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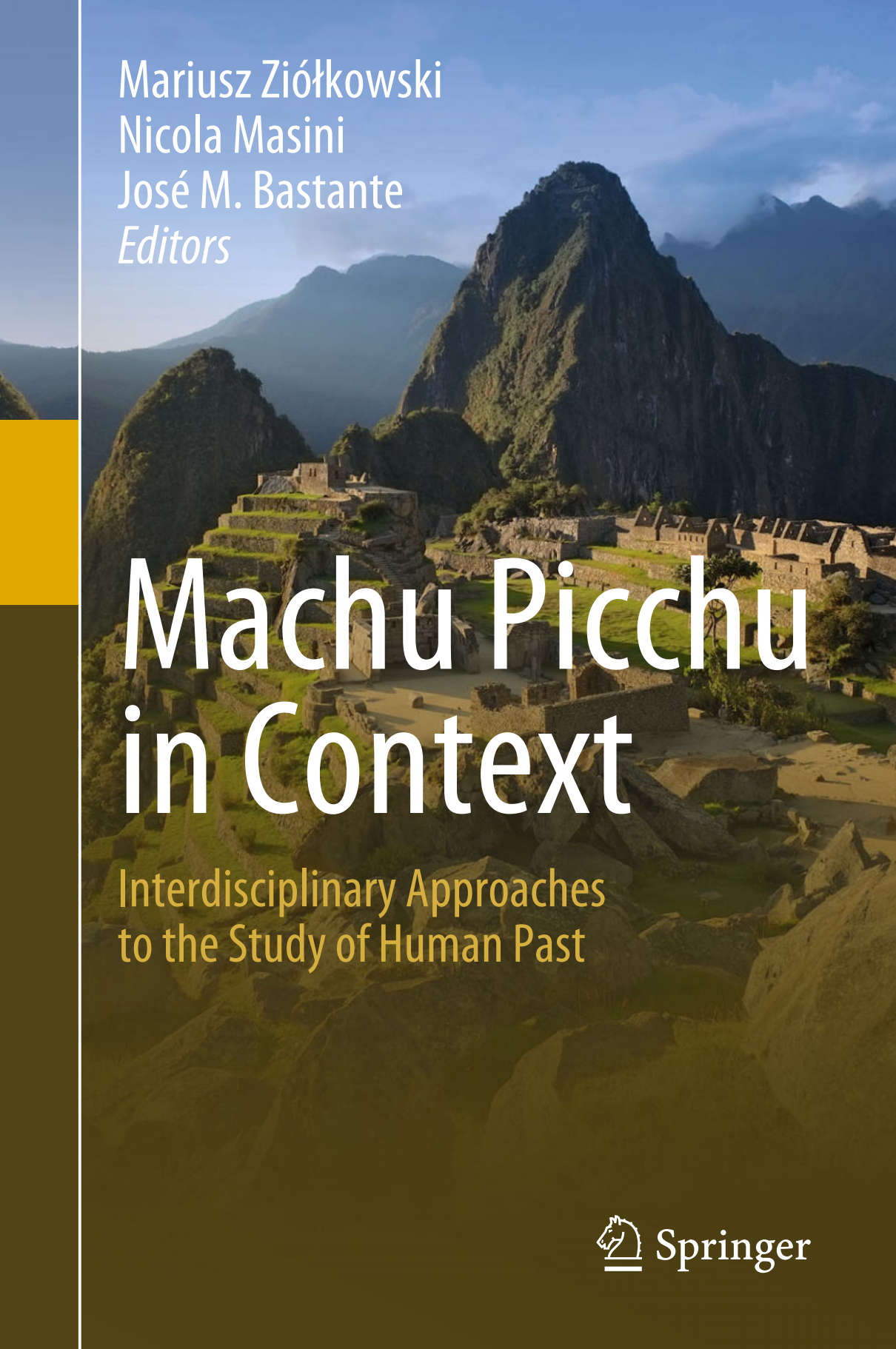

Machu Picchu in Context

Interdisciplinary Approaches to the Study of Human Past

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Chapter 14
Quillcas in the Historic Sanctuary-National Archaeological Park of Machu Picchu: A New Line of Evidence for the Earliest Occupancy of the Middle Vilcanota Basin

Gori-Tumi Echevarría López and José M. Bastante

Abstract The article examines a set of petroglyphs, which were identified in the Middle basin of the Vilcanota river in the area of the Historic Sanctuary-Machupicchu National Archaeological Park (SHM-PANM). It is argued that, due to their technomorphological characteristics, these quilcas make up a defined artifactual and diagnostic group of evidence for the SHM-PANM archaeology. Based on this consideration, the authors establish that these artifacts form part of the cultural assemblage of the earliest occupation of the area, related to the Marcavalle civilization.

Keywords Quilcas · Archaeological context · Marcavalle · Isla Chico · Machupicchu

14.1 Introduction

A series of archaeological findings, carried out since 2017 in the SHM-PANM, has provided a very particular group of quilcas or petroglyphs, which are concentrated in the middle basin of the Vilcanota river, towards the vicinity of the Mizkipukio and Chakimayo rivers, and to the interior of the Isla Chico archaeological site. These materials can be found exposed to the open air, but since—the excavations in Isla Chico in 2019, they were registered in stratigraphic correlation, as part of archaeological contexts associated with the oldest occupation of the site; which is related to Marcavalle-type pottery.

