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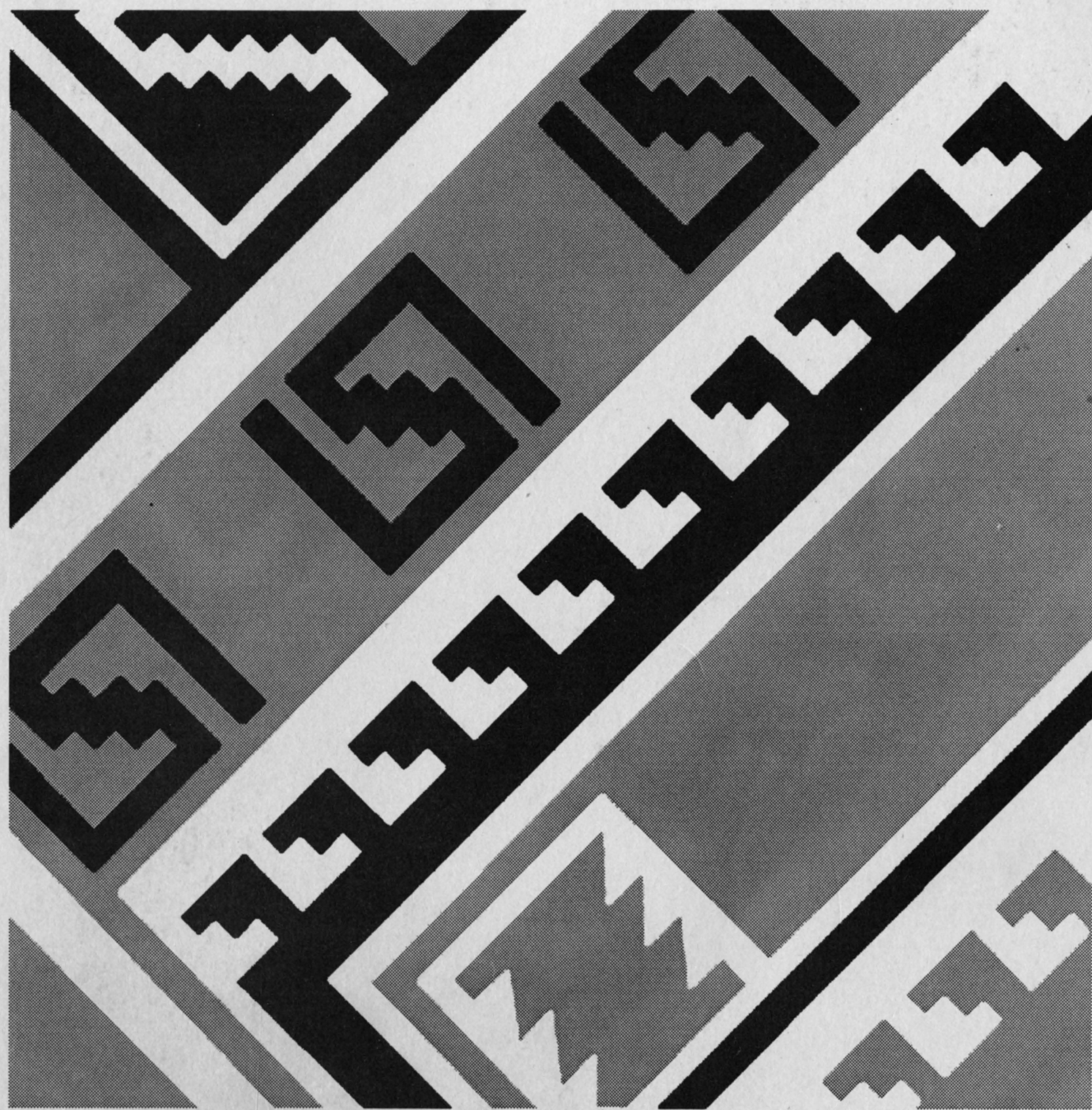
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TEXTILE SOCIETY OF AMERICA



SEVENTH BIENNIAL SYMPOSIUM

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Approaching Textiles, Varying Viewpoints

**Proceedings of the
Seventh Biennial Symposium
of the Textile Society of America**

**Santa Fe, New Mexico
2000**

Textile Society of America, Inc.

**APPROACHING TEXTILES, VARYING VIEWPOINTS
PROCEEDINGS OF THE SEVENTH BIENNIAL SYMPOSIUM
OF THE TEXTILE SOCIETY OF AMERICA, INC.**

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The Textile Society of America, Inc. provides a forum for the exchange and dissemination of information about the historic, cultural, socio-economic, artistic and technical aspects of textiles. It was founded in 1987 and is governed by a Board of Directors which includes scholars from museums and universities, as well as fiber artists.

The *Proceedings* of each biennial symposium are distributed as a benefit of membership. The previous titles are:

1988 *Textiles as primary sources**

1990 *Textiles in Trade**

1992 *Textiles in Daily Life**

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1996 *Sacred and Ceremonial Textiles*

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PREFACE

The Seventh Biennial Symposium of the Textile Society of America was held September 19-23, 2000 at the La Fonda Hotel in Santa Fe, New Mexico. The TSA 2000 Symposium theme, *Approaching Textiles, Varying Viewpoints*, reflected our members' interests in textiles as fascinating objects that draw our attention and reflect their cultural, geographic, and temporal settings. *Varying Viewpoints* emphasized the ways in which scholars and artists investigate textiles through many different methods and theories. Indeed, the 2000 Symposium showcased a wide range of professional approaches from the perspectives of artists, art historians, anthropologists, conservators, entrepreneurs, historians, and many others. *Viewpoints* invited exploration of differing cultural perspectives. Several panels include indigenous scholars and textile producers/users from around the world.

A session featuring textile-related videos and a market place/bookfair were special features this year. Santa Fe also offered the opportunity to enjoy the many local museums, galleries and studios, many of which offered special events for Symposium attendees. Before and after the Symposium, study tours visited fascinating out-of-town sites such as Taos, Acoma, and Laguna Pueblos, the Millicent Rogers Museum and the Spanish weaving village of Chimayo.

This Proceedings contains the juried presentations made during the 2000 Symposium. The variety of approaches represents the richness of interests found among Symposium participants and also the unique resources that Santa Fe and surrounding areas provided for this gathering.

Ann Lane Hedlund
Symposium Coordinator
The Gloria F. Ross Center for Tapestry Studies
Arizona State Museum
The University of Arizona
Tucson, AZ

QUECHUA TEXTILES: PRESERVING A LIVING TRADITION

By Nilda Callañaupa

Quechua Weavings as living art in the Andes today represent the contemporary textiles as result of transition of Pre-Colombian textiles of South America a textile tradition at least 2000 years. In Peru, after the Spanish arrival of 1532-33, many traditional arts were systematically replaced or mixed with European art styles. Fortunately, however, the strong tradition of backstrap loom weaving has survived.

Many changes have occurred in our traditional patterns, but a wide range of warp-patterned techniques have today developed into the richest and most extraordinary dress that Andean villagers have known. Indigenous people living in outlying communities today wear even finer and more complex woven textiles than their Inca forebears. Of course, I am not talking about the textiles woven for the Inca Emperor and nobility, but of Andean village weavings. Today we express in weavings our sacred landscape-the rituals and traditions associated with lakes, rivers, mountains, the flora and fauna of our high slopes, the shapes of our fields, our history. A few patterns now even include psychological associations.

Our Inca ideas and practices have always been comprehensive. They express contemporary world issues involving conservation, appreciation of our Mother Earth and the concept of caring for the land we are privileged to use during our lifetimes. My work relating to textile expressions strengthens knowledge of Quechua culture and history and I hope it will contribute to the wealth of world knowledge.

Since Pre-Columbian written documents do not exist and Colonial records are limited, it is important to learn what we can of our history through textiles. They hold information especially about everyday life as it links Pre-Inca and contemporary customs. Thanks to the Spanish colonial government, we lost much knowledge about our ancestors. But we are in the process of trying to reclaim as much as possible.

It is time now to recover what we can from our old people, to establish and keep records and teach our local people the great amount that is being learned. Since our education system does not emphasize or value our Inca heritage, I want to see the next generation of educated Quechua children continue to learn and pass on information to others.

Textiles can play other important roles in our society. My work in preserving textile traditions has already helped to strengthen the modest economy of Quechua families, helping many families in different regions. For example, I want to help families avoid sending their talented children to the cities to work in jobs below their abilities, as maids or laborers. Young people can use their weaving, as I have, to expand the advantages of their lives, and pursue new opportunities including advanced education. Also, if the families' economy is strengthened by the making and selling of fine weavings, husbands can avoid seeking work in the jungle where highland people are known to contract serious sicknesses; many tropical sicknesses that cause death.

Cusco is an important center in the tourism industry. It provides opportunities to market the best quality textiles. Weavers require opportunities and knowledge to avoid the excesses of middle market fees; then the makers of textiles can earn at least most of the money for their pieces. It is also important to educate tourists about authentic traditional textiles. I have been trying to make clear to travelers I meet the difference between fine works which take experienced weavers hundreds of hours to create and the simpler non-indigenous arts and crafts produced for the souvenir marketplace.

In recent years families needing money have sold the old textiles of their ancestors. This practice could be replaced if weavers concentrate on making fine new weavings.

With these perspective in mind, I have been working with a group of friends and supporters establishing and expanding the Center for Traditional Textiles of Cusco or CTTC. Our focus is on preserving and promoting the finest contemporary Andean textiles. We will soon start a capital campaign to raise funds for a textile Museum-Center in Cusco. In a few years, when we acquire and renovate an old Colonial building in the center of Cusco, we expect to have weavers coming from different and sometimes distant communities to demonstrate and teach their techniques.

In my role as President of the Center, while working on research of old techniques, I found that the rare warp scaffolding technique, still practiced in the remote village of Qeros and locations in the Pitumarca region, was also being practiced by a very few individuals in other areas of the Urabamba range. This was an exciting finding and shows the urgency of conducting studies in different Andean locations.

My responsibilities and the responsibilities of the professional people working with me at the CTTC in Cusco must be to aid local Quechua people in understanding their own weaving traditions, especially where the textiles play important roles as part of our tradition. We must become involved with broad issues relating to Andean culture. We need to create long-term projects involving local people. In addition to weaving, CTTC participants' roles must be to learn and to educate others, passing on from person to person whatever they discover about their culture.

The commercialization of our Quechua textiles must be accepted as it is and it should be understood that Peruvian textiles are the works of art from our culture. Education about this issue is very important.

The mission statement of The Center:

The Center for Traditional Textiles of Cusco was established in 1996 to aid in the survival of Peruvian Inca textiles and weaving traditions. Working with the Center, Quechua-speaking women and their families in the region of the former Inca capitol are engaged in skills-building, community networking and market development. By also researching and documenting complex styles and techniques of Inca ancestors, the Center helps to ensure that 2,000-year-old textile traditions will not be lost in the next millennium.

Navajo Weaver as a Teacher of Traditional Textile Arts

Pearl Sunrise

Navajo weaving has evolved from historical utilitarian functions to contemporary fine art today. My presentation on Navajo weaving will include topics of history, economics, function; new materials affecting style and structural and esthetic textile changes, and the purpose of instruction. My role in this presentation is to disseminate information about Navajo weaving and facilitate discussion through the important question-answer sessions to achieve interaction with the TSA members.

To the Din³/₄Navajo people, there is no word in the language to describe the word *art*. Weaving is both process and experience, and it involves activity toward a balance and harmony of self in the concept of HæZHæ, incorporating elements of physical, psychological and spiritual qualities.

Many positive and negative factors contribute to the teaching of traditional art forms. Economic and social aspects differ as well as race, age groups and learning styles. However, the mission and objectives in teaching traditional arts is the same for all, to promote understanding between cultures, among Natives and non-Native groups using the textile art form as the medium for discussion. It includes trying to give the students a total human experience by experiencing the concept of HæZHæ through the Din³/₄ philosophy of self and creativity.

Teaching Navajo weaving promotes preservation and perpetuation of the cultural arts. In order to preserve traditional arts, seeds have to be planted very early in life. For those searching for identity, they will gain identity and learn about themselves while they develop greater esteem. The Native people will gain empowerment through an enriched understanding of the value of their heritage which leads to stronger self esteem and pride for the people. For the non-native, learning Navajo weaving enables them to respect other cultures, enrich their lives, and better communicate and understand skills of diverse groups.

Pearl Sunrise has taught Navajo weaving to numerous children, adolescence, adults, senior citizens, Natives and non-Natives in a large variety of established institutions, kindergartens, elementary schools, mid schools, high schools, college level and senior citizens programs. These programs include Canoncito Navajo School, (kindergarten-High School); Cuba Consolidated Schools (elementary-High School); McCurdy School (Española, NM); "A School for Me" Navajo Handicapped School (Tohatchi, NM); Albuquerque Public Schools (Indian Education-Navajo Textiles); Chapter Houses, Navajo Reservation; Santa Fe Indian School (mid and High School); Santa Fe School for the Deaf and Blind; United World College (Las Vegas, NM); Native Arts and Crafts, (University of New Mexico Art Dept.); Institute of American Indian Arts (Santa Fe, NM); Taos Institute of Arts (Taos, NM); FRIDA Program (Lesotho, South Africa; Artist-in-Residence (Toronto, Canada); and Fulbright Scholarship (New Zealand).

The “Aristocracy of Color” among Kolla Communities in the Andes of Northwest Argentina

Andrea Fuchs

The weavers of the Kolla Community of the Argentine Andean highlands or Puna, show strong preferences for the use of certain color combinations. These preferences seem to be more stable over time than their use of traditional technology and materials, which change more often according to utilitarian reasons. As it happens with food preferences, the use of color can show a strong sign of cultural identity that, in this case, can be traced to pre-columbian times.

During our work with traditional Andean weavers from seven communities in the Humahuaca Valley and Altiplano of Jujuy (about 800 families), we came across several interesting examples of this phenomenon. The goals of our program combine the creation of new sources of employment for these economically marginal communities with the restoration of traditional Andean textile designs and techniques, including the use of llama wool, hand spinning, dyeing with local plants and minerals, and loom weaving. We believe the best way of organizing teaching and production is by strengthening the Andean communal forms of organization and exchange.

While preparing a collection of *mantos*, shawls, and *ponchos* for the fashion market in which we combined natural llama colors with “dusty” or pale dyed tones, for example, brown with pale blue, beige with gray, brown with mahogany, white with pastel colors, and others considered by the market to be “quote and quote” *traditional color combinations*, we were surprised by the protests of the weavers who didn’t agree with the fashion taste. They would say these combinations were dull and sad. *Can’t you see this manto has no life, if we add an orange stripe to the grey and brown, you’ll give it light and life.* They really felt the textile pieces were boring and seemed dead. They considered these combinations vulgar and not elegant at all. When shown archeological or antique pieces and their colors they would complain that the textiles were old the colors had faded (the original ones must have been bright and contrasting)

When dyeing, Kolla women throw away the second tint because it gives only a pale tone. When I was around I told them that the light colors were very nice and we should not spare these valuable dyes. They laughed and told me that these were bad colors. The good ones were strong and brilliant, specially tomato red, vibrant orange and violet or dark blue.

Intrigued by this unusual behavior, I looked for some explanation in the uses of color in pre-columbian times, searching in the chronicles of the Spanish conquest and in the analysis of ancient textiles. I centered my attention in color preferences, in the use of color contrasts and oppositions, and in design structures, trying to find relations between them and the Andean construction of the cultural world.

“By the first millenium B.C. inhabitants in the south-central Andes like those from the northern Andean regions, had developed a fully formed weaving tradition. Here, camelid fiber, (llama, alpaca and vicuña) not used on the northern coast, was used for tunics, turbants, woven mantles and string skirts. Many early textiles were dyed a brilliant red color produced from the roots of a Relbunium species, similar to the madder family.

In the following Alto Ramirez culture, which dates to the last centuries B.C., men dressed in one of the most distinctive garment styles developed at the time. Their costume included a tall, looped headdress patterned with rows of stepped designs in brilliant green, gold, red and blue stitching...The Alto Ramirez style was discovered inland along the Azapa River valley near Arica, Chile, but the style appears highland in origin.

The most important Highland culture in the Southern Andes was known as Tiwanaku, from the archaeological site of Tiwanaku with its standing stone monuments, located high in the windswept altiplano of the Lake Titicaca basin in Bolivia. Although textiles are rarely preserved on the Altiplano, Tiwanaku textiles dating from the fifth to the tenth centuries have been recovered throughout Bolivia and northern Chile. Tiwanaku was the preeminent highland capital of a vast, long-standing religious polity. Tiwanaku's cultural influence was equally expansive and enduring... Tiwanaku weavings are among the finest of all Andean textiles With yarns spun from only a few long hairs, much finished Tiwanaku cloth had the feel of a light, silk handkerchief.... Techniques of tie-dyeing and patchwork, weft-interlocked tapestry, and warp-patterned weaves of brilliantly dyed camelid fiber were all part of the Tiwanaku tradition. Red, blue, green and gold were emblematic Tiwanaku colors, and often mixed with deep maroons, pinks and violets. It is possible that the southern Andes was always the center for indigo dyeing, and blue yarns were a hallmark of the area....

Ancient Aymara textiles followed Tiwanaku prototypes. Elegant tunics and mantles were worn from brilliantly dyed and finely spun camelid fiber in warp faced, warp-striped and warp-patterned weaves. Aymara garments were known for such specific colors as red, blue, and maroon and the placement of wide and narrow warp stripes using simple, warp-faced plain weave.” (Oakland 1997:18-19)

“The Aymara Caciques used *unkus* in gold, silver and *mullu* (coral red) as it is confirmed by documents showing the presents that the Inka made to the Cacique Quillaca Guarachi. The Guarachi from Machaca kept among their possessions and left through testament, a wine red “unku” donated by the Inka. An “unku” weaved with silver threads is kept in the Ethnographic and Traditional Museum of La Paz, it has a military style and may have belonged to an important indigenous leader of the 1781 rebellion, maybe even the brave Tupac Catari.” (Gisbert 1987:63)

By the fifteenth century, the powerful Inkas were able to subjugate the southern highland Aymara. According to the Spanish chronicle of Bertonio, the *unku*, a poncho sewn on the sides, was the shirt of the Mallkus, the great lords. The Inkas' Unku is described as a sleeveless shirt or poncho sewn on the sides with blue to the knees and red at the bottom. This was the Inkas' dress called *Harputha Ccahua*. The Inkas were mostly described as wearing *unkus* and red and blue were the colors of preference, so they were considered noble colors.” (Gisbert 1987:59, 62-63)

It is worth noting that in Precolumbian times these colors were obtained from substances that are scarce and very difficult to obtain, like cochinitilla (for red and mango), añil or indigofera (for blue), achihuate seeds (for orange), and mullu. This could explain why these colors were associated with prestige and why their use became an effective way of communicating a high social condition.

In his study *Standardization in Inka Tapestry Tunics*, John Rowe analyzes a textile piece that is half red and half blue. He suggests that many noble tunics “may have

responded to certain color and structure codes,” for he also found similar *unkus* with black and white chessboards and red chests. This kind of design is called *Ayquipa* in Aymara... After the Inka conquest the *unku* was introduced into Bolivia... In the Island of the Sun of the Titicaca Lake, *Inka Unkus* with black and white chessboards and red chests were found.” (Gisbert1987:59) In a chronicle by Francisco de Xerez from 1535, there is an account of the first encounter between the Spanish and Atahualpa, the last Inka ruler:

“the men of Atahualpa’s army began to enter the plaza. First came a squadron of Indians dressed in a livery of colors in the manner of chessboards; they came removing the straws from the ground and sweeping the road. Behind them came three more squadrons, dressed in different manner, all singing and dancing.” (in Stone-Miller 1994:172)

When we read these documents to the weavers they were thrilled and teased us saying that they were the elegant ones not the fashion market. After that we tried not to change this type of color combination and to respect their preferences as a way of maintaining their strong cultural heritage in the creation of design and color. The market responded in a very favorable way, admiring their fine taste regarding color combinations and their exquisite sense of composition. Of course, we had to add to our marketing strategy explicit references to the Inkas and their royal habits.

Another difference of opinion with the weavers arose while trying to produce shawls with a design inspired in a Precolumbian textile with a motif representing mythical creatures of *kurus*. I asked them to use two tones of red, but they told me they couldn't make it unless the two colors were really contrasting and different, since these creatures had to be differentiated from their surroundings. Once again the idea of contrast and opposition came up, but this time in relation to the concept of creation. According to Gisbert, the forces of creation include two opposite aspects: The *Pachamama* or mother earth and the dangerous *Tio*, the Uncle or Devil that controls the mineral world. Female and male as parts of the same being: the Earth, the mother and giver of life, the *Tio* or Devil, who lives underground, who will take your life if you enter his domains without permission.

A similar situation arose when trying to produce a shawl with *Inti*, an abstract figure symbolizing the Sun. I asked them to make the shawl in browns with *Inti* in green, but they said that making *Inti* green was a really bad idea.

According to some authors, Andean textiles have also been a medium for conceptualizing the world and communicating complex ideas. Weavings with contrasting colors may embody the fundamental Andean concepts of reciprocity and complementarity. In complementary warp weaves, for example, two warp yarns of contrasting colors are always paired and essential to the structure of the fabric. Of these two basic colors, one will come out to form the design, and the other will create the background.

The process of textile production in the Kolla communities we are working with takes several steps, starting with the *llameros* or llama herders, from whom they obtain the wool. Then women from different Puna communities classify, clean, wash and spin the llama wool leaving it as soft as silk. Then, in other communities they dye the yarn using the local plants that are available during that season. At this point, the weavers

request the colors they need to produce specific designs. Only when enough thread of the right colors is available, some of it obtained through exchange with other places, the weavers will start their work.

Here is when their need to use certain combinations and ancestral preferences enter in conflict with modern Western rules and taste regarding the proper uses of color. For example, Argentina has its own rules and ideas for what is considered proper and elegant: little girls are always expected to wear pink and young boys light blue, but Kolla women prefer to use strong colors for babies so they look and feel healthier. I was even told that the use of some bright colors can prevent illness and the “bad eye” (it is believed that envious and wicked people can make a person sick by staring at her, specially babies). Men in our urban society always wear white shirts, and blue, grey or brown outfits. Kolla men love red and yellow and use these colors specially for *fiestas* and rituals, like Carnival and even for All Saints Day and the Day of the Death, on November 1st and 2nd, when they come down to the villages wearing their lively *ponchos* and colorful *chuspas* (little bags used to carry the coca leaves). Certainly they don’t use these garments when they go to the city, specially if they go in search of employment .

As we mentioned before, one of the goals of our work is to strengthen the sense of identity of Argentine Kolla communities by restoring ancient Andean weaving technology and design together with the communal forms of organization and exchange. We have noticed, however, that this *Aristocracy of brilliant, lively colors and strong color contrasts*, that seems to be an important part of that identity, can be traced in the way they handle any tincture, material or technology as synthetic dyes or acrylic fibers, in the sweaters they knit with electric machines, or when they choose a lychra fluo dress or a bright-colored baseball cap. Ancient preferences for contrasting combinations, vibrant tones or primary colors re-appear spontaneously in their use of new clothing and technology.

The cultural construction of the world that differentiates Andean peoples survives in everyday choices, tastes, and preferences, even in our modern, technological, and “synthetic” society.

References Cited

Gisbert, Teresa

1987 *Tecnología Textil: Arte Textil y Mundo Andino*. Gisbert y Cia., La Paz.

Oakland Rodman, Amy

1997 Weaving in a High Land: A Continuous Tradition. In *Traditional Textiles of the Andes: Life and Cloth in the Highlands*, edited by Lynn A. Meisch, pp. 16-27. Thames and Hudson, New York.

Stone-Miller, Rebecca

1994 *To Weave for the Sun: Ancient Andean Textiles*. Thames and Hudson Ltd., London.



Figure 1: Kolla women in Salt Desert



Figure 2: Asuncion Alancay spinning

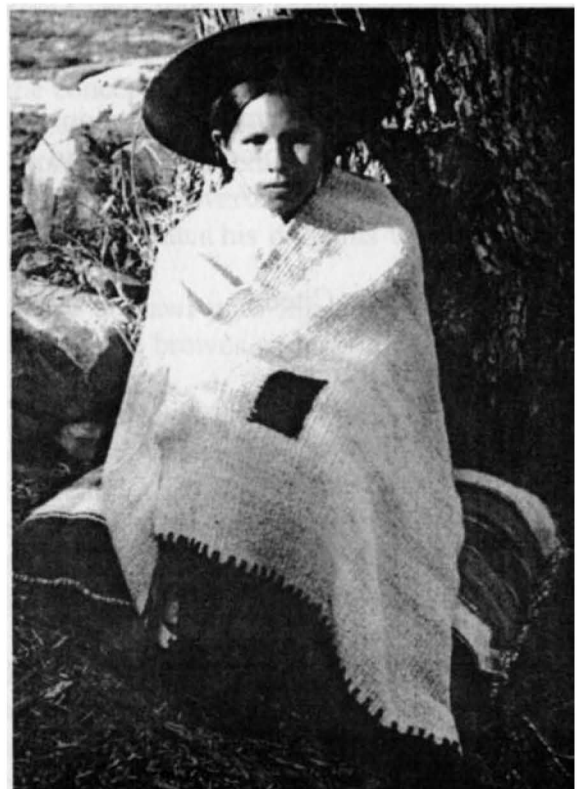


Figure 3: Vanesa Pérez in mantle with contrasting design.

The Order of Things in Ancient Peru Visual Metaphors in Wari-Associated DWW Textiles

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Two very different types of high status ritual textiles were produced with the use of the discontinuous warp and weft (hereafter DWW) technique during the Wari sojourn on the coast of Peru (ca. 600-800 C.E.): complex tie dyes, in which case the undyed cloth was woven in a DWW-based technique, and cloth woven in multiple techniques, wherein DWW is one of several weaves in a single textile.¹ In all probability, both types of ritual cloth were created on the coast of Peru for use by the highland Wari culture and/or their coastal representatives.² In the following paper, I will compare various technical and formal elements of these textiles in pursuit of Wari attitudes to their coastal neighbors. Such analyses add to the ongoing debate about Wari-coastal relations, traditionally based on ceramic distribution and architectural remains.³

The tie dyes, such as the mantle in the Museo Amano in Lima (Fig. 1), appear to promote the Wari as orchestrators of a harmonious, if complex, cosmic balance and integration. Often referred to as Nasca-Wari in collections, they are usually associated with the Wari presence on the South Coast. Fragments of these fabrics, however, have been found as well in graves along the Central Coast, and as far north as the Chicama Valley on the North Coast.⁴ The Museo Amano mantle was reportedly found at the South Coast site of Santa Cruz in the Nazca Valley (Tsunoyama 1979: 202-203). In contrast, the tunic (Fig. 4) and similar compositions with multiple techniques and hierarchically-arranged figurative imagery speak, at least initially, of cultural separation. The techniques represented here are plain weave, slit tapestry, DWW, and slit tapestry and openwork (see Emery 1994: 88). Such textiles have been found in burials on the Central Coast of Peru and as far north as the Huarmey Valley, but not on the South Coast (see Menzel 1977 and Prümers 1990). This tunic in the Phoebe Apperson Hearst Museum at Berkeley was excavated by Max Uhle at the Central Coast site of Chimu Capac in the Supe Valley (Menzel 1977: 36).

The DWW technique shared by these two types of textiles has, as its name implies, a most unusual quality; neither warps nor wefts travel the entire length or width of the cloth. The result of their interaction, however, is plain weave with the warps typically outnumbering the wefts. What makes this technique special, and hence potentially evocative, is that both warps and wefts participate in the creation of color and pattern (Fig. 6).⁵ Since both are equally exposed, their color is usually the same in a given color area, as is their material, all camelid or all cotton.⁶ In lieu of the load-bearing warps of tapestry, the weavers of DWW cloth employed temporary scaffold wefts, an interesting inversion of the tapestry technique,⁷ or, if the pattern area was very small, threads might be inserted with a

needle,⁸ such as the 3/8 in. (1 cm.) eyes of the felines. The joins between different color areas are the same as those in tapestry (see Emery 1996: 19-81, 90); the choice of join appears to have been specific to certain regions at certain times based on my examination of over 250 DWW textiles. Here, they are a combination of single interlocking and dovetailing (interlocking around a common warp) in the wefts and single interlocking in the warps.

Complex tie dyes of the Wari era represent a special category of DWW-related textiles. Camelid fiber, probably undyed, was initially woven into strips of plain weave cloth with side selvages or slit junctures in the weft direction and dovetail joins around removable scaffold wefts in the warp direction. In the Museo Amano mantle, which measures 79 x 44 3/4 in., the strips were composed of rectangular modules created by two stepped right triangles. The woven strips were then resist dyed. Based on the patterns created on this textile, 5 fabric strips were tie dyed.⁹ After dyeing, and over-dyeing in some cases, the strips were taken apart and reassembled into pre-planned, striking patterns with sometimes contrasting, sometimes similar color in adjacent pieces. To hold the pieces in place, scaffold wefts were reinserted through the warp dovetails, and the side selvages and slits were sewn together.

The entire process of creation in the DWW technique, whether on a backstrap loom or in some cases on a horizontal staked loom, was very time-consuming, perhaps more so than any other technique in ancient Peru.¹⁰ Such a labor of love, or conspicuous devotion and sacrifice, seems to have been an advantage to the minds of ancient Andeans, since there are so many instances of technical over-elaboration (see Stone-Miller 1992a: *passim*). What was valued appears to have been the amount of creative, animating energy transmitted to the finished textile. In fact, it could be said that the efficacy of a textile was directly proportional to the quantity and quality of interaction between weaver and fiber.

On a purely practical level, cloth woven in the DWW technique is typically flexible and relatively light weight, and hence is well-suited to the arid South Coast, where it first developed sometime around the 3rd century B.C.E.¹¹ The visual impact of sun and desert sand, which tend to bleach out color, was probably another practical reason for developing the technique, which can create rich, intense color with the use of dyed camelid fiber. However, since polychromy was not always sought in the production of DWW fabrics (sometimes a drab, almost monochromatic palette of browns, greys, and whites was selected),¹² the actual structure of DWW must have been charged with expressive meaning all its own.

Indeed, it is in the reciprocal sharing of responsibility for pattern and color by the warps and wefts of this technique that I believe is embedded a most important pair of ancient Andean principles; balance and reciprocity. These principles were necessitated by the extremes of the Peruvian landscape and climatic inversions in the form of El Niño and La Niña floods and droughts. In

the ancient Andean world, a harmonic balance on and between all levels of existence and reciprocity, a give and take relationship between humans and humans and the natural environment, were actively pursued and promoted through rituals.¹³ Given the high esteem of textiles in ancient Peru, their role in such ritual contexts must have been active, fully participatory, and not passive.¹⁴

When the Wari descended to the coast from the highlands of southern Peru at about the beginning of the 7th century, it may have been in response to a 30-year period of floods and droughts.¹⁵ If so, these phenomena may have been interpreted as an imbalance in the cosmos that could be righted only with the appropriate rituals performed in and beyond the Wari heartland. In any event, the Wari seized the moment and appeared on the coast with new or revamped religious beliefs and rituals which apparently required highland-lowland unity. This unity was manifested in the socio-political form of either a state or perhaps a federation,¹⁶ and in the establishment of a sacred pilgrimage site at Pachacamac on the Central Coast. I contend that the costumes of the ritualists were a major vehicle for communicating and participating in this cosmology, as much as the integrating rituals themselves.

Wari costumes were typically composed of exceptionally fine tapestries, which have also been found in South and Central coastal graves, or the complex tie dyes. Facial paint, head gear, and other ritual paraphernalia were also *de rigueur* based on extant ceramic figures shown wearing tapestry or tie-dye garments (Figs. 3a and 3b). The tapestries of the Wari were their native costume.

For the production of the complex tie dyes, the Wari apparently co-opted and expanded upon the DWW technique, which had been until that time primarily a coastal technology.¹⁷ To communicate their cosmic vision to a wider audience on the South Coast, the Wari over time also adopted geometric abstraction and South Coast color sensibilities.¹⁸ The means by which the Wari symbolically and perhaps actually incorporated the southern lowlands into this grand plan for cosmic rebalance may well have been through the production of the tie dyes. Balance and reciprocity, expressed by the structure of the DWW technique and wed to other South Coast textile features, was communicated through both the process of their fabrication and the final compositions. Costumed in these tie dyes the Wari and their coastal representatives literally placed themselves, it would seem, at the center of the cosmic imbalance in the role of mediators in ritual. It is possible that the tie dyes actually became a model for, as well as a recognized generator of, what was desired: a return to cosmic harmony, by virtue of their multi-color, multi-shape components.

These components build one upon another from the stepped triangles, to rectangles composed of complementary, reciprocating pairs of stepped triangles, to cruciforms superimposed on rectangles, to the largest pattern created here, cruciforms on rectangles set within even greater rectangles. Although punctuated by animating rhythmic color

and linear patterns, an overall harmonious balance is nonetheless expressed, in part a product of those hard-edged building blocks composed of right angles.¹⁹ The regularity with which each piece of cloth has been marked with resist-produced diamond shapes and parallel lines, and which is sustained in the union of pieces in the final composition, also contributes to the sense of control and order exuded by this textile. A secondary rhythm of animating diagonals, however, is created by the projecting warm colors of the red and golden yellow ground pieces, reproduced as light and medium grey in the illustrations (Figs. 1 and 2). The dark grey to black stepped triangles are the recessive cool colors of dark blue, blue-purple black, and green. Each row of these diagonals is a different con-figuration, which further energizes the composition, as do pattern deviations in some rows (for example, the second row from the left in Fig. 1). Even so, the mood and feeling projected by this textile remains one of balance, albeit complicated and full of life.

Other contemporaneous textiles speak less obviously of balance and integration through the juxtaposition of distinct techniques and hierarchically-arranged figurative imagery. One example is the Wari-associated ritual tunic at Berkeley, which was excavated at a fortified Wari outpost on the Central Coast known today as Chimu Capac (Menzel 1977: 29). Certain features, such as shape (it measures 36 x 50 1/2 in.), variety of weaving structures, and cotton and camelid fibers, are shared with other tunics of this region. The color complexity and iconography on this tunic, however, are quite unique and together suggest that the wearer, who was actually buried in a temple platform at the site,²⁰ was a particularly high-status individual. As was true of the tie dyes, certain components of this tunic suggest non-Wari features, including some shared by the Central and North coast cultures, such as the proportions of the garment and its sleeves. Many of the choices, however, suggest specifically North Coast aesthetics, including the use of relatively naturalistic figurative imagery, the horizontal registers, the rusty red overall ground, and paired warps in the plain weave section (these continue down into the slit tapestry).²¹ In addition, woven in slit tapestry in the lowest register is a series of so-called moon animals, a North Coast mythological being (Menzel 1977: 34, 37; Benson 1985; Berrin 1997: 93, 102-103).

Nevertheless, the Wari components dominate, especially the diagnostic kneeling or running figures carrying staffs. These are actually larger than the felines and moon animals and occupy a superior position to them in the highest register. An emblematic feature of Wari tapestries, the staff-bearing figures ultimately refer back to imagery carved on *The Gate of the Sun*, a sacred portal at the highland center of Tiwanaku (fig. 7).²² The felines in the DWW panel, although a pan-ancient Andean symbol with celestial associations,²³ are nevertheless also suggestive of the Wari aesthetic in their geometry. The color complexity in each section of the textile is also a Wari component, including a blue-green anomaly in the back foot of one of the winged beings (Stone-Miller

2000, personal communication),²⁴ as is the tunic's overall technical refinement.²⁵ Another color deviation appears in the face and paws of one feline.²⁶

The passivity of these felines and their containment in rectangular boxes positioned directly below the active Wari agents speaks volumes about the Wari's proposed role in taming their capricious environment. That so much of the garment, one-half of its length, is given over to these creatures woven in the DWW technique is surely significant.²⁷

Overall, the metaphorical content of this tunic implies that the relations between the Wari and most probably a North Coast culture, were problematic and/or that the Wari's self-appointed cosmic role had to be dictated with greater clarity if not greater force. The order of things and the Wari's role therein had to be spelled out in a markedly different aesthetic language from that of the abstract tie dyes. The specific non-Wari moon animal imagery, relegated to the lowest position along the bottom border and the sleeves suggest that the cosmic audience or powers addressed by the Wari were at least associated with the Moche or their immediate successor on the North Coast.²⁸ A state-level culture, the Moche had moved their capital far up the coast, perhaps in response to the same cataclysmic weather that had brought the Wari down from the highlands (Shimada 1994: 118-134). Whether the Moche were folded into the Wari state or remained independent is an unresolved issue, still hotly debated by scholars.²⁹ Perhaps the ritualist who wore this garment was key to the actual resolution of hostilities, presumed to have been felt between these two great centralized powers. Alternatively, rituals of integration, which incorporated mythological beings dear to northern religious beliefs, may have been carried out to complete the Wari's vision of a balanced cosmos.

In closing, a technical and formal aesthetic interpretation of ancient Peruvian textiles with specific site associations can add to our understanding of cultures and their interaction. Here, two very different ritual textiles were created with the use of the discontinuous warp and weft technique, itself expressive of the pan-ancient Andean principles of balance and reciprocity. Both textiles were the product of contact between the highland Wari and coastal cultures of ancient Peru. Although very different in the means by which they professed Wari ideas and ideals of cosmic order, their message was essentially the same, and in keeping with the message encoded in Wari tapestries: natural chaos (the predictable unpredictable) of all varieties was acknowledged, aggressively embraced, and vigorously contained (Stone-Miller 1992b: 334-345; 1995: 118; and Stone-Miller and McEwan 1990/1991). For the oral cultures of ancient Peru, ritual textiles were extremely important as a medium of communication, not only through their imagery and color, but also through the important languages of structure and technique.³⁰

Notes

1. See Cook 1996, for her analysis of Wari tie dyes as high status costumes. Although the tie dyes have been found most commonly in burials on the deceased, Amy Oakland Rodman (T.S.A. 2000 paper) mentioned two Wari textile fragments that had been ritually burned at the Moche site, El Brujo, in the North Coast Chicama Valley: one tapestry and one tie dye.
 2. Found with Wari-associated remains on the coast, who made the tie dyes and who was allowed to wear them are questions that are difficult to answer with certainty. Camelid fiber is usually associated with highland production, although the South Coast cultures had been importing the fiber many centuries prior to the Wari presence on the coast. See Rowe 1986: 182 (Fig. 40), for a tie dye that she attributes to the Wari. For Nasca-attributed tie dyes, see Brugnoli B. and Hoces de la Guardia Ch. 1999: 14-17, 37-38.
 3. For a recent reassessment of the Wari, see Isbell and McEwan, eds., 1991.
 4. A ritually burned and buried tie-dye fragment excavated at El Brujo in the Chicama Valley was reported by Amy Oakland Rodman in her T.S.A. 2000 paper (see note 2).
- The Chicama Valley lies immediately north of the Moche Valley. At least 6 fragments have been excavated from the Huarmey Valley, along with some 25 tapestry fragments, see Prümers 1990: 434-435, 725, 730.
- A tie-dye fragment reportedly from Huarmey is in the Amano Museum (Tsunoyama 1979: 225).
- The Huarmey Valley is the most southern valley on the North Coast, and until the era of the Wari, was the southern boundary of the Moche state. It apparently became the most northerly Wari settlement. For tie dyes excavated at Pachacamac, see Shimada 1991: 32; VanStan 1961 and 1967: 71-73, 84, fig. 67. Unpublished fragments from San Nicolas cemetery in the Supe Valley are in the Phoebe Apperson Hearst Museum at Berkeley (4-7512, 4-7486, 4-7796 A/B, 4-7791 a/b/c).- 5. The only structurally-created color and pattern in plain weave are stripes or plaids. In tapestry, a relative of DWW like plain weave, structurally-created color and pattern are produced in great variety, but at the expense of the hidden continuous warps.
- 6. In this tunic, the off-white, beige and tan fiber is cotton, which includes the plain weave upper section, the warps of the slit tapestry sections, and the white and tan rectangles and details in white in the DWW section.

7. Also, stick scaffolds were used rather than fiber, based on examples in the collection of the American Museum of Natural History and illustrated in Phipps 1982.
8. See Rowe 1973, for a discussion of the possible use of scaffold cloths in the creation of some of the finer examples of DWW by the Nasca culture of the South Coast. See Strelow 1996: *passim*, for her identification of many Middle Horizon-Late Horizon DWW textiles in which fibers were inserted with a needle.
9. All of the resist-dyed marks could have been created by tying alone based on the experiments of Ana Lisa Hedstrom and Yoshiko Wari (Ana Lisa Hedstrom, personal communication, T.S.A. 2000 symposium). They had tried to reconstruct the original fabric strips by cutting up photographs of tie-dye cloths, but to no avail. This suggests that more than one textile was made at a time, a cost effective strategy. Indeed the color palette of the Amano tie-dye mantle is precisely that of a tie dye in the Boston Museum of Fine Arts (see Stone-Miller 1992a: 99-100): red on golden tan; green on golden tan; blue on white; red on white; and red and dark blue-purple (black) on white.
10. Consider especially those *tour de force* examples in which frequent color variation was emphasized, such as the figurative textile in Boston (see Stone-Miller 1992a: 89-90).
11. Garaventa 1982 and Phipps 1982. This textile was found in the Yauca Valley on the South Coast of Peru and is in the Phoebe Apperson Hearst Museum at Berkeley.
12. Textiles excavated from tombs at Cahuachi are particularly supportive of this idea. See especially Ubbelohde-Doering 1967: 179, for a late Nasca tomb at one time reconstructed in the Staatliches Museum f. Völkerkunde in München. The walls of this tomb were hung with brown, grey, and white DWW cloth in a repetitive stepped-fret pattern.
13. See Salomon and Urioste 1991: 16 and Classen 1993: 11-38, especially on the ancient Andean concept of *ayni*, balance and reciprocity. The actual term is Quechua. According to Classen: 2, the major Inka rituals celebrated the agricultural and the human life cycles. Although the recording of ancient Andean oral traditions dates to the colonial period, there is a general agreement among scholars that the cosmologies were age-old. In the case of the Inka, it is highly possible that much of their belief system was built on a Wari foundation. See Cook 1996, for a recent assessment of Wari-Inka continuities. It should be noted that continuities can be traced from Chavín de Huántar and its predecessors to highland and coastal cultures of successive eras (e.g., Tiwanaku, Nasca, Moche, and Wari) by studying the visual arts (see Burger 1992 and Stone-Miller 1995).
14. Ancient Peruvian textiles used in ritual were surely not without some tacitly acknowledged magical properties. Through their symbolic languages (color, imagery, structure, and technique), ritual vestments would have been understood, in the very least, to protect the ritualist from

- the forces honored during the rites. On the function cloth in the Inka state, see Murra 1989.
15. See Shimada et al 1991, about the 1,500-year Andean ice core precipitation record and Moseley 1992: 28 about the drought, 562-594 C.E.
 16. See Isbell and McEwan 1991: 1-17, 293-294 and Schreiber 1992: 113, for how the Wari's socio-political rule has been interpreted as a state, an empire, and as part of a religious hierarchy of sites with oracles perhaps dominated by Pachacamac.
 17. Unfortunately, due to the climate in the highlands ancient textiles have not been preserved as they have along the arid South Coast of Peru.
 18. The Wari style was apparently more naturalistic in its earliest manifestation, closer in fact to the style of Tiwanaku, the genesis of Wari religious beliefs and iconography. See Rowe 1986 for a tentative chronology of Wari designs and Conklin 1971 for an early Wari textile.
 19. The configuration in this particular tie dye reads like a cosmogram expressive of a unified state or empire. The arms are perhaps symbolic of the lateral and vertical planes of the universe, which emanate from the core, i.e., the unifying culture and/or its capital city. On crosses in Andean astronomy and cosmology, see Urton 1980 and 1982.
 20. Also buried in the platform was an individual wearing a Wari-style tapestry tunic and perhaps another individual wearing a type of tunic more typical of the Central Coast during the Wari era (Menzel 1977: 36-37, 114, Fig. 75 and 115, Fig. 77).
 21. The cotton fiber is S-spun singles, while all of the camelid fiber is Z-spun and S-plied. For the few extant Moche textiles, see Conklin 1979 and Benson 1992: 314-315. Paired singles in the warps have been identified with the Chimú, a later successor of the Moche (see Rowe 1984).
 22. On this portal (Fig. 7), a centrally-located, front facing diety, usually identified as a sky god, appears in a position superior to profile human-, bird-, and feline-headed agents. These agents converge upon this central figure from the left and right. In the lowest register are unidentified frontal figures. When the Chimu Capac tunic was worn in ritual, as was true of Wari tapestries, the ritualist became the sky god, or at least that is the implication.
 23. Menzel refers to these felines as "Huari Feline Star Animals" (1977: 36). In 1968:87, she suggested that fully feline creatures might be synonymous with the Pachacamac griffin. Felines have such a long history in the visual arts and imaginations of ancient Andeans that their meaning on this tunic was probably multivalent. See Saunders 1998 and Benson 1998 on feline symbolism in the ancient Americas, but particularly in South America, wherein the jaguar was associated with rain, fertility, and water (Saunders: 37).
 24. See Stone 1987: 167-174 on color anomalies in Wari tapestries.
 25. The thread count is: in the plain weave section, 13 pairs of warps to 12 single wefts; in the tapestry section, 7 warps composed of two pairs of

- single threads to 46 wefts (average); and in the DWW section (it varies from color to color), 19 warps to 12 wefts of 2-ply red camelid fiber, and 18 pairs of warp singles to 14 weft singles in the white cotton.
26. The facial colors of a feline in one diagonal row are dark pink with blue eyes, the reverse of all others in that row, and the paws are both dark pink rather than one dark pink and one brownish-black. See Stone 1987: 154-163, on color deviations in Wari tapestries.
 27. Of particular interest is the appearance of a reclining feline at the side of a ruler in Moche iconography (Benson 1998: 61), while felines carved in relief prowl below a register of shamans in transformation at Chavín de Huantar (see Burger 1992: 133-135).
 28. The revision of the Moche chronology by Bawden 1996: 23, makes this association with the Moche feasible. He places Moche V in Middle Horizon 1b, if not MH2a. The immediate successor to the Moche was the Sicán culture (Shimada 1990: 297-392).
 29. See Isbell and McEwan 1991: 1-17, Bawden 1996: 271, and Shimada 1994: 131-134. The interpretation of Wari and Wari-related ceramics and textile fragments at Moche sites needs to be carefully scrutinized. Their incidence need not mean a physical presence, or political hegemony for that matter, but rather the importation of highly valued objects (with which travel ideas), or mementos or relics of a pilgrimage, to name but two of a number of other possibilities. See Caldwell 1964 and Schreiber 1992: 113, on interaction spheres in prehistory.
 30. On the importance of examining structure, materials and techniques, see Lechtman 1996.

