12-7-2015 12:00 AM

Chancay Style Textiles in the Canadian Museum of History

Beheshteh M. Asil, *The University of Western Ontario*

Supervisor: Dr. Jean-François Millaire, *The University of Western Ontario*

A thesis submitted in partial fulfillment of the requirements for the Master of Arts degree in Anthropology

CHANCAY STYLE TEXTILES IN THE CANADIAN MUSEUM OF HISTORY

(Thesis format: Monograph)

by

Beheshteh M. Asil

Graduate Program in Anthropology

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts

The School of Graduate and Postdoctoral Studies
The University of Western Ontario
London, Ontario, Canada

Abstract

This thesis is a study of a collection of 202 ancient Andean objects in the Canadian Museum of History (CMH). These artifacts are from the Central Coast of Peru and are associated with the Chancay culture of the Late Intermediate Period (A.D. 1000-1476). The aim of this research project is to help document the general technical and stylistic characteristics of Chancay weaving and potentially help narrow down the origin of some of the fabrics under study. The main objectives of this thesis are 1) to document the technical and aesthetic characteristics of the CMH fabrics and 2) to compare this collection to other published datasets.

The study first involved the systematic examination of textiles, recording technical and decorative information for each piece. In the museum, fabrics were analyzed using a worksheet that helped record a number of attributes. Each textile was also photographed and sketches were also drawn. Basic exploratory analyses using SPSS were subsequently carried out to identify patterns related to technological choices and the local textile making operational sequence. It was found that the CMH collection is similar in most respects to other Chancay-style textile collections, although differences are also noted.

Keywords:

Textiles, Ancient Andes, Chancay Culture, Central Coast Peru, Late Intermediate Period

Acknowledgments

I would like to use this opportunity to express my heart-felt gratitude to my supervisor Prof. Jean-François Millaire, for his continuous support, for introducing me to this amazing project and giving me the opportunity to study abroad. His patience, profound knowledge and amazing encouragement made the completion of my MA an enjoyable experience. Indeed, I could not have wished for a better supervisor.

I would also wish to thank other members of my thesis committee: Prof. Randa Farah, Prof. Lisa Hodgetts, and Dr. Jean-Luc Pilon. Their enlightening comments and thought-provoking questions not only improved my thesis in many aspects, but also gave me new ideas for further research.

Also, I would like to thank all my course instructors whose lessons equipped me with the theoretical knowledge I needed. In addition, this project would not have been possible without the funding from both The University of Western Ontario and the Social Sciences and Humanities Research Council of Canada.

My sincere thanks also go to Dr. Jean-Luc Pilon, Stacey Girling-Christie and other staff at the CMH who gave me the opportunity and provided me with the necessary facilities to carry out this research.

I also wish to thank all my wonderful friends who helped me during this process: Flannery Surette, Parastoo Alaeddini, Maryam Mojalal, and Azam Rasooli.

Last but not the least, I would like to thank my parents and my brothers for supporting me spiritually and financially during my MA.

I would like to dedicate this work to Marta Meckel de Hughes who made this project possible by offering these artifacts to the museum and sharing what she knew with me. She really wanted to see the results of this research; unfortunately she passed away in August 2015. May her soul rest in peace.

Table of Contents

List of Tables

List of Figures

List of Appendices

1 Introduction

This thesis is a study of 202 ancient Andean artifacts from the Canadian Museum of History (CMH) in Gatineau, Canada, associated with the Chancay culture of ancient Peru. The Chancay culture developed during the Late Intermediate Period (A.D. 1000-1476) in Andean prehistory (Table 1), in different valleys of the Central Coast of Peru, from the Huaura Valley in the north to Lurín Valley in the south (Figure 1). Although Chancay art style is well-known to specialists of pre-Hispanic Peru, relatively little is known about this ancient society, the settlements they occupied, the crops they cultivated, the people they traded with, and the objects they manufactured.

Indeed, archaeological work on Chancay is not an easy task due to the fact that it developed in an area presently covered by the greater city of Lima, and because of past and present looting of Chancay archaeological sites. Most of what we know about this ancient culture therefore comes from studies of unprovenanced artifacts housed in private and public collections from around the world. However, only a handful of these collections have been studied in detail by specialists. This thesis contributes to Chancay scholarship by analyzing the textiles from the CMH collection in terms of technological choices as well as aesthetics.

This chapter opens with an overview of the research context (1.1), followed by information on the thesis structure (1.2).

Table 1: Chronological Table

TIME SCALE	PERIODS/HORIZONS	COASTAL PERU		
		NORTH COAST	CENTRAL COAST	SOUTH COAST
1500	LATE HORIZON	INKA	INKA	INKA
1250	LATE INTERMEDIATE PERIOD	CHIMÙ	CHANCAY	
1000		SICÀN		ICA
750	MIDDLE HORIZON	WARI		
500	EARLY INTERMEDIATE PERIOD	MOCHE	PAHACAMAC	
250				
AD				

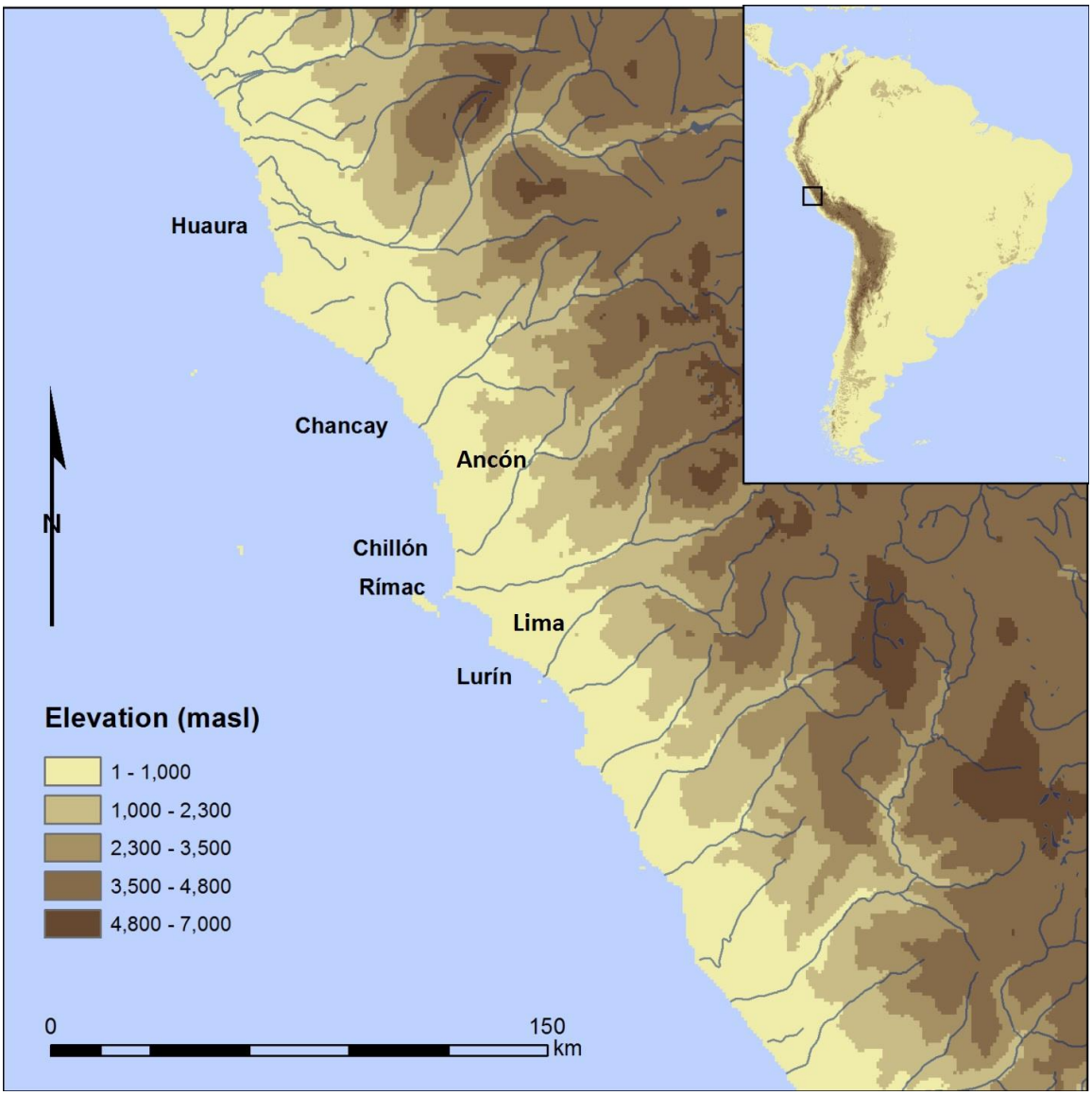


Figure 1: Map of the Central Coast of Peru

1.1 Research Context

Some of the most important early Andean civilizations developed along the Pacific littoral, which features a narrow coastline intersected by a number of fertile river valleys. Archaeologists working on the Peruvian coast have traditionally divided this region into North, Central, and South Coast regions. The Central Coast, which is the focus of this study, has been continuously occupied by Prehispanic societies from as early as the Pre-ceramic Period (4000 B.C.) (Lumbreras 1974). During the Late Intermediate Period (A.D. 1000-1476), a time which extends between the collapse of the Tiwanaku and Wari and the rise of the Incas and their conquest of the entire Andean region, a distinctive archaeological culture known as Chancay developed in this area, and ruled over the Chillón, Huaura, Rímac, Lurín, and Chancay valleys (Esser 1982; Kroeber 1926a; Senders 1982; Stone-Miller 1995).

The arid climate of this region has provided extraordinary conditions for the preservation of archaeological materials. Wood, reed, gourd, textile, and feather objects are preserved in good conditions in the archaeological record. Burials virtually always contain textiles and the most elaborate tombs often include dozens of intricately woven and decorated garments (Esser 1982; Tsunoyama 1979; Weiner 1970; Young-Sánchez 2000).

Chancay is known to us mainly through material culture, consisting mostly of pottery, textile, and metal objects found in graves (Esser 1982). Chancay ceramics (containers and figurines) typically feature white-slipped red ware decorated with black paint geometric designs (Esser 1982; Kroeber 1926; Weiner 1970). Traditionally, members of this society wrapped the corpses of their dead in many layers of cloth and buried them inside burial chambers along with various goods (Tsunoyama 1979; Young 1985).

Members of Chancay society were also expert weavers, who developed new techniques and produced items that are very rare in other regions, including fabric sculptures, textile samplers, and gauze head-dresses (Lehman 2005; Young 1985; Young-Sánchez 1992). Cotton was the fundamental raw material and it appeared generally in simple S-spun yarns or Z-spun S two-plied (Kula 1988; Lehman 2005; Lothrop and Mahler 1957; Young 1985). Camelid fibers were also used, although in a much more restricted way and

were reserved for ornamentation (Kula 1988; Lehman 2005; Rowe 1984, Young-Sánchez 1992). Fabrics were also embellished with feathers (King 2012; Rowe 1984; Young-Sánchez 1992). A number of motifs were represented, such as anthropomorphic and zoomorphic figures, birds, two-headed serpents, monkeys, and fish (Kula 1988; Lehman 2005; Lothrop and Mahler 1975; Medina Castro, Gheller Doig 2005; Tsunoyama 1979; Young 1985; Young-Sánchez 1992).

Reid (1986) argued that Chancay textiles actually represent a significant contribution to world art, and Stone-Miller (1995:191) describes them as "the most visually balanced and pleasing of the many incarnations of Andean fiber arts." Because of this, Chancay textiles have been in demand on the international art market for a century, and grave robbers in Peru have supplied the market with numerous pieces, some of which are presently in private collections, while others were acquired by museums around the world.

However, Jiménez Díaz has recently argued that we should be wary to use the term "Chancay" when describing these artifacts (Jiménez Díaz 2006) and should instead describe them more broadly as "Central Coast textiles from the Late Intermediate period," until more research is carried out. This is because in most cases these objects are missing contextual information. This suggestion points to the importance for more collection-based research to be carried out on Chancay-style artifacts, and for at least some comparative studies to explore the degree to which Chancay-style objects are the product of a coherent cultural group, or if instead it should be thought of as a broad tradition shared by members of different (largely) autonomous polities.

A collection of "Chancay-style" textiles housed at the Canadian Museum of History (CMH) in Gatineau, Canada, offers a unique opportunity to contribute to this debate by documenting a collection of textiles from the Central Coast of Peru about which very little is known. Between 1957 and 1976, the Archaeological Survey of Canada (which no longer exists) acquired hundreds of artifacts from the Andean region of Peru through purchase and donation, including ceramics and textiles. Around 30% of these artifacts are fabrics, which I studied as part of this MA research.

I started research on this collection with two main objectives in mind. The first was to document the technical and aesthetic characteristics of the ancient Andean textiles from the CMH collection. The second objective was to compare these Late Intermediate Central Coast textiles with other published datasets to help document the general technical and stylistic characteristics of the Chancay textiles and potentially help narrow down the original context of some of these fabrics.

My work was articulated around a general hypothesis that the technical and aesthetic properties of ancient textiles in the Andean region represent rich sources of information about the people who manufactured and used these objects. In order to tap into this source of information, cursory examination of fabrics is not enough. Detailed study of the weaving techniques and designs of the clothing is the essential first step before any further analysis can be carried out.

1.2 Chapter Outline

The second chapter provides background information on ancient Andean textile weaving and Chancay culture. The materials under scrutiny and methods used in this study are outlined in the third chapter. Chapter four presents a detailed analysis of the materials, the spinning and plying structure, weaving techniques, colors, motifs, design principals, and the garment types produced. In Chapter five, the data obtained from the analysis are examined within the broader context of the Central Coast textile tradition.

2 Background

The first part of this chapter presents information on ancient Andean textiles (2.1). The importance of textiles in archaeological studies is discussed and some of the obstacles researchers face when analyzing these fragile artifacts are also discussed. The second part of this chapter presents information on the Chancay culture, including the pottery, its burial practices, and the local textile weaving tradition (2.2).

2.1 Ancient Textiles in the Andes

From time immemorial, weaving has been one of the oldest crafts and art forms among human societies. Exploiting locally available fibers, societies from around the world have created textiles in one form or another to help satisfy their essential needs. The production of cloth for clothing, food gathering and shelter has always been a major concern and an integral part of daily practices, and this has resulted in the development of a multitude of local textile traditions, each with its own complex history (Barber 1991; Boytner 2004; Good 2001; Hasoori 1995; Lehman 2005; Murra 1962; Schevill 1991; Stone-Miller 1992). But textiles are more than mere items for body protection; they also fill different roles in peoples' personal, emotional, social, economic, aesthetic and spiritual lives. Despite the great potential of textiles as a means to study ancient societies, this field has somehow been neglected by anthropologists, archaeologists, and art historians alike.

In the Andean region, textiles have always been among the most important commodities produced, long before the appearance of pottery (Brinckerhoff 2000), and the desert coast provides a unique environment for the study of textiles due to the excellent organic preservation at many sites. Weaving was in no way a leisure activity in the region, representing an important investment of work and resources from communities to create some of the world's most extraordinary works of textile art (Y. Arnold, Helmer, and Arando 2009). Scholars have even argued that Andean achievement in weaving was unmatched from a technical point of view (Anders 1985; Bennet and Bird 1949; Boytner

2004; Kula 1988; Larco Hoyle 1966; Rowe 1977; Squier 1967 [1869]; Stone-Miller 1992; Young 1985; Young-Sánchez 2000).

However, the importance of Andean textiles goes beyond their interest as objects; research on textiles and textile making in this region reveals that clothing was a key medium for the expression and communication of cultural information. As Murra famously noted, in the Inca-dominated Andes "no political, military, social, or religious event was complete without textiles being volunteered or bestowed, burned, exchanged, or sacrificed" (1962:722).

Andeanists have studied ancient Andean fabrics to document a wide range of topics including social structure (Boytner 2004; Costin 1993; Costin 1998; Kula 1989; Millaire 2009; Murra 1962; Oakland 1992; Young 1985; Young-Sánchez 2000), craft production (Costin 2001; Chapdelaine et al. 2001; Millaire 2008; Vaughn 2006; Surette 2015; Zhang et al. 2007;), economic relations and long-distance trade (Boytner 2004; Costin 1993; Murra; Senders 1982 1962; Szpak et al. 2015; Young 1985; Young-Sánchez 2000), belief systems (Cereceda 1986; Conklin 1997; Crickmay 1992; Frame 1986; Stone-Miller 1992; Stone-Miller 1995), ritual practice (Heckman 2003; Millaire and Surette 2011), and individual or ethnic identities (Berlo 1992; Millaire 2009; Oakland 1992; Young 1985).

The study of textiles as identity markers is especially important for the present study. For example, textiles worn as shawls, ponchos, or sewn into clothing or shrouds for funerary bundles were of central importance as social markers (Boytner 2004; Costin 1993; Costin 1998; Rodman 1992), and even today in some regions of Ecuador, Peru, Bolivia, and Chile "what you wear signifies who you are" (Rodman 1992). In a key paper in Andean studies Rodman (1992) went further and argued that clothing and textile styles were used as markers of individual and ethnic identities throughout Andean prehistory and across the entire region, providing archaeologists with a means to learn about ancient social systems by carefully analyzing the technical and aesthetic characteristics of textiles from any given region.

Why structure matters as much as design

In describing the importance of weaving in the Andes, Bird (1963:43) stated that in spite of the fact that people could have used simple patterns and techniques in weaving clothing, a general dissatisfaction with simplicity always prompted them towards more complex artistic expressions and techniques. Although some techniques would limit and impact negatively on the work of the artist, they would accept the challenge for weaving was conceived of as the principal means of learning, communicating, and reproducing cultural values and aesthetics in the Andes. This echoes what many researchers have argued: that in the ancient Andean world although the images and patterns on the textiles were important, the structure of fabrics also directly conveyed ideas to the user and the viewer (Conklin 1997; Rodman and Cassman 1995).

Thus, weaving structures and techniques constitute fundamental aspects that need to be taken into account if we are to tap into the great potential of textiles (Bird 1963:46). Studying textiles, we should therefore keep in mind that the surface patterns do not hold all the information, but that some of this was "inscribed" into the fabrics through the use of specific fibers, colors, spinning, and weaving techniques, and onto their surface through their designs and use of motifs, and with the use of embroideries, generating many layers of information (Arnold, Helmer, and Arando 2009).

In this context, scholars have explored the various ways in which clothes somehow served as means of encoding cultural information in the absence of written language (Boytner 2004; Frame 1986; Schevill 1991). Considering that each media has its own "voice," "grammar," and "form of literacy," some researchers have now begun to "listen and consider" what a cloth means and how it conveys meaning (Berlo 1992; Martin1996). Instead of choosing to focus on either the aesthetic properties of fabrics or on the structure of an ancient textile, it seems more productive to those explore both of these dimensions (Conklin 1997).

Unfortunately, there are various obstacles to studying textile systems and clothing of the past, and they are not limited to any one particular region (Good 2001). These problems include, but are not limited to the fact that:

(1) Textiles are seldom found in the archaeological records due to the poor preservation of fibers in many parts of the world. Moreover, archaeological excavations seldom yield complete articles of clothing and in most cases only fragmented pieces are recovered.

(2) The analysis of archeological textiles is also a very complex process. Textiles are usually badly preserved, which often results in inaccurate identification of fiber material/spinning or plying direction. Fibers and spinning data can shed light on the technique, skill, craft specialization, choice, access to materials and other basic factors that were significant to the weavers and the societies in which they evolved.

(3) In interpreting textiles with abstract iconography, one often has to rely on oral traditions of mythical or historic associations, each of which comes with its own set of challenges. This is compounded by the fact that the provenience of the pieces is often unknown.

(4) Ancient textiles were often not recovered from scientific archaeological excavations and therefore came to us without context (as part of private or museum collections). Although much is lost because of this, these ancient fabrics are still of utmost importance and it is our role to use them to their full potential.

2.2 Chancay Culture

During the Late Intermediate Period, a distinctive archaeological culture known as Chancay developed on the Central Coast region with characteristic architecture, pottery, metal work, and textiles. Although numerous studies have been conducted that document this archaeological culture (De Lavalle, et al. 1990; Esser 1982; Hodnett 1978; Hodnett 1999; Jiménez Díaz 2006; Kroeber 1926a, b; Krzanowski 1991; Kula 1988; Larco Hoyle 1966; Lothrop and Mahler 1957; Nagy 1985; Senders 1982; Weiner 1970; Young 1985), the looting of Chancay cemeteries over the past centuries has greatly impaired the study of this ancient social entity.

Archaeological research on Chancay was initiated by Uhle in 1904 when he excavated five sites in the Chancay Valley (Kroeber 1926a; Weiner 1970), followed by Tello's work between 1946 and 1950 (Anders 1985; Nagy 1985). These, together with other excavations carried out in the area by Reiss and Stüble (1880-1887), Lothrop and Mahler (1957), and Larco Hoyle (1966), have provided essential information for understanding this ancient society and its chronology (Kula 1991:264).

2.2.1 Chancay-Style Ceramics

In his excavations of five regions in the Chancay Valley (La Mina, La Calera de Lauren, La Calera de Jegoan, Huaral Viejo Hacianda Guando and Cerro de Trinidad), Uhle distinguished several ceramic types, including Black-on-white, Red-white-black or Three-color geometric ware, Epigonal, White-on-red Chancay and Interlocking (Kroeber 1926a). Similarly, Lothrop and Mahler (1957), who excavated a Chancay-style grave at Zapallan, distinguished five different ceramics types that are characteristic of Chancay: White and black on red, Red, black and white geometrics, Black-on-white, Plain white, and Plain red.

Esser (1982) argued that the most important ceramic type is the Black-on-white as it epitomizes the Chancay culture and is a good proxy of the extent of the influence this polity had on the neighboring regions artistically and politically (see also Kroeber 1926a, b; Nagy 1985; Stone-Miller 1995; Weiner 1970). This style of pottery typically features white-slipped red ware decorated with black paint designs (Esser 1982; Kroeber 1926b; Weiner 1970). Black-on-white ceramic objects fall in two major categories: containers, which were produced in larger quantities; and figurines (Kroeber 1926a, b; Weiner 1970). The latter come as both rounded sculptures of animals, like llamas, dogs, foxes, and deer (Esser 1982), and "large, less rounded, more frontally modeled effigies of naked humans of both sexes with flaring, flattened crowns or headdress" (Esser 1982:323).

Black-on-white pottery has been described in the literature as "crude, regressive and naïve", due to its thinness, porosity, coarseness and gritty texture (Esser 1982:313;

Kroeber 1926a, b; Lumbreras 1974; Nagy 1985; Weiner 1970). The pottery also often features watery drips, which Stone-Miller (1995:177) argues results from the fact that the pieces were painted hastily. Designs are cursive, geometric, and figurative. Rims and handles are often decorated with "small, conventionalized roughly modeled creatures below the neck of vessels" (Kroeber 1926b:332).

The prevalence of this pottery type in the valleys of Huaura, Chancay, Ancón, Rímac, and Northern Chillón may indicate the existence of a political and cultural affiliation among and within these valleys (Esser 1982; Senders 1982; Weiner 1970; Young 1985), although the nature of this affiliation is still difficult to assess. The time during which Black-on-white ware was produced overlapped, at least in part, with the terminal Late Intermediate Period and Late Horizon, during which first the Chimú and then the Inca influences were felt in this region of the coast. For example, small quantities of Chimú black ware are found in Chancay graves, which may represent trade pieces (Kroeber 1926b; Senders 1982:11; Weiner 1970:26).

2.2.2 Burial Practices

Chancay burials represent one of the greatest sources of information available on this ancient society. One of the most important datasets comes from the excavations carried out in Ancón by Reiss and Stüble in the late 19th century (Cited in Young-Sánchez 2000), and in Zapallan by Lathrop and Mahler (1957). In keeping with their burial customs, members of the Chancay society wrapped the corpses of their dead in many layers of cloth and buried them deep in the ground along with various goods (Lothrop, Mahler 1957; Tsunoyama 1979; Weiner 1970). Reiss and Stüble's illustrations of tombs and mummy bundles depict the dead being buried naked "in a tightly fixed position with fingers and toes bound together with thread" (cited in Young 1985:8). While some mummies were often covered in layers of cloth, hide, and leaves, others had an extra layer of covering: "a shirt, on top of which was mounted a false head with a garment resembling a scarf tied around and small bags hanging from the neck (cited in Young 1985:8)."

According to Lumbreras (1974:193), distinctive types of graves reflect the economic and social status of the individuals buried. For instance, commoners were wrapped in plain cloth and deposited in shallow and simple graves with only a few objects, whereas members of the elites were buried in elaborate burial chambers that contained funerary offerings such as ceramic pieces, textiles, silver, and sometimes fabric sculptures. Some of their simpler tombs were circular or rectangular pits simply cut from the hard gravel of the earth. On the other hand, the most sumptuous tombs were either round or rectangular and two or three meters in depth with well-finished clay walls. These had cane roofs supported by vertical poles and horizontal wooden beams and at times also featured stairs.

Lathrop and Mahler (1957) describe a Chancay-style burial of an important woman at Zapallan. The square tomb had a floor cut into the hard gravel. A straw mat placed on one wall extended over part of the floor. Wooden beams, covered with a layer of reeds, held the roof in place. A large amount of material was wrapped around the body, consisting of grass and large wads of cotton, presumably to aid in the process of desiccation. Wrapped in textiles, many of which were notable because they had been so worn and mended prior to their inclusion within the bundle, the body had tattoos on the arms and was seated on a basket. A number of clay figures, two sacrificed dogs, many textiles, a few silver offerings, hundreds of canes wrapped with colored yarns in strips or diamond patterns and two dolls with reed bodies and painted faces surrounded the body. Although the grave contained numerous offerings, their overall quality was poor (except for the ceramics).

Hodnett (1999:10) mentioned several tombs from the Huaura Valley that "contained several cloth-wrapped mummies in each square or rectangular chamber" and whose "niches in the wall contained the bodies of children." In these graves, "the adult mummies were seated in the middle of the chamber and surrounded by ceramics, with perhaps a cushion to one side on which a doll might be standing."

In summary, residents of the Central Coast buried their dead with offerings such as ceramics, textiles, etc. possibly to ensure that they would have access to them in the

afterlife (Brinckerhoff 2000). As mentioned earlier, the dry and desert-like climate of the coast was conductive to their preservation and those that have found their way into private and public collections are the best tool for researchers who seek to decipher the Andean material culture.

2.2.3 Chancay Textile Tradition

According to Young-Sánchez (1992:43), "the Late Intermediate Period was a time of disunity" during which the Central Coast was ruled by numerous local leaders, which resulted in the rise of "secular hierarchies" and a concentration of wealth in the hands of emerging rulers. In this context, increased quantities of luxury goods were imported, such as wool and tropical bird feathers (King 2012; Lumbreras 1974; Young-Sánchez 1992), and there would have been a general shift in aesthetics from "supernaturalism" to "secularism" as the main form of representation (Stone-Miller 1995: 151-154).

The majority of textiles produced on the Central Coast of Peru at that time were plain weaves with simple alternating float designs, supplementary warp floats, or warp substitutions (Kula 1988). Rowe (1977:133) finds these textiles to be of lesser quality than those of earlier and later time periods, something which could be due to the fact that they were mass produced by local weavers (Tsunoyama 1979; Stone-Miller 1995; Kula 1988). But fine quality Chancay-style textiles were also produced, and these are generally recognized for the quality of their design and complexity of their structure (Esser 1982; Stone Miller 1992, 1995; Tsunoyama 1979; Reid 1986; Lehman 2005; Kula 1991; Weiner 1970). Stone-Miller (1995:191) describes these fine fabrics as "the most visually balanced and pleasing of the many incarnations of Andean fiber arts."

Yarn fibers, color, spinning, and plying

The weavers who produced Chancay-style textiles used both cotton, which was cultivated on the coast, and camelid yarns, which mainly came from the highlands. The colors of the cotton yarns range from white to light and dark tan, as well as light and dark brown, which are cotton's natural colors (Rowe 1984). Camelid yarns display a wider range of

natural colors including brown, gray, white, and black, but dyed fibers also come in shades of gold, brown, scarlet, pink, white and even lavender and olive green (de Lavalle 1990; Kula 1991; Stone-Miller 1995). As was the case elsewhere in the Ancient Andes, Chancay weavers sometimes dyed woven fabric using a resist technique known as tie-dyeing (Lehman 2005).

Camelid-fiber yarns were valued commodities on the coast, used mainly as colorful patterning elements (Kula 1988; Rowe 1984; Senders 1982; Yong 1985; Young-Sánchez 1992). Rowe (1984) states that the camelid fibers, mostly found to be of alpaca wool, were mainly used as ornamentations of cotton textiles or weft in tapestries. She further finds a uniformity of camelid yarns in archaeological sites on the North, Central, and South Coasts, a fact she credits to trade with the highlands, where yarns were probably mass produced by specialists.

In his investigations of the history of weaving on the Peruvian coast, Wallace (1979) observed that the types of cotton yarns varied widely in the early days of Peruvian weaving, but by the time of the Early Horizon (900 B.C. – A.D. 200), the direction of the original twist and the plying techniques used in the various areas had become standardized. While the South Coast weavers used almost exclusively Z-2S yarns, for both warp and weft, those of the North Coast specialized in paired S-spun cotton warps with either single or paired wefts. In this region, Chimú cloth consisted of an S-spun paired warp, crossed most commonly by wefts of S-spun singles (Rowe 1984). Rowe (1984) further notes that the cloth from this region was also characterized by monochromatic weft stripes and separately woven, undyed fringe bands. Z-spun, S two-plied (Z-2S) cotton was never used, but the warps of Chimú tapestries were composed of S-spun, two or three-plied cotton.

On the Central Coast, weavers worked mostly with cotton S-spun singles, which were quite often extremely fine. The emphasis on producing a final S-twist (Figure 2) was so strong that it must have been of tremendous cultural significance (Kula 1988; Lehman 2005; Senders 1982, Young 1985). Indeed Kula (1991) argues that Chancay spinners needed to produce two types of basic singles; a single S-spun to be used as so or a Z-spun

for the preparation of a Z-2S cotton yarn. She also mentions the importance of studying the types of yarns, arguing that it could serve to identify the cultural origins of certain textiles (1991: 265). Chancay-style fabrics were sometimes made with S-spun warp and weft, but could also be constructed from Z-spun, S two-plied cotton warp and weft. The tapestries from this area had typically Z-spun, S two-plied cotton with a dovetail technique to prevent long slits (Evans 1995; Kula 1988, Young 1985).

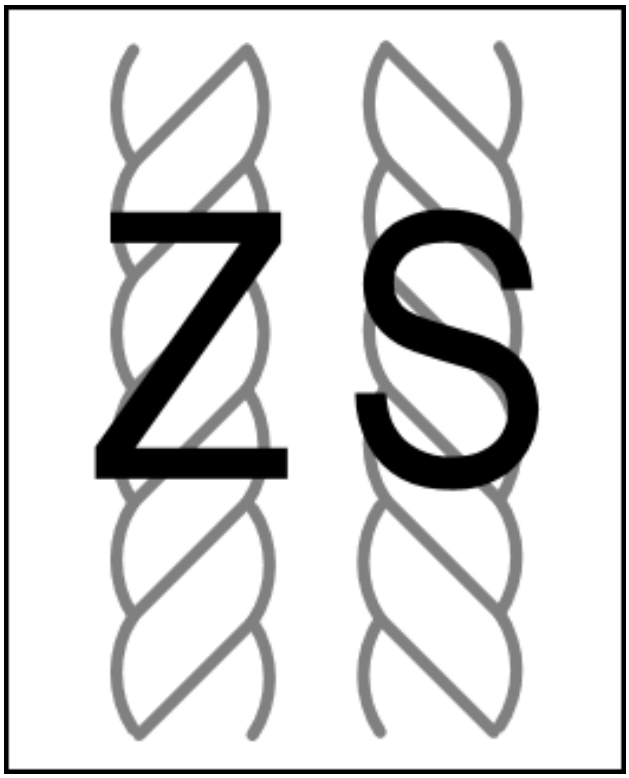


Figure 2: Yarn Twist

Weaving techniques

Chancay weavers (both men and women) used different techniques to weave textiles on back-strap looms, including plain weave, tapestry, double-cloth, gauze, pebble weave, and complementary warp/weft. But weavers also employed other non-structural techniques to embellish the fabrics, including supplementary warp/weft, embroidery,

painting, tie-dying, and addition of shells, tassels, fringe, feather, human hair and metal (Bawden and Conrad 1982; Lehman 2005; Lumbreras 1974; Medina Castro, Gheller Doig 2005; Tsunoyama 1979; Young 1985).

Chancay artistic creativity was also expressed in the production of items that were quite rare in other regions, including fabric sculptures, textile samplers, and gauze head-dresses (Hodnett 1999; Lathrop 2005; Lumbreras 1974; Senders 1982; Stone-Miller 1995; Tsunoyama 1979; Young 1985; Young-Sánchez 1992).

Fabric Sculptures

Doll-like fabric sculptures (Figure 3) are characteristic of Chancay archaeological assemblages, providing us with information on the daily life in these ancient coastal societies and on the dress code associated with different social categories (Hodnett 1999; Lehman 2005; Lothrop and Mahler 1957; Young 1985). These were made of reed and sewn or tied together with white cotton yarns. The fact that they were manufactured in a standardized manner suggests that they were probably produced in specific areas and workshops (Hodnett 1999). These sculptures were found inside burials, in women's workbaskets, and either broken or scattered at graves (Esser 1982; Lothrop, Mahler 1957).

What exactly these fabric sculptures were used for remains a mystery (Esser 1982; Hodnett 1999; Young 1985). According to Hodnett (1999) although these dolls were sometimes found among grave goods of deceased individuals, they may have initially been used in the homes of the living. The fact that they were found with adult mummies seems to go against the argument that these were children's toys, not to mention the fact that they are very fragile items. According to Peruvian artist and writer Nunes-Ureta (cited in Hodnett 1999:32), these fabric sculptures may "represent scenes of the daily life and perhaps they could tell us, if we knew how to listen, the history and the life of a highly developed culture and of social well-being."

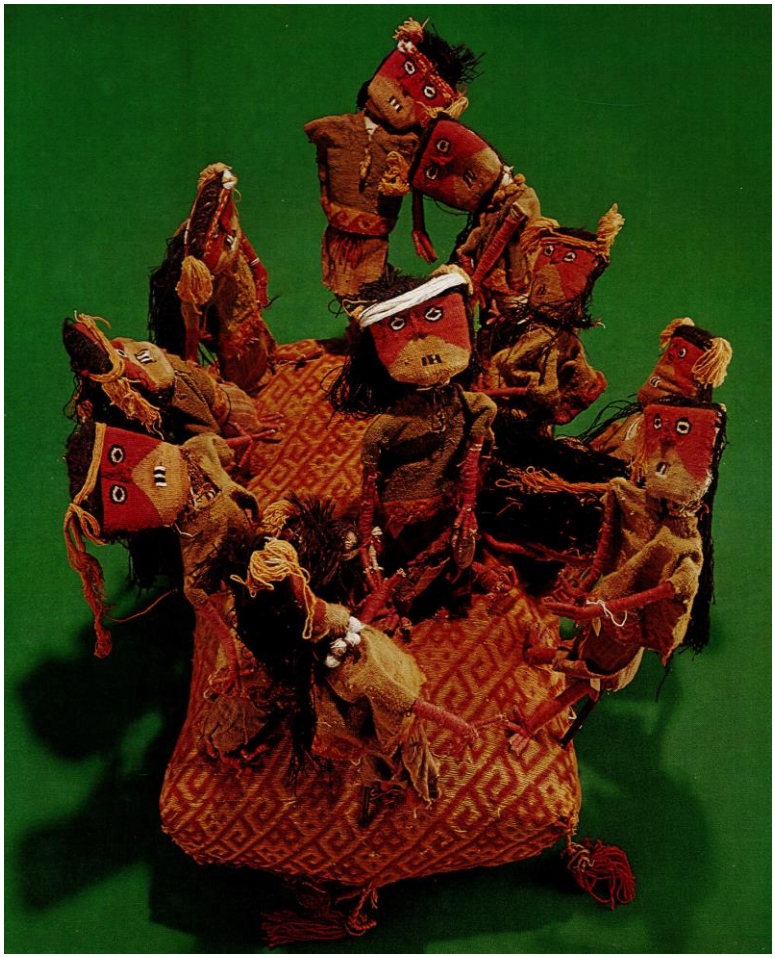


Figure 3: Group of Dolls under the Influence of Alcohol, Amano Collection, Lima, Peru (Tsunoyama 1979:197)

Textile Samplers

The second unusual category of objects produced by Chancay weavers is the textile samplers (Figure 4) that provide information on the learning process associated with weaving in this society (Young-Sánchez 1992). Bird (1963:74) argued that needle worked samplers began in the first centuries A.D. and functioned as guides for embroidered figures in contrast to the later samplers that might have been used in planning structural products. The experiential character of these fabrics is indicated by a variety of motifs, weaving techniques, and colors. Young-Sánchez (1992:48) mentions

that they were not “incorporated into finished garments, and they were often incomplete.” She (1992:48) further asserts that “the samplers were most likely not created by novice weavers, but rather, were built over time as individuals practiced new techniques and designs and the completed pattern units then provided the weaver with a visual record for future reference.”