The quilcas of Isla Chico, found in an archaeological context, were contrasted with two groups of quilcas registered in the Marcavalle archaeological site during the excavations carried out at this site between the years 2014–2015, and 2018. The result of this analysis allowed defining that the quilcas from both sites make up the

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same particular type of evidence, whose artifactual characteristics included formal and technological variables. Having established the definition of the artifact, it is considered that these quilcas constitute an archaeological diagnostic material of the first complex occupation of the SHM-PANM.

Due to the context of the quilcas of Isla Chico, at the beginning of the recognized archaeological occupation of the site, it is proposed to include them within the sequence of quilcas of the SHM-PANM, which was made on the basis of pictograms. It is probable that the studied quilcas -t'oqos and beveled lines- do not constitute the oldest sample of quilcas of the SHM-PANM, but they are one of the earliest, inscribed within the general tradition of abstract-geometric representations registered in the area.

14.2 Background

Archaeological researches at the SHM-PANM are one of the priorities of the Decentralized Directorate of Culture of Cusco, which has allowed us to learn more about human occupancies in the area and their cultural complexity. These researches are carried out in the form of interdisciplinary studies, which since 2014 have been in charge of examining the Machupicchu Llaqta, and the other monuments or archaeological sites in the scope of the SHM-PANM such as Patallaqta, Machuq'ente, Qoriwayrachina, Isla Chico and Choqelluska (Bastante 2016). These researches, in conjunction with archaeological work carried out in other parts of the region, have provided important cultural data, and greatly expanded our historic reference framework to understand the historic-social processes in the area of the SHM-PANM.

In view of the need to specify the associations of this of archaeological evidence, since 2017 we carried out a prospection in order to determine the existence and variety of archaeological monuments with quilcas, based on which it was possible to document 43 sites of this type (Fig. 14.1, Table 14.1); where petroglyphs and pictograms from different archaeological periods are included, as well as colonial samples (Astete et al. 2016; Echevarría López and Bastante 2019; Bastante and Echevarría López 2019). These findings make up a considerable and new volume of information for the SHM-PANM, and in general for any archaeological area circumscribed in the Cusco Region.

The results of the prospecting were preliminarily analysed, using sites with complex graphical evidence as a basis, which allowed establishing a general sequence of 29 production phases, and at least nine graphical periods for the entire park (Table 14.2). This sequence, establishes a minimum and preliminary reference for this type of graphic production recognized in the SHM-PANM, but not for their duration or its full temporal spectrum.

In chronological terms, the sequence achieved is not very indicative yet, which is due to the lack of diagnostic elements for a safe temporary determination. In this

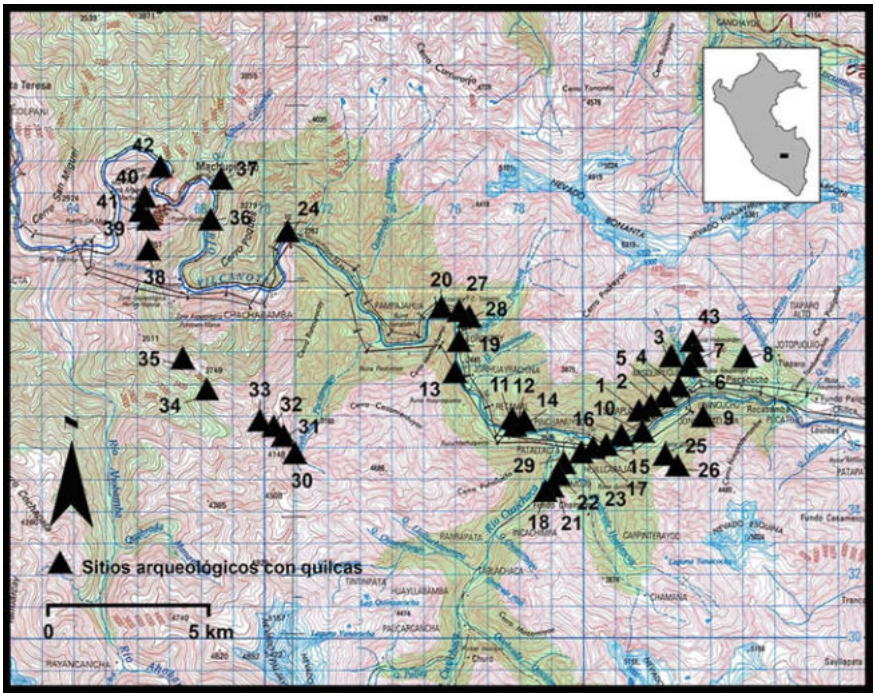

Fig. 14.1 Location map of the SHM-PANM quilcas sites. Based on the National Charter 27q and 27 r. Esc. 1: 100,000. According to the list of sites mentioned in Table 14.1

sense, the only time marker reached was obtained for period V, phase 18, of the sequence, which consisted of a pictorial scene from the Inka period (Figs. 14.2 and 14.3), (Echevarría López and Bastante 2019), the same one that is included in a complex graphic overlay context. As can be inferred, the chronological relationship of the sequence with the Inka pictorial phase marks an intermediate point in a long cumulative process, which still needs to be better understood in its temporality.

Due to the chronological limitations of the sequence and the lack of other time references, it is understood that there is much room for progress on these issues; especially in the chronological aspect, which is fundamental in order to establish the cultural context of the quilcas of the SHM-PANM. As will be seen later, new researches in archaeological monuments of Cusco and Machupicchu, can shed important light on the matter.

