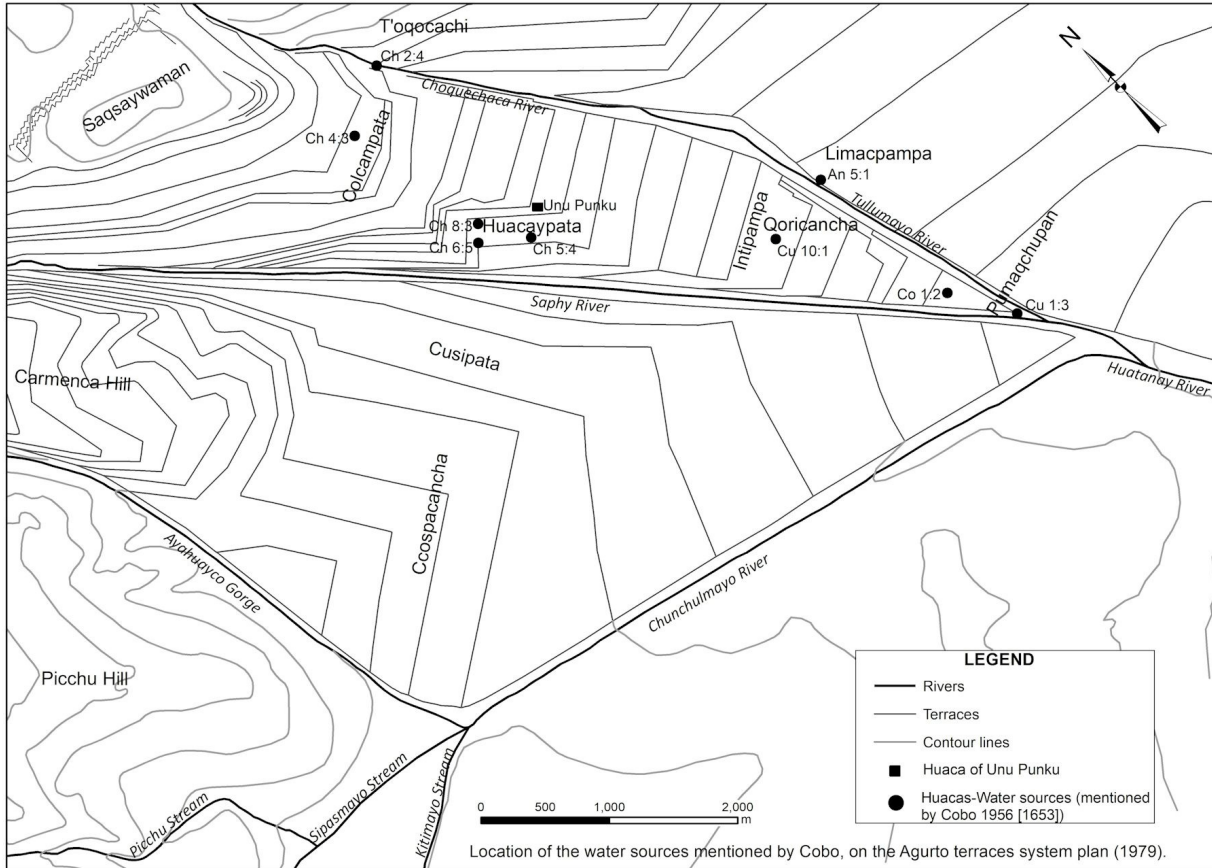


Figure 10. Plan of the form of Cusco with its terraces and water sources as mentioned by Cobo.



Figure 11. The palace of Inca Roca (Hatunrumiyoc) was constructed with blocks of green diorite.



Figure 12. Green diorite wall over a sandstone wall.
The dotted lines indicate how the original terrace was cut in order to open the street.



Figure 13. The corner of *Awaq̄pinta* Street with a green diorite veneer. The dotted line marks the original street level. Below it the foundation can be seen. The green diorite corner on the right must have been demolished when the Santo Domingo monastery was built over the *Qoricancha*.



Figure 14. View of Romeritos Street.



Figure 15. Stone terrace wall that formed part of the exterior of the Qoricancha.