Bibliography

Bawden, Garth. *The Moche*. Cambridge: Blackwell Publishers, Inc., 1996.

Benson, Elizabeth P. "The Moche Moon." In *Recent Studies in Andean Prehistory and Protohistory*, edited by D.P. Kvetok and D.H. Sandweiss. Ithaca: Cornell University, Latin American Studies Program.

-----, "The World of the Moche." In *The Ancient Americas: Art from the Sacred Landscape*, edited by Richard F. Townsend, 302-315. Chicago: the Art Institute, 1992.

-----, "The Lord, The Ruler: Jaguar Symbolism in the Americas." In *Icons of Power: Feline Symbolism in the Americas*, edited by N.J. Saunders, 53-76. London: Routledge, 1998.

Berrin, Kathleen. *The Spirit of Ancient Peru: Treasures from the Museo Arqueológico Rafael Larco Herrera*. New York: Thames and Hudson, 1997.

Brugnoli B., Paulina and Soledad Hoces de la Guardia Ch. *Amarras. El Arte de Teñir en los Andes Prehispánicos*. Santiago: Museo Chileno de Arte Precolombino, 1999.

Burger, Richard L. *Chavín and the Origins of Andean Civilization*. London: Thames and Hudson, 1992.

Caldwell, Joseph R. "Interaction Spheres in Prehistory." *Hopewellian Studies*, Scientific Papers Vol. XII (1964): 135-156.

Classen, Constance. *Inca Cosmology and the Human Body*. Salt Lake City: University of Utah Press, 1993.

Conklin, William J. "Peruvian Textile Fragment from the Beginning of the Middle Horizon." *Textile Museum Journal* 3, no. 1 (1970): 15-24.

-----, "Moche Textile Structures." In *The Junius B. Bird Textile Conference*, edited by A.P. Rowe, E. P. Benson, and A.-L. Schaffer, 165-183. Washington, D.C.: The Textile Museum and Dumbarton Oaks, 1979.

Cook, Anita G. "The Emperor's New Clothes: Symbols of Royalty, Hierarchy and Identity." *Journal of the Steward Anthropological Society* 24, nos. 1 and 2 (1996): 85-120.

Emery, Irene. *The Primary Structures of Fabrics. An Illustrated Classification*. (Originally published in 1966). The Textile Museum. Washington, D.C.: Watson-Guptill Publications/Whitney Library of Design, 1994.

Garaventa, Donna M. "A Discontinuous Warp and Weft Textile of Early Horizon Date." *Ñawpa Pacha* 19 (1981): 167-176.

Isbell, William H. and Gordon F. McEwan. "A History of Huari Studies and Introduction to Current Interpretations." In *Huari Administrative Structure: Prehistoric Monumental and State Government*, edited by W.H. Isbell and G.F. McEwan, 1-17. Washington, D.C.: Dumbarton Oaks, 1991.

-----, eds. *Huari Administrative Structure: Prehistoric Monumental Architecture and State Government*. Washington, D.C.: Dumbarton Oaks, 1991.

Lechtman, Heather. "Cloth and Metal: The Culture of Technology." In *Andean Art at Dumbarton Oaks*, Vol. 1, edited by E. H. Boone, 33-43. Washington, D.C.: Dumbarton Oaks, 1996.

Menzel, Dorothy. "Style and Time in the Middle Horizon." *Ñawpa Pacha* 2 (1964): 1-106.

-----, "New Data on the Huari Empire in Middle Horizon Epoch 2A." *Ñawpa Pacha* 6 (1968): 47-114.

-----, *The Archaeology of Ancient Peru and the Work of Max Uhle*. Berkeley: R.H. Lowie Museum of Anthropology, 1977.

Moseley, Michael E. *The Incas and Their Ancestors*. London: Thames and Hudson, 1992.

Murra, John V. "Cloth and Its Function in the Inka State." In *Cloth and Human Experience*, edited by A.B. Weiner and J. Schneider, 275-302. Washington, D.C.: Smithsonian Institution Press, 1989.

Phipps, Elena. *Discontinuous Warp Textiles in Pre-Columbian Weaving Tradition*. Master's Thesis, Columbia University, n.d. (1982).

Prümers, Heiko. *Der Fundort "El Castillo" im Huarmeytal, Peru. Ein Beitrag zum Problem des Moche-Huari Textilstils*. 2 Vols. Mundus Reihe Alt-Amerikanistik Bd 4. Bonn: Holos Verlag, 1990.

Rowe, Ann Pollard. "Interlocking Warp and Weft in Nasca 2 Style." *Textile Museum Journal* 3, no. 3 (1973): 67-78.

-----, *Costumes and Featherwork of the Lords of Chimor: Textiles of Peru's North Coast*. Washington, D.C.: The Textile Museum, 1984.

-----, "Textiles of the Nasca Valley at the Time of the Fall of the Huari Empire." In *The Junius B. Bird Conference on Andean Textiles*, edited by Ann P. Rowe, 151-182. Washington, D.C.: The Textile Museum, 1986.

Salomon, Frank and George L. Urioste. *The Huarochiri Manuscript: A Testament of Ancient and Colonial Andean Religion*. Austin: University of Texas Press, 1991.

Saunders, Nichoas J. "Architecture of Symbolism: The Feline Image." In *Icons of Power: Feline Symbolism in the Americas*, edited by N.J. Saunders, 12-52. London: Routledge, 1998.

Schreiber, Katharina J. *Wari Imperialism in Middle Horizon Peru*. Anthropological Papers, No. 87. Ann Arbor: University of Michigan, Museum of Anthropology, 1992.

Shimada, Izumi. "Cultural Continuities and Discontinuities on the Northern North Coast of Peru, Middle and Late Horizons." In *The Northern Dynasties: Kingship and Statecraft in Chimor*, edited by M.E. Moseley and A. Cordy-Collins, 297-392. Washington, D. C.: Dumbarton Oaks, 1990.

- , *Pachacamac. A Reprint of the 1903 Edition by Max Uhle and Pachacamac Archaeology: Retrospect and Prospect*. Philadelphia: The University Museum, University of Pennsylvania, 1991.
- , *Pampa Grande and the Mochica Culture*. Austin: University of Texas, 1994.
- Shimada, Izumi, C.B. Schaaf, Lonnie G. Thompson, and E. Mosley-Thompson. "Cultural Impacts of Severe Droughts in the Prehistoric Andes: Application of a 1,500-year Ice Core Precipitation Record." *World Archaeology* 22 (1991): 247-270.
- Stone, Rebecca Rollins. *Technique and Form in Huari-Style Tapestry Tunics: The Andean Artist, A.D. 500-800*. Vols. 1 and 2. Ph.D. Dissertation, Yale University, n.d. (1987).
- Stone-Miller, Rebecca. *To Weave for the Sun. Ancient Andean Textiles in the Museum of Fine Arts, Boston*. New York: Thames and Hudson, 1992a.
- , "Camelids and Chaos in Huari and Tiwanaku Textiles." In *The Ancient Americas. Art from the Sacred Landscape*, edited by Richard F. Townsend, 334-345. Chicago and Munich: The Art Institute of Chicago and Prestel-Verlag, 1992b.
- , *Art of the Andes from Chavín to Inca*. New York and London: Thames and Hudson, 1995.
- Stone-Miller, Rebecca and Gordon F. McEwan. "The Representation of the Wari State in Stone and Thread: a Comparison of Architecture and Tapestry." *RES* 19/20 (1990/1991): 53-80.
- Strelow, Renate. *Gewebe mit Unterbrochenen Ketten aus dem Vorspanischen Peru. (Pre-Hispanic Textiles with Discontinuous Warp)*. Berlin: Staatliche Museen-Preussischer Kulturbesitz, 1996.
- Tsunoyama, Yukihiro, ed. *Textiles of the Andes. Catalog of the Amano Collection*. Selected by Yoshitaro Amano. San Francisco: Heian International, Inc., 1979.
- Ubbelohde-Doering, Heinrich. *On the Royal Highways of the Inca. Archaeological Treasures of Ancient Peru*. New York: Praeger, 1967.
- Urton, Gary. "Celestial Crosses: The Cruciform in Quechua Astronomy." *Journal of Latin American Lore* 6, no. 1(1980): 87-110.
- , *At the Crossroads of the Earth and the Sky: an Andean Cosmology*. Austin: University of Texas, 1982.
- VanStan, Ina. "Ancient Peruvian Textile Arts: Patchwork and Tie-Die from Pachacamac." *Expedition* 3, no. 4 (1961): 34-37.
- , *Textiles from Under the Temple of Pachacamac, Peru*. Philadelphia: University Museum, the University of Pennsylvania, 1967.



Fig. 1: Tie dye, Museo Amano, Lima.
Photo: K. Fugita.

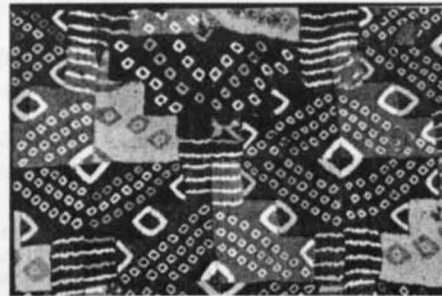


Fig. 2: Detail of Fig. 1.
Photo: K. Fugita.



Fig. 3a: Wari Ceramic Effigy
w/Tapestry Tunic,
Museo Amano, Lima.
Photo: R. Stone-Miller.



Fig. 3b: Wari Ceramic Effigy
w/Tie-Dye Tunic,
Museum Rietberg, Zürich.
Photo: Wettstein and Kauf,
Zürich.



Fig. 4: Tunic, Phoebe Apperson Hearst Museum of Anthropology,
University of California at Berkeley.
Photo: the author.



Fig. 5: Detail of Fig. 4. Tapestry figures above
and DWW felines below.
Photo: the author.

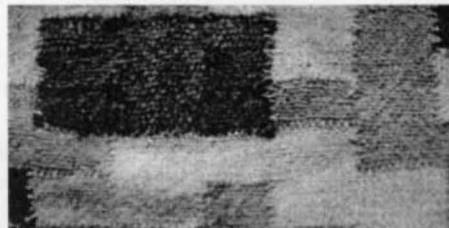


Fig. 6: Detail of Fig. 4. DWW feline face and upper body.
Photo: the author.



Fig. 7: Detail of the Gate of the Sun, Tiwanaku, Bolivia.
Photo: the author.

THE WASHITA CHIEF BLANKET: PART I, TEXTILE ANALYSIS

Peggy Whitehead, Department Associate, and Joyce Herold, Curator of Ethnology,
Denver Museum of Nature and Science

A unique historic textile treasure of the early American West, the Washita Chief Blanket (Figure 1) originated in the early to mid-1800s trade to the Plains Indians. It served Southern Cheyenne people for many years as a fine and expressive garment. In 1868 in a tipi village along Lodge Pole, or Washita, River, in western Indian Territory, it survived a major Indian Wars attack that is now known as the Washita Massacre. A soldier's "battlefield pickup," the blanket has been preserved and respected for 133 years as a war relic, a collectors' trophy, and a museum heirloom of sensitive nature. Cheyenne descendants today are beginning to know the textile as cultural heritage from a sacred site. Research in progress on this remarkable fragmentary textile is reported for the first time here and in the following paper.

In anthropology collections at The Denver Museum of Nature and Science (DMNS, formerly Denver Museum of Natural History) since 1968, the trade blanket is protected in secluded sacred storage along with another Washita remnant that has always accompanied it, a Cheyenne buffalo hide painted with a warrior's special designs and used as his robe (catalog number AC.4791). A handwritten tag pinned to the painted hide contains the following information: "Buffalo robe, was taken from an Indian Teepee at the Battle of Washita Nov 27, 1868. From whom I purchased it the following day, \$10-- E. S. Godfrey" The signature is that of General Edward S. Godfrey, a noted 7th Cavalry veteran.

Significance has always attached to this Cheyenne woolen blanket (often referred to as a robe) and the buffalo robe but their function and meaning have varied over time. Originally the robes served needs for personal warmth and protection and marked special tribal roles and rankings. Furthermore, Cheyennes expressed a culturally specified "language of the robe" in its positioning around the body and head or holding by arms and hands: the wearer would fit the drape of the robe to particular activities, such as addressing the tribe, running, and watching, or to the wearer's feelings, such as anger and hesitation (Fletcher and La Flesche 1905-1906: 360-2). Later in the history of these robes, the non-Indian possessors and exhibitors focused on their important historic provenance and the resulting personal meanings, such as remembrance and investment value. Today, the painted hide and blanket stand most of all as historic-cultural statements from a time and place sacred to the Cheyenne people and significant to the American experience.

More than objects, the Cheyenne robes together are a metaphor enwrapping the passing of the early American Indian West. The hide--hand-harvested, tanned, and decorated as an individualized wearable art--stands for the horse and buffalo way of life. The blanket--new, fashionable, and versatile, made in commercial multiples--represents Native American society opening to the encroaching Euroamerican world.

Leaving the ceremonially painted buffalo robe for future queries, museum staff have focused on the Washita Chief Blanket because of not only its provenance but also its distinctiveness as a trade item. That the blanket was traded to Cheyennes is a given, for no weavers are documented among pre-reservation Plains Indian tribes. The textile does have stylistic fit as an extreme variant of a blanket widely traded to Plains peoples--the earliest or Classic Phase of the renowned Navajo Chief Blanket (First Phase 1800-1850). However, the piece is materially, technically, and stylistically unusual and apparently undescribed in Indian trade studies.

The current definitive research effort began in 1998 when the Cheyenne-Arapaho Tribe of Oklahoma accepted the Museum's invitation to consult under the Native American Graves Protection and Repatriation Act (NAGPRA). Gordon L. Yellowman, Sr., NAGPRA Coordinator, and Alfrieck Heap of Birds, Southern Cheyenne Elder, inspected the Washita robes with great respect for their connection with a site sacred in tribal history. They supported study and preservation of the pieces at the Museum. Museum staff developed a research design that focuses first on the blanket itself, describing it through textile analysis and establishing its provenance through documentation. A second phase includes wider object comparisons and ethnohistoric search in collections and archives, the literature, authorities' knowledge, and Cheyenne Indian art and oral history. These steps will define the Washita Chief Blanket, place the piece within cultural-temporal contexts, and furnish materials for theory building, especially about the blanket's origin and its meanings. Joint tribal and scholarly knowledge will be served.

Discoveries, questions, and directions emerging from first-phase research that begin to define the textile are set forth in the present linked papers. The authors extensively contacted Southwestern textile specialists, provided for their inspections of the textile, and surveyed on site eight museum textile collections (see Acknowledgments). Second-phase research thus far is presented to confirm negative directions (what the textile is not) as well as to begin promising avenues for future study.¹

Description and Technical Analysis of the Blanket (textile terms follow Hedlund 1990)

In overall appearance the textile is a worn, stained, and damaged rectangle with slightly undulating sides and missing ends (Figure 1). It's patterning is bold, geometric, and symmetrical with dark brown and red compound or zoned weft bands crossing a white ground. The regularly spaced and repeated full-width bands include a broad zoned center band, flanking plain bands, and vestiges of end zoned bands.

The textile currently measures 69.6 inches wide, 59.5 inches long including raveled end warp threads. Its condition is termed "fragmentary" because of missing end margins at bottom and top and holes 3 to 8 inches across at left center body, mid-left selvage, lower right body, and lower right corner. Circumstances of loss are unknown, but bullet or saber cut damage is not evidenced. The loose, unknotted fringed end margins indicate unevenly worn warp threads remaining after raveling of weft threads from side to side.

Extensive fiber and dye analysis established that all yarns are sheep wool of two varieties and that some yarns are natural and some dyed, with strict segregation of these

characteristics (Reed 2000). Most important and used throughout for all white and brown yarn is lustrous “churra” wool, commonly called Navajo Churro wool. This fiber comes from the churra sheep breed introduced to New Spain in the 1500s by Spanish colonists. The wool was processed before fabrication into yarns so that it was very clean and graded. White fiber is natural white churra wool of varying quality: the white warp contains mainly outer guard hairs (kemp fibers) of churra with some secondary fibers; while white weft has been carefully sorted to remove outer guard fibers (or kemp). Brown weft is natural dark churra made up of both guard hairs and secondary fibers and over-dyed with a small amount of anthragallol, a vegetal dye.

The red weft threads, however, are not churra but merino wool, which at this period was mostly used in commercial yarns from Europe. The red weft is dyed with natural insect red dyes, which tested ninety percent cochineal and ten percent lac. These dyes were available to the Hispanic community at the time of the provenance (Reed 2000:3). A few red and brown lines show discontinuous color shift due to varying dye properties.

All weft yarns average 27 microns diameter (17-60 microns). Warp yarns average 48 microns diameter (27-100 microns). Whether the yarns are handspun or machine spun is undetermined. All the yarns have exceptionally even twist consistent with commercial yarns. However, consultants do not all agree that the yarn was commercially spun and some strongly believe that all the yarn was produced on a spinning wheel.

The textile contains no raveled yarns, i.e., machine spun threads that have been raveled from woven cloth and re-plied for use as weft yarn. However, the fine quality or small diameter of the yarn is noted as similar to that of raveled yarns (Reed 2000:1). The early Navajo weavers made such plied yarns from raveled flannel (referred to as bayeta).

Structurally, the blanket is woven of plied wool yarns in weft-faced plain weave with paired warps (Emery 1995: 77, Fig. 88; 87). The warp threads are two ply Z-twist S-plied threads, laid in multiple units of two warps--an unusual technical feature (Figure 2). The weft threads throughout are two ply Z-twist S-plied. Both the warp and weft contain inconspicuous knots. The warp thread count is 7 per inch. Weft thread counts are 36 per inch for white threads, 38 per inch for red threads, and 40 per inch for brown threads. Excellent shed control during weaving is indicated by the even weft lines and the consistent spacing of warps.

Several structural features that would indicate vertical loom weaving are absent, namely, selvages using extra cords, floating wefts caused by missed warp, and lazy lines (typical of Navajo blankets although sometimes lacking in Pueblo blankets).

Floor loom weaving is usually evidenced by the type of side selvages used in the Washita blanket, consisting of warp threads turned over two sets of multiple (four) weft threads. The wavy side edges could result from different loom take-up of coarser brown fibers compared with finer red and white fibers, differential fiber shrinkage caused by cleaning chemicals, or other factors. The missing ends deprive us of crucial evidence of cut and knotted warp ends and/or fringe, characteristics of floor loom manufacture. However,

since the present worn off warp ends in no way preclude such endings, the possibility remains that this blanket was fringed at bottom and top.

Nevertheless, floor loom fabrication is unclear for two reasons. First, the textile is much wider than available floor looms, which were generally less than thirty inches wide at this time (Fisher 1979: 194-5). Secondly, the textile lacks a double weave ridge (multiple-threads) at the center warp, characteristic evidence of double-weaving, the usual width-achieving expedient of Hispanic weavers using narrow looms of the period.

Figure 3 digitally reconstructs the blanket's pattern to undamaged state, as evidenced by remaining fragmentary patterning of brown and a single red strip at blanket ends and by similarly patterned blankets in photographs of the period (see below). Possible fringes are not reconstructed. The resulting textile is almost square (69.6 inches wide, 63.6 inches long). Three main pattern components are shown. First, a brown central compound or zoned band is edged with sets of four narrow red (overall 14 inches wide, each red-band set 5 inches wide). Second, flanking the center on both sides is a triple-banded section of solid brown, red, and brown on white (each band from 1.5 to 3 inches wide). Finally, each blanket end (bottom and top) has a brown compound band with quadruple narrow red bands that mirror the zoning of the central band.

Comparisons with Banded Blankets of the Southwest

Can the Washita blanket be identified with "the usual suspects," i.e., the known Native American and Hispanic weavers of New Mexico and Arizona? No closely similar textiles were found during initial extensive viewing of the Washita blanket and consultations with numerous authorities on Southwestern Indian and Hispanic textile styles (see Acknowledgments). However, linkages of salient features exist, as shown by the chart below, which compares the Washita Chief Blanket with Southwestern banded blankets from the same period. The data derive from textiles in eight museums and published analyses (Fisher 1979; Kent 1983:64-67; Hedlund 1990:35-36).

| Type | Washita Chief Blanket | Navajo First Phase Chiefs Pattern | Rio Grande Hispanic Striped | Pueblo Striped |
|-----------------|---|-----------------------------------|--|--|
| Construction | Single width | Single width | 2 widths sewn together or double woven with paired warps at center | Single width |
| Width | 67.5" to 69.6" | 63.4" to 82" | 43" to 60" | 43" to 62.7" |
| Length | Now 59.5"; reconstructed 63.6" | 48" to 64.4" | 67" to 103" (1.5 to 1.85 times width) | 46" to 77.1" |
| Format or Shape | Reconstructed: slightly wider than long | Wider than long | Longer than wide | Use determines wider than long or longer than wide |

| | | | | |
|------------------------|--|--|--|--|
| End Selvage Treatment | Original ends missing; warp combed as a fringe | Selvage cords two 2-ply or 3-ply | End of warp yarns cut and knotted into a fringe | Selvage cords usually present two or three 2-ply |
| Side Selvage Treatment | Weft yarn over multiple edge warps | Extra selvage cords: two 2-ply or 3-ply | Weft yarns turn over paired warps | Same as either Rio Grande or Navajo selvage |
| Corners | Missing | Tight knots; augmented tassels | Knotted fringe | Loose knots |
| Lazy Lines | None | Yes | None | Hopi none; Zuni may have |
| Warps | Unknown | Continuous | Cut and knotted | Continuous |
| Count warp/weft | 7 / 36-40 | 6-12 / 20-100 | 5-7 / 25-50 | 3-5 / 10-20 |
| Yarn | 2 z-S | 1 Z | 1 Z or 3 or 4 s-Z commercial | 1 Z |
| Weave | Weft faced plain; knots joining warp and weft fibers | Weft faced tapestry; joins overlap, dove-tail or interlock | Weft faced plain; knots joining weft fiber | Weft faced plain; joins overlap or interlock |
| Fiber | Churra wool, commercial merino wool | 1800-60 churra wool, 1860-80 mixed breed wool (crimps present) | 1800-60 churra wool; 1860-80 mixed breed wool (crimps present) | 1800-60 churra wool; 1860-80 mixed breed wool (crimps present) |
| Dyes | Cochineal/lac, brown over-dye | Indigo, brown over-dye, raveled red | Indigo, brown natural, raveled red | Indigo, brown over-dye, raveled red |

From the information above, the Washita blanket can be seen as an anomaly among Southwestern blanket types. As one consultant phrased it, “This is a distinctly different and unique weaving” (Reed 2000:4). Broadly, in technique it is closest to Rio Grande Hispanic blankets and in pattern and size it corresponds to some Navajo/Pueblo weavings.

Links with the Navajo Chief Blanket

Because the Washita Blanket resembles the zoned banded Navajo First Phase, or Classic, Chief Blanket (sometimes called “Ute style”) that evolved between 1800 and 1860, the two styles were closely compared in the study. As a known trade blanket widely used by Plains Indians from Canada to Texas (Bennett 1981), the Navajo style is often attributed to blankets described only as “striped” or “black and white” or “Spanish” in older journals and accounts. However, the similarity of the earliest Navajo Chief’s and the Washita Chief style should caution that attributions may have a degree of error.

In reconstructed size and shape the Washita Chief Blanket is similar to the classic Navajo wearing blanket--wide, but only slightly wider than long--in a size suitable for a large man (Figure 4). The reconstructed end bands also bring the Washita textile's pattern into general balance with the Navajo Chief Blanket banded layout (Wheat 1976:428; Kent 1985:52-3; Blomberg 1988:55-7; Hedlund 1990:79).

However, many technical differences separate the two styles, as the above chart shows. The classic period Navajo typically used single tightly spun warp yarn rather than the fine paired warp of the Washita textile. The Navajo textile is strengthened with plied cord selvages on all four sides, whereas the Washita blanket shows no signs of ever having had side or end cording. Characteristic Navajo vertical loom lazy lines are not present in the Washita textile, whose fine warp and multiple edge warps point toward a floor loom.

The patterns also differ in major ways. Most Navajo First Phase Chief blankets are brown or black and indigo blue on natural white ground; when added, red is a raveled cloth thread. In contrast the Washita blanket substitutes expensive red yarn where blue would appear in the Navajo blanket. Furthermore, the band rhythms are different. In the Navajo, only two solid-color bands typically appear between the central and end zoned broad bands, giving a dark and light overlay effect. But in the Washita piece three solid bands, brown and red separated with white, alter the balance of dark and light toward a flat appearance. In some sense, the red-banded rhythm gives Spanish flavor to the textile.

We suggest the following synopsis as a working hypothesis, based on the above analysis as well as ethnohistoric evidence in Part II. The earliest, or Classic, Navajo Chief Blanket style developing ca. 1800-1850 preceded the Washita blanket style. The originators of the Washita Chief Blanket's style were familiar with and inspired by the form, dark and light bold colors, and zoned banded pattern of the First Phase Navajo Chief Blanket, as well as its success in trade with the Plains Indians. To mimic the classic Navajo shoulder blanket, unknown weavers in the mid-1800's used wide floor looms and the appropriate yarns and techniques. They created a new design by emphasizing red in place of blue, by varying the rhythm of the bands, and by fringing the ends. The new blanket style was traded to Plains people contemporaneously with other trade blankets ca. 1850 to 1870.

Acknowledgments

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We also particularly thank Gordon L. Yellowman, Sr. for requesting the special viewing of the Washita Chief Blanket at the Seventh Biennial Symposium of the Textile Society of America in Santa Fe and the School of American Research for making possible and facilitating the exhibit and inspection by textile specialists on September 21-23, 2000.

Thanks to all the caretakers of textiles and experts in the field who consulted on the blanket and/or gave access and assistance with collection and/or records, as follows: Ann Lane Hedlund, Gloria F. Ross Center for Tapestry Studies; Suzanne Baizerman, Oakland Museum; Jerry Becker, Evergreen, Colorado; Nancy Blomberg, Roger Echohawk, and Tamara Rogaar, Denver Art Museum; Jeanne Brako, Colorado Historical Society; Diane Dittmore and Cathy Notarnicola, Arizona State Museum; Cheryl Frankenstein-Doyle and Jonathan Batkin, Wheelwright Museum; Kathleen Whitaker, Lee Goodwin, and Deborah Winton, School of American Research; Susan Haskell and T. Rose Holdcraft, Peabody Museum of American Archaeology and Ethnology; Karen Herbaugh, American Textile History Museum; Bruce Hucko, Maxwell Museum of Anthropology, University of New Mexico; David Irving, Denver, Colorado; Helen R. Lucero, National Hispanic Cultural Center of New Mexico; Robert Mann, Denver, Colorado; Martha Otto, Ohio Historical Society; Dianna Pardue, Ann Marshall, and La Ree Bates, Heard Museum; Bettina Raphael, Santa Fe; Marian Rodee, Albuquerque; Barbara Sumberg and Barbara Mauldin, Museum of International Folk Art; Irvin and Lisa Trujillo, Centinela Traditional Arts, Chimayo, New Mexico; Valerie Verzuh and Laurel Holt, Museum of Indian Arts and Culture; Laurie D. Webster, University of Arizona; Mark Winter, Santa Fe; and Will Wroth, Bloomington, Indiana.

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References

- Bennett, Kathleen Whitaker, "The Navajo Chief Blanket: A Trade Item Among Non-Navajo Groups," *American Indian Art Magazine*, Vol. 7, No. 1, winter 1981, pages. 62-69
- Blomberg, Nancy J. *Navajo Textiles: The William Randolph Hearst Collection*, The University of Arizona Press, Tucson, 1988.
- Emery, Irene *The Primary Structures of Fabrics*, Watson-Guptyl Publications and The Textile Museum, Washington, D.C., 1994
- Fisher, Nora (ed.) *Rio Grande Textiles*, Museum of New Mexico Press, Albuquerque, 1994; also published as *Spanish Textile Tradition of New Mexico and Colorado*, 1979
- Fletcher, Alice, and Francis La Flesche *The Omaha Tribe*, Twenty-seventh Annual Report of the Bureau of American Ethnology, 1905-1906. Smithsonian Institution, Washington, D.C., 1911
- Hedlund, Ann Lane *Beyond the Loom: Keys To Understanding Early Southwestern Weaving*, Johnson Publishing Company, Boulder, Colorado, 1990
- Kent, Kate Peck "Spanish, Navajo, or Pueblo? A Guide to the Identification of Nineteenth-Century Southwestern Textiles," in *Hispanic Arts and Ethnohistory in the Southwest*, ed. Marta Weigle, Spanish Colonial Arts Society, Santa Fe, 1983
———. *Navajo Weaving Three Centuries of Change*, School of American Research Press, Santa Fe, 1985
- Reed, Casey *Washita Blanket Dye and Fiber Analysis Report*, Material Insight–Textile Certification and Analysis, Albuquerque, November 6, 2000.
- Wheat, Joe Ben "Documentary Basis for Material Changes and Design Styles in Navajo Blanket Weaving," In *Ethnographic Textiles of the Western Hemisphere*, ed. Irene Emery and Patricia Fiske, 1977 Proceedings of the Irene Emery Roundtable on Museum Textiles, pp. 420-440, The Textile Museum, Washington D.C., 1977.

ILLUSTRATIONS

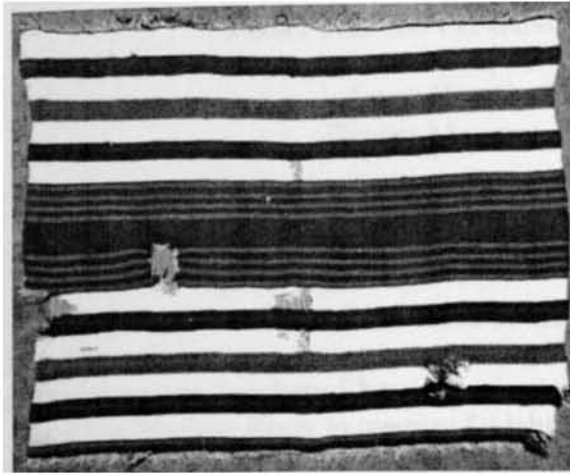


Figure 1 Washita Chief Blanket, collected 1868. 69.6" x 59.5".
Denver Museum of Nature and Science cat. no. AC.4792

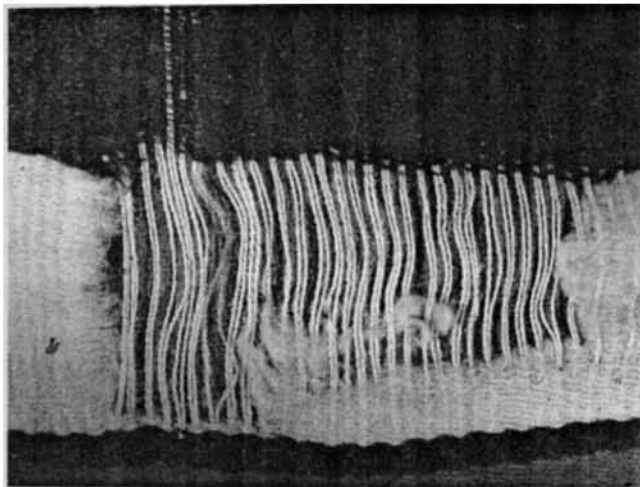


Figure 2 Paired warps in Washita Chief Blanket. 2.6 " wide white band.
Denver Museum of Nature and Science cat. no. AC.4792.



Figure 3 Digital reconstruction of Washita Chief Blanket. 69.6" x 63.6".
Denver Museum of Nature and Science cat. no. AC.4792.

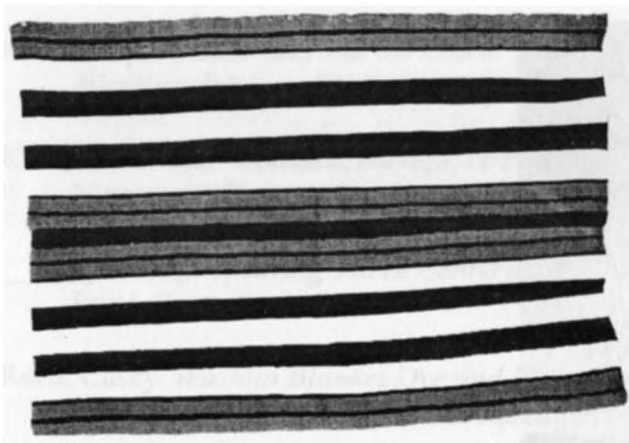


Figure 4. Navajo First Phase Chief Style Blanket, 1840-1850. 75.1"x 52.5"
Denver Museum of Nature and Science cat. no.A.1637.1

¹ Joyce Herold edited this and the following article and traced provenance and ethnohistoric-cultural contexts. Peggy Whitehead, a weaver, spinner and Southwestern textiles analyst, focused on the structural and design evidence and compared objects in Southwestern museums. Gordon L Yellowman, Sr., a chief of the Southern Cheyennes, provided insights into Native American meaning and contexts of blankets, especially the Washita Chief Blanket among Cheyennes today.

THE WASHITA CHIEF BLANKET: PART II, PROVENANCE AND ETHNOHISTORY

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A remarkable historic textile treasure of the early American West, the Washita Chief Blanket, originated in the early to mid-1800s trade to the Plains Indians, served as a fine garment among Southern Cheyenne people, and in 1868 survived an Indian Wars battle along the Washita River in western Oklahoma Territory. Since 1968 the blanket has been preserved at the Denver Museum of Nature and Science. The preceding article by Whitehead and Herold entitled "The Washita Chief Blanket: Part I, Textile Analysis" introduces and illustrates the object and presents the current research design, textile description of the blanket, and comparisons with Southwestern blankets. This article further delineates the Washita Blanket's ethnohistoric and cultural context and provenance, and begins to explore its possible origins and distinctiveness as a trade item.

Cultural-historic Context

The Cheyenne, or Tsistsistas, meaning *The People*, in the 1830s were established buffalo hunters in the west central Great Plains, ranging from the Rocky Mountains to the areas of later western Nebraska and Kansas. With herds of Spanish horses they transported villages of hide-and-pole lodges in rhythm with seasonal buffalo migrations. Their material culture was based on the bountiful larder of the buffalo and on trading hides for cloth, knives, and other implements and luxuries. A rich community and ceremonial life featured men's military societies and a women's quillworking society. Contacts with Americans followed trading routes along the Platte and Arkansas rivers and with Spanish colonists, the trails to the northern provinces of a newly independent (in 1821) Mexico. As more and more wagon trains rolled along the Santa Fe Trail, Cheyennes increasingly were attracted to the southern edge of their territory, especially to Bent's Old Fort on the Arkansas River (near the present town of La Junta, Colorado). In 1848 United States officially took over heavily Hispanic Texas, New Mexico, Arizona and California.

Probably near the middle of the nineteenth century a Mexican, Spanish, or Euro American weaver produced our fine warm woolen blanket, boldly patterned in bands of red and dark brown (see previous article, Figure 1). It was an unusual eclectic piece that used Spanish-introduced churra sheep's wool woven on a floor loom to make a piece of wearing apparel in a style favored by early Plains Indian people. The banded shoulder blanket originated with native weaver-wearers of northern New Spain (later the American Southwest) and became best known from the widely traded Navajo shoulder blanket, later termed the "First Phase Navajo Chiefs Blanket."

Like axes and kettles, wheat flour and coffee, lengths of cloth and hanks of glass beads, this new expression of a banded blanket became a valued trade item to Indian people clinging to traditional lands and buffalo sustenance as the western frontier of the United States advanced. The blanket and others like it passed via trade fairs, American and Spanish bison robe traders, or capture into the hands of native buffalo-hunters east of the Rocky Mountains, including Cheyennes. Someone in Cheyenne Peace Chief Black Kettle's band obtained this particular blanket. Probably an elder woman, a chief's wife, or a Cheyenne chief himself proudly draped it over the shoulders or around the waist.

The early setting of the trade blanket in the 1850s was the vast Prairies and Plains region controlled by tribes of hunter-gatherers and a few farmers. But by the late 1860s many restless Civil War veterans were heading west to seek fortunes in mining and agriculture. As the frontier line for 38 million Americans extended ever further west, traditional Cheyenne lands were designated as states or territories and were crossed by railroads under construction. White encroachment intensified into cultural collision between pioneers and Indians. U.S. government policy sought to relegate tribes to Indian Territory (present-day Oklahoma). Some Plains tribes accepted life on reservations but others continued to live and hunt dwindling buffalo herds on traditional lands. Their warriors rose against white settlers and travelers. A seemingly endless series of Indian raids, retaliations by U.S. forces, treaties, and broken treaties ensued.

The particular story of interest to us turned bitter on the wintry dawn of November 27, 1868: the Seventh U.S. Cavalry rode into the peaceful, slumbering Washita valley village of the subject blanket and attacked with great destruction and loss of life. A pivotal late Indian Wars event, the Washita Massacre, as many now call it, set in train the military defeat of the persevering Plains war chiefs and the near annihilation of a way of life.

Both Cheyenne and military contexts of the Washita Massacre can be better understood by turning back four years to the better-known Sand Creek Massacre in eastern Colorado. On November 29, 1864, despite the fact that American and white flags flew to indicate the camp of Cheyenne Chiefs Black Kettle and White Antelope was at peace and under military protection, volunteer troops under Colonel J. M. Chivington attacked and destroyed the village. In the aftermath, public outcry arose over what happened, the Cheyenne Dog Soldiers military society responded aggressively against whites, and Sand Creek took on grave historic and symbolic importance in Indian-white relations.

Chief Black Kettle escaped from the Sand Creek tragedy with some of his band and by 1868 they were in western Oklahoma Territory along the Washita River, called Lodge Pole River by the Cheyennes. In early November Black Kettle petitioned for protection at Fort Cobb but the respected Peace Chief was told that the commander had no protective authority and he returned to camp with flour, blankets, and other goods.

The Medicine Lodge Treaty of 1867 had convinced few Arapahos, Cheyennes, Kiowas, and Plains Apaches to settle on reservations and war parties continued to raid white settlements in Kansas. "Punishment must follow crime," enunciated Major General

Philip H. Sheridan and he mounted a winter campaign to surprise Indian camps. The Seventh Cavalry led by Lieutenant Colonel George A. Custer marched south with about eight hundred troopers, traveling through a foot of new snow, and picked up the trail of supposed Cheyenne raiders. In four days the force reached a position near an Indian encampment in the Washita valley. Before dawn on November 27, the troopers noticed the morning star and then attacked fifty-one lodges.

The village was quickly captured. Custer reported about a hundred Cheyennes, two officers, and nineteen enlisted men killed. Indian accounts claimed eleven warriors plus nineteen women and children killed, including Black Kettle and his wife. Custer ordered property seized from the lodges. Then he had the lodges burned and 875 Indian ponies destroyed. Fifty-three women, girls, children, and babies were taken prisoner.

Following the Washita attack, losing winter supplies and protection from attack, many Southern Plains bands accepted reservation life. Official reports, memoirs, and histories of the late Indian Wars emphasize Washita as the significant “battle” that began to bring the Southern Plains tribes to heel (Sheridan 1882:14-18; Schmitt and Brown 1948:43-45; Brady 1971:146-169). Even at the time, however, many easterners found Washita “little more than another Sand Creek Massacre [that] enhanced Custer’s reputation as a dashing cavalier and launched his reputation as an Indian fighter” (Viola 1999:7). Today revisionist historians and many others join Cheyenne descendants in seeing Washita as a controversial and tragic massacre.

Provenance of the Blanket

The research process initially set questions about object credentials. Could the records passed to the Museum about the blanket and the buffalo robe be verified as more than mere folklore in the vast popular treasury of famous but unproven “Indian collectibles”? The documentation quickly proved reliable: the Washita attributions correlate exactly with other records about military events, the objects, and the collector. Archival and literature search revealed the detailed history of the Washita-Cheyenne provenance and the later non-Indian ownership of the blanket and robe, as reported below.

Graduated from West Point in 1867 and commissioned a second lieutenant, Edward Settle Godfrey was assigned to the Seventh Cavalry commanded by Lieutenant Colonel George Armstrong Custer. On November 27, 1868, Godfrey (now a first lieutenant) took part in his first engagement, the attack on Black Kettle’s village along the Washita River. His participation there is well documented in the official military account (Sheridan 1882), by Godfrey himself in an eyewitness account (Godfrey, E. S. 1928), and in Stan Hoig’s definitive study *The Battle of the Washita* (1976). During the attack Godfrey was assigned to lead Troop K through the village without stopping in order to round up pony herds on the other side. He also pursued escaping Arapaho Indian allies of the Cheyenne, held them off in a counterattack, and reported but could not pursue another Arapaho action. Following the battle he was ordered to scour the village and capture all valuables and to destroy remaining Cheyenne property. He led the guard on prisoners as all rode back to the expedition’s headquarters at Camp Supply.

Godfrey, thus, by order focused his attention on the contents of the Washita camp. His reminiscences note blankets and buffalo robes piled in the village (Godfrey, E. S. 1928:13). The valuables selected for official plunder included saddles and horse gear, hatchets, firearms and ammunition, native weapons, tobacco, untanned buffalo hides, buffalo robes, and blankets. Among the items inventoried were 470 blankets and 573 buffalo robes, making an average of nine blankets and eleven buffalo robes for each family in the village of fifty-one dwellings. Godfrey's fine appreciation of Indian materials and their importance to the Cheyennes themselves led him to feel conflicted about Custer's orders to destroy everything not captured. In an exceptionally personal narrative of his "mopping up" assignment, Godfrey described Cheyennes saving materials and soldiers taking relics, in contrast to his own reluctant restraint:

I allowed the prisoners to get what they wanted...I began the destruction ..., tearing down tepees and piling several together on the tepee poles, set fire to them. All articles of personal property--buffalo robes, blankets, food, rifles, pistols, bows and arrows, lead and caps, bullet molds, etc.--were thrown in the fires and destroyed. I doubt but that many small curios went into the pockets of men engaged in this work. One man brought to me that which I learned was a bridal gown, a "one piece dress," adorned all over with bead work and elks' teeth on antelope skins as soft as the finest broadcloth. I started to show it to the General and ask to keep it, but as I passed a big fire, I thought, "What's the use, 'orders is orders'" and threw it in the blaze. I have never ceased to regret that destruction. (Godfrey, E.S. 1928:14)

The day after the fighting the obedient-but-regretful officer Godfrey did acquire for needed bedding a painted buffalo hide and presumably also collected the woven trade blanket. At some point he documented the buffalo robe by pinning to it a scrap of U.S. Army cardboard with the following signed handwritten note, "Buffalo robe, was taken from an Indian Teepee at the Battle of Washita Nov 27, 1868. From whom I purchased it the following day, \$10" (Godfrey, E. S. n.d.) Godfrey's second wife, Ida Emley Godfrey, corroborated and added details to this testimony in a note that passed down with the buffalo robe: "General Custer had ordered everything destroyed after the capture of the village-But a soldier disobeyed orders and Mr. Godfrey having lost his bedding bought this Buffalo skin of soldier" (Godfrey, I. E. n.d.)

Although not mentioned in these two records, the blanket was clearly specified by Godfrey's daughter Mary among the Washita objects in the Godfrey collection: "Indian pottery, bead work, a Navajo blanket—or rather an Indian blanket taken from the battle of Washita—" (Godfrey, M. 1941). Thus, the robe and the blanket—paired in the Godfrey collection for seventy-three years--were documented separately, but not together, to the Washita event. Godfrey did not mention any of his collected objects in his official writings, possibly because the objects were retained outside Custer's orders to capture property (including the hundreds of robes and blankets) and to destroy the rest.

Godfrey later served under Custer at the Battle of the Little Big Horn in 1876 but survived with Captain Benteen's detachment. He received the Congressional Medal of Honor for service against the Nez Perce Indians in 1877 and became a West Point instructor and commandant at Fort Riley. Retired as Brigadier General in 1907, he was known as an authority on the Indian campaigns. The buffalo robe and blanket remained together in Godfrey's personal collection. His obituary states that in his home in New Jersey, "he surrounded himself with maps, pictures and relics of his Indian service" (Bates 1932: 67). He became the longest surviving officer of the major Indian War campaigns and died on April 1, 1932, at the age of 88.

The Washita relics stayed for nine years more with the Godfrey family until the General's daughter Mary Godfrey found a suitably appreciative home for them with friends. In 1941 she offered them to the illustrator Joseph Scheuerle, who early in the century painted many portraits of western Indians and moved in Charlie Russell's circle of Montana artists (Boileau 1971). In a letter to Scheuerle, Mary Godfrey documented the Godfrey collection as well as uncertain Navajo identification of the blanket, "I can think of no better abiding place for some of our Indian relics than in your hands. If you care to have them. Indian pottery, bead work, a Navajo blanket--or rather an Indian blanket taken from the battle of Washita--Have you space for them?" (Godfrey, M. 1941)

The artist Scheurle did have space and kept the blanket and robe. Only after Scheuerle's death and the sale of his estate did the Washita objects transition from personally meaningful mementos to marketable commodities. Despite damaged condition and modest aesthetic appeal, the blanket and robe had major value in their joint historical provenance. They passed together over a short period to Michigan collector Richard Pohrt, then to Missouri dealer E. B. Daniels, and to Santa Fe dealer Rex Arrowsmith.

In 1960 Arrowsmith sold the Washita materials to Francis V. Crane, an avid collector of Western history, and his wife Mary W.A. Crane, who operated the private Southeast Museum of the North American Indian in Marathon, Florida. Finally, in 1968, a century after leaving Cheyennes, the pieces were donated with the Crane American Indian Collection to the Denver Museum of Natural History (now the Denver Museum of Nature and Science) (Herold 1999).

Too sensitive for display in the Denver Museum's American Indian Hall, the Washita pieces have never been exhibited and are reserved for research. The present study began in 1998 in response to consultations with the Southern Cheyenne Tribe. On September 21-23, 2000, at request of the Southern Cheyennes, the Washita Chief Blanket and the Chief White Antelope Blanket from the Sand Creek Massacre were laid out side by side at the School of American Research, Santa Fe, for inspection by the Seventh Biennial Symposium of the Textile Society of America.

Cheyennes and Trade Blankets

As the southernmost bands of Cheyennes moved into the Arkansas River area in the second quarter of the nineteenth century, the wearing of heavy buffalo hide robes must have become increasingly impractical in all but the coldest winter weather and the Cheyennes increasingly chose to wear cloth blankets. Suitable for both ordinary life and important occasions, blankets were improvised from lengths of plain woolen commercial trade cloth or blankets loom-woven to form and size needed. The blankets might originate on a Navajo vertical loom, a Spanish or American floor loom operated by hand and foot, or an American or British machine loom. Plentiful documentation shows that woven blankets were a staple exchange item for Indian-tanned buffalo hides. For example, Josiah Gregg said in 1820 of Comanche buffalo hide traders in the south, "Each owner usually wants a general assortment,...as a blanket, a looking-glass, an awl, a flint, a little tobacco, vermillion (sic), beads, etc." (Quaife 1967: 210).