14.3 The Quilcas of Isla Chico in the SHM-PANM

The Isla Chico archaeological site is one of the most remarkable sites of the SHM-PANM (Fig. 14.4). It is located on the north hillside, right bank, of the Vilcanota

Table 14.1 List of archaeological sites with quilcas located in the SHM-PANM)

Site	Name	Characteristics	Chronology
S1	Salapunku	Pictograms and t'oqos	Precolonial
S2	Machay Salapunku	Pictograms	Precolonial
S3	Moqowasapoma	Petroglyphs	Precolonial
S4	Salapunku Terrace	Petroglyphs	Precolonial
S5	Salapunku Vano	T'oqos	Precolonial
S6	Miskipukio 1	Pictograms	Precolonial
S7	Miskipukio 2	Linear Petroglyphs and t'oqos	Precolonial
S8	Ayapata	Pictograms	Precolonial
S9	Yawarwaka	Pictograms	Precolonial
S10	Riel Salapunku	Pictograms	Modern?
S11	Qoriwayrachina 1	T'oqos	Precolonial
S12	Qoriwayrachina 2	Pictograms	Precolonial
S13	Pampaqhawa 1	Pictograms and t'oqos	Precolonial
S14	Qoriwayrachina 3/Cruces	Pictograms	Colonial
S15	Cruz Meskay	Pictograms	Colonial
S16	Qanamarka	Pictograms	Modern
S17	Wilkaraqay Tumba	Pictograms	Precolonial
S18	Tunasmoqo 1	Pictograms	Precolonial
S19	Ñam Torontoy	Petroglyphs	Precolonial
S20	Pampaqhawa 2	Pictograms	Precolonial
S21	Tunasmoqo 2	Pictograms	Precolonial
S22	Tunasmoqo 3	Pictograms	Precolonial
S23	Ñam Mizcay-Wilkaraqay	T'oqos	Precolonial
S24	Cedrobamba	Pictograms	Precolonial
S25	Qarpamayu 1	Pictograms	Precolonial
S26	Qarpamayu 2	Pictograms	Precolonial
S27	Pampaqhawa 3	Pictograms	Precolonial
S28	Pampaqhawa 4	Pictograms	Modern
S29	Tunasmoqo 4	Potholes	Natural
S30	Warmiwañusqa	Pictograms	Precolonial/colonial
S31	Runkuraqay 1	Pictograms	Precolonial
S32	Runkuraqay 2	Pictograms	Colonial
S33	Runkuraqay 3	Pictograms	Colonial
S34	Sayaqmarka	Pictograms	Modern?
S35	Ch'akiqocha	Pictograms	Colonial
S36	Parawachayoq	Pictograms	Precolonial

(continued)

Table 14.1 (continued)

Site	Name	Characteristics	Chronology
S37	Inkaterra	Pictograms	Precolonial
S38	Pachamama	Pictograms/Petroglyphs	Precolonial
S39	Roca de la Serpiente	T'oqos/Petroglyphs	Precolonial
S40	Roca del Sol	Petroglyphs	Precolonial
S41	Roca de los T'oqos	T'oqos/Petroglyphs	Precolonial
S41	Qollpani	Pictograms	Precolonial
S43	Miskipukio 3	T'oqos	Precolonial

River, at kilometer 81.7 of the Cusco–Machupicchu railway (Fig. 14.5). The site is a multicomponent deposit, with one of the longest occupation sequences in the park (Echevarría López and Bastante, Ms), which includes Marcavalle-type evidence at one end, while at the other, there is the testimony of Inka occupancy. The main characteristic of the site is the change and transformation in the use of space over time.

For our purposes, the earliest occupation is of enormous relevance, as it shows a complex set of cultural evidence, including architecture, burials, ceramics, lithic elements, quilcas, and middens. In several cases, this evidence is articulated in such a way that it is clear that these form domestic units; such as those found in excavation units 23 and 27 (Figs. 14.6 and 14.7), which were executed in 2019. The data obtained allow us to infer that the quilcas were part of the set of artifacts related to the first domestic occupation of the site.

The researches and works during the years 2019 and 2020, allowed discovery of six places with quilcas, at platforms 16a (IC1), 34 (IC2), 36 (IC3), 37 (IC4), 48 (IC5), and 54 (IC6) (see Fig. 14.4), which are added to the three sites registered by us in the prospecting works of 2017, which are the Moqowasapoma site on the right bank of the Cachimayu River (Fig. 14.8), and the Miskipukio 2 and Miskipukio 3 sites (Fig. 14.9) on the left bank of the Mizkipukio River; all adjacent to Isla Chico (see Fig. 14.1). The quilcas of platforms 34 and 36 (Figs. 14.10 and 14.11) were the only ones found in sealed -not altered- contexts, which provided the necessary contextual information to establish the cultural relationship of these artifacts.

The quilcas of Isla Chico, including the three sites of the 2017 prospect, are characterized by containing t'oqos and incised lines (Table 14.3). Three sites show lines exclusively, three show t'oqos and three show both features. All these marks are made on shale, a soft metamorphic rock, which allowed the characteristic manufacture of this evidence. The context of inclusion of the quilcas is varied, but this variation is due to the process of change in the settlement over the years. Apart from quilcas IC2 and IC3, the quilca with t'oqos of IC4 (platform 37) was found in a secondary context (Fig. 14.12), while those of the other spaces (IC1, IC5 and IC6) have been integrated into the late cultural landscape of the area, having been covered by sediments and lichens over the years (Fig. 14.13).