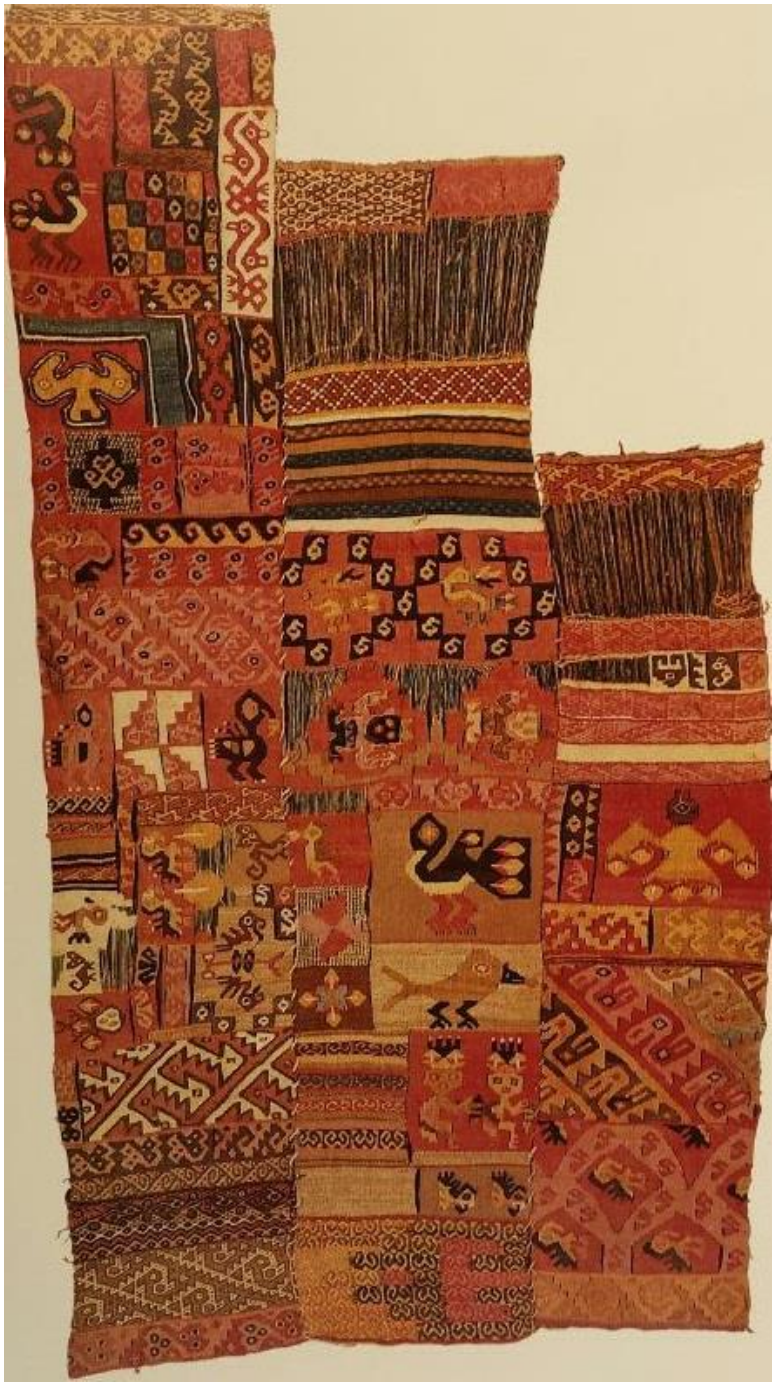


Figure 4: Textile Sampler, Amano Collection, Lima, Peru (Tsunoyama 1979:192)

Gauze Textiles

Gauzes were the third expertise of the Chancay weavers (Figure 5). Still practiced today, they are created entirely by warp manipulation whereby warp threads are twisted around each other according to certain sequences and configurations (D'Harcourt 2002; Gerschult 2008; Kula 1991; Lehman 2005; O'Neal and Clark 1948; Senders 1982). Analyzing a gauze fabric, Gerschultz (2008) argues that the physical movement of the crossing warp threads is quasi-analogous to the bodily movements of snakes.

The majority of the Chancay gauze textiles were woven with un-dyed cotton, although some examples have been found that are resist dyed, dyed with direct dyes or painted (Evans 1995; Gerschultz 2008). Their precise function as a category of object is still unknown. However, based on the data obtained from excavated tombs, gauzes seem to have been mainly used as funerary offerings, associated with the heads of the deceased (Evans 1995; Lehman 2005; Senders 1982). Moreover, due to the weave structure and the fine white cotton yarn used to make these head coverings, these textiles had an elastic quality as well as lightness. The designs depicted on these textiles were only recognizable for as long as they remained stretched on the loom (Evans 1995; Lehman 2005; Senders 1982; Stone-Miller 1995).

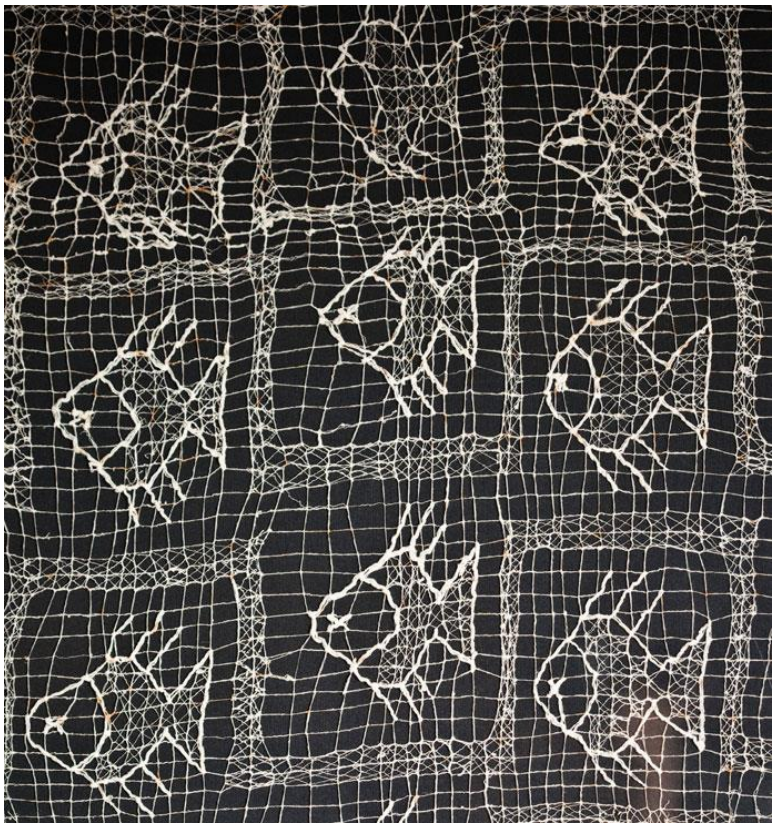


Figure 5: Embroidered Cotton Lace with Fish Design and Jagged Stripes, Amano Collection, Lima, Peru (Young 1985:189)

Decoration

Chancay-style textiles are known for their characteristic design and the motifs that adorn them. According to Young-Sánchez (1992) what characterizes Chancay textiles is the simplicity of the design used by the weavers, which were applied to all fabrics. According to her, motifs were small in scale and were depicted according to standard conventions; that is, they were repeated in horizontal and vertical alignments throughout the decorative field, creating an "illusion of dynamic movement" (Young-Sánchez 1992:46).

Considering that Chancay is a coastal culture, it is not surprising that marine motifs predominate, including seabirds, waves, and fish (Kula 1988; Lehman 2005; Young 1985; Young-Sánchez 1992). But other motifs were used, including geometric patterns,

human figures, and land animals (Anton 1967; Bawden, Conrad 1982; Lehman 2005; Medina Castro, Gheller Doig 2005; Senders 1982; Young-Sánchez 1992).

Another decorative technique used was feather-work. The periods following the 10th century A.D. saw an increase in the use of feathers, which became conspicuous on high-status woven and painted garments (King 2012). The fact that feathered tunics have also been found on the North and South coasts of Peru (Young-Sánchez 1992) suggests at least some interaction between distant societies along the littoral. Moreover, although some of the feathers applied to Late Intermediate Period textiles came from sea birds, most were from birds native to the eastern slopes of the Andes and the Amazon basin (Young-Sánchez 1992).

Weaving Implements

Chancay graves often include weaving implements (Esser 1982), something that might be related to the ancient belief in the hereafter, whereby women would have been buried with their weaving baskets to ensure that they could continue to weave in the afterlife (Brinckerhoff 2000). One of these baskets (Figure 6) is now in the Museum of Fine Arts, Boston (Young-Sánchez 1992). This basket, overflowing with weaving implements, gives us a direct understanding of the creative process of textile weaving in the Andes during this period.

Beside weaving baskets and weaving implements, loom samplers have also been found inside graves (Kula 1988). They suggest that textile making, from spinning yarn to the actual weaving of cloth, were as important to the ancient Peruvians as the finished textiles. Bird (1963:74) mentions the discoveries of a number of small looms in and near the Chancay Valley: unfinished fabrics depicting several motifs and patterns in several techniques. Skinner (1975) illustrates a reconstructed loom of the Late Intermediate Period: an example consisting of a weaver and a companion sitting on a workbasket, wrapped with a Chancay cloth. Based on this sample, Stone-Miller (1995) argues that the Chancay weaving tradition was probably transmitted from one generation to another in this way. She further suggests (1995:177) that such “self-referential images of weaving”

indicate that textile production was not only significant and sacred among the Chancay people, but was looked upon as a celebration of "women's textile virtuosity."

Figure 6: Weaver's Workbasket and Implements, Museum of Fine Arts, Boston (Stone-Miller 1992:69)

3 Materials and Methods

This chapter opens with a brief section that provides information on how the fabrics under study came to the Canadian Museum of History (3.1). The second section outlines the protocol used to analyze the textiles (3.2) followed by a brief description of published datasets on Chancay textiles (3.3).

3.1 Andean textiles at the Canadian Museum of History

Between 1957 and 1976, the Archaeological Survey of Canada acquired 743 artifacts from Peru through purchase and donation, including ceramics and textiles. In a report commissioned by the museum, Anders (1987) found that the majority (433 items; 58%) are ceramic objects, including vessels, molds for the manufacture of vessels, figurines, musical instruments, broken sherds, and adornments. More than sixty percent of the artifacts were catalogued as "Chancay" objects, thus categorizing them as originating from the Central Coast of Peru and dating from the Late Intermediate Period (1000 CE – 1476 A.D.). The other artifacts from that collection are associated with other Andean cultures, dating from as early as the first millennium B.C. to the time of the Spanish conquest (Anders 1987). Based on my examination, around 30% of the artifacts are fabrics or fiber-related artifacts; from which, I had the opportunity to analyze 202 (27%).

No information on the original context of these artifacts is available, but based on the evidence presented above it is likely that they all came from graves excavated early in the 20th century in the greater Lima region of Peru. From Anders' report, and museum archival documents, we learn that most of the Chancay-style pieces were originally purchased from collectors like Marta Meckel de Hughes and Robert B. Hughes.

In 2014, I had the opportunity to meet and interview Marta Meckel de Hughes in Ottawa, who was happy to share with me parts of the history of the collection. Originally from Bolivia, her family moved to Peru in the 1960s, where she worked as an interpreter in the Canadian embassy, met her husband, and undertook training in archaeology with a special interest in the Chancay culture. Her father worked in the mining industry and over

the years he bought a large number of artifacts from local farmers that likely came from graves they had excavated. This collection was bequeathed to his daughter and son-in-law after their marriage. As a part of her archaeological practice, Marta Meckel de Hughes also took part in archaeological excavations in the Lima region, where students were allowed to keep some broken pieces, adding to the family collection. More artifacts were eventually purchased by the couple from local farmers. In the early 1970's they moved to Canada and a few years later they sold and donated part of their collection to the CMH.

Information on these textiles was originally recorded in an accession catalogue, with nominal information on the donating or purchase process. As part of the study, I prepared a descriptive catalogue of the textiles (Appendix A) that contains the catalogue numbers and information on the dimensions, techniques, materials, the spinning and plying structure, decoration, and sometimes reference to similar pieces. A photograph is also provided. Note that this appendix includes only the woven fabric. Appendix B provides raw information on the woven objects under study.

As part of the curatorial process, most textiles had previously been straightened on cloth-covered boards and some were sewn to the boards. As a result, the fabrics are now under tension on the boards and thus one cannot see the back side of the fabrics. This has been a major hindrance to the present study as it has been extremely difficult to identify the complex techniques used in some of the textiles.

3.2 Technical and Stylistic Analysis of Ancient Fabrics

The main objectives of this study are to document the technical and stylistic features of the CMH textiles and to compare them to other published studies of Central Coast textiles. Due to the multivalent and multi-functional roles of textiles, large amounts of information can be gathered from these artifacts by analyzing their structure and design. Several scholars have contributed to the field of textile recovery and analysis throughout the past century, including key figures such as James Adovasio, Patricia Anawalt,

Elizabeth Barber, Junius Bird, Irene Emory, Raoul D'Harcourt, Mary Frame, and Veronika Gervers, Lila O'Neale, and Rebecca Stone-Miller, to name only a few. In this study, I chose to follow the lab methods outlined by Young-Sánchez (Young 1985). Throughout this thesis I also follow the general concept of *chaîne opératoire* (or operational sequence), understood as the breakdown of a given technological process into the step-by-step actions and social gestures involved in the production, use, and discard of artifacts (Cresswell 1993; Lemonnier 1992; Sillar and Tite 2000).

In July and August 2014 I spent six weeks at the CMH, analyzing the textiles. The work was carried out under the supervision of Dr. Jean-Luc Pilon and Stacey Girling-Christie. At the museum, I laid out each textile on a table (depending on the item's condition and the museum's permission) and recorded a number of attributes for each piece using a standard worksheet (Table 2). This included dimensions and information on fiber materials, spinning, plying, and weaving techniques, as well as information on designs and supplemental elements added to the finished cloth. Each artifact was also photographed and I used a video camera to record specific information and commentaries on complex pieces. I finally took notes on each artifact and drew technical sketches of specific designs. I analyzed an average of 10 pieces per day at the CMH.

Back at The University of Western Ontario, I conducted analyses under the supervision of Drs. Jean-François Millaire and Flannery Surette. The data collected at the CMH were first fed into a SPSS database to carry out basic exploratory analyses. Based on the mentioned attributes, the samples have been divided into groups and subgroups, each of which has been analyzed in terms of the frequency and the percentage of different characteristics.

Table 2: Work Sheet for Recording Data

Registration No.	Panels	Object type	Technique	Dimensions	Warp			Weft			Photo/ Sketch
					Fiber	S/P	Color	Fiber	S/P	Color	

3.3 Chancay Textile Studies

As part of the study, I have also gathered published information on other Central Coast textile datasets, information that was essential for comparative purposes. Unfortunately, very few collections have yet been studied in detail.

The earliest study useful for comparative purpose is *A Chancay-style Grave at Zapallan, Peru* by Lothrop and Mahler (1957). This is an examination of the textiles and other objects found in a single tomb (Grave Y) at the site of Zapallan on the Central Coast of Peru, 27.4 kilometers north of Lima. In this study Lothrop and Mahler analyzed the weaving techniques, spinning and iconography of the fabrics from this funerary context.

Textiles of the Andes: Catalog of Amano Collection (1977) is a partial catalog of the Amano Textile Museum collection in Lima, Peru. Yoshitaro Amano, the founder (1898-

1982), was a wealthy Japanese immigrant who collected what is probably the most extensive collection of decorated Chancay-style textiles in the world. This work includes illustrations of some of the best pieces from this collection. Most of these fabrics were originally part of mummy bundles excavated from coastal sites.

In 1985, Young studied 96 textiles from Lauri that were part of the Amano Textile Museum collection. As part of this work she analyzed materials, weaving techniques, and textile decoration with the objective of providing a technical and stylistic definition of the Chancay textile tradition.

Between 1986 and 1988 Kula cataloged and studied approximately 550 textiles from the Chancay Valley in the Young Peruvian collection, housed in the Haffenreffer Museum at Brown University. The pieces were gathered on the surface of various sites between 1964 and 1966 by Dr. and Mrs. Lloyd Poung of Sharon. Kula analyzed the technical and iconographic features of the textiles and looked for evidence of standardization in the collection. Results were published as part of her doctoral studies entitled *Chancay Textiles in the Young Peruvian Collection* (1988).

In the book *To Weave for the Sun,* Stone-Miller (1992) documents the collection of ancient and Colonial Andean textiles in the Museum of Fine Arts, Boston. Fabrics are illustrated and described in detail. This work also includes essays that examine textiles as rich sources of information about ancient weavers. The forth chapter "Textile Traditions of the Late Intermediate Period" written by Young-Sánchez (1992) would also be used as a comparative source. A few years later Stone-Miller published *Art of the Andes: From Chavín to Inca* (1995), in which she discusses various aspects of Andean weaving, with a specific focus on aesthetics and the connections that exist between textile design, the environment, and shamanistic practice.

In *Textiles from Peru's Central Coast 750-1100: The Reiss and Stubel Collection from Ancón,* Young-Sánchez (2000) studied a collection of textiles from the Royal Museum of Ethnology in Berlin (now Germany's National Museum of Ethnology). These fabrics were excavated in 1875 by Wilhelm Reiss and Alphons Stübel in a cemetery at Ancón, following nineteenth-century archaeological methods. The graves date to roughly the

second half of the Middle Horizon, the Late Intermediate Period, and the Late Horizon (A.D. 750-1536).

In *Tejidos y Mundo Textil en los Andes Centrales y Centro-Sur a Través de la Colección del Museo de América en Madrid: Periodos Prehispánico y Colonial*, Jiménez Díaz (2004) studied a collection of 429 textiles from different regions of the Andean coast, housed in the Museo de América in Madrid. In her analysis, she examined the technical and stylistic characteristics of individual fabrics.

Finally, in *Textiles of the Chimú and Chancay Cultures of Coastal Peru Woven During the Late Intermediate Period: A comparison of processes and techniques*, Lehman (2005) reviewed the work of several textile specialists who have studied Chimú and Chancay textiles. This includes information on the spinning, dying and weaving process and ends with discussing the similarities and differences between regions.

Beside these studies, other Chancay-style textiles have been described in other publications. For instance, in 1995 Evans analyzed a Chancay knotted weft wrapping head-cloth from the collection of the Michael C. Carlos Museum, Georgia. Gerschultz (2008) studied a Chancay gauze headdress from the collection of the Michael C. Carlos Museum. De Lavalle (1990) illustrated several Chancay-style textiles from Colección Arte y Tesoros del Perú in his book entitled Chancay. The Chancay-style dolls housed in the Amano Collection (Lima, Peru) were studied by Hodnett in 1999. Finally, Senders analyzed a group of Chancay gauzes, obtained from the Costume and Textile Study Center, the Lowie Museum and Reiss and Stüble excavations in 1982, to develop a gauze terminology.

4 Results

Focusing on the technical and stylistic characteristics of the fabrics under study, in this chapter I describe and analyze the raw materials, the spinning and plying structure, the colors, the weaving techniques, and the motifs used by the weavers. This will represent an important step for assessing the range of materials and techniques that were available to the coastal weavers who created these objects. This will also provide baseline information for assessing the technological and aesthetic unity of this collection and to address issues of cultural, temporal, and geographic origin.

This chapter is structured along the normal *chaîne opératoire* of traditional weavers, which starts with raw fibers and ends with the finished cloths. I first focus on the materials used (3.1), paying attention to fiber, and the color, spinning and plying of yarns. In the second part of this chapter, the fabrics are examined in terms of the different weaving techniques used (3.2). The function of the objects from the collection is addressed in section (3.3), and the final section, (3.4), explores the decoration of the fabrics.

4.1 Materials

This section explores the materials used in making the woven fabrics from the collection under study. The collection under study is composed of 202 objects (see section 4.2). However, other Andean textiles in the museum could not be analyzed because they were either stored in other sections or were donated or sold to the CMH after I conducted research in July and August of 2014.

Fibers

The Chancay-style textiles from the CMH were mostly woven using cotton and camelid fibers[1]. Cotton was cultivated along the coast and higher up in the valleys, while camelid

[1] Ropes and nets made of plant fibers were not included in these analyses.

fibers either came from local stocks or were imported from the upper valleys or highlands. Camelid fibers were obtained from llama, alpaca, or vicuña. However most of the camelid yarns used in weaving clothing on the coast were probably from alpaca (Rowe 1984:25; Young 1985:18). Tables 3 and 4 provide information on the materials used for the warp and weft elements of the fabrics under study[2].

Table 3: Fiber Information for Warp Yarns

Fiber Material	Frequency	Percent
Cotton	167	38.7
Wool	264	61.3
Total	431	100.0

Table 4: Fiber Information for Weft Yarns

Fiber Material	Frequency	Percent
Cotton	135	30.0
Wool	315	70.0
Total	450	100.0

Data presented in Table 3 shows that of the total 431 yarns used as warps in the textiles under study, 38.7% are made of cotton, while 61.3% are made of camelid wool. With regard to the wefts, Table 4 shows that 30.0% of the yarns were made of cotton while 70.0% were made of wool.

Yarn colors

According to Rowe (1984:18), native Peruvian cotton occurs in five natural colors: white, tan, light and dark brown, and grey. However, cotton yarns were also dyed in different shades of green, pink, blue, brown, yellow, and red. Wool occurs in natural shades of

[2] When information was missing for an object, it was excluded from the analyses. Slings, dolls, and one-element pieces such as threads or unspun fibers were also excluded. Slings and dolls are discussed below in more detail.

white, brown, black, and grey. Compared to cotton, camelid fibers take up natural dyes very easily (Rowe 1977:10). It is therefore not surprising to find that woolen yarns used in the fabrics under study were often dyed in different shades of red, yellow, gold, green, orange, purple and pink.

The colors of the warp and weft are recorded in Tables 5 and 6[3]. It should be noted that the colors of the yarns were often likely affected by the passage of time, inside the graves and in the different locations where they were subsequently stored, being exposed to light, and chemicals.

Tables 5 and 6 provide information on all hues (shades of color), identified by the investigator in the museum. For the sake of analyses, these different hues were lumped into broader color categories in Tables 7 and 8.

Table 5: Color Information for Warp Yarns

Color	Frequency	Percent
Black	13	3.0
Blue	16	3.7
Brick Red	2	.5
Brown	51	11.5
Chocolate	2	.5
Cream	56	13.0
Cream+White	4	.9
D.blue	19	4.4
D.brown	31	7.2
D.gold	4	.9
D.green	2	.5
D.grey	4	.9
D.pink	5	1.2
Gold	29	6.7
Green	3	.7
Grey	6	1.4

[3] Here and in other tables recording the color of yarns, (L.) stands for light and (D.) for dark.

L.blue	18	4.2
L.brown	30	7.0
L.green	3	.7
L.pink	5	1.2
Pink	6	1.4
Purple	1	02
Red	25	5.8
White	85	19.7
Yellow	11	2.6
Total	431	100.0

Table 6: Color Information for Weft Yarns

Color	Frequency	Percent
Black	33	7.3
Blue	8	1.8
Brick red	2	.4
Brown	34	7.6
Brown + Cream	2	.4
Cream	40	8.9
D. blue	9	2.0
D. brown	38	8.4
D. gold	14	3.1
D. green	1	.2
D. grey	2	.4
D. pink	14	3.1
D. yellow	3	.7
Gold	22	4.9
Green	33	7.3
Grey	2	.4
L. blue	4	.9
L. brown	26	5.8
L. brown + D. brown	1	.2
L. gold	11	2.4
L. green	4	0.9
L. grey	2	.4
L. pink	14	3.1
L. purple	2	.4
L. yellow	3	.7
Orange	1	.2
Pink	2	.4
Purple	9	2.0

Red	29	6.4
Tan + Cream	1	.2
White	67	14.9
Yellow	23	5.1
Total	450	100.0

Table 7: Color Categories for Warp Yarns

Color	Frequency	Percentage
Black	13	3
Blue	53	12.3
Brown	112	26
Chocolate	2	0.5
Cream	56	13
Cream and white	4	0.9
Gold	33	7.6
Green	8	1.9
Grey	10	2.3
Pink	16	3.8
Purple	1	0.2
Red	27	6.3
Yellow	11	2.6
White	85	19.7
Total	431	100%

Table 8: Color Categories for Weft Yarns

Color	Frequency	Percentage
Black	33	7.3
Blue	21	4.7
Brown	99	22
Brown and Cream	2	0.4
Cream	40	8.9
Gold	47	10.4
Green	12	2.7
Grey	6	1.2
Orange	1	0.2
Pink	50	11.1
Purple	11	2.4
Red	31	6.8

Tan and Cream	1	0.2
Yellow	29	6.5
White	67	14.9
Total	450	100%

Based on these tables, brown (26%), white (19.7%), cream (13.0%), and blue (12.3%) are the most frequent colors used for the warps. For the wefts, brown (22.0%), white (14.9%), pink (11.1%), and gold (10.4%) are the most popular colors. Tables 9 and 10 are cross tabulations of the same data to explore weavers' choices: if weavers chose specific colors for specific elements (warp, weft) or fibers.

Table 9: Cross Tabulation of Warp Fibers and Warp Colors

Color		Warp Fiber	
		Cotton	Wool
Black	Count	0	13
	% Within Warp color	0	100
	% Within Warp Fiber	0	4.92
Blue	Count	19	34
	% Within Warp color	35.8	64.1
	% Within Warp Fiber	11.3	12.9
Brown	Count	50	62
	% Within Warp color	44.6	55.3
	% Within Warp Fiber	29.9	23.5
Chocolate	Count	0	2
	% Within Warp color	0	100
	% Within Warp Fiber	0	0.8
Cream	Count	30	26
	% Within Warp color	53.5	46.4
	% Within Warp Fiber	17.9	9.8

Cream and white	Count	14	0
	% Within Warp color	100	0
	% Within Warp Fiber	2.3	0
Gold	Count	0	33
	% Within Warp color	0	100
	% Within Warp Fiber	0	12.5
Green	Count	1	6
	% Within Warp color	25	75
	% Within Warp Fiber	1.2	2.3
Grey	Count	3	7
	% Within Warp color	30	70
	% Within Warp Fiber	1.8	2.6
Pink	Count	2	14
	% Within Warp color	0.5	87.5
	% Within Warp Fiber	1.2	5.3
Purple	Count	0	1
	% Within Warp color	0	100
	% Within Warp Fiber	0	0.4
Red	Count	1	26
	% Within Warp color	3.7	96.3
	% Within Warp Fiber	0.6	9.8
Yellow	Count	0	11
	% Within Warp color	0	100
	% Within Warp Fiber	0	4.2
White	Count	56	29
	% Within Warp color	65.9	34.1
	% Within Warp Fiber	33.5	11

From Table 9, we learn that when weavers undertook to warp their backstrap loom, most cotton yarns were of different shades of brown, white and cream, and blue. When weavers warped their loom with woolen yarns, besides using the natural colors of wool such as brown, black, blue, grey and white/cream, they also used different shades of gold,

green, pink, red, and yellow. From this table it appears that weavers chose woolen yarns for colors such as black, blue, gold, green, pink, red, and yellow, but selected cotton yarns for warps are the shades of white and cream.

Table 10: Cross Tabulation of Weft Fiber and Weft Colors

Color		Weft Fiber	
		Cotton	Wool
Black	Count	0	33
	% Within Warp color	0	100
	% Within Warp Fiber	0	10.5
Blue	Count	5	16
	% Within Warp color	23.8	76.2
	% Within Warp Fiber	3.7	5.1
Brown	Count	44	54
	% Within Warp color	44.4	54.5
	% Within Warp Fiber	32.6	17.1
Brown and Cream	Count	0	2
	% Within Warp color	0	100
	% Within Warp Fiber	0	0.6
Cream	Count	18	22
	% Within Warp color	45	55
	% Within Warp Fiber	13.3	6.7
Gold	Count	0	47
	% Within Warp color	0	100
	% Within Warp Fiber	0	14.9
Green	Count	6	6
	% Within Warp color	50	50
	% Within Warp Fiber	4.4	1.90
Grey	Count	4	2

	% Within Warp color	66.6	33.3
	% Within Warp Fiber	2.9	0.6
Orange	Count	0	1
	% Within Warp color	0	100
	% Within Warp Fiber	0	0.3
Pink	Count	2	48
	% Within Warp color	4	96
	% Within Warp Fiber	1.5	15.2
Purple	Count	0	11
	% Within Warp color	0	100
	% Within Warp Fiber	0	3.5
Red	Count	1	30
	% Within Warp color	3.2	96.7
	% Within Warp Fiber	0.7	9.5
Tan and Cream	Count	1	0
	% Within Warp color	100	0
	% Within Warp Fiber	0.7	0
Yellow	Count	0	29
	% Within Warp color	0	100
	% Within Warp Fiber	0	9.2
White	Count	54	13
	% Within Warp color	80.6	19.4
	% Within Warp Fiber	40	4.12

Table 10 provides a cross tabulation of the same information for weft yarns. We learn that cotton wefts were left undyed and featured different natural shades of cotton. With regard to the woolen yarns used as wefts, besides undyed yarns, different shades of gold, pink, purple, red, yellow, and green were identified. As was the case for warps (Table 9), it appears that cotton was selected whenever there was a need for white and cream wefts, but wool was the fiber of choice when the wefts needed to be of any other color.

Yarn spinning and plying

Yarns can be spun in one of the two directions: in S or counterclockwise or in Z or clockwise (Figure 2). To strengthen the yarn, spinners often ply two or more threads together. Yarns are typically plied in the opposite direction from the single twist. On the Central Coast, the emphasis was on producing final S-twisted yarns, including singles S or Z-2S plied yarns (Kula 1988; Lehman 2005; Senders 1982; Young 1985). Table 11 and 12 provide information on spinning and plying directions for warp and weft yarns.

Table 11: Spinning/Plying Information for Warp Yarns

Fiber Spinning/Plying	Frequency	Percent
S	44	10.2
Z	2	.5
Z-2S	373	86.5
S-2Z	12	2.8
Total	431	100.0

Table 12: Spinning/Plying Information for Weft Yarns

Fiber Spinning/Plying	Frequency	Percent
S	33	7.3
Z	37	8.2
Z-2S	374	83.1
S-2Z	6	1.3
Total	450	100.0

From Tables 11 and 12 we learn that Z-2S was by far the most common choice for weavers for both warp and weft yarns. Around 10% of all warps and weft yarns were S-spun, but while 8.2% of all wefts were Z-spun, less than one percent of all warps were spun in this way. Few warps and wefts featured an S-2Z structure.

Tables 13 and 14 are cross tabulations of the same data to explore the relation between fiber material and spinning and plying direction.

Table 13: Cross Tabulation of Warp Fiber and Warp Spinning/Plying

			Warp S/P				
			S	Z	Z-2S	S-2Z	Total
Warp fiber	Cotton	Count	28	1	133	5	167
		% within Warp fiber	16.8%	0.6%	79.6%	3.0%	100.0%
		% within Warp S/P	63.6%	50.0%	35.7%	41.7%	38.7%
	Wool	Count	16	1	240	7	264
		% within Warp fiber	6.1%	0.4%	90.9%	2.7%	100.0%
		% within Warp S/P	36.4%	50.0%	64.3%	58.3%	61.3%
Total		Count	44	2	373	12	431
		% within Warp fiber	10.2%	0.5%	86.5%	2.8%	100.0%
		% within Warp S/P	100.0%	100.0%	100.0%	100.0%	100.0%

Table 14: Cross Tabulation of Weft Fiber and Weft Spinning/Plying

			Weft S/P				
			S	Z	Z-2S	S-2Z	Total
Weft fiber	Cotton	Count	26	23	86	0	135
		% within Weft fiber	19.3%	17.0%	63.7%	0.0%	100.0%
		% within Weft S/P	78.8%	62.2%	23.0%	0.0%	30.0%
	Wool	Count	7	14	288	6	315
		% within Weft fiber	2.2%	4.4%	91.4%	1.9%	100.0%
		% within Weft S/P	21.2%	37.8%	77.0%	100.0%	70.0%
Total		Count	33	37	374	6	450
		% within Weft fiber	7.3%	8.2%	83.1%	1.3%	100.0%
		% within Weft S/P	100.0%	100.0%	100.0%	100.0%	100.0%

From Table 13 we learn that Z-2S was the most common spinning structure for both cotton and wool warps. A similar pattern is evident from Table 14 where Z-2S represents the most common spinning structure for both cotton and wool wefts.

4.2 Weaving Techniques

Of the 202 objects under study (Table 15), 17 were excluded from the analysis of weaving structure because they do not fall into common categories of fabric. These include ropes, nets, spindles, beaters, one necklace, and a false head (see section 4.3 below).

Table 15: Objects from the CMH Collection

Function	Frequency	Percent
Bag	10	5.0
Beater	3	1.5
Belt	5	2.5
Bundle of Yarns	3	1.5
Decorative Fabric	3	1.5
Doll	9	4.5
False Head	1	.5
Fragment	88	43.6
Miscellaneous	3	1.5
Necklace	1	.5
Net	5	2.5
Poncho	2	1.0
Rectangular Fabric	39	19.3
Rope	4	2.0
Sling	7	3.5
Spindle	3	1.5
Tapestry Border	4	2.0
Textile on the Loom	2	1.0
Tunic	7	3.5
Unspun Wool	1	.5
Weaving Basket	1	1.0
Total	202	100.0

Among the remaining 185 objects, 122 feature only one panel while 63 are made up of more than one panel: two or more pieces of fabric sewn to another (including tassels and straps). Individual panels of fabric often featured more than one technique: sections of the same fabric woven using different techniques were considered to represent individual

panels for the sake of analysis. This prompted me to consider *panels* as units of analysis in this part of the study. The total number of panels considered for analysis comes to 369. However, only 280 of these panels were woven with two elements (warp and weft); the others only feature a single element.

In cases where individual fabrics featured more than one technique, it seemed interesting to know which technique was prominent on the fabric and which ones represented secondary, tertiary, etc. structures. Table 16 shows the primary technique of all fabrics and Tables 17 and 18 present the frequency of secondary and tertiary on those same fabrics.

Table 16: Frequency of Primary Weaving Techniques

Weaving Technique	Frequency	Percent
Braiding	19	6.8
Double-cloth	3	1.1
Embroidery	5	1.8
Gauze	16	5.8
Pebble-weave	3	1.1
Plain-weave	197	70.4
Tapestry	36	12.9
Wrapping	1	.4
Total	280	100.0

Table 17: Frequency of Secondary Weaving Techniques

Weaving Technique	Frequency	Percent
Braiding	2	1.6
Complementary Warp	50	39.7
Complementary Weft	12	9.5
Eccentric Tapestry	1	.8
Embroidery	9	7.1
Gauze	4	3.2
Interlocked Tapestry	1	.8
Painting	4	3.2
Plain-weave	4	3.2
Slit-Tapestry	6	4.8

Supplementary Warp	7	5.6
Supplementary Weft	16	12.7
Tie-dye	2	1.6
Wrapping	8	6.3
Total	126	100.0

Table 18: Frequency of Tertiary Weaving Techniques

Weaving Technique	Frequency	Percent
Braiding	2	16.7
Complementary Weft	3	25.0
Embroidery	2	16.7
Supplementary Weft	5	41.7
Total	12	100.0

Only one fabric featured four weaving techniques and in this case the quaternary technique was tapestry weave. Individual weaving techniques represented in the CMH collection are discussed below.

Plain-weaves

The most basic form of weaving is known as “plain weave”. This technique involves stretching parallel warp yarns between two poles and subsequently introducing perpendicular weft yarns between them. The weft threads will cross over the first warp thread, and under the next, until the piece is completed. Based on Table 16, 70.4% of all panels in the collection are plain-weaves.

The spacing of the warps and wefts, as well as the thickness of the thread allows a weaver to alter the appearance and texture of a plain-weave. Some examples include:

(1) Balanced plain weaves: Fabrics in which the warp and weft are both visible are named balanced. In these fabrics the number and size of the elements might/might not be equal.

(2) Paired/tripled/etc.: The number of one element is greater than the other, although both are still visible. The plain weave type is named after the number of warps/wefts (2/1, 1/2, 3/1, 1/3, etc.).

(3) Warp-faced or weft-faced: The count and/or size of one element is higher and hides the other element of the fabric. A textile on which only the warps are visible is called a warp-faced fabric, and the one on which weft yarns are visible is called weft-faced.

Table 19 shows the frequency of the different types of plain-weaves in the collection. If both elements are visible it is balanced (b) or if it features a warp face (wa) or weft face (we) structure.

Table 19: Types of Plain-Weaves

Plain-Weave Structure	Frequency	Percent
Plain-weave. b	90	41
Plain-weave. wa	85	38.6
Plain-weave. we	6	2.7
Plain-weave (2/1). b	7	3.2
Plain-weave (2/1). wa	2	.9
Plain-weave (2/1). we	4	1.8
Plain-weave (1/2). b	5	2.3
Plain-weave (1/2). wa	5	2.3
Plain-weave (1/3). b	1	.5
Plain-weave (1/3). wa	4	1.8
Plain-weave (3/1). b	1	.5
Plain-weave (3/1). wa	4	1.4
Plain-weave (3/1). we	3	2.7
Plain-weave (4/1). we	1	.5
Plain-weave (1/4). b	1	.5
Plain-weave (1/4). wa	1	.5
Total	220	100.0

Based on this table, balanced (41%) and warp-faced (38.6%) are by far the most frequent types of plain-weaves in this collection.

Tapestries

Tapestry is made of two sets of continuous warps and discontinuous wefts. Warp yarns are stretched on a loom and wefts are crossed forward and backward until all of the warp threads are completely hidden. As such, tapestry is considered a weft-faced structure. Based on Table 16, 12.9% of the 280 panels feature this technique.

Horizontal color alternations in tapestries require the change of weft color. This necessitates the use of discontinuous wefts. When the wefts do not interlock at the intersection of adjacent colored areas, vertical slit are produced and the technique is known as "slit tapestry" (or kilim). However weavers adopted a variety of techniques for joining adjacent colored areas. One is known as "interlocking tapestry", in which the weft from one area is looped with the weft from the adjacent area. Another way of creating transitions between areas of different colors is "dovetailing", in which the wefts from adjacent areas are looped around the same warp. A third technique is known as "outlined tapestry", in which the separation of colors is emphasized by using yarns to highlight the adjacent colored areas while also binding them together.

Another tapestry technique which produces an entirely distinct visual effect is a form of slit tapestry in which the design is cursive, and the discontinuous wefts are not in the right angle with the warp. Different color areas are separated by "eccentric weft outlining" (Conklin 1973:165). Table 20 shows the frequency of these various types of tapestries in the CMH collection. Based on this table, slit tapestry (85.7%) was by far the most frequent structure used on these Chancay-style textiles.