A vivid account by trader William Boggs near Bent's Old Fort in 1845 establishes the popularity among the Cheyennes of particularly the banded shoulder blanket in the version called the First Phase Chief Blanket, traded from the Navajos. Boggs described blankets "all alike, with white and black stripe[s] about two inches wide." He watched "several hundred of these young Indian maidens, dressed in their Navajo blankets, form a circle at a war dance outside of the circle of braves, who were dancing around a large bonfire...with their trophies of Pawnee scalps." (Hafen 1930)

More typically, nonspecific old journal accounts merely hint at banded blankets among the Cheyennes. For example, on August 6, 1846, at Bent's Fort Susan Magoffin, a traveler on the Santa Fe Trail, described some sort of banded trade blanket, possibly worn by a Cheyenne: "Another Indian has come in....He is a warrior well armed with bow and arrows—a quiver full. His dress consists of a striped blanket wrapped around his body, a string of beads, and his long hair tied up with a piece of red cloth." (Drumm 1982: 70)

We know that at least one Cheyenne of the period wore a blanket in the proper colors, though unknown pattern. Dog Soldier Chief Tall Bull was described as rising in great dignity at a gathering sometime before 1869, with his red and black blanket folded around so that he had free use of his right arm to gesture (Stanley 1982).

No banded blankets similar to the Washita example have been found thus far in scholarly studies of commercially created, machine-woven wearing blankets produced in the United States or Britain for an American Indian market, from the earliest Hudson's Bay blanket to the contemporary Pendleton. However, Robert Kapoun's important study of American Indian trade blankets, which focuses on later periods, provides clues for search among the products of an early independent woolen mill operating in New England and another in Oregon. (Kapoun 1992: 38-9).

Cheyenne artists of the mid-to late eighteenth century depicted trade blankets in use in pictographic style drawings of early camp scenes, ceremonies, horse raids and battles, drawn on pages of American ledger books. Navajo Chief Blankets and Hudson's Bay

blankets were models for many textiles, but thus far the distinctive Washita style pattern has not been recognized in ledger book drawings. A careful check of the Dog Soldier Ledgerbook, a Cheyenne document dated 1865 to 1869 that was collected at the Summit Springs battleground, showed trade cloth blankets around waists of warriors and on the backs of their horses but none with cross-banded patterning (Afton et. al. 1996).

Most promising for continuing research, but so far yielding no images of Washita blankets, are historic photographs of Cheyenne people. Many images show Cheyennes wearing trade blankets with banded patterns, including multi-color-banded point-marked Hudson's Bay blankets and multi or single-banded white blankets. For example, at a meeting at Camp Weld, Colorado before the Sand Creek Massacre of 1864, Chief Black Kettle and other Cheyenne and Arapaho delegates are enveloped from waist to feet in white blankets that have a single bold dark band along one end (Afton et. al. 1997:xvi).

To Southern Cheyennes today, this blanket has sacred presence as well as cultural meaning for it comes from one of the "sites of shame, where armed military forces attacked sleeping Indian villages,...Without question, the sites are sacred to Native Americans, who feel an obligation to tell the living about past atrocities." (Gulliford 2000: 88, 90). The victims and survivors of Sand Creek and Washita are family relations who are known by all their Cheyenne names. As the ancestors once possessed the warmth, beauty, and usefulness of the surviving Chief Blanket in their lodges, on their horses, and over their shoulders or around their waists at chiefly events, so the present-day kinsmen are touched and honored by the blanket's endurance and symbolism. Contemporary Cheyennes have a strong sense of stewardship toward the blanket: they believe that study and knowledge of the blanket support honoring it. Our future search for the Washita Chief Blanket tradition and meaning will include interviews with elder Cheyenne people and review of previous first-person accounts.

Trade Blankets Beyond the Cheyennes

While Part I has shown technical and design uniqueness yet linkages of this blanket with native Southwestern and Hispanic blankets of the period, no examples of the style have been found in collections or historic photographs or other depictions connected with Southwestern Indians. Looking eastward and northward, however, several early photographs depicting Washita-style blankets have been found—showing the blanket on the backs of Cheyenne enemies.

Closest to Cheyenne homelands is a photograph of a Pawnee scout unmistakably wearing a similar blanket, though the red color can't be discerned (Figure 1). The often-reproduced William H. Jackson image of an earth lodge village in Nebraska was possibly taken in 1871. In identifying both men as probable scouts, who often assisted the U.S. military, Pawnee scholar Roger Echo-Hawk noted that raiding and prisoners could have circulated trade blankets among Plains peoples (Echo-Hawk 2000). Details of the blanket design, namely, the compound center band and the three spaced bands, leave little doubt that the tall man in the center is wearing a look-alike of the Washita Chief Blanket. It is fringed at the base (though the top edge is hidden): textile analysis of our specimen

(Part I) leaves open the possibility of fringing.

Laurie D. Webster has recently pointed out two important images of similar fringed, banded blankets that were published by the Museum of the American Indian in 1982. Indian people contemporary with Washita but living far north of Cheyenne country are depicted—Crow Indians in the 1868 delegation to Washington. In each photograph of a man and his wife, the woman is arrayed in a zone-banded dark on white wearing blanket with fringes at bottom and top. In “Portrait of Blackfoot and Wife, Crow” (photographer unknown), only a single band detail differentiates the blanket from the Washita textile. Intriguing identifications (albeit undocumented) occur in the captions: “She is wearing...the Spanish trade textile favored by the Crow” and “His wife is wearing...a Spanish trade blanket.” (Museum of the American Indian 1982: 32,33,61)

From the images and “Spanish trade blanket” attributions above, our search for sister blankets of the Washita Chief Blanket clearly should encompass Plains Indians in the north as well as the south. It should focus on fringed blankets produced on wide floor looms of the Spanish, either in New Spain (Texas, New Mexico or Mexico) or European Spain. The latter direction is consistent with advice from several textile authorities (Nancy Blomberg, Jerry Becker, Ann Hedlund, Will Wroth, Jeanne Brako, and Bob Mann) to look at products from floor-loom workshops and commercial enterprises outside the Southwest to the south and east. We already know that blankets most widespread from this period--Saltillo blankets and serapes from northern Mexico and Hudson’s Bay blankets from England--are dissimilar. Other producers are little studied and sister blankets must be sought through collections survey and specialist information.

The first similar specimen came to light recently. Laurie D. Webster briefly inspected a textile fragment strikingly similar to ours at the Peabody Museum of Archaeology and Ethnology. The longitudinal half, cut from a large rectangular blanket, is band patterned across the width in black and red on white, almost identically to the Washita Chief Blanket. Knotted warp threads form fringes at both ends, indicating probable treadle looming. Though material and technical details are only partly known as yet, the warp appears to be 3-ply-Z-spun, S-twist, used in pairs, and the weft wool is 2-ply Z-spun, S-twist. With so many diagnostic trait similarities and filled-in parts, the Peabody textile offers excellent supplementation to knowledge of the Washita style textile. It disappoints only in its poor documentation: donated to the Museum in 1907, the textile has uncertain date and culture of manufacture (labeled ca. 1860s, Mexican?).

Conclusion (Parts I and II)

Research has defined the Washita Chief Blanket descriptively and vis a vis Southwestern wearing blankets and verified its provenance and cultural-historic context. Despite its strong visual similarity to the Navajo First Phase Chief Blanket, the blanket is an anomaly in the Southwest. Technical characteristics, provenance, and ethno-historic evidence establish it as another style of trade blanket to Plains cultures of the mid-nineteenth century (ca. 1840-1870). Specific source identification is hampered by the blanket’s oddities and missing ends, the indeterminate yarn production, the absence of

floor looms of sufficient width, and lack of similar source-documented specimens. The dyes and wools and ethnohistoric data place its probable place of manufacture in the Spanish sphere, but textile producers in the eastern United States cannot be dismissed.

The warps of the Washita Chief Blanket are so fragile that its survival is amazing (due in large part to its post-1868 life as a display piece). The existence of similar blankets is problematic, yet the historic Crow and Pawnee images show that there were such blankets in other Native hands and the discovered matching fragment gives hope of other illustrations and rare surviving textiles. Ultimately, we may find a wide loom with paired warp weaving structure from the mid-eighteenth century.

Moreover, the “whole cloth” of the Washita Chief Blanket story depends on understanding its role and significance among changing peoples, arts, and belief systems on the Western Frontier. Crucial are first-person knowledge and viewpoints of Southern Cheyenne descendants, who carry on the language of the robe and many other customs of the Cheyenne Way. Most vitally, for all, homage to the Washita tragedy is long overdue.

References

- Afton, Jean, David F. Halaas, and Andrew E. Masich *Cheyenne Dog Soldiers, a Ledgerbook History of Coups and Combat*, The Colorado Historical Society and University Press of Colorado, Denver and Niwot, Colorado, 1996
- Bates, Charles F. Col. “Edward Settle Godfrey, Class of 1867,” *Annual Report, June 9, 1932, The Association of the Graduates of the United States Military Academy*, pages 59-68.
- Boileau, Thornton I. and Margo “Joe Scheuerle: Modest Man with Friendly Palette,” *Montana, the Magazine of Western History, Vol. XXI, No. 4, October, 1971*, pages 39-58
- Brady, Cyrus T. *Indian Fights and Fighters*, University of Nebraska Press, Lincoln, 1971
- Drumm, Stella M. (ed.) *Down the Santa Fe Trail and Into Mexico: The Diary of Susan Shelby Magoffin, 1846-184*, University of Nebraska Press, Lincoln, 1982
- Echo-Hawk, Roger C. Personal interview with Joyce Herold, Denver, July, 2000
- Godfrey, Brig. Gen. Edward S. “Some Reminiscences, Including the Washita Battle, November 27, 1868,” *The Cavalry Journal*, vol. 37, no. 153, October 1928
_____. Handwritten note, signed, no date. Denver Museum of Nature and Science Archives, Denver
- Godfrey, Ida Emley Handwritten note, signed, no date. Denver Museum of Nature and Science Archives, Denver

-
- Godfrey, Mary Letter to Joseph Scheuerle, April 7, 1941. Denver Museum of Nature and Science Archives, Denver
- Gulliford, Andrew. *Sacred Objects and Sacred Places: Preserving Tribal Traditions*, University Press of Colorado, Boulder, Colorado, 2000
- Hafen, LeRoy R. (ed.) "The W. M. Boggs Manuscript about Bent's Fort, Kit Carson, the Far West and Life among the Indians," *The Colorado Magazine*, March, 1930, pages 45-57
- Herold, Joyce "Grand Amateur Collecting in the Mid-Twentieth Century: The Mary W. A. and Francis V. Crane American Indian Collection at the Denver Museum of Natural History," in *Collecting Native America, 1870-1960*, ed. Shepard Krech III and Barbara A. Hail, Smithsonian Institution Press, Washington, D.C., 1999, pages 259-291
- Hoig, Stan *The Battle of the Washita: The Sheridan-Custer Indian Campaign of 1867-69*, Doubleday & Company, Inc., Garden City, New York, 1976
- Kapoun, Robert W. *Language of the Robe: American Indian Trade Blankets*, Peregrine Smith Books, Salt Lake City, 1992
- Museum of the American Indian *With Eagle Glance, American Indian Photographic Images, 1868 to 1931*, Museum of the American Indian, New York, 1982
- Quaife, Milo M. (ed.) *The Commerce of the Prairies by Josiah Gregg*, [1845] University of Nebraska Press, Lincoln, 1967
- Schmitt, Martin F. and Dee Brown *Fighting Indians of the West*, Charles Scribner's Sons, New York, 1948
- Sheridan, Lieut. Gen. P. H. *Record of Engagements with Hostile Indians Military Division of the Missouri, 1868 to 1882*, Government Printing Office, Washington, D.C., 1882
- Stanley, Henry M. *My Early Travels and Adventures in America*, University of Nebraska Press, Lincoln, 1982, originally published 1895.
- Viola, Herman J. *Little Bighorn Remembered*, Times Books, New York, 1999



Pawnee scouts wearing trade blankets, Loup Fork village, Nebraska, 1871?. William H. Jackson photograph, Smithsonian Institution. National Anthropological Archives. (BAE-1249).

Pitfalls, Perceptions, Problems, and Possibilities in the Perusal of Prehistoric Fabrics

Mary Elizabeth King

Nearly 40 years ago, Anna Gayton wrote a paper entitled, "The Cultural Significance of Peruvian Textiles: Production, Function, Aesthetics for the *Kroeber Anthropological Society Papers* (1960). Textile studies at that time and earlier had tended to focus on one or more of these three categories when dealing with ethnological textiles, but studies of archaeological textiles were almost entirely descriptions of techniques and designs. While in the past 10 or 15 years, significant advances have been made in the interpretation of ancient fabrics; we still have a long way to go.

What, then, are the approaches that we must now take to adequately study prehistoric textiles and derive the greatest amount of knowledge from them? First, accurate descriptions with attention paid to terminological clarity, preferably using a standard such as that of Irene Emery (1966); second, a thorough knowledge of the literature, museum collections, and range of possibilities; third, employing multi-disciplinary corporations analysis; fourth, the use of such studies as semiotics, linguistics, ethnographic analogy, and mythology to attempt to understand meaning; fifth, experimentation; sixth, to make use of logical and scientific theory, yet approach the study with an open mind; and seventh, to always keep in mind the fact that are archaeological specimens are the product of human beings. Since it is unlikely that any one person could possibly accomplish all of this, it will be necessary to call upon others with specific areas of expertise and, whenever possible, to communicate with one's colleagues for their advise and criticism.

In any field, it is necessary to acquire a mass of basic data before one can begin to assess this data with an eye to making hypotheses and drawing a conclusion. One should look at all of the examples possible, though in many areas of textiles studies this may not be easy achieved. It may take years before sufficient examples are found to make meaningful comparisons. The scarcity of examples may lead us to make incorrect assumptions about the distribution of techniques and textile types through time and space, a problem with the study of all perishable materials. The problem is further magnified by the incomplete nature of all archaeological exploration. With advances in archaeological techniques, however, more and more fragments of fabrics are being found, and it may eventually be possible to make more reasonable statistical approximations of reality.

It is also important, perhaps particularly so in the study of ancient New World fabrics, to understand what was going on elsewhere. We must know what was happening in the past in North, Central, and South America, as well as in the Old World at the time of the original New World settlements. The latter can enlighten us as to the kinds of things that humans brought with them in their migration; the former can show us the results in diffusion and innovation in various New World cultures. As an example, Archaic peoples across North America utilized such garments as string skirts and fur-and feather-twined blankets. It seems clear that these were items that they brought with then

from the Old World. It would have been impossible for people to migrate or even to make extended hunting excursions without warm clothing, carrying devices, and all the many other things that they would need to preserve themselves and their way of life.

As to the importance of understanding the industries of the various parts of North and South America, without such knowledge it is impossible to understand the origin of techniques. Many techniques are more wide spread than is commonly believed, and most, if not all, of us have made substantial errors in speaking of origins and relationships without understanding the larger picture. In other words, descriptive studies form a basis for more sophisticated studies and hypotheses, but a sufficient number of descriptive studies must be available to assess the reliability of the data, and, if possible, the studies must be widely available, not simply buried in unpublished delivered papers, masters' theses, doctoral dissertation, or little-known local journals. Ultimately some of these may achieve wider access, but some important studies reach a wide audience. It is incumbent upon true students of a subject to make their works available for critical analysis and incumbent upon the critics to make their criticism objective and free of personal bias. The web may offer us a new chance "publish" important bits of knowledge (see, for example, Karen Bruhns' "The Story of a Sherd: The Second Oldest Textile in Ecuador.")

Modern graduate students often believe that the older literature in the field is not worth their consideration, but those without a knowledge of past information are often doomed to make serious misinterpretations. We might all be spared embarrassment if we had a better grasp of past published material as well as the contents of museum collections, to say nothing of frequently consulting with our colleagues before publishing our material.

Textile studies have, indeed, become more perceptive in recent times. One might cite William Conklin's 1973 and 1986 papers, "Structure as an Index of Numerical Thought in Archeological Textiles – An hypothesis" and "The Mythical Geometry of the Ancient Southern Sierra;" Mary Frame's imaginative demonstrations of techniques transposed into designs (1986); and many others. Semiotics, long applied to ethnic costume (see, for example, Bogatyrev, 1971) and even to high fashion (Barthes, 1983) can also be applied to ancient textiles, perhaps explicating that most elusive of traits—meaning—that might otherwise remain unknown. In *The Fashion System*, Barthes uses "image garments" in this case fashion photographs, in his semiotic analysis. While we unfortunately have no photographs from the distant past, we do have their equivalent in such things as human effigy potter, figurines, mural paintings, etc. Many of Barthes' "significant units" seem to have been virtually ignored in modern studies. Few of us have dealt with the meaning of placement, whether of details or whole design units. In Paracas, Safford (1941) pioneered in such a study, and Anne Paul (e.g., 1997) and Mary Frame (1988) have continued to do meaningful studies of design placement. One other paper (Brugnoli Bailoni and Hoces de la Guardia, 1995) uses placement to attempt to determine meaning in Chavin and Wari textiles. In the former, they believe that two textiles have agriculture calendrical significance; in latter, the meaning is not clear.

We are all aware of the importance of using specialist in other fields to assist us in our analyses. We are accustomed to using botanists and zoologist to help us identify further errors in print. Since many early fiber identifications are inadequate or totally wrong, and since analytical techniques are constantly improving, it is always wise to rest fibers and other organics. Sadly, some of these early errors are still being repeated in recent and otherwise excellent publications. For instance, the animal skins used in twined fur blankets are still being identified as rabbit, when a quick trip to the local zoologist would show that they are mixed small mammals. If it is impossible to retest, it should be made clear that these are old identifications. Dye analyses are woefully inadequate; basically only red and blues have sound source information. It is difficult to identify yellow dyes, but it would be worthwhile to find a dye chemist who is willing to spend a few years studying yellow plant dyes. It would undoubtedly have to be limited to a specific geographic region, but anything would be better than nothing.

There are, however, other ways in which scientists can be of use. Some time ago, two Austrian zoologist (Wickler and Seibt, 1983, 1988) offered a re-evaluation of the Paracas "double-headed snake" design, convincingly suggesting that the design actually represents polychaetes, sea worms that not only appear to have "heads" at both ends and protrusions from their sides but also have considerable calendrical significance. The earliest depiction of them is in a twined fabric from the preceramic site of Huaca Prieta on the north coast of Peru, in which they are shown with crabs. In actuality, polychaetes sometimes co-inhabit crab burros. They are often brightly colored, and they spawn at the ocean surface in great numbers annually. It would be impossible for coastal-dwelling people to ignore them. Polychaetes are widespread in the world, and, in Indonesia, they figure in the mythology, so it is quite reasonable to believe that they had significance to the ancient Peruvians as well. The publication of this identification was in a well-known European journal, but it had obviously been missed by most Peruvianists.

Linguistic analysis can be useful in design analysis as well; for example, minimal pairs can be located in repetitious design layouts and serve to distinguish similar beings or designs from one another. E.J.W. Barber (1991) has made superior use of her training as a linguist, archaeologist, and weaver in her discussion of the prehistoric textiles of the Old World. Likewise, experimentation, which Barber also practiced, can serve to reinforce technical analysis.

Experimentation, can, however, be dangerous unless the person experimenting has, at the very least, skills approaching those of the original craftspersons. Barber's use of the techniques is so successful because she is a skilled, second-generation weaver. The same process in other hands can be disastrous. We must be aware that early craftspeople may have utilized techniques unfamiliar to us and not make judgments based on what modern craftsmen and women can or cannot duplicate. If we find ourselves considering a production method that is far more complicated or time-consuming than need be, we should probably apply the principle of Ockham's razor and look for a simple explanation based on prior knowledge.

Archaeologists have used ethnographic analogies for many years in an attempt to explicate archaeological behavior, and though not infallible, such analogies sometimes help us to understand the archaeological counterparts. The fact that everyday artifacts and behavior often acquire ceremonial uses and meanings through the passage of time can also add dimension to the understanding of both archaeological and ethnographic textiles. Some obvious examples are the survival of medieval dress style in recent nuns' garments, the use of candles in ritual situations, and the transformation of the everyday semi-subterranean house into the kiva in the Southwest. A curious "survival" which does not fit this pattern concerns an odd Peruvian poncho or shirt from the Central Coast (Gayton, 1955; Emery and Kind, 1957). Sometimes called a mummy-bundle poncho, these relatively common garments consist of loosely woven narrow brown plain-weave cloths sewed together horizontally and bordered with red and blue weft-faced plain weave. The construction process produces a horizontal neck slit, and, in most examples, "arm" holes at the top edge of the poncho-shirt, rather than on the sides. This has been interpreted as a garment that could have easily been pulled over a mummy bundle, with the small fabric and the construction of the garment were both so loose and open that it would have been difficult to wear in life without catching on anything and everything. I recently encountered an illustration of a Chancay pottery figurine wearing a fragment of the same textile as a poncho (Damien, 1995:116-117, Fig. 4). Damien describes the female figurine as a votive "*cuchimilco*" figure found in graves, with obvious ritual significance. More surprising, the identical garment construction, albeit made of bark cloth, appears in the Peruvian Amazon among the Asherinka (Vebber, 1996), where it is worn by women and described as a prehistoric garment. Interestingly enough, the men wear a poncho made up of the same strips, but with the strips sewn together vertically, producing a normal neckslit and armholes. Thus a shirt can be turned from a male to a female garment or vice versa by simply unstitching it and putting it back together in the opposite direction. This appears to be the complete reversal of the more common situation of the everyday into ceremonial gear, but it might possibly be a case of a construction method used for both ritual and everyday circumstances.

One of the commonest pitfalls in prehistoric textile studies is the use of circular reasoning that creeps unintended into many arguments. Often eager to prove our cases, we may base a premise on the assumption, without proof, that a certain situation exists. Thus, as is often said to be the case in the Southwestern U.S., if the backstrap loom was introduced ca. A.D. 500, accompanied by cotton, then any example of cotton cloth cannot precede A.D. 500, or, if there is a backstrap loom, there must be cotton.

I have already written (1978) of the difficulties involved in the study of archaeological textiles, especially those which consist of impressions on pottery or those adhering to metals, and I believe that my conclusion in that paper are still sound. It is usually necessary to see both sides of a structure to identify it positively. Many descriptions of techniques based on pottery impressions are downright fanciful. In all archaeological textile studies we must make decisions about which details are significant and whether the significance applies in all circumstances. Some works, admirably, give us all possible details and let the reader make the decisions, but this is a very labor intensive approach. If we take the direction of spin and ply, for example, we are faced

with somewhat limited possibilities. There are only two directions: S and Z (\ and /). It seems clear that plant fibers have their own preferred direction of initial spin based, no doubt, on their structure, with cotton being usually initially spun Z and the other plant fibers, both leaf and stem, usually spun initially S. This is not infallible, it is simply the norm. Plies are usually in the opposite direction from the original spin, for the reason that they hold their twist better in that situation. Some variations in spin may be due to handedness or to the method of spinning. Non-plant fibers may be easily spun in either direction, and on occasion, opposite spins or plies in adjacent warps are used for a kind of herringbone patterning in textiles (Dransart, 1995:233, Fig. 5), a trick that the craftspeople may have originally learned with twining. The use of opposite plies in a given fabric may have a magical connotations as Goodell (1968) found in Andean ethnographic textiles, and, similarly Dransart (1995:240, endnote 11) cites Meisch (1986:27) for the information that opposite spin is used by the Tarabuco of Bolivia for plaited ties worn around the ankle “to protect the body.” Goodell (1968:7) agrees that *lloq’*e (clockwise, or S, spin) has protective qualities, as well as being used in offerings. The presence of opposite spins or plies in prehistoric textiles may indicate similar beliefs.

Adovasio and his colleagues (e.g., Maslowski, 1996) have long insisted that changes in spinning practices indicate a new population or culture moving into the areas, but they could just as well mean the introduction of a new fiber (which, of course, does not preclude a new population, as well). In a very few instances there do appear to be cultural preferences in spin. In northern Peru, for example, cotton is almost always initially spun S, and a textile that includes nothing but S-spun cotton can be safely said to be from the north. This, however, is the only clear example of such a preference that has been noted, and the northern Peruvians do not seem to be significantly different culturally from their southern neighbors. When Chavin-style textiles occur on the South Coast of Peru as a result of influence from the north, they are Z-spun. In the north, where preservation is unfortunately inferior, the spin would be S. Unfortunately, there are few early textiles preserved from the North Coast. In prehistoric fabrics from northern Mexico, Taylor (1968) noted a preference for final twist, rather than initial spin. This results in some rather strange spin and ply combinations, such as the same direction in both singles and plies with the same final spin, and it is impossible to know whether this was an aesthetic decision or had other meaning.

Both Dransart (1995:237ff) and Frame (1986:56) have suggested that spinning direction may have greater meaning, that it may be “the embodiment of the rotating motions in the [*waynu*] dances” (Dransart, 1995:239) or to simulate “the Apparently spiral direction of the sun in its daily and annual cycle” (Frame). If spinning does have such connotations it makes it less open to change than might otherwise be the case. However, these meanings cannot be all inclusive, since some fibers are spun in one direction and others in the opposite within the same culture. Clearly this is a subject for additional study. For that reason and others, I find it difficult that publications on design in fabrics rarely contain technical details such as size, fibers used, spin and ply, etc. These could be simply recorded in footnotes or appendices. Such an inclusion would render the articles far more useful and need not distract the reader from the discussion of design and meaning.

The most difficult thing to determine is unquestionably, meaning. Even with ethnographic textiles, differing interpretations of a single design can often be elicited from a group of artisans. With archaeological textiles, only semiotics used together with ethnographic analogy, holds out some promise for deciphering meaning, and even then, we can never be sure that we are right. Sometimes it appears that we simply cannot determine how something was made or used, or what it meant to the people who possessed it. Irene Emery (1966:xv) long ago pointed out that the method of construction usually cannot be positively identified from the finished product, although the structure can, in most cases, be described. Often a number of construction methods, more or less indistinguishable in the final fabric, can be used to produce a given effect.

There are still many unsolved problems. Some, such as the ultimate origins of techniques may not be susceptible to solution owing to the perishable nature of fabrics and their long history. We are bound to be left hanging in our studies of fabrics that are not accompanied by a written language. As Barthes (1983:277) has said, language is the “guardian of meaning and gateway to the world.” Without it, we can make surmises, but we cannot be assured that we are correct. In fact, the worst thing about the analysis of prehistoric fabrics is the fact that we can never really know whether a great many of our interpretations are right or wrong. We can only do the best we can to wring every shred of data from our artifacts. Even in our failures, we gain knowledge.

References Cited

Barber, E.J.W.

- 1991 *Prehistoric Textiles: The Development of Cloth in the Neolithic and Bronze Ages, with special reference to the Aegean*. Princeton University Press, Princeton

Barthes, Roland

- 1983 *The Fashion System*. Hill and Wang, New York

Bogatyrev, Petr

- 1971 The Functions of Folk Costume in Moravian Slovakia. *Approaches to Semiotics*, 5. Den Haag.

Brugnoli Bailoni, Paulina and Soledad Hoces de la Guardia

- 1995 Two Options for Achieving a Visual Image in Precolumbian Textile Art. In: *Andean Art: Visual Expression and Its Relation to Andean Beliefs and Values*, ed. by Penny Dransart, pp. 194-227. Avebury, Aldershot.

Bruhns, Karen Olsen

- n.d. *The Story of a Sherd: The Second Oldest Textile in Ecuador*.
<http://mercury.sfsu.edu/~kbruhns/textile.htm>

Conklin, William

- 1973 Structure as an Index of Numerical Thought in Archaeological Textiles—An Hypothesis.” Paper presented at the First Roundtable on Museum Textiles, The Textile Museum, Washington, D.C.
- 1986 The Mythic Geometry of the Ancient Southern Sierra. In: *The Junius B. Bird Textile Conference*, ed. by Ann Pollard Rowe, pp. 123-135. The Textile Museum, Washington, D.C.

Damien, Carol

- 1995 From Pachamama to the Virgin Mary: What the Spanish Never Saw. In: *Andean Art: Visual Expression and Its Relation to Andean Beliefs and Values*, ed. by Penny Dransart, pp. 109-130. Avebury, Aldershot.

Dransart, Penny

- 1995 Inner Worlds and the Event of a Thread in Isluga, Northern Chile. In: *Andean Art: Visual Expression and Its Relation to Andean Beliefs and Values*, ed. by Penny Dransart, pp. 228-242. Avebury, Aldershot.

Emery, Irene

- 1966 *The Primary Structures of Fabrics*. The Textile Museum, Washington D.C.

Emery, Irene and Mary Elizabeth King

- 1957 Additional Examples of and Unusual Peruvian Shirt Type. *American Antiquity*, 23(1):71-74.

Frame, Mary

- 1986 The Visual Images of Fabric Structures in Ancient Peruvian Art. *The Junius B. Bird Conference on Andean Textiles*, ed. by Anne Pollard Rowe, pp. 47-80. The Textile Society of America, Minneapolis.
- 1988 Orientation and Symmetry: The Structuring of Pattern Repeats in the Paracas Necropolis Embroideries. In: *Textiles as Primary Sources*, coord. by John E. Vollmer, pp. 136-139. The Textile Society of America, Minneapolis.

Gayton, Anna

- 1955 A New Type of Ancient Peruvian Shirt. *American Antiquity* 20(3):263-273
- 1961 The Cultural Significance of Peruvian Textiles: Production, Function, Aesthetics

Goodell, Grace

- 1968 A Study of Andean Spinning in the Cuzco Region. *Textile Museum Journal*

King Mary Elizabeth

- 1978 Analytical Methods and Prehistoric Textiles. *American Antiquity*. 43(1):89-96.

Maslowski, Robert F.

- 1996 Cordage Twist and Ethnicity. In: *A Most Indispensable Art: Native Fiber Industries from Eastern North America*, ed., by James B. Petersen, pp. 88-99. The University of Tennessee Press, Knoxville.

Meisch, Lynn

- 1986 Spinning in Bolivia. *Spin-Off*, 10(1):25-29.

Paul, Anne

- 1997 Color Patterns on Paracas Necropolis Weavings: A Combinatorial Language on Ancient Cloth. *Techniques and Culture*, 29:113-153

Safford, Cora E.

- 1941 *Paracas Embroideries, a Study of Repeated Patterns*. J.J. Augustin, New York.

Taylor, Walter W.

- 1968 A Burial Bundle from Coahuila, Mexico. *Papers of the Archaeological Society of New Mexico*, 1:23-56

Veber, Hanne

- 1996 External Inducement and Non-Westernization in the Uses of the Asheninka Cushma. *Journal of Material Culture*, 1(2):155-182.

Wickler, Wolfgang and Uta Seibt

- 1979 Über das Deuten von Tierbildnissen; angebliche Kult-Feliden aus Alt-Südamerika. *Baessler-Archiv*, n.f., 27(2):273-284.
- 1988 A Crab-Polychaete Symbiosis from Ancient Peruvian Iconography, and the Sawtoothed Snake Problem. *Baessler-Archiv*, n.f., 36(2): 253-259.

ARCHAEOLOGICAL TEXTILES: THE NUMBERS GAME

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Archaeological textiles are generally so rare that each one can be dealt with as the precious individual it is. But when ancient rags are emerging from the ground by the basketful, how do you deal with them? When, at day's end, you are confronted with two to three hundred separate textile specimens, and similar numbers are expected each day of excavation? That is the challenge that Elisabeth Crowfoot and I faced together for five seasons at the site of Qasr Ibrim.

The archaeological site of Qasr Ibrim is located on a bluff high above the Nile River in Egyptian Nubia, about 30 miles north of the Sudanese border. It was a powerful fortress-city, dominating the area for many miles both upstream and downstream. This strategic location must have attracted settlers from very early times; we know that Qasr Ibrim was continuously occupied for at least 3000 years, and was only abandoned finally in 1811 AD.

Since Qasr Ibrim is in Nubia, one of the driest regions of the world, the preservation of organic remains is truly amazing. In addition to literally thousands of textiles, we find remains of leather, wood, basketry and matting, parchment, papyrus, paper, and forgotten or lost stores of wheat, dates and beans. The town was built on its own trash, so the archaeological deposits are all refuse, and the recovered objects are mostly fragmentary. For example, a rag, which was originally part of a man's garment, was cut down to make a child's dress, and finally was used as a scrubbing rag, before being discarded. Though the fabric is in relatively good condition because of the extreme dryness of the site, its fragmentary condition makes it often difficult to ascertain an original purpose. However, if hems, seams, or other features are present, we can often recognize the ghost of the original garment.

The study of textiles at Qasr Ibrim has been carried out by Elisabeth Crowfoot and myself. The field methods we have devised have necessarily been adapted to meet the unusual conditions just described. A central feature of our study is the analysis and recording of every fragment of textile which comes from the ground, no matter how small. In the 1980 season alone, this number totaled 23,432 specimens, and other seasons have yielded similar numbers. We devised a form on which to record the textiles from each provenience, or location. The form includes spaces to record all the basic features of woven cloth: fiber, direction of yarn twist, weave, thread count, color, borders, and the numbers of fabrics in the group which answer that description. Space is left for comments to augment or clarify the tabulated description: stripes are recorded by counting the number of warps which compose each stripe; checks or plaids are analyzed using both systems of warp and weft. Often we sketch a pattern. Our ultimate aim is to produce a description sufficiently complete so that a weaver could reproduce each piece that has been found.

The best-preserved or most unusual textile fragments are catalogued. In addition to undergoing the initial analysis just described, they are given a number, measured, cleaned, photographed, possibly drawn, and mounted for safe travel to Cairo. The catalogued specimens in 1980 numbered 525, or slightly over 2% of the total number of textiles recorded. The uncatalogued specimens are reburied on the site.

These numbers have allowed us to do the same kinds of quantitative studies that archaeologists have long brought to the study of potsherds. Quantitative analysis, in which the textiles are viewed, not as individuals but as members of a population, is a useful way of addressing questions of variation of fibers and fabric types over time and space. Using percentage frequencies I have been able to construct graphs and charts which help to organize this vast body of material.

STUDY 1 (Figure 1)

The first study, of 12,061 specimens, shows the fluctuations of the frequencies of the three major fibers of flax, wool and cotton over a period of 2000 years. In order to understand the meaning of some of these wild variations, some knowledge of the history of Qasr Ibrim is in order.

The earliest level from which we have textiles dates to the Ptolemaic Period (ca.332-30 BC). In these levels, more than 90% of textile specimens are made of flax. It was the dominant fiber of ancient Egypt, and continued to be used in Ptolemaic times as well. Then, in 23 BC the Romans established a garrison at Qasr Ibrim. Our textiles reflect their arrival by a dramatic increase in the percentage of wool. The use of wool was known but not favored by the dynastic Egyptians; it was only with the coming of Roman forces that wool became a major textile fiber at Qasr Ibrim. During the period of Roman occupation, which lasted about 125 years, flax nevertheless continued to be the dominant fiber, used for furnishing material as well as for clothing worn by the local population.

With the departure of the Romans around 100 AD, Qasr Ibrim came under the influence of the Kingdom of Meroe located farther south along the Nile in the Sudan. Meroe had an extensive cotton industry, and, in fact, introduced the fiber to Egypt. During the following span of roughly 4 1/2 centuries the use of flax and wool decreased dramatically, and cotton made an appearance on a large scale. With the collapse of Meroe around 350 AD, the cotton industry gradually declined and then its use plummeted around 550 when Nubia converted to Christianity.

During the early middle ages, cultural influences, along with Christianity, came to Qasr Ibrim again from the north. The use of cotton was replaced by wool. Wool, along with flax, were the two fibers most prevalent throughout the Mediterranean world. Sometime around 800 AD the use of cotton began to increase again. This may be an indication of the early beginnings of an Egyptian cotton industry, so important to the Egyptian economy later on.

The later Middle Ages at Qasr Ibrim were a time of wealth and influence as indicated by the large numbers of imported luxury goods. Decorated pottery, glass vessels, art objects of metal, wood and ivory, as well as religious texts with elaborate decorative leather bindings have been found. Quantities of imported linen cloth also appear among the textiles at this time.

The last 400 years of occupation can be characterized generally by a continuation of the trends of the preceding century. However, we know that near the end of occupation there was a severe economic decline, which is not revealed by this graph. To see evidence of this poverty, we will turn to more sensitive data.

STUDY 2

During the last 300 years, of occupation, Qasr Ibrim came under Turkish rule when the Ottomans conquered Egypt in 1517. They established a garrison on the citadel and constructed barracks, storage pits, armories and a stable. A number of weapons as well as other imported items such as Chinese porcelain have been recovered, including quantities of luxury fabrics.

The Ottoman era falls into two periods: Period 1, 1556-1583 and Period II, 1583-1812. These two time spans were recognized archaeologically in the stratigraphy, and have since been confirmed historically. I have selected six imported luxury fabrics to analyze for the two periods, using the same numerical procedure as described earlier.

The first is fustian, a cloth with a flax warp and a cotton weft, used mostly for cushion covers. The second we call 'cap weave', a specialized wool fabric used for small, close-fitting men's caps, jackets and vests. Three others are fabrics of pure silk, wool pile carpet fragments, and resist-dyed or block printed cotton cloth; these were probably the three most expensive of the imports. The sixth luxury fabric, which we call silk mix, occurs in two types. One has a silk warp and a cotton or flax weft. It is warp face, and the heavy weft produces a ribbed texture. The other type of silk mix is basically flax or cotton fabric with the addition of silk warp stripes, often as a decorative selvedge.

The 27 years of Period I are represented by six excavation units containing a total of 8,770 textile specimens (Figure 2). The combined percentages of the six fabrics from the six excavation units present us with a high of 6.3% to a low of 2.7 %. Furthermore, the unit with the lowest total percentage completely lacks two of the luxury fabrics: pure silk and pile carpet. Perhaps this can be interpreted as an indication of a lower economic status for the residents of that house.

For the analysis of textiles in Period II, I took four neighborhoods containing a total of 15 houses (Figure 3). These 15 houses contained 17,394 textile specimens. During this period there seems to be a greater range of variability among neighborhoods and among individual houses than was true in the earlier period. Only neighborhood B contained any pile carpet; the two smaller neighborhoods C and D had no printed cotton or pile carpet and lesser percentages generally of luxury fabrics than the two larger units.

An interesting comparison with Period I is found in the combined percentages of the luxury fabrics from each house. In the earlier period only one of the six excavated units had less than 3% luxury fabrics; in Period 11 that figure climbs to 40%. A further comparison reveals that two-thirds of the units of Period I contained more than 4% luxury fabrics; in Period 11 that figure dropped to only one-fifth of the units with at least 4% luxury goods. The decline in luxury fabrics becomes even clearer when the frequencies of all the luxury fabrics are averaged for the two periods. For period I we arrive at a figure of 4.3 %, and for Period 11, 2.7 %.

The progression of the decline of luxury fabrics throughout the 229 years of Period 11 can be seen in Figures 4 and 5. The graphs show time proceeding from left to right; the earlier stratigraphic levels are on the left. Although the percentages fluctuate, especially for Neighborhood A, the trends in both neighborhoods are clear: there is a marked decline in imported luxury fabrics as the story of Qasr Ibrim was drawing to a close.

STUDY 3

The majority of cotton fabrics from the Ottoman Period have yarns spun in the Z direction. They were imported from Egypt in several standardized types from which much of men's clothing was made. A locally made cotton cloth is a poor substitute, and is readily distinguishable from the Egyptian types, by its S-spun yarn. This fabric only appears during the Ottoman Period; it is totally absent among the textiles dating to earlier times at Qasr Ibrim.

Looking at the percentages of this cloth type in the six Period I units (Figure 6), we see a variation between .6% and 4% among them. Furthermore, the three units containing the lowest percentages of this fabric are the same ones which show the highest percentages of luxury fabrics.

In Period II (Figure 7), the figures vary between 2% and 19%. This represents a dramatic increase in locally made cotton fabric since Period I. Among the six earlier units only one had as much as 4%; four of the remaining units had less than 3 %. In Period 11 we see that 8 of the 15 houses contained 10% or more of the locally made cloth. The negative correlation between luxury fabrics and locally made cotton cloth that was found in Period I is replicated in Period 11. Neighborhood C with the greatest percentage of locally made cotton is also the one with the fewest luxury fabrics.

The progression of the increase of the home-made cotton cloth throughout the 229 years of Period II can be seen in Figures 8 and 9. Again, the earlier stratigraphic levels are on the left, and proceed in time to the right. Neighborhood A shows a steady amount of this cotton fabric until near the end of the period, when the percentage jumps to 7%. In Neighborhood B we see the same trend. A comparison of these graphs with Figures 4 and 5 reveals again a negative correlation between imported luxury fabrics and locally made cloth.

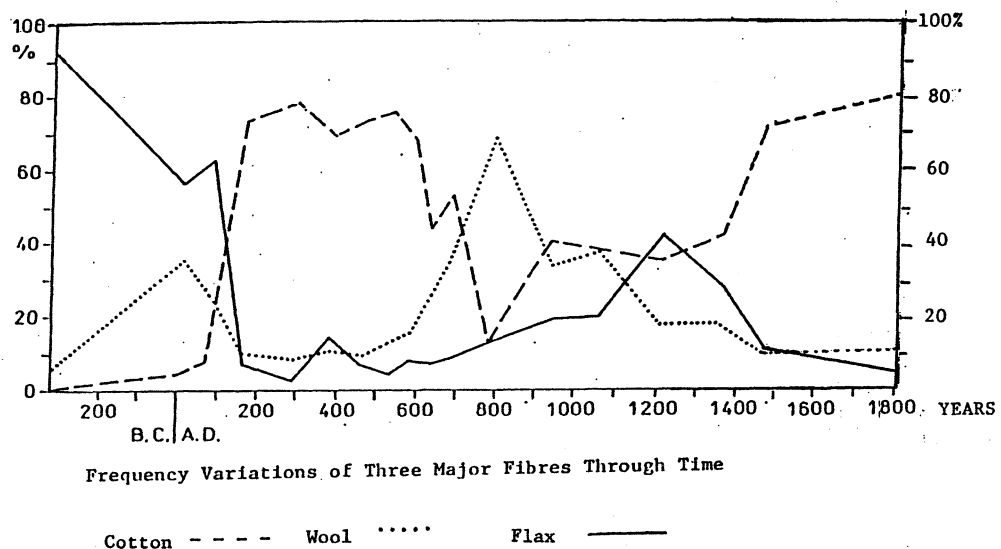
CONCLUSION

How do these three textile studies contribute to our understanding of life at Qasr Ibrim? Have we really learned anything about the people, or just about the behavior of fragments of textile refuse?

In the first study, the wild fluctuations of the percentage frequencies of the three major fibers reflect the changing fortunes of Qasr Ibrim through 2000 years of history. First, it was dominated from the north by Egypt and by Rome. With the decline of these influences, the Kingdom of Meroe extended its hegemony to the north, introducing its own fiber, cotton. With the collapse of Meroe, its influence, along with the cotton industry, declined, and Qasr Ibrim, by adopting Christianity, again became part of the Mediterranean world

Studies 2 and 3 trace the wealth, especially in luxury fabrics, brought to Qasr Ibrim by the Ottomans. But when governmental support of the garrison was abandoned, the inhabitants were no longer able to import luxury goods, or even good quality cotton fabric. In their poverty, they were forced to produce a home-made cloth which was greatly inferior to the imported types. From these three studies it seems clear that quantitative textile data can be accurate indicators of political and economic conditions.