Table 14.2 Production sequence of quilcas (pictograms) for the SHM-PANM

Period[a]	Phase	Archaeological sites and formal groups[b]								General characteristic
		T2	S	P1	T1	Q3	I	Par	Pac	
IX[c]	29					X				Geometric abstract; Calvary Cross and Latin Cross with diagonal appendixes
VIII	28	19	3	8						Geometric abstract; motifs with painting in area
–	27	23			2/3		4?		1?	Geometric abstract; sinuous and thick lines Geometric abstract; concentric circles with linear appendixes
	26	21								Geometric abstract; straight, short and diagonal lines (with possible zoomorphic)
	25	24								Geometric abstract; outlined rectangles
VII	24	17		7						Geometric abstract; linear, straight, long and short paired lines
	23	18		7	1					Geometric abstract; dotted lines
	22	22								Geometric abstract, straight lines and dots
VI	21	20	2	5						Geometric abstract; continuous wavy lines of square corners
–	20			4						Geometric and seminaturalist abstract; simetric shapes, anthropomorphic lines and designs on bands
	19			3						Geometric abstract, linear and curved of thick stroke

(continued)

Table 14.2 (continued)

Period[a]	Phase	Archaeological sites and formal groups[b]								General characteristic
		T2	S	P1	T1	Q3	I	Par	Pac	
V	18	13								Geometric and seminaturalist abstract; anthropomorphic in red colour and representative shapes(frets)
IV	17	25								Geometric abstract; rectangular arc lines
	16	12								Geometric abstract; simple linear forming square spaces
	15	15								Geometric abstract; trapeze with painting on area and outlined shape
	14	7								Geometric abstract; linear, curves and triangular shapes
	13	6					3			Geometric abstract: pairs of opposite triangles Geometric abstract; triangle with rounded corners and rectangle, painting on area
	12						2			Geometric abstract, composite figures in closed geometric shapes, linear composite squares
	11						1			Geometric abstract, composite figures with straight and curved lines, open shapes
–	10	8								Geometric and seminaturalist abstract; anthropomorphic, linear and other motifs of irregular workmanship

(continued)

Table 14.2 (continued)

Period[a]	Phase	Archaeological sites and formal groups[b]								General characteristic
		T2	S	P1	T1	Q3	I	Par	Pac	
III	9	14	1							Seminaturalist;anthropomorphic with outstretched arms and fingers
II	8	3/11		1				1		Seminaturalist; big zoomorphic, trunk with painting on area
	7			6	5					Seminaturalist; zoomorfo grande, línea irregular
	6	2			4					Seminaturalista; zoomorphic with proportionate body oriented to the left, head with ears
	5	4								Seminaturalist; zoomorphic
	4	1								Seminaturalist; zoomorphic with wide elongated body, stylized
	3	5								Geometric abstract, seminaturalist;irregular zoomorphic and linear shape
I	2	10								Geometric abstract; thick, linear and irregular
	1	9								Geometric abstract; composite linear, thin stroke

Note. Taken from Bastante and Echevarría López (2019)

[a]Main cultural periods in the production of quilcas

[b]Abbreviations of the archaeological groups: T2 (Tunasmoqo 2); S (Salapunku); P1 (Pampaqhawa 1); T1 (Tunasmoqo 1); Q3 (Qoriwayrachina); I (Inkaterra); Par (Parawachayoq); Pac (Pachamama)

[c]Row fill colour:

– Dark grey: jumps in graphic trends in quilcas production
– Light grey: blocks or graphic trends in quilcas production
– White: particular moments in the production of quilcas

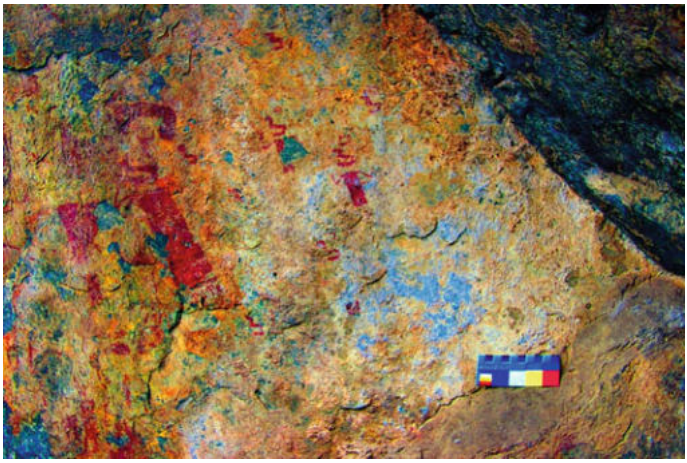

Fig. 14.2 Part of panel 4 with quilcas from Tunasmoqo 2 archaeological site showing a scene of the Inka period.
Photograph by Gori-Tumi 2020, processed with DStrech

The most characteristic detail of this evidence, in the case of the lines, is the type of sharp and beveled incision that has produced them, leaving a very characteristic V imprint. This line begins slightly at the ends and reaches its greatest depth towards the centre of its entire length, where it is noted that the greatest drag and cut force was produced. In all cases, this trait can be observed, especially in the IC2 and IC3 sites, which remained buried and free of lichens and erosion (Figs. 14.14 and 14.15). A microscopic view even reveals the production stretchmarks of the sharpened tool that was used to generate the quilcas. The t'oqos were produced by simple direct percussion (Fig. 14.16); and if we consider the stone from excavation unit 23 (IC2), these marks were made after the incised lines were produced at some of the sites (see Fig. 14.14).