Table 20: Types of Tapestry

Tapestry Structure	Frequency	Percent
Eccentric Tapestry	1	2.0
Interlocked Tapestry	4	8.2
Outlined-Tapestry	2	4.1
Slit-Tapestry	42	85.7
Total	49	100.0

Open Work and Gauzes

Open work includes fabric consisting of woven squares with interceding spaces and is created by eliminating a constant number of yarns in the warp at regular intervals, and by omitting the use of the weft for the same number of internals. These intervening spaces can be manipulated by changing the ratio of the woven sections to the number of missing yarns in the warp and weft.

Gauze weaving is an open weave technique made by twisting adjacent warps together. The resulting fabric is a very light, sheer, fine woven fabric. Gauzes were ordinarily made with over-twisted cotton yarn, giving the fabric a crepe-like appearance. Gauzes are often mentioned as the hallmark of Chancay weavers (Lehman 2005; Senders 1982; Young 1985; Young-Sánchez 1992). There are 16 gauze pieces in the CMH collection, representing 5.8 % of all panels under study. These are no-doubt evidence of the great workmanship achieved by highly skilled Central Coast weavers.

Double Cloth

Double cloth is produced by "the expert manipulation of two sets of warps and wefts which (…) travel back and forth between the two surfaces of the cloth, creating a reversed colour pattern from the side facing the weaver as she worked" (Surette 2015: 229). A weaver may alter the position of these two layers (sets of warps and wefts) to form certain patterns, which appear as a mirror image on the opposite side of the fabric. Three double cloth panels were identified in the CMH collection.

Pebble-Weaves

This technique is partly loom controlled, which means that only every second row requires a manual manipulation of the warp threads. Pebble-weave is recognizable easily by its spotty "pebbled" background. Fabrics woven with this technique are double faced; both sides of the textile show the same motifs with their colors reversed. Three pebble-weave cloth panels were identified in the CMH collection.

Fabrics with Supplementary Warps or Wefts

Additional warps and wefts are sometimes added to the ground weave without altering the structure of the fabric. Designs are created by inserting these extra warps and wefts along the same path as the first warp and weft, and subsequently working them back and forth throughout the loom. These additional "decorative" warps and/or wefts are usually of a different color than the structural elements. Based on Table 17 and 18, supplementary warps and wefts represent 18.3% of all secondary technique and 41.7% of tertiary technique on the panels under study.

Fabrics with Complementary Warp or Weft

In this technique, different colors of warps and wefts are used to create a (for example tartan-like) pattern. The finished product features a design with the colors in reverse on the opposite face. Complementary warps or weft fabrics accounted for 49.2% of secondary techniques (Table 17) and 25% of tertiary techniques (Table 18).

Braiding or Plaiting

Two sections of warp, which possess the reciprocal functions of warp and weft in this context, are overlapped in a regular and deliberate plan. They are first pulled in opposite directions, and are then brought together to form an angle (usually 45 degrees from the perpendicular). Therefore, the warps are intertwined at approximately 90 degree angles. Nineteen of the 280 panels under study (6.8%) had braiding as a primary technique. Two panels featured braiding as a secondary technique (1.6%) and two others as a tertiary technique (16.7%).

Painting and Tie-dyeing

Painting is a technique mostly used for decorating cotton plain-weave fabrics. Young-Sánchez (1992:46) explains that in this technique "paint colors are usually limited to shades of brown and yellow, but bright orange and yellow mineral pigments are found". Another method for dyeing woven fabric is a resist technique known as tie-dye. Fabrics

are folded and tied, preventing certain areas from absorbing the dye, which results in positive and negative areas of color. Four panels were painted in the collection (3.6%), while two others were tie-dyed (1.6%).

4.3 Fabric Function

Only a limited number of textiles in the CMH collection could be categorized in terms of possible function. Nearly half of the objects (47.6%) are fragmentary. Others were likely part of a variety of pieces of clothing or other objects, including shirts, ponchos, belts, bags and dolls. Table 21 provides the information on the possible function of woven objects from the CMH collection. The following sections describe individual categories of objects in some detail.

Table 21: Possible Function of Woven Objects

Function	Frequency	Percent
Bag	10	5.0
Belt	5	2.5
Bundle of Yarns	3	1.5
Decorative Fabric	3	1.5
Doll	9	4.5
Fragment	88	43.6
Miscellaneous	3	1.5
Poncho	2	1.0
Rectangular Fabric	39	19.3
Sling	7	3.5
Tapestry Border	4	2.0
Textile on the Loom	2	1.0
Tunic	7	3.5
Unspun Wool	1	.5
Weaving Basket	1	1.0
Total	185	100.0

Tunics

Of the seven tunics (3.8%) identified in the CMH collection, two are miniatures (XIX-G-459, XIX-G-460), which were probably woven for dressing dolls, and one (XIX-G-465) was meant for a child. The largest tunic in the collection (XIX-G-231) is trapezoidal in shape and made of plain weave cotton. Table 22 lists the dimensions of each tunic and the number of panels used in their composition.

Table 22: Tunics

Catalogue No.	Dimensions (cm)	No of panels
XIX-G-231	61 X 120.5	1
XIX-G-459	9 X 15	1
XIX-G-460	9.5 X 12	1
XIX-G-465	22 X 36	2
XIX-G-469	28 X 61.5	2
XIX-G-470	48 X 65	2
XIX-G-476	39.5 X 41.5	1

Bags

There are ten bags (5.4%) in the collection. Eight are composed of one rectangular piece of fabric folded in half and stitched on the sides, and two are made up of four panels sewn together. Six bags have tassels and four have straps. Table 23 lists the dimensions of each bag, the number of panels, and the presence of tassels and straps.

Table 23: Bags

Catalogue No.	Dimensions (cm)	No. of panels	Tassels	Strap
XIX-G-177	22 X 23	4	2	0
XIX-G-180	14.5 X 17	1	0	0
XIX-G-452	17 X 17.5	4	4	0
XIX-G-454	23.5 X 47	1	2	0
XIX-G-455	27.5 X 29	1	2	0

XIX-G-456	14.5 X 19.5	1	0	0
XIX-G-458	16 X 20	1	0	1
XIX-G-461	9 X 9.6	1	6	1
XIX-G-462	18 X 32.5	1	3	1
XIX-G-531	18 X 32.8	1	0	1

Rectangular Fabrics

The collection contains 39 (21.1%) complete pieces of rectangular fabrics with four selvedges. These fabrics likely served a variety of purposes. While the square pieces could have been used as carrying cloths (see Allen 2002: 133), pieces that are longer than wide could have been used as shawls, head-cloths, or stripes of fabric to be sewn as decorative elements.

Slings

There are seven (3.8%) slings in the CMH collection. The techniques used to weave these slings are braiding and wrapping. Tables 24, 25, and 26 provide information on the fiber, color, and spinning/plying structure of the yarns used in making the CMH slings.

Table 24: Fiber Information for Slings

Slings-Fiber	Frequency	Percent
Cotton	2	6.7
Wool	23	76.7
Plant	5	16.7
Total	30	100.0

Table 25: Yarn Color Information for Slings

Slings-Yarn Color	Frequency	Percent
Black	1	3.3
Blue	1	3.3
Brown	4	13.3
Cream	5	16.7
Gold	4	13.3

Green	1	3.3
Grey	2	6.7
Pink	2	6.7
Purple	1	3.3
Red	6	20
Yellow	2	6.7
White	1	3.3
Total	30	100.0

Table 26: Spinning/Plying Information for Slings

Slings-Spinning/Plying	Frequency	Percent
S	7	23.3
Z	7	23.3
Z-2S	13	43.3
S-2Z	2	6.7
Unspun	1	3.3
Total	30	100.0

Based on these tables, most yarns used in making slings from the collection are made of wool, spun Z-2S, although a number of pieces were made with either S or Z singles. The color of the yarns varied greatly, with red, cream, gold, and different shades of brown.

Belts

There are five (2.7%) belts in this collection. Table 27 lists the dimensions and techniques for each belt.

Table 27: Belts

Catalogue No.	Dimensions (cm)	Technique
XIX-G-178	7 X 282	Tapestry
XIX-G-179	3.2 X 151	Tapestry
XIX-G-433	3.5 X 171	Plain-weave
XIX-G-447	4.5 X 144	Tapestry
XIX-G-506	7 X 180	Plain-weave

Textiles on the Loom

Two pieces of fabric from this collection are still on the loom: XIX-G-228 and XIX-G-464. In the former we see the upper warp bar, suggesting that this fabric is finished on one end. This piece is executed with multiple techniques and represents geometric and striped patterns. The latter contains the upper warp bar and features an unfinished tapestry section, suggesting that it was abandoned during the weaving process.

Tapestry Borders

There are four decorative tapestry borders in the CMH. These are mostly composed of multiple panels sewn together. Although warps usually form the fringes in textiles, the fringes of the boarders of XIX-G-435 and XIX-G-442 are made with wefts. This is due to the fact that these panels are long and the size of the back-strap looms is limited. In another group of tapestry borders (XIX-G-18 and XIX-G-482), which features a different type of structure, the fringes are woven on the warps of the ground cloth and are thus "integral rather that applied" (Young 1985:62). Table 28 lists the dimensions and number of panels for each tapestry border.

Table 28: Tapestry Borders

Catalogue No.	Dimension (cm)	No. of panels
XIX-G-18	14 X 45.5	1
XIX-G-435	22.5 X 66	3
XIX-G-442	34 X 61.5	2
XIX-G-482	20.5 X 65.5	3

Ponchos

There are two ponchos of medium size in the collection. Ponchos are rectangular pieces of fabric with an opening in the center for the head, designed to be used as an outer

garment to keep the body warm. The dimension and number of panels for each poncho is listed in Table 29.

Table 29: Ponchos

Catalogue No.	Dimension (cm)	No. of Panels
XIX-G-466	23.5 X 38	2
XIX-G-467	44.5 X 57	1

Dolls

The CMH collection includes nine (4.9%) dolls. As I discussed, the term "doll" is not intended to imply that these were toys, for there is little information on the original function of these figurines. The Central Coast dolls are dressed in miniature items of clothing. In most cases, the cloths are made of complete webs woven specifically for this purpose and are not cut from worn out cloths (Hoddnet 1999). However, this is not the case for the CMH pieces; here they are made with fragments of textiles that were cut from larger pieces and wrapped around bodies made of reed.

Table 30 lists the primary weaving techniques employed in the various panels used in making the dolls' clothes. As this table shows, plain-weave (77.8%) is the most frequent primary technique used in the fabrics selected for making the doll clothes. That being said, when more than one technique was used (Table 31) in the same panels, complimentary warps (47.8%) and embroidery (34.8%) were the most common secondary techniques used.

Table 30: Primary Weaving Techniques for Dolls

Dolls-Weaving Techniques	Frequency	Percent

Plain-weave	49	77.8
Tapestry	5	7.9
Gauze	1	1.6
Embroidery	5	7.9
Braiding	3	4.8
Total	30	100.0

Table 31: Secondary Weaving Techniques for Dolls

Dolls-Weaving Techniques	Frequency	Percent
Complementary Warp	11	47.8
Supplementary Warp	2	8.7
Embroidery	8	34.8
Gauze	1	4.3
Tie-dye	1	4.3
Total	23	100.0

Weaving baskets

The CMH collection includes two weaving baskets full of spindles of various sizes, unspun or spun yarn, spindle whorls, and needles. These provide valuable information on the tools used by weavers of the Central Coast of Peru who made the fabrics discussed in this chapter. The smallest spindles would probably have been used for the finer yarns, while the longer and heavier spindles were most likely used for thicker yarns. Many spindles are either engraved or painted with geometric decorations in black, red, or white. The dimensions of these baskets are recorded in Table 32.

Table 32: Weaving Baskets

Catalogue No.	Dimension (cm)
XIX-G-532	14 X 19 X 38
XIX-G-722	5 X 15.5 X 37.5

4.4 Decoration

Chancay-style textiles are well known among Andeanists for featuring characteristic decorative elements, including repetition of small-scale motifs (Kula 1988; Lehman 2005; Stone-Miller1995; Tsunoyama 1979; Young 1985; Young-Sánchez 1992). Decorative elements adorning the textiles under study fall into four groups: (1) geometric designs, (2) striped patterns, (3) zoomorphic figures, and (4) anthropomorphic figures. Table 33 provides information on the frequency of these decorative themes.

Table 33: Frequency of Decorative Themes

Decorative Elements	Frequency	Percent
Geometric	103	34.1
Zoomorphic	88	29.1
Striped Pattern	75	24.8
Plain	29	9.6
Anthropomorphic	7	2.3
Total	302	100.0

Based on this table, geometric designs (34.1%) are the most frequent decorative element and anthropomorphic designs (2.3%) are least common. The following sections describe individual categories of decorative elements in more detail.

Geometric Designs

The first group of designs displays very simple geometric designs (for example see XIX-G-18 and XIX-G-510): irregular patterns of triangles and rectangles, seemingly either floating over the textiles or encompassing other motifs. More complex patterns such as steps, hooks and waves are created in many techniques and their forms vary from piece to piece.

Zoomorphic Figures

Similar to other Chancay textile collections, birds are the most common design among the fabrics adorned with zoomorphic figures at CMH (for example see XIX-G-438 and XIX-G-442). They are often represented on textiles of various sizes, materials and techniques, in varying degrees of naturalism or stylization. Some of them are reduced to a stylized form depicting only the most essential bird-features, such as beak, head, flaring wing, and tail. These popular motifs are displayed in diamonds, rectangles, sometimes alternating light and dark, and in diagonal bands. They either face in the same direction or alternating directions. They also appear interlocked in opposite directions. This popular motif is seen on 53 pieces of fabrics from the collection.

Cats generally occur as primary motifs in the textile designs (for example see XIX-G-405 and XIX-G-465), surrounded by geometric motifs. Like birds, they are also depicted on textiles of various sizes, materials and techniques. The bodies of cats are shown in profile, while their heads are viewed frontally. Cats are represented on 16 textiles of the collection.

Other animals include frogs, monkeys, fish, snakes, jaguar, reptiles, llamas, etc. Since some of these designs are hard to define due to their abstract characteristic, they are simply described as zoomorphic figures (see XIX-G-179, XIX-G-504, and XIX-G-512a, b).

Striped Patterns

Striped patterns are very frequent in the collection under study. They are mostly represented on warp-faced plain-weaves, but are also present on textiles with other techniques.

Anthropomorphic Figures

Anthropomorphic figures, either human faces or human characters, are represented seven times on CMH textiles. In four cases a human-like being is represented standing frontally, with raised, outreached arms and headdresses. Two (XIX-G-226, XIX-G-184) are depicted on plain-weave ground with painting. The third (XIX-G-510), also painted,

is represented on a tapestry. The fourth textile representing an anthropomorphic figure (XIX-G-178), probably a belt, displays two human characters, one in black, the other in white, separated with horizontal stripes and birds. The three other textiles are decorated with figures that seem to be human faces (XIX-G-438, XIX-G-450i, and XIX-G 517).

4.5 Summary

In this chapter the technical and decorative features of the CMH textiles were analyzed. We learned that woolen yarns were the primary choice of weavers of these fabrics. Regarding the color, natural shades of cotton were most often used. However, when the weavers used woolen yarns, besides natural colors, they also used different shades of gold, blue, green, pink, red and yellow. In terms of spinning techniques, this study reveals that in both warp and weft yarns, either cotton and wool, Z-2S was the primary choice of the weavers. Analysis of the weaving techniques shows that while plain-weave, tapestry and gauze are the most frequent primary structures, complementary warp/weft and supplementary weft are the most common secondary and tertiary structures used. With regard to the functions of the fabrics under study, nearly half (47.6%) are fragmentary pieces and 19.3% are rectangular fabrics that come in a great variety of dimensions and that were likely used in different ways. Other groups of woven objects include bags, dolls, tunics, slings, and belts. In terms of iconography, decorative elements adorning the CMH textiles are divided into four categories: (1) geometric designs, (2) striped patterns, (3) zoomorphic figures, and (4) anthropomorphic figures. Among these, geometric designs are the most frequent and anthropomorphic designs are the least common. Birds and then cats are the most common zoomorphic design, often represented on textiles of various sizes, materials and techniques, and in varying degrees of naturalism and stylization. In the next chapter the results obtained from this study are compared with other published Central Coast textile collections.

5 Discussion

The Chancay art style is well-known to all Andeanists, not because of the importance of this archaeological culture as an object of academic research but because Chancay-style artifacts are often prominently represented in museum collections, including ceramic jars, figurines, and textiles, decorated with a range of designs that historians and archaeologists associate with this archaeological culture from the Central Coast of Peru. In some cases these objects came from scientifically-excavated contexts but in other cases they came from unscientific excavation campaigns or were purchased from dealers, prior to the implementation of the UNESCO's *Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property* (1970).

What we know about this culture comes from field research carried out in the greater Lima region, between the valleys of Huaura to the north and Lurín to the south. The "Chancay culture" is thought to have represented a constellation of societies that exploited the coastal environment during the Late Intermediate Period (1000-1476 A.D.), whose leaders were in contact with distant lands, including polities from the upper valleys and highlands. The lack of solid contextual information has had profound detrimental effects on the study of Chancay material culture in general and on the study of the outstanding textiles produced by Central Coast weavers.

In this context, it is therefore essential that more field research be carried out on Chancay sites, focusing not only on cemeteries and burials but also on residential settlements. Parallel to that, is also essential that art historians and archaeologists document Chancay material culture housed in museum collection around the world, an undertaking that will require the dedication and patience of generations of scholars.

This chapter aims to put the Chancay textiles from the CMH collection in their broader context by comparing them to the few other collections that have been analyzed by specialists over the past century. This chapter follows the normal *chaîne opératoire* of traditional weaving, which starts with raw fibers and ends with the finished clothes.

5.1 Fibers

From the analysis presented in the previous chapter, we learned that 61.3% of all yarns used as warps in the CMH Chancay-style textiles were made of camelid wool, while only 38.7% were made of cotton. With regard to the wefts, 70.0% were made of wool, while 30.0% were made of cotton. This shows that the weavers who made the fabrics under study generally preferred to work with camelid wool, despite the fact that the native coastal fiber had been cotton for millennia. This suggests that the local Chancay communities either herded flocks of camelids on the coast or, more likely, that they imported some of the fibers from the upper valleys or highlands. This scenario would be in line with a recent isotopic analysis of woolen yarns from the CMH Chancay textiles in which it was found that all textiles sampled "were derived from camelids primarily raised on high altitude C3 grasslands" (Szpak et al 2015:449).

However, the predominance of wool in the CMH collection seems to contrast with Young-Sánchez's claim that Chancay-style textiles were mostly woven with cotton yarns, while camelid fibers were restricted to decorative function and were essentially limited to colorful ornamentations of fabrics (1992:46). A similar argument was put forward by Lehman (2005) in her comparative study of Chimú and Chancay textiles. In another study, Fung Pineda (cited in Young 1985:77, 245) reports that the fabrics left behind by looters were mainly plain and made of cotton. A similar case is reported by Lothrop and Mahler in a contextually-excavated grave at Zapallan (1957:12). They state that the majority of the textiles from Grave Y were made of cotton. Studying Chancay textiles in the Young Peruvian collection, Kula also found that cotton was the preferred fiber, noting that when camelid fibers were used, it was mainly for ornamentation (1988:134)[4].

While studying textiles from Ancón, Young-Sánchez (2000) divides the fabrics into two chronologically-distinct groups: the Middle Horizon Epochs 2B-3 and the Middle Horizon 4-Late Intermediate period Epoch 3. Results from her analyses showed that camelid wool was common in fine fabrics during the early period but became scarcer in

4 A study of Central Coast textiles carried out by O'Neale and Kroeber (1930: table 4) found that 44% of all yarns were made of cotton, 11% were made of wool, but 44% were made of a mix of cotton and wool.

the late period. Could it be that the CMH collection is composed of early Chancay textiles, predominately made of wool?

Alternatively, the discrepancy between the CMH collection and other published studies could be due to a sampling error. Indeed the CHM collection includes few undecorated plain weave fabrics that generally predominate in contextually-excavated collections, and these simple fabrics are usually made of cotton. It therefore seems likely that the CHM collection is to a highly select group of fabrics that is not representative of the entire corpus of textiles produced by Central Coast weavers.

5.2 Yarn Colors

With regard to yarn colors in the CMH collection, brown, white, cream, and blue are the most frequent colors used for the warps. For the wefts, brown, white, pink, and gold predominate. When warping their looms with cotton yarns, weavers used different shades of brown, white and cream, and blue. When using woolen yarns as warp, besides using yarns of natural colors (brown, black, grey, and white/cream), they also used dyed fibers in the shades of gold, blue, green, pink, red, and yellow. Cotton was selected when there was a need for white and cream wefts but wool was usually selected when the wefts needed to be of any other colors. Cotton wefts were also usually left undyed, featuring different natural shades of cotton. With regard to the woolen yarns used as wefts, besides natural colors, yarns dyed in different shades of gold, pink, purple, red, yellow, and green were used. As was the case for warp, it appears that cotton was selected when there was a need for white and cream wefts but wool was the fiber of choice when the wefts needed to be of any other colors.

These results are remarkably similar to what other scholars have reported in the literature. For example, Young-Sánchez (1992:46) noted that Chancay weavers mostly used the natural colors of cotton (brown, white, cream, and grey) and Stone-Miller refers to dyed woolen yarns in the shades of golds, browns, scarlet, white, and even lavender and olive green (1995:177). Young (1985) reported that cotton fibers used in the Lauri textiles

occur only in blue, white and different shades of brown. The natural colors of cotton represented in the collection studied by Fung Pineda (cited in Young 1985:245) include white, brown, blue and dark green. According to Kula (1991:270), the natural colors of cotton represented in the Young Collection include a "range from pure white to plight and dark tan, as well as light and dark brown." She also mentions that cotton was often dyed in the shades of blue, green, yellow, pink, red, brown and black (Kula 1991:270). Besides natural colors (brown, grey, white and black), camelid yarns from the Young collection displayed a wider range of colors. Most textiles excavated by Lathrop and Mahler (1957) were also woven using natural shades of cotton, from white to tan.

Regarding the Ancón textiles mentioned earlier, Young-Sánchez notes that in the early period cotton and woolen yarns come in a wide range of colors, with cotton yarns predominantly in the shades of white, tan, blue, browns, and salmon (2000:193). In textiles from the late period, however, the color range of cotton yarns was extended to shades of pink, orange, purple and green.

5.3 Yarn Spinning and Plying

With regard to spinning and plying, this study revealed that in both warp and weft yarns, either cotton and wool, Z-2S was the primary choice of the weavers. Around 10% of all warps and weft yarns were S-spun, but while 8.2% of all wefts were Z-spun, less than one percent of all warps were spun in this way. Few warps and wefts featured an S-2Z structure.

When compared to other studies of Chancay textiles, interesting patterns emerge. In the Lauri (Young 1985:77) and Ancón (Young-Sánchez 2000:194) collections Young-Sánchez found Z-2S to be the predominant spinning technique. She also found that cotton yarns used as warp in medium and heavy weight cloths were usually Z-2S spun; however, wefts were sometimes 2Z. Single or paired S spun cotton yarns, were used as warps and wefts in gauzy, lightweight cloths. Some warps and wefts were also made of S-2Z cotton yarns.

However, according to Lehman (2005:21) Chancay textiles were made with yarns that were usually single S spun or Z-2S spun. Similarly, Kula (1988) notes that the Chancay-style fabrics she examined were mostly made with warp and weft that were S spun (but could also be constructed from Z-2S cotton warp and weft)[5]. But she argues that tapestries typically featured Z-2S cotton warps. This is similar to what Lothrop and Mahler found on textiles from Zapallan. S spun single ply yarns were the most common type, but Z spun single ply, Z-2S, and S-2Z were also represented. Studying the limited number of textiles spared by looters, Fung Pinedas (cited in Young 1985:245) also found that single S spun yarns predominated, while single Z and Z-2S spun threads were also employed. Conversely, in the collection studied by Jiménez Díaz (2004), cotton fibers used as warp were mostly spun in single Z, Z-2S, and Z-3S. With regard to the wefts, either cotton or wool, yarns were often spun in single Z or Z-2S.

From the above, all other Chancay collections featured mostly S and Z-2S yarns. That being said, S singles featured prominently in all other Chancay museum collections but was very rare in the CHM textiles and in those studied by Young-Sánchez. Could it be that this discrepancy is actually due, again, to a sampling error related to the generally high quality of the CMH collection pieces? Or could it be that the variation in spinning and plying is actually due to the coexistence of various spinning traditions in the region? More research is needed to address this question.

5.4 Weaving Techniques

With regard to weaving techniques, plain-weave, tapestry, and gauze are the most frequent primary structures. Complementary warp/weft and supplementary weft are the most common secondary and tertiary structures. This compares well to the Lauri textile

[5] Kula reports that of the "16 tapestries in the collection, two were made with the typical Chimú warp of S-2Z cotton in combination with camelid and some cotton weft" (Kula 1991:269).

collection in which Young (1985) found that plain weave was the most common technique, followed by tapestry, supplementary and complementary warp/weft weave, double weave, and embroidery. Similar results were obtained by Jiménez Díaz on the Museo de América collection (2004), where plain weaves, tapestry, complementary elements, and open structures were the most common structures. Lathrop and Mahler also reported that the majority of the textiles they excavated at Zapallan were plain-weave fabrics (1957).

Describing the Young collection, Kula reports that plain-weave is the most frequent structure (50.2%), followed by gauzes (18.6 %). Interestingly, tapestries represent a mere 2.9% of that collection, something which Kula argues could be due to earlier looting activity. Alternatively, these fabrics could have come from ordinary graves that contained few luxury goods. With regard to the structural ornamentation on plain-weaves, Kula reports that supplementary warp pattern (7.8%) and complementary weft pattern (3.8%) are the most frequent.

One study offers results that are at odds with the general patterns reported above. In their analysis of Central Coast textiles, O'Neale and Kroeber (1930: table 4) report that 64% of all the fabrics examined were tapestries, while gauzes accounted for 15% of the collection and double cloth for 13%. Plain weaves were therefore very rare in this collection. Could it be that the textiles O'Neale and Kroeber examined consisted mainly of fancy fabrics? More research on the collections they examined would obviously be needed.

Interestingly, with regard to the Ancón textiles, Young-Sánchez (2000) found that the textiles from the early period featured a wide variety of techniques (warp-faced plain weave, plain weave with supplementary weft patterning, plain weave with inlaid supplementary warps, plain weave with discontinuous warps and wefts, double-cloth, several varieties of complementary warp weave, float-weave, complementary weft weaves, complementary weft double-cloth, and complementary warp double-cloth). The textiles from the late period were simpler, and featured only a limited number of weaving techniques (double-cloth, float-weave, and plain weave with supplementary wefts). As

was mentioned above, it could be argued that the range of techniques used and quality of fabrics produced on the Central Coast diminished in later times.

5.5 Fabric function

With regard to the function of fabrics, nearly half (47.6%) are fragmentary pieces. The second most frequent type is rectangular fabrics (19.3%) that come in a great variety of dimensions, likely used as part of different pieces of clothing. Other groups of woven objects include bags, dolls, tunics, slings, and belts.

In *Textiles of the Andes*, Tsunoyama (1977:4) mentions that the majority of textiles housed in Amano Collection were "articles of clothing, which can be divided into categories of practical use, ceremonial use, and burial use (…) those excavated range in size from tunics that reach to the knees to miniatures that appear to have been to dress burial dolls accompanying the mummies." The textiles Jiménez Díaz (2006) identified as Central Coast Late Intermediate textiles include both fragmentary and complete pieces, ranging from decorative pieces (which were probably sewn to other pieces of fabric), rectangular bags decorated with tassels, shirts, mantels, and samplers. Jiménez Díaz also reports the presence of dolls, which she believes were made in modern times, possibly using archaeological fabric fragments (2006:183). Similarly, in the Lauri collection, Young reports the presence of dolls, shirts, shawls or carrying cloths, loincloths, head cloths, bags, tapestry borders, wrapping and winding cloths, and samplers (1985).

In her study of Ancón textiles Young-Sánchez (2000:241) notes the presence of shirts, four-part head cloths, two- or three-part head cloths, scarf-like cloths, bags, rectangular pouches with tubular openings, grave tablets, and women's tunics, as the common type of fabric forms of the earlier period. The objects from the late period are simpler in construction than earlier ones; she notes that "bags, for instance, are made from a simple rectangle of lightweight cloth, stitched up the sides. Pouches with tubular openings, constructed of two to three specially woven webs are absent, as are the heavyweight camelid-fiber bags with woven straps and decorative edge-bindings. Complicated

garments like three-part headcloths or shawls, four-part headcloths, and scarf-like cloths are all absent as well" (2000:242). Again, this seems to suggest that Chancay materials were more elaborate early in the sequence and that the quality may have diminished towards the end of the Late Intermediate period.

5.6 Decoration

As mentioned earlier, decorative elements adorning the CMH textiles fall into four categories: (1) geometric designs, (2) striped patterns, (3) zoomorphic figures, and (4) anthropomorphic figures. Among these, geometric designs (ranging from irregular patterns of triangles and rectangles, steps, hooks and waves) are the most frequent decorative themes, while anthropomorphic designs are the least common. Birds, followed by cats, are the most common zoomorphic designs, often represented on textiles of various sizes, materials and techniques, and in varying degrees of naturalism or stylization.

This is in accord with what Young (1985:40) describes as the typical Chancay decorative pattern, which features small-scale motifs repeated throughout the fabrics. As part of the Chancay artistic canon, she also points to (1) the importance of color alternation, (2) the value placed on contrasts, (3) the alternation of two motifs, and (4) the central role of diagonal patterns (1985:40). She further argues that birds were the primary motifs in the fabrics she analyzed and notes that cats, human beings, monkeys and snakes were also sometimes depicted. Other standardized elements of Chancay textiles include frontal depiction of human beings and profile representation of birds, often repeated in horizontal and vertical alignment on the decorative field (Young-Sánchez 1992:46).

According to Lehman, there is a clear relation between the environment in which the weavers lived and the designs they wove into the fabrics (2005:26). She categorizes these iconographic elements into various groups: (1) marine figures including sea-birds, fish and waves, (2) zoomorphic designs such as monkey-like creatures, fishes, snakes, felines and frogs, and (3) human figures with raised hands.

In the collection analyzed by Kula (1988:123), iconographic features are divided into different groups. The first group of motifs includes very simple geometric designs, such as triangles, rectangles, hooks and steps. The second group comprises zoomorphic figures, which include birds (the most common), serpent-like characters, monkeys, and felines. The third group corresponds to anthropomorphic motifs, present on two tapestries.

Jiménez Díaz (2006:183) reports that the textiles from the Museo de América were mostly adorned with sequences of small and medium size zoomorphic motifs, such as birds, felines, fish, monkeys, interlocking serpents, and frogs. These were usually arranged horizontally, vertically or diagonally. Other types of design Jiménez Díaz identified include waves and hooks that were used as secondary motifs; she also notes the presence of a single fabric adorned with anthropomorphic iconography.

On the fabrics from Zapallan, Lothrop and Mahler (1957) note that the decorative patterns were limited to warp stripes, although five specimens display changes in color of the warp that creates stripes and plaids. In one tapestry, they report the design is simply geometric, while in the other one the beginning of a conventionalized cat motif was recognized.

Commenting on the decoration of the textiles in the Ancón textiles, Young-Sánchez (2000:242) mentions that iconographic figures are displayed in great variety and complexity on earlier fabrics. Contrary to this, in textiles of the later period, patterns are limited to stripes, geometric elements, stylized birds, and abstracted rectangular motifs.

5.7 Unity and Variability

The analysis conducted at CMH showed that the majority of the fabrics incorporated colorful camelid-fiber yarns, elaborate patterns, and complex, labor-intensive weaving techniques. One key finding from this analysis is that these fabrics are clearly Central Coast textiles and that they were most likely produced during the Late Intermediate

Period. This is evidenced by the fact that they all combine a number of technical and aesthetic attributes, including fiber material used, spinning and plying, weaving technique, overall design and decoration. To the trained eye, most of these textiles are therefore markedly different from contemporary Chimú and Ica fabrics and from earlier and later artifacts. Comparison of these textiles to fabrics from other Central Coast sites reveals many commonalities, while also highlighting some differences. It is clear, for example, that there existed a shared tradition for the spinning and plying of yarns among artisans of the region during the Late Intermediate period. There was also considerable uniformity in the weaving techniques they used, the categories of objects they wove, and in the general aesthetic of the fabrics they produced, including general design, colors, and ornamentation.

However, the unusually large number of camelid wool yarns in the CHM collection compared to the other published datasets points to at least some variability in the Chancay textile tradition. Indeed, it appears that the production of Chancay-style textile in the region may have varied through time as well as in space. Investigators studying unprovenanced collections housed in museums face yet other issue, related to sampling errors that need to be taken into account when drawing conclusions on this ancient technology.

As discussed by Young-Sánchez, Ancón textiles of the early period were more elaborate than those of later times; incorporated more camelid yarns, displayed a wider range of colors, and were woven using more complex techniques. This variation in fabric quality through time could have been related to a decrease in access to highland camelid-fiber or woven products (Young-Sánchez 2000:134). In a context where Camelid yarns had become scarce or costly, cotton yarns would become the main weaving material, while camelid yarns would have been reserved for decorative elements. However more work on stratigraphically-excavated collections would be needed to test this hypothesis. Until then we should simply keep in mind that the Chancay textile tradition is probably not monolithic and that it certainly evolved throughout its five centuries of existence.

Evidence on spinning patterns also revealed a certain amount of variability in spinning and plying between collections. This could be the result of the coexistence of various spinning traditions in the different Central Coast valleys. Each community could have had its own preferred set of rules on what was an appropriate way to spin yarns. Jiménez Díaz (2006:183) also cautioned that we should be wary to use the term "Chancay" when describing artifacts from this region, and instead talk about "Central Coast textiles from the Late Intermediate period", until more research is carried out.

However, as mentioned earlier, some of the discrepancies noted between collections may in fact be related to sampling. While certain studies exclusively focus on textile collections from museum, some examine fabrics recovered from the surface of archaeological sites and others deal with objects from archaeological excavations that have good contextual information. Indeed it seems likely that the Chancay-style textiles from the CMH collection represent a highly select group of fabrics that were picked for their aesthetics qualities by the original dealer, collector, and museum curators involved in the acquisition process. Taking this information into account, it seems clear that the results obtained in Chapter 3 are not entirely representative of the original textile production of Central Coast weavers.

6 Conclusion

Over the past millennia, men and women from different regions of the world have each in their own way contributed to the art of weaving: one of the oldest crafts in the world, and a unique media for artistic expressions. People from different cultures have created textiles with locally available fibers to satisfy needs such as body protection, food gathering, shelter, resulting in the emergence of as many local textile traditions, each with its own *chaîne opératoire* and aesthetics. However, textiles represent more than protection from the physical world; they also greatly contribute to the personal, emotional, social, communicative, economic, aesthetic, and spiritual lives of the individuals involved.

In ancient Andean societies, textiles were among the most important things individuals could possess. These fragile artifacts were (and still are in some regions today) usually imbued with information about the weaver and the people for whom they were manufactured. Indeed, through the quality of the cloth as well as the motifs that adorns them, both social status and cultural identity were often signified.

Despite the great potentials of textiles as a means to study ancient societies, this field has somehow been neglected by anthropologists, archaeologists, and art historians alike. However, during the past decades researchers have recognized the great potential of clothing and textiles as sources of information about the societies that produced them. For example, textile specialists are now able to reconstruct the operational sequence associated with specific textiles, helping to identify their provenience and to document the conditions under which they were produced. That being said, researchers are also aware that technological choices are not simply determined by the materials available or the function of the objects, but are conscious choices made by the weavers on what raw material, spinning direction, colors, weaving techniques, or decoration to use, depending on the circumstances.

This study focused on a collection of elaborate and exceptionally well preserved fabrics housed in the Canadian Museum of History. Since the textiles were excavated unscientifically and lacked archaeological provenience and associations, the main

objectives were to document their technical and aesthetic characteristics and to assess the extent to which this collection was similar to other Chancay-style fabrics.

As mentioned earlier, most textiles had previously been straightened on cloth-covered boards and some were sewn to the boards so the back side of the fabrics could not be examined. This has made it difficult to identify the complex techniques used in some of the fabrics from the collection. In the future, this curatorial practice could be revisited by the museum staff. Back to Western, it also became clear that complete high-resolution photographic record of the collection would have greatly helped to answer follow-up questions that emerged through the analysis process. Providing that resources are available, this would be a great way to make this exceptional textile collection available to the public.

As outlined in the previous chapter, the data collected at the CMH suggest that the textiles form a coherent collection of Chancay-style fabrics, although a highly select group of objects. Indeed this study revealed that the fabrics held by the museum were of high quality, and therefore probably came from elite graves. This has highlighted an inevitable sampling error that researchers face when studying textiles from museums, related to the history of the collections, acquired by art collectors because of their aesthetic value alone. In the future it would therefore be important for museums to be willing to acquire collections that include both fancy and mundane objects, when these are available.

When the CMH textiles were examined within the broader context of the Central Coast weaving tradition, it was found that they show a strong affinity to other Late Intermediate Central Coast textiles. For example the focus was on plain-weaves (specifically the warp predominant ones), gauzes, slit tapestry, repetition of small-scale motif throughout the fabric, and similar colors were used.

However, some differences were also noted, including the unusually high prevalence of woolen yarns, and the relatively small number of fabrics made with S spun yarns singles.

As mentioned above, these might be due to the sampling error, but it could also be related to the existence of various spinning traditions in this region.

In closing, many questions have inevitably been left unanswered by this thesis. Data from future studies will hopefully make it possible to refine our understanding of Chancay textile making. Nevertheless, it is hoped that this study will provide helpful information to future textile specialists and stimulate more collection-based analyses of textiles housed in museums around the world. Together with future archaeological projects on the Central Coast of Peru, this will be important to gain a broader understanding of the Chancay culture.