Figure 1



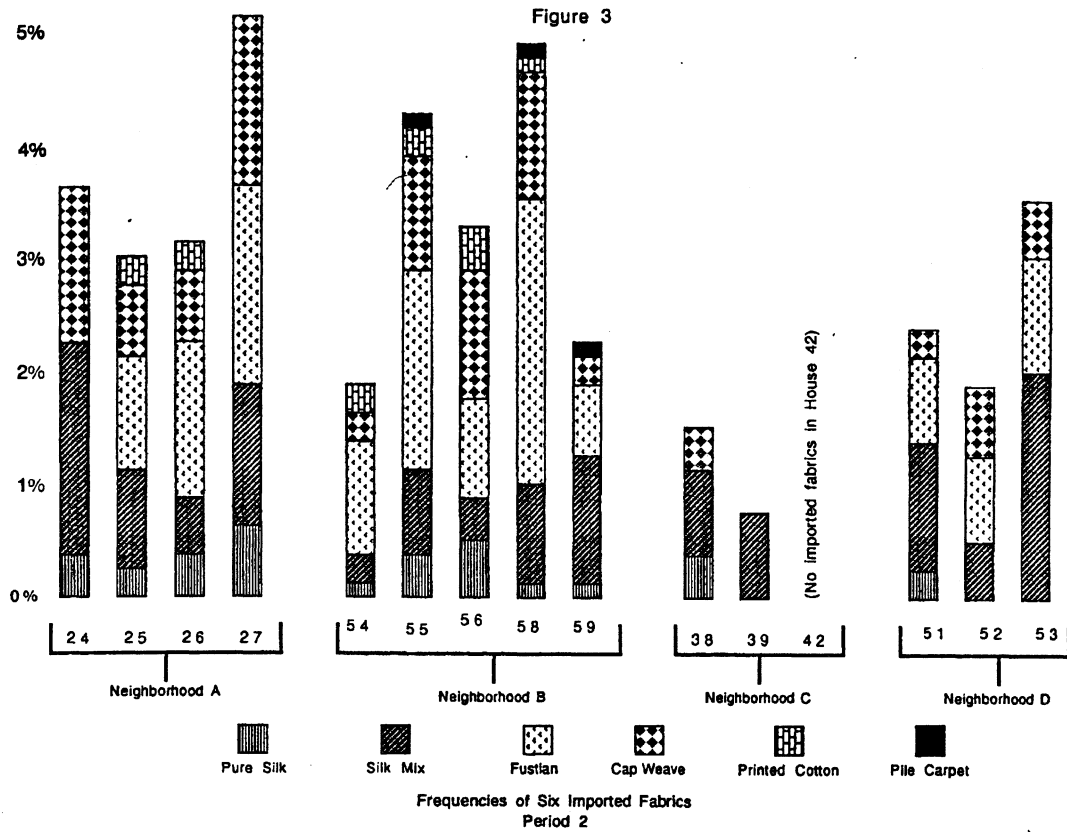
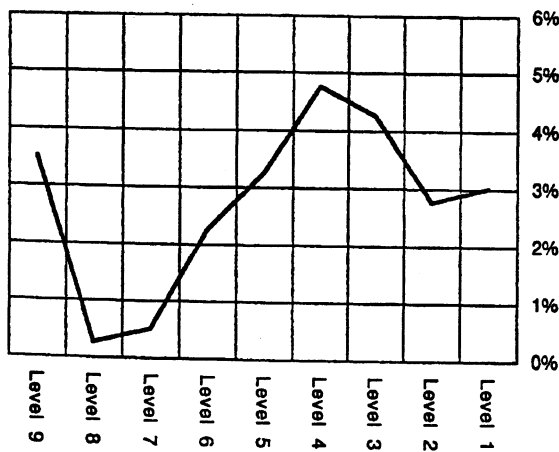
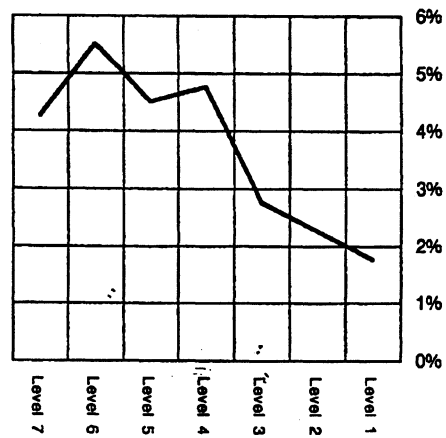


Figure 4



Combined Frequencies of Six Imported Fabrics
Neighborhood A

Figure 5



Combined Frequencies of Six Imported Fabrics
Neighborhood B

Figure 2

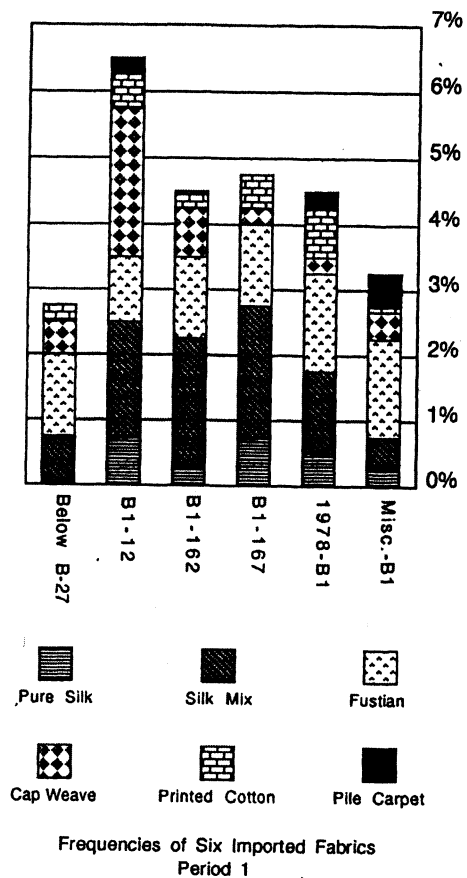


Figure 6

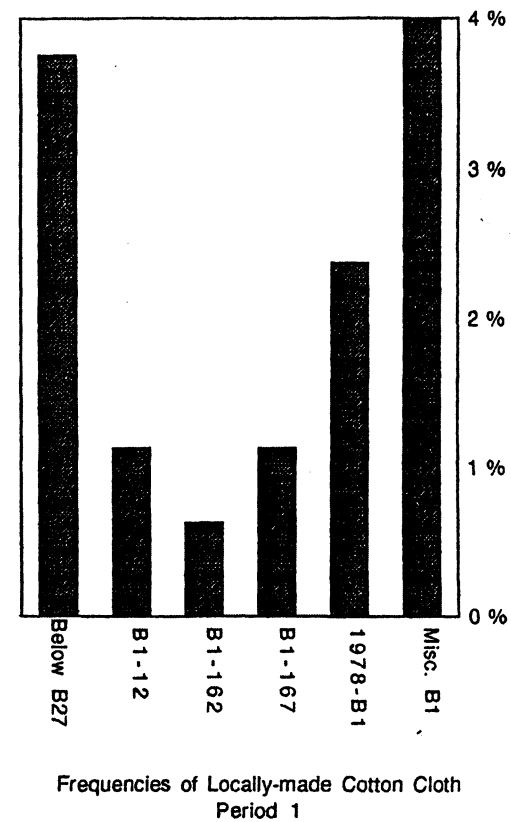


Figure 7

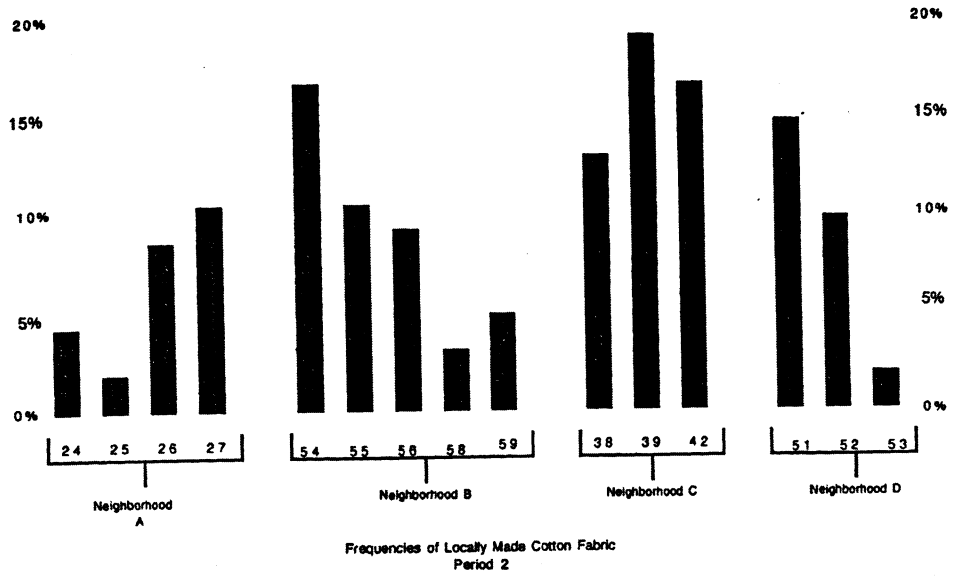


Figure 8

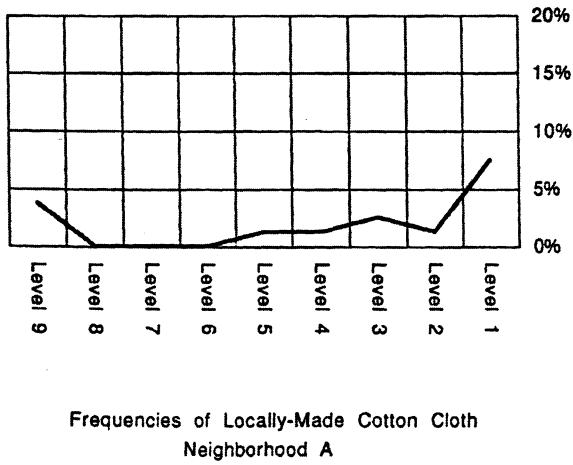
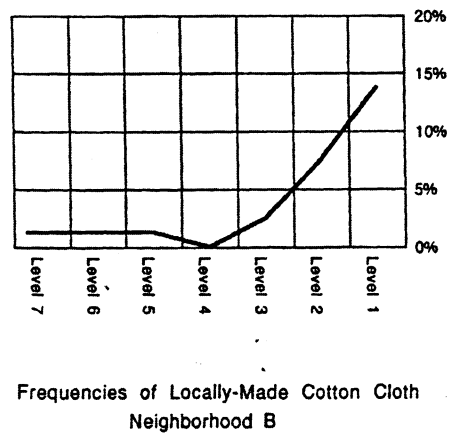


Figure 9



Ancient Traditions, New Interpretations: Compression Resist Textiles in North and Mesoamerica

Virginia Davis

Anasazi pieces from the Southwest USA, circa 1100 – 1300 AD, are known having compression resist patterning by tying or stitching. These may possibly show influence from further south. In Mexico, tie and stitch resist is seen in pre-Hispanic indigo dyed brown cotton fragments recovered in the region of Tehuacán, Puebla. The codices are rich in depiction suggesting tie-dye, in particular, the cloak of Nezahualpilli, Lord of Texcoco, Codex Ixtlilxóchitl, analyzed by Dr. Patricia Anawalt. Nezahualpilli, means in Nahuatl “blue knot,” linguistically reflecting the design in the legitimizing cloak. Codex Mendoza shows tribute to the Aztecs with tie design from an area where present day Otomi live. In the Otomi area of Hidalgo, Elsie MacDougall collected tie and stitch skirts in wool in 1935-36. Señora Romuald Olgún, created tie dye samples for MacDougall. Further fieldwork in Vizarrón, Queretaro by Irmgard W. Johnson in the early 1950s. also records the technique. In 1977, Dr. Ruth Lechuga, discovered one remaining practitioner of the technique, Sra. Delores Aguilar, near Vizarrón. These Otomi skirts exhibit certain European elements: floral motif, peasant style with a waistband, and the material, wool. This European influence and possible Asian elements may be syncretic with a technique that existed precontact. As the mestiza costume developed from the 18th century on, one form that evolved is the *china poblana* costume, now standardized in red, green and white. Perhaps the skirts described above are an earlier stage of this development, with the simpler form persisting in isolated villages into the 20th century.

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APPROACHING FABRICS THROUGH IMPRESSIONS ON POTTERY

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Organic fabrics only rarely survive under archaeological conditions. Particularly in humid temperate or tropical zones, textiles and other fiber perishables rapidly decompose and disappear quite soon after deposition. A few remnants may be found in dry caves or anerobic wet sites, or as charred fragments or metal pseudomorphs, but these represent only a tiny proportion of regional prehistoric fabric production. Fortunately, though, the archaeological record does sometimes yield secondary evidence in the form of impressions on pottery of yarn, fabric, and basketry.

Following the theme of this year's TSA symposium, "Approaching Textiles, Varying Viewpoints," this paper focuses on methods and results of some recent projects involving fabric impressions on pottery. Non-archaeologists might or might not be familiar with the approach. Specialists in organic archaeological fabrics might be familiar with the methodology but see little or no incentive to use it. Even archaeologists who have used the analysis of fabric impressions to good advantage might not be familiar with some of the most recent developments in the field.

In the following pages, I briefly review what is involved in such an analysis, describe advantages and limitations of fabric data derived from impressions, discuss some recently developed analytical approaches and newly-recognized problems, and touch upon several recent case studies that take full advantage of this medium.

WHAT IS INVOLVED?

Impressions of fabrics, cordage, and basketry can be found on exterior or interior surfaces of pottery vessels and figurines, as well as on unfired clay such as from wattle-and-daub houses. Use of these impressions to investigate yarns and fabrics was explored by William Henry Holmes over a century ago (Holmes 1884, 1888, 1896 cited in Drooker 1992), with a few additional studies reported in the mid-twentieth century (e.g., McPherron 1967; Quimby 1961; Saylor 1978; and Miner 1936, Rachlin 1955a cited in Drooker 1992). In the New World, both European and indigenous fabrics have been investigated (e.g., Kuttruff 1980 cited in Drooker 1992). Until fairly recently, though, the wealth of data available on such sherds was extremely underutilized.

In the case of clear, firmly-marked impressions, all that is necessary to study the original fabric and yarn structures is some sort of malleable material with which to make a cast or "positive mold" from the negative mold on the pottery, plus a low power microscope or magnifier to observe and measure small-scale attributes, and side lighting to throw three-dimensional structures into higher relief. If a fine-grained casting medium is used, details can be amazingly clear, to the point that individual fibers are visible, and plant and animal fibers usually can be distinguished from each other. Below, I discuss some of the casting products currently being used, but first I want to summarize what attributes can and cannot be studied by this method.

FABRIC IMPRESSIONS VERSUS ORGANIC FABRICS: ADVANTAGES AND DISADVANTAGES

Casts of yarns and fabrics obviously do not reveal color, nor can they be turned over to see the reverse side or pulled apart to confirm structural intricacies. This makes structural analysis particularly difficult for warp-faced and weft-faced fabrics, for stretchy structures like linking that were impressed in the relaxed position, and for structures like three-element twining that appear different on each side of the fabric (Drooker 1992, 1998, 1999). Unless an impression includes a fabric edge, warp and weft usually cannot be distinguished with certainty, nor can single-element versus multi-element fabrication techniques that result in the same structure (King 1978:90-91 cited in Drooker 1992), such as oblique interlacing versus weaving. Faint impressions may emphasize one set of elements in a fabric over another, making accurate analysis difficult. For instance, open twining may have the appearance of parallel two-ply cords if only the twining rows, and not the passive elements, have been impressed. Similar, and even thornier, problems arise with patterns formed by multiple impressions of the same or different structures, such as occur when cord-wrapped or fabric-wrapped paddles are used in pottery production (Herbert 1999). In addition, because the ceramics on which the yarns and fabrics are impressed would have shrunk as they dried, the fabric replica never will exhibit the exact dimensions of the original (Hutcheson 2000).

To tease out the most accurate analysis, one must be familiar not only with methods of cord making and fabric production and embellishment, but also with a wide range of pottery making techniques. Intimate knowledge of any and all extant organic fabric fragments from a given region and time period aids tremendously in interpreting fabric impressions from the same area. In addition, one must keep an open and skeptical mind. The old saying, "When you have a hammer, everything looks like a nail," holds true for textile specialists as much as anyone: NOT every cast that looks like a fabric actually represents a fabric! But the reverse can be true as well: It is possible to identify real textile treasures if you search in the right places and know enough to recognize them when you see them.

For those of us who work in parts of the world where few actual examples of fabrics, cordage, or basketry survive, impressions on pottery not only can afford glimpses of many types of perishable constructions that otherwise never would have been known, but also can provide very large samples, of a size suitable for statistical analysis and comparison within and between sites and regions. Three mid- to late-twentieth century advances have made this possible.

First, large strides have been made toward standardization of structural analysis terminology, with the publication of Irene Emery's terminology for yarns, textiles, and some non-woven fabrics, William Hurley's for cordage, Hélène Balfet's and James Adovasio's for basketry, and David Fraser's compendium of weft twining structures (Adovasio 1977; Hurley 1979; and Balfet 1957, Emery 1966, Fraser 1989 cited in Drooker 1992). None is complete or perfect, but they greatly facilitate analysis and comparison of results. The development and adoption of a single, unified terminology, while highly desirable, has yet to be accomplished. Second, a suite of statistical techniques called attribute analysis or numerical classification, together with the development of a group of standardized, numerically defined fabric attributes, provided an objective means to define and compare groups of artifacts (e.g., Drooker 1992:37-58 ;

Hoyal 1997; Kuttruff 1988a cited in Drooker 1992; Kuttruff and Drooker 2001; Kuttruff and Strickland-Olsen 2000:Appendix; Rice 1987:275-288; Shennan 1988:190-240; see also Hamilton et al. 1996:Appendix 2). Third, the rapid development of computer technology and current wide availability of powerful personal computers and off-the-shelf statistical analysis programs has enormously facilitated the application of attribute analysis to very large groups of artifacts (cf. Adams, this volume).

Just as with the analysis of organic fabrics and basketry, the ultimate goal is more than merely detailed descriptions of the fabrics themselves. It is to discover, to the extent possible, how they were made and used, and their economic, social, and ritual significance to the people who produced and employed them. In the case of fabric and basketry impressions on pottery, because the ceramics and perishables co-occur, analyses can draw upon both media for insights into patterns of production, use, discard, and exchange within and between groups of people. I describe a few recent examples below. Before that, though, is a brief discussion of technical aspects of impressed fabric analysis, including a significant newly-recognized problem.

NEW APPROACHES AND NEWLY-RECOGNIZED PROBLEMS

A variety of materials have been used to make casts from fabric impressions. Holmes reported using "clay," and others employed "plasticine." I have employed a molding product called "Sculpey," which can be used and reused, then baked to hardness for a permanent record (Drooker 1992:251-253). Carol Rachlin pioneered the use of latex (Rachlin 1955b, 1955c cited in Drooker 1992), which she sometimes stretched to reveal structural details (see also Adovasio et al. 1988:345). William Johnson utilizes a product called Moldlene (pers. comm. 1999). Plaster of Paris also has been employed. More recently, analysts have used dental compounds (Berman and Hutcheson 1997; Stothert et al. 1991; see below).

Until lately, primary concerns in choosing a casting medium and process were (1) speed and ease of use (important when carrying out analyses on far-flung collections), (2) quality of reproduction, and (3) potential for shrinkage. The easiest products to use while "on the road" are those, such as Sculpey, that can be applied in one step. Latex and Moldlene, while providing fine-grained casts, must be applied in several layers, with drying time between applications, so are most feasible at one's home institution. Mary Jane Berman and Charlene Hutcheson use a quick-setting dental compound (Jeltrate® or Jeltrate Plus®) that can be transported as powder and hydrated on site (Berman and Hutcheson 1997). Its application, while not one-step, is fairly simple. However, shrinkage can be significant - up to 8% within 2 months - so measurements of fabric attributes need to be made immediately. Berman and Hutcheson use these casts to make replicas of the sherds in a more permanent medium (plaster, or Kerr® Velmix, another dental compound), which must be done within 24 hours (Berman and Hutcheson 1997; Hutcheson 2000). Karen Stothert and colleagues employ a different dental compound, Reprosil, which shrinks less than 0.01% (Stothert et al. 1991:770:771). In my work (using Sculpey), I take measurements from the cast immediately, with both sherd and cast in front of me. The cast is then baked and retained for a permanent record of the fabric structure, but not used again for measurement.

Information about fabrics obtained by these methods can be extremely valuable. However, in obtaining such data, the textile analyst can damage or obliterate other types

of information (Rieth 1999). Awareness of potential problems is the key to minimizing them. Some damage to sherds generally has been considered inevitable, but it is the analyst's responsibility to keep it to a minimum.

Broken sherds, which result from not fully supporting the ceramic fragment while pressing the casting material against it, are easiest to guard against. Removal of surface material from poorly fired sherds, unfortunately, is difficult to avoid. Applying talcum powder before making a cast can alleviate this problem. Still-adhering dirt also can help, but chunks of dirt must be brushed off, or the fabric replication will be inaccurate. Sherds with unfired finishes such as paint, with applied substances such as red ochre, or with adhering materials such as food residues or soot ordinarily should not be used to make casts, because all could be physically removed from the sherd by the casting material.

A less obvious, but even more serious, problem recently has come to light through research by Christina Rieth and Jill Minar (Minar 1999; Rieth 1999). Many materials used to make casts, including plasticine, Sculpey, and Reprosil, contain organic compounds. These not only leave stains on ceramics (Stothert et al. 1991:770), but are highly contaminating. (Jeltrate® is said not to leave an oily residue (Berman and Hutcheson 2000), but it is unclear whether or not it still is a potential contaminant.) Sherds to which such substances have been applied, and even sherds that have been handled by a person who has handled such materials, will bias subsequent analyses of the sherd such as trace element identification or radiocarbon dating of adhering soot or food residue. Members of a Society for American Archaeology Working Group convened by Jill Minar (Minar et al. 1999) have begun to address the development of a protocol for use of potentially contaminating materials. At a minimum, analysts should provide complete information about the medium employed, should label or otherwise identify all sherds that have been cast, should bag these sherds separately, and should leave a portion of each sherd collection they study uncast, for use in other types of analysis.

In a number of projects, experimental replication has proved extremely useful. Joseph Herbert used it to investigate (for instance) whether particular surface textures on pottery from coastal North Carolina were formed by impressed fabrics or by multiple applications of cord-wrapped paddles (Herbert 1999). Hutcheson replicated basketry in a variety of local materials and impressed it on pottery. She was able to identify likely materials used in prehistoric basketry impressed on Bahamian pottery (Hutcheson 2000).

SELECTED APPLICATIONS

To give you a flavor of some of the current research employing data from cordage, fabrics, and basketry impressed on pottery, I briefly mention a number of ongoing or recently completed case studies. Most of them utilize data from pottery impressions in combination with data from other media, not as a stand-alone source of information.

Several recent projects (in addition to Herbert 1999 mentioned above) have provided new insights into ceramic technology. Studying fabric impressions on molded figurines, on their molds, and on associated platforms and house models from Ecuador, Stothert and colleagues concluded from the locations of the impressions that slabs of clay first were flattened on cloth-covered surfaces, then formed into the desired shape (Stothert et al. 1991). The impressions were present primarily in non-visible locations, having been smoothed away elsewhere. Hutcheson carried out a series of replication experiments to determine whether Palmettan Ostionoid pottery from the Bahamas was deliberately or

accidentally impressed with basketry mats (Berman and Hutcheson 1997). The former appeared to be the case. I investigated whether a specially-made, standardized fabric was employed to line molds for large, shallow salt evaporation pans at a late prehistoric site in Kentucky. The great diversity of fabric structures and scale, plus the presence of holes and other damage in a high percentage of examples, seemed to rule this out. Because these heavy vessels frequently were impressed with relatively fine and fragile fabrics, I also concluded that the fabrics more likely aided in separating the vessel from the mold than in lifting it out (Drooker 1992:146-152).

A number of recent studies using impressions on pottery have provided new information on fabric or basketry types, their temporal and geographical distributions, and socioeconomic implications. Some of the broader topics explored by means of these data include production technology, organization of production, exchange, subsistence strategies, horizontal group identity and interaction, and rank or class differences.

Some of the most exciting work, carried out by Olga Soffer, James Adovasio, and colleagues, has come from European assemblages. Among other things, they have shown that yarn and fabric were being produced far earlier than previously imagined. Impressions in clay from Upper Paleolithic sites in the Czech Republic, plus analysis of garments depicted on well-known Gravettian “Venus” figurines, demonstrated that twined fabrics, knotted netting, and interlaced basketry were being produced by ca. 26,000 BP or earlier (e.g., Adovasio et al. 1996; Soffer et al. 1999; Soffer et al. 2000). The popular press enthusiastically picked up on the notion that this assemblage provides potential evidence for cooperative hunting of small game by women, children, and men using nets, as opposed to the older archaeological paradigm for this time period, of spear-wielding men bringing down mammoths and other big game to feed their dependents (e.g., Pringle 1998).

Other recently excavated terminal Pleistocene assemblages, studied by David Hyland and colleagues, may provide evidence of links between Old World and New World fabric industries. Impressions of fabrics from ceramics at 13th-millennium BP sites in the Russian Far East include technological types congruent with the oldest fabrics recovered from western North America, dated several thousand years later (Hyland et al. 2000).

One of the hypotheses pursued by a number of archaeologists during the 1980s and 1990s, using evidence primarily from impressions on pottery, is that the predominant twist direction of cordage can be correlated with group affiliation or “ethnicity” (e.g., Hamilton et al. 1996; Johnson 1996, 1999; Maslowski 1984 [cited in Drooker 1982], 1996; Petersen 1996). Although it would be extremely risky to draw conclusions about group affiliation based only on small statistical differences in percentages of Z versus S twist in cordage samples from different communities or regions, James Petersen and colleagues, using ethnographic evidence from Amazonia, argue persuasively that when a sharp break in twist direction is apparent, it probably does represent a significant cultural divide (Petersen et al. 2001). This might or might not be a linguistic divide, however.

Jill Minar has drawn upon learning theory and experimental archaeology to show how this might work. She found that spinners tend to stick with whatever twist direction they first learned; this overrides such considerations as right- or left-handedness. Serious spinners produce yarn with a single consistent direction of spin and an opposite direction of ply, mainly for reasons of production efficiency (Minar 2000). They switch direction only for specific functional reasons, and when they do it slows them down. If most

teachers in a particular region tend to spin in a given direction, so will their students. However, only when there is a cultural rationale for spinning in a particular direction does an extremely consistent direction of twist become apparent over a large region. Minar has collected ethnographic examples of cultural twist preferences from Peru, Korea, and the North American Southwest (Minar 1999, 2000). My own findings, that yarns in eleventh-thirteenth century Mississippian western Kentucky, Tennessee, and portions of adjoining states have consistent (95-100%) final S twist whether they are 2-ply or single ply, almost certainly is a case of cultural preference (Drooker 1992:114-115, 123, 125, 176-207; see also Miner 1936 cited in Drooker 1992).

Another aspect of Minar's research is of great significance in researchers' attempts to assign bounded "ethnic" identity to archaeological groups. Using cord-marked pottery from Georgia, South Carolina, and Florida, she demonstrated that attributes of Southeastern ceramic vessels such as temper and decoration do not necessarily co-vary over space and time with attributes of cordage impressed upon them (Minar 1999, 2001). This calls into question the simplistic designation of archaeological "ethnic groups" based solely upon one medium or a restricted set of attributes.

However, when a variety of attributes do vary together - cordage twist, fabric type and attributes, vessel temper, manufacturing method, and/or style - then a geographical disjuncture or an oddball example can be significant and useful. For instance, Rieth found that in the upper Susquehanna River Valley, very similar fabrics were produced and used in ceramic manufacture between AD 800 and 1300 (Rieth 1997, 1999). When an atypical fabric was encountered, she carried out trace element analysis on the sherd to determine whether it was local or imported, using the data in a study of group movements over time. She found continuity between later and earlier archaeological culture groups (Owasco and Late Point Peninsula), suggesting that there was no mass displacement of local groups by in-migrating Iroquois populations. She also found greater variation at sites near the edge of the region, suggesting regular interaction with "foreign" groups.

In contrast, Petersen and Wolford (2000) demonstrated a rather sharp disjuncture, lasting over 2000 years, in impressed cordage twist direction between coastal and interior New England populations before AD 1000. After AD 1000, shell temper was adopted by coastal populations, and was consistently associated with the typical coastal Z-twisted cordage. Grit temper, and S-twisted cordage, persisted in the interior; when Z-twisted cordage impressions did occur there, they were typically associated with shell tempering. After AD 1300, Iroquoian style pottery, with predominantly Z-twist cordage impressions, entered the region from the west and north. Three separate populations do seem evident.

A study by Nathan Hamilton and colleagues of both impressed and organic fiber artifacts and related ceramics at the Juntunen site, in the Straits of Mackinac between Lakes Michigan and Huron, concluded that the data "suggest a combination of local development *and* regional exchange and contact" in the Upper Great Lakes during the period of interest, ca. AD 800-1300 (Hamilton et al. 1996).

In the Caribbean, Berman and Hutcheson are building a database of basketry attributes from impressions on pottery, along with developing a standardized descriptive methodology for the region (Berman and Hutcheson 1997, 2000; Hutcheson 2000). They, as others before them, note the power of complex basketry construction to convey cultural identities, and are beginning to recognize geographical differences in basketry techniques, patterns, and materials.

Karen Stothert and colleagues used textiles impressed on Ecuadorian figurines between 1000 BC and AD 800 to reconstruct the organization of production for both the ceramics and the fabrics among four different groups (Stothert et al. 1991). They not only used yarn and fabric attributes to infer local, domestic manufacture versus managed, standardized manufacture of cloth in different regions, but through the analysis of yarn consistency within a given fabric were able to show that in one of the groups, a number of different spinners probably contributed yarn to each weaver. Control by high-status managers within a relatively complex social system is hypothesized.

In my work with fabrics impressed on Mississippian pottery, I found that all fabric structures were consistent with production on free-hanging warps rather than a tensioned-warp frame or loom, in particular an emblematic type of structural decoration, plain twining with interlinked warps, that so far has not been found in pliable fabrics anywhere else in the world (Drooker 1990, 1992). The fabrics were the right size and shape to have functioned as skirts, mantles, or large bags; edge finishes were typical of garments. Through replication of typical yarns and fabrics, with the help of spinner Ella Baker I was able to determine production times for typical garments and containers, estimating that a Mississippian woman might spend on the order of three hours per day on fabric production for her family (Drooker 1992:164-171; cf. Ericksen et al. 2000). Skilled craftspeople who produced elaborate elite and ceremonial garments in twined tapestry and elaborate openwork similar to bobbin lace probably worked as part-time specialists. At the Wickliffe site in Kentucky, the few surviving organic fabrics, which came from mortuary contexts, were more complex (based on the Textile Production-Complexity Index developed by Jenna Kuttruff) than the average fabric impressed on pottery (Kuttruff and Drooker 2001). Yet the fabric assemblage impressed on pottery was remarkable for its diverse variety of fine and complex examples, implying that Mississippian women in general had the time as well as the skill to produce utilitarian fabrics of beauty and distinction.

Other recent analyses of Mississippian and contemporaneous fabrics and basketry impressed on pottery include work on assemblages from Illinois, Indiana, Kentucky, Tennessee, and Alabama (Brandon and Mainfort 1995; Drooker 1993; Henderson 1999; Kuttruff and Kuttruff 1996; Leslie and Simms 1991; Stathakis 1996). At least two of them were explicitly designed to investigate issues centering on social status. As more and more data are assembled, increasingly interesting region-wide anthropologically oriented investigations can be carried out.

I am very pleased that such important evidence of long-disappeared fiber artifacts is beginning to get the attention it deserves.

REFERENCES

(Note: SAA = Society for American Archaeology throughout)

Adovasio, James M.

1977 *Basketry Technology: A Guide to Identification and Analysis*. Aldine, Chicago.

Adovasio, James M., Robert F. Maslowski, and Rhonda L. Andrews

1988 Textile Impressions on Ceramic Vessels at Divostin. In *Divostin and the Neolithic of Central Serbia. Ethnology Monographs No. 10*, edited by Alan McPheron and Dragoslav Svejovic, pp. 345-357.

- Adovasio, James M., Olga Soffer, and Bohuslav Klima
 1996 Upper Palaeolithic Fibre Technology: Interlaced Woven Finds from Pavlov I, Czech Republic, c. 26,000 Years Ago. *Antiquity* 70:526-534.
- Berman, Mary Jane, and Charlene Dixon Hutcheson
 1997 Basketry-Impressed Sherds: To Weave and To Eat in the Bahamas. Paper presented at the SAA annual meeting, Nashville.
 2000 Impressions of a Lost Technology: A Study of Lucayan-Taino Basketry. *J. of Field Archaeology* (ms. accepted for publication).
- Brandon, Jamie C., and Robert C. Mainfort, Jr.
 1995 Textile Impressed Ceramics from the Oliver Site, Obion County, Tennessee. *Tennessee Anthropologist* 20(1):58-73.
- Drooker, Penelope B.
 1992 *Mississippian Village Textiles at Wickliffe*. U. of Alabama Pr., Tuscaloosa.
 1993 Matting and Fabric Impressions from Bottle Creek (1Ba2), Alabama. *J. of Alabama Archaeology* 39(1&2):115-132.
 1998 Cordage and Fabrics Impressed on American Bottom Ceramics, ca. 450 BC-AD 1250: Preliminary Discussion. Manuscript on file at the Illinois Transportation Archaeological Research Program facility, Urbana.
 1999 Possible Impressions of Elastic Fabrics on Woodland, Mississippian, and Fort Ancient Pottery. SAA Annual Meeting, Chicago.
- Ericksen, Annette, Kathryn Jakes, and Virginia Wimberly
 2000 Prehistoric Textiles: Production, Function, Semiotics. In *Beyond Cloth and Cordage*, edited by Penelope B. Drooker and Laurie D. Webster. U. of Utah Pr., Salt Lake City (in press).
- Fraser, David W.
 1989 *A Guide to Weft Twining: and Related Structures with Interacting Wefts*. U. of Pennsylvania Pr., Philadelphia.
- Hamilton, Nathan D., James B. Petersen, and Alan L. McPherron
 1996 Fiber Industries in the Upper Great Lakes: A Late Woodland Case Study from the Juntunen Site. In *A Most Indispensable*, edited by James B. Petersen, pp. 120-143. The U. of Tennessee Pr., Knoxville.
- Henderson, A. Gwynn
 1999 Caborn-Welborn Decorated Textiles from Impressions on Pans. SAA Annual Meeting, Chicago.
- Herbert, Joseph M.
 1999 The Cord-Marked Wares of Southern Coastal North Carolina. SAA Annual Meeting, Chicago.
- Hoyal, Suzanne
 1997 Attributes for Cast Analysis of Textiles Impressed on Ceramics. Unpublished Manuscript No. 95-1 (rev.), Div. Archaeology, Tennessee Dept. of Environment and Conservation, Nashville.
- Hurley, William M.
 1979 *Prehistoric Cordage: Identification of Impressions on Pottery*. Taraxacum, Washington, D. C.
- Hutcheson, Charlene Dixon
 2000 Reweaving the Strands: Continued Exploration into the Basketry Technology of Prehistoric Bahamians. *Proceedings for the International Association of Caribbean Archaeology, XVII Congress, St. George's, Grenada, 11-17 July 1999* (in press).

- Hyland, David C., I. S. Zhushchikhovskaya, V. E. Medvedev, A. P. Derevianki, and A. V. Tabarev
 2000 Pleistocene Textiles in the Far East: Impressions from the World's Oldest Pottery. Paper presented at the SAA Annual Meeting, Philadelphia.
- Johnson, William C.
 1996 A New Twist to an Old Tale: Analysis of Cordage Impressions on Late Woodland Ceramics from the Potomac River Valley. In *A Most Indispensable Art*, edited by James B. Petersen, pp. 144-159. U. of Tennessee Pr., Knoxville.
 1999 Cordage Twist Direction and Ethnicity in the Potomac River Basin: The Luray Complex Conundrum. SAA Annual Meeting, Chicago.
- Kuttruff, Jenna Tedrick, and Penelope B. Drooker
 2001 Textiles from the Wickliffe Mounds Site. In *Excavations at Wickliffe Mounds*, edited by Kit W. Wesler. U. of Alabama Pr., Tuscaloosa (in press).
- Kuttruff, Jenna Tedrick, and Carl Kuttruff
 1996 Mississippian Textile Evidence on Fabric-Imprinted Ceramics from Mound Bottom, Tennessee. In *A Most Indispensable Art*, edited by James B. Petersen, pp. 160-173. U. of Tennessee Pr., Knoxville.
- Kuttruff, Jenna Tedrick, and Mary Strickland-Olsen
 2000 Handling Archaeological Textile Remains in the Field and Laboratory. In *Beyond Cloth and Cordage*, edited by Penelope B. Drooker and Laurie D. Webster. U. of Utah Press, Salt Lake City (in press).
- Leslie, Jane Hackbarth, and Ann Cooke Simms
 1991 Fabric Imprinted and Cord Marked Pottery from Southwind. In *The Southwind Site: Archaeology of a Mississippian Community in Posey County, Indiana*, edited by Cheryl Ann Munson. Ms. in possession of editor, Bloomington, Indiana.
- Maslowski, Robert F.
 1984 The Significance of Cordage Attributes in the Analysis of Woodland Pottery. *Pennsylvania Archaeologist* 54(1-2):51-60.
 1996 Cordage Twist and Ethnicity. In *A Most Indispensable Art*, edited by James B. Petersen, pp. 88-99. U. of Tennessee Pr., Knoxville.
- McPherron, Alan L.
 1967 *The Juntunen Site and the Late Woodland Prehistory of the Upper Great Lakes*. Anth. Papers 30. Museum of Anth., U. of Michigan, Ann Arbor.
- Minar, C. Jill
 1999 *Impression Analysis of Cord-Marked Pottery, Learning Theory, and the Origins of the Alachua*. Ph.D. diss., U. of California, Riverside.
 2000 Spinning and Plying: Anthropological Directions. In *Beyond Cloth and Cordage*, edited by Penelope B. Drooker and Laurie D. Webster. U. of Utah Pr., Salt Lake City (in press).
 2001 Material Culture and the Identification of Prehistoric Cultural Groups. In *Fleeting Identities*, edited by Penelope B. Drooker. Occ. Paper No. 28. Center for Archaeological Investigations, Southern Illinois U., Carbondale (in press).
- Minar, C. Jill, Penelope B. Drooker, Joseph M. Hebert, A. Gwynn Henderson, Teresa M. Johnsen, William C. Johnson, James B. Petersen, and Christina B. Rieth
 1999 Working Group in Imprinted Pottery: Problems and Solutions in the Methods of Data Recovery and Analysis of Fabric, Net, Cord, and Basketry Imprinted Pottery, SAA Annual Meeting, Chicago.
- Petersen, James B.
 1996 Fiber Industries from Northern New England: Ethnicity and Technological Traditions during the Woodland Period. In *A Most Indispensable Art*, edited by James B. Petersen, pp. 100-119. U. of Tennessee Pr., Knoxville.

- Petersen, James B., Michael Heckenberger, and Jack Wolford
 2001 Spin, Twist and Twine: An Ethnoarchaeological Examination of Group Identity in Native Fiber Industries from Amazonia. In *Fleeting Identities*, edited by Penelope B. Drooker. Occ. Paper No. 28. Center for Archaeological Investigations, Southern Illinois U., Carbondale (in press).
- Petersen, James B., and J. R. Wolford
 2000 Spin and Twist as Cultural Markers: A New England Perspective on Native Fiber Industries. In *Beyond Cloth and Cordage*, edited by Penelope B. Drooker and Laurie D. Webster. U. of Utah Pr., Salt Lake City (in press).
- Pringle, Heather
 1998 New Women of the Ice Age. *Discover* April 1998:62-69.
- Quimby, George I.
 1961 Cord Marking Versus Fabric Impressing of Woodland Pottery. *American Antiquity* 26(3):426-428.
- Rice, Prudence
 1987 *Pottery Analysis: A Sourcebook*. U. of Chicago Pr., Chicago.
- Rieth, Christina B.
 1997 *Culture Contact During the Carpenter Brook Phase: A Tripartite Approach to the Spatial and Temporal Movement of Early Iroquoian Groups Throughout the Upper Susquehanna River Valley*. Ph.D. diss., SUNY Albany.
 1999 Textiles and Their Use in the Manufacture of Prehistoric Ceramics in New York. SAA Annual Meeting, Chicago.
- Saylor, Stan
 1978 An Introduction to Fabric Impressions on Selkirk Ware. *Archae-facts, J. of the Arch. Soc. of South-Western Manitoba* 5(2-3):49-56.
- Shennan, Stephen
 1988 *Quantifying Archaeology*. Edinburgh U. Pr., Edinburgh.
- Soffer, Olga, James M. Adovasio, and David C. Hyland
 1999 The Well-Dressed "Venus": Women's Wear ca. 26,000 B. P. Paper presented at the SAA Annual Meeting, Chicago.
- Soffer, Olga, James M. Adovasio, J. S. Illingworth, Kh. A. Amirkhanov, N. D. Praslov, and M. Street
 2000 Paleolithic Perishables Made Permanent. Paper presented at the SAA Annual Meeting, Philadelphia.
- Stathakis, Steven A.
 1996 Analysis of Fabric-Impressed Pottery from the Great Salt Spring in Gallatin County Illinois: Social Status and Salt Production during the Mississippian Period. Master's thesis, Southern Illinois U., Carbondale.
- Stothert, Karen E., Kathleen A. Epstein, Thomas R. Cummins, and Maritza Freire
 1991 Reconstructing Prehistoric Textile and Ceramic Technology from Impressions of Cloth in Figurines from Ecuador. In *Materials Issues in Art and Archaeology II*, edited by Pamela B. Vandiver, James Druzik, and George S. Wheeler, pp. 767-776. Materials Research Society Symposium Proceedings Vol. 185, Pittsburgh.

A Cautionary Tale Concerning Textile Reproduction

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The speakers in this session approach the subject of computerized jacquard weaving through a labyrinth of related issues, examining the foundations of contemporary weave technology as linked to our personal directions as textile artists, researchers and design educators. In essence this session will analyze the subject from many angles, investigating the threads that link technology and hand process. Common to our diverse pathways is the understanding that art is complex and must grow from the spirit of its maker and not simply from the tools that make it.

Parallels Between Handwoven Tapestry and Electronic Jacquard Weaving

I learned handweaving in the mid-sixties at the Art Institute of Chicago, a period when art schools were steeped in the legacies of the Bauhaus. There, I began to learn about the significance of textiles in the daily life of world cultures as well as the satisfaction of arduous hand process and concept as they merge into textile art. I have continued to nurture this foundation over the years.

Recently, after more than twenty years as a handweaver I have begun to use a computer assisted jacquard loom for the production of my woven artwork. Design, production and reproduction options available through twenty-first century electronic technology have presented me with exciting new directions for artistic growth.

Sitting in front of a computer for long hours while editing design work that would soon be taken, via diskette, to this electronic version of a nineteenth century loom, has become part of my new design process. The intermixing of tradition and history with new technology is meaningful and satisfying.

Preparing a composition on computer can be a monotonous job. During this process, design time and real time can easily become muddled if the mind is allowed to wander, and wander it does. Once, for example, while I was zoomed-in on a portion of a design, cleaning misplaced pixels and trying not to lose sight of the entire visual concept, I transported myself back many centuries, wondering how different my job in preparing for this woven image in the year 2000, really was from the work of a tapestry weaver in the 1500's.

The major difference is clear enough. Today I am both the artist and the weaver. Tapestry weavers of the sixteenth century were only half of that, but I imagined that the preparatory work on computer was comparable in tediousness and labor to the monumental tapestry weavers task.

A skilled sixteenth century tapestry weaver in a large workshop in Brussels for example, would have worked on a low-warp loom, "building" an image. This is done today on computer in the design preparation stage prior to jacquard weaving. A sixteenth century weaver would most likely have been in charge of a three-and-a-half foot vertical section of the warp's full twelve foot width, his stations not much wider than my computer station today. The tapestry weaver would sit, side-by-side with other weavers throughout the day, tediously translating imagery from a painted

cartoon hung behind his loom to weft-faced weave with fine colored wools. For the textile to see completion, fingers and minds, now as then, would need to be nimble and sharp, concentration and perseverance unwavering.

In one way tapestry and jacquard textiles are similar in that the images created by both weaving processes are actually part of the physical structure of the textile. Unlike drawing or painting these woven images are built up pick by pick, line by line bottom to top as the textile is woven. In traditional tapestry the initial design of the imagery required a full-scale painted cartoon which weavers then replicated using the gradual process of the discontinuous-weft technique.

The electronic jacquard handloom, on the other hand, offers contemporary textile artists a new approach for production of the working design prior to weaving. Current computer design image manipulation options extend the ways the artist can build and change images prior to weaving. Instead of physically copying, cutting, pasting and re-drawing images on a full-scale cartoon, motif repetition, scale-change and coloring tools in the software system provide ways of extending and altering the detailed pictorial composition. The most tedious or arduous part of woven image production is redirected from physical weaving to preliminary designing. After the completion of the image design process, the jacquard weaver gives only her time at the loom. Conversely, the tapestry weaver was required to follow the cartoon's design with painstaking accuracy throughout the weave process, while making selective judgments about when to change color and how much color mixing would be required per shape to achieve the individual shading and hues.

While requiring in-depth understanding of complex software, cropping, elongation, repetition and a myriad of other visual design changes to a composition are accomplished with relative ease and accuracy on computer. One or two swift software commands and an altered version of a composition can be ready to weave. The complex woven image is stored on disk, the loom processes and regurgitates the image. The jacquard weaver makes decisions on speed of shed change and weft color rotation only. Regardless of electronic support or level of sophistication found in current software systems, considerable artistic oversight needs to be exercised for the tools to be aesthetically effective.

Tapestry Cartoon Reproduction Practices of the 16th Century

The central reason for making a parallel between the two textile production processes of tapestry woven imagery of the sixteenth and seventeenth centuries and jacquard woven imagery in the twenty-first century, is to point out the overly enthusiastic use of composition alteration and reproduction in early European tapestry manufacture. Largely driven by market demand for tapestry woven epic scenes, this was a period when reproduction of composition was first introduced. It is important at this point to raise a caution about the role of art and the role of the artist as they intertwine within the complex history of textile reproduction.

Embellishing this point requires a look back to sixteenth century European tapestry. This will help to evaluate the good and evil of composition reproduction options, give insight into how and why reproduction was adopted, and depending on your point of view, how the practice of tapestry cartoon reproduction was abused.

My original investigation into tapestry reproduction practices and cartoon reuse began a number of years ago. (See M. D. Puryear, "Raphael's *Acts of the Apostles* Tapestries - The Birth of the Tapestry Reproduction System", in *Contact*,

Crossover, Continuity. Proceedings of the Fourth Biennial Symposium of The Textile Society of America, 1994, page 217 ff.). Throughout my years of teaching, historical research assignments for student design projects typically centered on significant European textile icons including the Bayeux Tapestry, Angers Apocalypse, and Unicorn tapestries from the *mille-fleur* era. From there my preference for assignment areas skipped to the textile revival work of William Morris. All are undeniably great periods of tapestry production that interpreted historic and cultural ideology through visual narrative, combined with immensely skillful manufacture.

The period of tapestry production between the early sixteenth century and the late nineteenth century always seemed to me to be less inspiring, producing compositions designed to reflect painting at the expense of textile autonomy. Largely due to the popularity of panel painting and painting on canvas, tapestry during these times moved to closely replicate the painters art, and eventually lost its stature as a unique form of narrative art.

The period of tapestry production beginning after the 1500's allowed compositions to be copied and reproduced, a practice which on its surface does not mesh with the pedagogy of a contemporary artist. This controversy becomes less significant when we begin to place tapestry at that period of time, in a middle-ground classification between one-of-a-kind textile art and industry mass production. The middle-ground in this instance is the place where a prosperous base of customers commissioned tapestry that copied or replicated successful popular images - a market for textile art driven by customer demand.

Tapestry compositions were designed or altered for individual customers, not mass produced for a ubiquitous open market, and tapestry workshops at this point had been able to turn greater profits. In some ways this more complex sixteenth century workshop mission develops into a model for the modern textile industry. From this point in the 1500's onward, some parts of narrative tapestry production would follow a form of compositional reproduction, while the traditional properties and meaning of tapestry as meaningful decorative art would allow it to remain a highly desirable form of artistic expression.

The Source of all Reproduction: Raphael's Tapestry Cartoon Commission

A closer look into the frequency and quality of cartoon reproduction during this period, takes this investigation to the first known instance of European tapestry reproduction, the celebrated cartoons for the Acts of the Apostles tapestries. This renown set of tapestry cartoons painted in 1515 by the Renaissance artist Raphael represents subjects from the lives of Sts Peter and Paul.

The painted paper cartoons, approximately eleven feet by seventeen feet in size, included the Miraculous Draught of Fishes, Christ's Charge to St. Peter, the Blinding of Elymas, Healing of the Lame Man, Stoning of St. Stephen, Sacrifice at Lystra, Death of Ananias, St. Paul Preaching at Athens, St. Paul in Prison, and the Conversion of Saul.

