PONTIFICIA UNIVERSIDAD CATÓLICA DEL PERÚ ESCUELA DE POSGRADO



BETWEEN ADOPTION AND REFUSAL: EUROPEAN OBJECTS AT VILCABAMBA, THE LAST STRONGHOLD OF THE INCA RESISTANCE (1537-1572)

Tesis para optar el grado de Magíster en Arqueología con mención en Estudios Andinos que presenta

ALICE KATE MERRY

Dirigido por

DR. MARCO CURATOLA PETROCCHI

San Miguel, 2021

ABSTRACT

Vilcabamba was the site of the final stronghold of the Inca resistance for nearly forty

years from 1537 until 1572. Though it has often been thought of as an isolated region

during this period, interactions between the Inca and Spanish play an important part in its

history. This thesis explores how these interactions are reflected in the material culture of

Vilcabamba, by examining European and European-style objects at Vilcabamba,

including glass objects; scissors; other metal objects such as nails, latches, hinges and

tools; tiles; and ceramics.

These objects are analysed on the basis of both archaeological and historical evidence,

including documentation of explorations and excavations conducted at Vilcabamba, from

Hiram Bingham's first explorations of the site in 1911 to recent excavations conducted

from 2008 to 2010 by Javier Fonseca Santa Cruz and by Brian S. Bauer and Miriam Aráoz

Silva, as well as the chronicles of Antonio Bautista de Salazar (1867 [1596]), Martín de

Murúa (2008 [ca. 1616]), Baltasar de Ocampo Conejeros (2013 [1611]), and Diego

Rodríguez de Figueroa (1910 [1565]).

From a Spanish perspective, European objects brought to Vilcabamba represented careful

gift-giving as part of delicate diplomatic negotiations. On the Inca side, selected European

objects were actively adopted and incorporated into the most important elite and ritual

settings at Vilcabamba. This thesis argues that these objects were used to create new

cultural phenomena that spoke to the strategies and ideologies of the Inca at Vilcabamba.

Keywords: Vilcabamba, Espíritu Pampa, Inca, Early Colonial Period, contact zone

2

RESUMEN

Vilcabamba fue el sitio del último bastión de la resistencia Inca durante casi cuarenta

años, desde 1537 hasta 1572. Aunque a menudo se ha considerado una región aislada

durante este período, las interacciones entre los incas y los españoles juegan un rol

importante en su historia. Esta tesis explora cómo estas interacciones se reflejan en la

cultura material de Vilcabamba, al examinar objetos europeos y de estilo europeo en

Vilcabamba, incluidos los objetos de vidrio; tijeras; otros objetos metálicos, como clavos,

pestillos, bisagras y herramientas; tejas; y cerámica.

Estos objetos se analizan sobre la base de evidencia arqueológica e histórica, incluida la

documentación de las exploraciones y excavaciones realizadas en Vilcabamba, desde las

primeras exploraciones del sitio por Hiram Bingham en 1911 hasta las excavaciones

recientes realizadas entre 2008 y 2010 por Javier Fonseca Santa Cruz y por Brian S. Bauer

y Miriam Aráoz Silva, así como las crónicas de Antonio Bautista de Salazar (1867

[1596]), Martín de Murúa (2008 [ca. 1616]), Baltasar de Ocampo Conejeros (2013

[1611]) y Diego Rodríguez de Figueroa (1910 [1565]).

Desde una perspectiva española, los objetos europeos llevados a Vilcabamba

representaron una cuidadosa entrega de obsequios como parte de delicadas negociaciones

diplomáticas. Del lado Inca, ciertos objetos europeos seleccionados fueron adoptados

activamente e incorporados a los espacios rituales y de élite más importantes de

Vilcabamba. Esta tesis sostiene que estos objetos fueron utilizados para crear nuevos

fenómenos culturales que se relacionaron con las estrategias e ideologías de los Incas en

Vilcabamba.

Palabras clave: Vilcabamba, Espíritu Pampa, Inca, Periodo Colonial Temprano, zona de

contacto

3

ACKNOWLEDGEMENTS

I am particularly grateful to Marco Curatola Petrocchi for first introducing me to the fascinating world of Vilcabamba and for his expert guidance throughout this thesis. My heartfelt thanks also to Bat-ami Artzi for her support and generous feedback, as well as to Javier Fonseca Santa Cruz and Brian S. Bauer for kindly sharing photographs and information from their excavations at Vilcabamba.



CONTENTS

troduction	13
The Inca resistance at Vilcabamba	13
European objects at Vilcabamba	14
The archaeological and historical sources	15
Understanding the adoption of objects	19
ow European and European-style objects came to Vilcabamba	26
lass objects	
Introduction	29
Context of the object	31
Technical description of the object	34
4.1. Spanish use of glass beads in trade and gift giving	37
•	
Context of the object	46
Technical description of the object	47
ther metal objects	55
Introduction	
The context of the metal objects found at Vilcabamba	56
2.1. Iron nails	56
3.2. Other iron objects	
3.3. Copper objects	63
4.4. Metal objects described in the chronicles	
	lass objects

	5.5.	Conclusions	70
6.	Euro	opean-style tiles	72
	6.1.	Introduction	72
	6.2.	The context of the tiles found at Vilcabamba	
		1. Roof tiles	
	-	2. Floor tiles	
	6.3.	Technical description of the tiles	
		1. Roof tiles	
	6.4. 6.4.	Interpretation	
	6.4.2	<u>.</u>	
	6.4.		
	6.4.4	\mathcal{L}	
	6.4.	1	
	6.5.	Conclusions	
		1. Roof tiles	
		2. Floor tiles	
7.	Cera	amics	
	7.1.	Introduction	
	7.2.	The context of European ceramics found at Vilcabamba	106
	7.3.	Technical description of the ceramics	107
	7.4.	Interpretation	
	7.5.	Conclusions	110
8.	Con	clusions	111
Re		e list	
111	.1010110		110

LIST OF FIGURES

Figure 1. A map of the region of Vilcabamba. Map by Gabriel E. Cantarutti (Bauer, 2016a, p. 28, Fig. 1)

Figure 2. Nine chevron glass beads found at Tendi Pampa, Museo Amazónico Andino Qhapaq Ñan de Quillabamba. Photograph by Brian S. Bauer (Fonseca Santa Cruz & Bauer, 2016a, p. 186, Fig. 53)

Figure 3. Colour photograph of the nine chevron glass beads found at Tendi Pampa. Photograph courtesy of Javier Fonseca Santa Cruz (personal communication, October 21, 2020)

Figure 4. A second colour photograph of the nine chevron glass beads found at Tendi Pampa. Photograph courtesy of Javier Fonseca Santa Cruz (personal communication, October 21, 2020)

Figure 5. A piece of clear glass found in Unit 2 in the "Hall of Miniatures" (Bauer & Aráoz Silva, 2016b, p. 224, Fig. 6)

Figure 6. Map of the Tendi Pampa compound. Map by Brian S. Bauer (Fonseca Santa Cruz & Bauer, 2016a, p. 152, Fig. 4)

Figure 7. Plan view of the floor level of Building 9. Map by the Ministry of Culture, redrawn by Gabriel E. Cantarutti (Fonseca Santa Cruz & Bauer, 2016a, p. 186, Fig. 52)

Figure 8. Map of the Hall of Miniatures at Tendi Pampa (Bauer & Aráoz Silva, 2016b, p. 223, Fig. 3)

Figure 9. Chevron bead produced in Venice with six layers and a smooth oval shape, typical of the production of chevron beads after 1590. (Accession number: 66.3.10 A) Photograph retrieved from the Corning Museum of Glass website¹

Figure 10. Beads at the right wrist of Burial 1 in Donnan and Silton's excavations at Chotuna. Two chevron beads (circled) can be identified, among several other types of

_

¹ Retrieved from https://www.cmog.org/artwork/chevron-bead-0

European glass beads (Donnan and Silton, 2010, p. 29, Plate IVD; red circles to identify chevron beads added by the author)

Figure 11. Two pieces of beaded jewellery found at the Hacienda San Nicholas in the Lima region, The Peabody Museum of Archaeology and Ethnology at Harvard University (Feinzig, 2017, p. 51, Fig. 32; red circle added by the author to identify the chevron bead)

Figure 12. The percentage of bead types in the Feinzig sample set observed by region (Feinzig, 2017, p. 70, Table 19)

Figure 13. The remains of a bowl and a pair of scissors on the floor of Structure D in the "New Sector" in Espíritu Pampa. Photograph by Javier Fonseca Santa Cruz (Fonseca Santa Cruz and Bauer, 2016b, p. 213, Fig. 14)

Figure 14. A map of the five structures of the "New Sector" (A-E). Plan by Gabriel E. Cantarutti (Fonseca Santa Cruz & Bauer, 2016b, p. 204, Fig. 1)

Figure 15. Plan of Structure D of the "New Sector". Plan by the Ministry of Culture, redrawn by Gabriel E. Cantarutti (Fonseca Santa Cruz & Bauer, 2016b, p. 211, Fig. 9)

Figure 16. A close-up image of the photograph in Figure 13 showing the scissors. Photograph by Javier Fonseca Santa Cruz (Fonseca Santa Cruz and Bauer, 2016b, p. 213, Fig. 14)

Figure 17. Manco Inca is killed by Méndez with a dagger. Drawing by Guamán Poma de Ayala (Murúa, 2004 [ca. 1590], Folio 47v)

Figure 18. Iron nails of a similar shape and size, with relatively large heads and short points of 2 to 4 cm, found in Vitcos.² Photographs by Brian S. Bauer and Miriam Aráoz Silva (clockwise: Bauer & Aráoz Silva, 2016a, p. 84, Fig. 25; p. 89, Fig. 32; Bauer, Aráoz Silva & Quave, 2016, p. 122, Fig. 51)

8

² The nails in the photograph on the upper left were found in Unit 5 of the Kallanka in front of one of the building's doorways, those on the right were found in the Double Structures, and the fragments of nails in the photograph on the bottom left were found in Unit 6 in the Yurak Rumi ceremonial complex.

Figure 19. One of the iron nails found in Structure 2 of Tendi Pampa, Museo Amazónico Andino Qhapaq Ñan de Quillabamba. Photograph by Brian S. Bauer (Fonseca Santa Cruz and Bauer, 2016a, p. 159, Fig. 11)

Figure 20. A large sickle-like iron tool found in Building 7 of Tendi Pampa, Museo Amazónico Andino Qhapaq Ñan de Quillabamba. Photograph by Brian S. Bauer (Fonseca Santa Cruz and Bauer, 2016a, p. 179, Fig. 36)

Figure 21. A copper latch, two hinges and five nails found in Building 4 of Tendi Pampa, Museo Amazónico Andino Qhapaq Ñan de Quillabamba. Photograph by Brian S. Bauer (Fonseca Santa Cruz and Bauer, 2016a, p. 163, Fig. 15)

Figure 22. A copper lid with a strap handle found in Building 8 of Tendi Pampa, Museo Amazónico Andino Qhapaq Ñan de Quillabamba. Photograph courtesy of Javier Fonseca Santa Cruz (personal communication, October 21, 2020)

Figure 23. A copper bell found in Building 11 of Tendi Pampa, Museo Amazónico Andino Qhapaq Ñan de Quillabamba. Photograph by Brian S. Bauer (Fonseca Santa Cruz and Bauer, 2016a, p. 190, Fig. 60)

Figure 24. A small (1cm) piece of curved copper with a rivet found in Unit 2 of the Room of Miniatures in Espíritu Pampa (Bauer & Aráoz Silva, 2016b, p. 225, Fig. 7)

Figure 25. A small copper hinge (2cm) which still held two copper nails (4cm and 6cm) found in Unit 2 of the Room of Miniatures in Espíritu Pampa (Bauer & Aráoz Silva, 2016b, p. 225, Fig. 8)

Figure 26. Savoy examines Spanish-style roof tiles at Vilcabamba. (Savoy, 1970a, p. 48, Fig. 8)

Figure 27. The number of roof tile fragments recovered in each building at Tendi Pampa (Fonseca Santa Cruz & Bauer, 2016a, p. 196, Fig. 71)³

9

³ Although Fonseca Santa Cruz and Bauer do not include tiles found at Buildings 10 and 11 in this chart, they mention finding fragments of tiles in Building 10 (2016a, p. 188) and show one tile in their floor plan of Building 11 (2016a, p. 189). It is therefore clear that some remains of tiles were found in all 11 buildings excavated at Tendi Pampa.

Figure 28. Plan of the floor level of Building 4 of Tendi Pampa. Plan by the Ministry of Culture, redrawn by Gabriel E. Cantarutti (Fonseca Santa Cruz & Bauer, 2016a, p. 163, Fig. 14)

Figure 29. Tapered barrel clay roof tiles custom made for the restoration of the 1820s "Indian barracks" at Mission Santa Cruz in California. Photograph by the National Park Service⁴ (Grimmer & Williams, 1993, p. 1)

Figure 30. Two tiles found during Bingham's explorations of Vilcabamba in 1911 (Bingham, 1914, p. 198, Fig. 63)

Figure 31. A tile with painted decoration of three serpent and feline-headed serpent figures found at the Tendi Pampa complex. Photograph courtesy of Javier Fonseca Santa Cruz (personal communication, October 21, 2020)

Figure 32. A tile with painted decoration of feline-headed serpents found at the Tendi Pampa complex. Photograph courtesy of Javier Fonseca Santa Cruz (personal communication, October 21, 2020)

Figure 33. A large roof tile (56cm x 26cm) decorated with three white painted serpents found in Building 8 in the Tendi Pampa complex. Photograph courtesy of Javier Fonseca Santa Cruz (personal communication, October 21, 2020)

Figure 34. A close-up of the tile being measured by Savoy in Figure 27. The tile appears to be decorated with curved incisions (Savoy, 1970a, p. 48, Figure 8)

Figure 35. A nearly intact clay floor tile found along the north wall of Building 4 in Tendi Pampa, Museo Amazónico Andino Qhapaq Ñan de Quillabamba. Photograph courtesy of Javier Fonseca Santa Cruz (personal communication, October 21, 2020)

Figure 36. The underside of a roof on the restored barracks at Santa Cruz Mission showing the twig sheathing to which the clay tiles were attached with mud mortar. Photograph by Gil Sánchez (Grimmer & Williams, 1993, p. 8., Fig. 10)

_

⁴ Available at: https://www.nps.gov/tps/how-to-preserve/briefs/30-clay-tile-roofs.htm

Figure 37. Communal house roofing in Chuschi, Peru (Isbell, 1978, p. 169, Plate 13)

Figure 38. Ichu thatch being tied to roof in Peru in 1970. Photograph by Billie Jean Isbell (Billie Jean Isbell Andean Collection, Digital Collection of Cornell University Library)⁵

Figure 39. The drawing of the main altar of the *Qori Kancha* by Joan de Santa Cruz Pachacuti Yamqui Salea Maygua in the 1613 manuscript "Relación de antigüedades deste reyno del Pirú" Folio 13v. (Biblioteca Nacional de España, MSS/3169)⁶

Figure 40. Inca painted mural with stepped border at Pachacamac. Photograph by Proyecto Ychsma, Université Libre de Bruxelles (Colonna-Preti, Eekhout & Luján Dávilo, 2019, p. 14, Fig. 8)

Figure 41. Two sides of a colonial wooden *qero* with a central belt of repeated designs, National Museum of the American Indian, Smithsonian Institution. Catalogue #17/8956 (Smithsonian Open Access image database)⁷

Figure 42. Reconstruction by the Ministry of Culture of the vessel found in 55 fragments in Building 5 of Tendi Pampa (30cm in height, 50cm in diameter). Photograph by Javier Fonseca Santa Cruz (Artzi, Nir & Fonseca Santa Cruz, 2019, p. 160, Fig. 3)

Figure 43. Drawing of the iconography of the vessel found in Building 5 of Tendi Pampa. Drawing by Arturo Rivera (Artzi, Nir & Fonseca Santa Cruz, 2019, p. 161, Fig. 4)

Figure 44. Map of Yurak Rumi with the locations of the test excavations (P1-P13) and the larger excavation units (U1-U10). Map by Brian S. Bauer and Miriam Aráoz Silva (Bauer, Aráoz Silva & Quave, 2016, p. 94, Fig. 4)

Figure 45. A fragment of majolica ceramic (in green and red-brown on yellowish white) from a narrow-mouth jar found at Yurak Rumi. Photograph by Brian S. Bauer and Miriam Aráoz Silva (Bauer, Aráoz Silva & Quave, 2016, p. 125, Fig. 54)

⁵ Retrieved from https://digital.library.cornell.edu/catalog/ss:290994

⁶ Retrieved from http://bdh-rd.bne.es/viewer.vm?id=0000087346&page=1

⁷ Retrieved from

Figure 46. Fragments of white-glazed majolica ceramic found in U6 at Yurak Rumi. Photograph by Brian S. Bauer and Miriam Aráoz Silva (Bauer, Aráoz Silva & Quave, 2016, p. 125, Fig. 55)

Figure 47. Fragments of glazed majolica found at Yurak Rumi. Photograph by Brian S. Bauer and Miriam Aráoz Silva (Bauer, Aráoz Silva & Quave, 2016, p. 126, Fig. 56)

LIST OF TABLES

Table 1. Iron nails found in various excavations at Vilcabamba. Compiled by the author based on information from Bauer, Fonseca Santa Cruz and Aráoz Silva (2016)



1. Introduction

1.1. THE INCA RESISTANCE AT VILCABAMBA

Vilcabamba was the site of the final stronghold of the Inca resistance, established by Manco Inca in 1537 and maintained for nearly forty years by his sons Sayri Tupa, Titu Cusi Yupangui, and Tupa Amaru until 1572. After the Incas failed to regain control of Cusco from the Spanish, Manco Inca and his supporters withdrew to the region of Vilcabamba and established the base for their ongoing resistance to Spanish dominance in the town of Vitcos (also known as Rosaspata). Later, as Vitcos proved vulnerable to Spanish attacks, Manco Inca begun to expand the settlement of Vilcabamba (the site now known as Espíritu Pampa), a few days' travel from Vitcos (see Figure 1). The Inca resistance at Vilcabamba was brought to an abrupt end in 1572, when Viceroy Francisco de Toledo organized an invasion of the area. The Spanish troops took Vitcos before arriving at the site of Espíritu Pampa, where they found the royal court had already fled, burning down the town before they did so. Despite his initial escape, the Spanish troops succeeded in tracking down Inca Tupa Amaru and he was later executed in Cusco. The events that took place in Vilcabamba between 1537 and 1572 are described in various chronicles (Titu Cusi Yupanqui, 2005 [1571]; Salazar, 1867 [1596]; Ocampo Conejeros, 2013 [1611]; Murúa, 2008 [ca. 1616]; Rodríguez de Figueroa, 1910 [1565]).

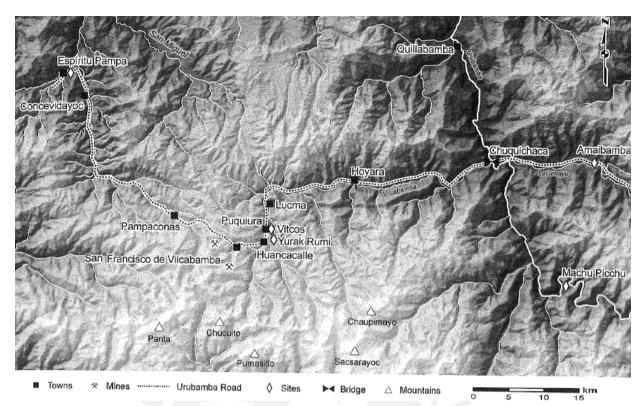


Figure 1. A map of the region of Vilcabamba.

Map by Gabriel E. Cantarutti (Bauer, 2016a, p. 28, Fig. 1)

Vilcabamba has often been thought of as an isolated region between 1537 and 1572, with only a few interactions with the outside world. However, interactions between the inhabitants of Vilcabamba and the Spanish play an important part in the history of Vilcabamba during this period. The Spanish sent diplomats into the region, as well as priests who set up Christian missions there. The Inca at Vilcabamba also interacted with Martín Pando, a mestizo and long-term resident at Vilcabamba, as well as rebel Spanish soldiers and Spaniards keen to exploit the rich resources of the region. The Inca and Spanish also came into contact through raids conducted by both sides. These interactions are explored in more detail in Chapter 2 of this thesis.

1.2. EUROPEAN OBJECTS AT VILCABAMBA

From Hiram Bingham's first explorations of the site in 1911, explorers and archaeologists have noted the striking presence of European and European-style objects at Vilcabamba, ranging from glass beads and iron nails to a large number of Spanish-style tiles.

The presence of these European objects raises fascinating questions about interactions between the Inca at Vilcabamba and the Spanish, and about the adoption of European

objects and ideas within the Inca resistance. In contrast to other regions, the introduction of European objects at Vilcabamba takes place as a result of interactions between the Inca and the Spanish in an area still under Inca control and actively resisting the Spanish. Though the power balance had already shifted dramatically towards the Spanish, the future of the Inca resistance at Vilcabamba was by no means a closed question.

On the Spanish side, we therefore see attempts to interact with the Inca in a deliberate and careful way, particularly through gift giving, and to understand the Inca and get diplomatic interactions right. On the Inca side, interactions at Vilcabamba represent quite a unique example of the Inca choosing which European and European-style objects to adopt and, in some cases, integrate within their own territory and on their own terms. Some of these objects were received by the Inca as gifts and through direct contact with Spanish people at Vilcabamba. Others were acquired through raids, trade and exchange, or local production of objects in European styles, as explored further in Chapter 2.

1.3. THE ARCHAEOLOGICAL AND HISTORICAL SOURCES

The combined archaeological and historical records provide a remarkable set of evidence on interactions between the Inca and Spanish at Vilcabamba. The site of Vilcabamba appears to have been abandoned and largely forgotten after the Spanish invaded and the Inca fled the site in 1572. As a result, it suffered limited looting or damage before it was once again bought to the world's attention in 1911, when Hiram Bingham explored the site (Bingham, 1912). Since then, the site has been investigated by various archaeologists and explorers, including Christian Bües (1958 [1935]), who mapped the region in the 1920s and 1930s; Gene Savoy (1970a), who publicly questioned Hiram Bingham's identification of Machu Picchu as the site of Vilcabamba, instead claiming that Espíritu Pampa was the site of the Inca's last city, and provided a vivid account of his explorations of the area; the explorer Vincent Lee (2000); and Cusqueñan archaeologist Florencio Fidel Ramos Cóndori (2007), among others. From 2008 to 2010, various archaeological investigations were carried out by Javier Fonseca Santa Cruz, for the Ministry of Culture of Cusco, and by Brian S. Bauer and Miriam Aráoz Silva. The 2008 to 2010 excavations are together documented in the book, "Vilcabamba y la arqueología de la Resistencia Inca" edited by Brian S. Bauer, Javier Fonseca Santa Cruz and Miriam Aráoz Silva (2016), which has been an invaluable resource for this investigation. The finds from these

excavations are largely kept in the *Dirección Desconcentrada de Cultura de Cusco* and the *Museo Amazónico Andino Qhapaq Ñan de Quillabamba*.

I began this thesis in 2019 before the COVID-19 pandemic's impact was felt in Peru, with the expectation that I would be able to visit the archaeological sites and examine objects directly in museums in Lima, Cusco and Quillabamba. I was particularly interested to view the objects found in recent excavations in the storage of the *Dirección Desconcentrada de Cultura Cusco* and at the *Museo Amazónico Andino Qhapaq Ñan de Quillabamba*. With the arrival of the pandemic, travel became impossible and museums and archaeological sites were forced to close. As a result, it has sadly not been possible to examine these objects in person. Since these objects are not available through online museum catalogues, I have had to rely largely on documentation and photographs available in literature or generously provided by archaeologists who have excavated the site, including photographs shared by Javier Fonseca Santa Cruz and Brian S. Bauer. In addition, I have examined online collections and museum databases, such as those of the Chevening Museum of Glass and the *Museo de Arte de Lima*, to examine comparable objects.

This thesis explores in detail various types of European or European-style objects found at Vilcabamba, many of which are also mentioned in the historical sources. These include glass objects; scissors; other metal objects, including nails, latches, hinges, tools and so on; tiles; and ceramics. The focus of this thesis is on the adoption of European and European-style material culture in the form of objects, rather than analysis of architecture or iconography. However, the analysis in this thesis is supported by other relevant evidence from the archaeological record. For example, a richly decorated ceramic vessel found in fragments at Vilcabamba has been analysed in depth by Artzi, Nir and Fonseca Santa Cruz (2019). The vessel depicts both Spanish and Inca soldiers and is interpreted by the authors as representing a scene of future Inca victory over the Spanish. It is one objects which, though distinctly Inca in form, provides a fascinating insight into attitudes towards to the Spanish at Vilcabamba.

The archaeological evidence is particularly rich when interpreted alongside written accounts of the events that took place in Vilcabamba. In 1571, the year before his death, Titu Cusi Yupanqui (2005 [1571]) gave a remarkable account of the events of the conquest and of the Inca withdrawal to Vilcabamba. His account was originally given in

spoken form and was translated from Quechua to Spanish by the Augustinian friar Marcos García and transcribed by Titu Cusi Yupanqui's bilingual mestizo secretary, Martín de Pando. As well as an introductory section addressed to Lope García de Castro, the departing governor of Peru, requesting that he present the account to King Philip II, and a final section which authorizes Lope García de Castro to represent his interests in Spain, the text tells the story of the conquest of Peru, the following military conflicts, his father's withdrawal to Vilcabamba and Titu Cusi Yupanqui's own time as Inca at Vilcabamba.

Several Spanish chroniclers also recounted the events of Vilcabamba, having visited the region of or spoken with witnesses of the events that took place there, including Antonio Bautista de Salazar (1867 [1596]), Martín de Murúa (2008 [ca. 1616]), Baltasar de Ocampo Conejeros (2013 [1611]), and Diego Rodríguez de Figueroa (1910 [1565]).