Due to the location, stratigraphic, technical, and formal evidences, it is inferred that we are facing the same graphic phenomenon, which, because of a direct contextual relationship, corresponds to the oldest occupancy of Isla Chico, whose associated pottery is culturally linked to the Marcavalle civilization of Cusco.

14.4 The Quilcas of Marcavalle

Marcavalle is one of the most important archaeological sites in southern Peru, and constitutes the type monument for the first human occupancy with pottery of the Huatanay valley in Cusco (Fig. 14.17). Although its discovery and research began in the 1950s, it was only in 2013 that the monument received systematic archaeological attention from the DDC-Cusco (Monrroy 2019), which allowed a significant

Fig. 14.3 Detail of the central personage of the scene from the Inka period of Tunasmoqo 2 archaeological site. Photograph by Gori-Tumi 2020, processed with DStrech

expansion for the comprehension of this civilization and its socio-cultural processes, which had been based almost exclusively on ceramographic analysis (Mohr 1977).

There were two findings at Marcavalle that, for our purposes, are extremely important. The first was made between 2014 and 2015, and consisted of two stones with t'oqos and incised lines that were part of a multiple funerary context (CF 138C), (Fig. 14.18); materials that were only analysed in 2016 (Echevarría López and Monrroy 2019). A second finding was made in 2018, it consisted of a stone with incised lines recovered in feature R7002 from unit 7 excavated that same year (Fig. 14.19). The entire set of materials represents a specialized type of artifact, which needs to be examined in more detail.

The quilcas of FC 138C consisted of two sandstone rocks, with rounded edges approximately 50 cm in diameter, which were found completely covered by t'oqos and natural holes (Fig. 14.20). The t'oqos, of different dimensions, were produced by simple percussion with an apparently random distribution. Due to the difference in patina on the faces, it is inferred that these artifacts were used by alternately exposing their surfaces, that is, when the piece changed position in its original context of use.

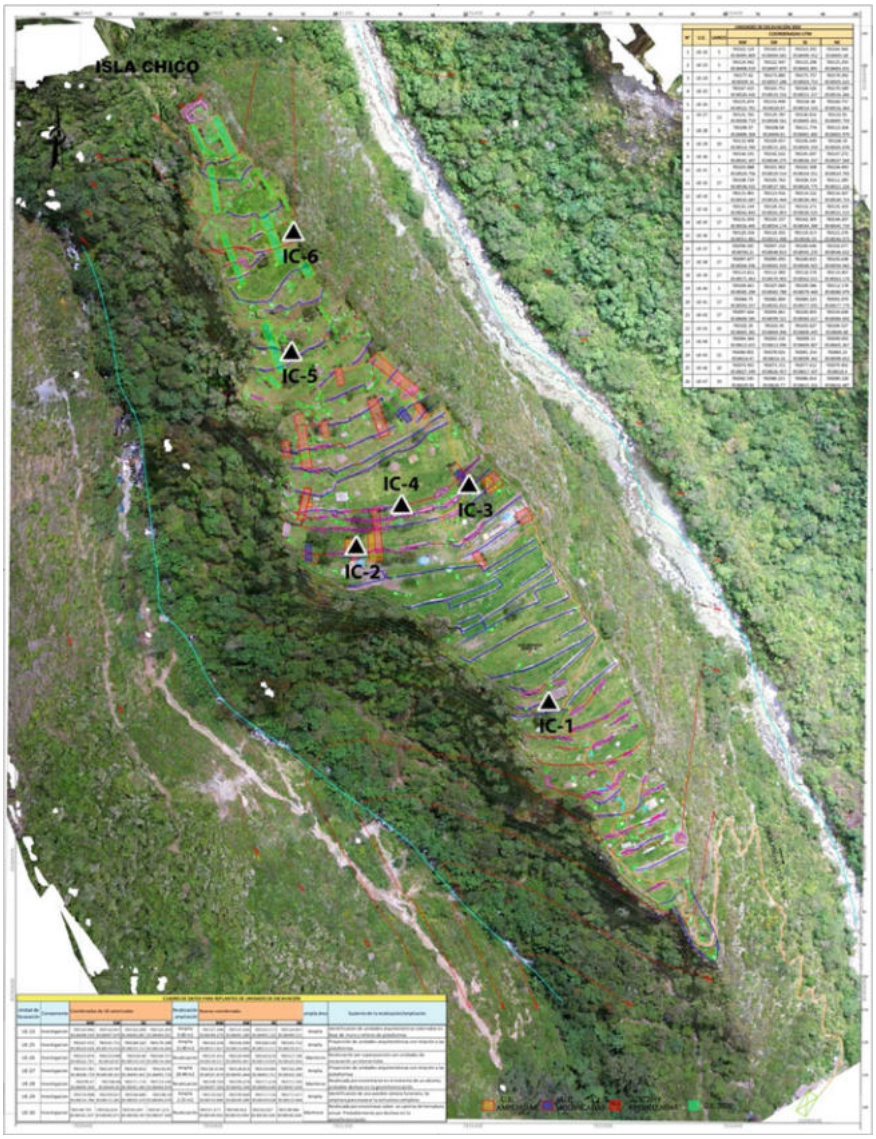

Fig. 14.4 Map of Isla Chico AS (PANM), based on drone image. The map includes the distribution of the quilcas sites