Following the cartoons closely, the Acts of the Apostles tapestries were woven in Brussels at the workshop of Pieter van Aelst. They were commissioned in

1515 by Pope Leo X to complete the decoration of the Sistine Chapel, specifically to create a balance between the lower walls of the Chapel and the powerful visual presence of Michelangelo's newly completed ceiling frescoes.

The tapestries were intended to be hung only at times of celebration and ceremony, and would be installed at floor-level covering portions of the chapel's lower walls which are decorated with frescoed images of damask drapery. The tapestries would be hung beneath a zone of painted scenes commissioned in the 1480's. These second-story frescoes were painted by some of the greatest artists of the fifteenth century, including Botticelli and Raphael's own teacher, Perugino. The time-honored prestige of tapestry with its history of conveying visual messages with warm, tactile beauty, as well as its inherently practical property of portability, made it the right artform for the Sistine Chapel space.

The tapestry weaving process being time intensive, allowed fewer than half the set of Raphael tapestries to be completed for hanging at Christmas in 1519. Those pieces that were hung were said to have been overwhelming in their beauty, owing in part to the exquisitely rendered larger than life figures represented in each scenes, the copious amounts of gold wrapped threads used in the weaving process and how they glowed in the chapel's modest light.

Without the continued support of Pope Leo X, who died just two years later in 1521, the life of the full set of ten tapestries would be cut short. They were rarely if ever hung again in the Sistine Chapel, and never in full set. Not until 1983, more than four hundred years later, in honor of the celebration of the Year of Raphael, were the existing pieces of the original Vatican owned set of tapestries re-hung in the Sistine Chapel, their compositional arrangement accurately reflecting Raphael's original plan. A commission of this magnitude in 1515, at a period in history when prosperity of a rising middle class began to challenge that of royalty and the church, created a demand for goods symbolic of personal wealth. Tapestry, with its history of epic narrative scenes and tradition dating from the middle ages as wall coverings of sizable proportions, would fit this requirement. Wealthy clients would request the production of scenes and images matching those in the collection of the head of the catholic church. Tapestry workshop directors, especially those in Brussels who had access to Raphael's original cartoons were able to manufacture tapestries for these customers, at times redesigning only the borders of the full set of ten pieces, other times cutting compositions, tailoring them to fit site specific requirements of the client. Since every tapestry needed a cartoon as its initial design source for manufacture, tapestry workshops that did not have access to the original cartoons made detailed full-size copies of borrowed cartoons or detailed copies of the recently manufactured tapestries themselves.

Fifty-Five Sets of Tapestry: Raphael's Compositions and How They Changed

The original Vatican commission of ten cartoons painted by Raphael, describing monumental events in the lives of Sts Peter and Paul, were woven at the van Aelst workshop in Brussels, 1515 to 1519. This same workshop wove an additional three or four full sets of ten pieces from Raphael's cartoons while they

were still in van Aelst's possession around 1519 to 1523. These subsequent sets are truest in color and composition to Raphael's cartoons, truer in color in fact than even the original Vatican set because of the workshop director's substitution in the original commission, of some color tones with precious gold-wrapped threads which tended to give an overall brownish tone to the tapestries as the gold tarnished.

The ten original Raphael cartoons were used for tapestry manufacture in Brussels for a period of sixty years. They were sold in 1623 to the monarchy of England for exclusive use at the Mortlake Tapestry Manufactory where excellent, accurate copies of full sets were woven twelve times from 1625 to 1703. A total of fifty-five sets and partial sets of tapestry have been identified as deriving directly or indirectly from Raphael's cartoons. Derivative sets and single pieces selected from the original ten cartoons were produced in Italy, Flanders, and in France, at Gobelins and Beauvais. Between 1520 and 1620 notable Brussels sets were known to have been woven at the workshops of Jan van Tieghen, Jan Raes, Jacques Geubels, and Jean Paul Asslebergh. These derivative sets of tapestries utilized copies of the cartoons, or copies of existing tapestries themselves for tapestry manufacture.

Cartoon Cropping and Editing, Unique Borders for Each New Commission

The loss of clarity of Raphael's images as well as compositional intention was inevitable as copies continued to be woven. Edits began as simple redesign of ornamental borders, and progressed to major cutting and reconfiguration of the central compositions determined by the desires, beliefs and site specifications of individual clients.

Cropping and editing of tapestry wasn't an easy task by any stretch of the imagination, nor was weaving a fifteen-foot by eighteen foot tapestry, which eventually employed a palette of three hundred hues and shades to more closely replicate the nuances of a painted surface. The skill of the weavers escalated with the times. If we look at examples of Raphael-attributed tapestries woven in Brussels approximately one hundred years after the first set of 1515, juxtaposed with the original cartoons for compositional comparison, it is clear how scenes have been cropped for manufacture. In some instances a scene will have condensed overall activity by eliminating less prominent figures, or architectural and landscape detail. With each edit, compositional balance was altered, even sacrificed for the development of new narrower-width textiles that would fit specific sites. Other alterations to the central scenes reflect design elements unique to individual specific workshops or elements contemporary with art of the time.

In the original Vatican tapestries, Raphael designed lower borders personalized to the client, in this case depicting events in the life of Pope Leo X and his family, the Medici's, in a stylized manner that resembled relief-stone carving. Specialized woven borders became a popular framing device on tapestry during this period. In subsequent production of Raphael cartoons, as in all tapestry design, borders continued to be individually designed for each customer, portraying their coats of arms, events from family history, popular mythology, or other stylistic pronouncements offered by the workshop director. The border areas became signature design work of individual workshops. Tapestry production workshops seem to have

been more focused on designing the uniquely individualized borders for each customer, then concentrating on exact replication of Raphael cartoon images. It appears that customer and workshop directors alike eventually found the Raphael scenes tiresome.

Regardless of its subject matter, tapestry was at its height of production and universal popularity in the sixteenth and seventeenth centuries, and tapestry workshops were prosperous. Reproduction of particularly prized compositions in response to market demand helped create this prosperity.

Conclusion: Concerning Reproduction and Artistic Integrity

Artistic integrity and an artists creative intentions were not a factor in the reproduction activities of tapestry. The reproduction aspect of tapestry weaving continued as a more or less commercial venture, as tapestry now competed directly with painting for patron support and weaving declined in stature as an artform.

Artists and designers today hold careful control over reproduction of personal artwork and might question the validity of the tapestry form that too closely imitated painting. Original motifs and designs in today's production cycles are closely monitored to avoid quick and callous knock-offs and copyright infringement. Artists and designers should be cautious about becoming fixated with the relative ease of mechanical reproduction available through current technology, and loose sight of personal expression.

When reproduction is out of the hands of the artist, integrity and potency of image can be ignored, altered, and eventually lost. It is the job of the artist to explore creative options and know the historical precedents. When the artist's vision is preserved the possibilities for textile art are limitless.

References

Pietrangeli, Carlo and Andre Chastel, John Shearman, et al. *The Sistine Chapel - The Art, the History, and the Restoration*. New York: Harmony Books/Crown Publishers, 1986, pp. 27-37 and 88-91.

Puryear, Marjorie Durko. "Raphael's *Acts of the Apostles* Tapestries - The Birth of the Tapestry Reproduction System", in *Contact, Crossover, Continuity, Proceedings of the Fourth Biennial Symposium of The Textile Society of America*, 1994, page 217 ff.

Roskill, Mark. "Reconstruction How Works were Displayed: Raphael's Tapestries in the Sistine Chapel", in *What is Art History?*. New York: Harper & Row, 1982, pp. 104-21.

Shearman, John. *Raphael Cartoons in the Collection of Her Majesty the Queen and the Tapestries for the Sistine Chapel*. London: Phaidon, 1972.

Victoria and Albert Museum. *The Raphael Cartoons*. Catalogue of Collections. London: HMSO, 1972.

White, John and John Shearman. "Raphael's Tapestries and their Cartoons (Part I), in *The Art Bulletin*, Fall 1958, pp. 193-221.

White, John and John Shearman. "Raphael's Tapestries and their Cartoons (Part II), in *The Art Bulletin*, December 1958, pp. 299-323.

Jacquard art weaving : an inexhaustible process of exploration

Louise Lemieux Berube

INTRODUCTION :

This presentation will survey my concern and my evolution in weaving, before and with jacquard weaving. I will explain how images are transformed, from the photographic document to the finished textiles. And finally, I will present some jacquard works that are significant for the development of this field.

1. THE COMPUTER BEFORE THE JACQUARD

I continuously worked to develop a specific approach combining the theoretical principles of weaving with my interest in abstract art with a specific interest in color blending, or color separation, color juxtaposition.

Images before jacquard were not so important to me, they served as a tool to experiment on color blending, on material, on weave structures themselves.

I would compare my approach to other art field experimentation, like ...

Color mixing in pointillism was more important for Seurat than the image itself,,

Or when welding became accessible to Sculptors,

Or when painters experimented with knife painting, instead of a brush ...

My first steps in computerized weaving (1983) : were extremely need - I was then confronted with the impossibility to use a multi-harness loom at its most efficiency.

There were two or three problems :

- there were tremendous difficulties to memorize a long and complex treadling
- I was suffering from the enormous weight need to lift multi-harnesses when weaving multi layers fabrics
- There were tremendous limits in the construction of specific designs or variety of designs with specific weave structures.

I came to a point when I had two choices : either stop weaving and do something else or get the proper equipment and continue. It meant getting new technology, computerized loom and a good software.

2. PUSHING THE LIMITS OF HARNESS LOOM WEAVING

There were about 10 years of multi-harness weaving before jacquard became available to me

During that period, I research on how to push the limits of harness loom weaving. I develop a profound comprehension of complex weaving, using layered structures,

different yarn size sometimes for each layer. I created designs that were very close to those used in jacquard weaving, or that could be taken for jacquard designs.

I develop a general approach, a method of designing for weaving, a method that could be used for almost any design or weave structures.

The use of a professional software (Pointcarre) made it easier to study, research and develop this innovative method for designing woven textiles.

And I wrote a manual (unfortunately for the most of two, written in French)

But all this was not enough for my hunger for more freedom.

3. THEN CAME OUR FIRST JACQUARD HANDLOOM

We needed a handweaving jacquard loom, with the largest repeat as possible.
And we made it possible.

About five years ago, we initiated a collaboration between AVL (a well-known loom maker company) and TIS (a Lyon based industrial jacquard head makers).

They came up with :

- A handweaving loom
- 1728 hooks (warp threads) completely independent from each other, meaning a full repeat design from selvedge to selvedge
- an adjustable width and density for the warp.

It was all we needed !

An extraordinary adventure started : research, teaching, developping a network of jacquard weavers,

Having a computerized loom at hand permits :

- testing the theoretical principles of weaving I was developping
- going faster in developping a collection of works
- having instant results - thus permitting instant adjustments to designs, to weaves, to yarns ;

The most important REVOLUTION was the possibility to use free designs, photographic images with all the weaves we want : it is a great opportunity for us handweavers. I would say it is bringing a revival for handweaving, art or design.

4. AN INFLUENCE ON MY OWN ARTWORK

I was so happy ! I wanted in my first series of jacquard work to please myself and my audience, to enlarge my audience.

I still have fresh in my memory, the souvenir of the opening of my first exhibition with jacquard works. There about 20 large scale woven works, created and grouped with to other art field : photography and contemporary dance. And there was an unity among the three art forms : each one was important, each one was supporting, and in harmony.

To enlarge my audience and with these new possibilities the question of Edition came up front. I decided to offer my works in small edition, if there was an audience for them. I sold 5 to 6 editions of two of the artworks from this first series : Joe, La La. (See Fiberarts Design Book 6 for images).

It can be argued that the value of the artwork is changed when produced in editions, but it brings with it an important accessibility for the audience. La valeur monetaire is changed a l'unite, mais le total des ventes a compense.

5. MORE RESEARCH

Until now, and it is so recent, most of us, jacquard handweavers, have been using until now one or two color warps, standard materials (coton, linen or silk). Now that the first generation is over, we are questioning ourselves again about material, texture, colors..

I have recently develop a research on color weaving for jacquard .- it was most satisfying last june to share these information with a dozen of jacquard weavers - what I first called a TAPESTRY warp, but what finally became a multi-layer, multi-color warps for complex structures in order to develop different weave and color effects.

My future research will include a research on different material , different size materials in different layers ...

Our Centre will have an Atlas of 4,000 weave structures to become a reality ... woven, that we can touch, feel and discover.

6. WHAT IS JACQUARD WEAVING, HOW IS IT MADE ?

Le procode : from a scanned image to the cloth

Step one - Scanned Photos at different resolution -and computerized designs

Step two - Reduction of colors

Step three - Choosing the rightweave structures

Step Four - Finishing : correcting the floats,

Step Five - Preparing selvages (harness tie) and transferring to the loom.

Step One: Scanned Photos at different resolution -and computerized designs

A design may be made by hand on paper and then digitized, just like a photo.

A design may be made directly on the computer using different softwares (e.g. Illustrator, Painter, Pointcarre, etc.).

A photograph can be scanned.

All these can be worked together in one single project or be a project in itself.

Some images may be more difficult to digitize than others ; sometimes original images are of poor quality or lack precise outlines.

When images are digitized, their resolution is linked to the number of threads per centimetre (or inch) during the weaving process and also depends on the size of the image. The finished size of a digitized image must correspond to the total number of threads in the woven version.

For example: the loom at the Montreal Centre for Contemporary Textiles has 1,728 threads (or hooks), which are usually beamed at 40 threads/in. If you wish to weave a full-width image, then you would digitize the original image so as to obtain a size approximating that number.

Of course, this also depends on the size of the image that you are digitizing. For example, if you are using a slide, which is usually small, you must increase the digital resolution. Therefore, it is important to produce a digitized image in the size corresponding to the total number of threads in the woven version of the image.

Digitization is done in colour or grey shades, depending on the type of weaves being used.

For monochrome effects, using satin or twill weaves, it is better to digitize in shades of grey. When using tapestry or colour-effect weaves, it is better to keep the dominant colours when digitizing.

Variations could be given to photographic images, like using different filters in different software (Photoshop, for exemple).

Step two - Reduction of colors - cleaning up the images

The number of determines the number of different weaves for an image determines the number colours of the same finished. Each colour will be replaced by a different weave structure in a given area.

Once the image is digitized, we have to start cleaning up the image in order to reduce the number of colours, according to the number of weaves that will be used.

The digitized images are made up of many small coloured (or grey) dots spread evenly over the entire surface of the image. You can see this by enlarging the image, like looking at it through a microscope. To be able to interpret these images convincingly, we must

group the colours together-more or less clump them together-so that a colour is made up of only one tone (instead of being made up of several colours at one time). Isolated or dispersed dots have to be eliminated.

Each colour in the design represent a weave, regardless of whether this colour is included in a specific area of the design or dispersed among several areas.

Sprayed colors have to be used very carefully. If the various coloured dots are scattered within a coloured areas of the design, the main weave in this area will be blurred by scattered raised threads from another weave. This makes some weaves unrecognizable, because the raised threads belonging to another weave are scattered. Nonetheless, these areas may be of interest if you want to explore texture and create mixed effects.

Step Three - Choosing the right weave structures

When all the cleaning is done, it is time to assign a different weave to each solid colour. If complex weaves are used, a larger number of colours could be possible in the final image.

Theoritically, any weave structures could be used, but they will not all serve at best a specific design. One has to know something about weave structures at this point and which should be used to emphasize the desired result.

I must say that at this point, the textile artist must have a comprehension of the weave structures. A scientific and artistic profiles must be in symbiosis.

Replace each theoretical colour in the image with a simple or complex weave. They can be found in an on-line library of weaves or in a personal library stored on diskette ; new weaves can be created at any time, especially layered complex weaves..

Weaves are chosen to achieve the best effects in texture, colour, contrast, shading, fabric strength and thickness, etc.

Step Four - Finishing : correcting the floats.

At any time when choosing the weaves, a woven display of the image is accessible. It permits to either change details in the image, or change weave structures.

When the weave structures are all assigned, it is time to check joints and correct too long floats.

When the fabric drafting is displayed, we must check the areas where two different weaves meet. This involves the relationship between the dimensions of the weave repeats and those of the design repeats.

The repeat of all selected weaves must be a multiple of the dimensions of the design repeat and the design repeat must be a multiple of the number of hooks available.

Good textile software will also allow you to verify and correct the maximum length of all floats almost automatically, regardless of whether they are located in the warp or the weft.

This length is determined according to the fabric's desired density, resistance to friction and ultimate use. This information can only be obtained through actual sampling.

The software will then use a flashing signal to display all floats that surpass these limits and may appear in places where two weaves meet side by side on the borders of the motifs and designs. These floats may be corrected automatically or by hand, in areas where design contour precision is crucial.

Simulation allows you to see both sides of the fabric on screen and in actual size, no matter what threads or weaves are used. At this point, a simulation on the screen of the finished textile, with exact counts in warp and weft can also be made.

Step Five : preparing selvages (harness tie) and transferring to the loom.

One of the last steps involves incorporating weaves for the selvages. This operation, known as harness tie, allows the fabric to be woven in a regular pattern on each side of the weaving.

The computer drafts selvedge weaves automatically. Simply choose the weave desired and the number of threads to be assigned to it.

It is now the time to save those technical informations in a format that can be read by the loom computer. Once all the information is transferred to the loom computer, the actual weaving is ready to start.

7. MORE JACQUARD WORKS

The Montreal Centre for Contemporary Textiles has organized a Jacquard exhibition, called e-textiles, Ventures in jacquard weaving. It will travel in Canada (Halifax, Fredericton, Toronto and Vancouver) and Australia.

We will show the works of 11 artists

From Australia : Liz Williamson

From Japan : Junichi Arai, Hideo Yamakuchi

From United States : Lia Cook, Emily DuBois, Laura Foster Nicholson, Cynthia Schira, Bhakti Ziek

From Canada : Frances Dorsey, Louise Lemieux Berube, Ruth Scheuing

To serve as the catalog of the exhibition, we have produced a Cdrom that contains much more than the exhibited works :

- a virtual gallery with more than 40 other jacquard works from various places in the world,
- two essays (one from Margo Mensing from Skidmore College, Saratoga Springs, NY, and one from Barbara Layne for Concordia University in Montreal).
- a section on jacquard history and process.
- And finally a section on our Centre and the services we offer to professionals and artists.

This Cdrom will be distributed after the opening of the exhibition on November 8 at the Museum of Contemporary Art in Montreal.

See the CTCM website to know more about it : www.textiles-mtl.com

Louise Lemieux Berube
October 2000

From Upholstery to Installation: Educating Designers and Artists Using an Electronic Jacquard Loom

by Deborah First

Introduction

In the fall of 1998 students and faculty in the fibers department at Savannah College of Art and Design began to use their newly installed AVL electronic jacquard loom (figure 1).

Since its arrival, students have explored the loom's capabilities for designing and producing samples for the textile design industry as well as using it as a tool for art making.

Students preparing textile design portfolios study woven structure and its relationship to image-based digital design directly through their use of the loom and the design software. Because they weave their designs independently of a technician, there is much flexibility for modifying and refining designs, and then re-weaving, all in a relatively short time period. Rather than relying solely on simulations of weaves, students create actual woven samples and short lengths of fabrics. This process enables students to push their designs further and to work more inventively.

In addition to this design application, other students are pursuing art-based ideas with the jacquard loom. Images and structures that were otherwise prohibitively time-consuming or technically complex are now possible with a loom that has 1,728 individually controllable warp threads. Students are attracted to its ability to reproduce and re-interpret imagery from a variety of sources, including their own photographs and drawings. Beyond the image-making function, students are investigating woven surfaces and structures possible with the new technology, and are experimenting with a variety of non-traditional weft materials and finishing processes. They are also beginning to explore the combination of jacquard-woven fabrics with other media.

Context

The fibers department at Savannah College of Art and Design has approximately 50 students from all over the United States, as well as Mexico, Central and South America, Asia, and the Middle East. There are four faculty teaching in the department and we offer both an undergraduate and a graduate program. Fibers is one of eighteen majors at the college.

After taking foundation drawing and design courses, students take courses that introduce them to textile processes and sensibilities. They study weaving, screenprinting and other surface design processes, repeat pattern, three dimensional fibers and history of fabric. From this base, they pursue a variety of textile design and fine art areas.

Computer Aided Jacquard Design is one of several electronic design courses that are textile-specific. Other courses explore textile print design and dobby weaving.

The Loom and Software

The AVL jacquard loom has a wooden frame built by AVL, a California-based company known for its dobby and computerized dobby looms. The loom is outfitted with a steel frame that supports three electronic jacquard heads manufactured by TIS, a French company located in Lyons, France. The loom is not a power loom, but a hybrid of a handloom and a jacquard. The loom has 1728 hooks, each of which controls one heddle (and one warp thread) independently. The independence of each warp thread provides for great flexibility of repeat size. One repeat could use the full width of the loom or a division of it. The sett, which is variable, is currently 60 ends per inch, for a weaving width of approximately 27".

The software we are using is NedGraphics, a Dutch software that has modules for print and jacquard design. It runs on Windows 95/98/NT operating systems.

Teaching Method

Students are required to take Computer Aided Surface Design as well as a basic weaving course as prerequisites for the jacquard course. In the introductory jacquard course, students first design and weave sample blankets as a way of learning the jacquard software and exploring simple and complex weave structures. Because the students in the course are generally seniors or graduate students, most are already pursuing a personal design or fine art direction. The projects they pursue reflect the diversity of their interests and include individual designs and collections for textile design portfolios or one-of-a-kind fabrics for fine art applications.

In spring 2000, a more advanced jacquard course was offered. This course explored more complex structures, including the use of supplementary wefts and multiple warps. In addition students explored variation in sett within one design, as well as the use of non-traditional materials.

Design Process

Using the NedGraphics program Texcelle, students create an image file that is the starting point of the jacquard fabric. Occasionally students draw directly with the computer to generate their images, but more frequently they scan in line drawings or even gouache paintings as a starting point. After the image is reduced in color and otherwise adjusted to make it suitable for a jacquard, it is taken through a series of steps using the NedGraphics Weaver NT software. The steps include assigning a weave to each design color, as well as entering technical information about the size of the design, the number of warps and wefts used, and the size and structure of selvages.

When the weaves have been assigned and the other technical information has been entered into the Weaver NT, the weave file is ready to be exported so that it can be read by the TIS software that controls the loom. The weaver is then ready to test the

design. Revisions to the design are often necessary, and because the loom is just a few feet away from the design computers, corrections are easily made. It is common to make changes affecting weave structures, design size, and weft use (filling color and material) at this point. It is often difficult to predict how well some weaves will work, so new weaves may need to be assigned if certain areas of the design lacks contrast, become too busy, or simply do not work technically. Also, because of variations in the number of picks (wefts) per inch, a design might become distorted without an adjustment to its size. A fine yarn may require a larger number of wefts per inch than anticipated, compressing the design, or conversely, if a weft has fewer picks per inch than planned, the design would become elongated. Based on the weave tests, the height of the design might need to be lengthened or shortened in proportion to the picks per inch. Changes to the weaves or design size are made relatively quickly using the NedGraphics software.

This process of designing, testing, and revising contrasts greatly with the technology that preceded electronic jacquard design. Previously, the jacquard design would be meticulously painted on point paper; each tiny block of the design represented a raised or lowered warp thread. Cards that controlled the operation of the jacquard head were punched and laced together in a lengthy process. One card was required for each weft in the design repeat. Unlike the current technology, which allows corrections to be made with a few keystrokes, modifications to the design required punching new cards: A mistake in the design was catastrophic!

The images that follow the text illustrate the design process and show a sampling of student explorations in both textile design and fine art applications.

Student Design Work

Figures 2-4. Graduate student Selinde Lanier's upholstery fabric Astoria illustrates the process of design revision. Figure 2 shows a detail of the final result of this single warp, multiple weft construction. Figure 3 shows a preliminary test in which leaves and buds lacked definition. In figure 4, the weave structures for these areas were made more weft-faced.

Figures 5- 7. Graduate student DeAnna Rigter used a variety of natural forms as inspiration for these single warp, single weft designs for upholstery.

Figures 8-10. Thai graduate student Vilasinee Sirimanapong explored her ancestry through this series which included one-of-a-kind panels, as well as designs for upholstery

Figure 11. The use of non-traditional wefts, such as raffia, are possible since the is woven in by hand.

Figures 12-13. Variations of density are explored in this fabric by Selinde Lanier. Negative spaces between amaryllis flowers use only half the warps as the rest of the fabric. The floating warps are clipped after weaving.

Fine Art Applications

Figures 14-17. Thai graduate student Piyanat Arphorn wove a series of pairs of fabrics contrasting architectural details from her country with those of her new environment in Savannah, GA. Figures 14 and 15 explore windows; figures 16 and 17 depict columns.

Figures 18-20. Graduate student Ann Heintz scanned collages from her notebooks and handmade books, as well as her own photographs and other found images to create a series of black and white single cloths.

Figure 21. This installation by Ann Heintz combines jacquard weaving with found objects and dyed and printed fabrics. Monofilament double cloths have pockets that contain jacquard fabrics.

Conclusion

We are just beginning to explore this new technology which marries electronics with the hand. The ability to scan in drawings, photos, text, and other imagery offers seemingly endless possibilities. The flexibility of exploring variations in fabric density, materials use, and finishing processes creates many new possibilities, as does hand manipulation of the cloth during and after weaving. It will be exciting to see further investigations of imagery, combined with an attention to the material nature of the woven cloth. The potential is great.

Illustrations



Figure 1. AVL Jacquard loom at Savannah College of Art and Design

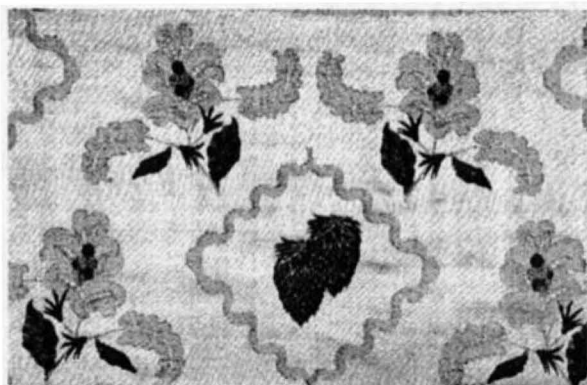


Figure 2. Selinde Lanier, Astoria

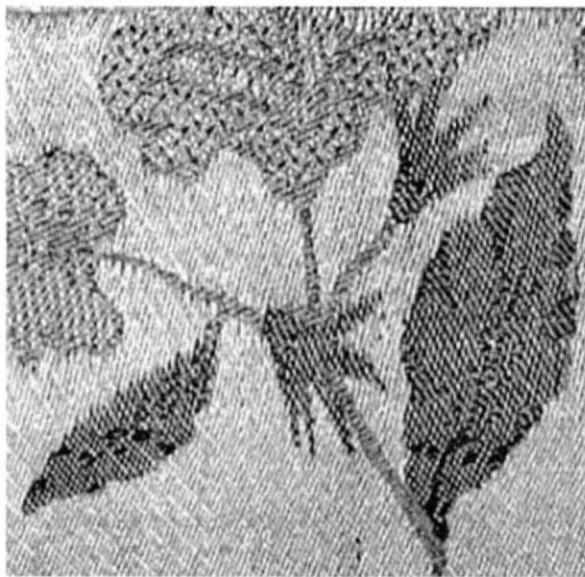


Figure 3. Selinde Lanier, Test for Astoria (detail)

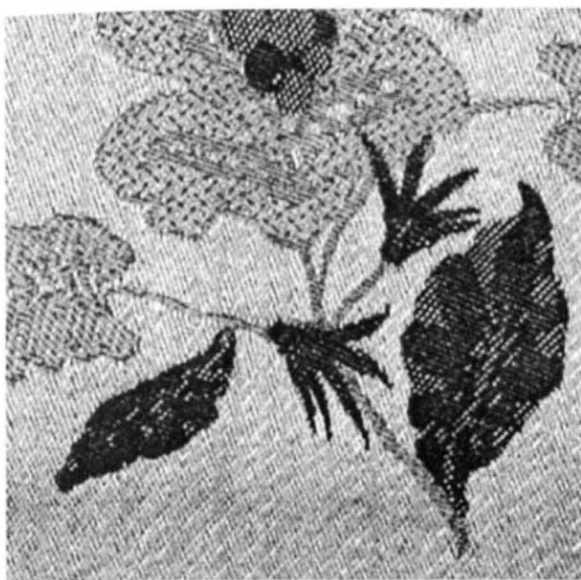


Figure 4. Selinde Lanier, Test for Astoria (detail)



Figure 5.
DeAnna Rigter, Jacquard upholstery design



Figure 6.
DeAnna Rigter, Jacquard
upholstery design



Figure 7. DeAnna Rigter, Jacquard upholstery design

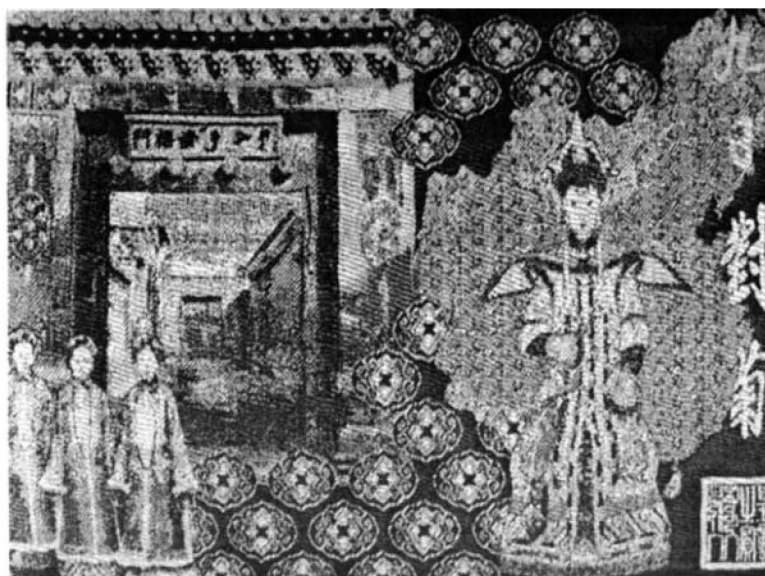


Figure 8. Vilasinee Sirimanapong, Jacquard panel

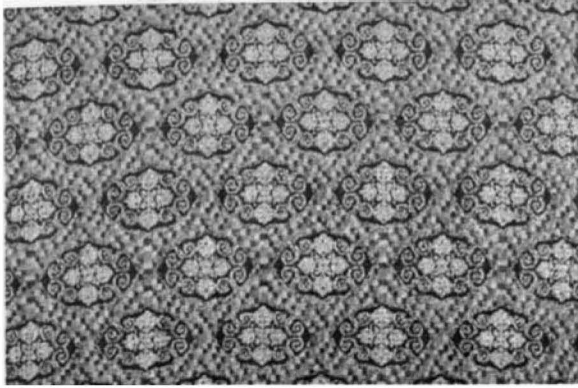


Figure 9. Vilasinee Sirimanapong, Jacquard upholstery design

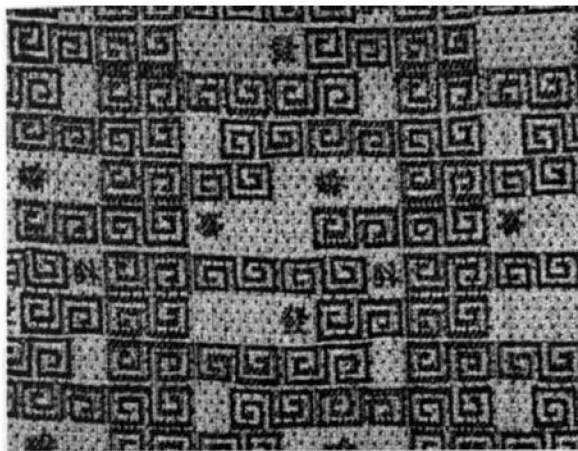


Figure 10. Vilasinee Sirimanapong, Jacquard upholstery design

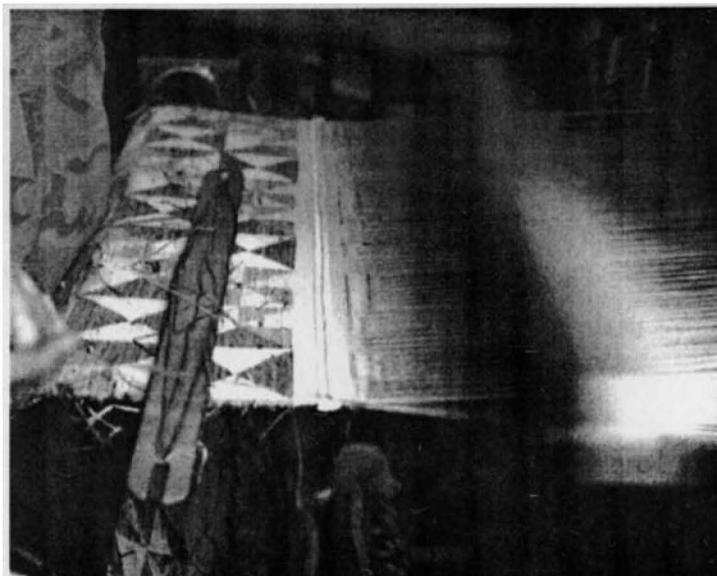


Figure 11. Laurie Lovell weaving raffia weft into a jacquard she designed.



Figure 12.
Selinde Lanier, Amaryllis (detail)

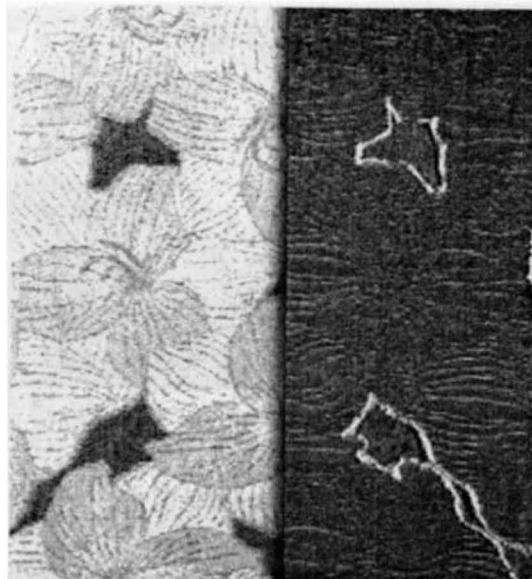


Figure 13
Selinde Lanier, Amaryllis (face and reverse
showing cut warps.

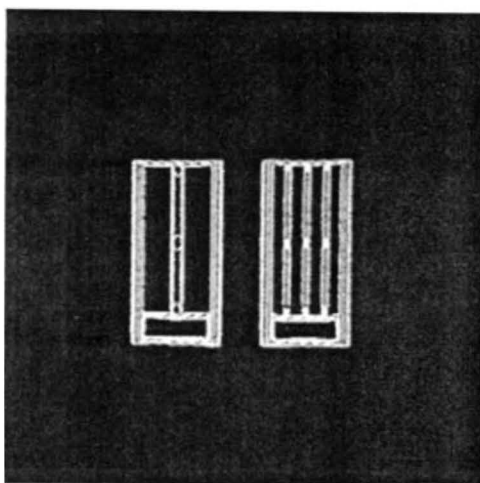


Figure 14. Piyanat Arphorn,
Where I Was No. 1

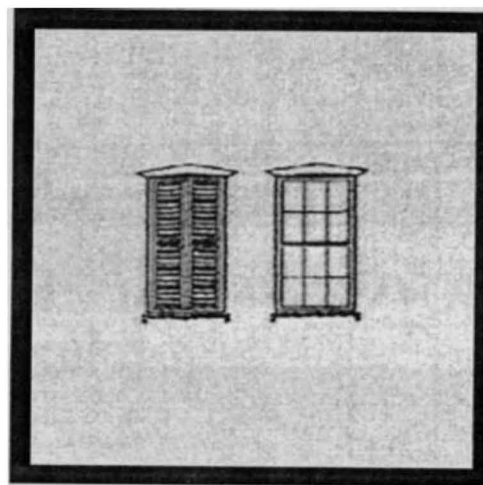


Figure 15. Piyanat Arphorn,
Where I Am No. 2

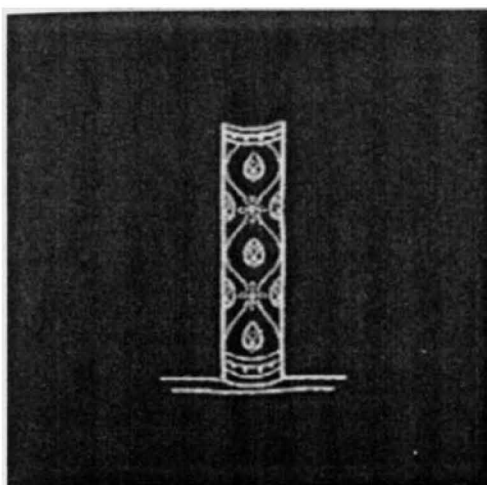


Figure 16. Piyanat Arphorn,
Where I was No. 5

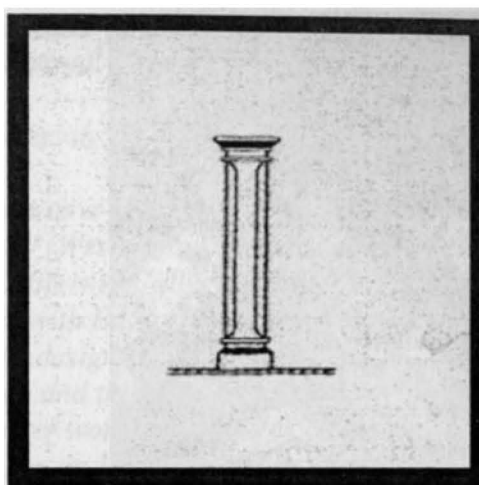


Figure 17. Piyanat Arphorn,
Where I Am No. 5

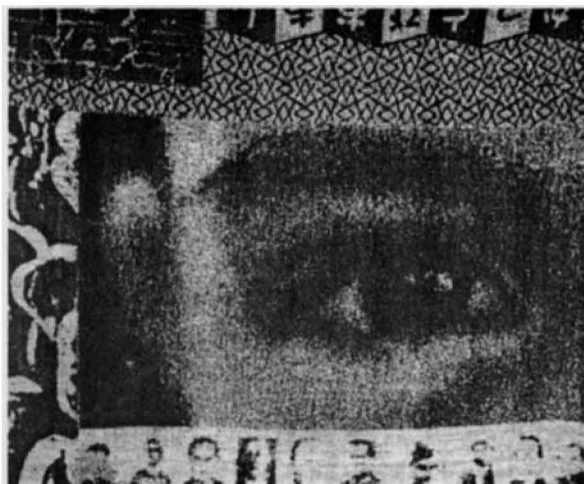


Figure 18. Ann Heintz, Secrets and Symbols

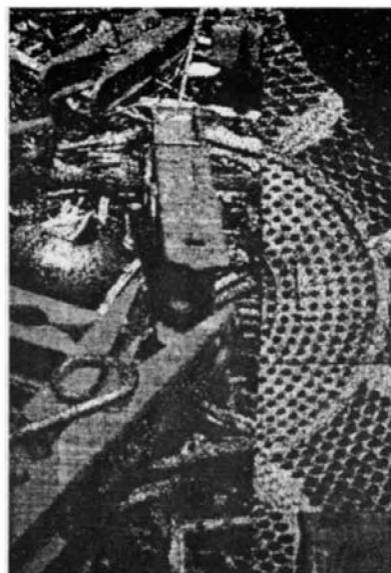


Figure 19. Ann Heintz, Secrets and Symbols



Figure 20. Ann Heintz
Secrets and Symbols

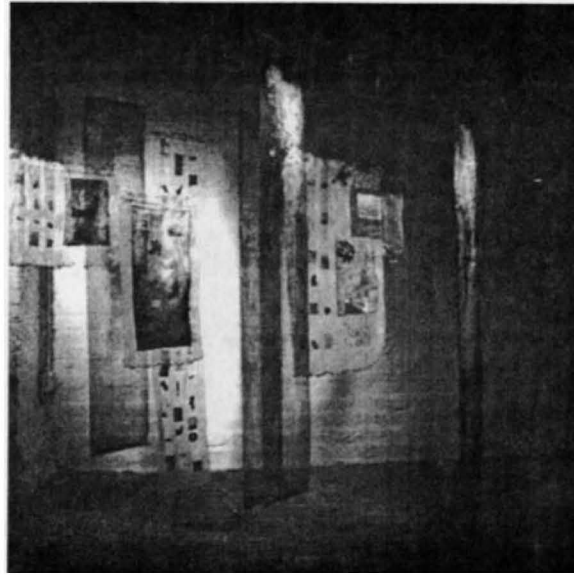


Figure 21. Ann Heintz, Importance of Place

A Mao A minute Real Computers as Virtual¹ Weavers

Lisa Lee Peterson

Lisa Lee Peterson has taught the textile curricula as a professor in the department of Visual and Performing Arts at Purdue University (West Lafayette, Indiana) since 1985. She studied with Trude Guermonprez at the California College of Art and Crafts as an undergraduate and earned her graduate degree with Ed Rossbach at the University of California Berkeley. After graduate school, Lisa designed jacquard textiles in New York City, first as an apprentice to Jack Lenor Larsen and then as designer and production manager for Boris Kroll Fabrics. Lisa exhibits her work and lectures on textiles nationally and internationally. Please contact her at: lisalee@purdue.edu.

A Mao a Minute

In the mid-1970s, Chinese goods began to flood American markets as a result of President Richard Nixon's historic visit to China in February 1972. Among such trade items as blue Mao jackets and caps with red enameled stars, proletarian black cloth shoes, and little red books were photograph-like woven portraits of the potentates of Communism: Stalin, Lenin, Marx, and Chairman Mao.

Convinced that China had computer-and-loom systems that could instantly weave textile renditions of photographs, I raced off to the textile industry in New York City to weave on these digital wonders. Industry experts quickly disabused me of this idea. If New York didn't have such a sophisticated computer system at that point in time, neither would China.

Twenty years later, in 1995, I visited one of the factories in China where they manufacture woven pictures. We watched a technician as he translated an image into instructions for a jacquard weaving, painstakingly hand painting a point paper – one tiny rectangle at a time. No Mao A Minute.

Over the years, I attempted to simulate virtual computer-and-loom systems. In the 1970s I used a pencil to translate the gray values of a video image printout into shaded satin weave structures. In the 1980s I used a 128K Macintosh computer and a software package² to convert video signal into shaded weaves. What was missing, of course, was the link to the loom.

In 1999, I worked with Louise Bérubé at her workshop on computerized weaving at the Montréal Center for Contemporary Textiles. Using *Pointcarré* software and an AVL loom with a TIS computerized jacquard head, I was finally able to weave a pair of

¹. Virtual: a word that has become part of the lexicon of computer terminology meaning an intangible simulation or emulation of the characteristics and nature of something that is real and tangible.

². The out-of-date software program I used was MAGIC (Macintosh Graphics Input Controller) by New Image Technology. See Lisa Lee Peterson, "From Image to Woven Structure: A Video-Computer System for Textile Designers," *Ars Textrina* 7 (1987), 109-160.

photographs using a computer-and-loom system that I had envisioned a quarter of a century earlier.

Friends and colleagues were skeptical about the major role the computer played in the creation of these pieces. “That’s cheating!” they said, dismissing the fact that there was a real human weaver behind the virtual computer weaver.

Their reaction raises a legitimate philosophical issue that is the focus of this paper. Although I physically wove the pieces - stepping on the treadle, tossing the shuttles, and beating the weft - the pieces could have been woven entirely by a computer-controlled mechanized loom.

Do time and human hands determine the value of woven textile art? Is it “cheating” to enlist the aid of a computer and a computer-assisted loom? If a significant part of the aura and mystery of a woven object are the hours and skills invested in its making, does the speed of execution diminish the object’s inherent value? Is a Mao a Minute less valued, less venerated than a Mao a hundred hours?

Looms and computers, a shared history

Throughout history, humans have employed tools to assist them in their work. In the history of hand loom technology, the simplest of looms has the greatest potential for immediate variation because weavers may vary the patterns and weave structures as they weave. The more complex the loom, the opportunities for spontaneous variation diminish; most of the work occurs during the set up of the loom, long before the fabric is woven.

The drawloom, before the mid-19th century, was a highly complex machine that, once set-up, could usually weave only one pattern. However, once the loom was set up, the loom could weave the identical pattern over and over – a distinct advantage when weaving repeat yardage. The drawloom had two operators who manipulated two sets of harnesses: the weaver used treadles to control the front harness that determined the basic structure of the woven cloth; and the drawboy, perched above or sitting beside the loom, controlled the back harness by pulling pre-tied cords that established the pattern of the woven fabric. The tie-up for a complex pattern took two or more months, during which time the loom sat idle.³ When completed, the loom would literally be tied up: it could only weave that one pattern until the draw cord ties were dismantled and a new pattern tied in.

Before the development of the Jacquard loom attachment, inventors designed various improvements to overcome the limitation of one pattern to one loom. In the 18th century, Philippe de LaSalle designed a tie-up system that was interchangeable with other tie-ups. Another variation was the *métier à la grande tirer* – a drawloom with a long side extension that housed tie-ups for as many as twenty different patterns that could be used successively.

³ Daryl M. Hafter, “New looms and fabric novelties in Philippe de LaSalle’s 18th century silks,” in *Irene Emery Roundtable of Museum Textiles, 1977 Proceedings: Looms and Their Products*, edited by Irene Emery and Patricia L. Fiske (Washington, DC: The Textile Museum, 1979), 259.

In 1804, Joseph-Marie Jacquard developed a punch-card operated mechanism to replace the cumbersome drawloom tie-up.⁴ A loom with the Jacquard mechanism attached to the top was no longer restricted to weave one pattern. To change the pattern, the weaver simply exchanged sets of cards.

Charles Babbage's theories for an Analytical Engine – based on the Jacquard's punch card system – were first published in 1842. Weaving is inherently a binary construction: either a warp thread is up, or it is down. A hole in a punch card causes its corresponding warp thread to rise; no hole means that the corresponding warp thread will not rise. Babbage saw in the punch cards the potential of the binary system for data calculation, storage, and transmission that is the basic building block of electronic code and the computer. One of Babbage's admirers remarked, "The Analytical Engine weaves Algebraical patterns, just as the Jacquard-loom weaves flowers and leaves . . ."⁵

Conversion of the design into point paper and then to a set of punch-card instructions for the Jacquard, is the work of highly skilled technicians and often requires hundreds of hours of work.