Bibliography

Allen, Catherine J.

1988 *The Hold Life Has: Coca and Cultural Identity in an Andean Community*. Smithsonian Institution, Washington, DC.

Anton, Ferdinand

1984 *Ancient Peruvian textiles*. Thames and Hudson, New York.

Arnold, Denise Y., Sven Helmer, and Rodolfo Velásquez Arando

2009 Towards Building a Knowledge Base for Research on Andean Weaving. *Dataspace:The Final Frontier*, pp. 180-188. Springer Berlin Heidelberg.

Bankes, George

1997 *Peru before Pizarro.* Phaidon Press, New York.

Barber, Elizabeth Jane Wayland

1991 *Prehistoric textiles: the development of cloth in the Neolothic and Bronze ages, with special references to the Aegean.* Princeton University Press, United Kingdom.

Bawden, Garth, and Geoffrey W. Conrad

1982 *The Andean Heritage: Masterpieces of Peruvian art from the collections of the Peabody Museum*. Peabody Museum Press, distributed by Harvard University Press.

Bennett, Wendell Clark, and Junius Bouton Bird

1964 *Andean culture history*. Garden City: Natural History Press.

Berlo Janet. Catherine

1992 Beyond Bricolage: Women and Aesthetic Strategies in Latin American Textiles.

Anthropology and Aesthetics 22:115-134.

Bird, Junius B.

1963 Technology and art in Peruvian textiles. *Technique and Personality:* 45-78. Museum of Primitive art, New York.

Boytner, Ran

2004 Clothing the social world. *Andean Archaeology, Oxford: Blackwell*: 130-145.

Brinckerhoff Deborah

2000 *Weaving for the gods: textiles of the ancient Andes*: *October 30, 1999 to March 19, 2000*. Bruce Museum of Arts and Science, Greenwich, Connecticut.

Brommer, Bea

1988 *3000 jaar weven in de Andes: textiel uit Peru en Bolivia.* GemeenteMuseum Helmond.

Creceda, Verónica

2010 The semiology of Andean textiles: the talegas of Isluga. *CHUNGARA-REVISTA DE ANTROPOLOGIA CHILENA* 42 (1): 181-198.

Creswell, Robert

1993 Of mills and water wheels. The hidden parameters of technological choice. In Lemonnier, P. (ed) *Technological Choices: Transformation in Material Cultures since the Neolithic,* 181-213. Routledge, London.

Chapdelaine, Claude, Jean-François Millaire, and Greg Kennedy

2001 Compositional analysis and provenance study of spindle whorls from the Moche site, North Coast of Peru. *Journal of Archaeological science* 28:795-806.

Conklin, William J.

1997 Structure as meaning in Andean textiles. *Chungara*, 29 (1):109-131.

Costin, Cathy Lynne

1998 Housewives, Chosen Women, Skilled Men: Cloth Production and Social Identity in the Late pre-Hispanic Andes. *Archaeological Papers of the American Anthropological Association* 8: 123-41.

Crickmay, Lindsey

1992 *Space, time and harmony: symbolic aspects of language in Andean textiles with special reference to those from Bolivar Province (Cochabamba, Bolivia)*. Ph.D. dissertation, University of St. Andrews.

D'Harcourt, Raoul

2002 *Textiles of ancient Peru and their techniques*. ed. by Grace G. Denny and Carolyn M. Osborne. Dover Publications, Mineola, New York.

De Lavalle, J. A. et al.

1990 *Chancay*. ed. by Jose Antonio de Lavalle and Werner Lang. Banco De Credito Del Peru En La Cultura. Lima, Peru.

Esser, Janet B.

1982 *Chancay, a pottery style of ancient Peru*. In *Alana Cordy-Collins*, Palo Alto: Peek Publications, 313-329.

Evans, A.F.

1995 *Representations of duality in a Chancay knotted weft wrapping head-cloth in the collection of the Michael C. Carlos Museum.* MA thesis, Art History Department, Emory University, Georgia.

Frame, M.

1986 The visual images of fabric structures in ancient Peruvian art. In *The Junius B. Bird conference on Andean textiles*, April, 1984, pp. 47-80. The Textile Museum, Washington, DC.

Gerschultz, J.

2008 The Serpentine Essence of a Chancay Gauze Headdress. *Textile society of America Symposium Proceedings, Textile society of America.*

Good, Irene

2001 Archaeological Textiles: A Review of Current Research. *Annual Review of Anthropology* 30: 209-226.

Hosoori, Ali

1995 *History of Carpet*. Iran's Bureau for Carpet Studies and Investigation.

Heckmsn Andrea M.

2003 *Woven Stories: Andean Textiles and Rituals*. University of New Mexico Press.

Hodnett, M.K.

1978 Molds Used in Ceramics of Chancay: Art Techniques of Ancient Peru / Moldes Utilizados en la Ceramica de Chancay: Tecnicas en el Arte del Antiguo Peru. Lima, Peru.

1999 *pre-Columbian dolls in the Amano Museum*. Lima, Peru.

Jiménez Díaz María J.

2004 *Tejidos y Mundo Textil en los Andes Centrales y Centro-sur a través de la Colección del Museo de América en Madrid: Periodos Prehispánico y Colonial*. Ph.D. dissertation, Universidad Complutense de Madrid.

2006 Testimonios de Diversidad: Los Tejidos del Intermedio Tsrdio de los Andes Centrales en el Museo de América. *Anales de Museo de América*, 14: 175-202.

King, Heidi, and Ma Mercedes Delgado Pérez

2012 *Peruvian Feather-works: Art of the Pre-Columbian Era*. The Metropolitan Museum of Art, New York.

Kroeber, A. L.

1926(a) Culture Stratification in Peru. *American Anthropologist*; 28 (2): 331-351.

1926(b) The Uhle pottery collection from Chancay, *American Archaeology and Ethnology*, 21(7): 265-304. University of California Publications.

Krzanowski, Andrzej

1991. *Estudios sobre la cultura Chancay, Perú*. Universidad Jaguelona. Peru

Kula, G.

1988. *Chancay textiles in the Young Peruvian Collection*. Ph.D. dissertation, Liberal Arts in Extension studies, Harvard University.

1991. A study of surface-collected Chancay textiles. In *Estudios Sobre la Cultura Chancay, Perú*: 263-284.

Lehman, Hattie J.

2005 *Textiles of Chimu and Chancay Cultures of Coastal Peru Woven during the Late Intermediate Period: A Comparison of Process and Techniques.* MA thesis, University of Montana, Missoula, Montana.

Lemonnier, P.

2012 Technology. In *The Oxford Handbook of Linguistic Fieldwork*. Oxford University Press.

Lothrop, Samuel Kirkland, and Joy Mahler

1957 A Chancay-style grave at Zapallan, Peru: An analysis of its textiles, Pottery and other furnishings. In *Papers of the Peabody museum of Archaeology and Ethnology, Harvard University*. Vol. L, No.1. Cambridge, Massachussetts, U.S.A.

Lumbreras, Luis Guillermo

1974 *The People and Cultures of Ancient Peru.* Translated by Betty L. Meggers. Smithsonian Institution Press, Washington, DC.

Martin, L.

1996 How did the Cloth Mean? Ancient Peruvian Plain Cloth and Cloth Planes. *Surface Design Journal* 20: 8-34.

Medina Castro, María Isabel, and Gheller Doig, Roberto

2005 *Textiles of Ancient Peru=Tejidos del Perú Antiguo*. [Lima? : s.n], Serinsa.

Millaire, J-F.

2009 Woven identities in the Virú Valley. In *Gallinazo: an early cultural tradition on the Peruvian north coast*. ed. Jean-François Millaire and Magali Morlion, Cotsen. Institute of Archaeology Press, University of California, Los Angeles.

Moseley, Michael Edward

2001 *The Incas and their ancestors: the archaeology of Peru*. Revised Edition, Thames and Hudson, New York.

Murra, John V.

1962 Cloth and its functions in the Inca State. *American Anthropologist* 64(4): 710-728.

Nagy, K.

1985 Ceramics and textile art of Chancay culture in Ancient Peru. *Artes Populares* 15: 155-174.

O'Neale, L. M. and Clark B.J.

1948 Textile periods in Ancient Peru III: The Gauze Weaves. University of California Publications in American Archaeology and Ethnology 40 (4): 143-222.

O'Neale, Lila M. and A. L. Kroeber

1930 Textile Periods in Ancient Peru. In *University of California Publications in American Archaeology and Ethnology Volume XXVIII 1930-1931*, edited by A.L. Kroeber, Robert H. Lowie, and R.L. Olson, pp 23-56. University of California Press, Berkeley.

Phipps, Elena

2008 Woven to shape: a pre-Columbian trapezoidal tunic from the South Central Andes in the Metropolitan Museum of Art. *Textiles as Cultural Expressions: Proceedings of the 11th Biennial Symposium of the Textile Society of America*, September 24–27, Honolulu, HI.

Rodman, Amy Oakland

1992 Textiles and ethnicity: Tiwanaku in San Pedro de Atacama, North Chile. *Latin American Antiquity*, 316-340.

Rodman, Amy Oakland, and Vicki Cassman

1995 Andean tapestry: structure informs the surface. *Art Journal*, 54 (2): 33-39.

Phipps, Elena

2008 Woven to Shape: a Pre-Columbian Trapezoidal Tunic from the South Central Andes in the Metropolitan Museum of Art. *Textile Society of America Symposium Proceedings.* Paper 126.

Rowe, Ann P.

1977 *Warp-patterned weaves of the Andes*. The Textile Museum, Washington, DC.

1984 *Costumes and featherwork of the lords of Chimor: textiles from Peru's North Coast*. The Textile Museum, Washington, DC.

Schevill, Margot Blum, and Miguel Angel Asturias

1991 The Communicative Power of Cloth and Its Creation. *Textile Traditions of Mesoamerica and the Andes*, edited by Margot Blum Schevill, Janet Catherine Berlo, and Edward B. Dwyer, pp. 3-15. University of Texas Press, Austin.

Senders, Diane Elizabeth

1982 *A Methodology for the Study of Gauze Textiles: The Chancay Culture of PreColumbian Peru.* MA thesis, University of Washington, Washington, DC.

Sillar, Bill, and Michael S. Tite

2000 The challenge of 'technological choices' for materials science approaches in archaeology. *Archaeometry* 42(1):2-20.

Skinner, Milica Dimitrijevich

1975 The Archaeological Looms from Peru in the American Museum of Natural History Collection. In *Irene Emery roundtable on museum textiles: ethnographic textiles of the western hemisphere*, ed. Patricia L. Fiske, pp.67-76. The Textile Museum, Washington, DC.

Squier, Ephraim George

1967 [1869]. A plain man's tomb in Peru. In *Peruvian Archaeology*: *Selected readings*, ed. John H. Rowe and Dorothy Menzel, pp. 210-216, Peek Publications, Palo Alto, California.

Stone-Miller, Rebecca

1992 *To Weave for The Sun.* Thames and Hudson, New York.

2012 *Art of the Andes: from Chavin to Inca*. Thames and Hudson, New York.

Szpak, P., Millaire J-F., White Christine D., Lau George F., Surette F., and Longstaffe Fred J.

2015 Origins of Prehispanic Camelid Wool Textiles from the North and Central Coasts of Peru Traced by Carbon and Nitrogen Isotopic Analyses. *Current Anthropology*, 56 (3) (June 2015): 449-459.

Surette, Flannery K.,

2015 *Virú and Moche Textiles on the North Coast of Peru during the Early Intermediate Period: Material Culture, Domestic Traditions and Elite Fashions*. Ph.D. dissertation, Anthropology Department, University of Western Ontario.

Tsunoyama Yukihiro

1979 *Textiles of the Andes: Catalog of the Amano collection*. Heian, Dodosha, San Francisco.

Wallace, Dwight T.

1979 The process of weaving development on the Peruvian Coast. In the *Junius B. Bird Pre-Columbian Textile Conference*. The Textile Museum and Dumbarton Oaks, Trustees for Harvard University, Washington, DC.

Young, Margaret Anne

1985 The Chancay textile tradition: the textiles from Lauri in the collection of the Amano Museum. Unpublished MA thesis, the Faculty of Philosophy, Columbia University.

Young-Sánchez, Margaret

1992 Textile Traditions of the Late Intermediate Period. In *To Weave for the Sun*, edited by Rebecca Stone-Miller, pp. 43-50. Thames and Hudson, New York.

2000 *Textiles from Peru's Central Coast 750-1100: The Reiss and Stubel Collection from Ancon*. Ph.D. dissertation, the Graduate School of Arts and Sciences, Columbia University.

Weiner, Janet Esser

1970 *Chancay art and culture: a critical review*. California State College.

Zhang, X., Boytner R., Cabrera J-L, and Laursen R.

2007 Identification of yellow dye types in pre-Columbian Andean textiles. *Anal. Cham* 79: 1575-1582.

Appendix A: Descriptive Catalogue of the CMH Textiles

This descriptive catalogue of the CMH fabrics contains the catalogue numbers and information on the dimensions, techniques, materials, the spinning and plying structure, decoration, and sometimes reference to similar pieces. A photograph is also provided.

XIX-G-18
Dimensions: 14 cm by 45.5 cm
Technique: Slit tapestry
Material:
Warp: Z-2s light brown cotton
Weft: Z-2S dark and light gold, light purple, dark brown, light and dark pink, yellow, grey, black and cream wool
Description: The design on this tapestry border represents diagonal rows of waves in the center and horizontal waves within stripes on the border. There are 33 fringes in total; each of which is approximately 0.8-1.4 cm by 4-4.5 cm.

XIX-G-38
Dimensions: 11 cm by 31 cm
Technique: Plain-weave (1/1), Plain-weave (1/1),Warp-faced, Complementary warp, Embroidery
Material:
Hair:
Warp: Z-2S dark brown wool
Weft: Z-2S dark brown wool
Fore-head:
Warp: Z-2S cream, light blue, white and brown cotton
Weft: Z-2S white cotton
Face:
Warp: Z-2S white cotton
Weft: Z-2S white cotton
Eyebrow:
Z-2S black wool
Nose:
Z-2S pink wool
Eye:
Z-2S white wool
Mouth:
Z-2S pink wool, and cream and white cotton
Neck:
Warp: Z-2S light brown and cream cotton
Weft: Z-2S light brown cotton
Skirt:
Warp: S spun white cotton, Z-2S white, light blue and light brown cotton
Weft: S spun and Z-2S white cotton
Arms and hands:
Z-2S light pink wool
Legs:
Z-2S light pink wool
Shirt:
Warp: S spun light blue cotton
Weft: S spun light blue cotton
Under-skirt:
Warp: S spun brown cotton
Weft: S spun brown cotton

XIX-G-39
Dimensions: N/A
Technique: Plain-weave (1/1), Embroidery, Slit-tapestry
Material:
Larger doll
Hair:
Z-2S dark brown wool
Face:
Warp: Z-2s white and light brown cotton
Weft: Z-2S light brown cotton
Nose:
Z-2S pink wool
Eye:
Z-2S black and pink wool
Mouth:
Z-2S pink wool
Dress:
Warp: Not Identifiable
Weft: Z-2S light and dark gold, pink and green wool
Arm:
Z spun pink wool
Smaller doll:
Technique: Plain-weave (1/1), Plain-weave (1/1), Warp-faced, Embroidery, Supplementary warp
Material:
Hair:
Warp: Z-2S brown wool
Weft: Z-2S brown wool
Face:
Warp: Z-2S white and light brown cotton
Weft: Z-2S light brown cotton
Nose:
Z-2S pink wool
Eye:
Z-2S black and pink wool
Mouth:
Z-2S pink wool
Arms and hands:
Z-2S pink wool
Dress:
Warp: Z-2S brown cotton, Z-2S light pink and gold wool
Weft: Z-2S brown cotton
Boat:
Warp: S spun white cotton
Weft: S spun white cotton
Paddle: Braiding

Unspun yellow wool, Z-2S red, brown and yellow wool
Strap of the paddle:
Brown plant fiber
Description: This piece shows 2 dolls in a boat.

XIX-G-154
Dimensions: N/A
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S light brown and dark and light green wool
Weft: Not identifiable
Z-2S yellow wool, unspun brown cotton, Z-2S green cotton, Z spun white cotton
Description:

XIX-G-159
Dimensions: N/A
Technique: Plain-weave (1/1)
Material:
Warp: Z-2S dark brown cotton
Weft: Z-2S dark brown cotton
Cord
Z-2S cream cotton
Description: Piece of decayed fabric with feathers sewn on it.

XIX-G-162
Dimensions: 20 cm by ?
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Warp: Z-2S dark and light brown, dark and light blue, cream, white, and chocolate wool
Weft: Z-2S dark brown wool
Description: This fragment is probably part of XIX-G-163.

XIX-G-163
Dimensions: 13.5 cm by ?
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Warp: Z-2s dark and light brown, dark and light blue, cream, white, and chocolate wool
Weft: Z-2S dark brown wool

XIX-G-164
Dimensions: 11.5 cm by 32 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S light brown, light and dark blue, cream wool
Weft: Z-2S dark blue wool

XIX-G-165
Dimensions: 8 cm by 180 cm
Technique: Plain-weave (1/1)
Material:
Panel 1
Warp: Z-2S brown and light cotton
Weft: Z-2S brown and light cotton
Panel 2
Warp: Z-2S brown and light cotton
Weft: Z-2S brown and light cotton
Description: This piece is made up of 2 identical panels. The stiches attaching these 2 panels are Z-2S in parts and S-2Z in others.

XIX-G-166
Dimensions: 22.5 cm by 25 cm
Technique: Plain-weave (1/1), most likely warp-faced
Panel 1
Warp: Z-2s cream, light brown, light green, dark grey and cream+white cotton
Weft: Z-2S cream cotton
Panel 2
Warp: Z-2S cream cotton
Weft: Z-2S cream cotton
Description: This fabric with striped pattern is made up of 2 panels, sewn together using (Z-2S) 4Z spun cream cotton.

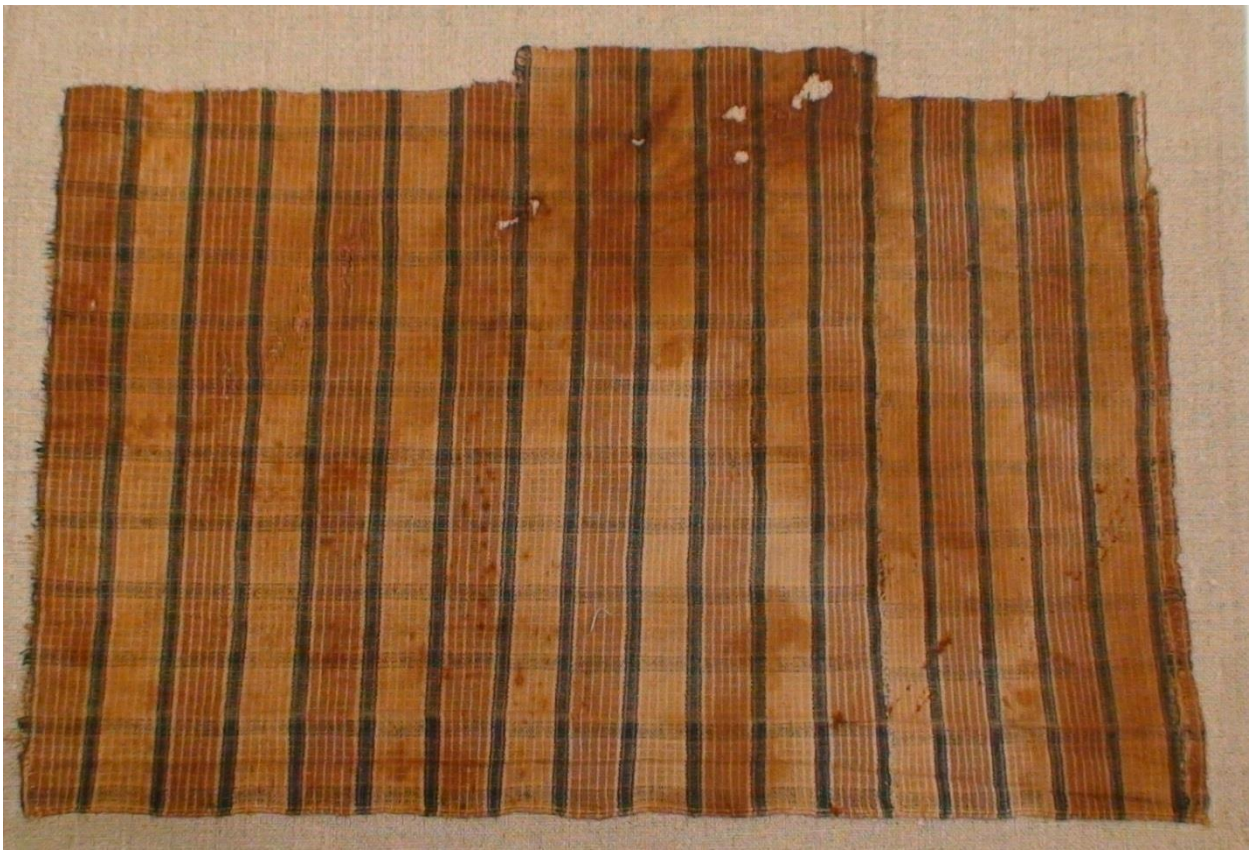
XIX-G-167
Dimensions: 27 cm by 31 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2s white, blue and light blue, cream, and brown cotton
Weft: Z-2S white cotton

XIX-G-168
Dimensions: 18.5 cm by 24 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S white, blue, and brown cotton
Weft: Z-2S white cotton
Description: This piece is trimmed on 2 sides. In addition to vertical stripes, the fabric features alternating rows of white and brown warps.

XIX-G-169
Dimensions: 17 cm by 21 cm
Technique: Plain-weave (1/1), warp-faced
Material:
Panel 1
Warp: Z-2S white, cream, light brown, and dark and light blue wool
Weft: Z-2S cream wool
Panel 2
Warp: Z-2S white, cream, light brown, and dark and light blue wool
Weft: Z-2S cream wool
Description: This piece is made of two identical panels. Each panel is about 9.5 cm by 21 cm. These are sewn together using two Z-2S white cotton yarns.

XIX-G-170
Dimensions: 5.5 cm by 17 cm
Technique: Plain-weave (1/1), wrap-faced
Material:
Warp: Z-2s blue and light blue, white, brown and light brown wool
Weft: Z-2S brown cotton, dark blue and white wool
Description: This piece is trimmed on all sides. The blue might be dyed.

XIX-G-171
Dimensions: 21.5 cm by 33.5 cm
Technique: Plain-weave (1/1)
Material:
Panel 1
Warp: Z-2S cream, white, light and dark blue, and brown wool
Weft: Z-2S cream and dark blue wool
Panel 2
Warp: Z-2S cream, white, light and dark blue, and light brown wool
Weft: Z-2S cream and dark blue wool
Description: This piece of textile is made of two identical panels; one is 9 cm by 21.5 cm and the other is 21.5 by 24.5 cm. The panels are stitched using Z-2S cream wool.



XIX-G-172
Dimensions: 27.5 cm by 36 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S white, cream, brown, dark and light blue wool
Weft: Z-2S white wool
Description: This piece, finished on one end and trimmed on the other sides, features vertical stripes. The deteriorated parts have been treated and sewn to prevent further deterioration.

XIX-G-173
Dimensions: 27.5 cm by 35 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S (?) white, light blue, and brown and light brown cotton
Weft: Z-2S (?) cream cotton
Description: In this striped fabric, the yarns are badly deteriorated and spinning pattern is difficult to identify.

XIX-G-174
Dimensions: 26 cm by 35 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S blue and light blue, cream and brown cotton
Weft: Z-2S brown cotton
Description: This fragmentary piece with striped pattern is trimmed on three sides.

XIX-G-175
Dimensions: 26 cm by 31 cm
Technique: Plain-weave (1/1), Warp-faced, Plain-weave (2/2)
Material:
Warp: Z-2S blue and light blue, cream, white and brown cotton, with S spun brown, white and blue cotton
Weft: Z-2S white/blue/brown cotton and S spun white/blue/brown cotton
Description: This fragmentary piece with striped pattern is trimmed on three sides. In the basket-weave section, yarns are S spun, paired and over-spun. Wefts are paired.

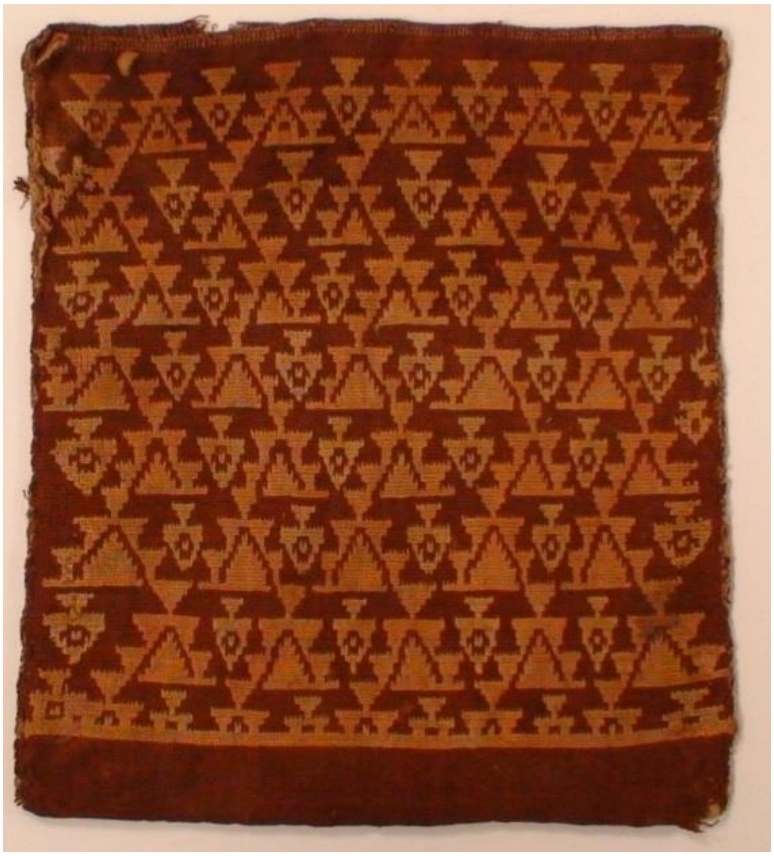
XIX-G-176
Dimensions: 41.3 cm by 72 cm
Technique: Plain weave (1/1), Warp-faced, Complementary warp
Materials:
Warp: Z-2S light brown, white, blue and grey cotton
Weft: Z-2S light brown cotton
Description: The textile has been stretched and distorted, so the design is loose in some parts of the fabric. Since blue and white yarns are loosely spun, they have decayed more than the other yarns. A large knot of white Z-2S/5Z spun cotton is present.

XIX-G-177
Dimensions: 22 cm by 23 cm
Technique: Plain-weave (1/1), Warp-faced, Braiding, wrapping, Slit/Interlocked Tapestry
Material:
Panel 1
Warp: Z-2S red and yellow wool
Weft: Z-2S white cotton
Panel 2
Warp: Z-2S cream cotton
Weft: Z-2S brown, cream, red, green, and yellow wool
Panel 3
Warp: Z-2S cream cotton
Weft: Z-2S cream cotton
Panel 4
Z-2S white cotton
Panel 5
Z-2S dark brown wool
Tassels:
Z-2S red and yellow wool
Description: The pattern and the material suggest that this bag might date from the Late Horizon or Early Colonial period.
Note: For similar objects see Jiménez Díaz (2004: Fig. 44), O'Neale and Kroeber (1930-1931: Plate 30), Stone-Miller (1992:178).

XIX-G-178
Dimensions: 7 cm by 282 cm
Technique: Slit/Outlined Tapestry
Material:
Warp: S-2Z cream wool
Weft: Z-2S red, dark brown, cream, black, yellow and pink wool with Z-2S cream cotton
Tassels
Z-2S red, black, yellow, gold and light brown wool
Description: The central part of this belt is 7 cm wide by 206 cm long and includes zoomorphic, anthropomorphic and striped patterns. The designs and the spinning technique suggest that this might have a Chimú origin.
Note: For similar pattern see Stone-Miller (1992:250)

XIX-G-179
Dimensions: 3.2 cm by 151 cm
Technique: Slit Tapestry
Material:
Warp: Z-2S dark gold wool
Weft: S-2Z cream, black, red, yellow, light and dark gold wool
Description: This is probably a belt or a band that was part of a larger piece, as stiches are visible on one side. The design represents interlocked snakes with headdress.

XIX-G-180
Dimensions: 14.5 cm by 17 cm
Technique: Double-cloth
Material:
Warp: Z-2S white, brown cotton
Weft: Z-2S white and brown cotton
Description: On one side of this bag birds and a zoomorphic figure are depicted diagonally in lozenges, and on the other side, fish (?) separated with diagonal rows of triangles are represented. Both sides are showed.



XIX-G-184
Dimensions: 62.5 cm by 91.5 cm
Technique: Plain-weave (2/1), Painting
Material:
Warp: Z-2S light brown cotton
Weft: Z-2S light brown cotton
Description: Since there is a layer of fabric on top of this textile, it's hard to identify the spinning direction with certainty.
Note: For a similar technique see Tsunoyama (1977:167-176).

XIX-G-185
Dimensions: N/A[6]
Technique: Plain-weave (1/1), Eccentric Tapestry
Material:
Warp: Z-2S light brown cotton
Weft: Z-2S light brown cotton with Z-2S gold, red, black and green wool
Note: For similar pattern and technique see Brommer (1988:66), Stone-Miller (1992:222-223), and Tsunoyama (1977:34, 81).

[6] This piece was so large that was folded in half and due to its condition it was impossible to unfold and measure it.

XIX-G-186

Dimensions: 134.5 cm by 145 cm
Technique: Plain-weave (1/1), Painting
Material:
Panel 1
Warp: Z-2S cream cotton
Weft: Z-2S cream cotton
Panel 2
Warp: Z-2S cream cotton
Weft: Z-2S cream cotton
Description: Panels are sewn together with (Z-2S) 2Z thread. This textile is painted with black, light and dark brown.

XIX-G-187
Dimensions: N/A
Technique: Plain-weave (1/1), Plain-weave (1/1), warp-faced, Complementary warp, Braiding, Embroidery,
Material:
Hair:
Z-2S dark brown wool
Head-band:
Warp: Z-2S dark pink, dark brown, yellow and purple wool
Weft: Not identifiable
Face:
Z-2S brick red wool
Eyes:
Z-2S black and white wool
Nose:
Z-2S yellow wool
Mouth:
Z-2S dark pink wool and (?) White cotton
Earrings:
Z-2S dark pink wool
Necklace and Pompoms:
Z-2S and unspun white cotton
Shawl:
Warp: Z-2S light pink, light and dark gold wool
Weft: Z-2S white and light pink wool
Poncho:
Warp: Z-2S light brown, camelid and white cotton, Z-2S yellow wool
Weft: Z-2S light brown and light blue cotton, Z spun white cotton
Dress:
Warp: Z-2S blue and light pink wool
Weft: Z-2S light brown cotton
Belt:
Warp: Z-2S white and grey cotton
Weft: Z-2S white + light brown cotton
Under-skirt
Warp: S spun white cotton
Weft: S spun white cotton
Arms and legs:
Z-2S brick-red wool

XIX-G-188
Dimensions: 16.7 cm by 21.5 cm
Technique: Slit Tapestry
Material:
Warp: Z-2S light brown cotton
Weft: Z-2S white and dark brown wool
Description: This textile seems to be mended. However, it is not known if the mending is original or modern. The white wool has deteriorated more than the dark brown wool.

XIX-G-223
Dimensions: 11 cm by 34 cm
Technique: Plain-weave (1/1), Plain-weave (1/1), Warp-faced, Complementary warp, Embroidery
Material:
Hair:
Warp: Z-2S black wool
Weft: Z-2S black wool
Face:
Z-2S dark pink wool
Eye:
Z-2S white wool
Mouth:
Z-2S dark pink wool and white cotton
Nose:
Z-2S yellow wool
Head-band:
Warp: Z-2S yellow and brick-red wool
Weft: Z-2S brick-red wool
Poncho:
Warp: S spun white, brown and blue cotton, Z-2S white cotton
Weft: S spun blue cotton
Dress:
Warp: Z-2S light brown cotton
Weft: Z-2S light brown cotton
Under-skirt:
Warp: Z spun white cotton, Z-2S dark pink wool
Weft: Z spun white cotton
Leg:
Z-2S dark pink wool
Belt:
Warp: Z-2S dark pink wool, Z-2S blue and white cotton
Weft: Z-2S dark pink wool
Arms:
Z-2S dark pink wool
Shawl:
Warp: Z-2S yellow and brick red wool
Weft: Z-2S brick red wool

XIX-G-224

Dimensions: 4 cm by 253 cm
Technique: Braiding, Wrapping
Material:
S spun black, cream and red wool, Z spun white wool, and Z spun light brown and light blue cotton, Z-2S yellow and red wool

XIX-G-225
Dimensions: 3.5 cm by 171 cm
Technique: Plain-weave (1/1), Plain-weave (3/1), Warp-faced, Complementary warp
Material:
Panel 1
Warp: Z-2S white cotton
Weft: Z-2S white cotton
Panel 2
Warp: Z-2S brown, red, yellow, and black wool, z-2S blue cotton, S spun white cotton
Weft: S spun white cotton
Panel 3
Warp: Z-2S brown, red, yellow, and black wool, Z-2S blue cotton, S spun white cotton
Weft: S spun white cotton
Panel 4
Warp: Z-2S brown, red, yellow, and black wool, Z-2S blue cotton, S spun white cotton
Weft: S spun white cotton
Tassels:
Z spun white cotton
Description: This textile is made of four panels; 3 of which are identical. The three identical ones are approximately 30.5 cm by 66.5. The other is 5 cm by 206.5 cm. This piece depicts double-headed birds, with alternative colors, within vertical stripes.

XIX-G-226
Dimensions: 57.5 cm by 121 cm
Technique: Plain-weave (1/2), Painting
Material:
Warp: Z-2S cream cotton
Weft: Z spun cream cotton
Description: The weft is paired
Note: For a similar technique see Tsunoyama (1977:167-176).

XIX-G-227
Dimensions: 51.5 cm by 55.5 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Warp: Z-2S blue and dark blue, white, dark brown and cream wool
Weft: Z-2S brown wool
Description: One part of this textile is decorated with a checker-board pattern within vertical brown stripes. The other part shows features vertical stripes.
Note: For a similar pattern and technique see Kula (1988:52).

XIX-G-228
Dimensions: 19 cm by 30.5 cm (without considering the loom)
Technique: Plain-weave (1/1), Plain-weave (4/1), Weft-faced, Supplementary weft
Material:
Warp: Z-2s white cotton
Weft: Z-2S white cotton, and Z-2S pink, gold, light brown and black wool
Description: The design of this textile on the loom represents a geometric pattern executed with supplementary wefts on plain-weave ground. These geometric patterns are placed within horizontal bands. Seven groups of yarns twisted in Z, shape the fringe.

XIX-G-229
Dimensions: 33.5 cm by 36 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp, Embroidery
Material:
Face:
Warp: Z-2S white and green cotton
Weft: Z-2S green cotton
Head-band:
Warp: Z-2S light brown cotton, Z-2S dark pink and yellow wool
Weft: Z-2S brown cotton
Eyes:
Z-2S pink wool
Z-2S white cotton
Hair:
Z-2S red wool, Z-2S white cotton
Mouth:
Z-2S white cotton, Z-2S pink wool
Beard and mustache:
Z-2S dark brown wool and white cotton
Back side:
Warp: Z-2S cream, light and dark brown cotton
Weft: Z spun, S spun and Z-2S cream cotton

XIX-G-230
Dimensions: 125 cm by 170 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Warp: Z-2S dark brown, blue and dark blue, white and cream wool
Weft: Z-2S light brown wool
Description: This was probably originally part of XIX-G-227.
Note: For a similar pattern see Kula (1988:52).

XIX-G-231
Dimensions: 61 cm by 120.5 cm
Technique: Plain-weave (1/1)
Material:
Warp: Z-2S cream cotton
Weft: Z-2S cream cotton
Description: This trapezoidal tunic was created with plain-weave (1/1) technique. The neck hole is 32 cm long and arm holes are 12 cm and 14 cm long.
Note: For similar objects see Phipps (2008).