Antonio Bautista de Salazar wrote a history of the Spanish presence in Peru around the year 1596, which begins with the arrival of Francisco Pizarro in Cajamarca and recounts events up to his own time (1867 [1596]). Only two parts of his history have survived, the first describing the activities of Francisco de Toledo from 1569 to 1581 and the second those of Viceroy García Hurtado de Mendoza from 1590 to 1596. Bautista de Salazar was particularly knowledgeable about Toledo's activities as he travelled with Toledo during his general inspection of Peru, appears to have had access to important archival materials from that time, and was even with Toledo during the invasion of Vilcabamba (Bauer, Halac-Higashimori & Cantarutti, 2016). His accounts provide useful context for this study, particularly in his discussion of the raids instigated by Titu Cusi Yupanqui on Spanish trade routes.

Martín de Murúa was a Mercedarian priest who lived much of his life in Peru and wrote two important texts on the country: *Historia del origen y genealogía real de los reyes Inças del Peru* (2004 [ca. 1590]) and *Historia general del Perú* (2008 [ca. 1616]). The latter is one of the most comprehensive overviews of the Incas from the early colonial period and is particularly valuable for this study because of the many chapters devoted to Vilcabamba and the events that took place there between 1537 and 1572. Murúa's descriptions of these events are based on a combination of the texts of other writers, the archives of Viceroy Toledo, investigations conducted by religious orders in Cusco, and the reports of both Andean and European witnesses (Bauer, Halac-Higashimori & Cantarutti, 2016). He was able to speak to many witnesses while living in the region, in

the Mercedarian monastery of Cuzco from at least 1585 to 1588 (Bauer, Halac-Higashimori, & Cantarutti, 2016), and, in 1595, as the parish priest in Curahuasi, which borders the Vilcabamba region (Ossio, 2008).

Baltasar de Ocampo Conejeros wrote a history of the Vilcabamba region for Viceroy Juan de Mendoza y Luna around 1611, titled *Descripción de la provincia de Sant Francisco de la Victoria de Villcapampa* (2013 [1611]). There is very little information available on his life. However, we know that he was elderly and impoverished and living in Lima when he wrote the history, and that he had previously resided for a long period in the Vilcabamba region where he had personally spoken with eyewitnesses of important events, such as those present at the murder of Fray Diego Ortiz and soldiers who took part in the final Spanish raid on Vilcabamba (Bauer, Halac-Higashimori & Cantarutti, 2016).

The accounts of Diego Rodríguez de Figueroa are particularly valuable because he visited the Inca at Vilcabamba in person and spent time there with the Inca on diplomatic missions. In 1565, Rodríguez de Figueroa was sent by Juan de Matienzo, chief judge of the Audiencia de Charcas, to meet Titu Cusi Yupanqui at Vilcabamba and initiate peace negotiations with him. The intention was to persuade Tuti Cusi Yupanqui, who had been conducting raids on Spanish-controlled regions, to leave Vilcabamba and settle in the Yucay *encomienda* (Bauer, Halac-Higashimori & Cantarutti, 2016). Rodríguez de Figueroa was successful in negotiating a meeting with the Inca in Pampaconas and terms were eventually agreed for a new peace treaty. At that point, Rodríguez de Figueroa returned to Cusco and immediately wrote an account of his journey and negotiations with the Inca (1910 [1565]). During the following year, while the final agreement was drawn up, Rodríguez de Figueroa traveled to Vilcabamba several times. When the treaty was signed in August of 1566, he was named *corregidor* of Vilcabamba and, after Vilcabamba was finally taken by the Spanish in 1572, he was given an *encomienda* in the region (Bauer, Halac-Higashimori & Cantarutti, 2016).

Each of the chroniclers mentioned above provide information on gifts of European objects given to the Inca and his people at Vilcabamba, European items that were observed by the Spanish when they visited and then invaded Vilcabamba, or of interactions more broadly between the Spanish and the Inca at Vilcabamba. Rodríguez de Figueroa's detailed descriptions of the gifts he gave to the Inca and his go-betweens, gifts given to

him, and the objects, dress, food and so on that he observed in Vilcabamba make his account a particularly rich source for the study of European objects at Vilcabamba.

It is important to note that some of the European or European-style items described in the chronicles are not reflected in the archaeological record. Textiles are frequently mentioned as gifts and Spanish-style clothes and textiles are observed at Vilcabamba by various chroniclers. Martín de Murúa says that fine European clothing was found among the Inca's possessions left behind when he fled Vilcabamba (2008 [ca. 1616], Chapter 83) and Baltasar de Ocampo Conejeros mentions gifts of fine fabrics given to the Inca (2013 [1611], p. 27). Any textiles at Vilcabamba would be very unlikely to survive given the conditions in the area and have not been found in the archaeological record. Food, drink and livestock are also mentioned. Rodríguez de Figueroa says that he was sent wine by the Inca (1910 [1565], p. 102) and, on another occasion, animals and supplies including a Castilian sheep (1910 [1565], p. 108). Martín de Murúa says that, at Pampaconas, the Spanish found 97 Castilian cows as well as Castilian sheep and pigs (2008 [ca. 1616], Chapter 80). These European objects and livestock are not analysed in detail in this thesis, which focuses on European objects which can be observed in the archaeological record.

The archaeological and historical sources are particularly interesting when viewed together. Accounts of interactions and gifts given and the archaeological discoveries of sometimes startlingly similar objects illuminate one another and help us investigate the objects from both sides: what did these objects mean to the Spanish who brought them to Vilcabamba, and what did they mean to the Inca who accepted or refused them, or in some cases incorporated them into the fabric of Vilcabamba? This double-sided question is at the centre of this investigation.

1.4. Understanding the adoption of objects

Various theoretical approaches can help us understand the adoption of European and European-style objects at Vilcabamba. Although the literature and theory on this topic is vast, including numerous theoretical approaches to cultural change in colonial contexts, this section will identify a few key theoretical approaches that are particularly pertinent to the discussion in this thesis.

Academics from a range of disciplines, from psychologists and anthropologists to linguists, have long used the concept of acculturation to describe the process of cultural change when two cultures meet. The first widely used definition was proposed by Redfield, Linton, and Herskovits (1936):

Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both. (p. 149)

Although theories and evidence of acculturation show culture change on both sides, studies have tended to focus on the experiences of adaptation of minority or less powerful groups.

Cultural theorists soon challenged theories of acculturation as overly reductive and unable to capture the complex realities of cultural change, especially in colonial and post-colonial contexts. Cuban sociologist Fernando Ortiz coined the term *transculturation* in 1947 to describe processes of cultural change in which members of subordinated or marginal groups both chose certain materials transmitted by a dominant or metropolitan culture and invent new cultural phenomena as a result. This theory was born out of his studies of the "extremely complex transmutations of culture" that took place in Cuban history (1995 [1947], p. 98).

Theories of transculturation emphasise the role of subordinate peoples in determining, to varying degrees, which elements of a dominant culture they adopt and how they are used. They also emphasise that the dominant culture does not simply expand to encompass new people and places. Rather, new cultural phenomena are created by the meeting of cultures and by the ways in which cultural elements are adopted and used by new groups. Ortiz (1995 [1947]) explains how he saw the term as distinct from acculturation:

I am of the opinion that the word transculturation better expresses the different phases of the process of transition from one culture to another because this does not consist merely in acquiring another culture, which is what the English word acculturation really implies, but the process also necessarily involves the loss or uprooting of a previous culture, which could be defined as deculturation. In addition, it carries the idea of the consequent creation of new cultural phenomena, which could be called neoculturation. In the end, as the school of Malinowski's followers maintains, the

results of every union of cultures is similar to that of the reproductive process between individuals: the offspring always has something of both parents but is always different from each of them. (pp. 102-103)

These theories have been adopted and further developed by other scholars, and greater emphasis has been placed on ways in which the dominant culture changes as a result of processes of transculturation. The colonial discourse movement, including academics like Bhaba, García Canclini, JanMohamed and Spivak, has examined the interfaces between coloniser and the colonised in culture and language.

The emergence of new cultural phenomena has been particularly recognised in the context of the introduction of Christianity in America and specifically in the Andes, where Christianity combined with indigenous customs and beliefs to create new cultural phenomena. Griffiths (1999) describes this two-way process:

The interaction of Christianity with native American religions in the colonial era (and indeed subsequently) was characterized by reciprocal, albeit asymmetrical, exchange rather than the unilateral imposition of an uncompromising, all-conquering and all-transforming monotheism. (p. 1)

The resulting practices in different parts of the Andes are far from uniform and in many cases not officially sanctioned by the church (Abraham, 2017, pp. 218-219). This fluid negotiation of religious identity creates what Bhabha describes as an "in-betweenness" of faith and ritual practice (1994).

The "contact zone" is a term introduced by Louise Pratt in a keynote address to the Modern Language Association titled "Arts of the Contact Zone" in 1991 and then in her 1992 book "Imperial eyes: Travel writing and transculturation". It is used to refer to spaces in which disparate cultures meet and try to come to terms with each other and is now widely used in cultural studies, postcolonial studies and literary studies. It can refer to places like trading posts and border cities where contact takes place, or to situations of colonialism and slavery, among others. The term has an important power dimension. Pratt (1991) describes it in this way:

I use this term to refer to spaces where cultures meet, clash, and grapple with each other, often in contexts of highly asymmetrical relations of power, such as colonialism,

slavery, or their aftermaths as they are lived out in many parts of the world today. (p. 34)

Pratt includes transculturation, critique, collaboration, bilingualism, mediation, parody, denunciation, imaginary dialogue and vernacular expression as some of the literate arts of the contact zone (1991, p. 37). She also builds on ideas around transculturation to introduce the idea of an *autoethnographic text* (1991, 1992, 1996), which she describes as:

a text in which people undertake to describe themselves in ways that engage with representations others have made of them... they involve a selective collaboration with and appropriation of idioms of the metropolis or conqueror. These are merged or infiltrated to varying degrees with indigenous idioms to create self-representations intended to intervene in metropolitan modes of understanding. (1996, p. 28).

Though studying cultural contact has long been a central element of archaeology, studies of cultural contact in colonial settings were for a long time dominated by historical and other approaches. Bartel, among others, called for archaeology to take a central role in understanding colonialism, partly to allow a more balanced understanding given that many groups involved in colonialism were illiterate, and their experiences not reflected in written sources (1985, p. 11). The role of historical archaeology in investigating colonialism has indeed grown in recent years and has recognised the importance of interaction between cultures. One important contribution to theoretical approaches to understanding colonialism in archaeological studies is the volume "Studies in culture contact: Interaction, culture change, and archaeology" (Cusick, 1998). The case studies in the volume are presented using a model which considers power relations in terms of a two-sided cultural interaction, with all parties reacting to one another and continually negotiating relationships. Cusick considers a broad range of possible outcomes, from resistance, to the dominant culture being transformed by the subordinate culture.

The various theories described above have been developed largely to analyse colonial contexts in which the dominance of one party is already well established. For example, according to theories of transculturation, although the colonial subject is selecting what to adopt and how to use those adopted objects and customs, they are already at a point of

disadvantage, forced to adopt at least some elements in order to survive and communicate in a new world.

The case of the Inca resistance at Vilcabamba is not as clear cut. The Spanish had already gained dominance in the Andes and the Inca empire was destroyed. What remained of the Inca state at Vilcabamba was a remnant of its previous power base. Yet, the future power balance in the Andes, and especially in the region of Vilcabamba, was not yet a closed question. Many parts of the Andes at this time still eluded the effective control of the Spanish, who had succeeded in conquering the Inca empire but were yet to secure a functioning state to replace it throughout the conquered territory. At Vilcabamba specifically, the Inca, though far reduced in power, still held control over the region.

Furthermore, we cannot take for granted that the Inca at Vilcabamba knew that their resistance would not last. In fact, many may have believed they could eventually bring down the Spanish and re-establish their empire. The *Taqui Oncoy* movement, contemporaneous with the Inca presence at Vilcabamba, was a messianic movement which claimed that the *huacas* would be resurrected and defeat the Spanish god and the Spanish invaders. The link between this movement and the Incas at Vilcabamba has been controversial, but strong arguments have been made in favour (Ramos, 1992; Curatola Petrocchi, 2008, pp. 53-54; Roy, 2010; Husson, 2016, 2017). Whether or not they directly supported the movement, it is likely that many people at Vilcabamba were aware of it and shared its belief in the eventual demise of the Spanish.

As a result, we need to be aware that we are examining a moment of flux, in which the power dynamics, though already shifted dramatically in one direction, were still very much up for negotiation. Pratt's concept of the contact zone is therefore a particularly relevant model in this case, as it one that has been used both to examine colonial situations and those in which power is asymmetrical but one party does not come under the direct control of another, such as border towns and trading posts.

It is also important to bear in mind Andean models of exchange and cultural adoption. Transculturation usually assumes that, although a subject people may be able to select which elements to adopt and how to use them, they are doing so from a position of lesser power. It is worth bearing in mind the possibility that cultural practices or objects might

also be adopted to gain or assert power. Andean concepts of exchange and gift giving with other powers and their subjects can help provide an alternative viewpoint.

Susan Elizabeth Ramírez (1996) stresses the vastly different understandings of exchange and trade which, alongside deliberate efforts to manipulate Andean principles of reciprocity, led to enormous social and economic tensions in the early colonial period. One pre-existing Andean concept of exchange, outlined by Ramirez, is that associated with *curacas*' acceptance of outsiders into the territory they administered. *Curacas* often provided safe conduct for the subjects of others to enter their lands and take advantage of their resources. In the reciprocity system in which this occurred, those who received safe conduct were expected to present gifts to the host *curaca* in return. According to Ramírez (1996), this system allowed a *curaca* to fulfil his role of generosity and hospitality to strangers, in addition to allowing him to acquire gifts to share with his followers (and therefore bolster his position among them). Over time, the position of these invited subjects could be formalized and become more permanent through the further exchange of gifts or marriage.

This model is relevant for understanding the exchanges of gifts associated with the entry of Spanish envoys into Vilcabamba. The Inca provided safe conduct and access to resources, such as food, information, and shelter, in exchange for gifts or services provided by the visitor. This idea is reinforced by the types of items exchanged by each side. The chronicles relate that the Spanish gave the Inca and his men many valuable and exotic objects not available locally, including cloth, glass, sweets, knives, scissors, jewellery, paper, and so on. The Inca, on the other hand, largely provides day-to-day provisions, such as food, chicha, animals and peanuts, and safe passage and accompaniment through his territory, although other gifts such as feathers are also given. In this sense, the visitors presented an opportunity to the Inca, allowing him to obtain hard-to-access European objects, which would increase his own prestige and could also be distributed to his followers. At the same time, their visits allowed him to access useful information about the Spanish.

The model described by Rodríguez helps us see that the acceptance of foreign objects plays a role in mediating relationships and hierarchies with foreigners, and that receiving and adopting certain foreign objects could be an appropriate way of emphasising the recipient's authority within his territory.

Secondly, the adoption of certain elements of other cultures and their combination with Inca material culture was a part of Inca empire building. While it is true that disseminating Inca material culture and imposing it on others was key to Inca imperial expansion, the Inca also frequently adopted elements of material culture from groups which they defeated. On the coast, for example, the Inca had to adapt their building styles to dramatically different local conditions and materials. There, coastal adobe and tapia styles used for some Inca state buildings appear to have been developed based on local styles. Tambo Colorado in the Pisco Valley, for example, features classic Inca characteristics but is made of mud-plastered parka and adobe and uses tapia latticework which is reminiscent of Chan Chan architecture (Stone, 2012, pp. 224-225). The site also features a frieze of adobe reliefs with no known prototype in the sierra (Menzel, 1959, p.130). Pachacamac is another example of a site in which the Inca made use of local building materials and styles for important imperial building works.

This is partly a practical solution to creating state buildings in new environments, but it can also be read as a statement of Inca power, remaking elements of other cultures in their own image. If the Inca at Vilcabamba believed that the Spanish would soon be another conquered people in its re-established empire, the adoption of certain Spanish objects and their integration into distinctly Inca practices and contexts can be read in a similar way.

2. HOW EUROPEAN AND EUROPEAN-STYLE OBJECTS CAME TO VILCABAMBA

We know of several possible ways in which European and European-style objects came into the Vilcabamba region: through direct contact with Spanish people at Vilcabamba, acquisition through raids, acquisition through trade and exchange, and local production of objects in European styles.

The Inca at Vilcabamba came into direct contact with Spanish people who came to Vilcabamba as refugees, for commercial interests, as priests, and as diplomats, among others. Whereas some contacts resulted in long-term residents at Vilcabamba, several of these interactions ended very negatively for both sides. We know, for example, that a band of Spanish rebels sought asylum in the Vilcabamba region in 1544. Martín de Murúa described how one of those Spanish rebels, Diego Méndez, killed Manco Inca while playing a game of *bolos* with him (2008 [ca. 1616], Chapter 73). Murúa also describes the fate of a Spaniard named Antonio Romero came to Vilcabamba to look for silver and gold mines (2008 [ca. 1616], Chapter 75). The Inca granted him permission to carry out his explorations, but when the Spaniard returned to the Inca with samples to show the great wealth in gold and silver that he had found, the Inca killed him because he was afraid that many Spaniards would come to the area if they knew about the gold and silver available there.

In 1568, as part of what has become known as the Acobamba Treaty, Tuti Cusi Yupanqui allowed two Augustinian priests, Marcos García and Diego Ortiz, to live and proselytize in the Vilcabamba area. The priests were successful in building a following among some residents of Vilcabamba and, in 1570, these priests and a small group of supporters burned the Yurak Rumi complex, the most important Inca shrine in Vilcabamba. Tensions continued to mount with the priests and the following year, when Tuti Cusi Yupanqui died suddenly, Diego Ortiz was killed in the belief that he was responsible for the Inca's death. These events are described by Martín de Murúa (2008 [ca. 1616], Chapters 75-76) and the murder of Diego Ortiz is described by Baltasar de Ocampo Conejeros (2013 [1611]), p. 30).

Martín Pando, a mestizo, lived for a long time in Vilcabamba. The only extant description of him comes from Diego Rodríguez de Figueroa, who describes him dressed in Spanish clothing and accompanying the procession of the Inca (1910 [1565], p. 99). He was an important figure at Vilcabamba, providing information on the Spanish and their customs and the vital ability to write and communicate with them.

Diplomatic interactions between Spanish envoys and the Inca at Vilcabamba are particularly well documented in historical sources described previously. And, as this thesis will outline in more detail, many of the diplomatic gifts they describe align closely with the archaeological record. Diplomatic gift-giving was certainly one important way in which European objects arrived at Vilcabamba.

Finally, the Spanish made several raids into the Vilcabamba region. The first raid took place in July 1537, led by Rodrigo Orgóñez and supported by Manco Inca's half-brother Paullu Inca. This was the first time the Spanish had entered the region and, unable to capture Manco Inca who had fled, they returned to Cusco with a hoard of gold and silver taken from the city (Pizarro, 1986 [1571]). The second Spanish raid in 1539, led by Gonzalo Pizarro, also failed to capture Manco Inca. After a major battle in the region and having stayed for almost two months without finding the Inca, the troops again left.

Finally, Viceroy Francisco de Toledo, organized a larger raid against the Incas in 1572. This time, the Spanish took Vitcos and moved to Vilcabamba, finding it smouldering in ruins after its residents had set it on fire and abandoned the site the night before. The royal court had all fled, but the Spanish troops succeeded this time in tracking them down and subsequently executing Inca Tupa Amaru.

Inca raids, both on locals and on the Spanish, are also documented by Spanish sources. Rodríguez de Figueroa, for example, describes his difficulties in persuading local porters to accompany his journey, since they said that they had been robbed numerous times by the Inca (1910 [1565], p. 91). Antonio Bautista de Salazar describes raids instigated by Titu Cusi Yupanqui on Spanish pack trains traveling between Lima and Cusco. He gives a sense of the intensity of these raids, claiming that they severely damaged trade and overland commerce to the cities of Huamanga and Cusco (1867 [1596], Chapter 26). It is highly likely that Spanish objects were brought into Vilcabamba as a result of these raids.

It is hardest to understand the extent of acquisition through trade and exchange networks since these are not documented in the chronicles. However, it is highly likely that some items entered Vilcabamba through such networks. As explored later in this thesis, many items have been found at Vilcabamba that are not described in the written records of official interactions with the Spanish. These likely arrived either through raids or through trade and exchange networks. Given that trade and exchange networks were firmly in place before the Spanish arrival, it seems likely that they were not completely disrupted by the Spanish, and could still have been used by the Inca to obtain items from Spanish-controlled regions.

Spanish items would certainly not have been easy to come by through such channels. Chatfield has emphasized that Spanish material culture was not readily available in highland Peru in the sixteenth century, even to Spanish citizens, as a result of the trade restrictions and the high costs of long-distance shipments from Europe (2007, p. 37). Furthermore, the chronicles also suggest a fear of conducting trade with the Spanish. As discussed preciously, Martín de Murúa recounts how a Spaniard was killed to prevent others coming to Vilcabamba in search of gold and silver (2008 [ca. 1616], Chapter 75). Furthermore, Rodríguez de Figueroa recounts how the Inca rejected a request to admit some Spaniards to Vilcabamba to open the cocoa and timber trade, claiming that violence could be provoked between the Spaniards and the people of Vilcabamba (1910 [1565], p. 112). This suggests that trade between the Inca at Vilcabamba and the Spanish, as well as those living in Spanish-controlled areas, was possible but would have been complicated and tense.

3. GLASS OBJECTS

3.1.Introduction

Glass objects have been found in two places in Vilcabamba. Nine glass chevron beads were found during the excavations of Tendi Pampa, in the site of Espíritu Pampa, directed by Javier Fonseca Santa Cruz in 2008 and 2009 (Fonseca Santa Cruz & Bauer, 2016a). The glass beads can be examined in a black and white photograph of all nine beads (Figure 2) and in two colour photographs (Figures 3 and 4). These beads are now kept by the Museo Amazónico Andino Qhapaq Ñan de Quillabamba.



Figure 2. Nine chevron glass beads found at Tendi Pampa, Museo Amazónico Andino Qhapaq Ñan de Quillabamba. Photograph by Brian S. Bauer (Fonseca Santa Cruz & Bauer, 2016a, p. 186, Fig. 53)



Figure 3. Colour photograph of the nine chevron glass beads found at Tendi Pampa.

Photograph courtesy of Javier Fonseca Santa Cruz

(personal communication, October 21, 2020)



Figure 4. A second colour photograph of the nine chevron glass beads found at Tendi Pampa. Photograph courtesy of Javier Fonseca Santa Cruz (personal communication, October 21, 2020)

In addition, a piece of unworked Spanish glass was found in the building known as the "Hall of the Miniatures" in Espíritu Pampa excavated by Brian S. Bauer and Miriam Aráoz Silva in 2010 (Bauer & Aráoz Silva, 2016b). It can be observed in the photograph in Figure 5.



Figure 5. A piece of clear glass found in Unit 2 in the "Hall of Miniatures" (Bauer & Aráoz Silva, 2016b, p. 224, Fig. 6)

3.2. CONTEXT OF THE OBJECT

The chevron beads were discovered during excavations of the architectural compound known as Tendi Pampa, in the site of Espíritu Pampa, directed by Javier Fonseca Santa Cruz in 2008 and 2009. These excavations formed part of a long-term research project designed and supported by the former Instituto Nacional de Cultura Región Cusco (sub-dirección de investigacción y catastro arqueológico).

Tendi Pampa is one of the most striking architectural complexes in Espíritu Pampa. The complex was identified by Bingham in his visit in 1911 as "the most important group of the Espíritu Pampa ruins" (1914, p. 188). Fonseca Santa Cruz and Bauer (2016a) describe Tendi Pampa as a relatively isolated compound on a low ridge about 300m from the central plaza of Espíritu Pampa. The compound is made up of 11 rooms built on two rectangular platforms (as seen in Figure 6), showing slightly better craftsmanship in their building than seen in other parts of Espíritu Pampa. The excavations showed that the building contained large amounts of charcoal, suggesting that the compound was burned and abandoned quickly, without time to gather many possessions, likely as its inhabitants became aware of the impending Spanish attack (Fonseca Santa Cruz & Bauer, 2016a).

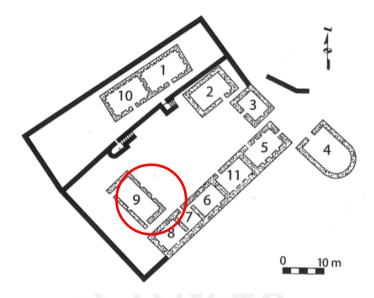


Figure 6. Map of the Tendi Pampa compound. Map by Brian S. Bauer (Fonseca Santa Cruz & Bauer, 2016a, p. 152, Fig. 4; red circle to identify Building 9 added by the author)

Based on statistical analysis of the types of vessels found at Tendi Pampa, Fonseca Santa Cruz and Bauer (2016a) suggest that food storage, cooking and serving were activities that took place together in many parts of the compound. The authors conclude that it is most likely that Tendi Pampa was a temple complex used for ritual feasting.

The chevron beads were found in the structure identified by Fonseca Santa Cruz and Bauer (2016a) as Building 9 located on the southern side of courtyard of the complex, towards the bottom left of Figure 6 (circled in red). This building revealed a fascinating collection of finds, including four miniature plates, a miniature aryballos, a miniature urpu/raki, a miniature jug, the base of a pedestal pot, an iron nail, a polychrome aryballos, an *urpi/raki* base and a concentration of Spanish-style roof tiles, as well as the nine chevron beads. Fonseca Santa Cruz and Bauer (2016a) point out that this building is unusual in the Tendi Pampa complex because it contains almost no food cooking or serving vessels, suggesting that neither domestic nor feasting activities took place there. The authors suggest that ritual activities may have taken place in the building, possibly during the long rainy months experienced in the region.

All the miniature objects are gathered together in one corner of the room along with the majority of Spanish objects (a nail and the nine chevron beads; the Spanish-style roof

tiles were in another part of the room, apparently left stacked on the floor). They can be seen in the top right-hand corner of Figure 7.