The point paper technician who worked at the Boris Kroll Fabrics (where I worked for five years) received intensive training in the art of point paper design in pre-World War II Europe. Aware that Boris Kroll's point paper technician was one of a dying breed – no one else was trained or willing to be trained to carry on such meticulous work, I tried to catalog the vast library of weave structures that he held in his mind. As this was the mid-1970s, I did not have a computer to assist me in this task. But in this aspect the powerful computers of today are invaluable memory devices, racing to record and preserve the mental processes involved in point paper design before the last of the highly-trained technicians is gone.

Both the drawloom and the Jacquard were developed in response to the demand for figured fabrics that could be woven as yardage in identical repeats. Because of the large expense in setting up a drawloom, only the aristocracy could afford drawloom-woven figured fabrics for their clothing and interior furnishings. The Jacquard made figure-woven fabrics more affordable, but the large investment in the point paper and card cutting preparation still requires the manufacturer to mass produce a pattern in order to recover the costs of producing it.

⁴. Jacquard's device succeeded in bringing together the drawloom improvements of other 18th C. inventors, among them: Bouchon (1725) designed a mechanism for selecting drawcords using needles and perforated paper; Falcon (1934) substituted punched cards stitched together; Vaucanson (1745) applied the idea of the punch cards and needles to raise warp threads. Philip Morrison and Emily Morrison, eds., "History of Punch Cards" in *Charles Babbage On the Principles and Development of the Calculator*, (New York: Dover, 1961), xxxiv, and *The Encyclopedia Britannica*.

⁵. Charles Babbage's admirer and chief supporter was the mathematician Ada Augusta, Countess of Lovelace. Babbage never built a punched-card calculating machine, but Herman Hollerith, the inventor, patentee, and co-founder of the earliest punched card tabulating machine may have been influenced by Babbage's published report of 1878; more probably Hollerith took his ideas directly from the Jacquard loom. By 1890 crude Hollerith machines were in practical use at the U.S. Census Bureau. Morrison, *Charles Babbage*, xxxiii-xxxv.

Until the computer had a role to play in the conversion of a design to woven fabric, creating one-of-a-kind Jacquard-woven textiles was economically impractical.

Computerized jacquard: the virtual weaver

Nearly two centuries after the punch-card operated Jacquard inspired the invention of the first computers, computer technology has finally returned to assist the weaver. Textile software, such as *Pointcarré*, allows the designer to convert a textile design or image into instructions to operate the loom in a matter of a few hours. The software – as virtual point paper designer and virtual card cutter – emulates both of these processes, storing all of the information as electronic data on a computer disk.

The weaver inserts the disk into a computer-controlled loom, such as the French TIS Jacquard attachment for the AVL hand loom or the Norwegian Thread Controller TC-1, taps a few instructions into the computer, and weaves.

The near-instantaneous and relatively low cost of converting a design to loom-control instructions makes possible the creation of one-of-a-kind Jacquard-woven art objects. The weaver can easily produce identical computerized jacquard-woven multiples and, like the printmaker, might choose to limit editions to create market value by false scarcity.

But is the market willing to accept computer-assisted textiles as legitimate art? The computer as virtual weaver challenges the boundaries that define weaving as an artform. If a Mao a Minute eliminates the touch of the human hand is it still art?

Art v. Craft

Textile artists, indeed all artists who work in traditional craft media, have a tenuous footing in today's elitist world of art. In a recent review of a fiber exhibition in Albuquerque, the reviewer wrote

*Her weaving . . . reminds me of the aesthetic and political transition that textiles made 30 years ago when they were reborn as fiber arts. Without that redefinition, I would now be reviewing a crafts show.*⁶

The British potter Bernard Leach, writing in the 1970s, placed functional craft in a status higher than non-functional art.

*Handcraftsmanship . . . justifies itself . . . as an intimate expression of the spirit of man. . . . If . . . it ceases to serve a functional need, it runs the risk of becoming art for art's sake.*⁷

I prefer the inclusive viewpoint of Henry Glassie, professor of folklore at Indiana University and author of *The Spirit of Folk Art*,⁸ a magnificent volume about the Alexander Girard collection at the Museum of International Folk Art, just up the hill here in Santa Fe. Writing about Turkish art, Glassie eloquently defuses the debate over art versus craft.

⁶. Wesley Pulkka, "Fiber arts exhibition features solid craftsmanship," *The Albuquerque Sunday Journal* (30 July 2000).

⁷. Bernard Leach, introduction to *The Unknown Craftsman*, by Soetsu Yanagi (Tokyo: Kodansha, 1972), 97.

⁸. Henry Glassie, *The Spirit of Folk Art: the Girard collection at the Museum of International Folk Art* (New York: Abrams, 1989).

The Turkish word for art is sanat. The artisans contrast it with emek. Their distinction between sanat and emek is analogous to our division of art and craft, but the criteria differ. We try to separate art from craft by medium, assuming some deep, even universal validity in the conventional hierarchy of the late West, as though a textile or ceramic work, no matter how fine, can only be craft, while a painting or sculpture, no matter how dreadful, remains art. . . .

*[Sanat and emek are both] created to make a living. . . . but [sanat] is distinct in that it contains . . . the artist's gift suffuse[d] . . . with spirit. . . .*⁹

Hand v. Machine

One might apply Glassie's perspective to the discussion of whether or not an object is real art if a virtual computer weaver played a role in its creation: art is the spirit of its human maker and not the tools, virtual or otherwise, that made it.

Weavers are no strangers to machines. As the inspiration for the first computer, weaving, among all the craft media, is most closely related to the computer. Yet our fellow craftsmen and possibly those who judge, buy, and appreciate crafts would disparage the virtual-computer-weaver-assisted textile as something less than the 100% real human hand-made article.

Soetsu Yanagi, founder of the Japan Folkcraft Museum in the 1930s, wrote about the place of crafts in the industrialized world of mass-produced objects in his book, *The Unknown Craftsman*. It is perhaps his writings that continue to exert their influence on our sensibilities and expectations of the craft media today.

. . . The chief characteristic of handcrafts is that they maintain . . . a direct link to the human heart. Machine-made things are children of the brain; they are not very human. . .

*No machine can compare with a man's hands. Machinery gives speed, power, complete uniformity, and precision, but it cannot give creativity, adaptability, freedom, heterogeneity. . . . Man prefers the creative and the free to the fixed and standardized.*¹⁰

However, Yanagi was open to the idea of the machine-made object, commending the work of William Morris of the Arts and Crafts movement at the dawn of the 20th century and of mid-20th century industrial designers Charles and Ray Eames.

*. . . The problem is not a matter of either hand or machine, but of utilizing both. . . . [The designer] must . . . know beauty at sight; then . . . he should understand the principles of mechanics . . . yet at the same time . . . also appreciate . . . the value of handwork. . . .*¹¹

Yanagi was writing in a time when industry was the only choice an artist had to access the machine, when a new occupation, industrial design, opened up for the artist-craftsman. William Morris and the Arts and Crafts movement sought to correct the ills of bad design in the wake of the Industrial Revolution. When we look at his woven fabrics today, the obvious mechanical repeats seem formal and stylized.

⁹. Henry Glassie, *Turkish Traditional Art Today*, exhibition catalog (Indiana University Art Museum, Bloomington, Indiana, 26 October to 23 December 1994), 4-5.

¹⁰. Yanagi (1889-1961), *The Unknown Craftsman*, 107-108.

¹¹. *Ibid.*, 108.

Anni Albers came to this country in the 1940s and is often cited as the founder of textile art in the United States. In her book, *On Designing*, Albers stresses the role of the artist in the work.

An impartial critic of our present civilization . . . would show that a division between art and craft, or between fine art and manufacture, has taken place under mechanical forms of production; . . . one . . . entirely spiritual and emotional . . . , the other predominantly practical . . .

*Whether the result is a unique object or a mass-produced one is hardly of concern, as long as the work is approached in the submissive manner of the artist. . . .*¹²

Virtual computer weavers in the hands of real human artists

The computer is a relatively new device in the weaver's basket of tools. Its presence in no way threatens to usurp the unique beauty of the hand-crafted object. The computer gives the textile artist access to the "speed, power, complete uniformity, and precision" of the Jacquard. The artist is free to explore which of these attributes to employ in the expression of her heart, free of the concerns of wearability and mass-marketability of the industrial-designed mass-produced object.

In Louise Bérubé's multi-colored warp workshop this summer, I collaborated with my husband to translate the amorphous watercolor-like effects of his paintings into weaving. I wanted to emulate the shifting and transparent feeling of his images rather than reducing it to clearly-defined solid areas of color. The facile nature of the software *Pointcarré* allowed me to weave with undefined and overlapping areas of color. To me these first pieces are small jewels, the sketches for a series of weavings of abstract imagery.

Lia Cook and her student Min Suk Kim are two artists who have enlisted the aid of computers to weave portraiture – a Mao A Minute, if you will – without sacrificing their artistic spirit to the machine.

Min Suk hard-wired the image of his California driver's license in copper: a parody of biting the computer that wove it. In an exhibition of Lia Cook's recent work of video and photographic self-portraits, one experiences an eerie sense both of watching and being watched. Loosely draped cloth images create the illusion of the moving, breathing body, yet each cloth is still: there is virtual physical presence, yet the real body is absent. The computer that assisted in the creation of all of these pieces was not the artist.

Weaving is the root of both the Industrial Revolution and the Digital Revolution. A Mao A Minute is not cheating, it is simply a harvest of the seeds we have sown. The computer as virtual weaver is just that – virtual – and not the real human weaver, not the real human spirit in the work.

¹². Anni Albers, *On Designing* (Middletown, CT: Wesleyan University Press, 1961), 13-14, 64.

Decoding the Divine: Kathi Embroideries of Saurashtra

Professor Victoria Z. Rivers

This paper focuses on nineteenth and early twentieth century textiles produced by the Kathi people of Saurashtra in northwest India, and motifs similar to the Kathi's repertoire. The purpose is to stimulate new thinking about archaic embroidered images and how they relate to the larger world of ancient solar/astral worship and the regenerative principles of nature. To understand this complex construct, let's start with the Kathi background, a brief history of the region, an analysis of some ancient motifs, and geographical heritage.

Visually, Kathi textiles contrast bright against dark. The silky untwisted floss called *heer*, also adds luster through elongated darning stitches called *adiya-fatiya*, some chain stitch and *bavaliya* or thorn stitch, long herringbone stitches, and some surface satin stitches.

(1) Touches of yellow, white and green, along with small mirror rounds accent the predominantly red stitches worked into deep indigo cotton grounds. Most Kathi embroidery motifs emanate from a central focal point thereby expanding the motifs' powers, and the most archaic of them are filled with symbols of solar character.

The Kathi household in Saurashtra, its contents and various contexts for textile displays is enticingly described in *Folk Art and Culture of Gujarat*. (2) Kathi people produced personal, household, dowry and festive textiles like other communities throughout northwest India and Pakistan. These included *chakla*, or ceremonial squares, which throughout Saurashtra were associated with dowries and weddings since bridal garments were commonly wrapped and transported in them. (3) Auspicious doorway hangings, *toran* were suspended at main entrances. Textiles that were more particular to the Kathi included *bhitiya*, large wall hangings consisting of three or four generous sized *chakla* connected with diamond shapes of assorted cloths and suspended from long, narrow friezes of cloth called *pacchitpati*. The Kathi also made rectangular, triangular topped cloths for sun worship called *suraj-stapan*. (4)

From the 19th century, some Kathi textiles made by Mochi professional embroiderers introduced figurative elements, (5) but this paper focuses on the geometric motifs. The Kathi stopped embroidering in their distinctive *Kathipa* style, sometime in the early twentieth century, (6) but their color schemes, embroidery styles, and images were widely adapted, even expanded, by members of Mahajan and Vaniya merchants castes, the Kanebi farming communities throughout Saurashtra and by the Patanvadi Rabaris. (7) Nanavati says that Saurashtran famines in 1900, 1922, and 1940 forced large numbers of Kathi to sell their embroideries and beaded textiles, thereby their creditors and village merchants purchased the old Kathi works, and were greatly influenced by the Kathis' distinctive iconographic and visual qualities, as well as the upper caste associations with them and their material culture. (8)

By the early twentieth century oral traditions explaining the meanings of the old motifs were lost. It is now very difficult to reconstruct their beliefs and intentions, as frequently, what was once a belief becomes a tradition, and the meanings attached to the beliefs become lost in custom. Additional fieldwork is needed, as well. But I believe there is

evidence that the archaic motifs are indeed connected to solar /fire worship and nature cults reflected in textiles from at one time shared regions of Southwest / Central Asia.

Some background about Saurashtra, the large central to southern peninsula of Gujarat State is helpful in understanding the complexities of the region, its' numerous groups and how the Kathi fit into this larger sphere. In the recent past, Saurashtra was called Kathiawar or Kathiawad after the Kathi people, but Saurashtra was one of the region's ancient names. From as early as 3,500 years ago, the people of the ancient Saurashtran archeological sites of Lothal, Dhandhukha, and Rozdi, traded with Mohenjodaro and other Indus Valley settlers. (9) In around 1,500 BC Saurashtra and the adjoining region of present-day Kutch, were settled by Aryans, and then the entire area was known as Anarta. (10) A great influx of cultures and religions continued, as many peoples were assimilated and adapted into the area over thousands of years. Numerous people from eastern Iran and Central Asia entered present-day Gujarat through Baluchistan and Pakistan, or through northern Pakistan's mountain passes from Central Asia. Fertile open valleys in the western part of north India, through Kashmir, Kulu and Dehra Dun were passageways, while invaders from the north or northwest came down the Indus or Kabul rivers. (11) The north frontier of Pakistan is the historical site of routes between Central Asia and the Indian Plains including the Khyber and Kurram passes to Kabul and less-known Tochi and Gomal passes into southern Afghanistan. (12) Saurashtra's geographical position on the Arabian Sea and its long-standing importance as a trade center further led to many immigrations. Intermarriages with invading groups and long-settled units led to great complexity of racial types.

Trade in textiles has been known since at least the 7th century BC when the Chinese writer Hiuen Tsang told of already famous cottons and silks woven in Southern Gujarat, (13) and from 751-1800 AD, when the seaports of Gujarat and Saurashtra were lively silk and cotton trade centers. This trade has been described in *The Book of Duarte Barbosa*, written in 1518, and *Travels of Ibn Batutah*. (14) Saurashtra also figures prominently in the great Hindu epics, when Lord Krishna roamed throughout the land. The early Greeks called Saurashtra Lar-des, after the Lar or Larica tribe. (15) It was also known as Ariaca, (16) and to the Romans, Saurashtra was called Saurastrene, which one scholar translated as "Good Country". (17) But the Sanskrit translation of the name Saurashtra, reveals that besides trade, the region was famous since ancient times, as the chief center for the worship of the sun in India. (18) Probably the Sanskrit-speaking, sun worshipping Aryan people first gave Saurashtra its name, for *saura* means sun, and *rastra* means worship. (19) Saurashtra was in "constant intercourse with Egypt and western Asia" where many revered the sun, (20) and from the Hindu texts called *Puranas*, it is known that as far back as several centuries BC, Saurashtra was ruled by "a king of the Solar Race". (21)

It is also well documented that solar and fire worshipping priests called the Magas were Maga Brahmins were brought to Saurashtra by the ruler Samba. The Magi were priests of the Persians, Bactrians, Charismians, Aryans, and Sakas. (22) Their roles were to install, ritually empower images of the sun god, and tend the altars in Saurashtran temples. The *Puranas* frequently state that the Maga or Zoroastrian Brahmins were brought from Sakadvipa, an area between the Caspian Sea, eastern Iran and southwestern Afghanistan.

(23) Sun god temples were spread throughout Saurashtra, present-day Gujarat and Rajasthan states, Sind and Punjab in present-day Pakistan. Many Zoroastrians were driven into India by Arab/Muslim invasions of the seventh century, and many Zoroastrian priests from eastern Iran were settled in Punjab, Sind, and Rajasthan. (24) In the ninth century AD Arabs conquered Sind, then established themselves in Kutch, then Saurashtra, which they called "Sorath" for sun worship. (25) Because of the region's harsh climate, the Muslims consolidated their power in Ahmedabad, and left the countryside/rural areas to the semi-nomadic herders and cultivators. Sometime after the fifteenth century, the Kathi established themselves in Saurashtra, acquired lands, and then the region became known as Kathiawad or Kathiawar. By the latter half of the nineteenth century, Kathiawar was ruled by 188 separate states. (26)

By looking into the Kathi's historical roots, we can more clearly connect the archaic solar elements in their embroideries with Seistan. Scholars do not agree on the Kathi's early history, but the earliest mention that connects the Kathi to Seistan states that they were driven out of Seistan by an Assyrian king in 1130 BC. (27) Some historians suggest that the Kathi were of Saka/Scythian origin. But many writers have confused the Saka and Scythian by massing these related groups into one. To sort out if the Kathi were Saka or Scythian is almost impossible, but the Kathi do not call themselves Saka. The correlation of the Kathi with the ancient nomadic Saka probably comes through the Kathi's historical connections with a land called Sakadwipa, also called Sakatai, or Chaghtai. While the ancient Greeks and Romans used the indefinite term Sakae to describe groups of nomadic tribes ranging from north of the Black and Caspian Seas eastwards to Mongolia, (28) other sources specifically state that Sakadwipa was located in Seistan. The Hindu *Puranas*, written from the sixth to sixteenth centuries AD mention Sakadwipa as a place where the inhabitants worshipped the sun. (29) Further records of no specific date indicate that the Takshak, the Gete (or Jat who are descended from the Scythians), the Kamari, the Kathi, and the Hun migrated from Sakadwipa (Seistan), into northern Sind. (30) We know that the Kathi people once lived between the Ravi and Beas rivers in Punjab. Their capital was Sangala, in northeast Punjab near the India border of Himachal Pradesh. (31) Around 325 BC, when Alexander passed through present-day Pakistan, the Kathis were already widely settled northeast of Multan, the ancient center of sun worship. The Kathi were overthrown in a great battle near Multan around 526 or 544 AD. (32) They left Multan and by 1196 had settled near the Araveli Mountains stretching from northern Saurashtra to and south-central Rajasthan, also called Mewar. Here, they intermingled with the Gehlot, an ancient branch of Rajputs who were partly Aryan, partly Scythian, partly indigenous and worshipped the sun. (33)

By the nineteenth century, Kathi/Gehlot/Rajput descendants claimed ancestry from the Bala or Bali people who occupied Balhara in the Araveli Mountains; perhaps this refers to the where the Kathi settled seven hundred years earlier. (34) According to Col. Tod, the Bala claimed ancestry from the Induvansa, who were originally a "Scythic" race of sun worshippers from Multan. (35) Sometime in the late sixteenth century, the Kathi became prosperous landowners, and by the nineteenth century, the Rajputanized Kathi peoples became Hindus devoted to Shiva. Interestingly, in the early stages of Vedic Hinduism, Shiva was the god of the setting sun. So, while the Kathi may have forgotten

their oldest origins, their history shows a long line of sun worship, which is perhaps not unlike the pre-Islamic, solar/fertility/regeneration-based beliefs of some other Southwest and Central Asian peoples.

The notion of solar /astral/ fire worship and cultic reverence for natural forces seems remote to us in our industrialized, high technology-supported lives. We don't think too much about our relationship with the sun, except perhaps to avoid a sun burn or to decide what to wear. However, reverence for the powers of nature is ancient and widespread. The sun, moon, stars, water, earth, fire and other elements figured prominently among many ancient people, and was intertwined with agriculture, migratory herding of animals, the changing seasons, fertility and regeneration. Because the sun promotes plant growth, restores light to darkness and returns anew every morning, it has been a powerful metaphor for renewal, perpetuation and the promotion of fertility for numerous millennia.

In Kathi textiles, the symbols and images were purposeful. Textiles are frequently filled with sacred or protective powers and imbued with the maker's soul force. Embroidery was such an important aspect of daily and ritual life among agricultural and pastoral people, that textiles like the ones made by Kathi people were deeply connected to all important rites of passage, religious and social aspects of life. The forces of nature were called upon to provide life sustaining, fertility protecting powers for important rites of passage like births, marriages, and funerals.

Archeological evidence of sun and nature cults are found in the Americas, Egypt, Iran, Southern Europe, the Indus Valley, and China. South and southwest Asia's history is rich, as well, with ancient sun worshipping cultures. The deified sun has had many names- Ra or Aton in Egypt, Ashur and Shamasha in Babylonia, Marduk in Assyria, Helios to the Greeks and Apollo to the Romans, Mithra among post- Zoroastrians, the same as the Vedic sun god Mitra.(36) Many early solar deities worshipped in the Mesopotamian kingdoms of Elam, Babylonia and Assyria were clothed with appliquéd sheet gold cut-outs of rosettes, stars, squares, rings and stepped crosses. This practice began as early as the 14th century BC. (37)

The archaic repertoire of Kathi embroideries synthesized influences from Zoroastrianism, Mesopotamia, trade with the Egyptians, and dispersions through the Greeks and other peoples of the Mediterranean world. Many images and symbols from these cultures are echoed in the textiles of not only the Kathi, but among other people who shared ties to eastern Iran. Solar and astral symbols are still seen throughout the farming regions of Central Asia and parts of Kutch, as people adorn their dwellings and material culture with fertility-based solar images.

The Kathi were probably the oldest embroiderers in Saurashtra, (38) and their motifs were echoed in sun temple carvings. Kathi sun disks are often depicted with alternate blocks of *koliphul*, ancient eight-pointed stars associated with solar worship. Other archaic images included concentric suns, variations of lotus flowers, circular centers with eight radiating lines, quadrant-divided circles and squares, diamonds, checker patterns, and stepped crosses. These motifs have been seen throughout the material culture of some

people from Seistan, Bactria and Khorezm, the area to the north. A closer look at these images and some meanings follows.

Solar images: The sun is the only visible god, which is manifested through light, luster, rays of light, and shadow. (39) Sunlight is often believed to be the source of life, knowledge and spiritual wisdom. The sun establishes time, the rhythm of life through day and night. And through fire, golden sun-like light illuminates darkness. Light and primal fire exist in pure time, and were believed by many to be the source of all. Light and darkness, fire and water are great polarities which symbolize the universe. (40) Suns are represented by circles, and while many are solar representations, not all are. Rosettes, crosses inside circles, sun heads with stick-like human figures, wheels, chariots, horses and horse-drawn chariots evolved to represent notions of sun, time, and regeneration. In Zoroastrianism, Asha who is sometimes called Lady Sun, the great light or the eternal truth has always been depicted and made visible by a circle. (41) In India, the lotus/water lily flower, which opens and closes with the rising and setting sun is an ancient solar symbol In India. The eight-petaled lotus or circle, called *sunya-murti* was prominent in the *Rigveda* writings from over 3,000 years ago. (42) The worship of the Sun God through an eight-petalled lotus flower drawn on the ground was proscribed in the most ancient Sanskrit literature. (43) Even today, many solar rosettes contain eight petals or rays. During the Kushan empire which spread from Afghanistan to the Indus between 500 B.C. to 500 A.D., Buddhist motifs entered regional design vocabularies. Circular lotus and mandala motifs mingled with the more ancient solar/lunar/ floral medallions, and appeared alongside other images associated with ancient cults of natural forces. Over time, solar symbols and images became progressively complex to represent the solar deity in human form. Anthropomorphic representations of the sun and all its associations also came into India through the Indo-Greeks and Kushans. (44) Later, the twelve-petalled lotus became associated with Surya, the emerging Hindu sun god. Henceforth, the number twelve became important as it related to the twelve Adityas or deities associated with Surya, which were further correlated with the months of the year. (45) In time, many of the Vedic sun gods lost their solar nature and became independent gods of the Aryan pantheon.

Quadrants: Swastikas are extensions of the circular sun image and convey time, space and the reproductive force. Swastikas are ancient and Indus Valley seals with them have been found dating to around 2500-1750 BC. (46) The right-hand swastika, made from two lines intersecting at right angles, rotates east to west or counter-clockwise. It is the symbol of light and day, and its four points indicate the sun at North for midnight and human regeneration; East for sun-rise and the beginning of life; South for noon and the prime of life; and West for sunset or death. The swastika visually and iconographically relates to quadrant-divided circles and squares. Perpendicular and horizontal intersecting lines symbolize the cardinal directions or the life cycle; diagonally intersecting lines indicate the two equinox and two solstice, therefore representing the four seasons; and both sets of intersecting diagonals symbolize the four seasons and cardinal points, or the unity of time and space. Essentially, these symbols represent cyclical thinking oriented toward the east/west or sun rise/sun as a regenerative principle. (47)

Organization and Numbers: Simple units divided into four or eight equal parts can represent complex principles. Often, solar / regenerative symbols are represented with eight equal, radial or symmetrical parts like the eight-petalled lotus and the eight-pointed star. The main field of Kathi textiles are often divided into either four, nine or twelve parts. The nine compartment composition is called *nava-khanda*, (48) and the number nine is highly symbolic in India of the sun god. In India, there are nine planets, and the sun is always centered and surrounded by the eight planets. Archaic Kathi embroideries are strikingly geometric, which reflects a distinct philosophical sense of order. Perhaps this order was inspired by Zoroastrian thought, where geometric shapes created an earthly order that refers to the higher manifestation of the Divine order. (49)

Stepped Crosses and Crenellations: Associated with protection, these symbols represent the purifying powers of sun/fire light through association with fertility deities who at one time were solar/astral deities, and through stylized depictions of light rays. A sacred seal with crenellated-edged, eight-pointed stars was discovered in the archeological site of Togolok in the Kara Kum desert dating to the second millennium BC. Some say this place was the origin of Zoroastrianism. (50) Other finds there included ceremonial heavy metal disks with crenellated cut-out diamonds, triangles, stair-stepped crosses and sun shapes. These objects are considered to convey early Zoroastrian principles, (51) and are seen in the Kathi's archaic design repertoire. Stepped-crosses and zig-zag edged shapes are depicted in Assyrian bas reliefs on the clothing of solar deities, soldiers wearing loin cloths, and on military equipment like siege engines, battering rams and chariot boxes. Crenellated and stair stepped designs were well known in Mesopotamian iconography for their apotropaic functions, (52) as Ashur, the old solar god of Assyria, evolved as the protector of armies and soldiers. (53) In India, stepped crosses are sometimes painted around windows and above doors of homes to bring luck and to honor Vishnu, who was at one time a solar deity associated with the setting sun. (54) Stepped-crosses are frequently depicted with other solar/regenerative and protective images, and often merge into checker patterns, which we will return to..

Eight-pointed Stars: The eight-pointed star is sometimes known as the star of the Magi. As a solar motif of great antiquity, it is also known as the eight-horned sun image. Some examples date to 4300 BC. (55) The Kathis introduced the *koliphul*, or eight-pointed star into Saurashtra. The *koliphul* is defined as a geometric pattern consisting of a square divided into nine smaller squares, which are further subdivided into triangles. (56) As we have seen, the number nine has solar connotations. In Mesopotamian cultures, the motif was believed to have originated in Sumer, (57) where it was associated with the Babylonian /Assyrian fertility goddess Ishtar, wife of Ashur, the sun god. Ishtar was also associated with Venus, which was viewed as both an evening star and a morning star - a duality that parallels Ishtar's associations with both summer fertility and winter barrenness. (58) Old Babylonian motifs known for their protective functions included the eight-pointed star, the six-petaled rosette, and crenellated patterns, all connected to "the cult of the foremost goddess of the Mesopotamian pantheon." (59) Garments decorated with gold-leaf appliqué star and rosette metal platelets were reserved for Assyrian gods and kings only. The images imbued the garments with sacredness and later appeared in Sasanian (226-641 AD) pattern woven textiles. From Iran these motifs reached

Byzantium, and were then diffused into Europe, while another route carried the motif from Mesopotamia through Syria and Egypt into the Mediterranean world. (60) From Buddhist pictorial art and Indian influences of the fifth to sixth centuries AD the Buddha was depicted inside circles and hexagons. "Gradually these circles and hexagons became symbols of the heavenly Buddha, and ..."many developed into rosettes and eight-pointed stars - motifs that were retained in the tenth and eleventh centuries by the Turkic Islamic Seljuks, who carried them to Persia and Asia Minor." (61)

Checker Designs: Check patterns are widely seen in Kathi, Kutch, Sind embroideries, and others. Many check designs have straightforward solar connotations, while others are subtly related as floral/fertility motifs. Among the Rabaris of Kutch and Saurashtra, alternating dark/light checks, sometimes with a diamond in the center, are called *baporiya*, meaning sun. (62) Commonly color changing blocks or checks create diamond and stepped-cross shapes. One of the most interesting observations of a checkered design with solar worship was made by Sir George Robertson in *The Kafirs of the Hindu Kush*, written in 1896. (63) Indo-Iranian, *Avesta* and *Vedic*-based Iranian priests built and oversaw the main temple for Nuristan, which was a type of solar observatory. The temple was dedicated to the supreme Creator god Imra and Disni, the fertility goddess. Robertson noted a square cloth with checkered patterns placed on the west wall above the square fire altar, and similar designs painted on the south. The god Irma, located in the northeast corner, was touched by a sunbeam at sunrise on the shortest day of the year, and the goddess Disni, was struck by a sunbeam from an opening in the east wall at the summer solstice. Years later, a model of the temple and astronomical and computer calculations showed that the patterns in the checkered cloth which Robertson saw on the western wall "conformed to patterns of sunbeams made at the spring and fall equinox." (64)

Diamonds and Triangles: Diamond shapes are formed from color arrangements in checker patterns, and when two triangles are placed one next to the other. Smooth and stepped- diamond patterns are found in Kathi embroideries, as well as in Central Asian felts, carpets, embroideries and wall paintings. Snesev tells of a ritual food in Khorezm that is formed into diamond shapes called *bogursak*. The food is made from the white grains of the first harvest, which is associated with fertility. The white color is important for its associations with light, stars and ancestors. This ritual food accompanies rituals associated with the cult of dead, of ancestors, and new crops. (65) Both diamond and triangle shapes have strong regenerative properties and associations with the feminine principle. Single and multiple triangle points are equally ancient motifs. Mesopotamian saw-toothed rows (crenellations) are documented for their associations with solar deities and rays of solar light. *Tumar*, *moska*, or *doga* triangular shaped amulets used by the Turkoman and Uzbeks of Central Asia to protect fertility in particular. Kathi textiles are usually enclosed within protective borders of triangles called *ganas*, (66) or *kangari*. (67) In Sanskrit, the word *gana*, meaning troop or flock brings up several connotations: the military association from Mesopotamia and the other meaning of the word, which is "a small group of deities". (68) Among the recognized *ganas* are the Twelve *Adityas*, twelve solar deities or twelve months, which clearly show the solar connections of this word.

The Moon and Stars: Although not a prominent motif in Kathi textiles, the moon is been extremely important in the belief systems and material culture of many people. The moon is often viewed as the consort of the sun, widely equated with fertility goddesses, and symbolically important for its waxing and waning phases symbolizing polarities like death and resurrection. Moon and star light emanate light from the sun. To extend this thinking, whiteness or lightness has been very important in protecting fertility. Like the moon, stars illuminate night and were considered portals of light through which souls descended to earth. In this regard, they were strongly associated with ancestors, because when people died, it was believed that their divine sparks or souls returned back to the sun. (69) Twinkling stars give hope, and with their white light have been regarded in Zoroastrian and other pre-Islamic beliefs to be soldiers that protect the earth and beings from evil. (70)

Polarities: Astral light (goodness, purity) set against the dark of night (evil, impurity) is the great cosmic polarity and dominant theme found throughout the world. In Central, Southwest, South Asia, this duality of nature stems from the ancient Iranian/Mesopotamian religions. (71) Heavenly solar/astrol lights in the form of brightness, whiteness, and warmth alleviated the "terrors of primal darkness" associated with the cave, womb, death, coldness, winter. (72) In Kathi embroideries, light-reflective surfaces contrasted to dark backgrounds. Perhaps the choices of silky materials, directional stitches, colors and small mirrors at one time served similar purposes. There are interesting relationships between mirrors, light, darkness and concepts of protection and resurrection. With their abilities to dazzle and reflect light into dark, evil influences were dispelled or at least mediated. In ancient times, mirrors brought metaphoric light into the darkness of the tomb, thereby promoting renewal, like the sun rising in the east after its night journey towards renewal. (73)

Red: Zoroastrians and Achaemenian Persians used the color red and rosettes to symbolize the sun. The round shape, radiating petals, and color of the red rose suggested the heat and rays of the sun. (74) Red is also associated with the Hindu sun god, Surya. In ancient times, his skin and garment color was called "pusparaga", for bright red. (75) In Khorezm, Central Asia there is a festival associated with the red rose and red tulips. The flowers are the embodiment of nature reborn and of spring planting. (76) In Kathi embroideries, red is the predominant color. The color by itself, is an aniconic reference to the sun.

To conclude, by the nineteenth century, archaic solar/fertility motifs began to disappear. While we might never know exactly what some of these motifs meant to Kathi embroiderers, there are interesting parallels with other solar/astrol motifs and associations. We know the Kathi worshipped the sun; we have evidence of the Kathi's migrations and probable origins in Seistan, near the birthplace of Zoroastrianism and more ancient solar religions. Most eloquently, through the old Kathi embroideries we can more fully appreciate what's on the surface, as well as the deeper meanings that come shining through.

1. J.M. Nanavati, M.P. Vora, and M.A. Dhaky, *The Embroidery and Beadwork of Kutch and Saurashtra* (Gujarat: Dept. of Archeology, 1966), 18.
2. Jyotindra Jain, *Folk Art and Culture of Gujarat* (Ahmedabad: Shreyas Prakashan, 1980), 32-33.
3. Santipriya Mukhopadhyay, *Catalog of Embroidered Textiles from Cutch and Kathiawar in the Indian Museum* (Calcutta: Indian Museum, 1983), 14.
4. Jain, *Folk Art and Culture of Gujarat*, 5.
5. Nanavati, *The Embroidery and Beadwork of Kutch and Saurashtra*, 83-84.
6. Nanavati, *The Embroidery and Beadwork of Kutch and Saurashtra*, 17-18.
7. Judy Frater, 1995 *Threads of Identity* (Ahmedabad: Mapin, 1995), 94.
8. Nanavati, *The Embroidery and Beadwork of Kutch and Saurashtra*, 17, 26, 33.
9. Mukhopadhyay, *Catalog of Embroidered Textiles from Cutch and Kathiawar*, 5.
10. Capt. H. Wilberforce-Bell, *The History of Kathiawad From the Earliest Times* (London: William Heinemann Publisher, 1916), 6.
11. W. Crooke, *The Native Races of India: Races of Northern India* (Delhi: Cosmo Publications, reprint 1973), 4-5.
12. Crooke, *The Native Races of India: Races of Northern India*, 5.
13. Mukhopadhyay, *Catalog of Embroidered Textiles from Cutch and Kathiawar in the Indian Museum*, 3-4.
14. Mukhopadhyay, *Catalog of Embroidered Textiles from Cutch and Kathiawar in the Indian Museum*, 4.
15. Edward Balfour, ed., *Cyclopedia of India*, Vol. III (Graz: Akademische Druck, reprint 1967), 521.
16. Mukhopadhyay, *Catalog of Embroidered Textiles from Cutch and Kathiawar in the Indian Museum*, 3-4.
17. Wilberforce-Bell, *The History of Kathiawad From the Earliest Times*, 1.
18. E. D. Phillips, *The Royal Hordes* (London: Thames and Hudson, 1965), 42.
19. Lalita Prasad Pandey, *Sun-Worship in Ancient India* (Delhi: Motilal Banarsidass, 1971), 226, 230.
20. Balfour, ed., *Cyclopedia of India*, Vol. I, 240.
21. Wilberforce-Bell, *The History of Kathiawad From the Earliest Times*, 6.
22. Balfour, ed., *Cyclopedia of India*, Vol. II, 768.
23. Pandey, *Sun-Worship in Ancient India*, 125, 184.
24. James R. Russell, "The Sun in Zoroastrian Culture", *The Sun: Symbol of Power and Life*, Madangheet Singh, ed. (New York: Harry N. Abrams, Inc. 1993), 242.
25. Jain, *Folk Art and Culture of Gujarat* (Ahmedabad: Shreyas Prakashan, 1980), 82.
26. Balfour, ed., *Cyclopedia of India*, Vol. III, 521.
27. Crooke, *The Native Races of India: Races of Northern India*, Vol. III, 179.
28. Balfour, ed., *Cyclopedia of India*, Vol. III, 555.
29. Balfour, ed., *Cyclopedia of India*, Vol. I, 494.
30. H.T. Lambrick, *Sind Before the Muslim Conquest* (Hyderabad: Sindhi Adabi Board, 1973), 113-115 and 23-23 for details of peoples and migrations.
31. Crooke, *The Native Races of India: Races of Northern India*, Vol. III, 178.
32. Balfour, ed., *Cyclopedia of India*, Vol. II, 556.
33. Balfour, ed., *Cyclopedia of India*, Vol. II, 521 and Vol. III, 349.
34. Balfour, ed., *Cyclopedia of India*, Vol. I, 241.

35. Lieut.-Col. James Tod, *Annals and Antiquities of Rajasthan*, Vol. I, (Delhi: D.K. Publishers, reprint 1993), 131, 134.
36. Pandey, *Sun-Worship in Ancient India*, 1.
37. Leo A. Oppenheim, "The Golden Garments of the Gods", *Journal of Near Eastern Studies*, 8, (Chicago: University of Chicago Press, 1949), 172-193.
38. Nanavati, *The Embroidery and Beadwork of Kutch and Saurashtra*, 18.
39. Sheo Bahadur Singh, "Surya: Universal Sun God", *Arts of Asia*, Nov./Dec. (Hong Kong: 1994), 87.
40. Karl Jetmar, *Cultures of Hindukush* (Wiesbaden: Franz Steiner Verlag, 1974), 16.
41. Herman Vahramian, 1996 "Lady Sun", *FMR*, 80 (Milan: 1996), 120.
42. Madangheet Singh, *The Sun: Symbol of Power and Life* (New York: Harry N. Abrams, 1993), 179.
43. Stella Kramrisch, *Unknown India: Ritual Art in Tribe and Village* Philadelphia: Philadelphia Museum of Art, 1968), 65.
44. Shakti M. Gupta, *Surya: The Sun God* (Bombay: Somaiya Publications, 1977), 4-5.
45. Gupta, *Surya: The Sun God*, 5, 14.
46. Pandey, *Sun-Worship in Ancient India*, 3-4.
47. Dieter and Reinhold Schletzer, *Old Silver Jewellery of the Turkoman* translated by Paul Knight, (Berlin: Dietrich Reimer Verlag, 1984) See 36- 40.
48. John Irwin and Margaret Hall, *Indian Embroideries*, Vol. II. (Ahmedabad: Calico Museum, 1973), 22.
49. Jetmar, *Cultures of Hindukush*, 13.
50. Victor I. Sarianidi, *Die Kunst des Alten Afghanistan* (Leipzig: 1986), 204, fig 10-3.
51. Sarianidi, *Die Kunst des Alten Afghanistan*, 209, fig. 15.
52. Oppenheim, *Journal of Near Eastern Studies*, (8), 190.
53. Morris Jastrow Jr., *Aspects of Religious Belief and Practice in Babylonia and Assyria* (New York: Benjamin Blom, reprint 1971), 52.
54. William Tyler Olcott, *Sun Lore of All Ages* (New York: G.P. Putnam's, 1914), 163.
55. Ahmad Hasan Dani, "The Sun God in South Asia" *The Sun: Symbol of Power and Life*, Madangheet Singh ed., (New York: Harry N. Abrams, 1993), 153-155.
56. Irwin and Hall, *Indian Embroideries*, Vol. II, 211.
57. Jastrow, *Aspects of Religious Belief and Practice in Babylonia and Assyria*, 217-218.
58. Jastrow, *Aspects of Religious Belief and Practice in Babylonia and Assyria*, 69.
59. Oppenheim, *Journal of Near Eastern Studies*, (8), 191.
60. Oppenheim, *Journal of Near Eastern Studies*, (8), 191.
61. *Encyclopedia Britannica*: Central Asian Arts- Kushan:
<http://www.britannica.com/bcom/eb/article/5/0,5716,108785+1+106127,00.html>
62. Frater, *Threads of Identity*, 162.
63. Sven Castenfeldt, "A Pre-Muslim Temple in Kafiristan", *Proceedings of the Second Hindukush Cultural Conference* (Karachi: Oxford University Press, 1996), 109-114
64. Castenfeldt, *Proceedings of the Second Hindukush Cultural Conference*, 116.
65. G. P. Snasarev, "Remnants of Pre-Islamic Beliefs and Rituals Among the Khorezm Uzbeks", Part 8, *Soviet Anthropology and Archeology* (13) No. 1, (White Plains: International Arts and Sciences Press, 1974), 14- 22.
66. Irwin and Hall, *Indian Embroideries*, Vol. II, 210.
67. Frater, *Threads of Identity*, 208.

68. Balfour, ed., *Cyclopedia of India*, Vol. I, 1167.
69. Snesev, Part 5, *Soviet Anthropology and Archeology*(11) No. 3, 244.
70. Jetmar, *Cultures of Hindukush*, 32.
71. Gerd Gropp, "Thus Spake Zarathustra?" *Hali* (74) p. 96.
72. Schletzer, *Old Silver Jewellery of the Turkoman*, 24.
73. Victoria Z. Rivers, *The Shining Cloth* (London: Thames and Hudson,1999), 63-67.
74. Russell, *The Sun: Symbol of Power and Life*, 242.
75. Pandey, *Sun-Worship in Ancient India*, 126.
76. Snesev, Part 8, *Soviet Anthropology and Archeology*, (13) No. 2, 5-6.



Pis siyabet from Jolo Island, Sulu Archipelago. Interlocking tapestry weave of silk. Warp 36", weft 34". Private collection. Photograph by Mike Zens for Material Possessions.

CONVERSING WITH THE COSMOS

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This paper focuses on the silk tapestry headcloths woven by Tausug peoples from the Philippine Sulu Archipelago. Called *pis siyabet*, they captured my attention because they diverge so wildly from the cotton or *abaca* warp ikat weaving one associates with indigenous peoples from the Philippines and Indonesia. Their material, structure, motif and color fly in the face of local tradition. The dense complexity created by their interlocking square, triangle and diamond motifs suggests cosmic mazes – treasure maps to the unconscious. *Pis* puzzle us and compel our imaginations.

Some history is in order. The Philippine Archipelago was first peopled during the Pleistocene when it was connected by land bridges with the Southeast Asia mainland. What became the Sulus offered a warm climate, access to water trade, fertile volcanic soils. It wasn't surprising that more people followed: voyagers in outrigger canoes from the Indonesian islands in 3000 B.C., Malay headhunters beginning in 300 B.C., and Chinese trader-adventurers in the 10th century.

About 800 years ago the people we now know as Tausug (“people of the current”) migrated from northeast Mindanao southwest into the Sulus, perhaps in response to increasing Chinese trade in that area. There they encountered Samal peoples of Malay origin on neighboring islands and shortly came into contact with Muslim missionaries and Arab traders who were establishing footholds. Those meetings bore fruit: the first Sulu Sultanate was founded in 1450.

The Sulu Archipelago in the southern Philippines stretches from the southwest tip of Mindanao to the northeast coast of Borneo. National Geographic Society map.

From their historical beginnings in the Sulus, women wove. Philippine textile authority Marian Pastor-Roces indicates that weaving is documented from the 14th century, and that early Tausug settlers adopted neighboring Samal dress and color preference, adding green and blue to their original palette of black, white, red and yellow.¹ While we don't know what they were weaving, we do have records of what textiles Tausug were buying and wearing. Fourteenth century Yuan Dynasty annals describe Sulu natives dressed in turbans and trading their pearls for "Pa-Tu-La cloth."² Magellan's diarist reported the ritual use of patola in the southern Philippines in 1521.³ As late as 1837, American Charles Wilkes relates that Tausug wore patola as protective "cumberbands" or thrown across their shoulders.⁴

Trade with China was quickly formalized, and by the early 15th century the Sulu Sultanate was sending tribute to the Ming Emperor. When three kings from Sulu visited the Chinese court in

1417, the Emperor bestowed gifts of silk clothing upon them.⁵ Chinese trading junks sailed under the Sultan's protection, so were spared from piracy and slave raids. In return, Sulu received vast quantities of Indian and Chinese trade cloth. Silk was first traded from China in these early centuries, and it's likely that tapestry weaving also was introduced by imitating Chinese examples.⁶ Robyn Maxwell points to striking examples of brightly-colored tapestry cloth made by Bajau, Yakan and Tausug peoples of the Sulus who experienced centuries of direct Chinese trade.⁷

This commerce flourished for over 400 years – sometimes augmented, sometimes thwarted by the trade with European colonial powers – until the Spanish achieved naval superiority and established a garrison at Jolo in the late 19th century.

Explorers and commercial diarists have left us compelling descriptions of Tausug dress from very early days. A Yuan Dynasty annual compiled by Kiang Si in 1349 states that both the men and women of Sulu "...bind a black turban..."⁸

Another Chinese diarist, Ma Huan, describes the men of neighboring Malacca wrapping their heads with square kerchiefs in 1433.⁹ By the time English civil servant Alexander Dalrymple negotiated trade privileges with Sultan Muizz ud-Din of Sulu in the mid-18th century, fine Coromandel cloth – particularly "brightly colored handkerchiefs" – was bringing 100 to 200% profit when traded in the Sultanate.¹⁰

Indian textiles from the Coromandel were still popular in J. Hunt's account of an 1814 expedition. "As a head dress," he noted, "most of the Sulo men prefer the pulicat red handkerchief; a few only the fine Javanese handkerchief; which they wear tied round their heads, after the Malay fashion...they wear an immense long cummerband, generally a Surat patoli, which they throw across their shoulders or wrap round their waists...The lowest slave, in this respect, vies with the datu in splendor of apparel."¹¹

This sartorial exuberance is repeated in British traveler John Foreman's description of a late 19th century Sultan: "His Highness was dressed in very tight silk trousers, fastened partly up the sides with showy chased gold...buttons,...a red sash around his waist, a kind of turban, and a kris at this side. His general appearance was that of a Spanish bull-fighter with an Oriental finish..."¹²



Early 20th century photograph. Three men in the front row wear tapestry-weave sashes, called kambut. The man on the left appears to be wearing a pis headcloth. Previously unpublished image by an unknown photographer.

Let me backtrack to consider headcloths generally. From at least the 15th century the custom of tying meter-square cloths – as opposed to wrapping long lengths of cloth turbans around one’s head – spread throughout insular Southeast Asia.¹³ This was an Islamic practice that linked the Muslim’s modesty before God with indigenous veneration of the head. The older Southeast Asian tradition of *adat* – or customary law – regards the head as the seat of a person’s power, creativity and soul force. Headhunting originated in an effort to capture that energy for oneself, and many peoples of the Philippines honored the successful warrior by allowing him to wear a square, red-saturated headcloth.¹⁴ When this early idea of the head’s potency was married to later Islamic injunctions forbidding an uncovered head, headcloths assumed critical significance.