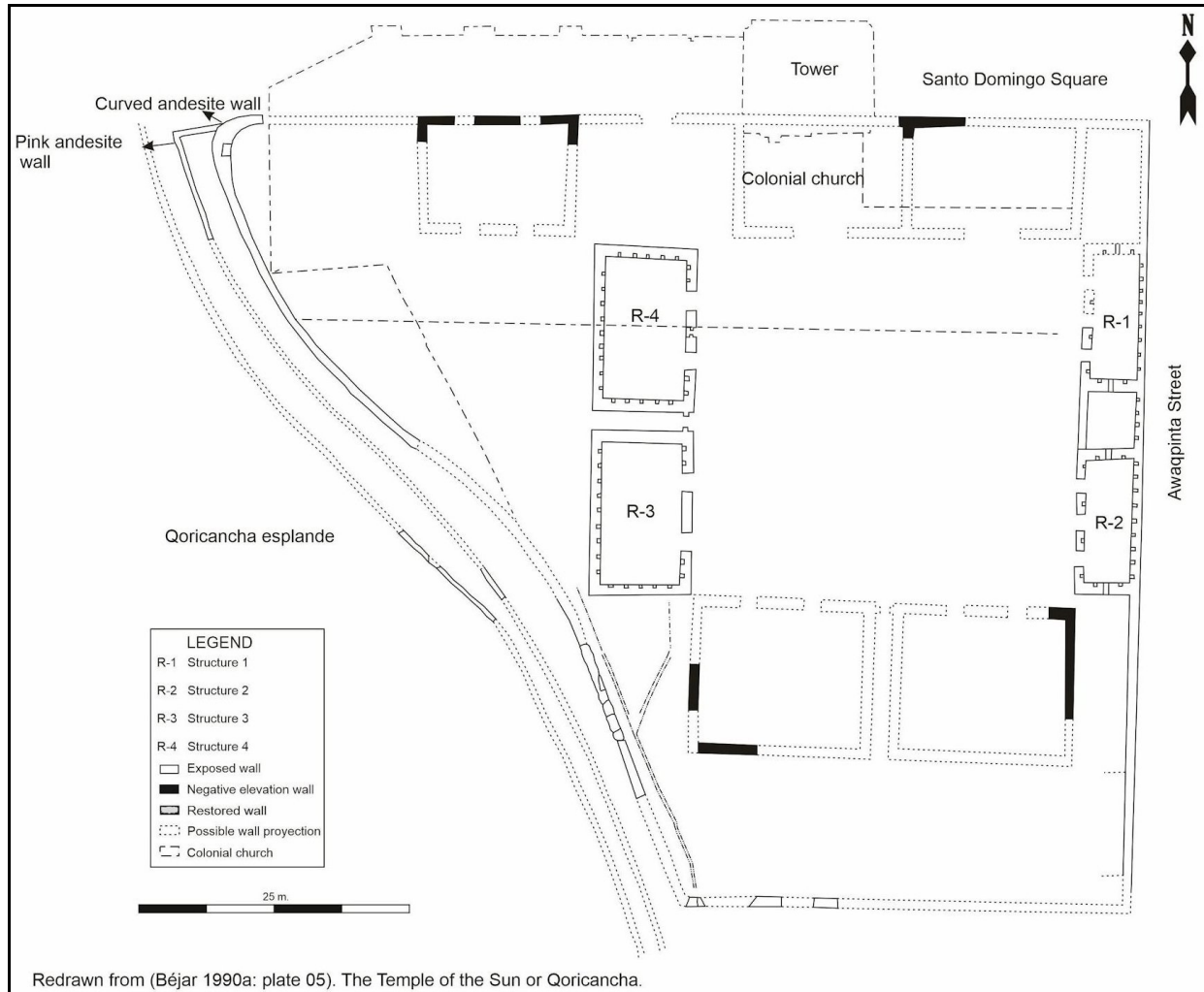


Figure 16. Hypothetical plan of the Qoricancha.



Figure 17. The curved andesite wall of the Qoricancha stands on a stone terrace made of pink andesite. The colonial walls reused diorite blocks.



Figure 18. Awaqinta Street.



Figure 19. Inca andesite wall on Awaq̄pinta Street. Note the green diorite foundation, the original foundation of the Qoricancha, above the andesite wall. Present day street level is below the Inca street level.



Figure 20. Colcampata with Saqsaywaman in the background. Photo by Max Uhle, 1915.