XIX-G-239
Dimensions: N/A
Doll No. 1
Technique: Plain-weave (1/1), Warp-faced, Embroidery
Material:
Hair:
Z-2S dark brown wool
Face:
Z-2S green wool
Fore-head:
Z-2S pink wool
Eyes:
Z-2S red and dark green wool
Nose:
Z-2S red wool
Mouth:
Z-2S pink wool
Poncho:
Warp: Z-2S light and dark blue, brown and chocolate cotton
Weft: Z-2S dark and light blue, chocolate and brown cotton
Shirt:
Warp: Z-2S light and dark blue, brown and chocolate cotton
Weft: Z-2S blue, chocolate and brown cotton
Legs and feet:
Z-2S light pink wool
Fingers:
Z-2S red wool
Doll No. 2
Technique: Plain-weave (1/1), Plain-weave (2/1), Plain-weave (1/1), Warp-faced, Embroidery
Material:
Hair:
Warp: Z-2S dark brown wool
Weft: Z-2S dark brown wool
Face:
Warp: S spun cream cotton
Weft: Z spun chocolate +brown cotton
Eyes:
Z-2S purple wool, Z-2S white cotton
Nose:
Z-2S purple wool
Mouth:
Z-2S purple wool, Z-2S white cotton
Legs and feet:
Z-2S red wool
Arms and hands:

Z-2S red wool
Dress:
Warp: Z-2S white cotton, Z-2S pink, yellow and dark blue wool
Weft: Z-2S white cotton
Doll No. 3
Technique: Plain-weave (1/1), Embroidery, ?
Material:
Hair:
Z-2S dark brown wool
Face:
Warp: S spun white cotton
Weft: S spun white cotton
Nose:
Z-2S red wool
Eyes:
Z-2S red and brown wool
Mouth:
Z-2S red wool
Arms and hands:
Z-2S red wool
Legs and feet:
Z-2S red wool
Dress:
Warp: Z-2S yellow and orange wool
Weft: Z-2S brown cotton
Under-skirt:
Warp: S spun brown cotton
Weft: S spun brown cotton
Doll No. 4
Technique: Plain-weave (1/1), Slit-Tapestry, Gauze, Embroidery
Material:
Hair:
Warp: Z-2S dark brown wool
Weft: Z-2S dark brown wool
Head-band:
Warp: S-2Z light brown cotton
Weft: Z-2S cream, gold, green, and crimson wool
Face:
Z-2S red wool
Eyes:
Z-2S black wool, Z-2S white cotton
Nose:
Z-2S purple and grey wool
Mouth:
Z-2S purple wool, Z-2S white cotton
Earrings:

Z-2S light and dark pink wool, Z-2S light and dark green, Z-2S yellow, and brown wool
Arms and hands:
Z-2S red wool
Legs and feet:
Z-2S red wool
Dress:
Warp: Z-2S red and yellow wool, S-2Z gold wool
Weft: Z-2S light pink wool
Under-skirt:
Warp: S spun white cotton
Weft: Z-2S cream and brown wool
Doll No. 5
Technique: Plain-weave (1/1), Gauze, Embroidery
Material:
Hair:
Z-2S black wool
Face:
Z-2S brick red wool
Nose:
Z-2S red wool
Mouth:
Z-2S red wool, Z-2S white cotton
Eyes:
Z-2S black wool, Z-2S white cotton
Poncho:
Warp: S spun white cotton
Weft: S spun white cotton
Arms and hands:
Z-2S red wool
Dress:
Warp: Z-2S brown wool
Weft: Z-2S brown wool
Legs and feet:
Z-2S red wool
***Pillow** (with tassels):*
Technique: *Plain-weave (1/1)*
Material:
Warp: Z-2S brown cotton
Weft: Z-2S brown cotton
Tassels:
Z-2S yellow and pink wool


4
5
3
1
2

XIX-G-298
Dimensions: 200 cm
Technique: Braiding, Wrapping
Material:
Cream and brown plant fiber
Description: The central part is 18cm. There is a loop at one end.

XIX-G-404
Dimensions: 21 cm by 23 cm
Technique: Plain-weave (2/1), Warp-faced, Complementary warp, Supplementary
Material:
Panel 1
Warp: Z-2s white cotton, and, Z-2S red, gold, white, dark grey, brown, dark brown and black wool
Weft: Z-2S white cotton
Panel 2
Warp: Z-2s white cotton with Z-2S red, gold, white, dark grey, brown, dark brown and black wool
Weft: Z-2S white cotton
Description: This fabric is made of 2 identical pieces; one is 9.6 cm by 23, the other is 11.4 by 23. Designs include diagonal rows of birds in lozenges and "stylized birds" within vertical stripes. The wool used in weaving birds on the left panel has deteriorated and only traces of them are discernable.
Note: For similar pattern see Tsunoyama (1977:139)

XIX-G-405
Dimensions: 13.7 cm by 36.7 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Materials:
Warp: Z-2S cream and brown cotton
Weft: (?) brown cotton
Description: This piece of fabric features diagonal rows of birds and cats, separated by diagonal rows of motifs, along with striped patterns and double-headed birds in the borders. A cord has passed through the textile, and the stitches around it suggests it might have been folded.

XIX-G-406
Dimensions: 14.2 cm by 26 cm
Technique: Gauze, Slit-Tapestry
Material:
Warp: Z-2S white cotton
Weft: Z-2S white cotton
Design:
Z-2S white cotton
Description: This piece of fabric might be a part of XIX-G-484a and XIX-G-484b. Tsunoyama (1977:214) states this is open-space tapestry. He also argues that the "design of a bird within a lozenge that is edged with a wave motif is common in the Post-Classic Period".
Note: For similar technique see Tsunoyama (1977:62, 106)

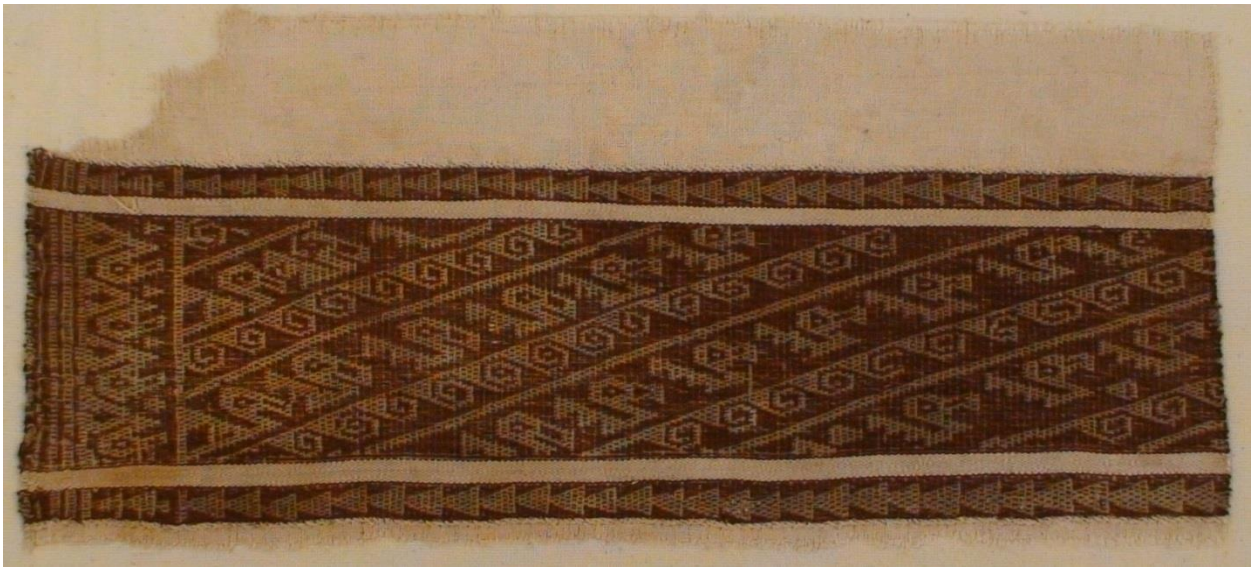
XIX-G-407
Dimensions: 25 cm by 31 cm
Technique: Plain-weave (1/2)
Material:
Warp: Z-2S brown and light brown, white, cream and blue wool
Weft: Z spun light brown wool
Description: In parts of this fabric yarns are missing. Wefts are paired

XIX-G-408
Dimensions: 33.5 cm by 36 cm
Technique: Plain-weave (1/1)
Material:
Warp: Z-2S white and brown cotton
Weft: Z-2S white cotton

XIX-G-409
Dimensions: 29 cm by 29 cm
Technique: Plain-weave (1/2), Plain-weave (1/3), Plain-weave (1/4)
Material:
Warp: Z-2S white cotton
Weft: Z spun white cotton
Description: This piece might be a carrying cloth, suggested by its tassels. The wefts are paired, tripled or quadrupled in parts.

XIX-G-410
Dimensions: 38.5 cm by 47.5 cm
Technique: Plain-weave (1/1), Embroidery
Material:
Warp: Z-2S red and white wool
Weft: Z-2S dark pink wool
Embroidery
Z-2S white wool

XIX-G-411
Dimensions: 16.5 cm by 37.2 cm
Technique: Plain-weave (1/1), Warp-faced, Pebble-weave
Material:
Panel 1
Warp: S spun white wool (?)
Weft: Z-2S white wool (?)
Panel 2
Warp: S spun white wool (?)
Weft: Z-2S white wool (?)
Panel 3
Warp: Z-2S white, brown and grey wool (?)
Weft: Z-2S white wool (?)
Description: This piece is made of three panels; two of which are identical. One is 5 cm by 37.2 and the other is 0.8 cm by 37.2 cm. The third panel, executed in pebble-weave, is 11 cm by 37.2 cm. This fabric represents diagonal rows of birds and waves.



XIX-G-412
Dimensions: 14.6 cm by 55 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S brown, white and blue cotton with Z-2S pink wool
Weft: Z-2S pink wool and brown cotton
Description: This complete piece with all selvedges available represents a checkerboard design.

XIX-G-413
Dimensions: 41 cm by 37 cm
Technique: Plain-weave (1/1), Supplementary weft
Material:
Panel 1
Warp: Z-2S red, gold and light brown wool with Z-2S dark brown cotton
Weft: Z-2S dark brown cotton
Panel 2
Warp: Z-2S red, gold and light brown wool with Z-2S dark brown cotton
Weft: Z-2S dark brown cotton
Description: This piece includes 2 identical panels; one is 31 cm by 37 cm, and the other is 9.5 cm by 12 cm.

XIX-G-414
Dimensions: 15 cm by 27 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Panel 1
Warp: Z-2S dark brown, black and gold wool
Weft: Z-2S dark brown wool
Panel 2
Warp: Z-2S dark brown, black and gold wool
Weft: Z-2S dark brown wool

XIX-G-415
Dimensions: 44 cm by 48 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2s white, brown and light brown, and cream wool
Weft: Z-2S brown wool

XIX-G-416
Dimensions: 51 cm by 133 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp, Gauze, Supplementary weft
Material:
Panel 1
Warp: Z-2S blue and light blue, brown and white cotton
Weft: Z-2S brown cotton
Panel 2
Warp: Z-2S brown cotton
Weft: Z-2S brown cotton, yellow and red wool
Description: This fabric is made of 2 panels. First panel, in plain-weave (1/1), is 14.5 cm by 133 cm, the second, also in plain-weave (1/1) but which features gauze and supplementary technique, is 36.5 cm by 133 cm. It features bird designs and stripes.
Note: For similar technique and pattern see O'Neale and Clark (1946: 218).

XIX-G-417
Dimensions: 47.5 cm by 105 cm
Technique: Plain-weave (1/1), Supplementary weft
Material:
Warp: S spun dark brown cotton (?), Z-2S white cotton, with Z-2S black wool
Weft: Z spun dark brown cotton

XIX-G-418
Dimensions: 35.5 cm by 137 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Warp: Z-2s white, blue and light blue, cream, and brown wool
Weft: Z-2S cream wool

XIX-G-419
Dimensions: 53 cm by 63 cm
Technique: Plain-weave (1/1), Supplementary weft, Slit Tapestry
Material:
Panel 1
Warp: Z-2S cream+white cotton
Weft: Z-2S cream cotton, Z-2S dark and light gold, dark and light pink, brown and black wool
Panel 2
Warp: z-2S cream+white cotton
Weft: Z-2S cream cotton, Z-2S dark and light gold, dark and light pink, brown and black wool
Description: This fragment has 2 identical panels; one is 37 cm by 53 cm and the second one is 26 cm by 38.5 cm. In the border, diagonal rows of waves within horizontal stripes and a horizontal row of waves, facing the same direction, are depicted.

XIX-G-420
Dimensions: 12 cm by 57.5 cm
Technique: Pebble-weave
Material:
Warp: Z-2S white and light brown cotton
Weft: Z-2S white cotton
Description: This piece depicts diagonal rows of cats and cat-birds beings separated by diagonal stripes and waves.

XIX-G-421
Dimensions: 7cm by 129 cm
Technique: Plain-weave (1/1), Warp-faced, Plain-weave (1/3), Complementary warp
Material:
Panel 1
Warp: S-2Z white cotton
Weft: Z-2S white cotton
Panel 2
Warp: S spun white cotton, Z-2S gold, cream, red, dark brown and dark gold wool with Z-2S cream cotton
Weft: S white cotton
Panel 3
Warp: S spun white cotton, Z-2S gold and dark gold, red, dark brown wool with Z-2S cream cotton
Weft: S spun white cotton
Description: This piece, which seems to be part of a larger textile, is made up of 3 panels. The first, executed in plain-weave is 4.5 cm by 120. The two others are identical in terms of design and technique; one is 4 cm by 66 cm and the other is 4 cm by 64.5 cm.

XIX-G-422
Dimensions: 5 cm by 38.2 cm
Technique: Plain-weave (1/2), Warp-faced
Material:
Warp: Z-2S grey, red and gold wool
Weft: Z-2S gold, grey and purple wool

XIX-G-423 [7]
Dimensions: 7 cm by 32 cm
Technique: Plain-weave, Warp-faced, Complementary warp
Material:
Warp: Z-2S red, yellow, gold, white and purple wool
Weft: Z-2S black wool
Description: This complete rectangular fabric depicts a big lozenge with smaller ones within it. The white wool is overspun in parts.

[7] No picture of the front side of this fabric is available.

XIX-G-424
Dimensions: 5.2 cm by 49 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Panel 1
Warp: Z-2S dark and light pink wool
Weft: Z-2S white cotton
Panel 2
Warp: Z-2S dark and light pink wool
Weft: Z-2S cream cotton
Panel 3
Warp: Z-2S cream cotton
Weft: Z spun cream cotton
Description: This piece is made of 3 panels, 2 of which are identical and are executed in plain-weave (1/1) with complementary warp. They are 1.7 cm by 49 cm and 1.5 cm by 49 cm. These panels are decorated with birds; the direction, birds' color and the surrounding squares alternate. The third panel, executed in plain-weave (1/1), is 2 cm by 44 cm and its weft is paired.

XIX-G-425
Dimensions: 4 cm by 67 cm
Technique: Plain-weave (3/1), Plain-weave (1/3), Complementary warp
Material:
Warp: Z-2S gold, dark and light brown and red wool with S spun white cotton
Weft: Z-2S white cotton
Description: This piece is made up of a single panel; the white part is woven with plain-weave (3/1) and the designed part is plain-weave (1/3) with complementary warp.

XIX-G-426
Dimensions: 6.5 cm by 44 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Warp: Z-2S gold, white, dark blue and red wool
Weft: Z-2S dark brown wool
Description: This fabric, finished on all four sides, depicts white lozenges within red ones.

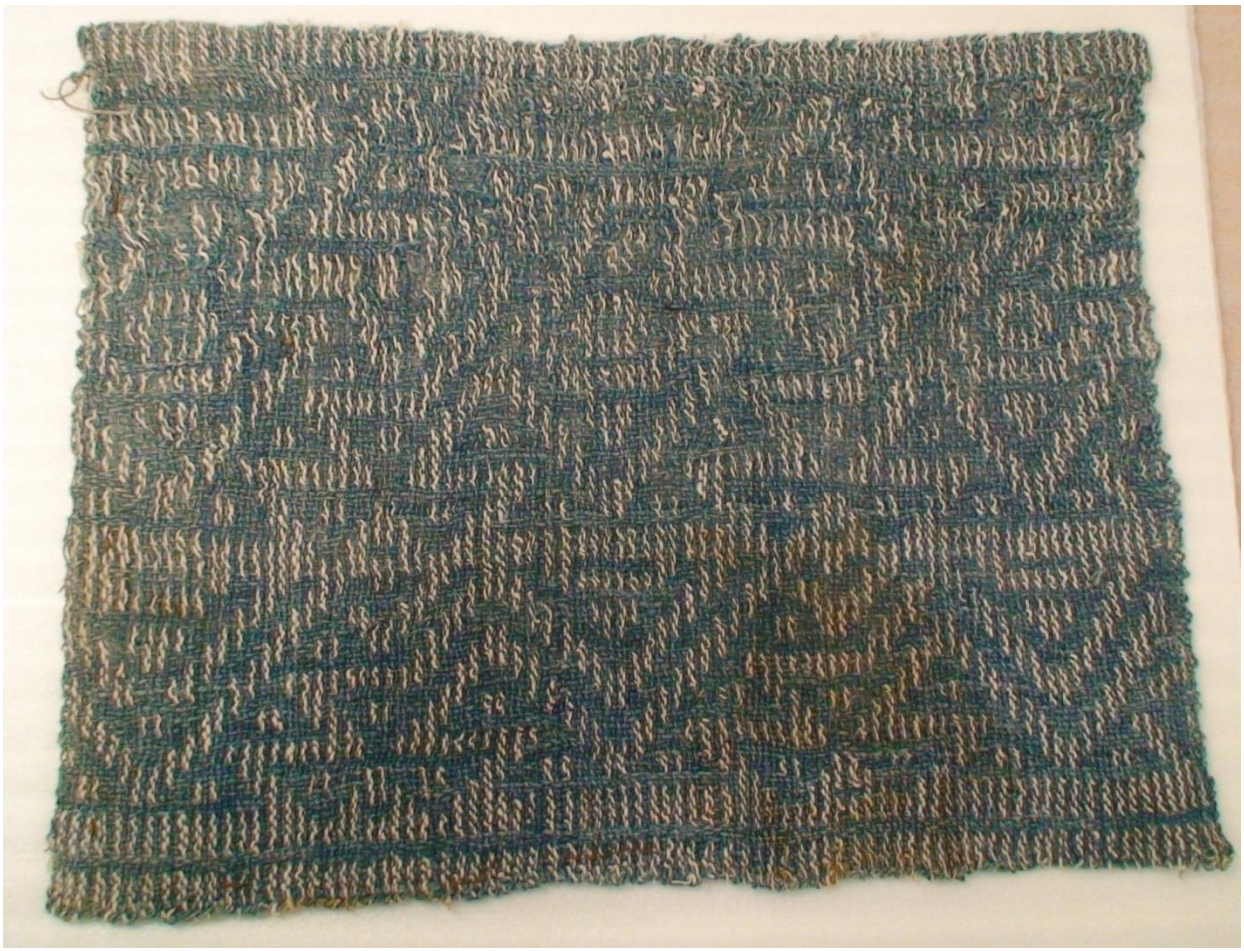
XIX-G-427
Dimensions: 5.5 cm by 35 cm
Technique: Plain-weave (1/2), Complementary warp
Material:
Warp: Z-2S gold and brown wool with Z spun pink wool
Weft: Z-2S brown wool with Z spun pink wool

XIX-G-428
Dimensions: 2.2 cm by 78 cm
Technique: Slit and Interlocked Tapestry
Material:
Warp: S-2Z cream cotton
Weft: Z-2S red, dark brown, gold, green, cream, and purple wool
Description: in this fabric some of the woolen yarns are deteriorated and in some parts and the warps are missing. Some of the slits are interlocked

XIX-G-429
Dimensions: 10 cm by 60 cm
Technique: Plain-weave (2/1), Weft-faced, Complementary weft
Material:
Warp: S spun white cotton
Weft: S spun white cotton, Z-2S red and yellow wool, Z spun black wool
Description: This fragment depicts a row of birds facing the same direction within horizontal bands.

XIX-G-430
Dimensions: 37 cm by 50.5 cm
Technique: Plain-weave (1/1), Supplementary weft
Panel 1
Warp: Z-2S white cotton
Weft: Z-2S white cotton
Panel 2
Warp: S spun dark brown cotton
Weft: Z-2S red wool and cream cotton with Z spun dark brown cotton
Description: This piece is made of 2 panels. The first executed in plain weave, is 5 cm by 50.5 cm. The other, woven in plain-weave and supplementary weft, is 31.5 cm by 50.5 with birds and striped pattern.

XIX-G-431
Dimensions: 26.2 cm by 33 cm
Technique: Plain weave (1/1)
Material:
Warp: Z-2S blue and white cotton
Weft: Z-2S blue cotton
Description: This textile is executed in plain-weave (1/1) with designs of birds.



XIX-G-432
Dimensions: 31.5 cm by 44 cm
Technique: Plain weave (1/1), Embroidery
Material:
Warp: Z-2S brick red cotton
Weft: Z-2S brick red cotton
Embroidery
Z-2S dark blue wool, Z-2S light brown and white cotton, S spun white cotton

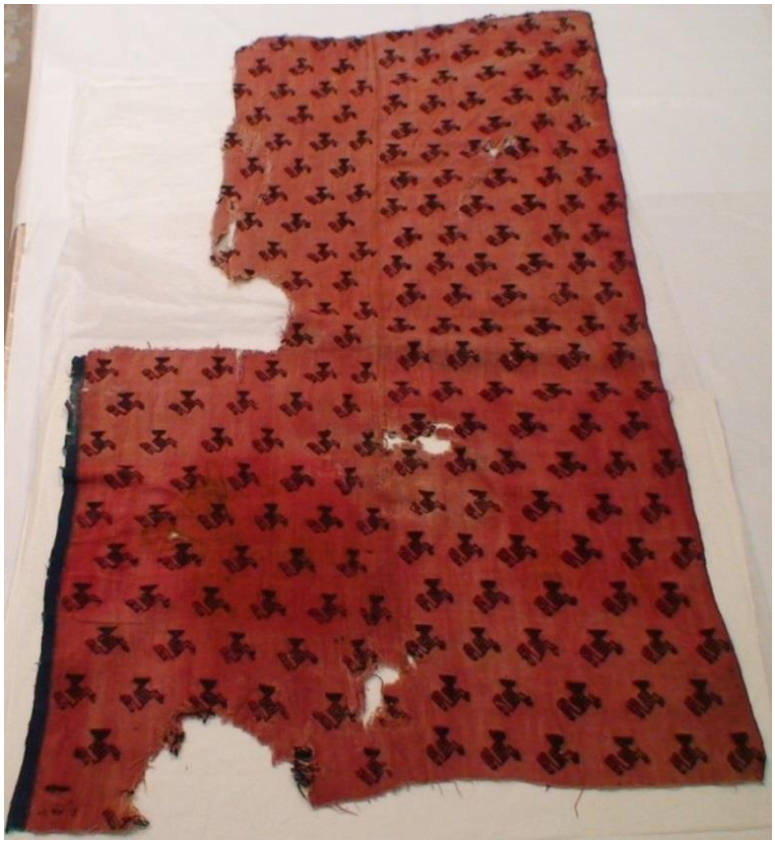
XIX-G-433
Dimensions: 3.5 cm by 171 cm
Technique: Plain-weave (1/1), warp-faced, Complementary warp, Braiding
Material:
Warp: S-2Z cream and dark brown wool, Z-2S pink wool
Weft: Z-2S brown wool
Description: This belt features diamonds and horizontal stripes; colors are reversed on the other side.

XIX-G-434
Dimensions: N/A
Technique: Braiding, Wrapping
Material:
Z-2S red, pink, green, purple, and yellow wool

XIX-G-435
Dimensions: 22.5 cm by 66 cm
Techniques: Slit Tapestry, Plain-weave (1/1)
Materials:
Panel 1
Warp: S-2Z gold wool
Weft: Z-2S red, pink, yellow, gold and cream wool
Panel 2
Warp: S-2Z gold wool
Weft: Z-2S red, pink, yellow, gold and cream wool
Panel 3
Warp: Z-2S white wool
Weft: Z-2S red wool
Description: This textile has three panels, 2 of which are identical in terms of techniques, patterns and colors; one is 6 cm by 35.7 cm and the other is 6 cm by 30. The third panel, executed in plain weave is 17 cm by 66 cm. The pattern of this fabric includes stylized zoomorphic face designs and abstract waves.
Note: For similar pattern see Tsunoyama (1977:65, 120) and Jiménez Díaz (2004: Nº CAT. 133)

XIX-G-436
Dimensions: 38.5 cm by 44 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S white, brown and dark brown wool
Weft: Z-2S brown wool

XIX-G-437
Dimensions: 56 cm by 94 cm
Technique: Plain-weave (1/1), Warp-faced, Supplementary weft
Material:
Panel 1
Warp: Z-2S pink cotton
Weft: Z-2S pink cotton with Z-2S red and black wool
Panel 2
Warp: Z-2S pink cotton
Weft: Z-2S pink cotton with Z-2S red and black wool
Panel 3
Warp: Z-2S dark blue cotton
Weft: Z-2S dark blue cotton
Description: This textile includes three panels; two of which are identical. One is 25.5 cm by 94 cm and the other is 28 cm by 94 cm. The third panel, executed in plain-weave, warp-faced, is 1.2 cm by 46.4 cm.



XIX-G-438
Dimensions: 26 cm by 44 cm
Techniques: Plain-weave (1/1), Warp-faced, Slit Tapestry
Materials:
Warp: Z-2S red, gold, brown wool and Z-2S cream cotton
Weft: Z-2S gold wool
Description: This piece of fabric is decorated with diagonal rows of birds facing opposite directions, separated by diagonal rows, with abstract birds in the borders. An anthropomorphic face is woven in tapestry on the lower left side; another is probably missing on the other side. This facial pattern reminds the facial decorations of Chancay style dolls.

XIX-G-439
Dimensions: 30 cm by 41 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Warp: Z-2S light blue cotton and Z-2S gold, light and dark brown, pink and cream wool
Weft: Z-2S light grey wool
Description: This piece of fabric is designed with rows of stylized bird, each forming a lozenge. They are separated by vertical stripes.

XIX-G-440
Dimensions: 22 cm by 62 cm
Techniques: Pebble-weave
Materials:
Warp: S spun white and dark blue cotton
Weft: S spun white cotton
Description: On one end, this textile seems to be either incomplete or trimmed, and on the other side, fringes are looped in (Z-2S) 2Z. Cat-birds are depicted in 9 diagonal rows, separated by diagonal rectangle rows. The blue yarns seem to be dyed.
Note: For similar technique see Kula (1988:72) and Cason & Cahlander (1976:47)

XIX-G-441
Dimensions: 8 cm by 37 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Warp: Z-2S gold, red and grey wool
Weft: Z-2S brown cotton
Description: In this fragment, birds, facing the same direction, are depicted in lozenges; the color of the birds and surrounding lozenges alternate.

XIX-G-442
Dimensions: 34 cm by 61.5 cm
Techniques: Slit Tapestry, Plain Weave (1/1)
Materials:
Panel 1
Warp: Z-2S cream cotton
Weft: Z-2S yellow, black, red, pink, purple and gold wool
Panel 2
Warp: Z-2S white cotton
Weft: Z-2S red wool
Description: This textile is made up of 2 panels. One executed in slit tapestry, measures 28 cm by 61.5 cm, and represents birds facing the same direction, striped pattern and waves. The other panel, woven in plain weave, is 16 cm by 61.5 cm. The 2 panels are attached using a Z-2S gold yarn.

XIX-G-443
Dimensions: 4 cm by 9.5 cm
Technique: Slit Tapestry
Material:
Warp: S-2Z dark brown wool
Weft: Z-2S red, black, white, yellow, gold and pink wool, Z spun blue wool
Description: Birds in alternating color and directions are represented.

XIX-G-444
Dimensions: 3.3 cm by 20.5 cm
Technique: Slit tapestry
Material:
Warp: Z-2S white wool
Weft: Z-2S dark and light pink, dark and light gold, white and purple wool
Description: This small band displays a bird in the center with waves in the borders surrounded by horizontal stripes. The fringes are complete on only one side.

XIX-G-446
Dimensions: 3.8 cm by N/A
Technique: Plain-weave (1/2), Complementary warp
Material:
Warp: Z-2S brown, gold, and red wool
Weft: Z-2S brown wool
Tassels
Z-2S red, light and dark pink, light and dark gold and brown wool
Description: This piece shows lozenges within red borders. The tassels are sewn to the textile using Z-2S brown wool.

XIX-G-447
Dimensions: 4.5 cm by 144 cm
Technique: Slit Tapestry
Material:
Warp: S-2Z cream cotton
Weft: Z-2S cream cotton, Z-2S red, yellow and black wool
Tassels:
S-3Z dark brown wool, Z-2S black, yellow and pink wool with Z-2S cream and light brown cotton
Description: This tasseled tapestry band, executed in slit tapestry, represents rows of birds. The wool used in weaving these birds has deteriorated and only traces of them are discernable.
Note: For similar kind of textile see Stone-Miller (1992:131)

XIX-G-448
Dimensions: 29 cm by 33 cm
Technique: Plain-weave (1/1), Supplementary weft
Material:
Warp: Z-2S brown cotton and white, grey wool, S spun yellow wool
Weft: Z-2S brown cotton
Description: This piece depicts birds within squares of alternating colors. The squares are separated by vertical and horizontal stripes portraying geometric designs.

XIX-G-449a
Dimensions: 5 cm by 21.5 cm
Technique: Plain-weave (1/1) with Complementary weft
Material:
Warp: Z-2S white cotton
Weft: Z-2S gold wool with Z spun red wool
Description: Rowe (1977:52) believes textiles like this "are always woven in red and yellow alpaca on a cotton brown warp with simple reciprocal designs of bird heads or frets set on diagonals."
Note: For similar pattern and technique see Rowe (1977:52)

XIX-G-449b
Dimensions: 11.5 cm by 30.5 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Warp: Z-2S dark brown, cream wool
Weft: Z-2S dark brown wool
Description: This piece of fabric with 3 selvages features a flowery design within lozenges.

XIX-G-449c
Dimensions: 7.9 cm by 9 cm
Technique: Plain-weave (1/1), Complementary weft
Material:
Warp: Z-2S brown wool
Weft: Z-2S yellow, brown and dark gold wool, Z spun red wool
Description: The design that represents cat-birds is separated with a diagonal row of triangles. This piece might have been part of a larger fabric, as stiches are seen on parts of it.

XIX-G-449d
Dimensions: 12 cm by 25 cm
Technique: Plain-weave (1/1), Brocade, Plain-weave (3/1), Weft-faced, Complementary weft
Material:
Warp: S spun white cotton
Weft: Z spun white cotton, Z-2S dark and light gold, black and light and dark pink wool
Description: This piece represents a zoomorphic motif in the center that might be a crab with a bird inside it, with interlocked abstract birds or interlocked waves in the border.
Note: For similar technique and pattern see Tsunoyama (1977:110)

XIX-G-449e
Dimensions: 15.5 cm by 21.5 cm
Technique: Plain-weave, Warp-faced, Complementary warp
Material:
Warp: Z-2S brown, cream cotton
Weft: Z-2S brown cotton
Description: This fragment depicts four rows of S-shaped designs in cream on a brown background within vertical stripes.

XIX-G-449f
Dimensions: 12 cm by 22 cm
Technique: Slit Tapestry
Material:
Warp: Z-2S cream wool
Weft: Z-2S light and dark pink, gold and yellow wool
Description: In parts of this fragmentary piece, slits are sewn together using Z-2S white wool. It represents steps in yellow and pink, and S-shaped designs in light pink.

XIX-G-450a

Dimensions: 16.5 cm by 27.5 cm
Technique: Double-Cloth
Material:
Warp: Z-2S cream and brown cotton
Weft: Z-2S cream and brown cotton
Description: The design adorning this fabric represents interlocked birds within horizontal stripes, birds and stepped pattern in the central part. Colors are reversed on the other side
Note: For similar pattern see Tsunoyama (1977:150) and Kula (1988:74).

XIX-G-450b
Dimensions: 10 cm by 11.5 cm
Technique: Slit Tapestry
Material:
Warp: Z-2S white cotton
Weft: Z-2S gold, light and dark pink and black wool
Description: This piece of fabric represents waves within horizontal stripes and probably a kind of abstract bird in the center. There are nine tapestry fringes; each is 0.8 cm by 4 cm. They are sewn together using Z-2S gold wool.

XIX-G-450c
Dimensions: 7 cm by 11.7 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Warp: Z-2S dark brown, cream wool
Weft: Z-2S dark brown wool
Description: This piece is probably part of XIX-G-449b.

XIX-G-450d
Dimensions: 13 cm by 19 cm
Technique: Plain-weave (1/1), Brocade (supplementary weft)
Material:
Warp: Z-2S light brown cotton
Weft: Z-2S light brown cotton and Z-2S dark brown, yellow, purple and pink wool
Note: For similar pattern and technique see Jiménez Díaz (2004: Nº CAT. 214)

XIX-G-450e
Dimensions: 3.5 cm by 15 cm
Technique: ? Plain-weave (1/1) with supplementary weft and discontinuous supplementary weft, Plain-weave (3/1)
Material:
Warp: S spun white cotton
Weft: S spun white cotton, Z-2S black, brown, red and white wool
Description: This piece represents birds facing the same direction with alternating colors. The design in this fragment is attained by varied weaving techniques.

XIX-G-450f
Dimensions: 4 cm by 14 cm
Technique: Plain-weave (1/1), weft-faced, with Complementary weft
Material:
Panel 1
Warp: Z-2S gold wool
Weft: Z-2S light and dark gold and black wool with Z spun red wool
Panel 2
Warp: Z-2S gold wool
Weft: Z-2S light and dark gold and black wool with Z spun red wool
Description: This piece of fabric is made up of 2 identical panels, each of which is 4cm by 7 cm, and are attached in an upside down direction. This piece represents cat-birds that are placed in squares.

XIX-G-450g
Dimensions: 12 cm by 19 cm
Technique: Plain-weave (1/1), Embroidery, Slit-Tapestry and Gauze
Material:
Warp: S spun white cotton
Weft: Z spun white cotton with Z-2S white cotton
Design
Z-2S red, brown and black wool
Note: For similar technique see O'Neale and Clark (1948:206-207)

XIX-G-450h
Dimensions: 2.5 cm by 19 cm
Technique: Plain-weave (1/1), Warp-faced, with Complementary Warp
Material:
Warp: Z-2S cream and brown cotton
Weft: Z-2S brown cotton
Description: The fabric is adorned with a zoomorphic design. Colors are reversed on the other side.
Note: For similar pattern see Tsunoyama (1977:118) and Stone-Miller (1992:251)

XIX-G-450i
Dimensions: 6 cm by 22.5 cm
Technique: Slit Tapestry
Material:
Warp: Z-2S dark gold wool
Weft: Z-2S light and dark gold, yellow, pink and black wool
Description: This piece of fabric executed in slit tapestry depicts a bird, outlined in red, within horizontal stripes and probably an anthropomorphic face in the center.

XIX-G-450j
Dimensions: 5.5 cm by 17 cm
Technique: Plain-weave (1/1), (2/1) and (3/1) with Complementary weft
Material:
Panel 1
Warp: Z-2s brown cotton
Weft: Z spun brown cotton, Z-2S dark brown, gold and black wool
Panel 2
Warp: Z-2s brown cotton
Weft: Z spun brown cotton, Z-2S dark brown, gold and black wool
Description: This piece is made up of 2 identical pieces, probably used as the border of a larger piece.
Note: For similar pattern see Stone-Miller (1992:44, Fig. IV.4) and Brommer (1988:57)

XIX-G-451a
Dimensions: 13.3 cm by 20 cm
Technique: Plain-weave (1/1), Warp-faced, and Complementary warp
Material:
Warp: Z-2S dark brown and gold wool
Weft: Z-2S dark brown wool

XIX-G-451b
Dimensions: 14 cm by 14 cm
Technique: Plain-weave (1/1), Supplementary Weft
Material:
Warp: Z-2S light brown cotton
Weft: Z-2S brown and light brown cotton
Description: This is an incomplete piece of fabric with only one selvedge available. The design represents zoomorphic heads placed in lozenges and is reverse on the other side of the fabric. Brown cotton used as supplemental element has decayed, so the design is missing in parts.

XIX-G-451c
Dimensions: 6 cm by 15 cm
Technique:?
Material:
Warp: S spun white cotton
Weft: Z-2S white cotton and black wool
Description: The design of this piece is made up of rows of interlocked birds separated by zig-zagged rows. Warps/wefts are not identifiable. Colors are reverse on the other side suggesting that this piece might be woven with complementary technique.

XIX-G-451d
Dimensions: 11.5 cm by 16 cm
Technique: Plain-weave (1/1), Slit Tapestry
Material:
Warp: Z-2S white cotton
Weft: Z-2S white cotton and Z-2S pink and light pink, light and dark gold wool
Description: This piece of fabric represents 2-headed birds in the central part, and interlocked abstract birds in the borders. Fringes are sewn together by the use of (Z-2S) 4Z gold yarn. Fringe are c. 0.8 cm by 5 cm.

XIX-G-451e
Dimensions: 7.5 cm by 15 cm
Technique: Plain-weave (1/1), Plain-weave (2/1), Weft-Faced with Complementary weft
Material:
Warp: Z-2S light brown cotton
Weft: S spun light brown cotton, Z-2s pink, black, and dark gold wool, Z spun cream cotton
Description: This band is probably part of a larger piece. Tsunoyama (1977:65, 115) believes the pattern depicts "rows of birds in full flight". However, the motif could also represent rows of fish.
Note: For similar pattern see Tsunoyama (1977:65, 115).

XIX-G-451f
Dimensions: 4 cm by 18 cm
Technique: Plain-weave (1/1), Warp-Faced with Complementary warp
Material:
Warp: Z-2S dark and light pink, yellow, gold, light blue, black and brick-red wool
Weft: Z-2S gold wool
Description: This complete band represents rows of birds facing the same direction.

XIX-G-451g
Dimensions: 17cm by 21 cm
Technique: Slit Tapestry
Material:
Warp: Z-2S light brown wool
Weft: Z-2S dark and light brown, light and dark pink, yellow, and light purple wool
Description: This fragmentary piece, woven with slit tapestry, shows abstract cat heads. Warps are paired.

XIX-G-451h

Dimensions: 11 cm by 13.5 cm
Technique: Double-Cloth
Material:
Warp: Z-2S brown and white cotton
Weft: Z-2S brown and white cotton
Description: The design of this piece of fabric represents interlocked zoomorphic faces placed diagonally in the center and horizontally in the border.

XIX-G-452
Dimensions: 17 cm by 17.5 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp, Supplementary warp and weft
Material:
Panel 1
Warp: Z-2S brown, light blue, white and grey cotton
Weft: Z-2S brown cotton
Panel 2
Warp: Z-2S white and brown cotton
Weft: Z-2S brown cotton
Panel 3
Warp: Z-2S white cotton and brown wool
Weft: Z-2S white cotton
Panel 4
Warp: S spun white cotton, Z-2S black, pink and yellow wool
Weft: S spun white cotton
Tassels:
Z-2S green, pink, yellow and purple wool
Pompoms:
Z-2S red and gold wool, Z spun gold wool
Description: This bag is made of four panels and also features two tassels and 2 pompoms. The first panel is executed in plain-weave with complementary warp. It covers both sides of the bag and depicts striped and geometric patterns. The second panel, also moves around the bag, is 1.8 cm by 32 cm. It shows a horizontal row of birds in alternating colors facing the same direction. The third panel, covering only one side of the bag, is 4 cm by 17 cm. The design depicted on this panel is not discernable. The forth panel, also covering one side of the bag, is 3.2 cm by 18.5 cm. It depicts abstract waves woven with supplementary weft on a plain-weave (1/1) base. The tassels are c. 13 cm long and the pompoms are 3.5 cm long.