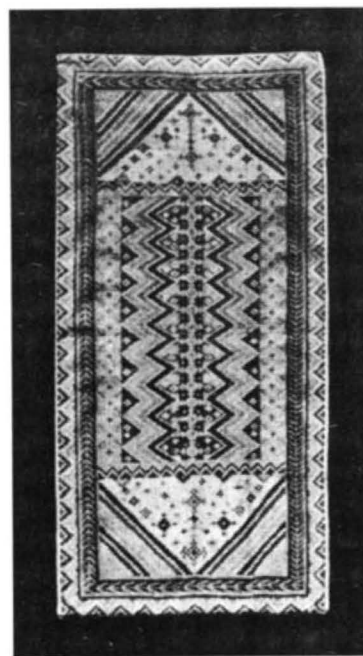
Areas of insular Southeast Asia where Islam overlays *adat* embraced the square headcloth enthusiastically. One sees it in Sumatra, in Java, in Malaysia and throughout the Muslim Philippines executed in different materials and techniques. In Sumatra men wear square headcloths ranging from simple black cotton through elaborate silk ikat. In Malaysia gold *songket* cloths achieve Byzantine artistic heights as specific color, design and methods of fold designate one’s region and status. On Java, square cotton headcloths batiked with writings from the Qur’an protect their wearers from harm.

So we see that, while status and identification are important elements of binding one’s head in a square cloth, spiritual invocation is also a critical component of the practice.

We know, too, that square headcloths were important to the Tausug from the 15th century. Less clear is when Tausug women began to weave silk into the tightly geometric, border-within-border, carpet-like motifs we today associate with *pis* or what sources might have inspired their designs.

The first question – when were *pis siyabet* first woven on Jolo – is intriguing. Given the relatively detailed verbal descriptions and images that survive from the past 500 years, it is odd that not one mentions such a distinctive piece of wearing apparel or depicts it accurately until the turn of the last century. One can see that all three men in the front row of this early 20th century photograph wear tapestry woven sashes. The man on the left also seems to be wearing a *pis*. In another detail from the same photograph, the men on both the left and the right in the first row are wearing *pis* headcloths twisted and wrapped in headband fashion.

Linguistic evidence also suggests a comparatively recent introduction for these weavings. Pastor-Roces tells us the Tausug words for sash (*kambut*) or the longer cloth (*kendit*) – pieces of apparel that were also woven in silk interlocking tapestry – pre-date the tapestry-weave cloths we are familiar with today.¹⁵ That is, the words describe older textile forms. Again, we remember that many 18th and 19th century diarists mention the “red sashes” or *patola* that Jolo men used to wrap around their waists. None, however, mention polychrome sashes that might describe the *kambut* we think of now, nor do they refer to the other distinctive garments Tausug women produced in silk tapestry weave: the *patadyong* tube skirt or the rare prayer mat pictured here. Both the absence of such



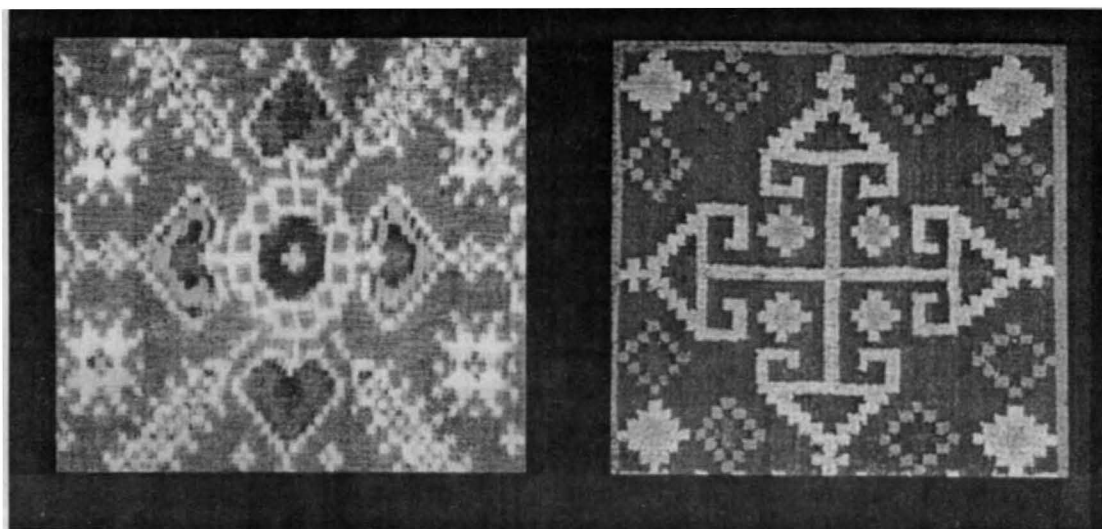
Tausug prayer mat (?) of silk tapestry. Photograph by Linda Beeman.

descriptions and the linguistic data point to a relatively new introduction of locally-made silk tapestry cloth in the Sulus. It's conceivable that the *pis*, *kambut* and *patadyong* we see today began to be woven as recently as the mid-to-late 19th century.

The gaps in our knowledge are extensive. Political and economic strife in the Sulus have made travel there difficult. What research has been accomplished has not focused on textiles. Still, we might infer that breaks in trading patterns caused by political and economic shifts stimulated Tausug women to imitate the technique of tapestry weaving and to incorporate motifs from important textiles that were not as widely available as they once had been. During the mid-to-late 19th century period we are considering, the Spanish colonial government in Manila did disrupt Tausug trade by stepping up its efforts to bring the Muslim south under its control. These efforts included an attack on Jolo in 1851, a maritime blockade of the islands beginning in 1871, and the eventual capture and establishment of a garrison at Jolo in 1876. The shortages associated with this siege may have inspired a renaissance in Tausug weaving to replace trade cloths that were becoming increasingly scarce.

Later disruptions were caused by World War II, when silk yarns became difficult to obtain, and by tighter Philippine government border controls imposed after that war. It has been thought that more easily available cotton was introduced for the warps of Tausug weaving about this time. However, early 20th century examples in Seattle's Wing Luke Museum and Santa Fe's Museum of International Folk Art indicate that cotton warps were used as early as 1917 and 1927 respectively.¹⁶

Perhaps the Spanish-imposed economic pressures also forced the looser weave and larger design motifs we begin to see at the beginning of the 20th century. The pieces from the International Folk Art Museum were collected in the Philippines in 1927. All employ magnified motifs in a more loosely-woven structure and brighter colors than earlier examples. We see yellow and blue added to the older palette of orange, purple, green and pink. Greens become more bluish in the



Details of pan leaf motifs from (left) a Vohra gaji bhat patolu sari and (right) a pis siyabet showing Tausug weavers copied patterns from Indian trade cloths. Left photograph by Linda Beeman. Right photograph by Don Cole for UCLA's Fowler Museum of Cultural History.

20th century pieces. While it's unclear whether natural dyes were used in earlier textiles, organic sources for pinks, purples, fuschias and oranges were certainly available in the Philippines in the 19th century.¹⁷ The later cloths are striking textiles, but they show us that Tausug weavers had reduced both the cost of their material and the time they spent at the loom.

Earlier I alluded to the importance of patola in the Sulu Archipelago. Patolu motifs like the heart-shaped *pan* leaf seen in the image on the left are mirrored in the detail from a Fowler Museum *pis* on the right. This is the same leaf, incidentally, that betel chewers use to wrap their mildly narcotic areca nut and lime. The stepped cross and its “snowflake” elaboration that are documented by Alfred Buhler¹⁸ are also readily apparent in Tausug *pis* headcloths. Finally, the eight-point star appears in both textile forms.

It's important to remember that 16th and 17th century Sulu nobility wore their patola over their shoulders or wrapped round their waists for protection. This practice was also followed by neighboring Samal, Yakan and Maranao peoples. Yakan men wrap a sash of red cotton – up to 25 meters long – round their waists. This bulk protected the vulnerable parts of their bodies in combat.¹⁹ A Maranao epic poem, the *Darangen*, describes square, embroidered cloths called *mansala* that were ordinarily worn over the shoulder, but would be tied around the waist during battle to cover the navel – site of the warrior's spirit. *Mansala* could even restore life to a fallen hero.²⁰ The pre-eminent cloth in these old stories, however, is the *patola* ' *kaorayan* from Maranao mythology which flies of its own accord, makes its wearer invisible and may transform itself into a deadly snake.²¹

Tausug men also wear their *pis siyabet* this way. In addition to their use as headcloths, men of Jolo fold the square *pis* on a diagonal and wear it to cover one shoulder or wrap it as a sash to bind their *kris* blades tight to their bodies.

Many contemporary writers have mentioned a connection between *pis* spacial arrangements and mandala, implying another spiritual dimension. If we think of mandala as Hindu-Buddhist representations of the cosmos, characterized by concentric configurations of geometric shapes, Tausug headcloths might qualify as square interpretations. Their symmetrical visual focus leads us through a series of outer borders into the meditative center of the textile. Then, too, the similarity between the Maranao word *mansala* to describe their mystical, square headcloths and the word *mandala* lends some credence to the idea. Further, a 14th century Buddhist figure unearthed on Mindanao following a 1917 flood suggests the early presence of Buddhism in the region.²² Again, we have no proof that mandala influenced Tausug weaving, but the theory certainly merits future research.

Telia rumal from Andhra Pradesh State on India's Coromandel coast have also been suggested as a source of inspiration.²³ However these cloths were not produced in any quantity until the late 19th century when they became popular trade items in the Deccan and Middle East. Their general layout resembles spacial arrangements of Malay headcloths worn throughout Southeast Asia. It is possible that an earlier Coromandel design prototype influenced Tausug weaving, and an 18th century *sarasa* documented in *Woven Cargoes* supports that idea.²⁴

Another possible source for the small, kaleidoscopic images we see in Tausug *pis* are talismanic garments from Islamic tradition called *antakusuma* on Java.²⁵ These, like their Buddhist *kesi* counterparts, were originally made from fragments of clothing once worn by important spiritual leaders, patched to form a prestigious new garment. For Buddhists, the patchwork symbolized humility, the acceptance of poverty and a rejection of worldly affluence. In the Islamic context, the fragments – whether patched from actual original garments or recreated in a new context – connote magical, protective qualities. If we think of *pis* as ‘quilts’ from a variety of sources –

Gujarat, Sumatra, Java and Malaysia – interpreted by Tausug sensibilities, their layout and motifs begin to resolve themselves from fragmented randomness into some kind of ritual coherence.

Finally we must ask who made these headcloths. This, too, is a cloudy issue. Anthropological studies in the mid-20th century tell us that little weaving was still being done at that time. By the late 1960s, the weaving of *kambut* sashes had disappeared entirely, and only a few women from the Jolo village of Parang were still producing square headcloths according to UC-Berkeley anthropologist David Szanton.²⁶ Frank Lebar and David Baradas report similar findings in the mid-1970s and 1990s. Pastor-Roces confirms that *pis* headcloths are still being woven today, but “...not with the mastery that was part of this tradition in the past.”²⁷

If we project backward, we can infer that the earlier *pis* – the tightly woven, small patterned, all-silk textiles – must have been costly. One would imagine they were luxury cloths accessible only to the nobility. As such, they might have been woven by wives of the Sultan or the *datus*. However Professor James Warren indicates that between the late 18th and mid-19th century Tausug women were primarily involved in administering Jolo’s trade.²⁸ Thus occupied, they may have delegated weaving to slaves or retainers talented in this work. Warren reinforces this idea by stating that Visayan women were valued as slaves for their superior weaving skills.²⁹ UCLA Fowler Museum’s Roy Hamilton also suggests captured women may have been employed in the Sulus to weave cloth used in bartering for yet more slaves.³⁰ Again, these are conjectures. Perhaps future scholars will gain access to the area in time to research the questions posed by *pis siyabet*.

In the meantime, we can appreciate these headcloths as art works that reflect a long history of intermingling cultures, religions and commerce. Tausug *pis* are repositories of a people’s political and spiritual aspirations. They speak to us in colorful images of status, power and wealth. They harness magical powers to protect their wearers and address themselves to Allah with humility and supplication. Truly, they converse with the cosmos.

¹ Pastor-Roces 1991:17 and 114. Another early Sulu oral history cites Sultan Abu Bakr’s (1450-1480) efforts to convert non-Muslim hill dwellers on Jolo by urging his followers to make rice cakes and clothing for them. See Patanne 1996:159.

² The *Tao I Chih Lueh* describes turbans worn by natives of Sulu. See Wang 1964:304.

³ Casino 1981:180.

⁴ Wilkes 1973:169.

⁵ Wang 1964:312. Also Majul 1966:349.

⁶ Guy 1986:5. John Guy points out that the sharp reduction of Chinese trade goods in Southeast Asia during the early Ming period may have stimulated the growth of local ceramic sites to supply the region’s demand. It is conceivable that the same might be true of tapestry weave textiles in areas that had imported them.

⁷ Maxwell 1990:288-291.

⁸ Wang 1964:304.

⁹ Huan 1970:110.

¹⁰ Warren 1981:44-45.

¹¹ Wilkes 1973:169.

¹² Foreman 1890:153-4.

¹³ Alliaata 1989:65-80. Alliaata cites 10th century T’ang annals describing Malaysia in which “...the noble rivalry between *kuan-t’ung-t’ien*, these cloth crowns with their enormous protuberances, began in the most remote times, before Buddhist pilgrims and merchants of the Celestial Kingdom arrived on that mythical peninsula ‘where men build extravagant hoods on their heads with their skirts.’” Also see Wang 1964:304 and Huan:1970:110.

¹⁴ Hamilton 1998:28

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- ¹⁵ Pastor-Roces 1991:139.
- ¹⁶ Museum of International Folk Art Accession Nos. FA.1972.24-20 and 22. Wing Luke Asian Museum Accession Nos. 1987.005.003, 4 and 7.
- ¹⁷ Ruurdje Laarhoven describes vegetal sources (orange derived from the bark of the *nara* tree, red from imported *curcuma*, and purple made from resin of the *lipau* tree) for many vibrant colors in Maguindanao weaving in the southern Philippines. See Hamilton 1998:147 and 152. It's also intriguing to note that Mexican cochineal was exported to Manila via Spanish galleons and may have been used in the southern Philippines for the bright pinks in Sulu textiles. See Schurz 1939:59.
- ¹⁸ Buhler and Fischer 1979.
- ¹⁹ Hamilton 1998:86.
- ²⁰ Scott 1994:167.
- ²¹ Ibid.:69.
- ²² Zaragoza 1995:333.
- ²³ Pastor-Roces 1991:124.
- ²⁴ Guy 1998:172.
- ²⁵ Ibid. 1998:102-3.
- ²⁶ Szanton 1973:32 and 65.
- ²⁷ Correspondence with L. Beeman, 3.3.00.
- ²⁸ Correspondence with L. Beeman, 8.20.00.
- ²⁹ Warren 1981:201.
- ³⁰ Hamilton 1998:84.

Selected Bibliography

- Alliata, Vittoria. "Brocade Temples – On Malaysian Headdresses," in *FMR*, No. 37, 1989, pp. 65-80.
- Blair, Emma H. and James A. Robertson. *The Philippine Islands*. Ohio: Clark Company, 1903.
- Buhler, Alfred and E. Fischer. *The Patola of Gujarat*. Basel, 1979.
- Casino, Eric. "Arts and Peoples of the Southern Philippines," in *The People and Art of the Philippines*, Casal, et. al., editors. Los Angeles: UCLA Museum of Cultural History, 1981.
- Foreman, John. *The Philippine Islands – A Political, Geographical, Ethnographical, Social and Commercial History of the Philippine Archipelago* (reprint from the third edition (1906), originally published in 1890). Manila: Filipiana Book Guild, 1980.
- Forrest, Thomas. *A Voyage to New Guinea and the Moluccas, 1774-1776*. Kuala Lumpur: Oxford University Press, 1969.
- Guy, John. *Oriental Trade Ceramics in Southeast Asia: Ninth to Sixteenth Century*. Singapore: Oxford University Press, 1986.
- Guy, John. *Woven Cargoes – Indian Textiles in the East*. New York: Thames & Hudson, 1998.
- Hamilton, Roy (ed.) *From the Rainbow's Varied Hue – Textiles of the Southern Philippines*. Los Angeles: UCLA Fowler Museum of Cultural History, 1998.
- Huan, Ma. *Ma Huan's Ying-Yai Sheng-Ian (The Overall Survey of the Ocean's Shores, 1433)*, translated by J. V. G. Mills, Cambridge, 1970.
- Hunt, J. "Some Particulars Relating to Sulo in the Archipelago of the Felicia," in *Notices of the Indian Archipelago and Adjacent Countries*, edited by J. H. Moot, 31-60 (Appendix). London: Frank Cass & Company, 1968.

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- Majul, Cesar Adib. "Chinese Relationship with the Sultanate of Sulu," in *The Chinese in the Philippines, 1570-1770*, Vol. 1, edited by Alfonso Felix, Jr., 1966.
- Marryat, Frank S. *Borneo and the Indian Archipelago*. London: Longman, Brown and Green, 1848.
- Maxwell, Robyn. *Textiles of Southeast Asia: Tradition, Trade and Transformation*. Canberra: Australian National Gallery, 1990.
- Montano, J. *Voyage aux Philippines et en Malaisie*. Paris: Librairie Hachette et Cie, 1886.
- Orosa, Sixto Y. *The Sulu Archipelago and Its People*. New York: World Book Company, 1938.
- Pastor-Roces, Marian. *Sinaunang Habi – Philippine Ancestral Weave*. Manila: Nikki Coseteng and Marian Pastor-Roces, 1991.
- Patanne, Eufemio P. *The Philippines in the 6th to 16th Centuries*. Manila: E. P. Patanne, 1996.
- Schurz, William Lytle. *The Manila Galleon*. New York: E. P. Dutton & Co., Inc., 1939.
- Scott, William Henry. *Barangay – Sixteenth Century Philippine Culture and Society*. Manila: Ateneo de Manila University Press, 1994.
- Szanton, David L. "Art in Sulu: A Survey," from *Sulu Studies*, Vol. 2, 1973.
- Wang, Teh-Ming. "Sino-Filipino Historico-Cultural Relations," in *Philippine Social Sciences and Humanities Review*, Vol. 29, No. 3-4, September-December, 1964.
- Warren, James Francis. *The Sulu Zone – 1768-1898*. Singapore: Singapore University Press, 1981.
- Wilkes, Charles. "Narrative of the United States Exploring Expedition During the Years 1838, 1839, 1840, 1841, 1842," in *The Philippine Islands, 1493-1898*, edited by Emma H. Blair and James A. Robertson, Vol. 43, 1903. Reprint, Mandaluyong: Cachos Hermanos, 1973.
- Zaragoza, Ramon Ma. *Tribal Splendor*. Manila: Ramaza Publishing, 1995.

Woven Incantations

Jasleen Dhamija

Esoteric and complex philosophical thought have been expressed by using textile terminology in India. The concept of time for instance is conveyed in the Rig-Veda, the oldest philosophical text, as the weaving of the warp and weft and thus the creation of days and nights. Tantra comes from the word tant, warp, and signifies that which stretches beyond. It is in this context that I present my paper, “Woven Incantations”. The act of weaving in itself is a powerful act. The loin loom used by women throughout the world is strapped to the waist and the tension created by the body is linked with the inner rhythm. As the weaver inhales the tension is built and the weft is beaten into the warp and as she exhales she lifts the reed creating a shed for throwing the warp thread. One of the oldest looms used in Southern Laos uses the human body as the loom. The weaver sits on the floor with her legs stretched in front of her. The outer warp beam is stretched by pushing it out with the feet while the weaving end is strapped to the body. It is an extraordinary skilled operation, which uses the human body as a living yantra, the ancient word for the loom. The very act is like a form of yoga, which controls the bio-rhythm through controlled breathing and disciplined movement of the body, which goes into a state of “dhayana”, meditation brought about by the rhythm of weaving echoing that of the body. The woven patterns emerge as a manifestation of introspective concentration. It is no wonder that the act of weaving is very closely linked with their rites of passage.

This tradition of the sacredness of the act of weaving is continued even when cloths were later woven by professionals. Most professional groups of weavers have their own legends of the origin. The Padmasalis, weavers of Southern India, have an extraordinary origin legend. Their progenitor, Bhavana Rishi appears from the ashes of a great sacrifice holding a ball of thread made from the stem of the lotus emerging from Vishnu’s navel, on whom Brahma, the God of Creation, rested. It was from this thread that the first cloth was woven and thus they called Padmasalis, the lotus born. They believe that they are linked to the umbilical cord of the God of Preservation, Lord Vishnu and only the very best can be created by them. The Ansaris, weavers of the famed Banaras Brocade and specially the designers, who created the human jacquard “naksha”, trace their origins to the Pir of the Sufi Sect of the Nakshabandis of Bokhara. The initial act of creation is a secret, which is shared by the women of the household. The first reeling of the yarn is carried out by the female head of the household in the nuptial chamber in the squatting position, normally used at childbirth. This is called giving birth to the cloth. It is the context that we have to look at the woven cloths depending upon who weaves and for whom they are woven, and for what particular occasion is it to be used.

Jasleen Dhamija has been involved with the Study of History of Textiles and Development for the last 40 years. She has lectured and worked in India, Central Asia, Iran, Africa, South East Asia, Australia, Europe and USA. She was awarded the Hill Professorship at University of Minnesota, USA and has been Resident Fellow at three universities in Australia. She has published over a dozen publications on Textiles & Living Cultural Traditions and is Chairperson of UNESCO’s Jury for Asian Award for Creativity.

Narrating Seen and Unseen Worlds: Vanishing Balinese Embroideries

Joseph Fischer

Vanishing Balinese embroideries provide local people with a direct means of honoring their gods and transmitting important parts of their narrative cultural heritage, especially themes from the *Ramayana* and *Mahabharata*. These epics contain all the heroes, preferred and disdained personality traits, customary morals, instructive folk tales, and real and mythic historic connections with the Balinese people and their rich culture.

A long *ider-ider* embroidery hanging engagingly from the eaves of a Hindu temple depicts supreme gods such as Wisnu and Siwa or the great mythic heroes such as Arjuna and Hanuman. It connects for the Balinese faithful, their life on earth with their heavenly tradition. Displayed as an offering on outdoor family shrines, a small *lamak* embroidery of much admired personages such as Rama, Sita, Krisna and Bima reflects the high esteem in which many Balinese hold them up as role models of love, fidelity, bravery or wisdom. Used as a ritual house decoration, a *tabing* embroidery that depicts the great god Wisnu astride his fierce eagle-like vehicle, Garuda, or the malevolent giant warrior, Kumbakarna, demonstrates the Balinese deep belief in the personified symbols of force and power that threaten and/or enhance their daily lives. The embroidering on these cloths of scores of ghosts, giants, nymphs, ogres, witches and weird creatures reflects a particular Balinese/ Hindu cosmos in which the Balinese strongly believe that the unseen arbitrary upper world and the seen lower one on earth are inseparable and must be seriously taken into account in ceremonies and rituals. The Balinese are also very conscious of their need for levity in daily life as a counter-play to all the uncontrollable and unpredictable forces in the seen and unseen worlds. As evidence of this, many embroideries are populated by two to four so-called clowns, no matter what the scene or story. These figures are Twalen, Merdah, Delem, and Sangut, who appear only in the Balinese version of the *Ramayana* and the *Mahabharata*. They provide comic relief and humor; they are not bound by traditional conventions of speech and behavior. They fill an important social function in that ordinary folk can participate in laughing at life's foibles, in joking with their gods and in criticizing their superiors.

These narrative embroideries are identified with a particular region of Bali and reflect major essentials in Bali/Hindu culture and religion. Now these pieces are in danger of disappearing. This paper calls attention to "endangered textiles species" and sets forth some criteria for helping to preserve textiles with significant traditional value.

Joseph Fischer has been a lecturer at Rangoon University, at Gadjah Mada University in Indonesia, and at the University of California Berkeley. He conducted doctoral studies at John Hopkins University and the University of Chicago, and has authored *Threads of Tradition: Textiles from Indonesia and Sarawak*; *Modern Indonesian Art*; *The Folk Art of Java*; and *The Folk Art of Bali*; as well as papers on children's art and Balinese embroideries.

Museum Viewpoint: Fiber Art and the Struggle for Recognition

Melissa Leventon
Lotus Stack
Suzanne Baizerman

Museums are important repositories of culture and play a key role in shaping values concerning art. Indeed, museum acceptance can validate the worth of an artwork, and is often a prerequisite for an artist's long-term success. Contemporary fiber, like textiles in general, occupies a lowly position within the hierarchy of large museums, where it constantly struggles for the position and recognition that other media are automatically granted. Smaller museums and those not focused solely on art can be more accepting, but they, too, discriminate against textiles. In order to challenge this status quo, it is essential to understand how museums operate. The panelists are curators who collect fiber art. Together we represent three different kinds of institutions -- art museums, interdisciplinary museums, and university collections -- but each of us has experienced, and sought to overcome, various challenges facing any curator trying to collect textiles. We will offer insiders' perspectives on the way museums operate, and the obstacles faced by textiles/fiber art in our differing institutional contexts. Specifically, we will discuss the often arbitrary and haphazard hierarchies that museums have used to organize themselves and pigeonhole their collections, and the ways those hierarchies have shaped collecting. We will review how art world and museum politics and economics affect fiber, and explore the ways artists, collectors, historians, anthropologists, and critics can affect museum collecting. And we will discuss ways that curators can influence and expand institutional definitions of art and textiles, despite the financial, political, and bureaucratic boundaries museums impose.

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INDIA-WEST AFRICA TRADE TEXTILES (IWATT):
‘An Escapade in the Life’ of Gujarati Mirror-Work Embroidery

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In this paper I will analyze the development of design within the several-hundred-year-old tradition of producing textiles in India for export to specific cultural markets in West Africa, in particular the appearance of Gujarati-style mirror-work embroidery within RMHK Fancy in the 1990s. I begin by describing the research process and defining RMHK Fancy.

The paper is based on ethnographic field research I completed in Madras, India on contemporary embroidery production for export to West Africa in 1997. The research addressed the question of how design and production occur in a transnational trade textile tradition¹ between India and West Africa, involving hand-embroidery,² in which cultural authentication³ marks the acceptance and use of the textiles in their destination markets.⁴

Formulation of my research plan began with the observation that though the Kalabari of West Africa require many kinds of textiles from India, including gold-embroidered velvets, for celebration of all of their life course and community rituals, the literature on Indian gold-embroidered velvets makes no mention whatsoever of the exports, either in text or pictures. A subplot of this paper, already mentioned, concerns the question of how Gujarati mirror-work embroidery appeared in one of those textiles, an RMHK Fancy, in the late 1990s. Note that Madras on the southeast coast of India is quite distant from the state of Gujarat on India's northwest side, and both are very distant from West Africa. Not only geographical distance, but language, culture, religion, and political boundaries separate these three areas.

I call the group of textiles made in India for West African markets India-West Africa trade textiles or IWATT. Two of the earliest styles of IWATT, Real Madras Handkerchief, or RMHK (Evenson 1991, 1994), and RMHK Fancy (Sumberg 1994), both maintain a format of eight (8) yard-square ‘handkerchiefs’ per cloth.⁵ RMHK is a handloomed cotton cloth with checked or plaid designs occurring in 18” or 36”-wide repeats. RMHK Fancy consists in a cotton handloomed cloth with decorative borders jacquard-woven in rayon yarns defining the 36”-square handkerchiefs. Both styles of cloth occur in plain and embroidered versions. Gold-embroidered velvets have also

¹ Evenson (1994) has researched the earliest textile, RMHK, in this tradition.

² Eicher and Sumberg (1995) first discussed embroidered velvets made in India for export to West Africa.

³ Erekosima and Eicher (1981) defined cultural authentication in an analysis of an Indian textile reworked by the Kalabari of West Africa.

⁴ For *in passim* examples of the use of other Indian textiles by the Kalabari, see Daly (1984, 1986); Daly, Eicher, and Erekosima (1986); Eicher and Erekosima (1987, 1996); Erekosima and Eicher (1994); and Michelman (1992).

⁵ A line woven into the cloth separates each of the handkerchiefs in all RMHK and early RMHK Fancies. The ‘handkerchiefs’ are never cut apart for use as handkerchiefs.

formed part of the IWATT family of cloths for at least 100 years, (Eicher and Sumberg 1995) and perhaps considerably longer.⁶ In the 1980s design changes in the three styles of cloth began to occur with rapid frequency and additional styles of IWATT developed, due to the disruption and reorganization of the manufacturing and trade network resulting from the Nigerian ban on textile imports, established in 1976.

Research Methodology:

Conceptualization of textile tradition as having a pure, central core does not assist us in understanding the IWATT-Gujarati tradition cross-over, or the character of the transnational India-West Africa tradition, or even how strictly-for-export designs of gold-embroidered velvets emerged from within the Indian gold-embroidered velvet tradition. I responded to this difficulty by developing a research method that aims at discovering the outer, growing frontiers of a textile tradition rather than its pure, still center at which textile scholarship has so often aimed. To accomplish this I combined theoretical work of Baizerman (1987) on tourist art textiles and Appadurai (1986) on *The Social Life of Things* to form the concept of *textile tradition ecumene*.

In her dissertation, Baizerman (1987) developed an elaborate set of criteria for studying the production and trade of traditional textiles that cross cultural boundaries as tourist art. In addition to the usual concern with tools, techniques, and materials her criteria include such concerns as (a) where do the textile craft workers learn their skills and who select the students; (b) who market the textiles; and (c) what are the consumers tastes--- regardless of whether or not the teachers, marketers, or consumers belong to the culture from which the traditional textiles originated or whether the designs of the textiles produced remain the same.

Appadurai (1986, 36) coined the phrase “commodity ecumene” in *The Social Life of Things* to draw attention to the way, during the period of their ‘life,’ material culture objects cross cultural, social, political, and geographical boundaries to connect people in social structures that are not recognized by the social and cultural pigeon holes customarily used to identify material culture objects or groups of people.

Applied to the concept of ecumene, Baizerman’s theory narrows its focus to the beginning of a textile’s ‘life’ when it is produced, and introduced to the market. Her criteria also shift the focus from Appadurai’s underlying concern with social structure to make material culture objects the central concern. Applied to Baizerman’s criteria, Appadurai’s theory expands the study to encompass transnational textile traditions. Out of this theoretical combination the concept of textile tradition ecumene emerges and a material culture methodology for studying design development in the production and trade of a long-standing transnational trade textile tradition.

A textile tradition ecumene is the cultural, social, political, and territorial geography that the material culture objects of a tradition travel during their ‘lives.’ This includes

⁶ Vogt (1975) provides evidence that gold-embroidered velvets could have reached West Africa during the period of Portuguese dominance of the West Africa trade.

everything from their conception and 'birth' in production, their movement in trade, use by consumers, 'retirement,' any resale and reuse, and final 'death.'

My method of research consisted in following the trail of gold-embroidered velvets produced in India for the Kalabari cultural market. I initially approached individuals in Madras engaged in the manufacture and export of RMHK. I asked if they knew anything of the gold-embroidered velvets exported to the Kalabari and found they had been manufacturing them since the early 1980s. Their West African Wholesale Buyers had shown them historic Indian velvets they brought from their ancestral cloth boxes asking if they could manufacture the same. Madras Manufacturers gave an enthusiastic "Yes!"

I followed the trail of these embroidered velvets, mapping the cultural, social, political, and territorial geography of the production and trade portion of the trade textile ecumene. Map points included the work sites and individuals engaged in the production and trade of the textiles. I also documented the design of the embroideries. In addition I asked workers about their sources of design. Lastly, I documented all other textiles being produced or traded by the same workers or in the same work sites where these IWATT embroideries begin their 'life.' The sites included the cottage industry homes, embroidery factories, and manufacturers' warehouses.

Analysis:

Because I began by looking for gold-embroidered velvets destined for the Kalabari, and maintained a focus on embroideries bound for West Africa, the bulk of the textiles I encountered were produced for West African cultural markets. However, not all the textiles were embroidered and not all embroideries were velvets. The early velvets were embroidered in the straight needle technique used for the *zardozi* embroidery (bullion work) traditional to Indian gold-embroidered velvets. Within just a few years, the Manufacturer-Exporters had shifted velvet embroidery work to those individuals they employed to embroider their RMHK and RMHK Fancy textiles. These latter embroiderers used the *nakshi* (tambour hook). It always makes a chain stitch, but in skilled hands can produce reasonable replicas of Gujarati mirror-work embroidery and many other embroidery and embellishment techniques such as beading. It is usually much quicker than the techniques it replicates.

For example, to do beading an embroiderer first loads beads onto the *nakshi*, and then applies them to the cloth with chain stitches produced by pulling loops from the thread held beneath the cloth up through the cloth, through the previous chain loop, and then through the dropped bead. The production of the next chain stitch, with or without a bead, secures the previous bead in place and hides the chain stitch which passes through the bead.

Mirror-work embroidery motifs are accomplished with the *nakshi* in several different manners. In the most simple way, the mirror is first applied to the cloth with a dab of glue to hold it in place while with the *nakshi* a few chain stitches, three or so, are executed crossing over the top of the mirror at its edges to hold it more securely in place. The motif is finished with at least one more course of chain stitches, running around the

mirror's edge to form a circle that loosely holds the mirror down and replicates the appearance of the most simple Gujarati mirror-work embroidery motifs. These latter use a row of chain stitch executed with a straight sewing needle to surround the mirror. There are many variations in Gujarati straight-needle techniques and in the design of the embroidery immediately surrounding the mirror in Gujarati mirror-work embroidery (Frater 1999; Morrell 1995, 75-95).

The embroidered RMHKs, Fancies, and velvet textiles were not produced and traded in isolation. I found many other textiles and apparel within the production and trade portion of the IWATT ecumene. The full range of workers from Cottage Industry and Factory Embroiderers through Manufacturer-Exporters and West African Wholesale Buyers, in total, are engaged in the production or trade of textiles and apparel destined to or coming from many different ethnic and fashion markets inside and outside Africa. These latter include ethnic and national fashion markets inside India; national fashion markets in the US and Europe; and ethnic fashion markets in the Middle East, in addition to the IWATT.

I found that outside design elements are freely being incorporated into the IWATT tradition to develop design variations and entirely new styles of textiles for self-defined cultural markets in West Africa. The entrance of new design elements into the IWATT tradition is facilitated by the overlapping of the IWATT ecumene with the ecumenes of the other tradition-based and fashion industry textiles which I encountered as I traveled and mapped IWATT production and trade.

In the tour of the IWATT ecumene on which I now take you, I use Gujarati-style mirror-work embroidery as a centering focus and case in point in this very lively tradition. The appearance of Gujarati-style mirror-work embroidery in an IWATT textile provides concrete evidence of the overlapping of ecumenes of textiles from very separate traditions.

In Madras, a Wholesale Buyer from Nigeria expressed how important Indian textiles are to the cultural markets she serves, telling me, "We must have Indian textiles!" However, distinctions between the different designs manufactured in Madras were never made in terms of identification of the many Indian ethnic traditions from which the hand-woven cloths, embellishment techniques, and design motifs originated. Rather identification was made in terms of trade names shared by Wholesale Buyers and Manufacturer-Exporters--names such as RMHK---or specific to the relationship between Wholesale Buyer and West African consumer---names like the global poetry of Jet Age Velvet and African women's sentiments like Don't Come Near Me If You're Not Rich. Moreover Wholesale Buyers sometimes bring to the Indian Manufacturers textiles from other world markets, such as Japan, for inexpensive reproduction in India. Apparently copying them in India makes them Indian to West African consumers. As the Wholesale Buyers regularly travel to Taiwan, and to Italy,⁷ to buy coral, and many live outside West Africa, e.g. in the UK, they have a lot of opportunity to encounter outside design and introduce new elements and techniques into the IWATT tradition.

⁷ Personal communication from Susan Torntore (2000)..

I first found the Gujarati mirror-work embroidery on some RMHK Fancies piled up in multiples in each of several color ways in the warehouse of one of the leading IWATT Manufacturer-Exporters. Later I found out that some of his competitors also produce and export them. Fancies of many other embroidered, appliquéd, and beaded designs sat in his warehouse, including newer designs of RMHK Fancies with embroidery-appliquéd velvet patches, an innovation that arose after the Madras Manufacturer-Exporters of RMHK and RMHK Fancy started producing and exporting gold-embroidered velvets. This Manufacturer, respected by his peers in the ecumene for his ability to innovate styles that become successful in West African markets, proudly showed me his latest success---Sari George. *George* is one of the generic terms used by West Africans for textiles from India. Sari George consists in a Benaras brocade sari, complete with blouse piece popular in the Indian domestic sari market, but woven of inexpensive rayon and Lurex®-type yarns for the export market. It is sold as is, or with embroidery-applied beading along the lines of the woven brocade design. Other products handled by the IWATT Manufacturer-Exporters include madras plaid men's casual shirts for European and US markets, Indian imitations of African textiles such as *akwete*,⁸ hats for Kalabari women, and a range of other embroidered and unembroidered IWATT styles that take me beyond the focus of this paper.

At an embroidery factory in Pillaipakkam village outside Madras, I found the owner and his employees consulting an Indian fashion catalogue with a magnifying glass to discover how fashionable salwar kamiz suits had been embroidered. They cited these catalogues, which are filled with Gujarati-style mirror-work embroidered garments, as a major source of their embroidery design inspiration. Manufacturer-Exporters also look to these catalogues, but they additionally access publications on textile traditions from other parts of the world through Madras book stores. On one visit I found a Manufacturer considering pictures of Japanese family crests woven into kimono fabric as inspiration for embroidery on IWATT.

Factory owners, themselves risen from the ranks of embroiderers, and the embroiderers they employ, were trained in embroidery factories stretching anywhere from the next village, to Madras city, or far away Bombay. During their early training and employment they embroidered products for many regional, national, and international markets. The longer they have worked, the more styles of design and embroidery techniques they have learned. However, a great expansion of the work volume in the last two decades has been for the Indian Ethnic Chic fashion trend, beginning in the 1980s, of which Gujarati-style mirror-work embroidery forms an important staple.

Cottage industry embroiderers, alone, seem to have limited exposure to a broad array of products for the world market. They tend to be newer in this occupation. Their sometimes limited skills garner them contracts for the thicker thread metallic embroidery that is done on the West Africa-bound velvets and the new style Washwash, also embroidered in thick metallic thread, but on an industrially produced polyester twill ground cloth in the eight-handkerchief format of RMHK. Yet about half of cottage industry embroiderers are also initially trained in local factories where they minimally encounter products for the Indian

⁸ Personal communication from Lisa Aronson (2000).

ethnic and national fashion markets. The paper patterns I examined of 15 plus years of embroidery contracts of one cottage industry embroider included logos of West African societies and the 1980 Moscow Olympics. Moreover every cottage industry embroiderer I interviewed, even those producing fans for Saudi Arabia, could at least display samples of fashionable saris they had embroidered.

In this seemingly topsy-turvy cross-tradition textile production network, cross-over of design elements and techniques from outside traditions and fashions into IWATT is a potential norm rather than the perplexing oddity. Is it any wonder that Gujarati-style mirror-work embroidery is being exported to some cultural community in West Africa? I think not.

Conclusions:

I offer three conclusions. In the first place, the India-West Africa trade textile tradition currently exhibits a lively development of new styles of textiles while maintaining elements of materials, techniques, and design which have a long history within the IWATT tradition. Use of handloomed cottons and velvet cloth, nakshi embroidery, and the eight-handkerchief design format remain in use both in the textile styles from the past and as incorporated into new styles like Sari George and Washwash. Those new styles incorporate new materials, such as the industrially loomed polyester twill cloth, and draw from outside traditions such as Gujarati mirror-work embroidery and Benarsi brocade saris.

My research, secondly, demonstrates the lack of separation of tradition-based textiles from fashion industry textiles, as well as the lack of separation of one textile tradition from another, in the contemporary production and trade of IWATT. Gujarati mirror-work embroidery, Indian ethnic and national fashions, American and European men's shirts, Middle Eastern dress accessories, Japanese kimono and fashion fabrics, and West African textiles all intersect at some one or several places in the IWATT ecumene. IWATT design and production occur in intimate proximity to other textile traditions and fashions. West Africans' cultural identity, as communicated in the textiles with which they dress themselves and their homes, is directly dependent upon input from textile traditions of culturally defined social groups from many other parts of the world, not least of all India. This makes the very distinctively dressed West Africans truly members of global society, a society in which textile tradition has a character quite distinct from any of our previous conceptualizations. I question whether we can continue to rely on our familiar categorization of textile traditions in any research on contemporary textiles now that globalization is knocking on most everyone's door.

Thirdly, use of the concept of textile tradition ecumene, with its focus on the expanding, outer frontiers of a tradition, rather than on its pure, early core, changes our understanding of what a textile tradition is. My research method for the study of a tradition in material culture production and trade exposes the potential for design change inherent in every material culture tradition. This method seems particularly suited to the study of textile traditions produced in the global factory (Blim, 1992), including even our own apparel. Yet I suggest we not stop there. Consider how our powers of sight might

change if we apply the concept of textile tradition ecumene to the study of pre-global commercial and non-commercial textile traditions as well.

In closing I would like to report that Gujarati-style mirror-work embroidery's social life has not stopped at West Africa. The US is currently experiencing the second wave, in my lifetime, of Gujarati-style mirror-work embroidery. Recently viewed sandals, scarf and purse, retailed as matching accessories by Chicos, a national US chain, are similar to items currently available in many clothing stores in the US. The significant point is that not all are made in Gujarat or even in India. I've seen mirror-work embroidered sandals made in Spain. The Chicos pair is made in China, though the matching scarf and purse are Indian made. Pre-fabricated mirror-work embroidery motifs made in China are now also being retailed in craft stores in the US for use by American home sewers. Gujarati-style mirror-work embroidery has entered the Chinese and Spanish work place, American women's dress and hobby pursuits, and might arguably be included in a description of turn-of-the-century fashion in world dress.

References

- Appadurai, Arjun. 1986 Introduction: Commodities and the politics of value. In *The Social Life of Things: Commodities in Cultural Perspective*, ed. by Arjun Appadurai, 3-63. Cambridge: Cambridge University Press.
- Aronson, Lisa. 2000. Conversation with author, 20 October.
- Baizerman, S. 1987. *Textiles, traditions and tourist art: Hispanic weaving in northern New Mexico*. Ph.D. diss., University of Minnesota.
- Blim, Michael L. 1992. Introduction: The emerging global factory and anthropology. In *Anthropology and the global factory: studies of the New Industrialization in the Late Twentieth Century*, ed. by Blim, Michael L. and Frances Abrahamer Rothstein, 1-30. New York: Bergin & Garvey.
- Daly, M. Catherine. 1984. Kalabari female appearance and the tradition of Iria. Ph.D. diss., University of Minnesota.
- _____. 1986. Iria Bo appearance at Kalabari funerals. *African Arts* 21(1): 58-61.
- Daly, M. Catherine, Joanne B. Eicher, and Tonye V. Erekosima. 1986. Male and female artistry in Kalabari dress. *African Arts* 19(3): 48-51, 83.
- Eicher, Joanne B. and Tonye V. Erekosima. 1987. Kalabari funerals: Celebration and display. *African Arts* 21(1): 38-45, 87-88.
- _____. 1996. Indian textiles in Kalabari funerals. *Asian Art & Culture*, 9(2): 68-79.
- Eicher, Joanne B. and Barbara Sumberg. 1995. India and West Africa: Transformation of velvets. In *Indian silks*, ed. by Dhamija, Jasleen, 141-154. Ahmedabad, India: Mapin.
- Erekosima, Tonye V. and Joanne B. Eicher. 1981. Kalabari cut-thread and pulled-thread cloth. *African Arts* 14(2):48-51, 87.
- _____. 1994. The aesthetics of men's dress of the Kalabari of Nigeria. In *ITAA Special Publication No. 7*, 185-199.
- Evenson, Sandra L. 1991. The manufacture of Madras in south India and its export to West Africa: A case study. MS diss., University of Minnesota.

- _____. 1994. *A history of Indian madras manufacture and trade: Shifting patterns of exchange*. Ph.D. diss., University of Minnesota.
- Frater, Judy. 1999. *Threads of identity: Embroidery and adornment of the nomadic Rabari*. Ahmedabad, India: Mapin.
- Michelman, Susan O. 1992. Dress in Kalabari women's societies. Ph.D. diss., University of Minnesota.
- Morrell, Anne. 1995. *The techniques of Indian embroidery*. Loveland, CO: Interweave.
- Sumberg, Barbara. 1994. The contemporary situation of real Madras handkerchief weaving and weavers. Paper presented at symposium, Real Madras Handkerchief: A Cross Cultural World Trade Perspective, Madras, Feb. 5-6.
- Torntore, Susan. 2000. Conversation with the author in August.
- Vogt, John. 1975. Notes on the Portuguese cloth trade in West Africa, 1480-1540. *International Journal of African Historical Studies* 8(4): 623-651.

Cloth in Contemporary West Africa: A Symbiosis of Factory-made and Hand-made Cloth

Heather Marie Akou

Introduction

The concepts of “tradition” and “fashion” both center on the idea of change. Fashion implies change, while tradition implies a lack of change. Many scholars have attempted to draw a line between the two, often with contradictory results. In a 1981 article titled, “Awareness: Requisite to Fashion,” Mary Ellen Roach-Higgins argued that,

If people in a society are generally not aware of change in form of dress during their lifetimes, fashion does not exist in that society. Awareness of change is a necessary condition for fashion to exist; the retrospective view of the historian does not produce fashion.¹

Although she praised an earlier scholar, Herbert Blumer, for promoting the serious study of fashion², their conceptualizations of the line between tradition and fashion differed. Taking a view of fashion as a phenomenon occurring in nearly all areas of human behavior and thought, Blumer wrote that in some areas,

...fashion occurs almost always without awareness on the part of those who are caught in its operation. What may be primarily response to fashion is seen and interpreted in other ways—chiefly as doing what is believed to be superior practice.³

This paper does not attempt to resolve the contradictions between these points of view, but makes another claim that they exist because there is no clear line between tradition and fashion to uncover. Instead there are many shades of gray between the black and white concepts of tradition and fashion.

A spectrum of subtleties can be demonstrated through a visual examination of West African textiles. Cloth that seems the most traditional—hand-woven with hand-spun threads, and dyed with natural dyes—has changed as artisans have experimented with new technologies and materials. On the other hand, factory cloth, manufactured quickly and inexpensively for a fashion-conscious public, often relies upon traditional aesthetics and cultural values for its appeal. In the realm of West African textiles, tradition and fashion seem to exist in symbiosis. They feed off of one another, and they are equally important forces. Traditional textiles do not exist in isolation, and fashionable textiles do not exist without consciousness of the past.