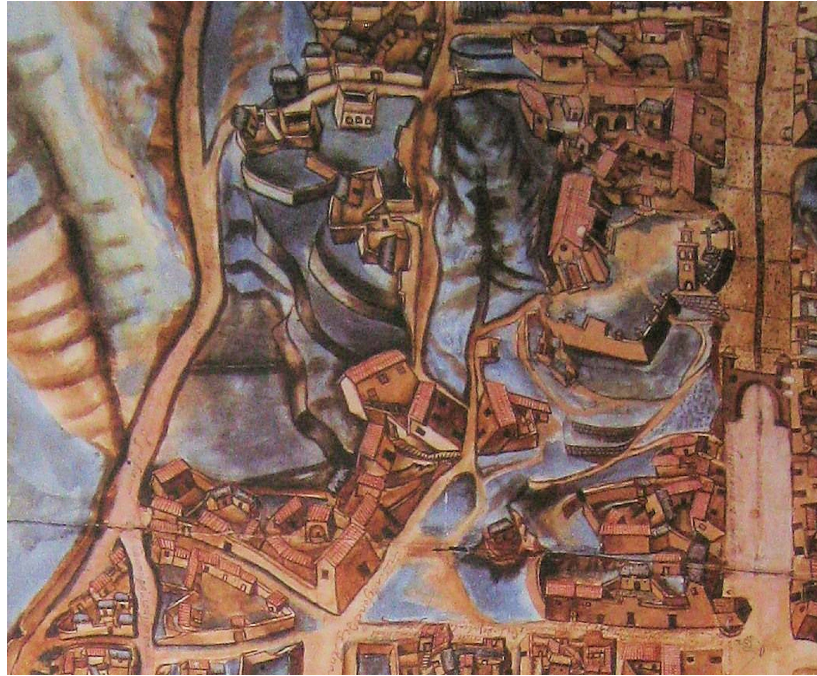


Figure 21. Detail of the slope of Arcopata and the Carmenca neighborhood showing terraces (from Rowe 1989).



Figure 22. Plan of the area between the Chunchulmayo River and the Santa Clara Church (from Rowe 1989).



Figure 23. The Huacaypata and Cusipata Plazas.