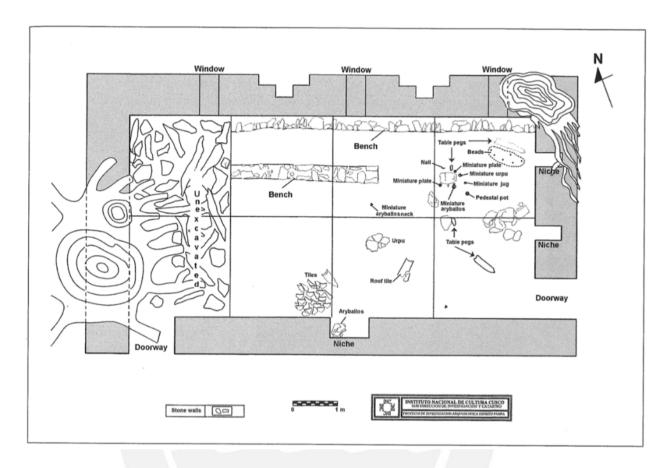


Figure 7. Plan view of the floor level of Building 9.

Map by the Ministry of Culture, redrawn by Gabriel E. Cantarutti

(Fonseca Santa Cruz & Bauer, 2016a, p. 186, Fig. 52)

Unlike many archaeological sites, Vilcabamba was left in a site of sudden abandonment. Those objects that were not removed by inhabitants were simply left behind, presumably in the places in which they had previously been used, or purposefully destroyed as in the case of the smashed vessels in Building 5 of Tendi Pampa (Fonseca Santa Cruz & Bauer, 2016a, p. 170). Given that the miniatures, the nail and the beads were found grouped together by nearby table pegs, they may have been left together on a table and possible used together or in related activities before the abandonment of the site. used or stored together.

Miniatures play an important part in Inca ritual activity and are frequently found in ritual or funerary contexts. Besom (2009), for example, identifies miniatures as a typical

offering left with *qhapaq hucha* sacrifices. If the beads were indeed used together with the miniatures found in Building 9, then it is likely that they were integrated, alongside the miniatures, into ritual activity.

The piece of unworked glass was found in the "Hall of the Miniatures" in Espíritu Pampa, excavated by Brian S. Bauer and Miriam Aráoz Silva in 2010 (Bauer & Aráoz Silva, 2016b). This building is made up of rectangular galleries, as seen in the map below (Figure 8), with the piece of glass found in Unit 2.

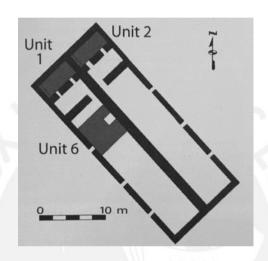


Figure 8. Map of the Hall of Miniatures at Tendi Pampa (Bauer & Aráoz Silva, 2016b, p. 223, Fig. 3)

The building contained an unusually large number of miniatures, and the authors conclude that the building would have hosted a combination of food storage, meal preparation, and other ritual or play activities that involved the miniatures. The authors suggest that due to its limited number of cooking and serving vessels, the small room excavated in Unit 2 is unlikely to have been used for preparation or storage of food. Rather, the presence in the unit of three Spanish items—the piece of glass, a piece of bent copper with a rivet, and a small copper hinge with two copper nails still attached (a notable collection, especially given the limited number of total finds in the "Hall of the Miniatures")—suggest that the room was used for keeping valuable or rare objects (Bauer & Aráoz Silva, 2016b).

3.3. TECHNICAL DESCRIPTION OF THE OBJECT

The chevron beads are all irregular oval shapes formed of sharply cut facets which leave flat planes across parts of their surface. Where visible, the beads appear to have facets cut on six sides. Each has a circular hole through the centre of the bead, which passes through its length. The beads are made up of layers of blue, red and white glass. Although the red and white colours are quite consistent across the set of beads, the blue appears to vary from a dark, almost black, colour to a paler shade (possibly as a result of a thinner layer of blue glass through which more of the white glass below shows through). The exposed layers of glass reveal irregular star-shaped patters that span the width of the bead at each end. Where the star shape can be seen the whole way around the bead, the stars have twelve points. In some cases, the points are quite angular, others are more curved, creating a wave pattern. In addition, lines of paler blue can be seen across the side of the glass of the beads, each lining up with one point of the star shape. In the photographs, the beads appear shiny.

Some of the beads appear to show wear on the sides of the holes, suggesting that the bead may have been strung at some point to wear as jewellery or perhaps simply to transport more easily. The set of nine glass beads are presented strung together in Figure 2, however they are not described as found in this way in the description of Fonseca Santa Cruz and Bauer (2016a), nor are they presented this way in Figures 3 and 4. Furthermore, the inclusion of what appears to be a small piece of plastic or paper within the string of beads at the top left of Figure 2 suggests that these were strung together by the archaeologists or at the museum. Nonetheless, it is possible that the beads were strung together at some point and that the original cord deteriorated. The fact that they were found closely grouped together, and that they are similar in style certainly suggests that they may have been received or collected as a set.

The beads would have been introduced to the area by the Spanish, but their distinctive star-shaped multi-layer design identifies them as chevron beads originally from Venice. These beads begun to be produced in Venice around 1500 and continue to be made in Italy to this day, as well as in other modern centres of production including the U.S., China and India.

The traditional technique for making chevron beads is described by the Corning Museum of Glass (n.d.). It involves drawing out a hollow tube of layered glass, with some layers set using moulds to create the beads' distinctive star-shaped layers. The process of drawing hollow canes of glass was rediscovered in Venice, which had long been an important centre for glassmaking, around 1490. The technique allowed Venetian

craftspeople to create new kinds of beads and was quickly applied to create the famous Venetian glass chevron beads and rosetta beads. Once the hollow tube was created, it was then cut into individual beads sections, which were tumbled or hand grinded into an oval bead shape, revealing the star-shaped layers of the interior.

This technique changed slightly over time. Early chevron beads, made in the 16th century, have seven layers of glass and are hand-ground to create rough oval shapes. As the beads narrow on each end, they reveal twelve-point stars. From 1590 onwards, the beads are usually finished by heat rounding giving a smoother appearance, and were produced with gradually fewer layers (Donnan and Silton, 2010). From this time onwards, beadmakers also increasingly experimented with variations in colour and shapes (Corning Museum of Glass, n.d.). The beads found in Vilcabamba, with their classic seven layers of glass and roughly cut hand-ground facets clearly fall into the earlier type of Chevron beads, indicating that they were produced in the 16th century before 1590, consistent with the chronology of the site. They can be contrasted with the chevron bead with six layers and a smooth oval shape achieved through heat rounding distinctive of later chevron beads shown in the bead in Figure 9, also produced in Venice.



Figure 9. Chevron bead produced in Venice with six layers and a smooth oval shape, typical of the production of chevron beads after 1590. (Accession number: 66.3.10 A)

Photograph retrieved from the Corning Museum of Glass website⁸

The measurements for the chevron beads found at Tendi Pampa are not provided by Fonseca Santa Cruz and Bauer (2016a) and details were not available at the time of writing this thesis from the museum in which they are kept. Therefore, as a reference, I have investigated the dimensions of Venetian chevron beads in the online catalogue of

-

⁸ Retrieved from https://www.cmog.org/artwork/chevron-bead-0

the collections of the Corning Museum of Glass,⁹ one of the most comprehensive collections of glass beads in the world. Six chevron beads in the collection have individual measurements provided and are identified as being produced in Venice. Measurements of these beads range from 0.9cm to 5cm in length and from 0.5 to 4.5cm in height.

The glass found at Vilcabamba is an irregularly shaped piece of glass of just over 1cm in length. It is made of clear glass without any additional colouring and has not been worked into a particular form.

3.4. Interpretation

3.4.1. Spanish use of glass beads in trade and gift giving

Glass beads were a commonly used trade item for the Spanish, both in Africa¹⁰ and the Americas. The popularity of European glass beads as a trade item in Africa, and the particular value of chevron beads, is illustrated by academics like John Pemberton (2008). Before his voyage to America, Christopher Columbus spent a decade in Portugal from the mid-1470s to 1485, also travelling to Africa and islands in the Atlantic. He brought much of his knowledge of Portuguese precedents and trade practices in Africa with him when he arrived in America (Philipps Jr, 1992, p. 150), including the use of glass beads for trading. When Columbus reached Cuba, believing it to be Cathay, he sent emissaries with presents to find the Great Khan whom he thought resided there. He chose a sailor who had previous experience in a similar mission in Africa to lead the group and they took strings of beads with them to exchange for food during the journey, presumably because these had proved an effective trading item in Africa (Columbus, 1989 [1492-1493], entry for October 30, 1492).

This pattern was established early and glass beads quickly took hold as a common trade item across the American continent. They are frequently found in archaeological sites from the early colonial period, including, for example, in many early 16th century sites in Florida (Mitchem, 1989). Therefore, by the time Pizarro and his men reached Peru, the use of glass beads in trade and gift giving in colonial contexts was already long-established and they were immediately used as gifts. As Pizarro made his way towards

¹⁰ Chevron beads in particular remain highly valued in West Africa to this day. At around 2:00 in this video, Ghanaian bead trader Garbe Mohammed shares his prized 16th century chevron bead and compares it to modern versions: https://www.worldremit.com/en/stories/story/2016/07/26/beads-ghana

⁹ Retrieved from https://www.cmog.org/collection

Cajamarca in 1532, the Inca Atahualpa sent a messenger to meet him with gifts and Pizarro in turn gave the messenger gifts including glass beads, a fine Holland shirt and two Venetian glass goblets (Trujillo, 1953 [1571], p. 136).

This pattern continued in Vilcabamba. Diego Rodríguez de Figueroa specifically mentions beads being used as gifts on four occasions in his account of his journey into Vilcabamba: he gives beads to a group of local people that become aggressive with him in an attempt to sooth the situation (1910 [1565], p. 95); to those who bring him food while he is staying in Vilcabamba (1910 [1565], p. 108); a few beads along with a headcloth to the Inca's servant (1910 [1565], p. 97); and finally as part of a package of gifts sent to the Inca (1910 [1565], p. 102). He describes this package of gifts in some detail:

E luego le lleué quatro pieças de vidro e vna petaca de confitura, que era lo que el oydor Matienço le enbiava, y así se lo escrevía por su carta. Y así mesmo le lleué media arroba de chaquira xpistalina e margarita e siete braceletes de plata e vna poca de chaquira de colores desta tierra; y se lo dí diziendo que aquellos vidros le enbiava el oydor Matienço porque era cossa que entre señores se tenían en mucho; y que los confites así como davan gusto en el tato de la lengua, así y de mis palabras pretendía darle contento; y que lo demás yo le hazia servicio como mensajero y enbaxador que á él venía. (p. 102)¹¹

This is the moment before Rodríguez de Figueroa's long-awaited conversation with the Inca and he delivers the Inca both gifts from Judge Matienzo and from himself. It seems likely that Rodríguez de Figueroa would save his highest status items to give to the Inca. We can therefore assume that the inclusion of glass beads within what is clearly intended as a lavish package of gifts including silver items, suggests that Rodríguez de Figueroa considers them a valuable gift worthy of their high-status recipient whose favour is integral to the success of his dangerous journey.

Higashimori & Cantarutti (2016, p. 161)

¹¹ "And then I sent him four pieces of glass and a basket of sweets, which was what the Judge Matienzo sent him, as mentioned in his letter to him. I also sent half an arroba of glass beads, pearls, seven silver bracelets, and a small [number] of earth-coloured beads. I gave them to him, telling [him] that Judge Matienzo had sent him the glasswork because it was highly valued among lords, and that just as the sweets gave pleasure upon touching the tongue, I hoped that my words would give him joy, and that [as for] the rest, I was coming to serve him as a messenger and ambassador." Translation by Bauer, Halac-

3.4.2. Inca perceptions of glass beads

Though clearly considered a valuable gift and exchange item by the Spanish, and specifically by Rodríguez de Figueroa in Vilcabamba, we cannot assume that the Inca recipients felt the same way about the glass beads they received. Rodríguez de Figueroa's gift giving appears successful throughout his account, dispelling tensions and achieving access both to the geographical area of Vilcabamba and to the Inca himself, suggesting that they were also considered to be acceptably valuable gifts by their recipients. However, he almost always gives out a package of gifts to each person he wishes to win over. This is surely supposed to demonstrate his generosity, but it could also be read as ignorance—without knowing what is truly valued by the Inca and his people, perhaps Rodríguez de Figueroa simply packages together several likely items in the hope of success. It is possible that the beads are a hapless inclusion among other goods considered valuable by their recipients.

This is unlikely for two reasons. Firstly, in the broader context of the early colonial period in Peru, it appears that glass beads were considered attractive and valuable. This is particularly evident in the way in which Spanish beads are seen integrated into local customs, particularly in the mixing of Spanish beads with valued local beads and the use of such items in ceremonial and funerary contexts. The study of Donnan and Silton (2010) on the presence of 16th century glass beads, including chevron beads, in Chotuna on the North coast of Peru shows how such mixed objects were used in indigenous ritual contexts, suggesting that they were considered to be items of value and ritual power. The beads at Chotuna are found in burial contexts (as seen in Figure 10, for example) and appear to have been strung as necklaces, bracelets and anklets worn by the deceased. Interestingly, glass beads were particularly concentrated around the neck – possibly a place of particular importance – where they made up 94% of the beads.



Figure 10. Beads at the right wrist of Burial 1 in Donnan and Silton's excavations at Chotuna. Two chevron beads (circled) can be identified, among several other types of European glass beads (Donnan and Silton, 2010, p. 29, Plate IVD; red circles to identify chevron beads added by the author)

Similarly, Feinzig (2017) points out combinations of local and Spanish beads on the North and Central Coast of Peru, including one item seen in Figure 11, in which largely local beads are combined with a chevron bead to create a striking piece. The chevron bead can be found circled towards the top left corner of the item on the left of the photograph.



Figure 11. Two pieces of beaded jewellery found at the Hacienda San Nicholas in the Lima region, The Peabody Museum of Archaeology and Ethnology at Harvard University (Feinzig, 2017, p. 51, Fig. 32; red circle added by the author to identify the chevron bead)

Although the chevron beads found in Vilcabamba were not mixed with indigenous bead types, they were found together with indigenous ritual objects, as discussed previously.

Secondly, the context in which the Spanish beads were found in Vilcabamba suggests that they were highly valued. Their position in a building likely used for ritual activities and together with charged ritual objects strongly suggests that these beads were not only accepted by the Inca, but were valued enough to be kept in an important ritual place and most likely used as part of Inca ritual activity.

Why were these chevron beads valued in this way? Part of their value comes from their role as exotic and hard-to-obtain gifts brough by outsiders. Menaker (2004) argues that European beads were valued in a similar way to Spondylus shells because they are acquired from distant places. Glass, the material the beads were made of, was also likely attractive to the Incas at Vilcabamba. Feinzig (2017) argues that indigenous interest in Spanish glass beads was related to pre-existing preferences, particularly the strong pre-Columbian preference for shiny and metallic beads. Feinzig studied beads across regions of Peru, Venezuela and Colombia during the sixteenth century, to explore preferences related to materials and colours of both local and Spanish beads, using relevant beads in the collections of the Peabody Museum of Archaeology and Ethnology at Harvard University, The Field Museum of Natural History, The Smithsonian Institution National Museum of the American Indian, The Yale University Art Gallery, and The Corning Museum of Glass. Feinzig observes that beads of each material are not evenly spread throughout each region (see Figure 12), with a concentration of glass beads in the Cusco area in the 16th century and a very low proportion of glass beads in other areas apart from Chachapoyas.

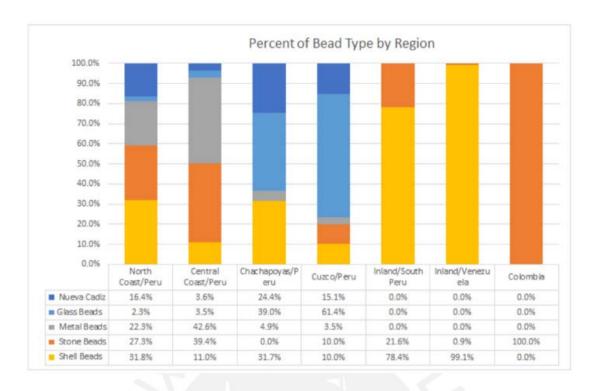


Figure 12. The percentage of bead types in the Feinzig sample set observed by region (Feinzig, 2017, p. 70, Table 19)

These findings should be interpreted with caution since they come from beads in museum collections. It is possible that the proportions observed are affected by the interests of archaeologists investigating certain regions or museum curators with access to finds from different regions. Nonetheless, the striking difference in the proportions suggests that these reflect some underlying reality.

Feinzig interprets the proportions of glass beads in terms of indigenous interest in or rejection of these types of beads. This interpretation is incomplete without considering Spanish actions and motivations in influencing the distribution of glass beads. As mentioned previously, glass beads were clearly considered by the Spanish as useful and valuable items for trade and gift giving throughout America and elsewhere in the world. The Spanish would not have had an unlimited supply of these objects and would therefore have needed to make decisions about where best to use them either as gifts to people important to Spanish interests or to trade in order to obtain goods that they required. During the 16th century, Cusco was an area of high political importance for the Spanish in establishing control, negotiating with Inca nobles, and dealing with the rebel territory of Vilcabamba. We should not therefore be surprised to find high proportions of one of their most effective bargaining materials in that area. Nonetheless, given the religious

importance placed by the Inca on the qualities of shiny materials like gold, it certainly possible that glass beads were particularly sought after in the Cusco area.

It is also likely that the blue colour of the beads was considered valuable and attractive. Blue was a difficult colour to produce in the Andes. It was used sparingly in textiles, to which it was added through a die created from indigo plant species that were difficult to obtain (Antúnez de Mayolo, 1989, p. 183). Blue was also present in small quantities in the Inca empire in precious stones, such as chrysocolla, which was mined at Los Infieles, in modern-day north-central Chile, during the Inca Period. The mining operations are believed to have been supported by the Inca state and the stone to have been considered valuable in the Inca Empire (Cantarutti, 2013). The colour was therefore rare and blue objects would likely have been considered unusual and valuable.

3.4.3. The unworked piece of glass

The presence of the unworked piece of glass reinforces the value of glass as a material to the Inca at Vilcabamba. It seems strange to find such an apparently unremarkable piece of glass in a prestigious and apparently ritual setting, but Bauer and Aráoz (2016b) point out that the qualities of glass as well as its scarcity may have made even this fragment attractive to the Inca and therefore a viable item for trade or gift giving by the Spanish.

In fact, Rodríguez de Figueroa's account of his trip to Vilcabamba reveals that a simple piece of glass was indeed considered a viable gift by at least some Spanish (though not necessarily by Rodríguez himself). Among the gifts brought to Vilcabamba by Rodríguez de Figueroa on behalf of Judge Matienzo were four pieces of glass. When he sent the gifts to the Inca, Rodríguez de Figueroa also sent an explanation that Judge Matienzo sent glasswork because it was highly valued among lords (1910 [1565], p. 102), as if the Inca might otherwise be offended, finding simple pieces of glass insufficient. Rodríguez de Figueroa's intention in this passage is perhaps to show his superior diplomatic skill in understanding the appropriate gifts to win over the Inca (he himself sent a lavish collection of gifts including silver and glass beads).

Regardless of his intention, this passage reveals to us that simple pieces of glass were given as gifts to the Inca in Vilcabamba on at least one occasion. Despite his apparent reservations about the gift, Rodríguez does not give us any indication that the gift was rejected by the Inca. Rather, the inclusion of a simple piece of unworked glass in the

archaeological record in a place of apparent ritual significance and grouped with other rare objects suggests that the such a gift was in fact considered attractive and worthy of a prestigious place in Vilcabamba.

3.5. CONCLUSIONS

For the Spanish, glass items, and particularly glass beads, were a common and effective trade item and gift frequently used since their arrival on the American continent and previously in Africa. Written records show that glass items were presented as gifts at Vilcabamba, including glass beads and pieces of glass presented as part of lavish packages of gifts directly to the Inca.

We see that glass items were indeed seen as valuable by the Inca. Nine chevron beads were kept in the temple complex of *Tendi Pampa* alongside other special and ritual objects and may have been integrated into ritual activity. It is likely that they were valued for their inherent properties, including their material and colour, as well as their status as rare and exotic objects gifted by outsiders.

The presence of a piece of unworked piece of glass, stored alongside special and possibly ritual objects in the "Hall of Miniatures", confirm the Inca interest in glass as a material. The object is otherwise unremarkable, without being worked into any form or with any colour added. Its value therefore appears to have been derived from the exotic and attractive material it was made of.

4. Scissors

4.1.Introduction

In the excavations led by Javier Fonseca Santa Cruz in Espíritu Pampa in 2008 and 2009, a striking find was made: one pair of scissors, uncovered in a special, possibly ritual context in a set of buildings in Espíritu Pampa referred to as the "New Sector" by Fonseca Santa Cruz and Bauer (2016b). The scissors can be seen on the floor of the structure, where they were found, in Figure 13.



Figure 13. The remains of a bowl and a pair of scissors on the floor of Structure D in the "New Sector" in Espíritu Pampa. Photograph by Javier Fonseca Santa Cruz (Fonseca Santa Cruz and Bauer, 2016b, p. 213, Fig. 14)

The find is particularly intriguing given that Diego Rodríguez de Figueroa mentions bringing pairs of scissors to Vilcabamba as gifts for the Inca (1910 [1565], pp. 93, 97). Furthermore, this was not the first time that scissors had been find at Vilcabamba. Ellwood C. Erdis, the chief engineer of Bingham's third and final 1914-15 expedition to

Peru, conducted expeditions at Vitcos from mid-June to mid-July 1915. These excavations are not well documented, but Bingham (1922) reported that:

Our excavations in 1915 yielded a mass of rough potsherds, a few Inca whirl-bobs and bronze shawl pins, and also a number of iron articles of European origin, heavily rusted—horseshoe nails, a buckle, a pair of scissors, several bridle or saddle ornaments and three Jew's harps. (p. 244)

4.2. CONTEXT OF THE OBJECT

Fonseca Santa Cruz and Bauer (2016b) describe the "New Sector" as made up of five structures, four of them contained within a walled complex (see Figure 14), around 250m to the southwest of the central square in Espíritu Pampa. It was registered for the first time and possibly cleaned in parts by Savoy (1970b, p. 103). The style of the complex is unusual, and Fonseca Santa Cruz and Bauer (2016b) suggest that it could have been built relatively late in the Inca presence at Vilcabamba.

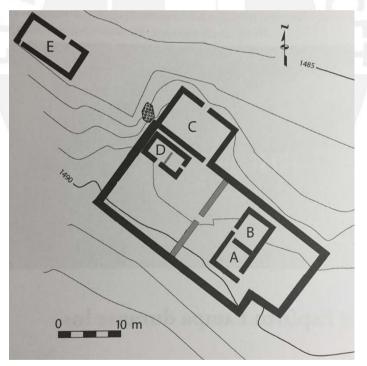


Figure 14. A map of the five structures of the "New Sector" (A-E).

Plan by Gabriel E. Cantarutti (Fonseca Santa Cruz & Bauer, 2016b, p. 204, Fig. 1)

The scissors were found in Structure D. This structure is divided by an internal wall into two spaces, with a small passageway between the two (Figure 15). The structure contained significant quantities of carbon showing that it was burned, likely as the Inca

abandoned Vilcabamba. In the excavations led by Fonseca Santa Cruz, the archaeologists found a lid, an iron nail, a clay whistle in the shape of a rhombus, a small bird figurine and a collection of miniature vessels in one half of Structure D. In this space, they also came across a looting pit. In the other half of the building, they found floor areas made of baked orange clay, a miniature plate, a bowl with straight edges, and the rusted pair of scissors (seen on the bottom right of the plan in Figure 15).

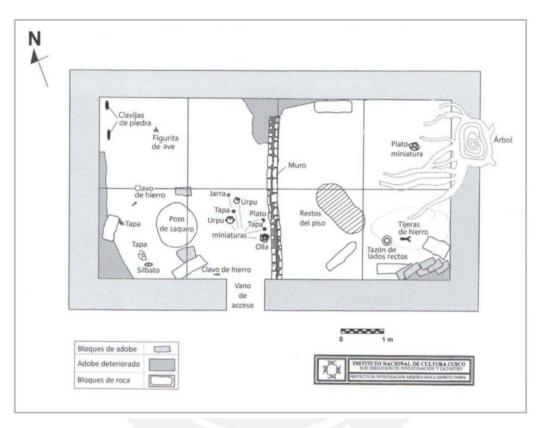


Figure 15. Plan of Structure D of the "New Sector". Plan by the Ministry of Culture, redrawn by Gabriel E. Cantarutti (Fonseca Santa Cruz & Bauer, 2016b, p. 211, Fig. 9)

Fonseca Santa Cruz and Bauer (2016b) conclude that the function of Structure D is unclear, although they rule out the possibility of it being a domestic structure due to the lack of evidence of preparation of storing of food. Rather, they suggest that the discovery of numerous miniature vessels, the whistle, the figurine and the scissors suggest that the structure had a special function.

4.3. TECHNICAL DESCRIPTION OF THE OBJECT

The rusted scissors found in Structure D are European-style scissors. Unfortunately, it has not been possible to examine the scissors in person or to obtain more detailed

photographs or information on them at this time. In the zoomed-in image in Figure 16, the two blades can be seen, but little more about the item can be observed.



Figure 16. A close-up image of the photograph in Figure 13 showing the scissors.

Photograph by Javier Fonseca Santa Cruz

(Fonseca Santa Cruz and Bauer, 2016b, p. 213, Fig. 14)

During this period, scissors were made individually by hand. From at least the 13th century until the manufacture of crucible steal scissors in Sheffield in 1761, scissors were made of iron with a steelified outer surface (Kirkup, 1998, p. 430).

4.4. Interpretation

4.4.1. Spanish use of scissors in trade and gift giving

Since scissors were made individually by hand and were intricate to manufacture, they were reserved largely for craft activities rather than domestic activities, for which shears long continued to be used (Kirkup, 1998, p. 430). As a result, from a Spanish perspective, scissors were an object of some value. They were brought by Europeans to America from the early colonial period. As early as 1545, records show that Spanish craftsmen brought European tools for making textiles including scissors (Phipps, 2013). Turgeon (1998)

notes the presence of scissors in trade goods in Norman cargoes transported to North America in the 16th Century. And Mexican archival research shows that supplies for crafts and trades, including scissors, were included in shipments from Mexico to Peru by the 1560s (Borah, 1954).