Only one of the rocks showed an area with beveled cutting incisions, which was overlapped by some t'oqos. These incisions had a general diameter of approximately 3 to 4 cm (Fig. 14.21) being arranged in a parallel and convergent manner. Due to their poor conservation, some of the lines have lost their beveled stroke, but this can be inferred through the marks that have better preserved this characteristic. In

Fig. 14.5 Location map of Isla Chico AS (PANM)

Fig. 14.6 Excavation unit 23 of Isla Chico AS (PANM), showing a partial domestic unit from the Formative Period. The largest stone on the left in the centre of the image contains quilcas. Photograph by Gori-Tumi 2019

Fig. 14.7 Excavation unit 27 of Isla Chico AS (PANM), showing a complete domestic unit from the Formative Period where the conservation of the architecture of the time stands out. Photograph by Gori-Tumi 2019

this sample, the concentration and the formal parameter of the lines stand out, which seem to have been displaced by the massive production of t'oqos after their first uses; which is deduced by the superposition of marks. Thus, the lines were relegated to a marginal section of the rock.

In the case of the second sample, as mentioned above, it was recovered from excavation unit 7, where it was documented in association to an architectural context (Fig. 14.22). The artifact was found embedded in mortar, associated with other unmarked stones, apparently forming part of a wall-type structure. The lithic, also made of sandstone, showed a flat exposed surface of 19 cm in diameter, which was covered by 9 straight, parallel, and diagonal lines, most of which showed a technical manufacture of a V-shaped beveled incision. In this case, the technical detail is extremely clear, which can be noticed in the longest diagonal line, the bevel of which is inclined, highlighting the right wall of the canal; and on the major horizontal line, which intersects all the other straight and parallel lines (Fig. 14.23).

As in the case of the previous example, the technical feature is unmistakable. When this piece was removed, another incised line with the same characteristics was found on the opposite surface, which indicates that we are, as in the previous case, in front of a movable artifact, which has changed its position for use. This particular detail allows establishing a functional relationship with the quilcas found in the funerary context; one of which also contains beveled incised lines on one of its facets.

The archaeological context of correspondence of these artifacts is, without any discussion, that of the initial or formative settlement of Marcavalle (1100–700 BCE), which is linked to a very characteristic pottery (for a reference to the pottery complexity see Mohr 1977). For our purposes, it is important to consider that the

Fig. 14.8 Linear quilcas from Moqowasapoma archaeological site (PANM). Photograph by Gori-Tumi 2018

Marcavalle site presents a unique cultural occupation context, which, beyond the stratigraphic complexities (Echevarría López et al. 2019), has not been disturbed or altered; this means that the temporary correspondence of the quilcas is uniform and definite.

Fig. 14.9 Outcrop with t'oqos from Mizkipukio 3 archaeological site.
Photo by Gori-Tumi 2020

Fig. 14.10 Rock with t'oqos and lines (IC2), exposed in excavation unit 23.
Photo by Gori-Tumi 2019

14.5 The New Evidence and the Quilcas Sequence of the SHM-PANM

Before proposing a temporary situation for the quilcas that we are examining, we must establish that we are facing the same cultural phenomenon, which, from the anthropological point of view, represents a particular type of temporary related behaviour. This graphic object has a limited typological variation (lines and t'oqos) and a very

Fig. 14.11 Rock with lines (IC3), exposed in excavation unit 26. Photo by Gori-Tumi 2019

Table 14.3 List of sites with quilcas registered in Isla Chico SA (PANM) and their surroundings, including their characteristics and discovery context

Site	Quilcas		Context
	T'oqos	Lines	
Moqowasapoma		X	Free (outcrop)
Mizkipukio 2	X	X	Free (outcrop)
Mizkipukio 3	X		Free (outcrop)
IC1		X	Free (outcrop)
IC2	X	X	Stratigraphic
IC3		X	Stratigraphic
IC4	X		Secondary
IC5	X	X	Free (outcrop)
IC6	X		Free (outcrop)
Total	6	6	–

defined parameter of properties, especially of shape and manufacture. To these artifactual properties, we add the association and the archaeological context that, as we have seen for Isla Chico and Marcavalle, consists of undisturbed spaces assigned to the Formative Period.

The finding and recording of this evidence has allowed, in turn, to contextualize the quilcas that were registered exposed to the open air at Isla Chico and surrounding areas, and that for this reason have suffered physical-chemical and biological degradation; the latter characterized mainly by the growth of lichens. However, the technical and formal relationship between the quilcas of the entire

Fig. 14.12 Rock with t'oqos surrounding a natural concavity (IC4), placed as the top of a retaining wall, corresponding to enclosure 13 of Isla Chico. The rock is in a secondary context.
Photograph by Gori-Tumi 2019

Fig. 14.13 Rock with t'oqos and lines (IC5) on a rock outcrop, which was found covered with soil and sediment.
Photograph by Gori-Tumi 2020

Fig. 14.14 Detail of a grouping of lines and t'oqos on rock at IC2 site, found in excavation unit 23. Note the beveled character of the lines.
Photograph by Gori-Tumi 2019