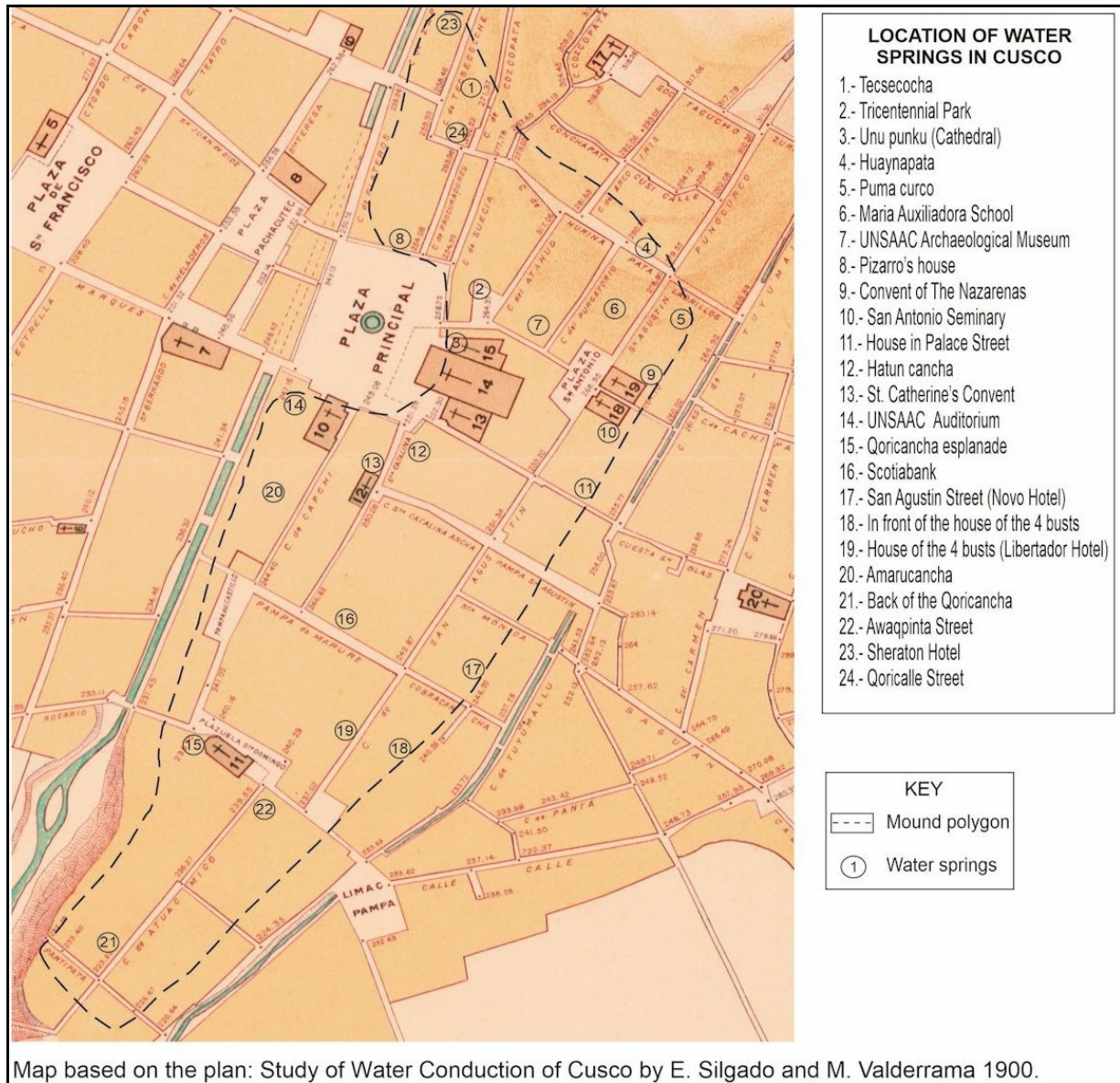


Figure 24. Plan by Enrique Silgado and Mauro Valderrama noting altitudes. From this one can see that there is not a great difference in altitudes in the area enclosed by the dotted line, which corresponds to the mound or pata. The numbers enclosed in circles mark the locations of springs.



Figure 25. Inca platform with an andesite wall running north-south beneath Mantas Street.