XIX-G-453

Dimensions: 13 cm by 29 cm
Technique: Plain-weave (1/1), supplementary warp, Embroidery, Plain-weave (1/1), warp-faced, Complementary warp, Slit-tapestry, Tie-die
Material:
Hair:
Warp: Z-2S dark brown wool
Weft: Z-2S black wool
Head-band:
Warp: S spun brown cotton, Z-2S black wool
Weft: S spun brown cotton
Face:
Warp: Z-2S brown cotton
Weft: Z-2S brown cotton
Eye:
Z-2S dark brown and pink wool
Mouth:
Z-2S pink wool, Z-2S white cotton
Nose:
Z-2S pink wool
Tassels (earrings):
Z-2S pink, dark brown and yellow wool
Shirt:
Warp: Z-2S white, brown and chocolate cotton
Weft: Z-2S white cotton
Skirt:
Warp: Z-2S white cotton
Weft: Z-2S yellow, light and dark pink, and purple wool
Arms:
Z-2S pink wool
Hands:
Z-2S gold wool
Under-skirt:
Warp: S spun brown cotton
Weft: Z spun brown cotton
Poncho:
Warp: Z-2S white cotton
Weft: Z-2S yellow, gold, black, brown, and pink wool
Legs and feet:
Light and dark pink wool

XIX-G-454
Dimensions: 23.5 cm by 47 cm
Technique: Plain-weave (1/2), Warp-faced
Material:
Warp: Z-2S dark brown, red, yellow, gold, purple wool, Z-2S white cotton
Weft: Z-2S dark brown wool
Tassel: (right one)
Z-2S red, green, brown, cream, dark blue, crimson wool
Tassel: (left one)
Z-2S red, green, brown, cream, dark blue wool, S-2Z crimson wool
Description: The material and pattern of this bag suggest a highland origin. Each tassel is about 25 cm long.

XIX-G-455
Dimensions: 27.5 cm by 29 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S red, dark brown, gold and green wool
Weft: Z-2S brown and dark brown wool
Tassels
Z-2S red wool
Description: This bag is stitched on two sides. The tassels are attached to the bag with red wool. Each tassel is about 10 cm long.

XIX-G-456
Dimensions: 14.5 cm by 19.5 cm
Technique: Plain-weave (1/1), Plain-weave (2/1), Supplementary weft
Material:
Warp: Z-2S cream cotton
Weft: Z-2S cream cotton and dark brown wool
Description: The fabric is folded and stitched on two sides to form a bag. The design is executed in plain-weave (2/1) with supplementary weft and the back side, with Plain-weave (1/1).
Note: For similar textile, see Rowe (1977:34).

XIX-G-457
Dimensions: 46 cm by 52 cm
Technique: Plain-weave (1/1)
Material:
Warp: Z-2S cream and brown cotton
Weft: Z-2S cream cotton
Tassels:
Z spun brown and white cotton, Z-2S brown and white cotton
Description: This piece of fabric, probably a carrying cloth, is decorated with stripes of cream and brown cotton.

XIX-G-458
Dimensions: 16 cm by 20 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Warp: Z-2S dark brown, gold and brick-red wool
Weft: Z-2S brown wool
Strap
Warp: Z-2S dark brown and gold wool
Weft: Z-2S dark brown wool
Description: On the right side of this bag, the 2 layers of fabric forming the bag are stitched together. A knot at the end of the strap suggests that it was attached to the bag with a Z-2S gold yarn.

XIX-G-459
Dimensions: 9 cm by 15 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S red, pink, yellow, green and gold wool
Weft: Z-2S dark green wool
Description: The 2 layers are stitched on the sides of the shirt. The neck hole is 2 cm and the arm holes are 4.5 cm.

XIX-G-460
Dimensions: 9.5 cm by 12 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S cream, red, and green wool
Weft: Z-2S cream wool
Description: When folded, this miniature tunic is 9.5 cm by 12 cm. The arm holes are 0.8 cm and 1.5 cm long, and the neck hole is 1.5 cm long.

XIX-G-461

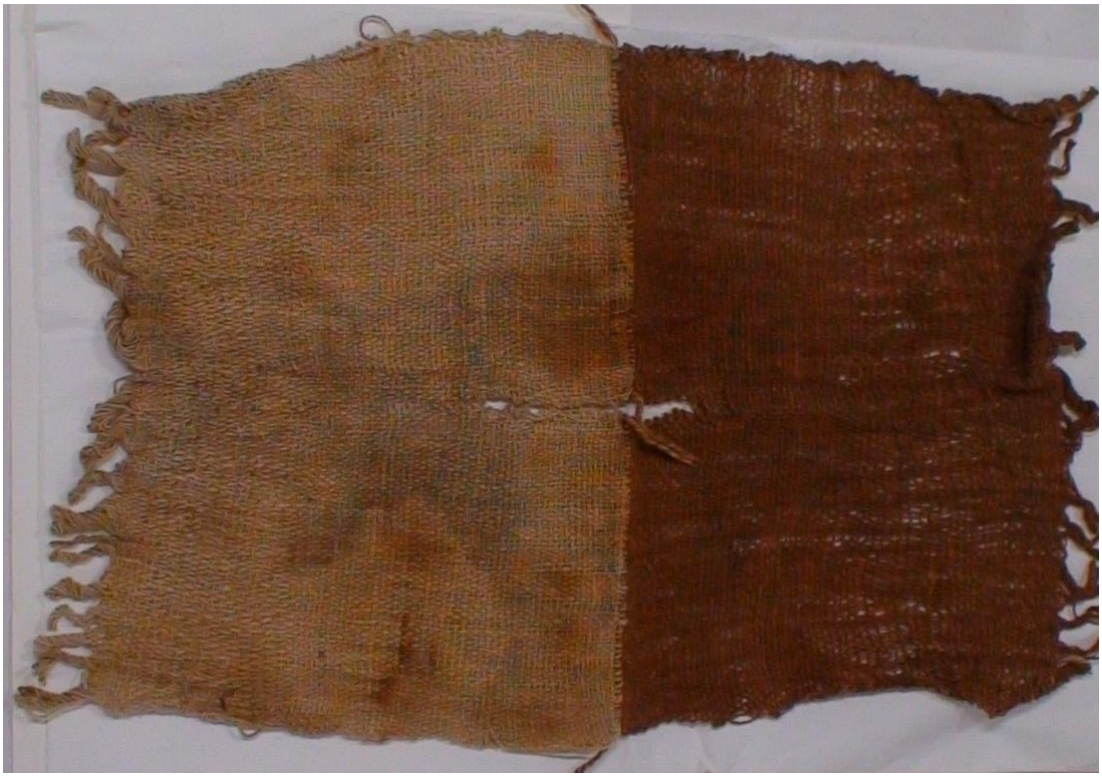
Dimensions: 9.5 cm by 63 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp, Braiding
Material:
Warp: Z-2S dark brown, dark blue, cream and orange wool
Weft: Z-2S dark brown wool
Strap:
Warp: Z-2S dark blue, dark brown and orange wool
Weft: Z-2S dark brown wool
Tassels:
Z-2S light blue, red, orange and cream wool.
Description: The main part of this bag is 8.6 cm by 9 cm. The strap is 58 cm long, and tassels are c. 26 cm long. The S-shaped design and material suggest that this bag could be from the highlands. It could also be modern.

XIX-G-462
Dimensions: 9.5 cm by 15 cm
Technique: Plain-weave (1/1)
Material:
Warp: Z spun white cotton
Weft: Z spun white cotton
Strap
Z-5S white cotton, (Z-2S) 5Z white cotton
Tassels
Z spun white cotton, Z-2S white cotton, Z-2S red wool
Description: This bag contains leaves, probably coca (*Erythroxylum coca*).

XIX-G-464
Dimensions: N/A
Technique: Slit-Tapestry
Material:
Warp: Z-2S white cotton
Weft: Z-2S orange, light and dark pink, yellow, and dark blue wool

XIX-G-465
Dimensions: 22 cm by 36 cm
Technique: Plain weave (2/1), Supplementary wefts
Materials:
Panel 1
Warp: S spun cream cotton
Weft: S spun cream cotton, with Z-2S brown and light green cotton, and Z spun dark grey, light green, light grey, light brown and green cotton
Panel 2
Warp: S spun cream cotton
Weft: S spun cream cotton, with Z-2S brown and light green cotton, and Z spun dark grey, light green, light grey, light brown and green cotton
Description: This tunic with cat and wave designs is composed of two identical panels; one is 16 cm and the other is 20 cm. They are stitched together using Z-2S cream cotton.

XIX-G-466
Dimensions: 23.5 cm by 38 cm
Technique: Plain-weave (1/1)
Material:
Panel 1
Warp: Z-2S white cotton
Weft: Z-2S white cotton
Panel 2
Warp: Z-2S brown cotton
Weft: Z-2S brown cotton
Description: This miniature poncho is made of 2 panels; the white part is 19 cm by 23.5 cm and the brown one is 20 cm by 23.5. A cord, 23 cm, of Z-5S white+brown cotton has passed through the middle of the fabric. Fringes are looped at both ends.



XIX-G-467
Dimensions: 28.5 cm by 44.5 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S cream and dark brown wool
Weft: Z-2S dark brown wool
Description: When folded, this poncho is 28.5 cm by 44.5 cm. Stretched, it would be 51 cm by 44.5 cm. The neck hole is 20 cm long. Some of the fringes are looped and their length is about 7 cm.

XIX-G-469
Dimensions: 61.5 cm by 28.5 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Panel 1
Warp: Z-2S black and gold wool
Weft: Z-2S dark brown wool
Panel 2
Warp: Z-2S black and gold wool
Weft: Z-2S dark brown wool
Description: This tunic is made up of 2 identical panels, one is 32 cm by 28.5 cm and the other is 29 cm by 28.5 cm. Arm holes are 15cm and neck hole is 13 cm.

XIX-G-470
Dimensions: 48 cm by 65 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Panel 1
Warp: Z-2S dark brown wool
Weft: Z-2S dark brown wool
Panel 2
Warp: Z-2S dark brown wool
Weft: Z-2S dark brown wool
Description: This tunic is made of two panels; woven with plain-weave (1/1). One is 32 cm by 48 cm and the other is 33 cm by 48 cm. In this tunic, the neck hole is 12 cm long, and the arm holes are 15.5 cm and 22.5 cm long.

XIX-G-473
Dimensions: 70 cm by 70.5 cm
Technique: Gauze, Plain-weave (1/1), weft-faced
Material:
Warp: Z-2S light brown, white and dark blue wool
Weft: Z-2S light and dark blue and light brown wool

XIX-G-474
Dimensions: 81 cm by 89 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Panel 1
Warp: Z-2S cream, brown, and white cotton
Weft: Z spun white cotton
Panel 2
Warp: Z-2S cream, brown, and white cotton
Weft: Z spun white cotton
Description: This piece of fabric is made of 2 identical panels, one is 10 cm by 89 cm and the other is 71 cm by 79. Holes have been mended.

XIX-G-476
Dimensions: 39.5 cm by 41.5 cm
Technique: Plain-weave (1/1)
Material:
Warp: Z-2s gold and dark brown wool
Weft: Z-2S dark brown wool
Description: This shirt is made of an un-cut cloth stitched on the sides. The arm holes are 7.8 cm and 13.5 cm long, while the neck hole is 12 cm long. The color of gold wool, used in creating stripes, has changed throughout time.

XIX-G-478
Dimensions: 6 cm by 79 cm
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Panel 1
Warp: Z-2S yellow, gold, light and dark pink wool
Weft: Z-2S light brown cotton
Panel 2
Warp: Z-2S yellow, gold, light and dark pink wool
Weft: Z-2S light brown cotton
Description: This piece is made of two panels; one is 6 cm by 70 cm and the other is 8 cm by 16 cm. Both panels depict vertical rows of geometric patterns with alternating colors. The panels are sewn to one another at right angle.

XIX-G-479
Dimensions: 46.5 cm by 60 cm
Technique: Gauze, Slit Tapestry
Material:
Warp: Z-2S white wool
Weft: Z-2S white, dark and light gold, and pink wool, with Z spun dark gold and white wool
Description: The design represents diagonal rows of birds, surrounded by rows of triangles. Abstract interlocking birds within horizontal stripes form the design of the border.

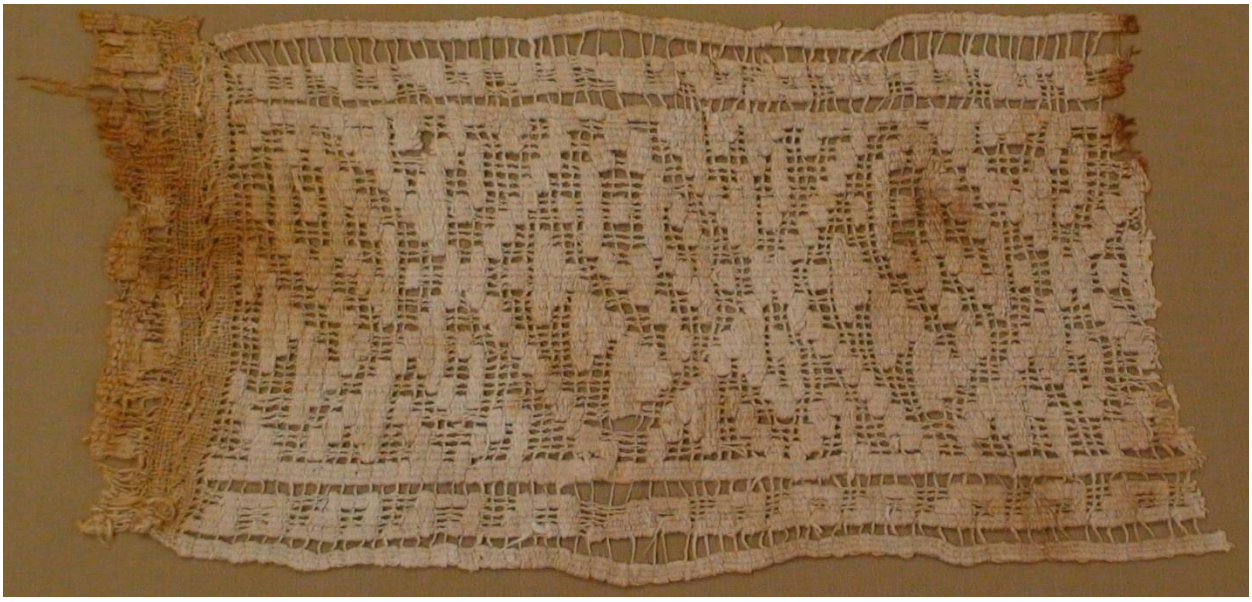
XIX-G-480
Dimensions: 20 cm by 22 cm
Technique: Slit-Tapestry
Material:
Warp: Z-2S brown wool
Weft: Z-2S yellow, red and gold wool

XIX-G-481
Dimensions: 17 cm by 17 cm
Technique: Slit-Tapestry
Material:
Warp: Z-2S cream cotton
Weft: Z-2S white cotton, and pink, yellow, brown, cream, black, and gold wool

XIX-G-482
Dimensions: 20.5 cm by 65.5 cm
Technique: Slit Tapestry, Plain-weave (1/1)
Material:
Panel 1
Warp: Z-2s cream wool
Weft: Z-2S dark and light yellow, dark and light pink, gold, purple, cream, light blue and dark brown wool with Z-2S cream wool (base)
Panel 2
Warp: Z-2s cream wool
Weft: Z-2S dark and light yellow, dark and light pink, gold, purple, cream wool with Z-2S cream wool (base)
Panel 3
Warp: Z-2s cream wool
Weft: Z-2S dark and light yellow, dark and light pink, gold, purple, cream wool with Z-2S cream wool (base)
Description: This tapestry border is made of 3 identical panels, 20.5 cm by 21.5 cm, 20 cm by 21 cm, and 20.5 cm by 23 cm. Some warps are paired, while others are tripled. Blue and dark brown is seen in the left panel.
Note: For similar technique see Brommer (1988:16) and Young (1985:133)

XIX-G-483
Dimensions: N/A
Technique: Plain-weave (1/1), Warp-faced, Complementary warp
Material:
Warp: Z-2S red, gold, dark green, green, cream, brown and dark brown wool
Weft: Z-2S light+dark brown wool
Description: This fabric seems to be part of a tunic. The patterns and material used suggest that it dates from the Late Horizon or Early Colonial period.
Note: For similar patterns see Brommer (1988:70), Jiménez Díaz (2004:Fig. 16), Stone-Miller (1992:252), and Tsunoyama (1977:140).

XIX-G-484a
Dimensions: 14 cm by 27 cm
Technique: Gauze, Slit-Tapestry
Material:
Panel 1
Warp: Z-2S white cotton
Weft: Z-2S, Z spun white cotton
Panel 2
Warp: Z-2 white cotton
Weft: Z-2S, Z spun white cotton with,
Description: This piece is made of two panels; one is 14 cm by 25 cm and the other 2 cm by 14 cm. The white cotton used as the weft is Z-2S. This fragment is probably part of XIX-G-406. Wefts are paired.
Note: For similar pattern see O'Neale and Clark (1948:206-207), Tsunoyama (1977:62, 106)



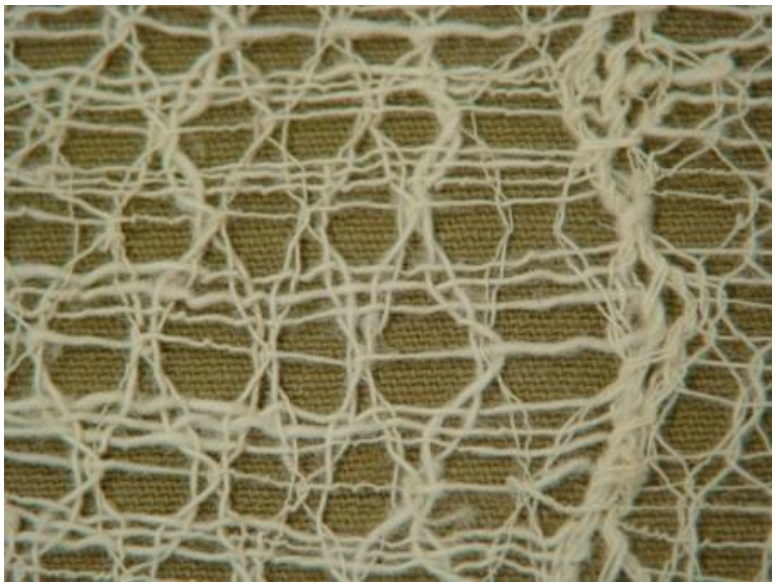
XIX-G-484b
Dimensions: 12 cm by 41 cm
Technique: Gauze, Slit-Tapestry
Material:
Warp: Z-2S white cotton
Weft: Z-2S, Z spun white cotton
Description: The white cotton used as the weft is Z-2S, however, it's hard to identify the spinning of the one used as embroidery to weave the designed part; it might be 2 single Z spun white cotton or Z-2S white cotton that is loosely plied. This fragment might be part of XIX-G-484a and XIX-G-406. Wefts are paired.
Note: For similar pattern see O'Neale and Clark (1948:206-207), Tsunoyama (1977:62, 106).

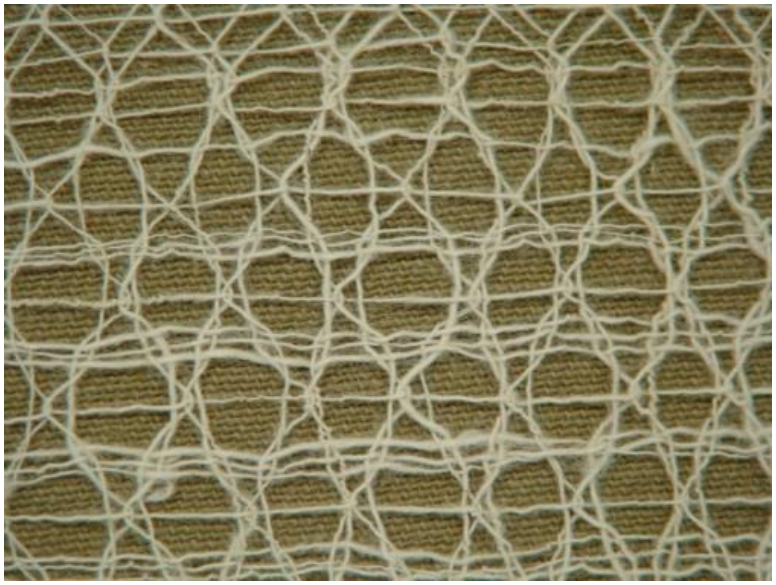
XIX-G-485
Dimensions: 2 cm by 44 cm and 1.5 by 26 cm
Technique: Plain-weave (1/1), Weft-faced
Material:
Warp: S-2Z cream cotton
Weft: Z-2S red and yellow wool and Z-2S white cotton
Tassel:
Z-2S yellow, white (?), and red wool
Description: These tassels were probably part of a belt or a larger fabric. Some of the missing warps are mended; however, the cream wool used to repair the missing parts seems to be modern.

XIX-G-486
Dimensions:
Technique:
Material:
Z-2S dark blue
Description: This is a spool of cotton on a corn cob

XIX-G-487
Dimensions: 25 cm by 40 cm
Technique: Plain-weave (1/1)
Material:
Warp: S spun white cotton
Weft: S spun white cotton

XIX-G-488
Dimensions: 44 cm by 78 cm
Techniques: Gauze
Materials:
Warp: S white cotton
Weft: S white cotton
Description: This piece is made up of 2 panels, the larger is 33 cm by 45 cm and the smaller is divided into 2 sections; the lower section is 30 cm by 10 cm and the upper section is 16 cm by 6 cm.





XIX-G-489
Dimensions: N/A
Technique: Gauze, Embroidery
Material:
Warp: S and Z spun white cotton
Weft: S spun white cotton
Description: This fabric features a cat design. Warps and wefts are paired.

XIX-G-490
Dimensions: N/A
Technique: Open-weave
Material:
Warp: S spun white cotton
Weft: S spun white cotton
Description: In this piece of textile, executed with open-weave technique, warps and wefts are paired.

XIX-G-491
Dimensions: 19 cm by 184.5 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S red and black wool
Weft: Z-2S black wool
Description: The fabric features some discoloration.

XIX-G-492
Dimensions: 18 cm by 196 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Warp: Z-2S red, grey and dark brown wool
Weft: Z-2S dark brown wool
Description: This fabric loosely woven in parts is a complete one with all selvedges available. This could have been a decorative object or it was originally sewn to another piece.

XIX-G-493
Dimensions: 7 cm by 14 cm
Technique:
Material:
S spun light blue and light brown cotton, Z-2S red, white, light and dark gold and cream wool, S spun cream, white, light and dark gold wool, and S spun light brown cotton
Description: The yarns dangling from the head of this doll suggest that it might originally have been used as a tassel.

XIX-G-494
Dimensions: 21 cm
Technique:
Material:
S spun white wool

XIX-G-495
Dimensions:
Technique:
Material:
Z spun and Z-2S white cotton

XIX-G-496

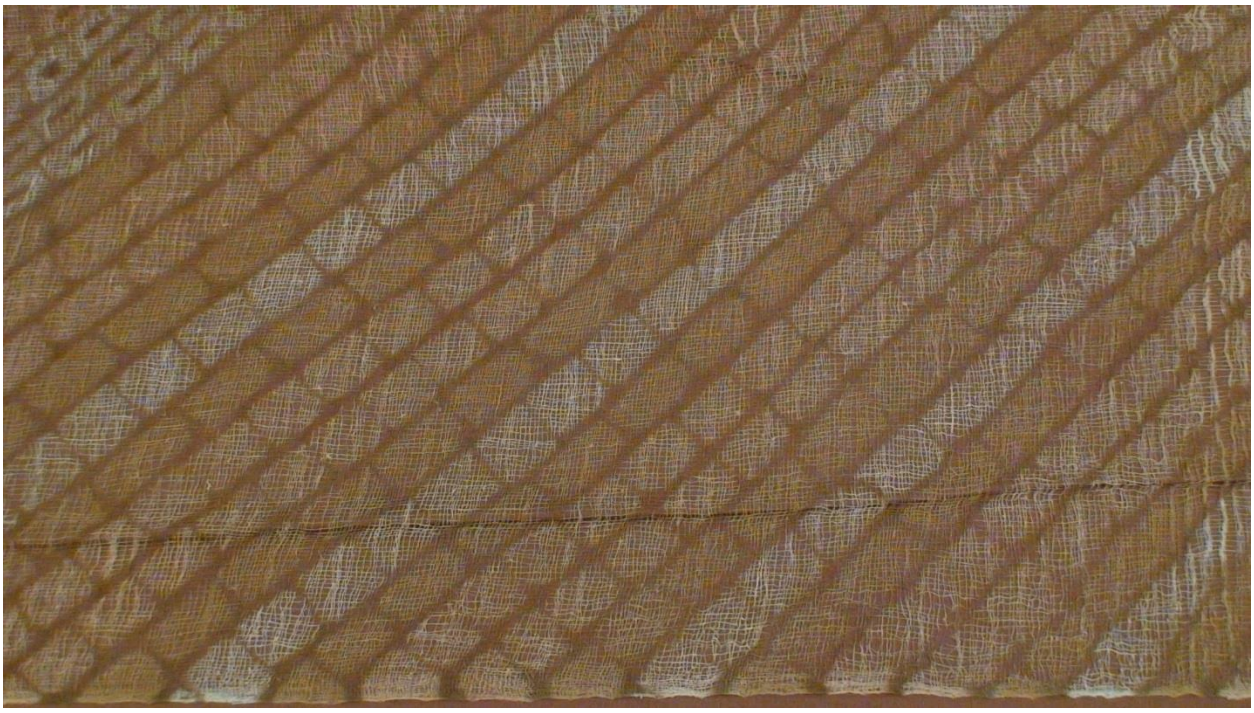
Dimensions: N/A
Technique: Plain-weave (1/1)
Material:
Warp: S spun blue cotton
Weft: S spun blue cotton
Unspun brown wool
Z spun white cotton

XIX-G-497
Dimensions: N/A
Technique:
Material:
S spun white cotton
Description: Spindle with black and red designs, over-spun white cotton.

XIX-G-501
Dimensions: N/A
Technique: Gauze
Material:
Warp: S spun white cotton
Weft: S spun white cotton
Bundle of yarns
Z-2S red, pink, purple, light brown wool, Z-2S green cotton, Z spun gold wool, S spun white and dark green cotton
Description: This catalogue number is not mentioned in the Museum's records.

XIX-G-504
Dimensions: 68.5 cm by 86.5 cm (approximately)
Technique: Slit Tapestry
Material:
Warp: S-2Z cream cotton
Weft: Z-2S red, brown, dark brown, gold and cream wool
Description: Missing parts of the design (a human figure standing with outreached arms, a monkey, and geometric patterns) were painted on the background cloth.

XIX-G-505
Dimensions: 142 cm by 152 cm
Technique: Plain-weave (1/1), Tie-dye
Material:
Warp: S spun white cotton
Weft: S spun white cotton
Description: Since there is a layer of fabric on top of this textile, it's hard to identify the spinning direction with certainty.
Note: For a similar technique see Tsunoyama (1977:177-183).



XIX-G-506
Dimensions: 7 cm by 180 cm
Technique: Plain-weave (1/2), Warp-faced, Braiding
Material:
Warp: Z-2S cream and light brown cotton
Weft: Z-2S tan+cream cotton
Description: This piece might be a belt. The weft seems to be paired; one yarn is cream, and the other is tan.

XIX-G-507
Dimensions: N/A
Technique: Plain-weave (1/2), Braiding
Material:
Warp: Z-2S white and brown cotton
Weft: Z-2S white cotton
Description: This piece might be a belt, however due to its decomposition it was impossible to measure its dimension.

XIX-G-508
Dimensions: 200 cm
Technique: Braiding, Wrapping
Material:
Z spun plant fiber with unspun (?) red wool

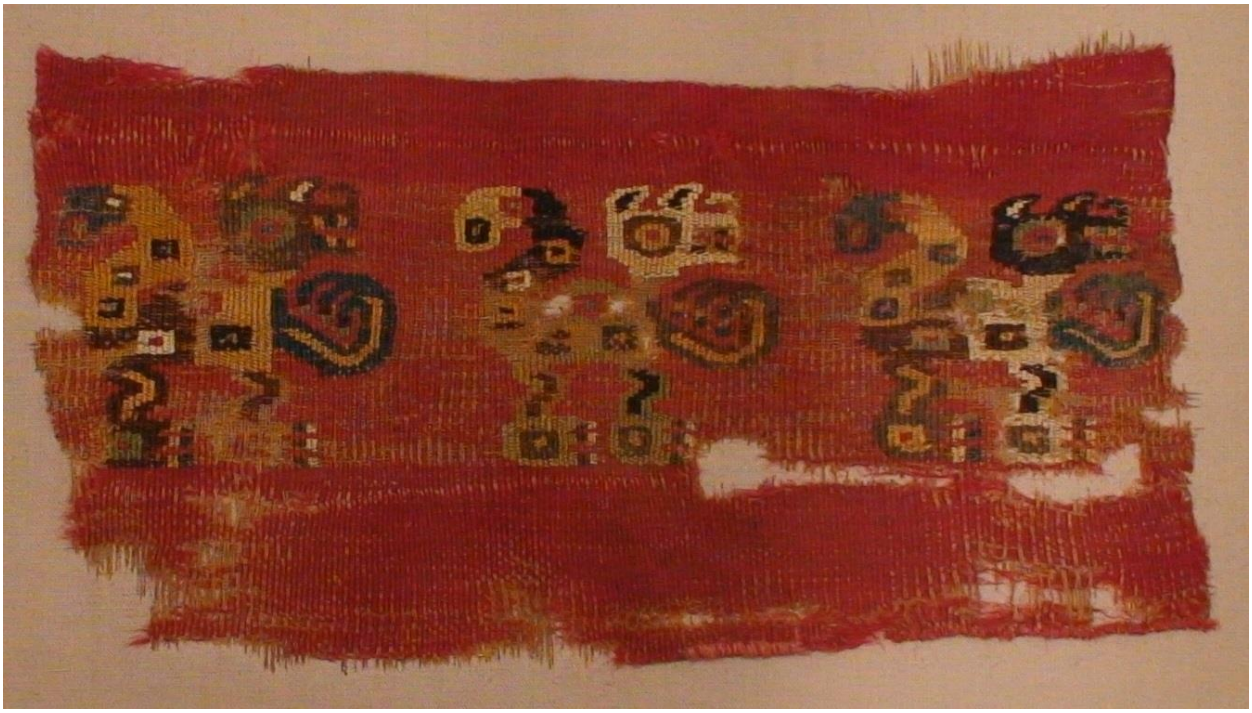
XIX-G-509
Dimensions: 1.5 cm by 43.5 cm
Technique: Slit Tapestry
Material:
Warp: Z-2S cream cotton
Weft: Z-2S yellow, black, brick-red, red, dark and light brown, green and dark blue wool
Tassels:
Z-2S brick-red and black wool
Description: The tassels of this band suggest that this fragment might be part of XIX-G-510. However, the spinning and the color of warp, and the designs are different. It might have been woven at the same workshop or by the same weaver as that of the other similar piece.

XIX-G-510
Dimensions: 2 by 47.5
Technique: Slit Tapestry
Materials:
Warp: S-2Z light pink cotton
Weft: Z-2S red, dark brown, dark green, blue, cream, yellow, pink, grey wool and Z-2S (?) cream cotton (?)
Tassels:
Z-2S green and red wool
Description: This piece was probably originally part of XIX-G-509. The design on this band includes horizontal striped patterns, lozenges and crosses. There are two 15 cm long tassels.

XIX-G-511
Dimensions: 2 cm by 142.5 cm (including the cords)
Technique: Plain-weave (1/1), Warp -faced, Complementary warp (?)
Material:
Warp: S spun cream wool, Z-2S red wool
Weft: Z-2S light brown cotton and red wool

XIX-G-512a
Dimensions: 8.5 cm by 30 cm
Technique: Plain-weave (3/1), Plain-weave (2/1), Plain-weave (1/1), Warp-faced, and Interlocked Tapestry
Material:
Warp: Z-2S light brown cotton
Weft: Z spun light and dark pink wool, S spun light brown wool, and Z-2S light and dark blue, cream, yellow, green, and pink wool
Description: This is an incomplete piece of fabric with two selvedges available. Its colors and techniques suggest that it might be part of XIX-G-512b.
Note: For similar technique see Jiménez Díaz (2004: Nº CAT. 100, 102, and 105)

XIX-G-512b
Dimensions: 12 cm by 24 cm
Technique: Interlocked Tapestry
Material:
Warp: S spun light brown cotton
Weft: Z spun pink wool, S spun light brown cotton, and Z-2S pink, green, blue, cream, yellow and dark brown wool
Description: This is an incomplete piece of fabric with one selvedge available. Its colors and techniques suggest that it might be part of XIX-G-512b.
Note: For similar technique see Jiménez Díaz (2004: Nº CAT. 100, 102, and 105)



XIX-G-513
Dimensions: ?
Technique: Braiding, Wrapping
Material:
Z-2S gold and red wool with S-2Z grey wool, S spun gold wool
Tassels
Z-2S red and gold wool
S-2Z grey wool

XIX-G-514
Dimensions: 3.5 cm by 137 cm
Technique: Braiding, Wrapping
Material:
Z-2S cream wool with S spun gold and dark brown wool
Description: This piece might be a sling; however, the open part, which is 13cm, is too large for holding a stone. It is braided at the ends and has a loop at one end.

XIX-G-516
Dimensions: N/A
Technique:
Material:
Batt of unspun dark brown wool and Z-2S brown cotton wrapped around a piece of bone

XIX-G-517
Dimensions: 6 cm by 21 cm
Technique: Slit/Outlined Tapestry, Plain-weave (1/1), Braiding
Material:
Panel 1
Warp: Z-2S white cotton
Weft: Z-2S red, brown, yellow and black wool
Panel 2
Warp: Z-2S brown cotton
Weft: Z-2S brown cotton
Fringe:
Z-2S yellow, red and black wool
Description: This fragment, probably a decorative element of a larger piece, is made of 3 panels. In the first panel, 1.8 cm by 12 cm and 2 cm by 3.5 cm, executed with slit tapestry, some of the slits are outlined. This panel depicts birds and anthropomorphic face. The second panel is woven in Plain-weave and is 3 cm by 6.5 cm. The fringe that surrounds parts of this fragment is 1.5 cm by 28.5 cm. White S spun cotton stiches are visible.
Note: For a similar piece see Kula (1988:63).

XIX-G-518
Dimensions: 46 cm
Technique: Braiding
Material:
Z spun cream plant fiber, unspun yellow wool, Z-2S red, yellow and black wool
Note: For a similar object see Brommer (1988:38).

XIX-G-519
Dimensions: 60 cm
Technique: Braiding, Wrapping
Material:
Cream plant fiber, unspun yellow wool, Z-2S red, black and yellow wool
Note: For a similar object see Brommer (1988:38).

XIX-G-520
Dimensions: 23 cm
Technique: Braiding
Material:
Unspun yellow wool, cream plant fiber
Note: For a similar object see Brommer (1988:38).

XIX-G-521
Dimensions: 20 cm by 30 cm
Technique: Gauze
Material:
Panel 1
Warp: S spun white, dark blue, and brown wool with Z-2Slight blue and brown wool
Weft: S spun blue wool (?)
Panel 2
Warp: S spun white, dark blue, and brown wool
Weft: S spun blue wool (?)
Description: This fabric is made up of two panels, one is 18 cm by 20 cm, and the other is 12 cm by 20 cm. They are attached together using two S spun brown wool. There is a Z-2S brown wool yarn beside the fabric.

XIX-G-522
Dimensions: N/A
Technique: Plain-weave (1/1), Gauze
Material:
Warp: S spun brown, and light and dark blue wool
Weft: S spun brown, and light and dark blue wool
Description: Some of the yarns used in weaving this piece are over-spun.

XIX-G-523
Dimensions: N/A
Technique: Gauze
Material:
Warp: S spun dark blue, white and brown wool
Weft: S spun dark blue, white and brown wool

XIX-G-526
Dimensions: N/A
Technique: Plain-weave (1/1), Plain-weave (3/1), Supplementary weft
Material:
Warp: Z-2S cream cotton
Weft: Z-2S cream cotton, dark brown and gold wool
Tassel:
Z spun white cotton

XIX-G-527
Dimensions: N/A
Technique: Gauze
Material:
Warp: S spun dark brown cotton
Weft: S spun dark brown cotton
Unspun white cotton

XIX-G-528
Dimensions: 15 cm by 71 cm
Technique: Plain-weave (1/1)
Material:
Panel 1
Warp: Z-2S cream cotton
Weft: Z-2S cream cotton
Panel 2
Warp: Z-2S cream and dark brown cotton
Weft: Z-2S dark brown cotton
Description: This piece is made of two panels, one is 3 cm by 42 cm, and the other is 12 cm by 71 cm.

XIX-G-530
Dimensions: 84 cm by 98 cm
Technique: Plain-weave (1/1), Warp-faced
Material:
Panel 1
Warp: Z-2S dark brown wool
Weft: Z-2S brown+cream, dark brown and cream wool
Panel 2
Warp: Z-2S dark brown wool
Weft: Z-2S brown+cream, dark brown and cream wool
Description: This fabric is made of 2 identical panels; one is 41 cm by 98 cm and the other is 43 cm by 98cm. The panels are attached together using (Z-2S) 2Z brown+cream cotton.