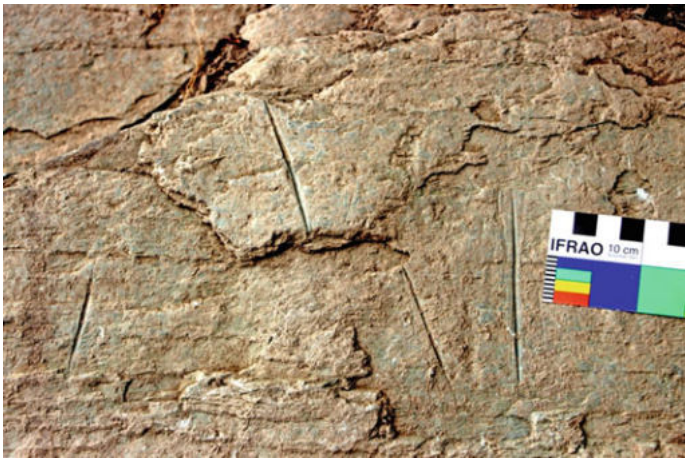

Fig. 14.15 Detail of a grouping of incised lines on rock, exposed at the IC3 site, found in excavation unit 27. Note the beveled character of the lines.
Photograph by Gori-Tumi 2019

sample is consistent, due to their features and peculiarities, which allows us to hypothetically recognize that these graphic evidences were produced under the same cultural parameters.

Archaeologically speaking, the quilcas of Isla Chico are the only evidence of their kind in the SHM-PANM that have been found in an undisturbed stratigraphic context, which places them so far as the oldest of the SHM-PANM. Although this

Fig. 14.16 Detail of a grouping of t'oqos produced by percussion on the rock at the IC5 site. Photograph by Gori-Tumi 2019

allows incorporating a new temporary reference to estimate longevity for the general production of quilcas in the area, its relationship with the sequence proposed for the SHM-PANM (Bastante and Echevarría López 2019) is still uncertain; mainly because this sequence was built entirely with pictograms. The exclusion of all the sites with t'oqos (see Table 14.1), was due to the fact that there was no archaeological evidence to allow us to establish a defined cultural or temporary correlation with the pictorial contexts that are shown in the sequence (see Table 14.2).

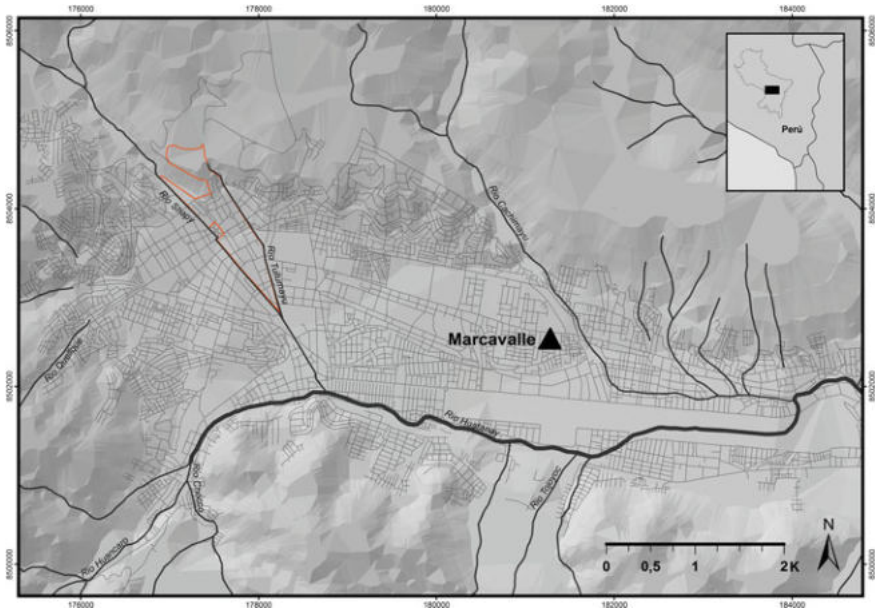

Fig. 14.17 Location map of the Marcavalle archaeological site. Marcavalle Project 2017

Fig. 14.18 Funerary context 138C, Marcavalle archaeological site. Note the rock with t'oqos associated with the skeletal remains.
Photography by Luz Marina Monrroy 2015

Fig. 14.19 Feature 7018, rock with incised linear quilcas. Marcavalle archaeological site. Photograph by Gori-Tumi 2018

Up to this point, however, it is clear that the Isla Chico findings allow the creation of a fairly regular corpus of graphical evidence, and the Ñam Mizcay-Wilkaraqay site could join this corpus, as its t'oqos are related to those of Isla Chico at the level of support and technical-formal features. From the representative point of view, we are facing a consistent assemblage of an abstract-geometric character.

In the sequence (Table 14.2) an alternation between stages of abstract-geometric and seminaturalist representation (zoomorphic and anthropomorphic) can be seen, with a historical trend of an abstract-geometric nature. If the quilcas of Isla Chico are

Fig. 14.20 Two rocks with t'oqos and incised lines excavated between the year 2014 and 2015 in the funerary context 138C, recovered in 2016 at Marcavalle archaeological site. Photograph by Gori-Tumi 2016

Fig. 14.21 Detail of the beveled incised lines of one of the rocks with quilcas recovered in FC 138C, Marcavalle archaeological site.
Photograph by Gori-Tumi 2018

Fig. 14.22 Structures discovered in excavation unit 7, Marcavalle archaeological site. In the central part of the image, right structure, the quilca was found embedded in the mortar. Photograph by Gori-Tumi 2018

part of this trend, then it can be considered that the t'oqos of this site correspond to the first phases of the sequence; at least from period 3, after phase 8. This latter phase linked to the representation of zoomorphic motifs with painting in area (Fig. 14.24). As it is understood, this is a preliminary assignment since it can be expected that some pictorial evidence could be much older than that of the quilcas of Isla Chico, which have been made in a soft stone such as shale. The t'oqos that we have examined in the SHM-PANM only imply an early stage of quilca production, the oldest from the

Fig. 14.23 Detail of the quilca, whose exposed surface was found covered with beveled incised lines (feature 7018), discovered during the excavations of unit 7 of the Marcavalle archaeological site. Photograph by Gori-Tumi 2018

Fig. 14.24 Quilca (pictogram) corresponding to phase 8, period II of the general sequence of quilcas of the SHM-PANM. Panel 1 of Pampacahua 1 archeological site.
Photograph by Gori-Tumi 2017, processed with DStrech

point of view of a particular archaeological excavation, but they are not necessarily the oldest graphic evidence of the area.