Scissors were not only used by Spanish craftspeople in America, they were also traded with local people. Scissors were included, for example, in items traded with indigenous people by Portuguese and French merchants in exchange for labour in harvesting Brazilwood trees, the first major economic activity in colonial Brazil (Dodge, 2018). In Peru, scissors also appear to have been an important item for the Spanish in local trade and gift-giving. Inca Garcilaso de la Vega (1829 [1609]), for example, explains that a school friend jokingly commented to him:

Si los españoles, vuestros padres, no hubieran hecho mas de traernos tijeras, espejos y peines, les hubiéramos dado cuanto oro y plata teníamos en nuestra tierra. (p. 67)¹²

In Vilcabamba, we observe the use of scissors as gifts in an important diplomatic mission. Diego Rodríguez de Figueroa carried several pairs of scissors with him on his mission to Vilcabamba and presented them as valuable gifts to the Inca. When he handed over some letters to the Inca's runners for them to take to the Inca, Rodríguez de Figueroa also gave them gifts, including raisins, sweets, figs, quince jam, three handkerchiefs, four knives with sheaths, some needles and three pairs of scissors, as gifts for the Inca (1910 [1565], p. 93). Later, when Rodríguez de Figueroa stays outside the town of Arancalla in Inca territory on his way to meet the Inca, he sends further gifts to the Inca of two decks of cards and two pairs of scissors (1910 [1565], p. 97). Rodríguez de Figueroa gives a wide range of gifts to various people he meets during his travels to meet the Inca, but he only ever sends scissors to the Inca. This suggests that, in Rodríguez de Figueroa's perspective, scissors were valuable items reserved for the most important gifts.

49

¹² "If the Spanish, your ancestors, had not done anything more than bring us scissors, mirrors and combs, we would have given them all the gold and silver we had in our land." Translated by the author.

4.4.2. Inca perceptions of scissors

Scissors were not only deemed valuable by the Spanish but appear to have been assigned value by their recipients, since they were found alongside special Inca objects like miniatures, figurines and whistles in a structure likely used for special activities.

It is possible that scissors were adopted by the Inca at Vilcabamba for crafts like clothmaking, as the Spanish used scissors. It is certainly true that Spanish styles of clothmaking and use of Spanish tools were rapidly adopted by some indigenous or mestizo craftsmen to fulfil Spanish and mestizo demand for Spanish clothing. For example, by 1600, a contract recorded that Baltazar Aucca Poma, a master embroiderer with Quechua family names, would provide various living arrangements and tools to an apprentice, including scissors, a thimble and needles (Cornejo Bouroncle, 1960, p. 335). And it is interesting to note that in one of the two times that Rodríguez de Figueroa used scissors as a gift, he also gave needles alongside them (1910 [1565], p. 93).

However, the pair of scissors found in excavations at Vilcabamba were not uncovered in a setting that suggests that clothmaking, or any craft work, took place there. Furthermore, cutting cloth was not a common practice for Incas in making textiles. Inca clothing typically consisted of knitted or woven cloth that was worn whole. Clothing might be made of several pieces of cloth sewn together, but individual pieces of cloth were rarely cut. Arm and neck holes in an *uncu*, for example, were incorporated into the weaving rather than cut out afterwards (Phipps, 2018). It is possible that scissors could have been used for other elements of dressmaking, such as cutting threads used in embroidery, although they would likely have proved quite large and unwieldly for the task. It is therefore unlikely that scissors would have been readily incorporated into traditional clothmaking practices at Vilcabamba.

Another possibility, suggested by the context in which the scissors were found, is that the scissors were incorporated into ritual activity. In this context, it is interesting to consider the way in which scissors are used today in the tradition of Andean scissor dances, *la danza de las tijeras*. There is no conclusive evidence to demonstrate the exact origin of the *danza de las tijeras*, or the point at which scissors were incorporated into the ritual dance. However, since first suggested by Roel Pineda (1974), various studies including Núñez (1990) and Cavero Carrasco (2002) have suggested a link between the *danza de*

las tijeras and the *Taqui Oncoy* rebellion, a millennialist movement in opposition to the Spanish which originated in Huamanga and spread throughout much of the Andean sierra in the 1560s and 1570, at the same time as the Inca resistance at Vilcabamba.

The *danza de las tijeras* originated in the area now made up of the departments of Ayacucho, Huancavelica, Apurímac and the northern part of Arequipa (Núñez, 1990), the same area in which the *Taqui Oncoy* rebellion begun. Núñez (1990) shows various links between the *Taqui Oncoy* and the modern version of the *danza de las Tijeras*, noting similarities in the ecstatic form of the dance and in the ideas behind the dances, relating to a possessed person internalizing divinities. Núñez hypothesizes that the *Taqui Oncoy* was among the first antecedents of the indigenous elements that eventually transformed and came together in the *danza de las Tijeras*.

If scissors were already incorporated into these ritual dances at the time of the *Taqui Oncoy*, then the presence of scissors in a ritual place at Vilcabamba might suggest that similar ritual dances and activities took place there. This link between rituals carried out at both Vilcabamba and among those participating in the *Taqui Oncoy* rebellion would contribute to the ongoing scholarly debate on the extent of the connection between Vilcabamba and the rebels of the *Taqui Oncoy*, argued for by Curatola Petrocchi (2008, pp. 53-54) and Roy (2010), among others.

However, even if the *danza de las tijeras* did originate in the *Taqui Oncoy* rebellions, we cannot be sure that scissors were already used in the dance in its early incarnations. Núñez (1992) explains that the *danza de las tijeras* evolved substantially throughout the colonial and republican periods, and the name itself appears to be relatively recent. Further, Bush (2011) states that, although the first archival documents that represented the scissor dance appeared in aftermath of the Tupa Amaru rebellion (which ended in 1781), it is not until the 1830s, in the first decades of the Republic, that a number of archival documents register a theatrical figure who bears a close resemblance to the contemporary scissor dancer in terms of the diabolic Andean sorcerer. Further research into the *Taqui Oncoy* and *danza de las tijeras* would be needed to establish a connection between scissors and the messianic movement during this period.

Regardless of whether this connection can be established, the context in which the scissors were found suggests that they were kept alongside special and valued objects,

some possibly ritual in nature. What could have been behind the appeal of scissors as a special and possibly ritual object? I suggest that we can look to the scissor's material, appearance and sound. Iron appears to have been valued by the Inca as an exotic metal resembling silver in appearance, a topic which is explored in more detail in Chapter 5 of this thesis. ¹³ Furthermore, scissors may have been valued for the sounds they created. The importance of scissors' sounds is certainly emphasised by contemporary scissor dancers, including in a contemporary origin story of the *Tusuq Laiqa* (Dance of the Sorcerer, another name for the *danza de las tijeras*) captured by Bush through interviews carried out from 2007 to 2009 with scissors dance performers from Huancavelica (2011, p. 62).

Finally, it is worth considering the possibility that scissors may have been valued for their sharpness and, rather than being connected with craft activity, may have been associated with Spanish weaponry, which was perhaps harder to come by. This possibility is reinforced by a brief reference to scissors made by Rodríguez de Figueroa (1910 [1565], p. 97). When he travels past Vitcos, he mentions that this is the place in which seven Spaniards killed Manco Inca. Rodríguez de Figueroa reports the story of the murder as told to him by locals, recounting that Méndez killed Manco Inca by stabbing him in the back of the head with some scissors:

Y me dixeron los yndios que[lo]auían muerto aquellos españoles por alçarse con la tierra, y que estando jugando á la herradura determinaron de matalle. Le echó mano vn fulano Mendez, y le dió con vnas tixeras por detrás en el celebro quatro ó cinco puñaladas, hasta que lo mató... (p. 97)¹⁴

This is not the standard version of the story told by other Spanish chroniclers. Guamán Poma de Ayala, for example, also depicts Manco Inca being stabbed from behind, but with a dagger, as seen in Figure 17 (Murúa, 2004 [ca. 1590], Folio 47v). The fact that the story recounted by Rodríguez de Figueroa diverts from the usual Spanish story suggests

spirits, the apus..." Translation by author.)

¹³ In this context, it is interesting to note the connection made by modern scissor dancers between the metal scissors are made of and their link with the earth. In <u>this video</u> of modern scissor dancers, one dancer explains, "La tijera está hecho de las piedras, de los huacas, de los minerales. Por eso, la tijera es una comunicación entre el hombre y los espíritus, los apus..." (PromPerú, n.d.) ("The scissors are made of rocks, of *huacas*, of minerals. For this reason, scissors are a form of communication between man and the

¹⁴ "The Indians told me that those Spaniards had killed [Manco Inca] to take over the land and that while playing horseshoes, they decided to kill him. What's-his-name Méndez grabbed and hit [the Inca]; stabbing him four or five times in the back of the head with some scissors, until he killed him." Translation by Bauer, Halac-Higashimori & Cantarutti (2016, p. 159).

that it might in fact have been the version told to him by the Inca's men. If this were indeed the version of the story recounted among the Inca, it could have affected their attitude towards scissors, which may have been viewed as a powerful and dangerous object that had brought about the death of an Inca.



Figure 17. Manco Inca is killed by Méndez with a dagger.

Drawing by Guamán Poma de Ayala (Murúa, 2004 [ca. 1590], Folio 47v)

It is interesting to note that Rodríguez de Figueroa reports that he is told the story shortly after he gives a pair of scissors as a gift for the Inca. The story might therefore reflect some unease or ambivalence about the gift. The fact that Rodríguez de Figueroa is, at the same time, shown the heads of the dead Spanish responsible for the scissor attack might also represent something of a warning to another Spaniard who has arrived to Vilcabamba with scissors in tow.

4.5. CONCLUSIONS

The archaeological and historical evidence suggests that scissors were given by the Spanish as a high-status gift and accepted by the Inca and brought into a special, non-utilitarian setting alongside other valued objects. We do not have any indications that the scissors were used for clothmaking or other craft purposes. Rather, the context in which they were found, as well as the adoption of scissors into ritual dance in the Andes, though possibly at a later stage, suggest that the scissors were valued by the Inca as a powerful, ritual, possibly dangerous object, rather than as a useful craft tool.



5. OTHER METAL OBJECTS

5.1.Introduction

In addition to the scissors explored in Chapter 4, a number of other European metal objects have been found at Vilcabamba, including a considerable number of iron nails, as well as other items made of iron and of copper.

Nails are reported frequently in excavations of Vilcabamba, including those of Juan Samiengo in 2005 (Bauer, 2016b, p. 140); Javier Fonseca Santa Cruz in 2008-2009 (Fonseca Santa Cruz & Bauer, 2016a, pp. 159-160; 2016b, p. 214); Brian S. Bauer, Miriam Aráoz Silva and Kylie Quave in 2008 (2016, p. 121); and Brian S. Bauer and Miriam Aráoz Silva in 2009 and 2010 (2016a, pp. 84-85, 88-89; 2016b, p. 234). Bingham (1922) also reported that horseshoe nails were found at Vitcos in the excavation conducted by Ellwood C. Erdis, the chief engineer of Bingham's third and final 1914-15 expedition to Peru.

In addition to the iron nails and the scissors discussed in Chapter 4, European and European-style metal objects found in recent excavations at Vilcabamba include the following objects from the excavations of Javier Fonseca Santa Cruz in 2008-2009 (Fonseca Santa Cruz & Bauer, 2016a):

- Remains of a copper latch and two copper hinges with five accompanying copper nails, likely parts of a small wooden chest of European origin
- An iron pin-like object with inlaid shell
- A large sickle-like iron tool
- A large copper lid which appears to be made in Inca style but to be influenced by European production
- A copper bell, possibly of Andean or European origin (Fonseca Santa Cruz and Bauer (2016a) do not discuss the origin of the object and it is difficult to determine, as discussed further in section 5.3.3)
- A large sheet of iron

In addition, two European metal objects were found by Brian S. Bauer and Miriam Aráoz Silva in 2010 (Bauer & Aráoz Silva, 2016b):

- A small piece of curved copper with a rivet
- A small copper hinge which still held two copper nails

In addition, European metal objects have been reported from earlier explorations and excavations, but little information is now available. Bingham (1922) reported that several iron objects were found during the excavations conducted at Vitcos by Ellwood C. Erdis in 1914-1915, including heavily rusted—horseshoe nails, a buckle, a pair of scissors, several bridle or saddle ornaments and three Jew's harps. Savoy (1970a) also reports having brought back a few European metal objects that he found in Vilcabamba in 1964 for study in Lima, including a Spanish horseshoe.

5.2. THE CONTEXT OF THE METAL OBJECTS FOUND AT VILCABAMBA

5.2.1. IRON NAILS

The largest recorded concentration of nails found at Vilcabamba was in Bauer and Aráoz Silva's excavations of the "Double Structures" in Vitcos (Bauer & Aráoz Silva, 2016a, p. 89). Here, 28 iron nails were found, almost all close to doorways. In addition, smaller collections of nails have been recorded at various other buildings:

Excavated by	Year	Site	Structure	Iron nails found
Juan Samiengo	2005	Espiritu Pampa	The Ushnu	One iron nail
Brian S. Bauer, Miriam Aráoz Silva and Kylie Quave	2008	Espiritu Pampa	The South- East patio of the Yurak Rumi ceremonial complex	Fragments of two iron nails

Brian S. Bauer and Miriam Aráoz Silva	2009	Vitcos	La Kallanka	Three iron nails
Brian S. Bauer and Miriam Aráoz Silva	2009	Vitcos	The "Double Structures"	28 iron nails found in total: • 20 nails in Unit 2 (mostly close to a doorway) • Three nails in Unit 3 (outside, close to a doorway) • Four nails in Unit 4 (outside, close to a doorway) • One nail in Unit 5
Brian S. Bauer and Miriam Aráoz Silva	2010	Espiritu Pampa	Cancha Baja	One iron nail found
Javier Fonseca Santa Cruz	2008- 2009	Espiritu Pampa	Tendi Pampa, Building 2	Two iron nails (one found near the entrance to the structure)
Javier Fonseca Santa Cruz	2008- 2009	Espiritu Pampa	New Sector, Building D	Two iron nails (one found near the entrance to the structure)

Table 1. Iron nails found in various excavations at Vilcabamba.

Compiled by the author based on information from Bauer, Fonseca Santa Cruz and Aráoz Silva (2016)

The nails are largely connected to elite or ceremonial structures: the Ushnu is a large and complex platform structure with buildings, terraces and patios (Bauer, 2016b); the South East patio forms part of a ceremonial complex surrounding the Yurak Rumi stone, where the most important Inca ceremonies took place during the Inca resistance at Vilcabamba (Bauer, Aráoz Silva and Quave, 2016); the Kallanka is believed to have been used for public ceremonies (Bauer and Aráoz Silva, 2016a); the Double Structures are thought to have been an elite residence (Bauer and Aráoz Silva, 2016a); at least some buildings within the Cancha Baja are believed to be associated with individuals of high status (Bauer and Aráoz Silva, 2016b); Tendi Pampa was likely a temple (Fonseca Santa Cruz and Bauer, 2016a); and the function of Building D in the New Sector is unknown, but it contained numerous special objects and appears to have had a special function (Fonseca Santa Cruz and Bauer, 2016b).

In many cases the nails were found in buildings that did not contain any other European objects. For example, no other European objects were found in the Kallanka, the Cancha Baja or the Double Structures, where the largest number of nails were found, although these buildings did contain other special objects such as miniature vessels and exotic ceramics. However, Bauer and Aráoz Silva note that the materials found at the Double Structures were badly degraded and very fragmented (2016a). The Tendi Pampa complex, on the other hand, contained a concentration of European-style objects. In addition to iron nails, it contained Spanish-style roof tiles, a sickle-like iron tool, a large copper lid possibly of European manufacture, a copper bell, a copper latch and two copper hinges with nails, an iron pin with inlaid shell, and a collection of nine chevron glass beads, as well as certain architectural features likely imitating European styles (Fonseca Santa Cruz and Bauer, 2016a).

Most of the nails found at Vilcabamba have been discovered near doorways. As a result, Bauer and Aráoz Silva (2016a) conclude that they were likely used in the construction of wooden doors, which would have disintegrated over time. We know that at least some of the buildings at Vilcabamba contained wooden doors, as Martín de Murúa mentions that the doors and gables of the Inca's house were made of a very fragrant cedar wood (2008 [ca. 1616], Chapter 82).

However, not all the nails present in Vilcabamba are associated with doors. One particularly noteworthy example is the nail found in Building 9 of Tendi Pampa, which was found alongside nine chevron beads and various miniature vessels in one corner of the room (at the top-right in Figure 7). According to Fonseca Santa Cruz and Bauer (2016a), the contents of the room appear to have been left as they were abandoned just before the Spanish arrived. Therefore, the fact that the miniatures, the nail and the beads are found grouped together suggests that they were used or stored together. The nearby table pegs perhaps suggest that they had been placed on a table together when the site was suddenly abandoned. This loan nail grouped with other unusual and prized objects therefore does not appear to have been stored ready for use in a door. Rather, its context suggests that it was kept individually as a valued object. Indeed, the fact that it was likely left on a table together with miniatures—objects which are frequently found in ritual or funerary contexts (Besom, 2009)—and within a temple complex suggests that the nail might even have been integrated into ritual activity.

5.2.2. METAL OBJECTS FOUND IN TENDI PAMPA

The other European metal objects recorded by Javier Fonseca Santa Cruz and Bauer (2016a) were found in various buildings of the Tendi Pampa complex (Buildings 4, 7, 8 and 11; the locations of these buildings within the complex can be seen in Figure 6). Tendi Pampa is one of the most striking sets of buildings in Espíritu Pampa, set apart from the rest of Espíritu Pampa on a low ridge. The compound is made up of several rooms, constructed with superior craftsmanship compared to other parts of Espíritu Pampa and believed to have been used as a ritual feasting and temple complex (Fonseca Santa Cruz & Bauer, 2016a). Tendi Pampa contained a collection of important and unusual finds of Inca and European origin, including the beads discussed in Chapter 3.

The copper latch and two copper hinges with accompanying copper nails, likely parts of a small wooden chest, and an iron pin-like object were found in Building 4 of the complex. This building contains very unusual architectural features; the building has one semi-circular end and contains clay floor tiles and an elaborately decorated floor area which appears to mimic European floor tiles (discussed further in Chapter 6). With only a few vessels present, the space was almost certainly not used for food preparation or storage. Rather, with its unusual architectural features and the various special objects which it contained, the building was likely used for ritual or elite activities, according to

Fonseca Santa Cruz and Bauer (2016a). It may even have been designed to imitate a chapel, as Bingham originally thought it was (1914, p. 194).

Building 7 contained the large sickle-like iron tool. This building forms part of the overall temple complex, but its specific function could not be identified by Fonseca Santa Cruz and Bauer (2016a) due to the range of materials found.

The copper lid was found in Building 8. This space appears to have been used to store vessels and to prepare food and drink, including fermenting chicha. Like all buildings in the complex, it contained high quality artefacts and even a miniature *urpu*, suggesting that some special or ritual items may also have been kept in the space. The lid's presence in this room among other similar lids made of ceramic and ceramic vessels suggests that it was used as part of the preparation and storage of food and chicha for elite and ceremonial events.

The copper bell and large sheet of iron were found in Building 11. Chicha appears to have been fermented and prepared, alongside food, for feasting events that likely took place in the plaza connected to the building through its only doorway, according to Fonseca Santa Cruz and Bauer (2016a). Nonetheless, some special objects, not related to food preparation or storage, were also kept in the room, including the copper bell, the sheet of iron and two miniature objects. Given their presence in a building used for feasting preparations, it is intriguing to consider whether these objects were also somehow involved in feasting events.

5.2.3. METAL OBJECTS FOUND IN THE "ROOM OF MINIATURES"

The two European metal objects reported by Bauer and Aráoz Silva (2016b) were found in the "Room of Miniatures". This building is not well understood, but contained an impressive number of miniature vessels, as well as full-size vessels for storing, cooking and serving food. Bauer and Aráoz Silva conclude that the building was used for the preparation and storage of food, as well as for ritual activities or perhaps even a game which involved the large number of miniature vessels. The two European metal objects (the curved piece of copper with a rivet and the small hinge holding two nails) were found in Unit 2, one of two small rooms at the far end of the building (see Figure 8). In Unit 2, Bauer and Aráoz Silva (2016b) report finding only one piece of unworked glass

(discussed in Chapter 3) and these two metal items, with no vessels for food preparation or storage. They therefore conclude that the small room was used for storing exotic and valuable objects.

5.3. TECHNICAL DESCRIPTION OF THE OBJECTS

5.3.1. IRON NAILS

Bauer and Aráoz Silva (2016a) report that all the nails that they found in their excavations of Vitcos were similar, with relatively large heads and short points, of about 2 to 4 cm in length (Figure 18). One of the nails found in Tendi Pampa in Espíritu Pampa, on the other hand, appears much larger, at about 8cm in length (Figure 19). The nails are all made of iron, a material not used in the Andes before the arrival of the Spanish.



Figure 18. Iron nails of a similar shape and size, with relatively large heads and short points of 2 to 4 cm, found in Vitcos. 15 Photographs by Brian S. Bauer and Miriam Aráoz Silva (clockwise: Bauer & Aráoz Silva, 2016a, p. 84, Fig. 25; p. 89, Fig. 32; Bauer, Aráoz Silva & Quave, 2016, p. 122, Fig. 51)

¹⁵ The nails in the photograph on the upper left were found in Unit 5 of the Kallanka in front of one of the building's doorways, those on the right were found in the Double Structures, and the fragments of nails in the photograph on the bottom left were found in Unit 6 in the Yurak Rumi ceremonial complex.

61



Figure 19. One of the iron nails found in Structure 2 of Tendi Pampa,

Museo Amazónico Andino Qhapaq Ñan de Quillabamba. Photograph by Brian S. Bauer

(Fonseca Santa Cruz & Bauer, 2016a, p. 159, Fig. 11)

5.3.2. OTHER IRON OBJECTS

The iron pin-like object is described as having inlaid shell. Unfortunately, given COVID-19-related restrictions in place during the investigation for this thesis, it was not possible to examine or obtain photographs or further information on this object. Similarly, it was not possible to access images or further information on the large sheet of iron. However, the measurements of this object are provided by Fonseca Santa Cruz and Bauer (2016a) as 23cm by 4cm.

The sickle-like tool is of considerable size, measuring over 30cm lengthwise and made of iron (Figure 20).



Figure 20. A large sickle-like iron tool found in Building 7 of Tendi Pampa,

Museo Amazónico Andino Qhapaq Ñan de Quillabamba. Photograph by Brian S. Bauer

(Fonseca Santa Cruz & Bauer, 2016a, p. 179, Fig. 36)

5.3.3. COPPER OBJECTS

The copper latch, hinges and five nails can be seen in Figure 21. These are relatively small, with the long side of the latch no longer than 10cm. The two hinges are of even sizes and shapes and the copper nails are thinner and longer than the iron nails found elsewhere in Vilcabamba.

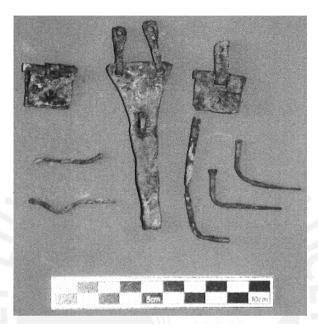


Figure 21. A copper latch, two hinges and five nails found in Building 4 of Tendi
Pampa, Museo Amazónico Andino Qhapaq Ñan de Quillabamba.

Photograph by Brian S. Bauer (Fonseca Santa Cruz & Bauer, 2016a, p. 163, Fig. 15)

The copper lid is relatively large, with a diameter of approximately 25cm and a central strap handle, also made of copper (Figure 22). Fonseca Santa Cruz and Bauer (2016a, p. 184) state that the object may be of Andean or European manufacture.



Figure 22. A copper lid with a central handle found in Building 8 of Tendi Pampa,

Museo Amazónico Andino Qhapaq Ñan de Quillabamba. Photograph courtesy of Javier

Fonseca Santa Cruz (personal communication, October 21, 2020)

The bell is a small object with a diameter of approximately 3cm (Figure 24). It is made of copper which has corroded significantly in parts. Fonseca Santa Cruz and Bauer (2016a) do not indicate whether they believe the bell to be of Andean or European origin and it is difficult to be sure. Bells were made of copper by the Inca and by Europeans at this time. Although the form of the bell is not entirely clear in Figure 23, it appears to flare at the bottom, ending in a circular shape which allows it to stand up, and to gradually narrow towards the top, a shape which may more closely resemble a European bell. It is possible that this is an item made in the Andes but influenced by European bells.



Figure 23. A copper bell found in Building 11 of Tendi Pampa,

Museo Amazónico Andino Qhapaq Ñan de Quillabamba. Photograph by Brian S. Bauer

(Fonseca Santa Cruz and Bauer, 2016a, p. 190, Fig. 60)

The small piece of curved copper is approximately 1cm in size and is attached to a rivet (Figure 24). The small copper hinge is approximately 2cm in size and still held two copper nails when it was found, measing 4cm and 6cm (Figure 25). Both have degraded considerably. The original use of these copper parts is not known but, given their relatively small size, they might perhaps have formed part of a European box or chest. Since the small room in which these pieces were found is believed to have been used to store exotic and valuable objects, it is possible that other valuable objects might have been stored in such a chest.

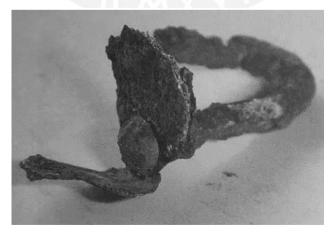


Figure 24. A small (1cm) piece of curved copper with a rivet found in Unit 2 of the Room of Miniatures in Espíritu Pampa (Bauer & Aráoz Silva, 2016b, p. 225, Fig. 7)



Figure 25. A small copper hinge (2cm) which still held two copper nails (4cm and 6cm) found in Unit 2 of the Room of Miniatures in Espíritu Pampa
(Bauer & Aráoz Silva, 2016b, p. 225, Fig. 8)

5.4. Interpretation

5.4.1. IRON NAILS

The majority iron nails found at Vilcabamba appear to have been used in the wooden doors of buildings associated with the elite or with ceremonial or special functions. A particularly large number of nails were used in the doors of the multiple doorways of the Double Structures. Their connection with such buildings suggests that iron nails were not adopted chiefly as a useful technology, but rather as a way of decorating and marking out the entrance to elite and important spaces. Other nails may have been kept individually as exotic and perhaps even ceremonial objects.