XIX-G-531
Dimensions: 18 cm by 32.8 cm
Technique: Plain-weave (1/1), Complementary weft, Braiding
Material:
Warp: S spun white cotton, Z-2S brown cotton
Weft: S spun white cotton, Z-2S brown cotton, Z-2S yellow, black and pink wool
Strap:
S spun white cotton, Z-2S yellow and pink wool
Description: In this bag, white cotton has decayed more than other yarns.

XIX-G-532
Dimensions: 14 cm by 19 cm by 38 cm
Technique: Plain-weave (1/1)
Material:
Warp: Z-2S light and dark green and yellow wool
Weft: N/A
Description: This fragment was on top of the box.

XIX-G-690.1
Dimensions: N/A
Technique: Plain-weave (1/1), Supplementary weft
Material:
Warp: Z-2S light brown cotton
Weft: Z-2S light brown cotton and red wool

XIX-G-690.2
Dimensions: 9 cm by 40 cm
Technique: Plain-weave (1/1), Weft-faced, Complementary weft
Material:
Warp: Z-2S light brown cotton
Weft: Z-2S light brown cotton, pink, white and yellow wool

XIX-G-690.3
Dimensions: 4.5 cm by 20.5 cm
Technique: (?)Plain-weave (1/1), Complementary weft, Plain-weave (2/1), Supplementary weft
Material:
Warp: Z-2S white cotton
Weft: Z-2S white cotton and Z-2S pink, yellow, green, black wool
Description: This fragment is probably part of XIX-G-404.

XIX-G-690.4
Dimensions: 7 cm by 24 cm
Technique: (?) Plain-weave (1/1), Plain-weave (1/1), Warp-faced, Complementary weft, Plain-weave (2/1), Supplementary weft
Material:
Panel 1
Warp: S spun white cotton
Weft: S spun white cotton, Z-2S pink, dark brown, yellow wool, Z-2S white and green cotton
Panel 2
Warp: S spun white cotton
Weft: S spun white cotton, Z-2S pink, dark brown, yellow wool, Z-2S white and green cotton
Description: This is probably part of XIX-G-404 and XIX-G-690.3. It is made of 2 panels; one is 4 cm by 24 cm, the other is 2.5 cm by 24 cm.
Note: For a similar pattern see Tsunoyama (1977:139).

XIX-G-690.5
Dimensions: 57.5 cm by 121 cm
Technique: Plain-weave (1/1), Supplementary weft
Material:
Warp: Z-2S light brown cotton
Weft: S spun light brown cotton, Z-2S black wool

XIX-G-690.6
Dimensions: 9.5 cm by 22 cm
Technique: Plain-weave (1/1), Weft-faced, Supplementary weft
Material:
Warp: Z-2S white cotton
Weft: Z-2S white cotton and black wool

XIX-G-690.7
Dimensions: 241.5 cm
Technique: Braiding, Wrapping
Material:
Z spun cream and brown plant fiber, Z-2S pink wool

XIX-G-718
Dimensions: 14.5 cm by 34.5
Technique: Plain-weave (1/1), Plain-weave (1/1), Warp-faced, Complementary weft, Embroidery,
Material:
Hair:
Warp: Z-2S dark brown wool
Weft: Z-2S dark brown wool
Earrings:
Z-2S light and dark pink, Z-2S light brown, black, and grey wool
Head-band:
Warp: S spun white cotton
Weft: s-2Z cream cotton, Z-2S grey wool
Face:
Warp: Z-2S white cotton
Weft: Z-2S white cotton
Eyes:
Z-2S pink, brown and black wool
Nose:
Z-2S pink wool
Mouth:
Z-2S pink wool, Z-2S white and blue cotton
Shawl:
Warp: Z-2S brown cotton
Weft: Z-2S brown cotton
Arms and hands:
Z-2S cream, light pink and grey wool
Dress:
Warp: Z-2S dark blue, gold and light brown wool
Weft: Z-2S white cotton
Under skirt:
Warp: Z-2S white cotton, S spun blue cotton
Weft: S spun blue cotton, Z-2S brown and white cotton
Legs and feet:
Z-2S gold, blue, light and dark pink, and purple wool


XIX-G
718

XIX-G-722
Dimensions: 5 cm by 15.5 cm by 37.5 cm
Technique: Plain-weave (1/1), Slit Tapestry, Braiding
Material:
Panel 1
Warp: Z-2S white and brown cotton
Weft: Z-2S white cotton
Panel 2
Warp: Z-2S white cotton
Weft: Z-2S yellow, pink, cream, and purple wool
Panel 3
Z-2S black and white wool

Appendix B: Textile Data from the CMH

This appendix provides raw information on the woven objects under study.

Key Table

Technique

PW-b	Plain-weave balanced
PW-wa	Plain-weave warp-faced
PW-we	Plain-weave weft-faced
PW (2/1)-b	Plain-weave (2/1) balanced
PW (2/1)-wa	Plain-weave (2/1) warp-faced
PW (2/1)-we	Plain-weave (2/1) weft-faced
PW (1/2)-b	Plain-weave (1/2) balanced
PW (1/2)-wa	Plain-weave (1/2) warp-faced
PW (1/3)-b	Plain-weave (1/3) balanced
PW (1/3)-wa	Plain-weave (1/3) warp-faced
PW (3/1)-b	Plain-weave (3/1) balanced
PW (3/1)-wa	Plain-weave (3/1) warp-faced
PW (3/1)-we	Plain-weave (3/1) weft-faced
PW (4/1)-we	Plain-weave (4/1) weft-faced
PW (1/4)-b	Plain-weave (1/4) balanced
PW (1/4)-wa	Plain-weave (1/4) warp-faced
C	Complementary
S-T	Slit-tapestry
Pb-W	Pebble-weave
G	Gauze
S	Supplementary
E	Embroidery
B	Braiding
W	Wrapping
OT	Outlined Tapestry
E-T	Eccentric Tapestry
I-T	Interlocked Tapestry
D-C	Double-Cloth
Br	Brocade
MW	Mat-Work
P	Painting
T-D	Tie-Dye
O-W	Open-Work

Function

F	Fragment
T	Tunic
R-F	Rectangular Fabric
S	Sling
B	Belt
U-W	Unspun Wool
B-Y	Bundle of Yarns
T-L	Textile on the Loom
T-B	Tapestry Border
P	Poncho
D	Doll
W-B	Weaving Basket
M	Miscellaneous
D-F	Decorative Fabric

Design

S	Striped Pattern
Z	Zoomorphic
A	Anthropomorphic
G	Geometric
P	Plain

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
XIX-G-18	T-B	14 X 45.5	1	14 X 45.5	g	S-T	l.brown	Cotton	Z-2S	d.gold	Wool	Z-2S
										l.gold	Wool	Z-2S
										l.purple	Wool	Z-2S
										d.brown	Wool	Z-2S
										l.pink	Wool	Z-2S
										yellow	Wool	Z-2S
										d.pink	Wool	Z-2S
										grey	Wool	Z-2S
										black	Wool	Z-2S
										cream	Wool	Z-2S
XIX-G-38	D	11 X 31	1	11 X 31		PW-b	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
			2			PW-wa	cream	Cotton	Z-2S	white	Cotton	Z-2S
							blue	Cotton	Z-2S			
							white	Cotton	Z-2S			
							brown	Cotton	Z-2S			
			3			PW-b	white	Cotton	Z-2S	white	Cotton	Z-2S
						E	black	Wool	Z-2S			
							pink	Wool	Z-2S			
							white	Wool	Z-2S			
							black	Wool	Z-2S			
							pink	Wool	Z-2S			
							cream	Cotton	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							white	Cotton	Z-2S			
			4			PW-wa	l.brown	Cotton	Z-2S	l.brown	Cotton	Z-2S
							cream	Cotton	Z-2S			
			5			PW (1/3)-wa	white	Cotton	S / Z-2S	white	Cotton	Z / Z-2S
						C	blue	Cotton	Z-2S			
							l.brown	Cotton	Z-2S			
			6				l.pink	Wool	Z-2S			
			7				l.pink	Wool	Z-2S			
			8			PW (1/2)-b	l.blue	Cotton	S	l.blue	Cotton	S
			9			PW-b	d.brown	Cotton	S	d.brown	Cotton	S
XIX-G-39	D	N/A	1	N/A		PW-b	white	Cotton	S	white	Cotton	S
			2				d.brown	Wool	Z-2S			
			3			?	white	Cotton	Z-2S	l.brown	Cotton	Z-2S
						E	l.brown	Cotton	Z-2S			
							pink	Wool	Z-2S			
							black	Wool	Z-2S			
							pink	Wool	Z-2S			
							pink	Wool	Z-2S			
			4			S-T				l.gold	Wool	Z-2S
										d.gold	Wool	Z-2S
										pink	Wool	Z-2S
										green	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
			5				pink	Wool	Z			
			6			PW-b	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
			7			PW-wa	white	Cotton	Z-2S	l.brown	Cotton	Z-2S
						E	l.brown	Cotton	Z-2S			
							pink	Wool	Z-2S			
							black	Wool	Z-2S			
							pink	Wool	Z-2S			
							pink	Wool	Z-2S			
			8				pink	Wool	Z-2S			
			9			PW-b	brown	Cotton	Z-2S	brown	Cotton	Z-2S
						S	l.pink	Wool	Z-2S			
							gold	Wool	Z-2S			
			10			B	yellow	Wool	unspun			
							red	Wool	Z-2S			
							brown	Wool	Z-2S			
							yellow	Wool	Z-2S			
							brown	Plant	N/A			
XIX-G-154	M	N/A	1	N/A			yellow	Wool	Z-2S			
			2				brown	Cotton	unspun			
							green	Cotton	Z-2S			
			3				white	Cotton	Z			
			4			PW-wa	l.brown	Wool	Z-2S	l.brown	?	N/A