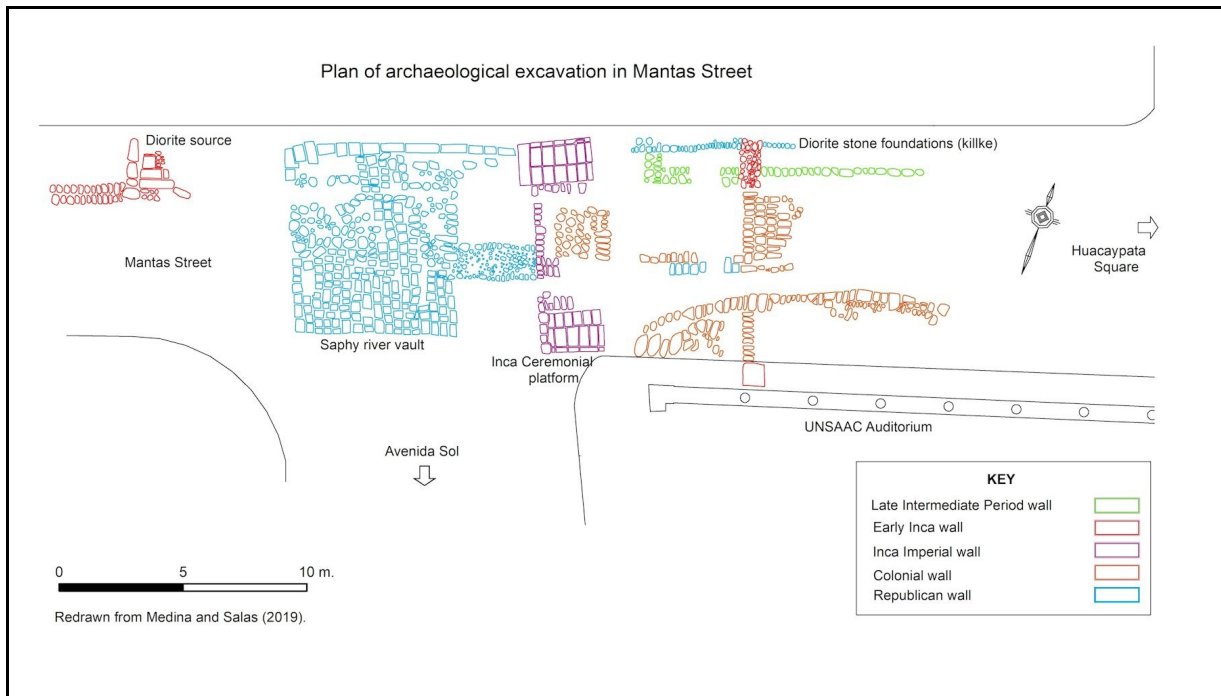


Figure 26. Plan of the excavation beneath Mantas Street.

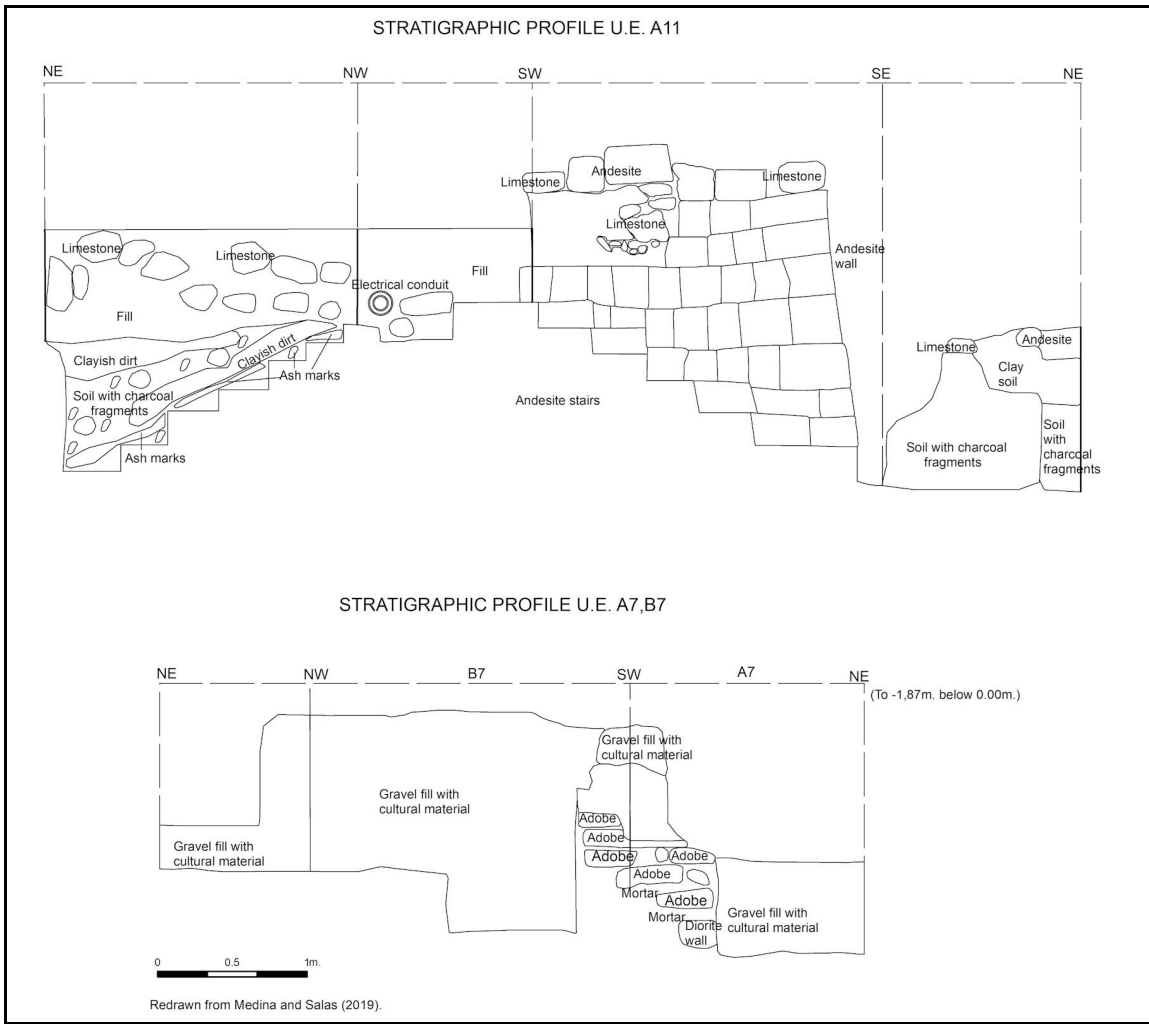


Figure 27. Profile of the excavation beneath Mantas Street.