These nails may have been valued for the material they were made of. Given the importance placed on various metals in Inca culture, this is not surprising. Iron may have represented an exotic and valuable new type of metal, appealing for its silver-like appearance, as well as its distant origins and rarity at Vilcabamba. The Inca did not

manufacture objects in iron and there is no evidence that they developed this technology at Vilcabamba, meaning that the nails would need to have been brought in from outside. Iron objects therefore would have been hard to come by at Vilcabamba.

Nails do not appear to have been brought to Vilcabamba by the Spanish as gifts. They are not mentioned as part of the goods exchanged or observed in any of the chronicles examined for this study (Antonio Bautisa de Salazar (1867 [1596]), Martín de Murúa (2008 [ca. 1616]), Baltasar de Ocampo Conejero (2013 [1611]) and Diego Rodríguez de Figueroa (1910 [1565])). And nails are not known as items regularly involved in Spanish exchange or gift-giving in colonial settings. It is possible that nails were brought to Vilcabamba by the Spanish friars, but it is unclear in that case why they would have ended up concentrated in Inca ceremonial settings.

It seems most likely therefore that they were brought to Vilcabamba either through trade and exchange connections with Spanish or with people outside Vilcabamba who had access to Spanish objects, or through raids on the Spanish. Either way, given the final use of these nails, it appears that they were accessible to state or elite figures.

5.4.2. OTHER IRON OBJECTS

Although it was not possible during this investigation to acquire much information about the iron sheet found in Vilcabamba, its presence and the context in which it was found emphasise the value placed on iron as a material among the Inca at Vilcabamba. It is described by Fonseca Santa Cruz and Bauer (2016a) as an extremely rare find. There is no record of such an object being given by Spanish to the Inca at Vilcabamba and for the Spanish, who did not value iron in and of itself as a high-status gift, an iron sheet would have been a strange and inconveniently heavy item to bring to Vilcabamba. Therefore, this iron sheet was likely acquired through trade and exchange networks or through raids. It could have been acquired in order to use to make into an iron object by the Inca. However, it was not found in a workshop setting, but in a space in which chicha and food appears to have been prepared for feasting events, and in which some special objects were stored, including the copper bell and two miniature objects. This suggests that, even if the eventual intention was to transform the iron into another object, it was already stored alongside and considered a special object in the form of a simple sheet in which it was found.

The other two iron objects found—the iron pin-like object with inlaid shell and the sickle-like tool—appear to have been kept in the Tendi Pampa temple complex as special and exotic items. It is possible that the sickle-like tool was used in a utilitarian way, perhaps to clear the thick undergrowth of the Vilcabamba area. However, it is notable that it was not found alongside any other tools, but in a temple complex, and it is possible that it was valued for its material and as an exotic item. This is not incompatible with it being used as a practical tool, especially if it were it used to clear ground around the sacred temple complex.

5.4.3. COPPER OBJECTS

Copper was commonly used in the Andes long before the arrival of the Spanish and was a valued material, though less prestigious than silver or gold.

The copper lid is particularly interesting because it appears to combine Inca and European aspects. The lid is Inca in style and very similar to other concave lids with central handles made of ceramic found in Tendi Pampa, such as those in Building 11 (Figure 26). However, I am not aware of other finds of Inca lids made of copper. It appears that this style of lid, usually created in ceramic, was recreated in copper. This may be a result of European influence, since metal lids were used by Europeans at this time.



Figure 26. Objects found in Building 11 of Tendi Pampa, including various concave lids with central handles (circled). Photographs by Javier Fonseca Santa Cruz

(Fonseca Santa Cruz & Bauer, 2016a, p. 193, Fig. 67-68; red circles added by the author)

If this is the case, the lid presents an interesting case of a traditional Inca-style object reworked in a material and technology already used by the Inca but applied to the object in a way inspired by European customs. This innovative object, possibly inspired partly inspired by similar European objects, appears to have been used directly in preparations for elite feasting.

The bell's presence in a space which appears to have been used for the preparation of feasting events in the adjacent plaza suggest that it may also have been somehow incorporated into these feasting and ritual events. This is reinforced by the fact that other special objects like miniature objects, which play an important part in Inca ritual activity and are frequently found in ritual or funerary contexts (Besom, 2009), were found in the same space. Inca religion was strongly aural in nature (Curatola Petrocchi, 2016, p. 2,020) and sound played a central role in Inca ceremonies and major festivals (Gudemos, 2008, p. 118). Therefore, it would certainly make sense to find an instrument like a bell stored ready for use in ceremonial activity. It may even originally have been attached to a larger ceremonial objects or piece of clothing which has not survived. If this copper bell is indeed European or influenced by European bell styles, this could suggest a willingness to directly integrate a European element into the essential auditory aspect of Inca ceremonies.

The copper objects which are certainly European (a curved piece of copper with a rivet, a small hinge holding two nails, and the remains of a copper latch and two copper hinges with five accompanying copper nails) are clearly parts of larger objects, perhaps European chests. They are all found in special settings in which exotic and ceremonial objects were kept. The objects which these metal parts formed part of may therefore have been considered valued and exotic objects, though it is unclear whether the copper parts would have contributed to this value. Alternatively, they may have been adopted for utilitarian reasons, perhaps for the additional security of European chests closed and perhaps locked with metal latches. It is also possible that the chests were attractive for both reasons, as a special and secure container for valued objects.

5.4.4. METAL OBJECTS DESCRIBED IN THE CHRONICLES

There is written evidence of European metal objects brought to or present at Vilcabamba. Rodríguez de Figueroa describes an Inca procession in Vilcabamba in which some people had armour made of iron from Spain (1910 [1565], p. 100) and describes several gift exchanges involving metal objects. He frequently gives metal knives and needles to messengers, men who are close to the Inca and other people with whom he comes into contact in Vilcabamba, often alongside food, drink and other small items (1910 [1565], pp. 95, 102) as well as sending them to the Inca with a message (1910 [1565], p. 93). When he first meets the Inca, Rodríguez de Figueroa gave him a sword and a dagger (1910 [1565], p. 101) as well as additional gifts later that day which included seven silver bracelets alongside beads and sweets (1910 [1565], p. 102).

Metal objects were therefore clearly considered appropriate and valuable gifts by the Spanish, which were given to the Inca as well as the men around him. However, the objects described in the chronicles do not match the objects seen in the archaeological record of the site. Weaponry, knives and needles predominate in the gifts described in the written evidence, but none of these objects are recorded in the archaeological records, at least not within those possible to access during this investigation. It is likely that as small, valuable and highly portable objects, which would have been particularly useful when fleeing invasion, most weapons and knives would have been carried away as Vilcabamba was abandoned.

This mismatch between the archaeological and written records suggests that those European metal objects that were found at Vilcabamba may not have been brought there as gifts by the Spanish. Rather, they were likely acquired through trade and exchange networks or through the raids frequently reported on Spanish cargos travelling near the region.

5.5. CONCLUSIONS

Metal objects appear to have been adopted at Vilcabamba partly for practical purposes and often as prestigious and exotic objects. European copper items were kept among valued objects, often in spaces related to ceremonial or feasting activities. Larger objects containing copper parts—likely European chests—were likely used to store special objects and may have been valued for the secure storage they offered and possibly also

as exotic objects themselves. The copper lid, on the other hand, may represent an unusual example of an Inca ceramic style reworked in metal as a result of European influence.

Iron seems to have been particularly prized as a new, exotic, silver-like metal, come from afar and difficult to obtain. It is sometimes adopted in the form of iron tools, such as a sickle-like tool, which may have been used for practical purposes. However, iron objects are frequently used in ways that privilege the elite or ceremonial value of their material over its practical advantages. Iron nails were used on doors to mark the entrances to elite spaces, and iron objects were kept as exotic and valuable items and perhaps in some cases even integrated into ceremonial activities. This is not surprising given the prestige and ceremonial value placed by the Inca on certain metals as well as on exotic and unusual items.

The concentration of metal objects in the temple complex of Tendi Pampa is particularly notable. These objects were clearly considered appropriate for integration into elite and ceremonial spaces and in some cases may have been integrated directly into feasting and ceremonial activities or have been considered sacred or religious objects.

These metal items are also intriguing because of the questions they raise about how the Inca at Vilcabamba might have obtained them. Unlike the tiles described in the next chapter, which could be made locally, and scissors and glass beads which we know were brought to Vilcabamba by Spanish visitors, most of these items—and certainly those made of iron—cannot have been made locally and do not appear in any written records of gifts or exchanges with the Spanish. They were likely therefore acquired either through raids on Spanish goods being brought through the region or through trade and exchange networks not otherwise documented between the Inca at Vilcabamba and Spanish-dominated areas.

6. EUROPEAN-STYLE TILES

6.1.Introduction

Explorers and archaeologists have long encountered tiles at Vilcabamba, and they have played a pivotal role in understanding of the site. In the 1970s, John Hemmings noted that Martín de Murúa (2008 [ca. 1616]) mentions the presence of roof tiles within the town of Vilcabamba: "Tenía la casa el Ynga con altos y bajos cubierta de tejas y todo el palacio pintado con grande diferencia de pinturas a su usanza que era cosa muy de ver" (Chapter 82). This finding was key to helping Hemming (1970) link the ruins of Espíritu Pampa definitively with the Inca town of Vilcabamba.

In this chapter, I explore the tiles found at Vilcabamba across multiple explorations and excavations. These are largely made up of Spanish-style barrel roof tiles made from ceramic. In some cases, the tiles show intriguing Inca painted or scored designs of serpent or serpent-feline figures. Some I have been able to observe in photographs, other observations are based on the written records of explorers and of past excavations at Vilcabamba. In total I have examined three roof tiles in good colour photographs and the remaining through written accounts and other photographs which do not focus on individual tiles.

The other tiles present at Vilcabamba are floor tiles, including fragments of Spanish-style floor tiles and one almost complete tile, as well as an area of flooring decorated to imitate Spanish floor tiles. I have been able to observe the almost-complete floor tile through a colour photograph and information about the other fragments and the decorated flooring area comes from written records.

⁻

¹⁶ "The house of the Inca had upper and lower floors covered with [roof] tiles, and the whole palace [was] painted with a great variety of paintings in their style, which was quite a sight to see." Translation by Bauer, Halac-Higashimori & Cantarutti (2016, p. 83).

6.2. THE CONTEXT OF THE TILES FOUND AT VILCABAMBA

6.2.1. ROOF TILES

Spanish-style ceramic roof tiles are frequently found at Vilcabamba and are recorded from early explorations of the site. Bingham noted the presence of tiles at Tendi Pampa (1914, p. 197; 1922, p. 295) and did not rate them highly (1922):

Equally interesting and very puzzling were half a dozen crude Spanish roofing tiles, baked red. All the pieces and fragments we could find would not have covered four square feet. They were of widely different sizes, as though some one had been experimenting. Perhaps an Inca who had seen the new red tiled roofs of Cuzco had tried to reproduce them here in the jungle, but without success. (p. 295)

Later, Gene Savoy (1970a) observed Spanish-style tiles during his explorations of the site from 1964 to 1965 (see Figure 26), noticing a particularly large number of Spanish tiles at the group of structures which he calls "Bingham's Group" or the "Spanish Palace" (on the basis of the number of Spanish-style roof tiles):

I noticed an unusual piece of orange-red ceramic protruding from the ground. I pick it up and discover that it is a roofing tile, the kind used by the Spaniards during colonial times. Kicking up a pile of dead leaves with the heel of my boot, I find there are several layers of tile strewn about the floor. (p. 111)

According to Bauer (2016a), this group of buildings corresponds to Tendi Pampa. Savoy describes finding further piles of such tiles during his explorations and reports that there were 32 Spanish-style tiles in the collection of artefacts he brought back to Lima for scientific analysis by Gary S. Vescelius, chief archaeologist at the Vitcos Peru-Cornell Project (Savoy, 1970a, p. 134).



Figure 26. Savoy examines Spanish-style roof tiles at Vilcabamba. (Savoy, 1970a, p. 48, Fig. 8)

In more recent excavations, numerous roof tiles have been found at Vilcabamba. Fonseca Santa Cruz and Bauer (2016a) collected evidence from various excavations, including those of the authors, and noted that remains of tiles have been found at Tendi Pampa; a few have been found at the building in Espíritu Pampa named the "Hall of Miniatures" by Bauer and Aráoz Silva (2016b); and by Lee (2000) within the four buildings in Espíritu Pampa known as the "Palace Compound" by Bauer (2016b); as well as by Pilares Daza in 2003 in the same compound, according to the unpublished archaeological report seen by the authors. Fonseca Santa Cruz and Bauer (2016a) concluded that the majority of the buildings at Espíritu Pampa were not decorated with tiles and that they were likely only used in Tendi Pampa, the Palace Compound and a few other isolated buildings. Murúa's account reinforces that many of the buildings were covered with traditional roofing materials and not tiles. Just before describing the Inca's tiled house, Murúa (2008 [ca. 1616]) describes houses and huts covered in straw: "las casas y buhíos cubiertos de buena paja" (Chapter 82).

Fonseca Santa Cruz and Bauer (2016a, p. 125) found that the distribution of roof tiles is very uneven even within the areas in which they are present. For example, in Tendi Pampa, they observe that Structure 5 had the highest number of roof tile fragments at

more than 900, followed by structure 9 at more than 100, whereas others contained less than 100 fragments (Figure 27). However, the authors point out that in both structures 5 and 9, the roof tiles were found in piles likely awaiting use.



Figure 27. The number of roof tile fragments recovered in each building at Tendi Pampa (Fonseca Santa Cruz & Bauer, 2016a, p. 196, Fig. 71)¹⁷

Tiles are found largely in two contexts: firstly, piled on the floor apparently in storage and ready to be attached to a roof; or in relatively small numbers apparently previously attached to a roof and fallen to the floor, either as the buildings were burnt when the Inca abandoned the site or as they later decayed.

Tendi Pampa was identified from Bingham's visit as "the most important group of the Espíritu Pampa ruins" (1914b, p. 188) and he observed that alongside the roof tile fragments, the building also contained the finest Inca pottery that he saw at Vilcabamba. The stonework of the buildings itself is also of higher quality than other parts of the site, as observed by Fonseca Santa Cruz and Bauer (2016a, p. 151), who conclude that the complex was used for ritual feasting and as a temple. Bauer (2016b, p. 138) concludes that the Palace Complex was also associated with the Inca elite, possibly as a residence or with another function. The Hall of Miniatures has proved difficult to interpret due to the small number of objects found there. However, the presence of various European objects in one room suggests that the room may have been used for storing exotic objects

75

¹⁷ Although Fonseca Santa Cruz and Bauer do not include tiles found at Buildings 10 and 11 in this chart, they mention finding fragments of tiles in Building 10 (2016a, p. 188) and show one tile in their floor plan of Building 11 (2016a, p. 189). It is therefore clear that some remains of tiles were found in all 11 buildings excavated at Tendi Pampa.

(Bauer & Aráoz Silva 2016b, p. 225). Another room contains an unusually large collection of miniature vessels as well as a few full-size storage vessels, plates and pots, leading Bauer & Aráoz Silva (2016b, p. 230) to conclude that the room was used for the storing and preparation of foods as well as some kind of other activities, perhaps ritual or connected to a game, which required the miniature vessels.

All the buildings in which tiles are found therefore appear to be elite buildings connected with ritual activities, feasting, the storage of special objects and possibly elite residences.

6.2.2. FLOOR TILES

The floor tiles are all found in one location. Fonseca Santa Cruz and Bauer (2016a) found 23 fragments of rectangular clay floor tiles, one of them almost complete, along the north wall of Building 4 of Tendi Pampa. In addition, the west side of the same building contained a decorated rectangular clay floor area inscribed with rectangles that imitate European floor tiles (Figure 29). Building 4 is particularly noteworthy, even within the striking temple complex of Tendi Pampa. It is set slightly apart from the rest of the Tendi Pampa complex (see Figure 6) and is different to any other building within the complex or found elsewhere in Vilcabamba.

This building contains very unusual architectural features. In addition to its distinctive flooring, the building has one semi-circular end (see Figure 28). The shape of the building could mimic a chapel, as Bingham (1914, p. 194) originally thought it was when he found it. Others have pointed out that a rectangular building with one oval end, though unusual in Inca architecture, is not unique. Sakai (2009), for example, who visited the site, compared it to the famous curved wall in the *Qori Kancha* complex in Cusco. It is indeed quite possible that the curved end of the building could be intended to connect the building with both, linking it with a European religious form and with the form of the most important Inca ritual space at Cusco.

With only a few vessels present, the space was almost certainly not used for food preparation or storage. Rather, the building contained some unusual objects, including the remains of a copper latch and two copper hinges with five accompanying copper nails, likely parts of a small wooden chest of European origin, and a miniature plate. With its surprising architectural features and the special objects it contained, the building was

likely used for ritual or elite activities, according to Fonseca Santa Cruz and Bauer (2016a).

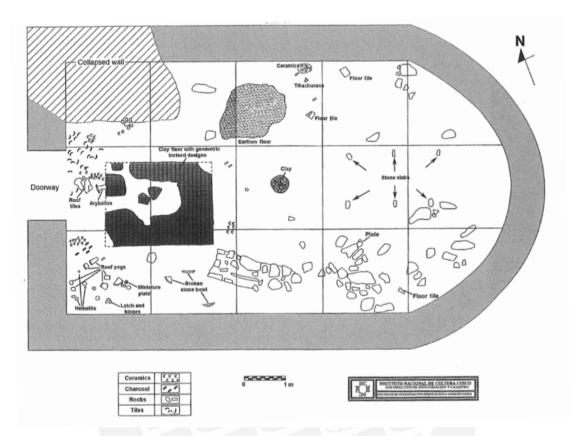


Figure 28. Plan of the floor level of Building 4 of Tendi Pampa.

Plan by the Ministry of Culture, redrawn by Gabriel E. Cantarutti

(Fonseca Santa Cruz & Bauer, 2016a, p. 163, Fig. 14)

Bingham (1914, p. 194) and Lee (2000, pp. 414-415) believed that the building may have been constructed as a chapel during the brief Spanish occupation of the town in 1572. However, Fonseca Santa Cruz and Bauer (2016a) found that there was enough charcoal in the building to suggest that it was burned along with most of the rest of the site as the Spanish invaded. Nonetheless, they do believe that the building was a relatively late addition to the compound, given its less substantial structure and position set aside from the rest of the complex. They suggest that it may have served as a space for early colonial indigenous workshop in the region (2016a, p. 200). It could perhaps have been built by Titu Cusi Yupanqui during his brief conversion to Christianity (around 1566-1570).

It is difficult to be sure of the exact purpose of the building, but a building with distinct European religious features connected to an Inca temple complex suggests a willingness to combine elements of Christian religious practice or at least religious architecture with traditional Inca religious activities. Although the co-existence of Inca and Christian religious practices was far from the intention of Spanish missionaries, it is entirely feasible within an Inca ideology that had incorporated new *huacas* and religious sites as the empire expanded.

6.3. TECHNICAL DESCRIPTION OF THE TILES

6.3.1. ROOF TILES

The roof tiles found at Vilcabamba are Spanish-style "barrel tiles" made of clay. Clay tile roofing has been traced to two origins: China at around 10,000 B.C. and the Middle East soon after. From there, it soon spread throughout Asia and Europe and was brought to the American continent with the arrival of Europeans (Grimmer & Williams, 1993). There was considerable variation in European roof tiles at the time of the European arrival in America and, consequently, similar variation in tiles found in the continent during the colonial period.

The tiles found at Vilcabamba fall into the category of pantiles, the category given to a wide range of convex or rounded tiles. More specifically, they are in the style of Spanish "barrel tiles", otherwise known as "mission tiles" or "barrel mission tiles" (or simply as "Spanish tiles" in Europe, not to be confused with the S-shaped tiles known as "Spanish tiles" in the U.S.). These are half-cylinder tiles, where one tile, curve facing outwards, overlaps over another which is inverted, forming what is known as a cover and pan, or cap and trough, arrangement (Grimmer & Williams, 1993). A carefully restored colonial roof in California using such tiles can be seen in Figure 29.



Figure 29. Tapered barrel clay roof tiles custom made for the restoration of the 1820s "Indian barracks" at Mission Santa Cruz in California.

Photograph by the National Park Service¹⁸ (Grimmer & Williams, 1993, p. 1)

Although I have not been able to examine and measure the tiles, measurements of some of the roof tiles are given by Fonseca Santa Cruz and Bauer (2016a). One roof tile found in Building 2 of Tendi Pampa is described as large and markedly concave. Its measurements are given as 55cm long, 32cm wide and 2cm thick, with an arch of approximately 17cm in height. Measurements are given by Fonseca Santa Cruz and Bauer (2016a) for another complete roof tile found in Building 8 of Tendi Pampa, at 56cm in length and 26 cm in width. Bingham also gives measurements for some of the tiles he found in Tendi Pampa. Although he describes the measurements in a confusing way, he seems to give examples of tiles measuring between 1.6 feet (approximately 49cm) and 1.9 feet (approximately 58cm) in width and between the same measurements in length (1914, p. 197); measurements which roughly correspond at least to the length of tile reported by Fonseca Santa Cruz and Bauer (2016a). It is certainly possible to observe from Bingham's photograph of the tiles (Figure 30) that they vary considerably in size, which is emphasized by his description of them as "of widely different sizes, as though some one had been experimenting" (1922, p. 295).

¹⁸ Available at: https://www.nps.gov/tps/how-to-preserve/briefs/30-clay-tile-roofs.htm

It is possible that the tiles vary in size simply because they were made by different people at different times or using different molds (more information on the likely manufacture of the roof tiles is given later in this chapter in section 6.4.1). It is also possible that the tiles served different purposes. Grimmer and Williams (1993) explain that traditional roof tiles are produced in several types, shapes and sizes to cover different areas of the roof, including field tiles to cover the majority of the flat roof, ridge tiles to cover the top of ridges, and many other shapes to fill in oddly-shaped spaces such as corners.



Figure 30. Two tiles found during Bingham's explorations of Vilcabamba in 1911 (Bingham, 1914, p. 198, Fig. 63)

All of the tiles I have been able to observe in color photographs are a quite consistent orange terra cotta colour. Grimmer and Williams (1993) explain that the typical terra cotta colour of clay roof tiles comes from the use of clay with a large percentage of iron oxide, and that the colour of tiles, even when made from the same clay, can vary between deep reddish browns to paler oranges and pinks, because of uneven temperatures within wood fire kilns. The colour of the roof tiles found at Vilcabamba is therefore consistent with fired clay roof tiles.

On some of the roof tiles it is possible to observe decoration, in the form of vermillion, black, orange and white paint, or incised lines. Some tiles are simply painted in one colour, including a large tile found in Building 2 of Tendi Pampa which is described as painted in vermillion colour (Fonseca Santa Cruz and Bauer, 2016a, p. 159) and several of the roof tiles found on the floor of Building 5 of Tendi Pampa which are also described as painted vermillion (Fonseca Santa Cruz and Bauer, 2016a. p. 167).

On others, vivid painted designs of serpents, and of serpents with feline heads, can be seen, including on three tiles excavated by Javier Fonseca Santa Cruz's team (Figures 31 to 33). All these decorated tiles were found associated with the *Tendi Pampa* complex (J. Fonseca Santa Cruz, personal communication, October 22, 2020).



Figure 31. A tile with painted decoration of three serpent and feline-headed serpent figures found at the Tendi Pampa complex. Photograph courtesy of Javier Fonseca Santa Cruz (personal communication, October 21, 2020)



Figure 32. A tile with painted decoration of feline-headed serpents
found at the Tendi Pampa complex. Photograph courtesy of Javier Fonseca Santa Cruz
(personal communication, October 21, 2020)



Figure 33. A large roof tile (56cm x 26cm) decorated with three white painted serpents found in Building 8 in the Tendi Pampa complex. Photograph courtesy of Javier Fonseca Santa Cruz (personal communication, October 21, 2020)

These tiles show various serpent and feline-headed serpent figures. The faces of the figures appear in two forms. The first, seen in Figure 33, is a simplified pointed serpent head typical in Inca art and painted in white paint. The other faces of the serpent figures are feline, with rounded faces, pointed teeth and small triangular feline ears. The decoration of the serpent bodies shows a mixture of oval markings, as seen in the top and bottom thinner serpents in Figure 32, and double diamond shapes, seen in the wider central snake in Figure 32 and the central snake of Figure 31.

It appears that other tiles may have been decorated with incisions. Savoy (1970a) reports that when he came across roof tiles at Vilcabamba, he noted one tile "incised with serpentine lines" (p. 111). I was not able to find any recent photographs of this tile and Savoy does not describe these incisions in any further detail. However, it is possible that he is referring to the curves visible in the tile he is measuring in Figure 26, shown in close up in Figure 34.



Figure 34. A close-up of the tile being measured by Savoy in Figure 27.

The tile appears to be decorated with curved incisions (Savoy, 1970a, p. 48, Figure 8)

More detailed observation of other decorated tiles found at Vilcabamba was not possible during the preparation of this thesis, given restrictions on museum openings and travel related to the COVID-19 pandemic. However, all the decorated tiles which I have been able to observe photographs of or read written accounts of contain decoration in the form of painted serpent or serpent-feline figures, or incised serpent-like waved line patterns.

1.1.1. FLOOR TILES

A total of 23 fragments of rectangular clay floor tiles were found in Building 4 of Tendi Pampa. One is almost complete (Figure 35). Fonseca Santa Cruz and Bauer describe this almost complete tile as well-fired and measuring 20cm by 16.5cm by 2.5cm (2016a, p. 164).