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							d.green	Wool	Z-2S			
							l.green	Wool	Z-2S			
XIX-G-159	F	N/A	1	N/A	p	PW-b	d.brown	Cotton	Z-2S	d.brown	Cotton	Z-2S
							cream	Cotton	Z-2S			
XIX-G-162	F	20 X ?	1	20 X ?	s	PW-wa	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
					g	C	d.blue	Wool	Z-2S			
							l.blue	Wool	Z-2S			
							cream	Wool	Z-2S			
							l.brown	Wool	Z-2S			
							chocolate	Wool	Z-2S			
XIX-G-163	F	13.5 x ?	1	13.5 X 18	s	PW-wa	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
					g	C	d.blue	Wool	Z-2S			
							l.blue	Wool	Z-2S			
							cream	Wool	Z-2S			
							l.brown	Wool	Z-2S			
							chocolate	Wool	Z-2S			
XIX-G-164	F	11.5 X 32	1	11.5 X 32	s	PW-wa	d.blue	Wool	Z-2S	d.blue	Wool	Z-2S
							l.blue	Wool	Z-2S			
							cream	Wool	Z-2S			
							l.brown	Wool	Z-2S			
XIX-G-165	R-F	91.5 X 42	1	46 X 42		PW-b	brown	Cotton	Z-2S	brown	Cotton	Z-2S
							l.brown	Cotton	Z-2S	l.brown	Cotton	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
			2	45.5 X 42	g	PW-b	brown	Cotton	Z-2S	brown	Cotton	Z-2S
							l.brown	Cotton	Z-2S	l.brown	Cotton	Z-2S
XIX-G-166	F	22.5 X 25	1	?	s	PW-wa	cream	Cotton	Z-2S	cream	Cotton	Z-2S
							l.brown	Cotton	Z-2S			
							l.green	Cotton	Z-2S			
							d.grey	Cotton	Z-2S			
							cream+white	Cotton	Z-2S			
			2	?	s	PW-wa	cream	Cotton	Z-2S	cream	Cotton	Z-2S
							l.brown	Cotton	Z-2S			
							l.green	Cotton	Z-2S			
							d.grey	Cotton	Z-2S			
							cream+white	Cotton	Z-2S			
XIX-G-167	F	27 X31	1	27 X 31	s	PW-wa	white	Cotton	Z-2S	white	Cotton	Z-2S
							blue	Cotton	Z-2S			
							l.blue	Cotton	Z-2S			
							cream	Cotton	Z-2S			
							brown	Cotton	Z-2S			
XIX-G-168	F	18.5 X 24	1	18.5 X 24	s	PW-wa	white	Cotton	Z-2S	white	Cotton	Z-2S
							brown	Cotton	Z-2S			
							blue	Cotton	Z-2S			
							l.blue	Cotton	Z-2S			
XIX-G-169	F	17 X 21	1	9.5 X 21	s	PW-wa	white	Wool	Z-2S	cream	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							cream	Wool	Z-2S			
							d.blue	Wool	Z-2S			
							l.blue	Wool	Z-2S			
							brown	Wool	Z-2S			
			2	9.5 X 21	s	PW-wa	white	Wool	Z-2S	cream	Wool	Z-2S
							cream	Wool	Z-2S			
							d.blue	Wool	Z-2S			
							l.blue	Wool	Z-2S			
							brown	Wool	Z-2S			
XIX-G-170	F	24.5 X 31	1	24.5 X 31	s	PW-wa	blue	Wool	Z-2S	brown	Cotton	Z-2S
							white	Wool	Z-2S	d.blue	Wool	Z-2S
							l.blue	Wool	Z-2S	white	Wool	Z-2S
							l.brown	Wool	Z-2S			
							brown	Wool	Z-2S			
XIX-G-171	F	21.5 X 33.5	1	9 X 21.5	g	PW-b	cream	Wool	Z-2S	cream	Wool	Z-2S
							white	Wool	Z-2S	d.blue	Wool	Z-2S
							l.blue	Wool	Z-2S			
							d.blue	Wool	Z-2S			
							brown	Wool	Z-2S			
			2	21.5 X 24.5	g	PW-b	cream	Wool	Z-2S	cream	Wool	Z-2S
							white	Wool	Z-2S	d.blue	Wool	Z-2S
							l.blue	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							d.blue	Wool	Z-2S			
							brown	Wool	Z-2S			
XIX-G-172	F	27.5 X 36	1	27.5 X 36	s	PW-wa	white	Wool	Z-2S	white	Wool	Z-2S
							cream	Wool	Z-2S			
							brown	Wool	Z-2S			
							d.blue	Wool	Z-2S			
							l.blue	Wool	Z-2S			
XIX-G-173	F	27.5 X 35	1	27.5 X 35	s	PW-wa	brown	Cotton	Z-2S	cream	Cotton	Z-2S
							l.brown	Cotton	Z-2S			
							l.blue	Cotton	Z-2S			
							white	Cotton	Z-2S			
XIX-G-174	F	26 X 35	1	26 X 35	s	PW-wa	l.blue	Cotton	Z-2S	brown	Cotton	Z-2S
							cream	Cotton	Z-2S			
							d.blue	Cotton	Z-2S			
							brown	Cotton	Z-2S			
XIX-G-175	F	26 X 31	1	26 X 31	s	PW-wa	blue	Cotton	Z-2S	white	Cotton	S
						PW (2/2)	l.blue	Cotton	Z-2S	brown	Cotton	S
							cream	Cotton	Z-2S	blue	Cotton	S
							white	Cotton	Z-2S	white	Cotton	Z-2S
							brown	Cotton	Z-2S	brown	Cotton	Z-2S
							blue	Cotton	S	blue	Cotton	Z-2S
							white	Cotton	S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							brown	Cotton	S			
XIX-G-176	F	41.3 X 72	1	41.3 X 72	s	PW-wa	l.brown	Cotton	Z-2S	l.brown	Cotton	Z-2S
						C	white	Cotton	Z-2S			
							blue	Cotton	Z-2S			
							grey	Cotton	Z-2S			
							brown	Cotton	Z-2S			
XIX-G-177	Bag	22 X 23	1	16 X 23	z	B	yellow	Wool	Z-2S	white	Cotton	Z-2S
						W	red	Wool	Z-2S			
			2	12.5 X ?	g	S-T	cream	Cotton	Z-2S	brown	Wool	Z-2S
					g	I-T				cream	Wool	Z-2S
										red	Wool	Z-2S
										green	Wool	Z-2S
										yellow	Wool	Z-2S
			3	5.5 X ?	p	PW-wa	cream	Cotton	Z-2S	cream	Cotton	Z-2S
			4			B	white	Cotton	Z-2S			
			5			B	d.brown	Wool	Z-2S			
			6	13			red	Wool	Z-2S			
							yellow	Wool	Z-2S			
XIX-G-178	B	282 X 7	1	206 X 7	z	S-T	cream	Wool	S-2Z	red	Wool	Z-2S
					a	OT				d.brown	Wool	Z-2S
					s					cream	Cotton	Z-2S
										cream	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
										black	Wool	Z-2S
										yellow	Wool	Z-2S
										pink	Wool	Z-2S
			2				red	Wool	Z-2S			
							black	Wool	Z-2S			
							yellow	Wool	Z-2S			
							gold	Wool	Z-2S			
							l.brown	Wool	Z-2S			
			3				black	Wool	Z-2S			
							red	Wool	Z-2S			
							gold	Wool	Z-2S			
							l.brown	Wool	Z-2S			
							yellow	Wool	Z-2S			
XIX-G-179	B	3.2 X 151	1	3.2 X 151	z	S-T	d.gold	Wool	Z-2S	cream	Wool	S-2Z
					g					black	Wool	S-2Z
										red	Wool	S-2Z
										yellow	Wool	S-2Z
										l.gold	Wool	S-2Z
										d.gold	Wool	S-2Z
XIX-G-180	Bag	14.5 X 17	1	14.5 X 17	z	DC	brown	Cotton	Z-2S	brown	Cotton	Z-2S
					g		white	Cotton	Z-2S	white	Cotton	Z-2S
XIX-G-184	R-F	62.5 X 91.5	1	62.5 X 91.5	z	PW (2/1)-b	l.brown	Cotton	Z-2S	l.brown	Cotton	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
					a g	P						
XIX-G-185	R-F	N/A	1	N/A	z	PW-b E-T	l.brown	Cotton	Z-2S	l.brown	Cotton	Z-2S
										gold	Wool	Z-2S
										red	Wool	Z-2S
										black	Wool	Z-2S
										green	Wool	Z-2S
XIX-G-186	R-F	134.5 X 145	1	67.5 X 145	z g	PW-b P	cream	Cotton	Z-2S	cream	Cotton	Z-2S
			2	67 X 145	z g	PW-b P	cream	Cotton	Z-2S	cream	Cotton	Z-2S
XIX-G-187	D		1				d.brown	Wool	Z-2S			
			2			PW-wa C	d.pink	Wool	Z-2S			
							yellow	Wool	Z-2S			
							d.brown	Wool	Z-2S			
							purple	Wool	Z-2S			
			3			E	brick red	Wool	Z-2S			
							black	Wool	Z-2S			
							white	Wool	Z-2S			
							yellow	Wool	Z-2S			
							d.pink	Wool	Z-2S			
							white	Cotton	N/A			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
			4			B	d.pink	Wool	Z-2S			
			5			B	white	Cotton	Z-2S			
							white	Cotton	unspun			
			6			PW-wa	l.pink	Wool	Z-2S	white	Wool	Z-2S
						C	gold	Wool	Z-2S	l.pink	Wool	Z-2S
							d.gold	Wool	Z-2S			
			7			PW-b	l.brown	Cotton	Z-2S	l.brown	Cotton	Z-2S
							camelid	Cotton	Z-2S	l.blue	Cotton	Z-2S
							white	Cotton	Z-2S	white	Cotton	Z
							yellow	Wool	Z-2S			
			8			PW-wa	blue	Cotton	Z-2S	l.brown	Cotton	Z-2S
							l.pink	Cotton	Z-2S			
			9			PW-wa	white	Cotton	Z-2S	white+l.brown	Cotton	Z-2S
							grey	Cotton	Z-2S			
			10			PW-b	white	Cotton	S	white	Cotton	S
			11				brick red	Wool	Z-2S			
			12				brick red	Wool	Z-2S			
XIX-G-188	F	16.7 X 21.5	1	16.7 X 21.5	g	S-T	l.brown	Cotton	Z-2S	d.brown	Wool	Z-2S
										white	Wool	Z-2S
XIX-G-223	D	11 X 34	1			PW-b	black	Wool	Z-2S	black	Wool	Z-2S
			2				d.pink	Wool	Z-2S			
							white	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							d.pink	Wool	Z-2S			
							white	Cotton	Z-2S			
							yellow	Wool	Z-2S			
			3			PW-wa	yellow	Wool	Z-2S	brick red	Wool	Z-2S
						C	brick red	Wool	Z-2S			
			4			PW-b	white	Cotton	S	blue	Cotton	S
						E	brown	Cotton	S			
							blue	Cotton	S			
							white	Cotton	Z-2S			
			5			PW-b	l.brown	Cotton	Z-2S	l.brown	Cotton	Z-2S
			6			PW-b	white	Cotton	Z	white	Cotton	Z
			7				d.pink	Wool	Z-2S			
			8			PW-wa	d.pink	Wool	Z-2S	d.pink	Wool	Z-2S
							blue	Cotton	Z-2S			
							white	Cotton	Z-2S			
			9				d.pink	Wool	Z-2S			
			10			PW-wa	yellow	Wool	Z-2S	brick red	Wool	Z-2S
						C	brick red	Wool	Z-2S			
XIX-G-224	S	253 X 4	1			W	black	Wool	S			
						B	white	Wool	Z			
							yellow	Wool	Z-2S			
							red	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							cream	Wool	S			
							red	Wool	S			
							l.brown	Cotton	Z			
							l.blue	Cotton	Z			
XIX-G-225	F	71.5 X 206.5	1	5 X 206.5	p	PW-b	white	Cotton	Z-2S	white	Cotton	Z-2S
			2		z	PW (3/1).wa C	white	Cotton	S	white	Cotton	S
							black	Wool	Z-2S			
							blue	Cotton	Z-2S			
							yellow	Wool	Z-2S			
							red	Wool	Z-2S			
							brown	Wool	Z-2S			
			3	33.5 X 66.5	z	PW (3/1).wa C	white	Cotton	S	white	Cotton	S
							black	Wool	Z-2S			
							blue	Cotton	Z-2S			
							yellow	Wool	Z-2S			
							red	Wool	Z-2S			
							brown	Wool	Z-2S			
			4	32 X 66.5	z	PW (3/1).wa C	white	Cotton	S	white	Cotton	S
							black	Wool	Z-2S			
							blue	Cotton	Z-2S			
							yellow	Wool	Z-2S			
							red	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							brown	Wool	Z-2S			
			5	7			white	Cotton	Z			
			6	6			white	Cotton	Z			
XIX-G-226	R-F	121 X 57.5	1	121 X 57.5	a z z	PW (1/2)-b P	cream	Cotton	Z-2S	cream	Cotton	Z
XIX-G-227	F	51.5 X 55.5	1	51.5 X 55.5	s g	PW-wa C	d.brown	Wool	Z-2S	brown	Wool	Z-2S
							d.blue	Wool	Z-2S			
							l.blue	Wool	Z-2S			
							white	Wool	Z-2S			
							cream	Wool	Z-2S			
XIX-G-228	T-L	19 X 30.5	1	19 X 30.5	s g	PW-b S PW (4/1)-we	white	Cotton	Z-2S	white	Cotton	Z-2S
										pink	Wool	Z-2S
										gold	Wool	Z-2S
										l.brown	Wool	Z-2S
										black	Wool	Z-2S
XIX-G-229	D	33.5 X 36	1	N/A			red	Wool	Z-2S			
							white	Cotton	Z-2S			
			2			PW-wa C	l.brown	Cotton	Z-2S	brown	Cotton	Z-2S
							d.pink	Wool	Z-2S			
							yellow	Wool	Z-2S			
			3			PW-b	green	Cotton	Z-2S	green	Cotton	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
						C	white	Cotton	Z-2S			
						E	pink	Wool	Z-2S			
							white	Cotton	Z-2S			
							white	Cotton	Z-2S			
							pink	Wool	Z-2S			
			4				d.brown	Wool	Z-2S			
							white	Cotton	Z-2S			
			5			PW (1/4)-wa	cream	Cotton	Z-2S	cream	Cotton	Z / S /Z-2S
						C	l.brown	Cotton	Z-2S			
							d.brown	Cotton	Z-2S			
XIX-G-230	F	125 X 170	1	125 X 170	s	PW-wa	d.brown	Wool	Z-2S	l.brown	Wool	Z-2S
						C	d.blue	Wool	Z-2S			
							l.blue	Wool	Z-2S			
							white	Wool	Z-2S			
							cream	Wool	Z-2S			
XIX-G-231	T	61 X 120.5	1	61 X 120.5	p	PW-b	cream	Cotton	Z-2S	cream	Cotton	Z-2S
XIX-G-239	D	N/A	1	N/A			d.brown	Wool	Z-2S			
							pink	Wool	Z-2S			
						E	green	Wool	Z-2S			
							red	Wool	Z-2S			
							d.green	Wool	Z-2S			
							red	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							pink	Wool	Z-2S			
						PW-wa	l.blue	Cotton	Z-2S	blue	Cotton	Z-2S
							d.blue	Cotton	Z-2S	chocolate	Cotton	Z-2S
							brown	Cotton	Z-2S	brown	Cotton	Z-2S
							chocolate	Cotton	Z-2S			
						PW-wa	l.blue	Cotton	Z-2S	blue	Cotton	Z-2S
							d.blue	Cotton	Z-2S	chocolate	Cotton	Z-2S
							brown	Cotton	Z-2S	brown	Cotton	Z-2S
							chocolate	Cotton	Z-2S			
							l.pink	Wool	Z-2S			
							red	Wool	Z-2S			
			2			PW-b	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
						PW (2/1)-b	cream	Cotton	S	chocolate brown	Cotton	Z
						E	purple	Wool	Z-2S			
							white	Cotton	Z-2S			
							purple	Wool	Z-2S			
							purple	Wool	Z-2S			
							white	Cotton	Z-2S			
							red	Wool	Z-2S			
							red	Wool	Z-2S			
						PW-wa	white	Cotton	Z-2S	white	Cotton	Z-2S
							pink	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							yellow	Wool	Z-2S			
							d.blue	Wool	Z-2S			
			3				d.brown	Wool	Z-2S			
						PW-b	white	Cotton	S	white	Cotton	S
						E	red	Wool	Z-2S			
							red	Wool	Z-2S			
							brown	Wool	Z-2S			
							red	Wool	Z-2S			
							red	Wool	Z-2S			
							red	Wool	Z-2S			
						?	yellow	Wool	Z-2S	brown	Cotton	Z-2S
							orange	Wool	Z-2S			
						PW-b	brown	Cotton	S	brown	Cotton	S
			4			PW-b	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
						S-T	l.brown	Cotton	S-2Z	cream	Wool	Z-2S
										gold	Wool	Z-2S
										green	Wool	Z-2S
										crimson	Wool	Z-2S
						E	red	Wool	Z-2S			
							black	Wool	Z-2S			
							white	Cotton	Z-2S			
							purple	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							grey	Wool	Z-2S			
							purple	Wool	Z-2S			
							white	Cotton	Z-2S			
							l.pink	Wool	Z-2S			
							d.pink	Wool	Z-2S			
							d.green	Wool	Z-2S			
							l.green	Wool	Z-2S			
							yellow	Wool	Z-2S			
							brown	Wool	Z-2S			
							red	Wool	Z-2S			
							red	Wool	Z-2S			
						PW-b	red	Wool	Z-2S	l.pink	Wool	Z-2S
						G	yellow	Wool	Z-2S			
							gold	Wool	S-2Z			
						S-T	white	Cotton	S	cream	Wool	Z-2S
										brown	Wool	Z-2S
			5				black	Wool	Z-2S			
						E	brick red	Wool	Z-2S			
							red	Wool	Z-2S			
							red	Wool	Z-2S			
							white	Cotton	Z-2S			
							black	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							white	Cotton	Z-2S			
						G	white	Cotton	S	white	Cotton	S
							red	Wool	Z-2S			
						PW-b	brown	Wool	Z-2S	brown	Wool	Z-2S
							red	Wool	Z-2S			
			6			PW-b	brown	Cotton	Z-2S	brown	Cotton	Z-2S
							yellow	Wool	Z-2S			
							pink	Wool	Z-2S			
XIX-G-298	S	200	1	200		B	cream	Plant	S			
						W	brown	Plant	Z			
XIX-G-404	F	21 X 23	1	9.6 X 23	z	PW (2/1)-wa	white	Cotton	Z-2S	white	Cotton	Z-2S
					g	S	red	Wool	Z-2S			
					s	C	gold	Wool	Z-2S			
							d.grey	Wool	Z-2S			
							brown	Wool	Z-2S			
							black	Wool	Z-2S			
							d.brown	Wool	Z-2S			
							white	Wool	Z-2S			
			2	11.4 X 23	z	PW (2/1)-wa	white	Cotton	Z-2S	white	Cotton	Z-2S
					g	C	red	Wool	Z-2S			
					s	S	gold	Wool	Z-2S			
							d.grey	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							brown	Wool	Z-2S			
							black	Wool	Z-2S			
							white	Wool	Z-2S			
							d.brown	Wool	Z-2S			
XIX-G-405	F	13.7 X 36.7	1	13.7 x 36.7	z	PW-wa	brown	Cotton	Z-2S	brown	Cotton	N/A
					s	C	cream	Cotton	Z-2S			
					g							
XIX-G-406	F	14.2 X 26	1	14.2 X 26	z	S-T	white	Cotton	Z-2S	white	Cotton	Z-2S
					g	G				white	Cotton	Z-2S
XIX-G-407	R-F	25 X 31	1	25 X 31	s	PW (1/2)-b	brown	Wool	Z-2S	l.brown	Wool	Z-2S
							white	Wool	Z-2S			
							cream	Wool	Z-2S			
							blue	Wool	Z-2S			
							l.brown	Wool	Z-2S			
XIX-G-408	R-F	33.5 X 36	1	33.5 X 36	s	PW-b	white	Cotton	Z-2S	white	Cotton	Z-2S
							brown	Cotton	Z-2S			
XIX-G-409	R-F	229 x 29	1	29 X 29	p	PW (1/2)-b	white	Cotton	Z-2S	white	Cotton	Z
						PW (1/3)-b						
						PW (1/4)-b						
XIX-G-410	R-F	38.5 X 47.5	1	38.5 X 47.5	g	PW-b	red	Wool	Z-2S	d.pink	Wool	Z-2S
						E	white	Wool	Z-2S			
XIX-G-411	F	16.5 X 37.2	1	5 X 37.2	p	PW-b	white	Wool	S	white	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
			2	0.8 X 37.2	p	PW-b	white	Wool	S	white	Wool	Z-2S
			3	11 X 37.2	z	PW-wa	white	Wool	Z-2S	white	Wool	Z-2S
					g	Pb-W	brown	Wool	Z-2S			
							grey	Wool	Z-2S			
XIX-G-412	R-F	14.6 X55	1	14.6 X 55	g	PW-wa	brown	Cotton	Z-2S	pink	Wool	Z-2S
							pink	Wool	Z-2S	brown	Cotton	Z-2S
							white	Cotton	Z-2S			
							blue	Cotton	Z-2S			
XIX-G-413	F	41 X 37	1	31 X 37	g	PW-b	d.brown	Cotton	Z-2S	d.brown	Cotton	Z-2S
						S	gold	Wool	Z-2S			
							red	Wool	Z-2S			
							l.brown	Wool	Z-2S			
			2	9.5 X 12	g	PW-b	d.brown	Cotton	Z-2S	d.brown	Cotton	Z-2S
						S	gold	Wool	Z-2S			
							red	Wool	Z-2S			
							l.brown	Wool	Z-2S			
XIX-G-414	F	15 X 27	1	15 X 16	s	PW-wa	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
							black	Wool	Z-2S			
							gold	Wool	Z-2S			
			2	11 X 15	s	PW-wa	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
							black	Wool	Z-2S			
							gold	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
XIX-G-415	R-F	44 X 48	1	44 X 48	s	PW-wa	brown	Wool	Z-2S	brown	Wool	Z-2S
							white	Wool	Z-2S			
							cream	Wool	Z-2S			
							l.brown	Wool	Z-2S			
XIX-G-416	F	51 X 133	1	14.5 X 133	s	PW-wa	blue	Cotton	Z-2S	brown	Cotton	Z-2S
						C	l.blue	Cotton	Z-2S			
							brown	Cotton	Z-2S			
							white	Cotton	Z-2S			
			2	36.5 X 133	z	PW-b	brown	Cotton	Z-2S	brown	Cotton	Z-2S
						G				yellow	Wool	Z-2S
						S				red	Wool	33
XIX-G-417	F	47.5 X 105	1	47.5 X 105	z	PW-b	d.brown	?	S	d.brown	Cotton	Z
						S	white	Wool	Z-2S			
							black	Wool	Z-2S			
XIX-G-418	F	35.5 X 137	1	35.5 X 137	s	PW-wa	white	Wool	Z-2S	cream	Wool	Z-2S
						C	blue	Wool	Z-2S			
							l.blue	Wool	Z-2S			
							cream	Wool	Z-2S			
							brown	Wool	Z-2S			
XIX-G-419	F	53 X 63	1	37 X 53	g	S-T	cream+white	Cotton	Z-2S	cream	Cotton	Z-2S
					s	PW-b				d.gold	Wool	Z-2S
						S				l.gold	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
										d.pink	Wool	Z-2S
										l.pink	Wool	Z-2S
										brown	Wool	Z-2S
										black	Wool	Z-2S
			2	26 X 38.5	g	S-T	cream+white	Cotton	Z-2S	cream	Cotton	Z-2S
					s	PW-b				d.gold	Wool	Z-2S
						S				l.gold	Wool	Z-2S
										d.pink	Wool	Z-2S
										l.pink	Wool	Z-2S
										brown	Wool	Z-2S
										black	Wool	Z-2S
XIX-G-420	F	12 X 57.5	1	12 X 57.5	z	Pb-W	white	Cotton	Z-2S	white	Cotton	Z-2S
					g		l.brown	Cotton	Z-2S			
XIX-G-421	F	129 X 7	1	120 X 4.5	p	PW-b	white	Cotton	S-2Z	white	Cotton	Z-2S
			2	66 X 4	s	PW (1/3)-wa	white	Cotton	S	white	Cotton	S
					g	C	gold	Wool	Z-2S			
							cream	Cotton	Z-2S			
							red	Wool	Z-2S			
							d.brown	Wool	Z-2S			
							d.gold	Wool	Z-2S			
			3	64.5 X 4	s	PW (1/3)-wa	white	Cotton	S	white	Cotton	S
					g	C	gold	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							cream	Cotton	Z-2S			
							red	Wool	Z-2S			
							d.brown	Wool	Z-2S			
							d.gold	Wool	Z-2S			
XIX-G-422	R-F	5 X 38.2	1	5 X 38.2	g	PW (1/2)-wa	grey	Wool	Z-2S	gold	Wool	Z-2S
							red	Wool	Z-2S	grey	Wool	Z-2S
							gold	Wool	Z-2S	purple	Wool	Z-2S
XIX-G-423	R-F	7 X 32	1	7 X 32	g	PW-wa	yellow	Wool	Z-2S	black	Wool	Z-2S
						C	gold	Wool	Z-2S			
							red	Wool	Z-2S			
							white	Wool	Z-2S			
							blue	Wool	Z-2S			
XIX-G-424	F	5.2 X 49	1	1.5 X 49	z	PW-wa	d.pink	Wool	Z-2S	white	Cotton	Z-2S
						C	l.pink	Wool	Z-2S			
			2	1.7 X 49	z	PW-wa	d.pink	Wool	Z-2S	white	Cotton	Z-2S
						C	l.pink	Wool	Z-2S			
			3	2 x 44	p	PW-wa	cream	Cotton	Z-2S	cream	Cotton	Z
XIX-G-425	R-F	4 X 67	1	4 X 67	s	PW (1/3)-wa	white	Cotton	S	white	Cotton	Z-2S
					g	C	gold	Wool	Z-2S			
							d.brown	Wool	Z-2S			
							l.brown	Wool	Z-2S			
							red	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
XIX-G-426	R-F	6.5 X 44	1	66.5 X 44	g	PW-wa	gold	Wool	Z-2S	d.brown	Wool	Z-2S
						C	white	Wool	Z-2S			
							blue	Wool	Z-2S			
							red	Wool	Z-2S			
XIX-G-427	R-F	35 X 5.5	1	35 x 5.5	g	PW (1/2)-wa	gold	Wool	Z-2S	pink	Wool	Z
						C	brown	Wool	Z-2S	brown	Wool	Z-2S
							pink	Wool	Z			
XIX-G-428	R-F	2.2 X 78	1	2.2 x 78		S-T	cream	Cotton	S-2Z	red	Wool	Z-2S
						I-T				d.brown	Wool	Z-2S
										gold	Wool	Z-2S
										green	Wool	Z-2S
										cream	Wool	Z-2S
										purple	Wool	Z-2S
XIX-G-429	F	10 X 60	1	10 X 60	s	PW (2/1)-we	white	Cotton	S	white	Cotton	S
					z	C				black	Wool	Z
										pink	Wool	Z-2S
										red	Wool	Z-2S
XIX-G-430	F	50.5 x 37	1	5 X 50.5	p	PW-b	white	Cotton	Z-2S	white	Cotton	Z-2S
			2	31.5 X 50.5	s	PW-b	d.brown	Cotton	S	d.brown	Cotton	Z
					z	S				cream	Cotton	Z-2S
										red	Wool	Z-2S
XIX-G-431	R-F	26.2 X 33	1	26.2 X 33	z	PW-b	white	Cotton	Z-2S	blue	Cotton	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							blue	Cotton	Z-2S			
XIX-G-432	R-F	44 X 31.5	1	44 X 31.5	g	PW-b	brick red	Cotton	Z-2S	brick red	Cotton	Z-2S
						E	blue	Wool	Z-2S	blue	Wool	Z-2S
							l.brown	Cotton	Z-2S	l.brown	Cotton	Z-2S
							white	Cotton	S	white	Cotton	S
							white	Cotton	Z-2S	white	Cotton	Z-2S
XIX-G-433	B	3.5 X 171	1	3.5 X 171	g	PW-wa	cream	Wool	S-2Z	brown	Wool	Z-2S
					s	C	d.brown	Wool	S-2Z			
						B	pink	Wool	Z-2S			
XIX-G-434	S	N/A	1	N/A		B	red	Wool	Z-2S			
						W	yellow	Wool	Z-2S			
							pink	Wool	Z-2S			
							green	Wool	Z-2S			
							purple	Wool	Z-2S			
XIX-G-435	T-B	22.5 X 66	1	6 X 35.7	g	S-T	gold	Wool	S-2Z	red	Wool	Z-2S
					z					pink	Wool	Z-2S
										yellow	Wool	Z-2S
										gold	Wool	Z-2S
										cream	Wool	Z-2S
			2	6 X 30	g	S-T	gold	Wool	S-2Z	red	Wool	Z-2S
					z					pink	Wool	Z-2S
										yellow	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
										gold	Wool	Z-2S
										cream	Wool	Z-2S
			3	17 X 66	p	PW-b	white	Wool	Z-2S	red	Wool	Z-2S
XIX-G-436	R-F	38.5 X 44	1	38.5 X 44	s	PW-wa	white	Wool	Z-2S	brown	Wool	Z-2S
							d.brown	Wool	Z-2S			
							brown	Wool	Z-2S			
XIX-G-437	F	56 x 94	1	25.5 X 94	z	PW-b	pink	Cotton	Z-2S	pink	Cotton	Z-2S
						S				black	Wool	Z-2S
										red	Wool	Z-2S
			2	28 X 94	z	PW-b	pink	Cotton	Z-2S	pink	Cotton	Z-2S
						S				black	Wool	Z-2S
										red	Wool	Z-2S
			3	1.2 X 46.4	p	PW-wa	blue	Cotton	Z-2S	blue	Cotton	Z-2S
XIX-G-438	R-F	26 X 44	1	26 X 44	z	PW-wa	red	Wool	Z-2S	gold	Wool	Z-2S
					a	S-T	brown	Wool	Z-2S			
							gold	Wool	Z-2S			
							cream	Cotton	Z-2S			
XIX-G-439	R-F	41 X 30	1	41 X 30	z	PW-wa	l.blue	Cotton	Z-2S	l.grey	Wool	Z-2S
					g	C	gold	Wool	Z-2S			
							l.brown	Wool	Z-2S			
							brown	Wool	Z-2S			
							pink	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							cream	Wool	Z-2S			
XIX-G-440	F	22 X 62	1	22 X 62	z	Pb-W	white	Cotton	S	white	Cotton	S
					g		blue	Cotton	S			
XIX-G-441	F	8 X 37	1	8 X 37	z	PW-wa	gold	Wool	Z-2S	brown	Cotton	Z-2S
					g	C	red	Wool	Z-2S			
					s		grey	Wool	Z-2S			
XIX-G-442	T-B	34 X 61.5	1	28 X 61.5	z	S-T	cream	Cotton	Z-2S	yellow	Wool	Z-2S
					g					black	Wool	Z-2S
										red	Wool	Z-2S
										pink	Wool	Z-2S
										purple	Wool	Z-2S
										gold	Wool	Z-2S
			2	16 X 61.5		PW-b	white	Cotton	Z-2S	red	Wool	Z-2S
XIX-G-443	F	4 X 9.5	1	4 X 9.5	z	S-T	d.brown	Wool	S-2Z	red	Wool	Z-2S
										black	Wool	Z-2S
										white	Wool	Z-2S
										yellow	Wool	Z-2S
										gold	Wool	Z-2S
										pink	Wool	Z-2S
										blue	Wool	Z
XIX-G-444	R-F	3.3 X 20.5	1	3.3 X 20.5	z	S-T	white	Wool	Z-2S	d.pink	Wool	Z-2S
					g					l.pink	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
					s					d.gold	Wool	Z-2S
										l.gold	Wool	Z-2S
										white	Wool	Z-2S
										purple	Wool	Z-2S
XIX-G-446	R-F	3.8 X 410	1	3.8 X ?	g	PW (1/2)-b	red	Wool	Z-2S	brown	Wool	Z-2S
						C	brown	Wool	Z-2S			
							gold	Wool	Z-2S			
			2	5 X 22			red	Wool	Z-2S			
							l.pink	Wool	Z-2S			
							d.pink	Wool	Z-2S			
							gold	Wool	Z-2S			
							brown	Wool	Z-2S			
							d.gold	Wool	Z-2S			
XIX-G-447	B	144 X 4.5	1	144 X 4.5	z	S-T	cream	Cotton	S-2Z	cream	Cotton	Z-2S
										red	Wool	Z-2S
										yellow	Wool	Z-2S
										black	Wool	Z-2S
			2	33			d.brown	Wool	S-3Z			
							black	Wool	Z-2S			
							yellow	Wool	Z-2S			
							pink	Wool	Z-2S			
							cream	Cotton	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							brown	Cotton	Z-2S			
			3	6			d.brown	Wool	S-3Z			
							black	Wool	Z-2S			
							yellow	Wool	Z-2S			
							pink	Wool	Z-2S			
							cream	Cotton	Z-2S			
							brown	Cotton	Z-2S			
XIX-G-448	R-F	29 X 33	1	29 X 33	z	PW-b	brown	Cotton	Z-2S	brown	Cotton	Z-2S
					g	S	white	Wool	Z-2S			
							grey	Wool	Z-2S			
							yellow	Wool	S			
XIX-G-449a	F	5 X 21.5	1	5 X 21.5	z	PW-b	white	Cotton	Z-2S	gold	Wool	Z-2S
					g	C				red	Wool	Z
XIX-G-449b	F	11.5 X 30.5	1	11.5 X 30.5	g	PW-wa	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
						C	cream	Wool	Z-2S			
XIX-G-449c	F	7.9 x 9	1	7.9 X 9	z	PW-b	brown	Wool	Z-2S	yellow	Wool	Z-2S
					g	C				red	Wool	Z
										brown	Wool	Z-2S
										d.gold	Wool	Z-2S
XIX-G-449d	F	12 X 25	1	12 X 25	z	PW-b	white	Cotton	S	white	Cotton	Z
					z	Br				l.gold	Wool	Z-2S
					s	PW (3/1)-we				d.gold	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
						C				black	Wool	Z-2S
										l.pink	Wool	Z-2S
										d.pink	Wool	Z-2S
XIX-G-449e	F	15.5 X 21.5	1	15.5 X 21.5	g	PW-wa	cream	Cotton	Z-2S	brown	Cotton	Z-2S
					s	C	brown	Cotton	Z-2S			
XIX-G-449f	F	12 X 22	1	12 X 22		S-T	cream	Wool	Z-2S	d.pink	Wool	Z-2S
										l.pink	Wool	Z-2S
										gold	Wool	Z-2S
										yellow	Wool	Z-2S
XIX-G-450a	F	16.5 X 27.5	1	16.5 X 27.5	z	DC	cream	Cotton	Z-2S	cream	Cotton	Z-2S
					s		brown	Cotton	Z-2S	brown	Cotton	Z-2S
					g							
XIX-G-450b	F	10 X 11.5	1	10 X 11.5	z	S-T	white	Cotton	Z-2S	gold	Wool	Z-2S
										l.pink	Wool	Z-2S
										d.pink	Wool	Z-2S
										black	Wool	Z-2S
XIX-G-450c	F	11.7 X 7	1	11.7 X 7	g	PW-b	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
						C	cream	Wool	Z-2S			
XIX-G-450d	F	13 X 19	1	13 X 19	g	PW-b	l.brown	Cotton	Z-2S	l.brown	Cotton	Z-2S
						Br				d.brown	Wool	Z-2S
										yellow	Wool	Z-2S
										purple	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
										pink	Wool	Z-2S
XIX-G-450e	F	3.5 X 15	1	3.5 X 15	z	?	white	Cotton	S	white	Cotton	S
										black	Wool	Z-2S
										brown	Wool	Z-2S
										red	Wool	Z-2S
										white	Wool	Z-2S
XIX-G-450f	F	4 X 14	1	4 X 7	z	PW-we	gold	Wool	Z-2S	red	Wool	Z
						C				black	Wool	Z-2S
										l.gold	Wool	Z-2S
										d.gold	Wool	Z-2S
			2	4 X 7	z	PW-we	gold	Wool	Z-2S	red	Wool	Z
						C				black	Wool	Z-2S
										l.gold	Wool	Z-2S
										d.gold	Wool	Z-2S
XIX-G-450g	F	12 X 19	1	12 X 19	z	PW-b	white	Cotton	S	white	Cotton	Z
					g	G	red	Wool	Z-2S	white	Cotton	Z-2S
						E	d.brown	Wool	Z-2S	red	Wool	Z-2S
						PW-we	black	Wool	Z-2S	d.brown	Wool	Z-2S
						S-T				black	Wool	Z-2S
XIX-G-450h	F	2.5 X 19	1	2.5 X 19	z	PW-wa	cream	Cotton	Z-2S	brown	Cotton	Z-2S
						C	brown	Cotton	Z-2S			
XIX-G-450i	F	6 X 22.5	1	6 X 22.5	z	S-T	d.gold	Wool	Z-2S	l.gold	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
					a					d.gold	Wool	Z-2S
					s					yellow	Wool	Z-2S
										pink	Wool	Z-2S
										black	Wool	Z-2S
XIX-G-450j	F	17 X 5.5	1	?	z	PW-b	brown	Cotton	Z-2S	brown	Cotton	Z
					s	PW (2/1)-we				d.brown	Wool	Z-2S
						PW (3/1)-we				gold	Wool	Z-2S
						C				black	Wool	Z-2S
			2	?	z	PW-b	brown	Cotton	Z-2S	brown	Cotton	Z
					s	PW (2/1)-we				d.brown	Wool	Z-2S
						PW (3/1)-we				gold	Wool	Z-2S
						C				black	Wool	Z-2S
XIX-G-451a	F	13.3 X 20	1	13.3 X 20	g	PW-wa	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
						C	gold	Wool	Z-2S			
XIX-G-451b	F	14 X 14	1	14 X 14	z	PW-b	l.brown	Cotton	Z-2S	l.brown	Cotton	Z-2S
						S				brown	Cotton	Z-2S
XIX-G-451c	F	6 X 15	1	6 X 15	z	?	white	Cotton	S	white	Cotton	Z-2S
					g					black	Wool	Z-2S
XIX-G-451d	F	11. X 16	1	11.5 X 16	z	PW-b	white	Cotton	Z-2S	white	Cotton	Z-2S
						S-T				pink	Wool	Z-2S
										l.pink	Wool	Z-2S
										l.gold	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
										d.gold	Wool	Z-2S
XIX-G-451e	F	7.5 X 15	1	7.5 X 15	z	PW-b	l.brown	Cotton	Z-2S	l.brown	Cotton	S
					s	PW (2/1)-we				pink	Wool	Z-2S
						C				d.gold	Wool	Z-2S
										cream	Cotton	Z
										black	Wool	Z-2S
XIX-G-451f	R-F	4 X 18	1	4 X 18	z	PW-wa	d.pink	Wool	Z-2S	gold	Wool	Z-2S
						C	l.pink	Wool	Z-2S			
							yellow	Wool	Z-2S			
							green	Wool	Z-2S			
							blue	Wool	Z-2S			
							brick red	Wool	Z-2S			
XIX-G-451g	F	17 X21	1	17 X 21	z	S-T	l.brown	Wool	Z-2S	d.brown	Wool	Z-2S
					s					l.brown	Wool	Z-2S
										d.pink	Wool	Z-2S
										l.pink	Wool	Z-2S
										yellow	Wool	Z-2S
										peach	Wool	Z-2S
										l.purple	Wool	Z-2S
XIX-G-451h	F	11 X 13.5	1	11 X 13.5	z	DC	brown	Cotton	Z-2S	brown	Cotton	Z-2S
							white	Cotton	Z-2S	white	Cotton	Z-2S
XIX-G-452	Bag	17 X 17.5	1	N/A	s	PW-wa	brown	Cotton	Z-2S	brown	Cotton	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
					g	C	blue	Cotton	Z-2S			
							white	Cotton	Z-2S			
							grey	Cotton	Z-2S			
			2	1.8 X 33	z	PW-b	white	Cotton	Z-2S	brown	Cotton	Z-2S
						S	brown	Cotton	Z-2S			
			3	4 X 17		PW-wa	white	Cotton	Z-2S	white	Cotton	Z-2S
						C	brown	Wool	Z-2S			
			4	3.2 18.5	g	PW-wa	white	Cotton	S	white	Cotton	S
						S	black	Wool	Z-2S			
							pink	Wool	Z-2S			
							yellow	Wool	Z-2S			
			5	13			green	Wool	Z-2S			
							pink	Wool	Z-2S			
							yellow	Wool	Z-2S			
							purple	Wool	Z-2S			
			6	3.5			red	Wool	Z-2S			
							gold	Wool	Z / Z-2s			
XIX-G-453	D	13 X 29	1			PW-b	d.brown	Wool	Z-2S	black	Wool	Z-2S
			2			PW-b	brown	Cotton	S	brown	Cotton	S
						S	black	Wool	Z-2S			
			3			PW-b	brown	Cotton	Z-2S	brown	Cotton	Z-2S
						E	d.brown	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							pink	Wool	Z-2S			
							pink	Wool	Z-2S			
							white	Cotton	Z-2S			
							pink	Wool	Z-2S			
			4				pink	Wool	Z-2S			
							d.brown	Wool	Z-2S			
							yellow	Wool	Z-2S			
			5			PW-wa	white	Cotton	Z-2S	white	Cotton	Z-2S
						C	brown	Cotton	Z-2S			
							chocolate	Cotton	Z-2S			
			6			S-T	white	Cotton	Z-2S	yellow	Wool	Z-2S
										d.pink	Wool	Z-2S
										l.pink	Wool	Z-2S
										purple	Wool	Z-2S
			7				pink	Wool	Z-2S			
			8				gold	Wool	Z-2S			
			9			PW-b	brown	Cotton	S	brown	Cotton	Z
						T-D						
			10			S-T	white	Cotton	Z-2S	yellow	Wool	Z-2S
										gold	Wool	Z-2S
										black	Wool	Z-2S
										brown	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
										pink	Wool	Z-2S
			11				d.pink	Wool	Z-2S			
							l.pink	Wool	Z-2S			
XIX-G-454	Bag	23.5 X 47	1	22.5 X 23.5	s	PW (1/2)-wa	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
							red	Wool	Z-2S			
							yellow	Wool	Z-2S			
							gold	Wool	Z-2S			
							purple	Wool	Z-2S			
							white	Cotton	Z-2S			
			2	25			red	Wool	Z-2S			
							green	Wool	Z-2S			
							brown	Wool	Z-2S			
							cream	Wool	Z-2S			
							d.blue	Wool	Z-2S			
							crimson	Wool	S-2Z			
			3	25			red	Wool	Z-2S			
							green	Wool	Z-2S			
							brown	Wool	Z-2S			
							cream	Wool	Z-2S			
							d.blue	Wool	Z-2S			
							crimson	Wool	S-2Z			
XIX-G-455	Bag	27.5 X 29	1	27.5 X 29	s	PW-wa	red	Wool	Z-2S	brown	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							d.brown	Wool	Z-2S	d.brown	Wool	Z
							gold	Wool	Z-2S			
							green	Wool	Z-2S			
			2	10			red	Wool	Z-2S			
XIX-G-456	Bag	14.5 X 19.5	1	14.5 X 19.5	g	PW (2/1)-b S PW-b	cream	Cotton	Z-2S	cream	Cotton	Z-2S
										d.brown	Wool	Z-2S
XIX-G-457	R-F	52 X 46	1	52 X 46	s	PW-b	cream	Cotton	Z-2S	cream	Cotton	Z-2S
							brown	Cotton	Z-2S			
		28	2	28			d.brown	Cotton	Z / Z-2s			
							white	Cotton	Z / Z-2s			
XIX-G-458	Bag	20 X 16	1	20 X 16	s	PW-wa C	gold	Wool	Z-2S	brown	Wool	Z-2S
							brick red	Wool	Z-2S			
							d.brown	Wool	Z-2S			
			2	1.7 X 85	s	?	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
							gold	Wool	Z-2S			
XIX-G-459	T	9 X 15	1	9 X 15	s	PW-wa	red	Wool	Z-2S	d.green	Wool	Z-2S
							pink	Wool	Z-2S			
							yellow	Wool	Z-2S			
							green	Wool	Z-2S			
							gold	Wool	Z-2S			
XIX-G-460	T	9.5 X 12	1	9.5 X 12	p	PW-wa	cream	Wool	Z-2S	cream	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
					s		red	Wool	Z-2S			
							green	Wool	Z-2S			
XIX-G-461	F	9.5 X 63	1	9 X 8.6	g	PW-wa	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
						C	d.blue	Wool	Z-2S			
							cream	Wool	Z-2S			
							orange	Wool	Z-2S			
			2	58	g	PW-wa	d.blue	Wool	Z-2S	d.brown	Wool	Z-2S
						C	d.brown	Wool	Z-2S			
							orange	Wool	Z-2S			
			3	26		B	l.blue	Wool	Z-2S			
							red	Wool	Z-2S			
							orange	Wool	Z-2S			
							cream	Wool	Z-2S			
XIX-G-462	Bag	9.5 X 15	1	9.5 X 15	p	PW-b	white	Cotton	Z	white	Cotton	Z
		24	2	24			white	Cotton	Z			
							white	Cotton	Z-2S			
			3				white	Cotton	Z / Z-2s			
							red	Wool	Z-2S			
XIX-G-464	T-L	1	1	N/A	g	S-T	white	Cotton	Z-2S	orange	Wool	Z-2S
										l.pink	Wool	Z-2S
										yellow	Wool	Z-2S
										d.pink	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
										d.blue	Wool	Z-2S
XIX-G-465	T	22 X 36	1	22 X 16	z	PW (2/1)-b	cream	Cotton	S	cream	Cotton	S
					g	S				brown	Cotton	Z-2S
										d.grey	Cotton	Z
										l.green	Cotton	Z
										l.grey	Cotton	Z
										l.brown	Cotton	Z
										green	Cotton	Z
										l.green	Cotton	Z-2S
			2	22 X 20	z	PW (2/1)-b	cream	Cotton	S	cream	Cotton	S
					g	S				brown	Cotton	Z-2S
										d.grey	Cotton	Z
										l.green	Cotton	Z
										l.grey	Cotton	Z
										l.brown	Cotton	Z
										green	Cotton	Z
										l.green	Cotton	Z-2S
XIX-G-466	P	23.5 X 38	1	19 X 23.5	p	PW-b	white	Cotton	Z-2S	white	Cotton	Z-2S
			2	20 X 23.5	p	PW-b	brown	Cotton	Z-2S	brown	Cotton	Z-2S
XIX-G-467	P	28.5 X 44.5	1	28.5 X 44.5	s	PW-wa	cream	Wool	Z-2S	d.brown	Wool	Z-2S
							d.brown	Wool	Z-2S			
XIX-G-469	T	61.5 X 28.5	1	32 X 28.5	s	PW-wa	black	Wool	Z-2S	d.brown	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							gold	Wool	Z-2S			
			2	29 x 28.5	s	PW-wa	black	Wool	Z-2S	d.brown	Wool	Z-2S
							gold	Wool	Z-2S			
XIX-G-470	T	48 X 65	1	48 X 33	p	PW-wa	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
			2	48 X 32	p	PW-wa	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
XIX-G-473	R-F	70 X 70.5	1	70 X 70.5	p	G	white	Wool	Z-2S	d.blue	Wool	Z-2S
						PW-we	l.brown	Wool	Z-2S	l.blue	Wool	Z-2S
							d.blue	Wool	Z-2S	l.brown	Wool	Z-2S
XIX-G-474	F	81 X 89	1	19 X 89	s	PW-wa	brown	Wool	Z-2S	white	Wool	Z
							cream	Wool	Z-2S			
							white	Wool	Z-2S			
			2	71 X 79	s	PW-wa	brown	Wool	Z-2S	white	Wool	Z
							cream	Wool	Z-2S			
							white	Wool	Z-2S			
XIX-G-476	T	39.5 X 41.5	1	39.5 X 41.5	s	PW-wa	gold	Wool	Z-2S	d.brown	Wool	Z-2S
							d.brown	Wool	Z-2S			
XIX-G-478	F	6 X 79	1	6 X 70	g	PW-wa	yellow	Wool	Z-2S	l.brown	Cotton	Z-2S
						C	gold	Wool	Z-2S			
							l.pink	Wool	Z-2S			
							d.pink	Wool	Z-2S			
			2	8 X 16	g	PW-wa	yellow	Wool	Z-2S	l.brown	Cotton	Z-2S
						C	gold	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							l.pink	Wool	Z-2S			
							d.pink	Wool	Z-2S			
XIX-G-479	F	46.5 X 60	1	46.5 X 60	z	G	white	Wool	Z-2S	white	Wool	Z-2S
					s	S-T				d.gold	Wool	Z / Z-2S
										l.gold	Wool	Z-2S
										pink	Wool	Z-2S
										white	Wool	Z
XIX-G-480	F	20 X 22	1	20 X 22	g	S-T	brown	Wool	Z-2S	yellow	Wool	Z-2S
										red	Wool	Z-2S
										gold	Wool	Z-2S
XIX-G-481	F	17 X 17	1	17 X 17	g	S-T	cream	Cotton	Z-2S	pink	Wool	Z-2S
										yellow	Wool	Z-2S
										brown	Wool	Z-2S
										cream	Wool	Z-2S
										black	Wool	Z-2S
										gold	Wool	Z-2S
										white	Cotton	Z-2S
XIX-G-482	T-B	20.5 X 65.5	1	20.5 X21.5	z	S-T	cream	Wool	Z-2S	d.yellow	Wool	Z-2S
					g					l.yellow	Wool	Z-2S
										d.pink	Wool	Z-2S
										l.pink	Wool	Z-2S
										gold	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
										purple	Wool	Z-2S
										blue	Wool	Z-2S
										d.brown	Wool	Z-2S
										cream	Wool	33
			2	20 X 21	z	S-T	cream	Wool	Z-2S	d.yellow	Wool	Z-2S
					g					l.yellow	Wool	Z-2S
										d.pink	Wool	Z-2S
										l.pink	Wool	Z-2S
										gold	Wool	Z-2S
										purple	Wool	Z-2S
										blue	Wool	Z-2S
										d.brown	Wool	Z-2S
										cream	Wool	Z-2S
			3	23 x 20.5	z	S-T	cream	Wool	Z-2S	d.yellow	Wool	Z-2S
					g					l.yellow	Wool	Z-2S
										d.pink	Wool	Z-2S
										l.pink	Wool	Z-2S
										gold	Wool	Z-2S
										purple	Wool	Z-2S
										blue	Wool	Z-2S
										d.brown	Wool	Z-2S
										cream	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
XIX-G-483	R-F	N/A	1	N/A	s	PW-wa	red	Wool	Z-2S	l.brown+d.brown	Wool	Z-2S
					g	C	gold	Wool	Z-2S			
					g		d.green	Wool	Z-2S			
							green	Wool	Z-2S			
							cream	Wool	Z-2S			
							d.brown	Wool	Z-2S			
							brown	Wool	Z-2S			
XIX-G-484a	F	14 x 27	1	14 X 25	z	G	white	Cotton	Z-2S	white	Cotton	Z-2S
					g	S-T				white	Cotton	Z
			2	2 X 14	z	G	white	Cotton	Z-2S	white	Cotton	Z-2S
					g	S-T				white	Cotton	Z
XIX-G-484b	F	12 X 41	1	112 X 41	z	G	white	Cotton	Z-2S	white	Cotton	Z-2S
					g	S-T				white	Cotton	Z
XIX-G-485	F	2 X 44	1	2 X 44	s	PW-we	cream	Cotton	S-2Z	red	Wool	Z-2S
							cream	Wool	S-2Z	white	Cotton	Z-2S
		26	2	26			yellow	Wool	Z-2S			
							red	Wool	Z-2S			
							white	Wool	Z-2S			
XIX-G-486	B-Y		1				d.blue	Cotton	Z-2S			
XIX-G-487	F	25 X 40	1	25 X 40	p	PW-b	white	Cotton	S	white	Cotton	S
XIX-G-488	F	44 X 78	1	33 X 45	g	G	white	Cotton	S	white	Cotton	S
			2	30 X 10	g	G	white	Cotton	S	white	Cotton	S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
XIX-G-489	R-F	N/A	1	N/A	z	G	white	Cotton	S	white	Cotton	S
					g	E	white	Cotton	Z			
XIX-G-490	R-F	N/A	1	N/A		O-W	white	Cotton	S	white	Cotton	S
XIX-G-491	R-F	19 X 184.5	1	19 X 184.5	p	PW-wa	red	Wool	Z-2S	black	Wool	Z-2S
							black	Wool	Z-2S			
XIX-G-492	R-F	18 X 196	1	18 X 196	s	PW-wa	red	Wool	Z-2S	d.brown	Wool	Z-2S
							grey	Wool	Z-2S			
							d.brown	Wool	Z-2S			
XIX-G-493	D	7 X 14	1	7 X 14			blue	Cotton	S			
							l.brown	Cotton	S			
							red	Wool	Z-2S			
							white	Wool	Z / Z-2s			
							l.gold	Wool	Z / Z-2s			
							d.gold	Wool	Z / Z-2s			
							l.brown	Cotton	Z			
							cream	Wool	Z / Z-2s			
XIX-G-495	B-Y		1				white	Cotton	Z / Z-2s			
XIX-G-496	M	N/A	1	N/A			brown	Wool	unspun			
			2	N/A			white	Cotton	Z			
			3	N/A	p	PW-b	blue	Cotton	S	blue	Cotton	S
XIX-G-497	B-Y	N/A					white	Cotton	S			
XIX-G-501	M	N/A	1				red	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
			2				pink	Wool	Z-2S			
			3				purple	Wool	Z-2S			
			4				l.brown	Wool	Z-2S			
			5				green	Cotton	Z-2S			
			6				gold	Wool	Z			
			7			G	white	Cotton	S	white	Cotton	S
			8				white	Cotton	S			
			9				d.green	Cotton	S			
XIX-G-504	F	N/A	1	N/A	a	S-T	cream	Cotton	S-2Z	red	Wool	Z-2S
					g					brown	Wool	Z-2S
					z					d.brown	Wool	Z-2S
										gold	Wool	Z-2S
										cream	Wool	Z-2S
XIX-G-505	R-F	142 X 152	1	142 X 152	g	PW-b	white	Cotton	S	white	Cotton	S
						T-D						
XIX-G-506	B	7 X 180	1	7 X 180	s	PW (1/2)-wa	cream	Cotton	Z-2S	tan+cream	Cotton	Z-2S
						B	tan	Cotton	Z-2S			
XIX-G-507	F	N/A	1	N/A	g	PW (1/2)-wa	white	Cotton	Z-2S	white	Cotton	Z-2S
						B	brown	Cotton	Z-2S			
XIX-G-508	S	200	1	200		B	cream	Plant	N/A			
						W	red	Wool	unspun			
XIX-G-509	F	1.5 X 43.5	1	1.5 X 32.5	z	S-T	cream	Cotton	Z-2S	yellow	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
										black	Wool	Z-2S
										brick red	Wool	Z-2S
										hepatic	Wool	Z-2S
										d.brown	Wool	Z-2S
										l.green	Wool	Z-2S
										d.green	Wool	Z-2S
										l.brown	Wool	Z-2S
			2	?			brick red	Wool	Z-2S			
							d.brown	Wool	Z-2S			
XIX-G-510	F	47.5 X 2	1	31.4 X 2	g	S-T	l.pink	Cotton	S-2Z	red	Wool	Z-2S
										d.brown	Wool	Z-2S
										blue	Wool	Z-2S
										cream	Wool	Z-2S
										yellow	Wool	Z-2S
										grey	Wool	Z-2S
										pink	Wool	Z-2S
										cream	?	?
										green	Wool	Z-2S
			2	15			green	Wool	Z-2S			
							red	Wool	Z-2S			
			3	15			green	Wool	Z-2S			
							red	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
XIX-G-511	R-F	142.5 X 2	1	142.5 X 2	z	PW-wa	cream	Wool	S	l.brown	Cotton	Z-2S
					z	C	red	Wool	Z-2S	red	Wool	Z-2S
XIX-G-512a	F	8.5 X 30	1	8.5 X 30	z	PW (3/1).wa	l.brown	Wool	Z-2S	l.pink	Wool	Z
						PW-b				blue	Wool	Z-2S
						I-T				pink	Wool	Z-2S
										d.blue	Wool	Z-2S
										d.brown	Wool	Z-2S
										cream	Wool	Z-2S
										yellow	Wool	Z-2S
										green	Wool	Z-2S
										l.brown	Wool	S
										d.pink	Wool	Z
XIX-G-512b	F	12 X 24	1	12 X 24	z	I-T	l.brown	Wool	S	pink	Wool	Z
										pink	Wool	Z-2S
										green	Wool	Z-2S
										blue	Wool	Z-2S
										black	Wool	Z-2S
										cream	Wool	Z-2S
										yellow	Wool	Z-2S
										d.brown	Wool	Z-2S
										l.brown	Wool	S
XIX-G-513	S	N/A	1	24		B	red	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							grey	Wool	S-2Z			
							gold	Wool	Z-2S			
			2	N/A		B	grey	Wool	S-2Z			
							gold	Wool	Z-2S			
							red	Wool	Z-2S			
			3	18 X 3.5		W	gold	Wool	S			
XIX-G-514	S	137 X 3.5	1	137 X 3.5	g	B	cream	Wool	Z-2S			
						W	gold	Wool	S			
							d.brown	Wool	S			
XIX-G-516	U-W	N/A	1	N/A			d.brown	Wool	unspun			
							l.brown	Cotton	Z-2S			
XIX-G-517	F	6 X 21	1	1.5 X 28.5		B	yellow	Wool	Z-2S			
							red	Wool	Z-2S			
							black	Wool	Z-2S			
			2	1.8 X 12	z	S-T	white	Cotton	Z-2S	red	Wool	Z-2S
				3 x 3.5	a	OT				brown	Wool	Z-2S
										yellow	Wool	Z-2S
										black	Wool	Z-2S
			3	3 X 6.5	p	PW-b	brown	Cotton	Z-2S	brown	Cotton	Z-2S
XIX-G-518	D-F	46	1	46		B	cream	Plant	Z			
							yellow	Wool	unspun			
							red	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							yellow	Wool	Z-2S			
							black	Wool	Z-2S			
XIX-G-519	D-F	60	1	60		B	cream	Plant	S			
						W	yellow	Wool	unspun			
							red	Wool	Z-2S			
							black	Wool	Z-2S			
							yellow	Wool	Z-2S			
XIX-G-520	D-F	23	1	23		B	cream	Plant	N/A			
							yellow	Wool	unspun			
XIX-G-521	F	20 X 30	1	18 X 20	s	G	white	Wool	S	blue	Wool	S
							blue	Wool	S			
							brown	Wool	S			
							gold	Wool	Z-2S			
							brown	Wool	Z-2S			
			2	12 X 20	s	G	white	Wool	S	blue	Cotton	S
							blue	Wool	S			
							brown	Wool	S			
							gold	Wool	Z-2S			
XIX-G-522	R-F	N/A	1	N/A	g	PW-b	l.blue	Wool	S	blue	Wool	S
						G	brown	Wool	S	l.brown	Wool	S
							d.blue	Wool	S	d.brown	Wool	S
XIX-G-523	R-F	N/A	1	N/A	p	G	brown	Wool	S	brown	Wool	S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							white	Wool	S	white	Wool	S
							d.blue	Wool	S	blue	Wool	S
XIX-G-526	R-F	N/A	1	N/A	z	PW-b	cream	Cotton	Z-2S	cream	Cotton	Z-2S
					g	S				d.brown	Wool	Z-2S
						PW (3/1)-b				gold	Wool	Z-2S
			2	N/A			white	Cotton	Z			
XIX-G-527	R-F	N/A	1	N/A	p	G	d.brown	Cotton	S	d.brown	Cotton	S
							white	Cotton	unspun			
XIX-G-528	F	15 X 71	1	3 X 42	p	PW-b	cream	Cotton	Z-2S	cream	Cotton	Z-2S
			2	12 X 71	p	PW-b	d.brown	Cotton	Z-2S	d.brown	Cotton	Z-2S
							cream	Cotton	Z-2S			
XIX-G-530	F	84 x 98	1	41 X 98	p	PW-wa	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
										cream	Wool	Z-2S
										brown+cream	Wool	Z-2S
			2	43 X 98	p	PW-wa	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
										cream	Wool	Z-2S
										brown+cream	Wool	Z-2S
XIX-G-531	Bag	32.8 X 18	1	32.8 X 18	g	PW-b	white	Cotton	S	white	Cotton	S
						C	brown	Cotton	Z-2S	brown	Cotton	Z-2S
										black	Wool	Z-2S
										pink	Wool	Z-2S
										yellow	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
		0.5 X 57	2	0.5 X 57	g	B	yellow	Wool	Z-2S			
							pink	Wool	Z-2S			
							white	Cotton	S			
XIX-G-532	W-B	38 X 19 X 14	1	38 X 19 X 14		PW-b	l.green	Wool	Z-2S			
							yellow	Wool	Z-2S			
							d.green	Wool	Z-2S			
XIX-G-690.1	F	N/A	1	N/A	z	PW-b	l.brown	Wool	Z-2S	l.brown	Wool	Z-2S
						S				red	Wool	Z-2S
XIX-G-690-2	F	9 X 40	1	9 X 40	g	PW-wa	l.brown	Wool	Z-2S	l.brown	Wool	Z-2S
					s	C				pink	Wool	Z-2S
										yellow	Wool	Z-2S
										white	Wool	Z-2S
XIX-G-690.3	F	4.5 X 20.5	1	4.5 X 20.5	s	PW-b	white	Cotton	Z-2S	pink	Wool	Z-2S
					g	C				yellow	Wool	Z-2S
						PW (2/1)-b				green	Cotton	Z-2S
						S				black	Wool	Z-2S
										white	Cotton	Z-2S
XIX-G-690.4	F	7 X 24	1	4 X 24	g	PW-b	white	Cotton	S	white	Cotton	S
					s	C				pink	Wool	Z-2S
						PW (2/1)-b				green	Cotton	Z-2S
						S				yellow	Wool	Z-2S
										d.brown	Wool	Z-2S

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
										white	Cotton	Z-2S
			2	2.5 X 24	g	PW-wa	white	Cotton	S	white	Cotton	S
					s	C				pink	Wool	Z-2S
										green	Cotton	Z-2S
										yellow	Wool	Z-2S
										brown	Wool	Z-2S
										white	Cotton	Z-2S
XIX-G-690-5	F	17 X 6.2	1	17 X 6.2	z	PW-b	l.brown	Cotton	Z-2S	l.brown	Cotton	S
						S				black	Wool	Z-2S
XIX-G-690.6	F	9.5 X 22	1		z	PW-we	white	Wool	Z-2S	white	Wool	Z-2S
					s	S				black	Wool	Z-2S
										white	Wool	Z-2S
										black	Wool	Z-2S
XIX-G-690.7	S	241.5	1			B	cream	Plant	Z			
						W	brown	Plant	Z			
							pink	Wool	Z-2S			
XIX-G-718	D	14.5 X 34.5	1			PW-b	d.brown	Wool	Z-2S	d.brown	Wool	Z-2S
			2	14			d.pink	Wool	Z-2S			
							l.pink	Wool	Z-2S			
							l.brown	Wool	Z-2S			
							black	Wool	Z-2S			
							grey	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
			3			PW-wa	white	Cotton	S	cream	Cotton	S-2Z
						C				grey	Wool	Z-2S
			4			PW-b	white	Cotton	Z-2S	white	Cotton	Z-2S
						E	pink	Wool	Z-2S			
							brown	Wool	Z-2S			
							black	Wool	Z-2S			
							pink	Wool	Z-2S			
							pink	Wool	Z-2S			
							white	Cotton	Z-2S			
							blue	Cotton	Z-2S			
			5			PW-b	brown	Cotton	Z-2S	brown	Cotton	Z-2S
			6				cream	Wool	Z-2S			
							l.pink	Wool	Z-2S			
							grey	Wool	Z-2S			
			7			PW-b	d.blue	Wool	Z-2S	white	Cotton	Z-2S
						C	gold	Wool	Z-2S			
							l.brown	Wool	Z-2S			
			8			PW-b	white	Cotton	Z-2S	blue	Cotton	S
							blue	Cotton	S	brown	Cotton	Z-2S
										white	Cotton	Z-2S
			9				gold	Wool	Z-2S			

Cat.No	Function	Dimension	Panels	Panel dimensions	Design	Technique	Warp			Weft		
							Color	Fiber	S/P	Color	Fiber	S/P
							blue	Wool	Z-2S			
							l.pink	Wool	Z-2S			
							d.pink	Wool	Z-2S			
							purple	Wool	Z-2S			
XIX-G-722	W-B	37.5 X 15.5 X 5	1	37.5 X 15.5 X 5	s	PW-b	white	Cotton	Z-2S	white	Cotton	Z-2S
							brown	Cotton	Z-2S			
			2		z	S-T	white	Cotton	Z-2S	yellow	Wool	Z-2S
										pink	Wool	Z-2S
										cream	Wool	Z-2S
										purple	Wool	Z-2S
			3			B	black	Wool	Z-2S			
							white	Wool	Z-2S			

Curriculum Vitae

Name:	Beheshteh M. Asil
Post-secondary Education and Degrees:	Tehran University of Art Tehran, Tehran, Iran 2003-2007 B.A. The University of Western Ontario London, Ontario, Canada 2013-2015 M.A.
Language	English, Persian
Professional Skills:	Iranian Traditional and Modern Carpet, Kilim and Gabbeh from design to weaving Carpet Design using contemporary software Dying and preparation of wool for the weaving process