14.6 Discussion

The quilcas have been, for a few years, a novelty in the archaeological discussion of the SHM-PANM. This material, although known since 1912 (Bingham 1913), has never been a diagnostic cultural element for local archaeology, nor has it been used to make historical inferences. This is basically due to the lack of interest of archaeologists and researchers in endowing this artifact with the properties that allow its heuristic use. Since 2017, the works and findings made by PANM researchers have changed this reality, incorporating quilcas into the archaeological and historical discussion of Machupicchu, as well as promoting their academic value.

As we have already mentioned, the quilcas are not a novelty, but their contextual definition in the archaeology of the area is. The discovery of a particular type of quilcas, located between the Mizkipukio and Chakimayu basin, both in the open air and in sealed archaeological contexts, formed the first key corpus for the archaeological characterization of the evidence, the same that was contrasted with the findings made in the archaeological monument of Marcavalle in Cusco. This has made it possible to carry out an artifactual formalization of the material, and in turn, determine the context of cultural articulation of the artifact. In conjunction with Marcavalle, the technical definition allows considering these evidences as a diagnostic artifact of the earliest occupation of the SHM-PANM, with implications in the establishment of cultural and temporary relations at the regional level.

The situation of this type of quilcas, beveled incised lines and t'oqos, both in sealed contexts and outdoors, is linked to the long and voluminous process of transformation of the cultural landscape of the SHM-PANM, at least since the Early Formative Period (circa 1800–1000 BCE) in which the oldest assemblages of artifacts related to the Marcavalle culture are verified. As can be inferred from the excavations, these quilcas were covered by sediments from other times until the colonial era, and outside these contexts, they were kept exposed on isolated supports, away from the zones where the spatial changes happened by the successive human occupations of the area.

Although we are clear that these quilcas are from the Marcavalle epoch, that is, they correspond to the Formative Period of Cusco, their inclusion within the general sequence of quilcas of the SHM-PANM is complicated. This sequence has not taken petroglyphs into account due, as we have already mentioned, to the minimal formal and technological relationship between this type of quilcas and the pictograms, but mainly to the lack of a temporary parameter of relation between these materials. Now that we know that these quilcas are part of the cultural assemblage of the Marcavalle era in the PANM, it is considered possible to estimate a reference point for their inclusion in this series.

The sequence of quilcas of the SHM-PANM with 29 production phases is the longest in Cusco and, however, it does not have a diversified chronological tie. Nevertheless, this sequence can be considered of great antiquity, due to its complexity and the poor state of conservation of its earliest phases. Although it can be estimated that the t'oqos and beveled lines of the SHM-PANM are contemporary or are within one

of the initial phases of pictogram production, due to its geometric abstract language, it cannot be asserted that we are facing the initial phase of quilcas in the area.

The "taphonomic threshold", that is, the moment when the rock art evidence begins to appear (Bednarik 2007: 163), is at the moment, for the t'oqos and beveled lines, in the Early Formative Period, but this does not have to be the same for the pictograms, whose conservation is not conditioned by the same physical and environmental aspects of the petroglyphs. The most famous examples of pictograms in the Andes are more than five thousand years old (Ravines 2015), so another chronology can be expected for the early phases of pictograms in the SHM-PANM, whose cultural assemblage probably didn't survive.

The fact that these assemblages of quilcas exist is something very relevant to the archaeological occupation of the SHM-PANM, and exposes cultural dynamics about which there was no previous knowledge, especially for such an early time in the cultural history of the area. As has been seen, petroglyphs are not excluded to the pictograms production, and we must understand these materials as a formal variation of a deeply rooted and defined cultural behaviour, which needs to be better investigated.

14.7 Conclusions

We consider that this work has shown that quilcas are a very important material for the archaeology of the SHM-PANM, being also culturally complex; especially due to the contextual variation in the archaeological association of this evidence for the Formative Period of Cusco. The petroglyphs are a socially standard artifact, so they form part of the cultural assemblage of the first human occupations of the SHM-PANM that are related to the Marcavalle civilization, whose known centre is in the Huatanay valley in Cusco.

Due to its formal and technological specialization, the quilcas of Isla Chico—t'oqos and beveled incised lines—make up a very particular and defined artifactual set, which allows considering this material as a diagnostic artifact, both chronologically and culturally. This is supported not only by its intrinsic properties but also by its stratigraphic situation, which has been clearly exposed during the excavation work at the Isla Chico and Marcavalle archaeological sites. This gives the material a very important status in the archaeology of Cusco, whose usefulness for making historical inferences must be better considered.

Due to the advances of the researches in the quilcas of the SHM-PANM, it is not possible to continue considering these artifacts as a disaggregated and insignificant element of the cultural landscape of Cusco and southern Peru, but as a promising material, and as a new line of evidence to gain a better understanding of our past.

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