Figure 35. A nearly intact clay floor tile found along the north wall of Building 4 in Tendi Pampa, Museo Amazónico Andino Qhapaq Ñan de Quillabamba. Photograph courtesy of Javier Fonseca Santa Cruz (personal communication, October 21, 2020)

Although the Inca would have had the available technology to have produced such a tile, since it was made through fired ceramic, Fonseca Santa Cruz and Bauer (2016a) observe that the clay that this tile is made of appears to be different to that used for the roof tiles, and suggest that it may therefore have been imported into the area.

The decorated clay floor area on the west side of the building measures 2.65m by 2m by 0.05m and is described as inscribed with rectangles measuring approximately 10cm by 7cm (Fonseca Santa Cruz & Bauer, 2016a). It was not possible to obtain a photograph of this floor area for this study, but it is outlined in the plan of Building 4 in Figure 29. Fonseca Santa Cruz and Bauer believe that the area is intended to imitate European floor

tiles and point out that this is a remarkable find given that no other inscribed clay floor has been reported in an Inca building (2016a, p. 164).

Since both the individual floor tiles and the engraved area of flooring appear to have been found at the same level in the excavation, it is not clear whether one was eventually intended to cover the other. However, given that they are found only in specific parts of the structure, it is more likely that each was intended to cover only a small area of the floor, perhaps to decorate or demark a certain section of the space.

6.4. Interpretation

6.4.1. The production and use of roof tiles in the early colonial period

In most of the American continent, Europeans first imported clay tiles from Europe before quickly establishing local production. For example, Grimmer and Williams (1993) discuss the establishment of Dutch production of clay tiles in the upper Hudson River Valley by 1650, which were shipped to New Amsterdam. They also discuss later production by local labourers under the direction of Spanish missionaries at Mission San Antonia de Padua in California around 1780. In the Andes, local labourers were taught varied European construction techniques, including arch construction, fired brick masonry with mortar, and clay roof tiles, by friars and Spanish craftsman in order to build Andean mission churches, including at schools established by the Jesuit order (Donahue-Wallace, 2008, p. 25).

It is possible that the tiles at Vilcabamba were imported by the Spanish and later acquired by the Inca at Vilcabamba, or that they learnt to make the tiles from the Augustinian friars or other Spanish visitors, as suggested by Savoy (1970a, p. 111). However, the production of fired ceramic objects was very familiar to the Inca, and they could have simply adapted existing techniques themselves having observed Spanish roof tiles.

We do not know precisely how the tiles were made at Vilcabamba. Records of Spanish-style tiles made in the American continent, such as those in California described by Grimmer and Williams (1993), suggest that they were made with wooden moulds and then fired in wood fire kilns and it is possible that the Inca adopted this technique. The wooden moulds would have quickly degraded in the damp conditions of Vilcabamba and

are unlikely to be found in excavations at the site. Alternatively, they may have adapted existing technology, either shaping the tiles without moulds or by using moulds made of other materials, such as the wax or ceramic moulds used in Inca metallurgy (Cockrell & McEwan, 2016, pp. 24-25). Direct observation of the tiles could provide some clues to their manufacture.

Grimmer and Williams (1993) explain the ways in which traditional clay roof tiles are attached to roofs. Traditionally, they were hung directly on roofing laths and battens that were nailed to the roof rafters. This practice gradually evolved, and tiles were later nailed directly onto wooden sheathing. Barrel tiles begun to be laid over vertical strips or battens which were in turn nailed to sheathing. Alternatively, tiles were fastened to wood purlins with copper wire. However, some barrel tiles, such as those of the old Spanish missions in California, were attached without nails. These were simply laid in mud mortar mixed with grass or straw to attach them to a low-pitched sheathing made of reed or twigs, perhaps making use of pre-invasion roofing practices (see Figure 36).



Figure 36. The underside of a roof on the restored barracks at Santa Cruz Mission showing the twig sheathing to which the clay tiles were attached with mud mortar. Photograph by Gil Sánchez (Grimmer & Williams, 1993, p. 8., Fig. 10)

It is possible that the roof tiles found at Vilcabamba were held in place with nails, and plenty of nails have certainly been found at Vilcabamba which might have been used to secure the tiles. However, nails have been found in many buildings that do not contain any tile fragments, and there are no records of nails in several of the buildings which do contain roof tile fragments. For example, in Tendi Pampa, tile fragments were found

associated with all of the 11 buildings in the complex, but the only iron nails reported by Fonseca Santa Cruz and Bauer (2016a) are two iron nails near the entrance of Building 2. In fact, nails are repeatedly found near doorways and were more likely used for doors than for attaching tiles (as seen in Chapter 5).

Furthermore, I have not been able to observe any nail holes in photographed tiles found at Vilcabamba. This is perhaps because most of the tiles are very fragmented and the most complete tiles, found piled on the ground, would not yet have been nailed in place. Nonetheless, given the distribution of nails and the lack of nail holes in the tiles, I believe it is unlikely that the tiles were nailed in place. Rather, they were likely attached using techniques more familiar to the Inca, most likely laying the tiles in a mud mortar mixed with grass or straw onto the otherwise thatched roofs of the buildings, as described by Grimmer and Williams (1993) in the case of Spanish missions in California.

6.4.2. The cultural significance of roofs in the Andes

Before we can interpret the roof tiles and their iconography, we need to gain a better understanding of the cultural significance of roofs in the Andes. We can approximate this significance by exploring ethnographic data from the Andes, as well as Inca art. Reviewing various sources, I suggest roofs can be connected with four important ideas in the Andes: a privileged, prestigious position; the establishment of an individual household through communal labour; agriculture; and powerful entities including gods, ancestors, *huacas* and mountain peaks.

Spaces within a building commonly establish hierarchy and meaning, and upper sections of a building, including the roof, are often associated with elevated status. For example, ethnographic research (Miranda North, 2012, p. 139; Marussi, 2004) shows that the raised inside space of a *maloca* (an Amazonian community space with multiple purposes including ritual activities) is destined for the chief and his family. Upper space is also privileged in the Andes. According to the Andean concept of duality, the world contains opposites that complement and maintain one another through reciprocity. In terms of spatial organization, this is expressed in the duality of above and below, expressed in Quechua as *hanin* and *hurin* (González Holguín, 1952 [1608], p. 333) and in Aymara as *alasä* and *mäsä* (Bertonio, 2011 [1612], p. 309). This is a concept with a long history in the Andes (Hocquenghem, 1984), seen in ceremonial sites like Chavín and earlier (Burger

and Salazar-Burger, 1993; Cordy-Collins, 1976) through to the Inca period (Rostworowski, 1983; Silverblatt, 1987; Zuidema, 1982), and which continues to play an important role to this day (Isbell, 1976; Platt, 1986).

In the Andes, roof construction is an activity of high importance, traditionally undertaken communally and based on a system of reciprocal support known as *minka-ayni*. Isbell (1978, pp. 167-177) gives an ethnographic account of various rituals in the community of Chuschi in Peru, including house-building activities. Isbell explains how community members commit to helping to build the house and roof (Figures 37 and 38), and the person calling on the support of community members would need to provide them all with three meals a day, as well as coca, drink, and cigarettes.



Figure 37. Communal house roofing in Chuschi, Peru (Isbell, 1978, p. 169, Plate 13)



Figure 38. Ichu thatch being tied to roof in Peru in 1970.

Photograph by Billie Jean Isbell (Billie Jean Isbell Andean Collection,

Digital Collection of Cornell University Library)¹⁹

In many communities, the ceremony completing roof construction is also the ceremony that completes the various steps in the marriage of a couple (Albó & Mamani, 1976, pp. 4-5; Mayer, 1977; Marzal, 1977, p. 152; Carter, 1980, p. 418; Bourque & Warren, 1981, p. 99; Carter & Mamani, 1982, p. 189; Platt 1986, p. 244; Gose, 1991; Carrasco Gutiérrez, 1998, p. 95). Of particular interest for this study is the tradition of Sarhua tablets, in which painted boards are placed on the main roof beam of a house when its construction is complete as part of the establishment of a new marriage and household in the village of Sarhua in the province of Ayacucho. Pratt (1996) describes both modern examples of the tablets as well as the practice and traditional panels they derive from, which depicted multiple scenes showing the household's genealogy.

Given the importance of its role in the formation of the marriage and new household, Gose (1991) explains that the thatched roof comes to be a symbol of the household itself. It is therefore an element that must be protected, and one which can be endangered by the breaking of social norms. Methods to protect the roof are mentioned in several studies. During the rethatching process described by Gose (1991), a small wooden cross is placed on the crest-line of the roof when the thatching is finished. Gose reports that he was told that the cross was placed there as protection from "flying heads". These are heads that

¹⁹ Retrieved from https://digital.library.cornell.edu/catalog/ss:290994

detach themselves at night from living bodies to fly around with their jaws clicking, which, in Huaquirca, are believed to be caused by incest—a clear example of the breaking of social and household norms. In addition, Gose (1991) and Mayer (1977) describe how roof thatching ceremonies often explicitly act out, in a farcical manner, elements which illustrate the possibility for the household to go astray, in ways related to death, incest, infidelity, abandonment by a spouse, and so on.

In addition to the roof's connection to the household, ethnographic studies show that it is also connected with agriculture. Harvested crops are often stored in the rafters of a house, where symbols of protection are used which relate to agriculture (Gose, 1991). Foxes are linked both with roofing ceremonies (Gose, 1991) and widely with the protection of crops, as seen in the description of fox-skin headdresses worn to guard fields in the accounts of "idolatries" of the Jesuit priest Pablo José de Arriaga (1968 [1621], p. 36) and similar images in illustrations of Guamán Poma da Ayala (2001 [1615], p. 1138 [1148], 1159 [1169]) analyzed by Paul (1990, p. 43). Mayer (1977) suggests that the crosses made of colored ears of corn hung in the ridge pole during roofing ceremonies are linked to the "fruitfulness and harmony" (pp. 76-78) desired for the couple and likely also to fruitfulness in agriculture.

Finally, roofs are connected with powerful entities, including gods, ancestors, *huacas*, and peaks. We have already seen how traditional Sarhua tablets depicted scenes of the ancestors of the married couple (Pratt, 1996), and the mounting of crosses on roofs also suggests a link to nearby mountain peaks, which are frequently topped with a cross, as described by Gose (1991):

There is thus more than a passing similarity between houses and mountains, particularly during the dry season, when the bricks of mud and straw correspond to the bare fields strewn with chaff after the harvest, while both roof and summit are covered with dry yellow hay and crowned with a cross. (p. 54)

Although it is not known to what extent these concepts, connected with roofs in ethnographic studies, stretch back to Inca times, there is evidence that roofs were considered an important part of a building and that effort was invested in decorating Inca roofs. Pizarro (1944 [1571], p. 132) describes how important Inca buildings were

decorated with elaborate thatching. Furthermore, iconographic evidence can help us understand the symbolism of roofs for the Inca. In particular, it is worth examining the drawing of the main altar of the *Qori Kancha* by Joan de Santa Cruz Pachacuti Yamqui Salea Maygua (Figure 39). The whole image is encased within the shape of building. It has been argued that it is the shape of a European-style house, but Zuidema (1997b) has argued that it could also represent an Inca building. According to the explanation of the elements of the drawing given by Fink (2001), in the "roof" of the image, are two pairs of elements: the sun and the moon, which are the parents of the first Inca, and, just below them, the morning star, *chasca quyllur achachi ururi* (shining star, shining grandfather/ancestor), and the afternoon star, *chuqi chinchay apachi ururi* (hunting tiger cat, shining grandmother/ancestor). Down the centre of the roof are two individual elements: the *urqu rara* constellation (a group of males or of hills), and an oval which represents *wira quchan* (the creator of earth and sky).

The drawing has been interpreted as representing Inca cosmology (Zuidema, 1997a, 1997b) or an indigenous version of Christian cosmology (Duviols 1997a, 1997b). Nonetheless, it is fascinating to note the presence of elements in the "roof" of the building which are connected with many of the ideas connected to roofs observed in Andean roofing traditions, in particular ideas connected to powerful entities like gods, ancestors and peaks.



Figure 39. The drawing of the main altar of the Qori Kancha
by Joan de Santa Cruz Pachacuti Yamqui Salea Maygua in the 1613 manuscript
"Relación de antigüedades deste reyno del Pirú" Folio 13v.

(Biblioteca Nacional de España, MSS/3169)²⁰

6.4.3. The use of roof tiles at Vilcabamba

Where buildings do contain evidence of roof tiles, our initial assumption may be that they were used to roof buildings in essentially the same way as the Spanish used roof tiles to roof their buildings in the 16th century. Grimmer and Williams (1993) explain that clay roofing tiles were popularised in the American continent during the colonial period to avert the risk of fire, particularly given experiences of the destruction wrought by fires in cities such as that in London in 1666 and Boston in 1679. Clay roof tiles were seen as a durable and easy to maintain solution for fireproof roofs. Indeed, the Spanish ordered for Cusco to be tiled in 1560 as a preventative measure against fire, given that the city had been burnt in 1536 by Manco Inca (Savoy, 1970, p. 111). It is possible that the Inca observed these advantages and decided to also fireproof their buildings at Vilcabamba.

²⁰ Retrieved from http://bdh-rd.bne.es/viewer.vm?id=0000087346&page=1

However, the archaeological record suggests a different interpretation. Fonseca Santa Cruz and Bauer (2016a) make an important observation about the number of tiles found in the Tendi Pampa section of Vilcabamba. Some buildings contained many tile fragments and other just a few. However, with the exception of perhaps one building in the compound (Structure 5), there were not enough tile fragments related to each building for the roofs to have been completely covered. Even in the one building with perhaps enough tiles to fully tile a roof, the tiles were found stacked on the ground in storage and may not have been intended to roof that buildings.

Fonseca Santa Cruz and Bauer (2016a) therefore conclude that, although it is possible that tiles completely covered the roofs of some buildings, in most cases they were likely placed only over doorways or along roof ridges. They stress the decorative and elite nature of the tiles: "Their use in limited numbers also suggests that they were viewed as decorative or status-linked elements" (2015, p.125). We should therefore imagine the roof tiles used not as the primary roofing materials, but as additional decoration.²¹

Fonseca Santa Cruz and Bauer (2016a) suggest that the tiles were placed over doorways or along the upper ridges of the roofs. This could have been for aesthetic reasons or perhaps also to reinforce the ridges of the buildings against the heavy rain which was usual in the region. In addition, I believe it is also possible that the tiles were placed along the bottom of roofs, along the eaves. According to Grimmer and Williams (1993), traditional Spanish roof tiles are laid beginning with a first course of tiles at the lower edge of the roof, at the eaves, and the tiles are then laid upwards from there. Therefore, where the Inca observed tiling in process, perhaps by the friars or in nearby Spanish settlements, they would have seen the tiles placed from the bottom up. Had the friars or other Spanish visitors at Vilcabamba showed the Inca to lay tiles, they would have done so beginning with this initial course of tiles along the lower edge of the roof. That is not to say that the Inca would necessarily have followed this pattern, and they may have broken Spanish roofing practice and chosen to place tiles along the top ridges of a roof without having applied tiles to the rest of it. Given the varied shapes and sizes of the roof

_

²¹ Although European tiles are usually used to tile entire roofs, globally roof tiles are often used in a more decorative way rather than to entirely cover a roof. In China, for example, a country with a particularly rich artistic tiling tradition, tiles have historically been used to crest high brick outer walls, and to decorate the tops of gateways even on more modest country homes without overall roof tiling (Garnet Worcester, 1910).

tiles found at Vilcabamba, it is also very possible that different tiles were intended for different areas of the roof. However, I think it is as likely that the tiles would have been used along the eaves of buildings as along the upper ridges or over doorways, and will keep all these possibilities in mind for the remainder of the analysis.

It is also of course possible that the tiling of the roofs was simply a late addition to Vilcabamba and was left unfinished when the Inca abandoned the town. This is suggested by the presence of roof tiles stacked on the floor, presumably awaiting further roofing activity (though even these would not be enough to fully tile the roofs of these buildings). Furthermore, it is curious that Murúa's description of the tiled Inca house does not mention that it was only partly tiled. Murúa was not writing based on first-hand observation of Vilcabamba, but he lived in the Mercedarian monastery of Cuzco for at least three years, from at least 1585 to 1588 (Bauer, Halac-Higashimori, & Cantarutti, 2016, p. 44), and, in 1595, as the parish priest in Curahuasi, which borders the Vilcabamba region (Ossio, 2008, p. 1,485). He had access to Andean and European eyewitnesses, Viceroy Toledo's archives and investigations by various religious orders in Cusco, as well as the works of other writers, when putting together his account of the Inca rump-state in Vilcabamba (Bauer, Halac-Higashimori, & Cantarutti, 2016, p. 44).

It is therefore important to analyse the evidence we have for the partially tiled buildings, where the existing tiles certainly would have acted as decorative elements, while not discarding the possibility that the eventual intention was to fully tile the roofs of at least some buildings.

It is not difficult to imagine that roof tiles would have appealed to the Inca as decoration. Attached in a row on a roof, they provide a series of even geometric shapes, a central feature of imperial Inca aesthetic, as described by Stone (2012):

The imposed style emphasized repeated units (such as a living enclosure of buildings around a patio, called a kancha), limited but highly recognizable shapes (notably the trapezoid in architecture and the checkerboard in textiles), and grandiose scale (from the terraces and road system to plazas and monoliths). (p. 199)

In fact, the even fitted shapes of roof tiles, each bulging out from the surface, even bear some resemblance to the neat Inca stonework found in many of the Inca's most sacred spaces.

Furthermore, tiles provided a medium to add painted decoration to buildings. Decorated walls and roofs have long been present in the Andes. Mural paintings, which stretch back to at least the third millennium BCE in the Andes (Cohen Suarez, 2016), were used in Inca architecture, particularly for sacred buildings. Pachacamac, for example, the important oracle and site of pilgrimage, was transformed by the Inca administration, which added numerous buildings and pyramids (Makowski, 2015), many of them painted. The Step Pyramid or Temple of Pachacamac has mural decorations on its outer facades from the Inca period, which are described by Makowski (2015) as an image of an island with corn surrounded by a sea full of fish.

Recently, new Inca painted murals have been found in a structure within the site's Sacred Precinct (Colonna-Preti, Eekhout & Luján Dávilo, 2019). The decorations include varied designs of plants, stylized fish, an anthropomorphic figure and stepped border designs (like those seen in Figure 40), and many of the designs were repainted several times. Eeckhout (2003) emphasizes that painted murals in Pachacamac are only associated with buildings dedicated to religious activity.



Figure 40. Inca painted mural with stepped border at Pachacamac.

Photograph by Proyecto Ychsma, Université Libre de Bruxelles

(Colonna-Preti, Eekhout & Luján Dávilo, 2019, p. 14, Fig. 8)

Although fewer murals remain in the highlands as a result of poor conditions for preservation, traces of mural decorations have been found in highland Inca sites like Raqchi and Quispiguanca (Cohen Suarez, 2016).

Tiles provided an ideal surface for applying such painted decoration to buildings, since painting decoration on ceramic was of course already a common practice through painted ceramic vessels. Indeed, the relatively naturalistic style of the paintings on the tiles compares most readily with painted decoration on ceramic vessels, which makes sense given their shared technique.

The painted tiles, forming repeated bordered spaces filled with similar designs, could also be compared to the repeated *tocapu* designs familiar in various types of Inca art, including ceramics, drinking cups (known as *qeros*) and textiles. The designs on the tiles are generally more naturalistic than those observed in *tocapus*. Nonetheless, if decorated tiles were indeed placed in rows along the eaves at the bottom of the roofs, then they might have appealed to an Inca aesthetic accustomed to dividing upper and lower spaces with "belts" of repeated *tocapu* designs. For example, early colonial *qeros* often contain a "belt" of repeated designs separating the decoration of the upper and lower halves of the vessel, as seen in Figure 41.



Figure 41. Two sides of a colonial wooden qero with a central belt of repeated designs,

National Museum of the American Indian, Smithsonian Institution.

Catalogue #17/8956 (Smithsonian Open Access image database)²²

The tiles take a European architectural element and rework them through existing Inca techniques of painting decoration onto ceramics and distinctly Inca designs. By doing so they repurpose an object used by the Spanish for the largely practical purpose of creating weather- and fire-proof roofing and use it within an existing Inca tradition of decorating the outside of buildings with colourful, figurative painted designs.

Finally, it is worth considering the aural impact of adding tiles to the roofs of important ceremonial buildings like *Tendi Pampa*. As discussed previously, Inca religion was strongly aural in nature. Curatola Petrocchi (2020) summarised it in this way:

I highlighted that in the ancient Andean world the attribute that distinguished things and places infused with life-force (camac), and therefore considered living sacred entities (huacas [wak'a]), was essentially sound and that the Andean places of cult were thought of primarily as spaces where one could hear the voices of the gods. (pp. 267-

268)

The sounds of water were particularly important and many ceremonial spaces were designed to amplify natural sources of sounds or to create sounds through their construction, most often through flows of water or air (Gudemos, 2008, pp. 133-134).

The addition of ceramic tiles to a roof amplifies the noise of rain falling, creating a very different aural impact compared to the sound of rain falling on thatched roofing. The Vilcabamba region is an area of high rainfall, and it is possible that part of the interest in using roof tiles came from the way that they accentuated the sound of rain in ceremonial spaces.

6.4.4. Interpretation of the iconography

Although the focus of this thesis is on the material culture rather than the iconography of objects, to understand the presence of roof tiles at Vilcabamba it is vital to consider the

-

²² Retrieved from

https://collections.si.edu/search/detail/edanmdm:NMAI_191681?q=178956.000&record=1&hlterm=178956.000&inline=true

designs which were painted on them. This section provides a brief analysis of this iconography, using the analysis of Artzi, Nir and Fonseca Santa Cruz (2019) of an impressive vase also found within the Tendi Pampa complex as an important point of reference.

All the tiles which I have been able to observe in photographs or read written accounts of are either unpainted, painted in one colour, or contain painted or scored decoration in the form of serpents, serpent-feline figures or serpent-like waved line patterns. Serpents and felines have an important role in Andean cosmovision and in Inca art, where they are frequently depicted together, as well as combined in the form of the serpent-feline known as the *amaru*. Allen (2002) uses ethnographic, historical, and iconographic analysis to show how snakes, water and felines are linked with thresholds and moments and places of change and transition in the Andes, at least from the early colonial period. She recounts stories in which the Incas are said to have disappeared into the jungle, passing a special meeting place of four streams, which is the abode of large felines, large snakes and the Rainbow (also considered a kind of *amaru*).

With the tiles decorated with serpent and serpent-feline images placed on the roofs of buildings, and possibly directly over doorways, they may have marked the threshold of a special and sacred place. Given that all the tiles decorated with serpent and serpent-feline designs described in Section 6.3.1 are associated with the Tendi Pampa complex (J. Fonseca Santa Cruz, personal communication, October 22, 2020), these images would mark out a space interpreted by Fonseca Santa Cruz and Bauer (2016a) as a temple complex.

The relevance of the *amaru* to places or moments of transition can be taken further. As part of the story Allen (2002) recounts of the Inca's retreat to the forest, she adds that it is said that when and if the Inca return, they will come back alongside felines and *amarus* to destroy the mestizos and pass their inheritance to those who remained faithful to Inca tradition, in a great "turning around of the world"—a *pachakuti*. Allen's research suggests a close link between felines, snakes and *amarus* and the dramatic and world-altering changes of a *pachakuti*.

A clue to the particular transformation referenced can be found inside Building 5 of Tendi Pampa, in which one at least one of the tiles decorated with serpent designs was found (Fonseca Santa Cruz & Bauer, 2016a, p. 157). In the same building, 55 fragments of a particularly remarkable ceramic vessel were found (Figure 42).



Figure 42. Reconstruction by the Ministry of Culture of the vessel found in 55 fragments in Building 5 of Tendi Pampa (30cm in height, 50cm in diameter).

Photograph by Javier Fonseca Santa Cruz

(Artzi, Nir & Fonseca Santa Cruz, 2019, p. 160, Fig. 3)

Artzi, Nir and Fonseca Santa Cruz (2019) analyzed the iconography of the vessel (shown in detail in Figure 43) and concluded that it transmits a strong symbolic message: the promise of the future upturning of Spanish power. The Spanish, depicted with horses, writing and Spanish weaponry, are shown defeated in battle by a combined Inca army with soldiers from all four *suyos* of the Inca empire, each carefully depicted in the vessel's iconography. A central image shown on both sides of the vessel includes repeated serpent and feline imagery. The scene shows a Spanish soldier on horse-back underneath a rainbow, which emerges from the mouths of two serpents with feline heads. Each Spanish

soldier on horseback is in turn surrounded by two felines. Furthermore, a version of the diamond patterns seen on the serpents and felines is repeated on the distinctive four handles of the vessel, a number of handles which, according to Artzi, Nir and Fonseca Santa Cruz, is otherwise unknown in Inca or colonial pottery. I believe that these diamond shapes may be another reference to serpents, shown on a highly noticeable series of curves around the vessel, perhaps hinting at the curves of a serpent's body, especially since the handles begin just below and to the side of the end of the painted snakes. That each pair of "serpent" handles should encase a dead Spanish soldier on each side of the vessel only reinforces the role of the serpents in the scene.

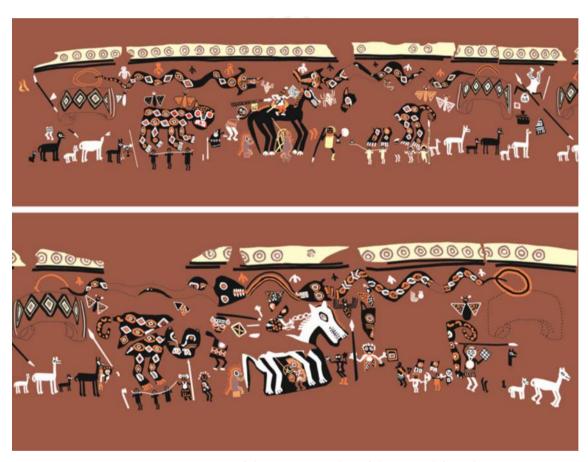


Figure 43. Drawing of the iconography of the vessel found in Building 5 of Tendi Pampa. Drawing by Arturo Rivera (Artzi, Nir & Fonseca Santa Cruz, 2019, p. 161, Fig. 4)

Artzi, Nir and Fonseca Santa Cruz (2019) explain that during the Inca Empire, the ancient Andean rainbow symbol took on a new meaning associated with a transition to Inca power and prosperity. The rainbow, often presented as a serpent, is the bridge between worlds and realities, and also the link between the Inca and his father, the Sun. Finally, the

rainbow is related to the sun and rain and is therefore an important agricultural symbol. In colonial art, a rainbow often frames important narrative episodes, particularly moments of crisis. Artzi, Nir and Fonseca Santa Cruz therefore link the rainbow, and the Spanish soldier it frames, to change and crisis, in keeping with the Andean idea of a *pachacuti*, a crisis or turning point which begins a new era, and, in the case of this vessel, the calamitous transition created by the arrival of the Spanish.