Figure 28. Stairway abutting the platform that was covered with earth, ash, and charcoal.



Figure 29. Detail of the blockage of the Inca wall canal.



Figure 30. Detail of the blockage of the right stairway with andesite ashlars.



Figure 31. Detail of the Late Intermediate Period (Killke) wall.



Figure 32. Limestone Inca wall cut by the colonial structure made from reused andesite blocks.



Figure 33. Inca diorite structure on the right bank of the Saphy River.

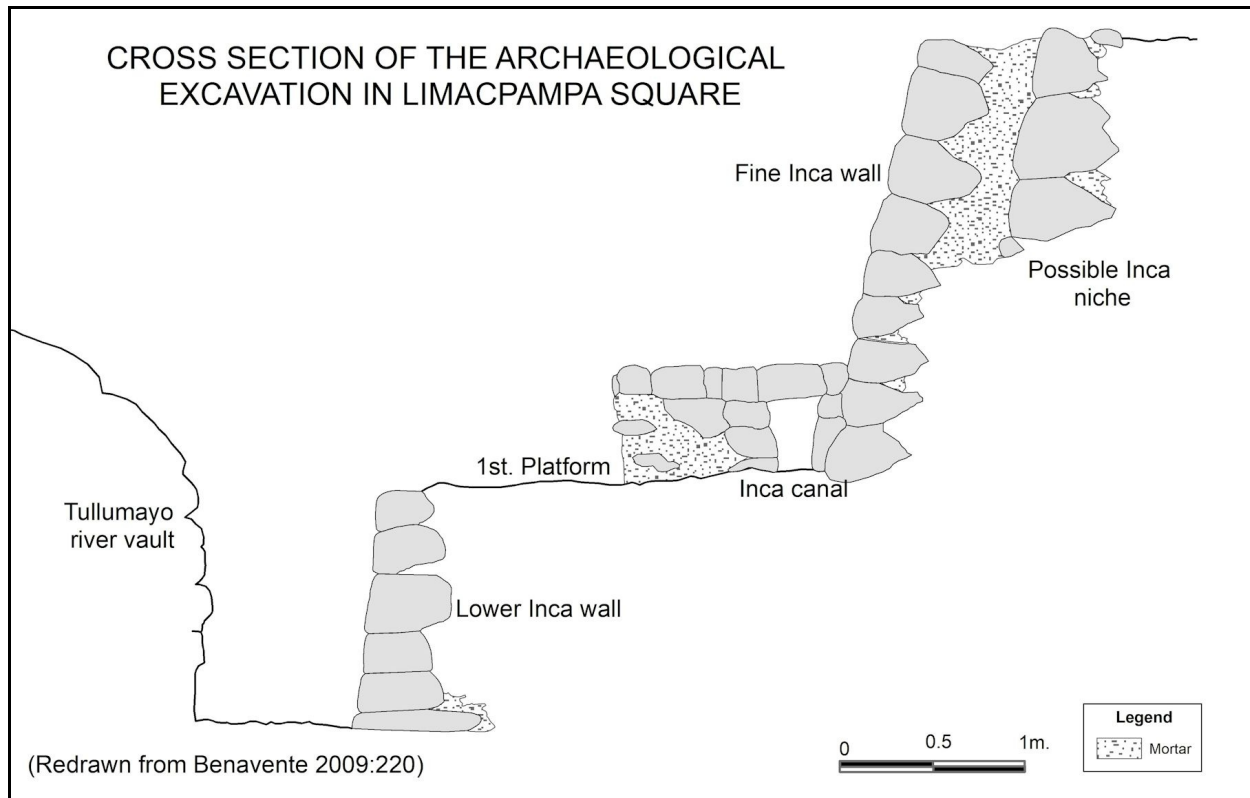


Figure 34. Section of the Inca structure of the Limacpampa Plaza.