Serpents and felines are closely tied with rainbows in Andean art, and indeed in this vessel, as the rainbows emerges from the mouths of feline-serpents. In this way, they are connected to the *pachacuti* implied by the rainbow. However, they also hint at the possibility of a new, positive *pachacuti*, as represented in the Inca victory over the Spanish depicted around the rest of the vessel. The two large felines stand facing one another on either side of the Spanish soldiers on horseback are seen by Artzi, Nir and Fonseca Santa Cruz, following the interpretation of Curatola Petrocchi (2017, pp. 195-196), as representing the two extremes of the Inca Empire united under one Sun and, therefore, the promise of a new and prosperous Inca rule.

The feline-headed serpents and felines on the vessel found inside of the Tendi Pampa complex are therefore interpreted as representing dramatic transformation—both the disastrous arrival of the Spanish and the promise of a new *pachacuti* and a prosperous return to Inca rule. The feline-serpent transformations depicted on the tiles fixed to the outside of the complex, with their similar oval and diamond skin patterns and similar depictions of feline heads with teeth and ears on serpent bodies, likely reflect a similar message with their similar iconography. At the same time, they may mark out the threshold of an important religious space at Vilcabamba, perhaps a space (or the activities which took place within it) considered key to achieving this desired transformation.

6.4.5. Interpretation of the floor tiles at Vilcabamba

The floor tiles are a rare find at Vilcabamba and, in the case of the engraved floor imitating roof tiles, unique in an Inca context. I have not been able to find any other references to floor tiles at Vilcabamba in the archaeological or historical records examined for this thesis. These unusual tiles are all found in one building (Building 4 of the Tendi Pampa complex), itself a striking and unusual structure which has received considerable attention, as outlined in section 6.2.2., and may be intended to imitate a

Christian chapel. Regardless, it is clearly a space marked out as special and ceremonial, as is further emphasised by the special and exotic objects found inside the building, including metal parts of a Spanish chest and Inca miniature vessels, as well as the floor tiles and imitation tile flooring.

The presence of the imitation flooring, with its clear attempt to replicate a Spanish architectural feature, and Spanish-style floor tiles lends credence to the interpretation of the building as imitating the European form of a chapel. The floor tiles therefore play an important role in helping to understand Building 4 of Tendi Pampa.

Furthermore, their presence in such an unusual ritual space, as well as the fact that the individual floor tiles may have been brought in from outside of Vilcabamba, suggest that they were highly valued and that this European style was considered appropriate for an important elite and ritual Inca space. The fact that tiles were also imitated in inscribed clay flooring, a feature not seen in earlier Inca architecture and presumably made locally, also demonstrates a willingness to innovate to incorporate European styles at Vilcabamba. This can be compared with the roof tiles, which take a European medium and adapt it to an Inca style. In this case, a European style is integrated through a local medium. Furthermore, since this flooring did not have the appeal of an exotic object brought from outside, it suggests that the European style itself, with its geometric pattern, was desirable to the Inca, at least in this particular space.

6.5. CONCLUSIONS

6.5.1. ROOF TILES

To conclude the interpretation of the roof tiles at Vilcabamba, we need to combine the interpretation of the context, medium and iconography. They form a startling combination.

We find Spanish-style roof tiles used in used on the roofs of a small selection of Inca buildings at Vilcabamba, all of them, apart from the possible elite residence of the Palace Complex, likely connected with public rituals, feasting and the storage of special ritual objects. The tiles therefore seem to be present exclusively in elite and ritual settings that were central to the Inca powerbase at Vilcabamba.

In these places, they do not appear to have been used to fully roof buildings. Rather, the tiles served as decoration on the roofs of important places, possibly also accentuating the sound of rain within these largely ritual buildings. Decorating the walls and roofs of building was a common Inca practice, and painted murals were used for important and religious buildings. The tiles would likely have appealed as decorative elements with their even geometric shapes and ideal surface for adding painted decoration to a building using the familiar technology of painted ceramic.

Some of the tiles, related to the Tendi Pampa temple complex, are painted with serpent and serpent-feline figures, likely referencing thresholds and transitions. Considering similar figures observed as part of a scene on a ceramic vessel found inside one of the tiled temple buildings, the iconography appears to reference the promise of a coming *pachakuti*, a transition in which the Inca will defeat the Spanish and re-establish a prosperous Inca Empire.

Analysis of the significance of roofs in the Andes suggests why such a message would be particularly suitable for roof decoration and hints at the Inca interest in the medium of roof tiles. Ethnographic evidence suggests that the roof is a part of the building with particular importance and symbolic power, linked with gods and peaks, ancestors, the formation and security of households, and agriculture. Significant effort goes into creating, protecting, and infusing roofs with symbolic importance. And we know that the Inca also put effort into producing elaborate decorative thatching for the roofs of their most important buildings. It therefore makes sense that the Inca at Vilcabamba would adopt and adapt a new mechanism to add symbolic designs to the roof and that they would use this medium to convey a message central to the Inca resistance in a place of particular symbolic power.

Nonetheless, interpreting the tiles in this way, the use of a foreign medium to convey such a message is surprising. The *Taqui Oncoy* movement, contemporaneous with the Inca presence at Vilcabamba, was a messianic movement which originated in Huamanga. It claimed that the *huacas* would be resurrected and defeat the Spanish god and therefore the Spanish. The movement called on adherents to reject Christianity and Spanish ways entirely. The link between this movement and the Incas at Vilcabamba has been highly controversial, but Curatola Petrocchi (2008, pp. 53-54) and Roy (2010) have made strong

arguments in favour, and similar ideas do seem to have been present in Vilcabamba. The vessel examined by Artzi, Nir and Fonseca Santa Cruz (2019) appears to reflect this message. The image of soldiers from all parts of *Tahuantinsuyu*, dressed and armed in typical ways without a trace of Spanish influence, does not reflect the reality of the Inca at Vilcabamba, who we know adopted Spanish armour, animals, building materials and even occasionally clothing. Rather, it seems to chime with the argument of the *Taqui Oncoy* movement for a return to traditional practices and the abandonment of Spanish customs and objects.

Therefore, it is surprising to find symbols related to this promised victory over the Spanish and a return to Inca purity painted on a distinctively Spanish medium. However, the medium may in fact from part of the message. The Inca route to victory might require a rejection of Spanish ways, but, once conquered, the Spanish would have formed a new subject group within the Inca Empire and would need to have been incorporated into it. The Incas frequently used local building materials and techniques to build Inca-style state buildings in newly conquered parts of the Empire. On the coast, for example, the Inca had to adapt their building styles to dramatically different local conditions and materials. There, coastal adobe and tapia styles used for some Inca state buildings appear to have been developed based on local styles. Tambo Colorado in the Pisco Valley, for example, features classic Inca characteristics but is made of mud-plastered parka and adobe and uses tapia latticework which is reminiscent of Chan Chan (Stone, 2012, pp. 224-225), as well as a frieze of adobe reliefs with no known prototype in the sierra (Menzel, 1959, p.130). Pachacamac is another example of a site in which the Inca made use of local building materials and styles for important imperial building works.

The Inca at Vilcabamba did not simply adopt a Spanish building practice wholesale. Roofs at Vilcabamba were tiled only in parts and did not fulfil the function of Spanish roof tiling. Furthermore, the tiles' vivid iconography loads the tiles with a distinctly Inca imperial message. In this way, the Inca at Vilcabamba took a Spanish medium and used it to create a new and distinctly Inca art form, just as they had previously incorporated conquered people and their materials and technologies into their empire and created distinctly Inca art and architecture from them. By using Spanish building materials in a distinctively Inca style, bearing a message of the power of the Inca state, the Inca may be foreshadowing a promised future in which they will use the materials and labour of their

new subject group, the vanquished Spanish, to construct Inca state buildings in the reestablished *Tahuantinsuyu*.

6.5.2. Floor tiles

The floor tiles are particularly interesting because they are combined with other European architectural features and objects in the same building: the curved end of the building likely imitating a chapel, some roof tiles, and remains of what was likely a European chest as well as a European in-laid pin. Overall, this is the building in Vilcabamba which appears to most closely imitate a European space. Considering the collection of architectural features and objects together, it seems that the building was indeed intended to resemble a chapel. That is not to say that it functioned as a chapel or even that Christian religious activities took place within it. It is notable, for example, that the building also contains a miniature plate, given that miniatures were frequently found in Inca ritual or funerary contexts (Besom, 2009). However, it is possible that some Christian religious activity might have taken place, perhaps linked to Titu Cusi Yupanqui's interest in and brief conversion to Christianity. Regardless, the presence of this building imitating a chapel in an Inca temple complex suggests an interest in harnessing and integrating elements of Spanish culture and perhaps even religion into an important Inca ritual space.

7. CERAMICS

7.1.Introduction

European ceramics are a rare find at Vilcabamba. Bauer, Aráoz Silva and Quave (2016) report that they found majolica ceramics at Yurak Rumi but nowhere else in their excavations at Vilcabamba, and no additional references to European ceramics were found during this investigation in reports of other explorations or excavations.

7.2. THE CONTEXT OF EUROPEAN CERAMICS FOUND AT VILCABAMBA

In total, 27 fragments of majolica ceramic were found by Bauer, Aráoz Silva and Quave (2016) in the ceremonial complex surrounding the sacred Yurak Rumi stone, the place in which the most important ceremonies took place during the Inca resistance at Vilcabamba. The fragments were found in four excavation units (P10, U3, U4 and U6), all to the south of the sacred rock (seen in Figure 44).

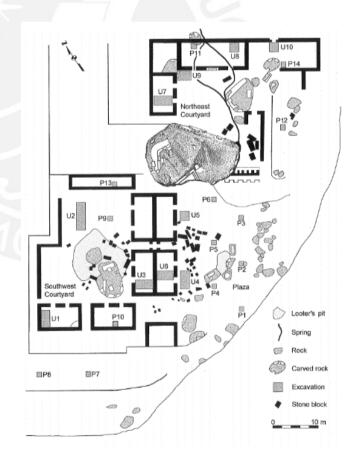


Figure 44. Map of Yurak Rumi with the locations of the test excavations (P1-P13) and the larger excavation units (U1-U10). Map by Brian S. Bauer and Miriam Aráoz Silva (Bauer, Aráoz Silva & Quave, 2016, p. 94, Fig. 4)

Given the layers of excavation in which these fragments were found, Bauer, Aráoz Silva and Quave (2016) believe the majority belong to a brief reoccupation of the shrine after it was burnt and destroyed by Marcos Garcia and Diego Ortiz, two Augustinian friars resident at Vilcabamba, and their supporters.

7.3. TECHNICAL DESCRIPTION OF THE CERAMICS

The 27 fragments of European pottery found are all fragments of majolica ceramics (Figures 45 to 47). Majolica pottery is made of earthenware covered in a lead glaze which is opacified and whitened by adding a small percentage of tin oxide. The Spanish acquired the technology from the Islamic world and introduced it into the American continent early in the colonial period (Olin & Myers, 1992).

Bauer, Aráoz Silva and Quave (2016) point out that, although bowls made of majolica ceramic are more common in Latin America and associated with displays of wealth and the introduction of individual table service (Jamieson, 2003, p. 256), the forms that they were able to identify in the *Yurak Rumi* complex were in fact a narrow-mouth jar, a flat plate and a lid. They report that most of the fragments are glazed in a green colour, but others are white, yellow, red/brown and blue. Some of the fragments are decorated. In the case of the fragment depicted in Figure 45, the decoration is in the form of stripes, as well as other shapes which cannot be identified in the photograph.



Figure 45. A fragment of majolica ceramic (in green and red-brown on yellowish white) from a narrow-mouth jar found at Yurak Rumi. Photograph by Brian S. Bauer and Miriam Aráoz Silva (Bauer, Aráoz Silva & Quave, 2016, p. 125, Fig. 54)

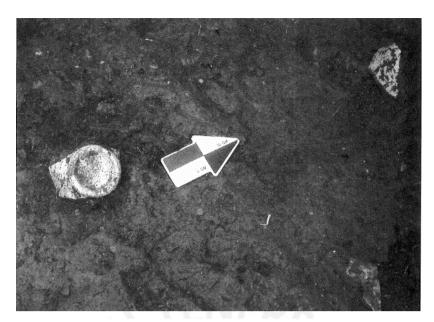


Figure 46. Fragments of white-glazed majolica ceramic found in U6 at Yurak Rumi.

Photograph by Brian S. Bauer and Miriam Aráoz Silva

(Bauer, Aráoz Silva & Quave, 2016, p. 125, Fig. 55)



Figure 47. Fragments of glazed majolica found at Yurak Rumi.

Photograph by Brian S. Bauer and Miriam Aráoz Silva

(Bauer, Aráoz Silva & Quave, 2016, p. 126, Fig. 56)

There were various centres of majolica production in colonial Latin America, and it was not possible for Bauer, Aráoz Silva and Quave (2016) to identify the source of the majolica found at *Yurak Rumi*. However, they were able to tell, based on the orange paste of the sherds, that they were not produced in Panama Vieja, which was traditionally believed to be the source of most majolica which arrived in Peru.

7.4. Interpretation

Very few fragments of European pottery have been found in Vilcabamba, and in only in one very unusual context. The analysis of the archaeological context of these fragments by Bauer, Aráoz Silva and Quave (2016) suggest that they were left at the Yurak Rumi complex as part of a brief occupation after it was burnt by Marcos Garcia and Diego Ortiz and their Christianized supporters.

The Augustinian friars had been invited into the Vilcabamba region in 1568 and 1569 by Titu Cusi Yupanqui in order to establish a mission there. Titu Cusi Yupanqui was considering converting fully to Christianity at the time and the Christian mission coexisted uneasily alongside the nearby Yurac Rumi shrine for some time. By 1570, the friars had become both emboldened by their growing community of converts as well as increasingly frustrated by the Inca's ambiguous relationship with them. With the support of a small group of local people, who claimed to have been harmed by Yurak Rumi, the friars conducted an exorcism at the shrine and burned it. The Inca had to step in to prevent the friars being killed in response. In 1571, however, Tuti Cusi Yupanqui died and Diego Ortiz, believed to be implicated in his death, was killed. These events are described by Martín de Murúa (2008 [ca. 1616], Chapters 75-76) and the murder of Diego Ortiz is described by Baltasar de Ocampo Conejeros (2013 [1611]), p. 30).

The destruction of the shrine by fire is clearly supported by the archaeological evidence, with thick layers of burnt building materials including burnt plaster and roofing materials (Bauer, Aráoz Silva & Burr, 2012). The archaeological evidence also demonstrates that it was briefly reoccupied before being completely abandoned. Although the nature of this reoccupation is not clear, Bauer, Aráoz Silva and Burr suggest that it is possible that some parts of the shrine were immediately re-consecrated by local inhabitants after it was first destroyed and before it was once again burned when the area was abandoned before the Spanish invasion (2012, p. 200). That parts of the complex were used once again for religious activity connected to Yurak Rumi is suggested by finds like a small offering which was burnt and buried at the site during the brief period of reoccupation and was found alongside small pieces of silver (Bauer, Aráoz Silva and Quave, 2016, p. 119). However, the presence of pieces of European majolica pottery suggest that the friars and their followers may also have had some presence in the complex at this time.

During the investigation for this thesis, no further references to European ceramics at Vilcabamba were found either in the written records or in reports of explorations and excavations. Ceramics do not feature in descriptions of Spanish gifts brought to Vilcabamba, suggesting they were not viewed as particularly effective gifts by the Spanish (though this would not necessarily have prevented them being acquired had the Inca wished to, since we know that they were able to access European goods through other channels). European ceramics certainly do not appear to have been adopted in Inca ritual settings elsewhere in Vilcabamba where we know that other European objects were introduced.

It is therefore possible that the presence of majolica ceramics in parts of the Yurak Rumi complex were linked to the presence of the friars or their followers, perhaps attempting to prevent the return of religious activities associated with the shrine. It is notable that the fragments were only found in certain excavation units, all within one area of the complex. It is possible that groups of Christianized locals, led by the friars, as well as groups wishing to reconsecrate the shrine, both carried out some activities within the complex, each possibly trying to assert control at the shrine as the relationship between the Christian mission and the Inca leadership further deteriorated.

7.5. CONCLUSIONS

It seems that European ceramics were not widely adopted at Vilcabamba, and their extremely limited presence may be related to the presence of the Spanish friars and their Christianized supporters. It is not surprising that the Inca at Vilcabamba do not appear to have adopted European ceramics with the same interest as they adopted other European items such as metalwork and glass beads. These ceramics were not made of new and attractive materials like glass or iron, and ceramics in general were not as highly valued as textiles or metals by the Inca.

Ceramics were important to Inca political alliances and empire building. Nonetheless, it was imperial subjects who were required to adopt standardized Inca vessels, such as the *urpu* (Stone, 2012, p. 199), and the adoption of European ceramics might therefore have represented to the Inca a concession to the Spanish rather than a prestigious acquisition for Vilcabamba's elite.

8. Conclusions

Vilcabamba during the Inca resistance from 1537 to 1572 has often been thought of as an isolated place. The findings of this thesis, however, support the opposite conclusion. Vilcabamba was a place of contact and articulation between the remaining Inca power base and the Spanish. We know that there was a small but important Spanish presence at Vilcabamba, including a Christian mission and the visits of Spanish diplomats, rebel Spanish soldiers, and others coming to pursue commercial interests.

The analysis in this thesis shows that these interactions with the Spanish were reflected in the material culture at Vilcabamba. We see how the Spanish used gifts of European objects as part of their diplomatic strategies at Vilcabamba. At the same time, the Inca actively adopted selected European objects, using them to mediate relationships and hierarchies with the Spanish and incorporating them into their most important elite and ritual settings.

These objects came to Vilcabamba through various channels. Some objects are directly linked with the presence of Spanish people in Vilcabamba. Items including scissors and glass beads likely arrived as gifts from Spanish visitors and match Spanish descriptions of gifts brought by envoys. The small quantity of European ceramics found at Vilcabamba appears to be related to the presence of the Spanish friars who were resident there.

Other European and European-style objects were acquired outside of official Spanish channels. Some, such as the ceramic roof tiles, appear to have been made locally. However, the archaeological record suggests that the Inca at Vilcabamba also had other ways of acquiring European objects. The metal objects found at Vilcabamba are particularly intriguing given that many of them, especially those made of iron, could not have been made locally. At the same time, they do not appear in descriptions of Spanish gifts at Vilcabamba and are not known as common Spanish gift items. They were likely therefore acquired either through raids on Spanish goods being brought through the region or through trade and exchange networks not otherwise documented between Vilcabamba and Spanish-dominated areas.

What should we make of these European items at Vilcabamba? From a Spanish perspective, the objects brought by envoys represented careful gift-giving as part of

delicate diplomatic negotiations. The Spanish envoys offered objects they believed would be valued based on their experiences in America and previously in Africa, as seen, for example, in the long tradition of using beads as trade and gift items described in Chapter 3, as well as their own estimations of the value of certain objects, as in the value placed on scissors. During a period in which European objects were not readily available in the Andes (Chatfield, 2007, p. 37), the multiple gifts brought to Vilcabamba represent a considerable effort to open dialogue with the Inca leadership and persuade them to accede to Spanish wishes.

Other European objects present at Vilcabamba not obtained through Spanish envoys likely had more uncomfortable connotations for the Spanish. We have seen the serious impact of Inca raids on Spanish caravans and Spanish-controlled areas. Observing Spanish items and livestock at Vilcabamba was surely a reminder of their ongoing failure to contain the threat of the Inca resistance at Vilcabamba.

From an Inca perspective, many European objects were clearly considered items of considerable value and prestige. European goods were not widely available in the Andes at this time and active effort would have been required to obtain these items beyond those given directly by Spanish visitors. This interest in acquiring European objects is suggested in reports of Inca raids on Spanish goods and the Inca interest in Spanish objects described in the chronicles. It is also clear in the archaeological record, in which we see the adoption of European objects into important and elite spaces and local production of European-style tiles.

This thesis has explored several aspects of the appeal of these objects to the Inca at Vilcabamba. The prestige and appeal of European objects is based on their distant origin and difficulties in obtaining them, as well as pre-existing Inca preferences for objects with certain properties. The nine chevron beads kept in the temple complex of Tendi Pampa, for example, were likely valued for their inherent properties, including their material and rare blue colour, as well as their status as rare and exotic objects gifted by outsiders. And the presence of a piece of unworked glass, stored alongside special and possibly ritual objects in the "Hall of Miniatures", confirms the Inca interest in glass as an exotic and attractive material. Several iron objects were adopted at Vilcabamba and the material also

seems to have been particularly prized as a new, exotic, silver-like metal, acquired from afar and difficult to obtain.

Some objects may have been adopted at least partly for practical purposes. It appears, for example, that European chests were used to store special objects, perhaps as a result of the secure storage they offered, and possibly also valued as exotic and attractive objects and containers in their own right. Metal tools, such as scissors and an iron sickle-like tool, may have been used for practical purposes, and iron nails were likely used in door construction.

However, the archaeological context of these finds suggests that the majority were used in ways that privileged their elite or ceremonial value over their practical utility. Neither the scissors or sickle-like tool are found in workshop contexts or with other tools. Rather, these and other European objects at Vilcabamba were brought into special, elite and often ritual environments alongside special Inca objects. Iron nails are not used widely, but to mark the entrances to elite and important spaces.

The concentration of European and European-style objects in the temple complex of Tendi Pampa is particularly notable. These objects were clearly considered appropriate for integration into elite and ceremonial spaces and, in some cases, may have been integrated directly into feasting and ceremonial activities or have been considered sacred or religious objects.

In some cases, this adoption of certain European objects may reflect an interest in harnessing elements of Spanish culture and perhaps even religion. One building set slightly outside of the Tendi Pampa complex combines several European-style architectural features and objects: European floor tiles and a carved floor area designed to imitate European tiling, a curved wall on one end of the building likely imitating a chapel, some roof tiles, and remains of what was likely a European chest, as well as a European in-laid pin. Overall, this is the building in Vilcabamba which appears to most closely imitate a European space. Considering the collection of architectural features and objects together, it seems that the building was intended to resemble a chapel, though it does not necessarily follow that it functioned as a chapel. It is notable, for example, that the building also contains a miniature plate, a frequent element of Inca ritual. However,

it is possible that some Christian religious activity might have taken place there, perhaps linked to Titu Cusi Yupanqui's interest in and brief conversion to Christianity. Regardless, the presence of a building imitating a chapel as part of an Inca temple complex suggests an interest in harnessing and integrating elements of Spanish culture and perhaps even religion into an important Inca ritual space.

Elements of European material culture are adapted in surprising ways to create distinctly hybrid objects. The copper lid explored in this thesis, for example, may represent an unusual example of an Inca ceramic style reworked in metal as a result of European influence. And Spanish styles were also reworked using Inca technology and local materials, as seen in the imitation Spanish flooring, as well as the locally-made European-style roof tiles.

In some cases, these hybrid objects are used in startling ways to convey uniquely Inca messages. The use of roof tiles in Vilcabamba is a particularly striking example. The tiles are used on a small selection of buildings, almost all connected with elite and ritual settings that were central to the Inca powerbase at Vilcabamba. In these places, they do not appear to have been used to fully roof buildings but to partially decorate them and possibly also to accentuate the sound of rain. Given existing Inca practices of decorating important and religious buildings with murals, as well as their familiarity with the ceramic technology required to make the tiles, they would likely have appealed to the Inca at Vilcabamba as decorative elements which could easily be painted with designs.

The serpent and serpent-feline figures painted on some of the tiles used in the Tendi Pampa complex are similar to those painted on a ceramic vessel found inside one of the complex buildings. The figures appear to reference the promise of a coming *pachakuti*, a transition in which the Inca would defeat the Spanish and re-establish a prosperous Inca Empire. It is appropriate that images conveying this message would be placed not only on important buildings but on their roofs—places of high symbolic importance in the Andes.

The adoption and adaptation of a European medium to convey a message central to the Inca resistance to Europeans is initially surprising. However, I have argued that the medium is in fact part of the message. Once the promised *pachakuti* was brought about

and the Spanish conquered, they would have formed a new subject group within the Inca Empire and would have been incorporated into it. The Incas frequently used local building materials and techniques to build Inca-style state buildings in newly conquered parts of the Empire. By using Spanish building materials in a distinctively Inca style, bearing a message of the power of the Inca state, the Inca may be foreshadowing a promised future in which they will use the materials and labour of their new subject group, the vanquished Spanish, to construct Inca state buildings in the re-established *Tahuantinsuyu*.

These roof tiles decorated with painted Inca iconography are a notable example of a new cultural phenomena created out of the adoption of select elements of European material culture and their creative combination with Inca culture, as predicted by theories of transculturation. These roof tiles are not the only example of this phenomena. None of the European or European-style objects at Vilcabamba are passively adopted. Items are rarely adopted for purely utilitarian reasons and are in fact often not used for the same purpose as they were in Europe. Rather, they are integrated into the fabric of Inca culture and redefined for new purposes: scissors appear divorced from a craft context and redefined as a special, possibly ritual, object; iron nails mark out elite buildings; and glass beads seem to have been used alongside Inca miniatures in a ritual setting.

Indeed, these objects were most often incorporated into Inca ritual and elite settings. There, European style objects were used in new ways to create new cultural phenomena that spoke to the strategies and ideologies of the Inca at Vilcabamba. They reinforce elite settings, are integrated into Inca religious practice and are harnessed to communicate Inca ideology.

We see these phenomena emerge at the "contact zone" of Vilcabamba, to use the term of Louise Pratt (1991, 1992). This was a contact zone quite unique in the experience of colonisation in the Andes. Although power in the Andes had tipped dramatically in favour of the Spanish invaders, Inca religious and state activity continued at Vilcabamba under Inca control, if under considerable Spanish pressure. Therefore, the study of Spanish material culture at Vilcabamba provides a unique view on its adoption by Inca leadership for its own purposes and within an Inca context and ideology.

REFERENCE LIST

Abraham, S. (2017). Reconstructing early colonial Andean ritual practice at Pukara, Peru: An architectural approach. In S. A. Rosenfeld & S. L. Bautista (Eds.), *Rituals of the Past: Prehispanic and Colonial Case Studies in Andean Archaeology* (pp. 217-239). University Press of Colorado.

Albó, J., & Mamani, M. (1976). Esposos suegros y padrinos entre los Aymaras. Centro de Investigación y Promoción del Campesinado.

Allen, C. (2002). The Incas have gone inside: Pattern and persistence in Andean iconography. *Anthropology and Aesthetics*, 42, 180-203.

Antúnez de Mayolo, K. K. (1989). Peruvian Natural Dye Plants. *Economic Botany*, 43(2), 181-191. Springer on behalf of New York Botanical Garden Press.

Arriaga, P. J. de. (1968 [1621]). La extirpación de la idolatría en el Pirú. In F. Esteve (Ed.), *Crónicas Peruanas de Interés Indígena*. Biblioteca de Autores Españoles.

Artzi, B., Nir, A., & Fonseca Santa Cruz, J. (2019). Los fragmentos de Vilcabamba, Perú: Un testimonio iconográfico excepcional de la visión andina sobre el enfrentamiento entre indígenas y españoles. *Latin American Antiquity* 30(1), 158-176.

Bartel, B. (1985). Comparative Historical Archaeology and Archaeological Theory. In S. L. Dyson (Ed.), *Comparative Studies in the Archaeology of Colonialism* (pp. 8-37). B.A.R.

Bauer, B. S. (2016a). Capítulo 1 – Introducción al Vilcabamba. In B. S. Bauer, J. Fonseca Santa Cruz, & M. Aráoz Silva (Eds.), *Vilcabamba y la arqueología de la resistencia Inca* (pp. 27-68). Instituto Francés de Estudios Andinos/Ceques Editoriales SRL/UIC College of Liberal Arts & Sciences/Institute for New World Archaeology.

Bauer, B. S. (2016b). Capítulo 4 – Una introducción al sitio de Espíritu Pampa. In B. S. Bauer, J. Fonseca Santa Cruz, & M. Aráoz Silva (Eds.), *Vilcabamba y la arqueología de la resistencia Inca* (pp. 133-146). Instituto Francés de Estudios Andinos/Ceques

Editoriales SRL/UIC College of Liberal Arts & Sciences/Institute for New World Archaeology.

Bauer, B. S., & Aráoz Silva, M. (2016a). Capítulo 2 – Patrones de asentamiento y excavaciones en la región de Vitcos. In B. S. Bauer, J. Fonseca Santa Cruz, & M. Aráoz Silva (Eds.), *Vilcabamba y la arqueología de la resistencia Inca* (pp. 69-89). Instituto Francés de Estudios Andinos/Ceques Editoriales SRL/UIC College of Liberal Arts & Sciences/Institute for New World Archaeology.

Bauer, B. S., & M. Aráoz Silva. (2016b). Capítulo 7 – Las excavaciones realizadas en Espíritu Pampa en el año 2010. In B. S. Bauer, J. Fonseca Santa Cruz, & M. Aráoz Silva (Eds.), *Vilcabamba y la arqueología de la resistencia Inca* (pp. 219-242). Instituto Francés de Estudios Andinos/Ceques Editoriales SRL/UIC College of Liberal Arts & Sciences/Institute for New World Archaeology.

Bauer, B. S., Aráoz Silva, M. D., & Burr, G. S. (2012). The destruction of the Yurac Rumi shrine (Vilcabamba, Cusco Department). *Andean Past*, 10, 195-211.

Bauer, B. S., Aráoz Silva, M., & Quave, K. (2016). Capítulo 3 – El complejo ceremonial de Yurak Rumi. In B. S. Bauer, J. Fonseca Santa Cruz, & M. Aráoz Silva (Eds.), *Vilcabamba y la arqueología de la resistencia Inca* (pp. 91-132). Instituto Francés de Estudios Andinos/Ceques Editoriales SRL/UIC College of Liberal Arts & Sciences/Institute for New World Archaeology.

Bauer, B. S., Fonseca Santa Cruz, J., & Aráoz Silva, M. (2016). *Vilcabamba y la arqueología de la resistencia Inca*. Instituto Francés de Estudios Andinos/Ceques Editoriales SRL/UIC College of Liberal Arts & Sciences/Institute for New World Archaeology.

Bauer, B. S., Halac-Higashimori, M., & Cantarutti, G. E. (2016). *Voices from Vilcabamba: Accounts Chronicling the Fall of the Inca Empire*. University Press of Colorado.

Bertonio, L. (2011 [1612]). *Transcripción del vocabulario de la lengua Aymara*. Instituto de Lenguas y Literaturas Andinas-Amazónicas.

Besom, T. (2009). Of Summits and Sacrifice. University of Texas Press.

Bhabha, H. K. (1994). *The Location of Culture*. Routledge.

Bingham, H. (1914). The ruins of Espiritu Pampa, Peru. American Anthropologist New Series 16(2), 185-199.

Bingham, H. (1922). *Inca land: Explorations in the highlands of Peru (second edition)*. The Riverside Press Cambridge.

Borah, W. (1954). Early Colonial Trade and Navigation between Mexico and Peru. University of California Press.

Bourque, S. B., & Warren, K. B. (1981). Women of the Andes: Patriarchy and social change in two Peruvian towns. The University of Michigan Press.

Bües, C. (1958 [1935]). El señorío de Vilcabamba. Instituto Nacional de Cultura.

Burger, R. L., & Salazar-Burger, L. (1993). The place of dual organization in early Andean ceremonialism: A comparative review. *Senri Ethnological Studies* 37, 97–116.

Bush, J. A. (2011). Staging lo Andino: The scissors dance, spectacle, and indigenous citizenship in the new Peru [Doctoral Dissertation, Ohio State University]. Retrieved from https://etd.ohiolink.edu/

Cantarutti, G. E. (2013). Mining under Inca rule in North-Central Chile: The Los Infieles mining complex. In N. Tripcevich., & K. Vaughn (Eds.), *Mining and quarrying in the ancient Andes: Interdisciplinary contributions to archaeology*. Springer.

Carrasco Gutiérrez, A. M. (1998). Constitución de género y ciclo vital entre los Aymaras contemporáneos de Chile. In: *Chungara 30*(1), 87-103.

Carter, W. (1980). Matrimonio de prueba en los Andes. In R. Bolton, E. Mayer (Eds.), *Parentesco y matrimonio en los Andes* (pp. 363-423). Pontificia Universidad Católica del Perú.

Carter, W., & Mamani, M. (1982). *Irpa Chico: individuo y comunidad en la cultura Aymara*. Juventud.

Cavero Carrasco, R. (2002). Los dioses vencidos: una lectura antropológica del Taki Ongoy. *Anthropologica Del Departamento De Ciencias Sociales*, 20(20), 357-365.

Chatfield, M. (2007). From Inca to Spanish Colonial: Transitions in ceramic technology. Dissertation for Doctor of Philosophy in Anthropology [Doctoral Dissertation, University of California]. Retrieved from: https://www.academia.edu/214619/From_Inca_to_Spanish Colonial Transitions in Ceramic Technology

Clados, C. (n.d.). Tocapu Drawings Database Project (TDDP). tocapu.org

Cockrell, B., & McEwan, C. (2016). The Fabrication and Ritual Significance of Inka Miniature Figurines in the Princeton University Art Museum. *Record of the Art Museum, Princeton University*, 75/76, 18-41.

Cohen Suarez, A. (2016). Painting beyond the frame: Religious murals of colonial Peru. Conversations: An Online Journal of the Center for the Study of Material and Visual Cultures of Religion. Retrieved from https://mavcor.yale.edu/conversations/collections/painting-beyond-frame-religious-murals-colonial-peru

Colonna-Preti, K., Eekhout, P., Luján Dávilo, M. R. (2019). Pinturas y pintores en Pachacamac: un estudio multidisciplinario del Edificio B15. *Boletín de Arqueología PUCP 26*, 9-32.

Columbus, C. (1989 [1492-1493]). Diario. In O. Dunn & J. E. Kelley, Jr. (Eds.), *The Diario of Christopher Columbus's First Voyage to America*, 1492-1493. University of Oklahoma Press.

Cordy-Collins, A. (1976). The Dual Divinity Concept in Chavin Art. *El Dorado 3*(1), 1-31.

Cornejo Bouroncle, J. (1960). *Derroteros de arte cuzqueño: Datos para una historia del arte en el Perú*. Editorial Garcilaso Ediciones Inca.

Corning Museum of Glass. (n.d.). *Chevron Bead*. https://www.cmog.org/artwork/chevron-bead-0

Curatola Petrocchi, M. (2008). La función de los oráculos en el Imperio Inca. In M. Curatola Petrocchi & M. S. Ziólkowski (Eds.), *Adivinación y oráculos en el mundo andino antiguo*. Fondo Editorial de la Pontificia Universidad Católica del Perú /IFEA.

Curatola Petrocchi, M. (2016). La voz de la huaca: Acerca de la naturaleza oracular y el trasfondo aural de la religión andina antigua. In M. Curatola Petrocchi & J. Szemiński (Eds.), El Inca y la huaca: La religión del poder y el poder de la religión en el mundo andino antiguo. Fondo Editorial de la Pontificia Universidad Católica del Perú/The Hebrew University of Jerusalem.

Curatola Petrocchi, M. (2017). Los oráculos de los confines del mundo: Pachacamac, Titicaca y el Inca Tupa Yupanqui. In D. Pozzi-Escot (Ed.), *Pachacamac: El oráculo en el horizonte marino del sol poniente* (pp. 167–197). Banco de Crédito.

Curatola Petrocchi, M. (2020). On the threshold of the *huaca*: Sanctuaries of sound in the ancient Andean world. In S. Kosiba, J. W. Janusek, & T. B. F. Cummins (Eds.), *Sacred matter: Animacy and authority in the Americas*. Dumbarton Oaks Research Library and Collection.

Cusick, James G. (1998). Studies in Culture Contact: Interaction, Culture Change, and Archaeology. No. 25. Southern Illinois University.

Dodge, C. J. G. (2018). A Forgotten Century of Brazilwood: The Brazilwood Trade from the Mid-Sixteenth to Mid-Seventeenth Century. *e-Journal of Portuguese History 16*(1), 1-27.

Donahue-Wallace, K. (2008). Art and Architecture of Viceregal Latin America, 1521-1821. UNM Press.

Donnan, C. B., & Silton, J. (2010). Sixteenth-century glass beads from Chotuna, North Coast of Peru. *BEADS: Journal of the Society of Bead Researchers* 22, 13-26.

Duviols, P. (1997a). La interpretación del dibujo de Pachacuti Yamqui. In T. Bouyesse-Cassagne (Ed.), *Saberes y memorias en los Andes*. Institut des Hautes Etudes de 1'Amerique Latine/Instituto Francés de Estudios Andinos.

Duviols, P. (1997b). Respuesta de Pierre Duvoils a la crítica de Tom Zuidema. In T. Bouyesse-Cassagne (Ed.), *Saberes y memorias en los Andes*. Institut des Hautes Etudes de l'Amerique Latine/Instituto Francés de Estudios Andinos.

Eeckhout, P. (2003). Diseño arquitectónico, patrones de ocupación y formas de poder en Pachacamac, costa central del Perú. *Revista Española de Antropología Americana 33*, 17-37.

Feinzig, K. M. (2017). Tracing Sixteenth Century beads in South America to understand their impact on indigenous ritual practices and material culture at the time of the Spanish conquest [Master's thesis, Harvard Extension School]. Retrieved from http://nrs.harvard.edu/urn-3:HUL.InstRepos:33813391

Fink, R. (2001). La cosmología en el dibujo del altar del Quri Kancha según don Joan de Santa Cruz Pachacuti Yamqui Salea Maygua. *Historica XXV*(1), 9-75.

Fonseca Santa Cruz, J., & Bauer, B. S. (2015). Chapter 5 – Excavations at Tendi Pampa (Espíritu Pampa) in 2008 and 2009. In B. S. Bauer, J. Fonseca Santa Cruz, & M. Aráoz Silva (Eds.), *Vilcabamba and the archaeology of Inca resistance* (pp. 88-131). The Cotsen Institute of Archaeology Press.

Fonseca Santa Cruz, J., & Bauer, B. S. (2016a). Capítulo 5 – Excavaciones en Tendi Pampa (Espíritu Pampa) durante los años 2008 y 2009. In B. S. Bauer, J. Fonseca Santa Cruz, & M. Aráoz Silva (Eds.), *Vilcabamba y la arqueología de la resistencia Inca* (pp. 147-202). Instituto Francés de Estudios Andinos/Ceques Editoriales SRL/UIC College of Liberal Arts & Sciences/Institute for New World Archaeology.

Fonseca Santa Cruz, J., Bauer, B. S. (2016b). Capítulo 6 – Otras excavaciones en Espíritu Pampa durante los años 2008 y 2009. In B. S. Bauer, J. Fonseca Santa Cruz, & M. Aráoz Silva (Eds.), *Vilcabamba y la arqueología de la resistencia Inca* (pp. 203-218). Instituto

Francés de Estudios Andinos/Ceques Editoriales SRL/UIC College of Liberal Arts & Sciences/Institute for New World Archaeology.

Garcilaso de la Vega, I. (1829 [1609]). Comentarios reales de los incas. *Primera parte de los comentarios reales que tratan del origen de los Incas... Tomo II*. Los Hijos de Doña Catalina Piñuela.

Garnet Worcester, W. (1910). A brief history of roofing tile manufacture and use. In E. Orton, Jr. (Ed.), *The Manufacture of Roofing Tiles, Bulletin 11*. Geological Survey of Ohio.

González Holguín, D. (1952 [1608]). *Vocabvlario de la lengva general de todo el Perv llamada lengua Quichua o del Inca*. Imprenta Santa María.

Gose, P. (1991). House rethatching in an Andean annual cycle: Practice, meaning, and contradiction. *American Ethnologist* 18(1), pp. 39-66.

Griffiths, N. (1999). Introduction. In N. Griffiths & F. Cervantes (Eds.), *Spiritual encounters: Interactions between Christianity and native religions in Colonial America* (pp. 1-42). University of Nebraska Press.

Grimmer, A. E., Williams, P. K. (1993). *Preservation Brief 30: The Preservation and Repair of Historic Clay Tile Roofs*. U.S. Department of the Interior National Park Service, Cultural Resources Heritage Preservation Services. Retrieved from https://www.nps.gov/tps/how-to-preserve/briefs/30-clay-tile-roofs.htm

Gudemos, M. (2008). Taqui Qosqo Sayhua: Espacio, sonido y ritmo astronómico en la concepción simbólica del Cusco incaico. *Revista española de antropología americana* 38(1), 115-138.

Hemming, J. (2004). The conquest of the Incas. Pan Macmillan.

Hocquenghem, A. M. (1984). Hanan y hurin: un modelo de organización y clasificación del mundo andino. *Chantier Amerindia 1*(9), 3-61.

Husson, J.-P. (2016). Vilcabamba, el Taki Unquy y la refundación de la cultura andina. In J.-J. Decoster & M. Ziółkowski (Eds.), *Vilcabamba entre arqueología, historia y mito* (pp. 158-182). Centro Bartolomé de las Casas, Centro de Estudios Andinos de la Universidad de Varsovia en el Cuzco, Centro Tinku.

Husson, J.-P. (2017). Génesis de los dramas del fin del Inca Atahualpa y los mitos de Incarrí. Producciones del reino neo-Inca de Vilcabamba y sus aliados del Taqui Oncoy. Editorial Argos E.I.R.L.

Isbell, W. H. (1976). Cosmological order expressed in prehistoric ceremonial centers. In J. F. Ochoa (Ed.), *Actes du 42 Congrès Internacional des Américanistes Volume IV* (pp. 269–297). Société de Américanistes, Musée de l'Homme.

Isbell, B. J. (1978). To defend ourselves: Ecology & ritual in an Andean village. Waveland Press.

Jamieson, R. W. (2003). *De Tomebamba a Cuenca: Arquitectura y arqueología colonial*. Ediciones Abya-Yala.

Kirkup, J. (1998). The history and evolution of surgical instruments. *Annals of The Royal College of Surgeons of England 80*, 422-432.

Lee, V. R. (2000). Forgotten Vilcabamba: Final stronghold of the Incas. Empire Publishing.

Makowski, K. (2015). Pachacamac—Old wak'a or Inka syncretic deity? Imperial transformation of the sacred landscape in the Lower Ychsma (Lurín) Valley. In T. L. Bray (Ed.), *The archaeology of wak'as: Explorations of the sacred in the Pre-Columbian Andes*. University Press of Colorado.

Marussi, F. (2004). Arquitectura vernacular amazónica: La maloca, vivienda colectiva de los Boras. Editorial Universitaria, Universidad Ricardo Palma.

Marzal, M. (1977). *Estudios sobre la religión campesina*. Fundo Editorial, Pontificia Universidad Católica del Perú.

Mayer, E. (1977). Beyond the nuclear family. In R. Bolton (Ed.), *Andean Kinship and Marriage* (pp. 60-80). American Anthropological Association.

Menaker, A. (2004). Las cuentas durante el colonialismo español en los Andes peruanos. *Boletín de Arqueología PUCP 21*, 85-97.

Menzel, D. (1959). The Inca occupation of the South Coast of Peru. *Southwestern Journal of Anthropology* 15(2), 125-142.

Miranda North, R. (2012). La maloca: Arquitectura vernacular Amazónica sustentable. *Consensus 17*(1), 129-142.

Mitchem, J. M. (1989). Artifacts of exploration: Archaeological evidence from Florida. In J. T. Milanich, & S. Milbrath (Ed.), *First encounters: Spanish explorations in the Caribbean and the United States*, *1492-1570* (pp. 99-109). University of Florida Press.

Morris, C., Covey, R. A., & Stein, P. (2011). *The Huánuco Pampa archaeological project volume I: The plaza and palace complex*. American Museum of Natural History

Murúa, M. de. (2004 [ca. 1590]). J.M. Ossio Ed. Códice Murúa: Historia y genealogía de los reyes incas del Perú de padre mercedario Fray Martín de Múrua. Testimonio Compañía Editorial.

Murúa, M. de. (2008 [ca. 1616]). Historia general del Piru: Facsimile of Paul Getty Museum Ms. Ludwig XIII 16. Getty Research Institute.

Núñez Rebaza, L. (1990). Los dansaq. Instituto Nacional de Cultura.

Ocampo Conejeros, B. de. (2013 [1611]). Descripción de la provincia de Sant Francisco de la Victoria de Villcapampa. In B. S. Bauer, & M. Halac-Higashimori (Eds.), *Baltasar de Ocampo Conejeros y la provincia de Vilcabamba* (pp. 19-56). Ceques Editores.

Olin, J., & Myers, J. (1992). Old and new world Spanish majolica technology. *Materials Research Society Bulletin*, 17(1), 32-38.

Ortiz, F. (1995). *Cuban counterpoint: Tobacco and sugar* (H. de Onís, Trans.). Duke University Press. (Original work published 1947)

Ossio, Juan M. (2008). Múrua, Marín de. In J. Pillsbury (Ed.), *Fuentes documentales para los estudios Andinos 1530-1900, Volumen III* (pp. 1,485-1,494). Fondo Editorial de la Pontificia Universidad Católica del Perú.

Paul, A. (1990). Paracas ritual attire: Symbols of authority in Ancient Peru. The Civilization of the American Indian Series, No. 195. The University of Oklahoma Press.

Pemberton, J. III (2008). *African beaded art: Power and adornment*. Smith College Museum of Art.

Phillips Jr., W. D. (1992). Africa and the Atlantic Islands meet the Garden of Eden: Christopher Columbus's view of America. *Journal of World History* 3(2), 149-164. University of Hawai'i Press on behalf of World History Association.

Phipps, E. (2013). The Iberian globe: Textile traditions and trade in Latin America. In A. Peck (Ed.), *The Interwoven Globe: Worldwide Textile Trade 1500-1800* (pp. 120-135). Metropolitan Museum of Art.

Phipps, E. (2018). Garments, *tocapu*, status, and identity: Inca and colonial perspectives. In S. Alconini, & R.A. Covery (Eds.), *The Oxford Handbook of the Incas* (pp. 645-668). Oxford University Press.

Pizarro, P. (1986 [1571]). Relación del descubrimiento y conquista de los reinos del Perú. Oxford University Press.

Platt, T. (1986). Mirrors and maize: The concept of yanantin among the Macha of Bolivia. In J. V. Murra, N. Wachtel, & J. Revel (Eds.), *Anthropological History of Andean Polities* (pp. 228-259). Cambridge University Press.

Pratt, M. L. (1991). Arts of the contact zone. *Profession*, 33-40.

Pratt, M. L. (1992). Imperial eyes: Travel writing and transculturation. Routledge.

Pratt, M. L. (1996). Transculturation and autoethnography: Peru 1615/1980. In F. Barker, P. Holme, & M. Iversen (Eds.), *Colonial discourse / Postcolonial theory* (pp. 24-26). Manchester University Press.

PromPerú. (n.d.). *The scissors dance: Intangible cultural heritage of humanity*. https://peru.info/en-us/talent/news/6/24/the-scissors-dance--cultural-heritage-of-humanity

Ramirez, S. E. (1996). *The world upside down: Cross-cultural contact and conflict in Sixteenth-Century Peru*. Stanford University Press.

Ramos, G. (1992). Política eclesiástica y extirpación de la idolatría: discursos y silencios en torno al Taqui Onqoy. *Revista Andina 19*, 147-169.

Redfield, R.., Linton, R.., & Herskovits, M. (1936). Memorandum for the Study of Acculturation. *American Anthropologist*, 38(1), 149-152.

Rodríguez de Figueroa, D. (1910 [1565]). Relación del camino e viaje que... hizo desde la ciudad del Cuzco a la tierra de guerra de Manco Inga. In R. Pietschmann (Ed.), Nachrichten von der königlichen gesellschaft der wissenchaften su Göttingen, Philologisch-historische klasse (pp. 89-122). Klasse aus dem Jahre.

Roel Pineda, J. (1974). Danzas del Perú. Boletín del Taller de Folklore, 13.

Rostworowski, M. (1983). *Estructuras andinas del poder: Ideología y política*. Instituto de Estudio Peruanos.

Roy, H. (2010). En turno al Taqui Oncoy: texto y contexto. Revista Andina 50, 9-58.

Sakai, M. (2009). El templo del sol Coricancha en Cusco y Vilcabamba. In H. Someda, & Y. Seki (Eds.), *Miradas al Tahuantinsuyu: Aproximaciones de peruanistas japoneses al imperio de los Incas* (pp. 133-158). PUCP - Fundo Editorial

Salazar, A. B. de. (1867 [1596]). De virreyes y gobernadores del Perú. In L. Torres de Mendoza (transcription), *Colección de documentos inéditos, relativos al descubrimiento*,

conquista y organización de las antiguas posesiones españolas, volumen 8 (pp. 212-293). Imprenta de Frías y Compañía.

Salomon, F., & Urioste, G. (Trans.) (1991). *The Huarochiri manuscript: A testament of ancient and colonial Andean religion*. University of Texas Press.

Santa Cruz Pachacuti Yamqui Salcamaygua, J, de. (1613). *Relación de antiguedades deste reyno del Piru*. Biblioteca Nacional de España.

Savoy, G. (1970a). Vilcabamba: Last city of the Incas. Hale.

Savoy, G. (1970b). Antisuyo: The search for the lost cities of the Amazon. Simon and Schuster.

Silverblatt, I. (1987). *Moon, sun, and witches: Gender, ideologies and class in Inca and colonial Peru*. Princeton University Press.

Stone, R. R. (2012). Art of the Andes: From Chavín to Inca (Third Edition). Thames & Hudson.

Titu Cusi Yupanqui, I. D. De C. (2005 [1571]). Relación de la conquista del Perú. In R. Bauer (Ed.), *An Inca account of the conquest of Peru by Titu Cusi Yupanqui*. University of Colorado Press.

Trujillo, D. (1953 [1571]). Relación del descubrimiento del Reino del Perú... In M. Muñoz del San Pedro Canilleros, Conde de (Ed.), *Tres testigos de la conquista del Perú (Hernando Pizarro, Juan Ruiz de Arce y Diego de Trujillo)*, Colección Austral no. 1168. Espasa Calpe Argentina.

Turgeon, L. (1998). French fishers, fur traders, and Amerindians during the Sixteenth Century: History and archaeology. *The William and Mary Quarterly*, 55(4), 585-610. Omohundro Institute of Early American History and Culture.

Zuidema, R. T. (1982). Catachillay: The role of the Pleiades and of the Southern Cross Alpha and Beta Centauri in the calendar of the Incas. In A. Aveni (Ed.),

Ethnoarchaeology and archaeoastronomy in the American Tropics (pp. 203-229). Annals of the New York Academy of Science 358. The American Philosophical Society.

Zuidema, T. (1997a). Pachacuti Yamqui andino. Respuesta de Tom Zuidema a Pierre Duviols. In T. Bouyesse-Cassagne (Ed.), *Saberes y memorias en los Andes*. Institut des Hautes Etudes de l'Amerique Latine/Instituto Francés de Estudios Andinos.

Zuidema, T. (1997b). Segunda respuesta de Tom Zuidema a Pierre Duviols. In T. Bouyesse-Cassagne (Ed.), *Saberes y memorias en los Andes*. Institut des Hautes Etudes de 1'Amerique Latine/Instituto Francés de Estudios Andinos.