Traditions Change

John Picton carefully reconsidered the role of tradition in his 1995 exhibition catalogue, *The Art of African Textiles: Technology, Tradition, and Lurex*. Sixteen years

after publishing the first edition of *African Textiles* with John Mack, Picton wrote,

In 1989 [...] a second edition of *African Textiles* was published [...] I removed the word 'traditional.' At best it was redundant: it served no useful purpose and signified nothing that was not already obvious. At worst, it was misleading, supposing an essentially 'authentic' African practice. [...] It was no longer acceptable as representation of social practice to contrast the 'traditional' with the 'contemporary.'⁴

Claire Polakoff had expressed similar concerns in her book, *Into Indigo*, published in 1980. Going a step beyond Picton's statement she insisted that,

African textile arts are still alive because of their immediacy. The fabrics were created by people who made remarkable use of all that was around them, who learned techniques from their elders who in turn had learned from others. Any materials or devices found or won or learned from other people were used whenever they seemed appropriate. [...] the life in anything handcrafted must come from the reality around it.⁵

Polakoff also saw a continuum between tradition and fashion, not only urging that traditions change but that they must engage new generations to remain vital.

Indigo has always been a prestigious dye, imbued with a sense of tradition and legend. Indigo, made naturally and synthetically, and even imitated with navy-blue aniline dyes, is a constant in West African textiles—a tradition carried through many new techniques and forms. Indigo-dyed textiles run the gamut from the very traditional to the very fashionable with everything in between.

In 1997 I was able to spend four months in Mali, and I purchased a range of indigo-dyed textiles which together illustrate change within tradition. Two of these were completely spun, woven, and dyed by hand: a Dogon woman's wrapper (fig. 1), and a baby carrier from Djenné. Called "country cloth," pieces such as these are considered uncomfortable and out-of-date by some, but timeless by others. The technology to make them has existed in the region for at least one thousand years. A cloth from Kayes (fig. 2) though aesthetically similar uses a base of factory woven jacquard, and the resist lines were sewn on by machine.

Other methods of resist dyeing with indigo were developed elsewhere. The Yoruba in Nigeria use starch to resist dye. The resist lines on adire cloth are drawn on by hand or applied with stencils made from tin sheets. The use of factory cloth as a base allows a very high degree of detail. Such crisp designs would never be possible with a cloth containing hand-spun threads, because of its relative bulkiness and uneven surface.

In the mid-nineteenth century, Dutch textile manufacturers developed an indigo resist technique in imitation of Indonesian batiks. Resin is applied in a repeated pattern by machine, the cloth is dyed, and the resin is removed.⁶ This technique is still used by the Uniwax factory in Côte D'Ivoire, and some factories in Nigeria. This fish pattern (fig. 3) is a classic design originally created in Europe, although this particular cloth was manufactured in Nigeria. Called "wax" cloth after the wax originally used in batik, this is still an expensive, prestigious textile. There are, however, less expensive imitations of

these imitations. This cloth (fig. 4) was manufactured at the ITEMA factory in Mali. It was screen-printed by rollers with navy blue ink and contains no indigo, although the color and association with wax cloth lend it prestige as well.

All of these textiles are still worn in West Africa as part of every-day dress. Although they show changes in technique and materials, they do not show an evolution; all of these forms are contemporary and meaningful to a living generation. None of them have been artificially preserved or cast aside in a “survival of the fittest.” Even this Dogon woman’s wrapper (fig. 1), made with generations-old materials and technologies, is both traditional and fashionable, because the Dogon have made a conscious decision to make traditional textiles a part of their present reality.

The More Things Change...

More has been written about fashion’s use of tradition as a resource and source of inspiration. Susan Domowitz found that factory cloths in Côte d’Ivoire and Ghana associated with traditional Akan proverbs sell more quickly and for more money than cloths with uninteresting names, regardless of the design.⁷ This (fig. 5), for instance, is a European-style cloth with an Akan proverb attached. It’s called, “One Tree Alone Cannot Stand in the Wind.”⁸

In her survey of European factory cloth bound for West Africa and Zaire, Ruth Nielsen noted that,

Apparently there are various degrees of traditional designs, that is, some are more traditional than others, and, of course, some are not traditional at all and therefore quickly drop out of production and use. [...] When wax prints are not significant enough to be named by the consumers, they are not kept, not considered traditional, and soon cease to be produced.⁹

Although new, fashionable factory prints are continually being designed, their longstanding value to merchants and consumers depends upon tradition. As far as fashion goes, in a 1985 article, Christopher Steiner noted that,

As early as the 17th century, European merchants and metropolitan companies were [...] not only trying to determine African aesthetic values, but also attempting to monitor and predict the pulse of fashion change.¹⁰

Many of these designs catered well enough to African tastes that they are still popular today and have become “traditional” in their own right. Some do have European themes. This design (fig. 6) called, “Bon Appetit,” has been in circulation for several decades, and variations have been printed in many different factories. This one was manufactured in Nigeria.

Other enduring and popular prints depict aspects of African life. They contain symbols such as the Golden Stool (fig. 7), bronze Ife sculptures (fig. 8), and cowry shells (fig. 9). Others incorporate design elements from hand-made African textiles. These factory prints imitate paste resist (fig. 10), the figures on korhogo cloth (fig. 11),

mudcloth (fig. 12) (which is known in Bambara as “bogolanfini”), and kente (fig. 13). (Incidentally, this imitation kente cloth was printed in South Korea.)

Korhogo cloth, mudcloth and kente are all woven in strips which are then sewn together. This is a very old technology, but its influence on contemporary aesthetics is still very strong. The aesthetics of stripcloth have influenced printed designs, even as stripcloth itself has changed to take advantage of factory technologies.

Factory textiles today are most often printed with silkscreen rollers that come in standard sizes of 36 inches and 18 inches. This introduces an element of repetition and striping that is not lost on designers. There are the obvious imitations of stripcloth such as factory-imitation kente, but the head designer at the ITEMMA factory in Bamako also pointed out several designs to me that resemble stripcloth when viewed on a large scale. This motif (fig. 14), for instance, looks any other design when viewed in isolation. On a large scale (fig. 15) it has a definite stripcloth effect.

Contemporary stripcloth also recalls past aesthetics even as technological innovations allow for greater variation. Most weavers now use factory-spun threads, which are strong, consistent, and inexpensive compared to hand-spun thread. The strength of factory-spun thread allows for wider strips, because it can withstand the added force necessary to beat longer wefts into place. The strips on this cloth (fig. 16) are approximately ten inches wide.

This innovation, however, does not always result in wider strips. Sewing machines allow weavers to create inexpensive cloths with many narrow strips. A cloth that might have taken several hours to sew together by hand now takes only minutes. Cloths made in Mali with hand-spun threads generally have strips approximately 6 inches wide – this is the limit of the technology. They could be made more narrow today (and sewn together by machine), but 6 inches is the standard aesthetic. Many cloths made with factory-spun threads have strips that are only 3 to 4 inches wide, although some are as narrow as 1 inch.

In some instances, factory-made textiles are cut into strips and interspersed with hand-woven lengths of stripcloth. This could reduce the cost and even weight of a finished piece, although these mixed stripcloths are often flashy and expensive because the factory cloth is satin or jacquard. The hand-woven strips on this particular cloth (fig. 17) have a float weave surface design, which also increases the expense and prestige. The strips on this wrapper are less than 2 inches wide.

These changes should not be seen just as imitations or worse as a corruption of “traditional” textiles. These forms are still changing, sometimes to make the textiles more affordable and sometimes to make them more expensive and prestigious. Artisans and factories create cloth with consumer demand in mind, and this demand itself is always changing.

Conclusion

In her 1997 article “Bogolanfini in Bamako,” an exploration of the symbiosis between tradition and fashion in mudcloth (this is the English translation of “bogolanfini” which literally means “mud cloth” in Bambara), Victoria Rovine made a statement that seems appropriate to West African textiles at large:

Bogolanfini is in the midst of a renaissance. New forms of this Malian textile, whose characteristic patterns are achieved by using vegetal dyes and concentrated mud, are being developed at a dizzying rate. These recent versions of *bogolanfini* are generally referred to by their makers and their consumers as *bogolan*, a term that indicates their connection to the cloth that is their inspiration. While clearly distinct from *bogolanfini*, *bogolan*'s many varieties all retain aspects of the traditional cloth that its makers deem valuable, marketable, or attractive.¹¹

Bogolanfini, the original version of mudcloth, has inspired fashionable contemporary designs, but it has also renewed interest in a long-standing textile tradition. This interplay between tradition and fashion keeps both more complex and satisfying for contemporary generations, and it has blurred the line between the past and the present.

Considering the interplay between tradition and fashion in the cloths presented here, two major points need to be emphasized. The first is that all of these cloths are being made today and are worn as part of everyday dress. Some Malians choose to wear handmade mudcloth produced with technologies that are over a thousand years old, while others choose to wear factory imitation mudcloth produced with technologies developed within the past 250 years. Depending upon the context, both can be seen as either traditional or fashionable. Where should a line be drawn between them, and who would draw this line? There are no clear answers to these questions.

The second point to consider is the symbiosis that exists between traditional and fashionable textiles in West Africa. Techniques and aesthetics will eventually come full circle. Today we have factory imitations of mudcloth, but can hand-made interpretations of these factory cloths be far behind? Already people are using hand-made mudcloth to construct fashionable cut-and-sewn garments (fig. 18) – a use that was not originally envisioned. Because traditional textiles have influenced fashion, and fashionable textiles have influenced tradition, every cloth has a little mixture of both influences. We can ask, "Where should a line be drawn between them?" but a more important question might be "Why are we even trying to draw a line?"

¹ Roach-Higgins, Mary Ellen. "Awareness: Requisite to Fashion," in *Dress and Identity*, eds. M.E. Roach-Higgins, J.B. Eicher, and K.K.P. Johnson. (New York: Fairchild Publications, 1995), 395.

² Ibid., 394.

³ Blumer, Herbert. "Fashion: From Class Differentiation to Collective Selection," *The Sociological Quarterly* (1969, vol. 10(3)): 286.

⁴ Picton, John. *The Art of African Textiles: Technology, Tradition, and Lurex*. (London: Barbican Art Gallery, Lund Humphries Publishers, 1995), 11.

⁵ Polakoff, Claire. *Into Indigo: African Textiles and Dyeing Techniques*. (Garden City, NY: Anchor Press/Doubleday, 1980), 187.

⁶ Bickford, Kathleen. "Knowing the Value of Pagne: Factory and Printed Textiles in Côte d'Ivoire." (Ph.D. diss., Indiana University, 1995), 7, 8.

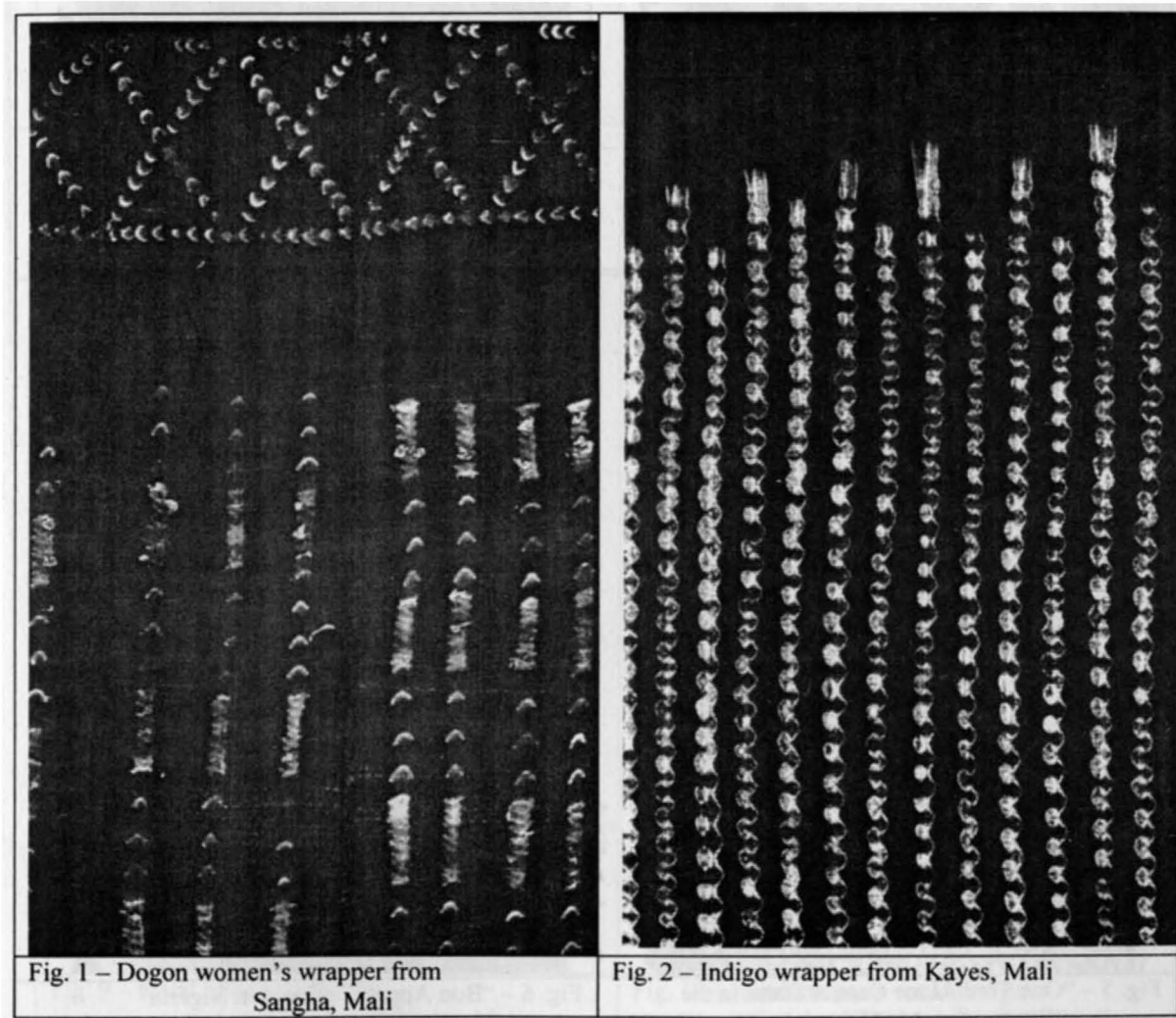
⁷ Domowitz, Susan. "Wearing Proverbs: Anyi Names for Printed Factory Cloth," *African Arts* (July 1992, vol. 25(3)): 86, 87.

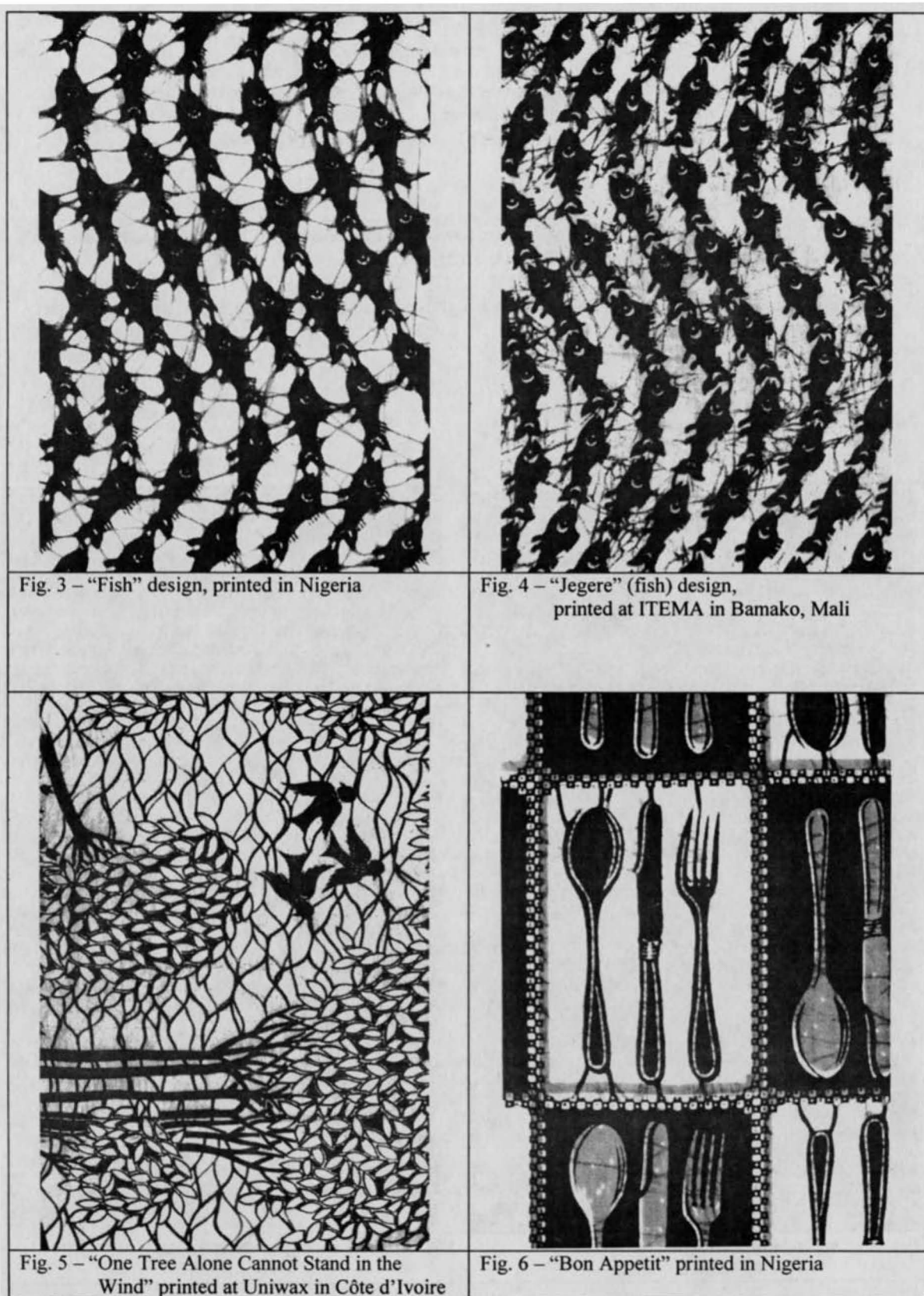
⁸ Nielsen, Ruth. "The History and Development of Wax-Printed Textiles Intended for West Africa and Zaire," in *The Fabrics of Culture: The Anthropology of Clothing and Adornment*, eds. J.M. Cordwell and R.A. Schwarz. (The Hague: Mouton Publishers, 1979), 493.

⁹ *Ibid.*, 481, 482.

¹⁰ Steiner, Christopher. "Another Image of Africa: Toward an Ethnohistory of European Cloth Marketed in West Africa," *Ethnohistory* (1985, vol. 32(2)): 98.

¹¹ Rovine, Victoria. "Bogolanfini in Bamako: the Biography of a Malian Textile," *African Arts* (Winter 1997, vol. 30(1)): 40.





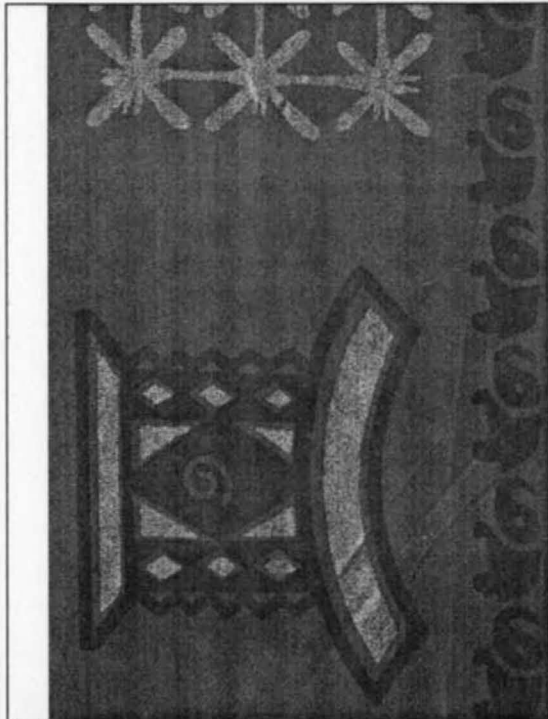


Fig. 7 – design with figures of the Golden Stool,
printed at Sotiba in Senegal



Fig. 8 – design with figures of Bronze Ife sculptures
printed at Comatex in Segou, Mali

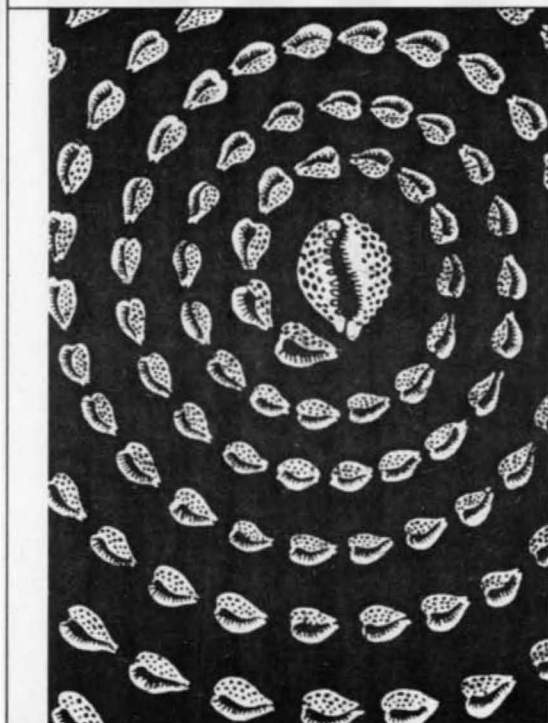


Fig. 9 – spiral of cowrie shells
printed at ITEMA in Bamako, Mali

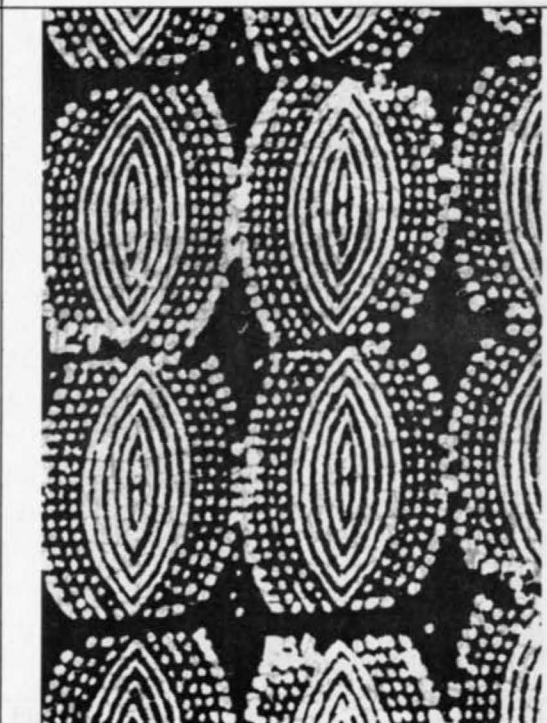


Fig. 10 – imitation paste resist design
printed at ITEMA in Bamako, Mali

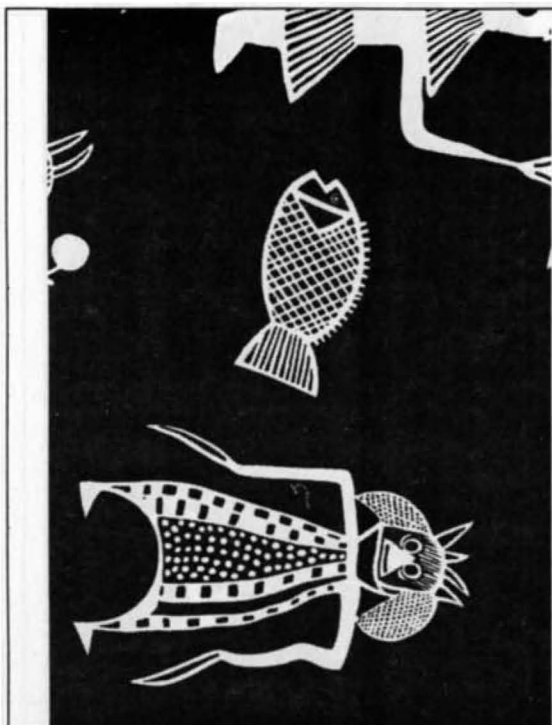


Fig. 11 – design with Korhogo figures
printed at Kita de Woodin in Côte d'Ivoire



Fig. 12 – “Bogolan” (imitation mudcloth)
printed at ITEMA in Bamako, Mali

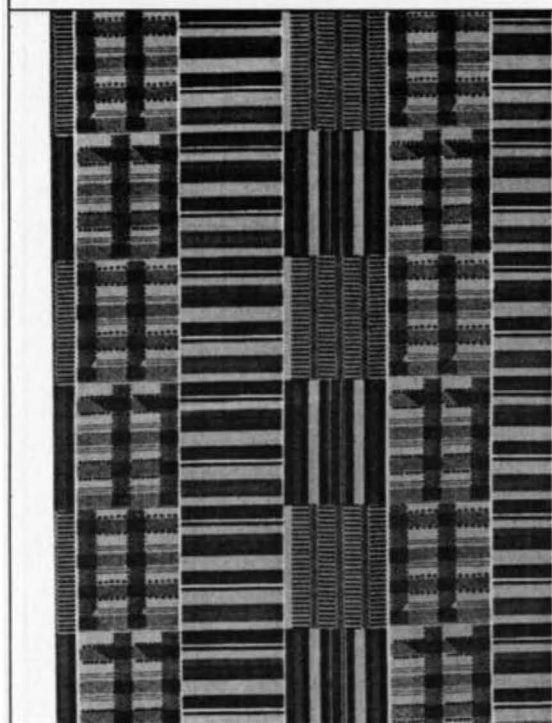


Fig. 13 – imitation kente cloth
printed in South Korea



Fig. 14 – “36th Anniversaire de l'Armée Malienne”
(detail) printed at ITEMA in Bamako, Mali

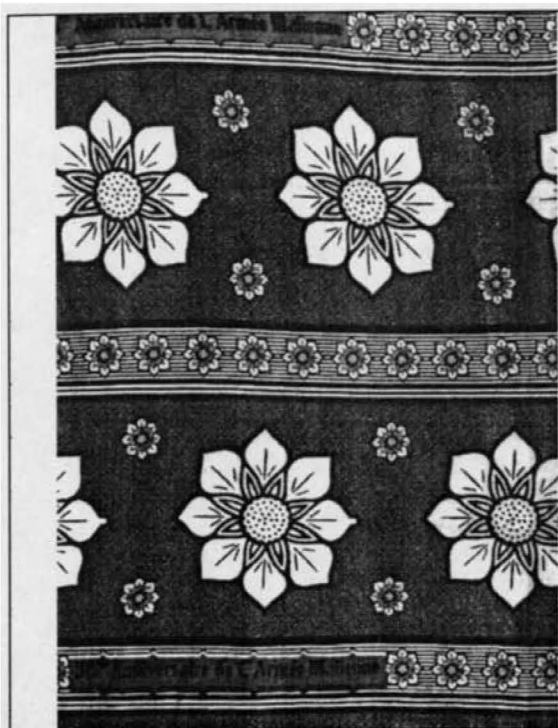


Fig. 15 – “36th Anniversaire de l’Armée Malienne”
printed at ITEMA in Bamako, Mali

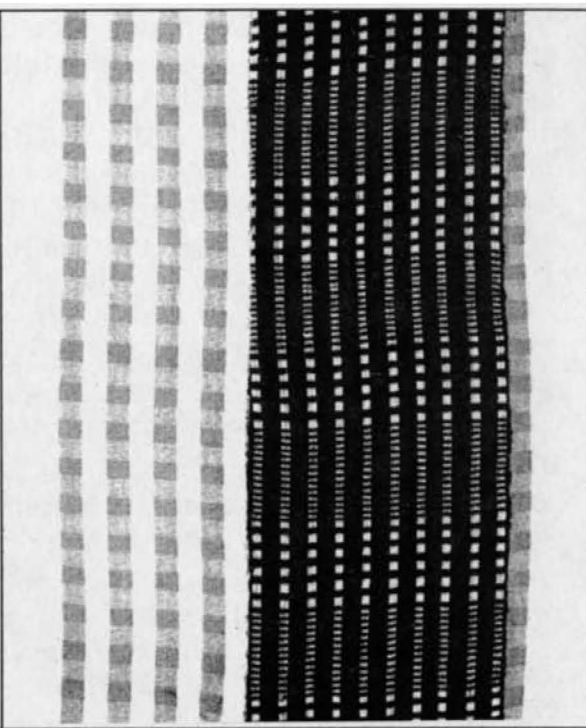


Fig. 16 – stripcloth wrapper from Djenné, Mali

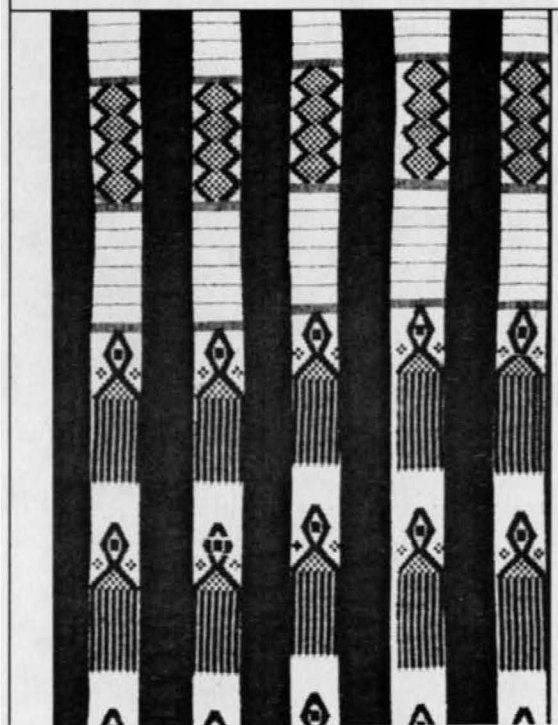


Fig. 17 – mixed stripcloth wrapper from
Bamako, Mali



Fig. 18 – “bogolan” ensemble
(photograph taken in Bamako, Mali by author)

**Afghan After a Fashion:
The Fusion of Politics with Religion and
Women's Textile Craft Economies ¹**

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Afghan men and women have been restricted in their use of traditional and contemporary items of textiles during several "jihad" periods of Afghan history, first during the Mujahedeen period of the late 1970's and since the mid-1990's by the Taleban Islamic Movement of Afghanistan (Daly, 1998b).² "Use" during either period reflects varying viewpoints that govern not only the wearing of textiles but also involvement in the textile craft economies. In either circumstance textile craft economies have economically supported both men and women (Daly, 1999b). Most "outsiders" presume that the strict measures imposed by first the Mujahedeen then followed by strident sanctions imposed by the Taleban on Afghans have diminished their creativity and production. However continuity and change, tradition and fashion is evident in the textile techniques of production.³ It is also evident in a variety of cultural forms of expression. Techniques used by women include but are not limited to rug, dress and print making, embroidery, knitting and crocheting (Majrooh, 1989). This presentation focuses on Afghan women's embroidery traditions and provides examples of how static/dynamic characteristics of tradition/fashion survive austere political and religious sanctions using the medium of textiles.

Several factors have contributed to the ongoing plight of Afghans and their textile craft traditions. Briefly summarized these factors include:

- According to the United Nations High Commission for Refugees, Afghans are the largest refugee population worldwide (<http://www.unhcr.ch/statist/98oview/ch1.htm>). They live as internally displaced peoples in Afghanistan, as refugees in camp and non-camp settings of Pakistan, and in diaspora communities worldwide. Employment and economic development is essential to their survival and frequently textile craft economies are a means to this end.
- Patriarchy governs the everyday life of Afghans. Afghan society is patriarchal, patrilineal and patrilocal (Dupree, 1980). Paradoxically, an estimated 75% of Afghan women are single, married or widowed living in female headed households. In many instances regardless of their marital status women must sustain themselves and their families. Textile craft economies are an acceptable form of women's sustainable development within the family context especially in disrupted family contexts.

- Also, centuries of internal ethnic and regional conflict continues to dominate Afghan social and political history (Magnus & Naby, 1998; Maley, 1998; Marseden, 1998; Rashid, 2000; <http://www.Taleban.com>). During each of these periods, women's rights referred to as the "woman question" has been repeatedly negotiated. Some of these rights include a woman's right to dress with or without head coverings, the right to appear in private and public contexts and the right to be gainfully employed within as well as outside the home.
- And finally, ethnic and religious codes of conduct seemingly limit and restrict women's choices. Pushtunwali (regional ethnic codes of conduct) coupled with Islamic Sharia law (religious codes of conduct) invoke women's honor and virtue which remains a central feature of all cultural and economic activities. Gender politics therefore appears a critical issue to Afghan textile craft traditions (<http://www.feminist.org>).

It is estimated that 75% of Afghan women are involved in textile income generating projects (Daly, 1998a). The range of textile crafts that Afghan women have expertise is greater than those that are currently exploited for economic means. The major textile crafts include embroidering household items and clothing, weaving rugs and pillows and sewing women's clothing (figure 1). However, embroidery is a particularly favored skill by Afghan women which supports their economic sustainability for a variety of reasons. These reasons are economic, resource availability, spatial requirements, and informal education.

Compared to other textile craft economies, embroidery practice requires the least costly tools and materials. The only required tools are a needle and in some instances an embroidery hoop. Embroidery materials include a variety of fabrics but usually woven cotton and wool are typical while embroidery threads depending on the tradition consist of cotton, wool and silk. Other additive surface materials are incorporated (Harvey, 1996; Paiva and Dupaigne, 1993; Paine, 1990) such as mirrors, shells, braids, beads, coins etc. Regardless of embroidery tradition, most tools and materials are available at a nominal cost to nearly all women regardless of geography or community residence.

Another reason embroidery practice is favored by many Afghan women is that the tools and materials are compact and transportable compared to other textile crafts. The compact spatial demands of embroidery within the Afghan household are minimal. Though most Afghans are sedentary it is not uncommon during periods of internal displacement within Afghanistan and diaspora contexts of camp and non-camp settings for Afghan families to frequently change residences. Therefore issues of availability of space and ease of transportation requirements are important.

Embroidery practice is viewed by Afghan Muslims as a legitimate economic activity for women during "jihad" periods. That is, textile craft production for consumption outside the family context is valid more so during the jihad periods (Dupree, 1998).

In previous presentations I have defined, outlined and classified the terminology, techniques and styles of Afghan embroidery. From an Afghan point of view, there are at least five distinctive embroidery categories and though they are not necessarily parallel ones their characteristics are distinctive (figure 2).

- Gul dozee are “easy” stitch patterns and techniques of “simple” singular floral designs;
- Khamak dozee includes a variety of more complex natural and geometric designs in repetitive or multiple patterns incorporating a combination of stitch patterns and techniques;
- Taarshumaar dozee and taarkarshee dozee are two embroideries based on geometric patterns requiring advanced technical expertise (to count or to pull threads);
- “other dozee” refers to embroideries that include additive surface objects and are named as such; mura dozee (beads), chaarma dozee (metallic braids) etc.

It is important to keep in mind that historically, items were embroidered for family members, friends and on occasion guests; the social relationships of everyday. In this context, Afghan embroidery can be differentiated by those textiles used for the home versus textiles used as clothing; level of technical expertise and sophistication of design; and ethnic and regional association. These embroidery categories can be further classified according to general embroidery traditions, traditions based on technical ability and traditions of regional and ethnic distinctions (figure 3).

- For example, general embroidery traditions are found primarily on household textiles and children’s clothing; gul and khamak dozee.
- Those textiles exhibiting more technical ability are found on adult clothing worn in more public social contexts; taarshumaar and taarkarshee dozee.
- Those textiles considered more ethnic in association are reserved for special occasions that are the most public and significant to the community; mura and chaarma dozee.

These classifications, however, are ideal ones. Textile production for the consumer market is a recent phenomenon. Afghans fleeing Afghanistan did so on foot walking days through treacherous mountainous terrain of the Khyber Pass and through regions of armed combat. Consequently any textiles that survived the journey were worn in multiple layers. In Afghanistan and refugee camps, textiles owned are textiles worn or used. Whether living in camp or non-camp settings most Afghan refugees have limited material possessions. These items include full and partial head and body coverings, overdresses and pants, and some household textiles. Though Afghan textiles are socially valued they

also provide the first means towards economic survival. Fortunately for Afghans, textiles are highly prized commodities in the market economy.

Consumers of Afghan embroideries fall into three separate but at times overlapping arenas (figure 4);

- Afghan merchants, non-profit organizations and Afghans who live in diaspora communities. Afghan merchants sell textile crafts to tourists, collectors, curators and infrequently to Afghans for cultural and aesthetic value.
- In contrast non-profit organizations supporting economic development projects for Afghans sell textile crafts to tourists, human rights advocates, and to a lesser degree other Afghans for social and economic value.
- Diaspora Afghans purchase embroidered clothing for cultural and ethnic value and identity. The majority of textiles owned by Afghans are more recent hand and machine made items as opposed to the traditional ones made by family members.

Textile items available through Afghan merchants are plentiful. Depending on the shopkeeper, some items are visually displayed on walls while others are so plentiful they are in heaps of piles wherever there is space. Some are complete embroidered items while others are bits of embroideries cut away from the original textile or garment. For example a variety of purses are used for storing monies, eye makeup, tobacco etc. They are embroidered in numerous techniques unique to specific ethnic groups or regions of Afghanistan. Gul and khaamak dozee, taashamar and taarkashee dozee and additive surface design embroideries.

Items sold, then, by non-government organizations are newly made hand or machine sewn items. Similar to piece work women are paid for completed items. In some instances women are reimbursed for items produced independently of an organized development project. NGOs provide a variety of services for refugee women living in camp settings such as health and child care, education, transportation, skill training and employment. Some NGOs provide embroidery materials and cut/sewn patterns to specification with quality control monitored. NGOs market embroidered items as a result of income generating activities. The irony of NGO activity is that development projects that support women also strain male and female relationships and provide a potential contentious environment between the genders.

The majority of textile items produced for NGOs tend to fall in two separate categories; those designed and produced by Afghan women versus those designed by NGOs who provide the materials for Afghan women to complete. Items designed and produced by Afghan women are characterized by simplicity of design, questionable expertise because of an indiscriminating audience eager to support Afghan women. Exclusive NGO designed items are typically marketable items made to compliment other cultural demands; camera cases, key chains, napkins, skirts and vests, dresses, lingerie bags,

Christmas ornaments. Motifs are often large, abstracted, simplified and singular techniques. The most successful NGOs are the Danish DACCAR Sewing Project and the British Ockenden Venture.

Items sold for Afghan diaspora communities are usually commissioned items of clothing and adornment. Very few household textiles fall in this category of consumption. These items are made by Afghans to be worn by Afghans. Items such as women's overdresses, pants, headcoverings, and shoes are mostly machine stitched and embroidered. They are commissioned by a young woman's family for engagement and wedding ceremonies. Collectively these items are referred to as Kaala Afghani or Afghan clothing. The entire ensemble costs the family from \$100-600. However the seamstress/ embroider receives approximately \$10 for her efforts. Negotiations for women's textile work is often arranged by male kin networks. Women provide the labor but it is unclear if they have access to the profits of their work.

Commissioned textiles are possibly the most fashion oriented items possibly because they are made by Afghans in one social context to be used by Afghans in another such as the United States. They are made to order according to consumer preferences of fabric, color, embroidery style, and surface design embroideries. For those diasporan Afghans it has become fashionable to "look" Afghan or ethnic or traditional especially during special occasions. Items commissioned for engagement and wedding ceremonies are then subsequently worn for other Afghan community events such as celebrations following Ramadan and Nawroz the New Year.

In summary, there are a range of embroidered items that Afghans have historically produced in the context of the domestic environment for family member use in social settings that cross private and public domains. However given the current socio-economic, geo-political and religious realities of displaced and refugee status, Afghan women struggle to maintain their honor and virtue by exploiting the textile craft traditions for economic viability.

Notes

1. The transliteration of Afghan and Arabic terms is according to Burhan's and Goutierre's Dari for Foreigners (1983).
2. Nancy Dupree, Personal Communication. Peshawar, Pakistan. April 1998.
2. During the past 6 years I've worked with Afghan refugees in the United States and in refugee communities in Central and South Asia. During this period I have been struck with the complexity of understanding Afghan textile and clothing practices from an Afghan point of view in Afghanistan as well as in diaspora settings (Daly, 1998a; Daly, 1998b; Daly, 1999a; Daly 1999b; Daly, 2000). What are the distinctive cultural practices that differentiate Afghan textile craft traditions from "others"? Similar to our panel presenters I have struggled with

definitions of textile & clothing traditions, the fashionable aspect of these traditions, and their potential for globalization.

Bibliography

Burhan, M., and Goutierre, T. *Dari for Foreigners*. Omaha, NE: Center for Afghanistan Studies, 1983.

Christensen, A. *Aiding Afghanistan: The Background and Prospects for Reconstruction in a Fragmented Society*. Copenhagen: Nordic Institute of Asian Studies, 1995.

Daly, M. "Kaala Afghani: The metallic embroidered clothing of Afghan women." Paper presented at the 25th annual meeting of the Costume Society of America Symposium, Pasadena, CA, May 1998a.

_____. "Afghan refugee women's textile craft economies: A status report with policy Recommendations." Paper presented at the annual meeting of the Third World Studies Association, Omaha, NE, October 1998b.

_____. "Afghan Embroidery: A Classification of Indigenous Terminology and Technique." Paper presented at the 17th annual Ars Textrina Conference., St. Paul, MN, June 1999a.

_____. "Afghan Dozee: A Visual and Cultural Analysis of Afghan Embroidery." Paper presented at the xx annual meeting of Third World Studies Association, Omaha, NE, October 1999b.

_____. "The Ethnic Embroideries of Afghan Women." Paper presented at the annual conference of Women in Successful Aging, Omaha, NE, March 2000.

Dupree, L. *Afghanistan*. 3rd ed. Princeton, New Jersey: Princeton University Press, 1980.

Harvey, J. *Traditional Textiles of Central Asia*. London: Thames and Hudson, 1996.

Magnus, R. and E. Naby. *Afghanistan: Mullah, Marx, and Mujahid*. Boulder, Colorado: Westview Press, 1998.

Majrooh, P. "Afghan Women Between Marxism and Islamic Fundamentalism." *Central Asian Survey* 8(3).87-98, 1998.

Maley, W., ed. *Fundamentalism Reborn?: Afghanistan And the Taliban*. New York: New York University Press, 1998.

Marseden, P. *The Taliban: War, Religion, and the New Order in Afghanistan*. Karachi: Oxford University Press, 1998.

- Paine, S. *Embroidered Textiles: Traditional Patterns From Five Continents With a Worldwide Guide to Identification*. London: Thames and Hudson Ltd.
- Paiva, R. and Dupaigne, B. *Afghan Embroidery*. Lahore, Pakistan: Ferozsons (Pvt.) Ltd., 1993.
- Rashid, A. *Taliban: Militant Islam, oil and fundamentalism in Central Asia*. New Haven: Yale University Press, 2000.
- The Feminist Majority Foundation//<http://www.feminist.org>
(A non-profit group that advocates for the human rights of Afghan women)
- The Taliban Islamic Movement of Afghanistan//<http://www.Taliban.com>
- United Nations High Commission for Refugees//<http://www.unhcr.ch/statist/98oview/ch1.htm>

The Major Income Generating Textile Skills of Afghan Women

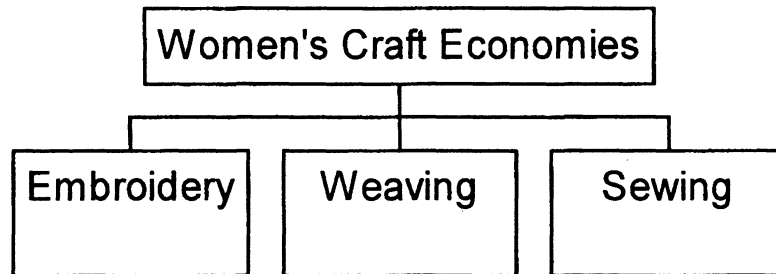


Figure 1

Afghan Embroidery Classification

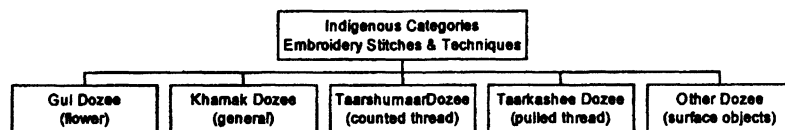


Figure 2

Afghan Embroidery Traditions

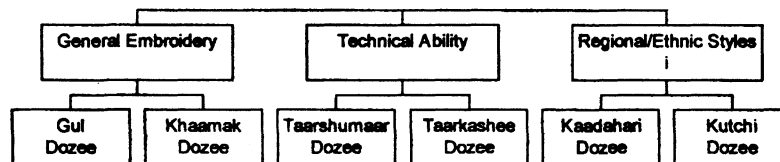


Figure 3

Consumers of Afghan Embroideries

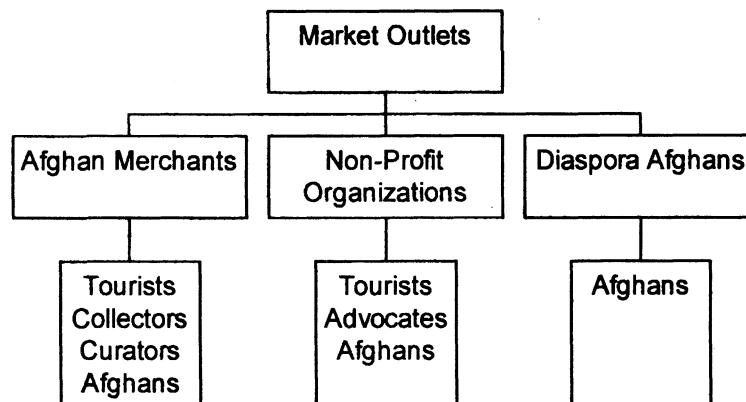


Figure 4

Discussion of Panel “Textile Tradition and Fashion in the Context of Globalization”

By Joanne B. Eicher, University of Minnesota

The papers by Hazel Lutz, Heather Akou, and Cathy Daly raise several overlapping issues that bridge three words—two, fashion and tradition that we have used commonly and perhaps, carelessly. The third, globalization, that is newer in our vocabularies but so common that it approaches or has become a buzzword.

Before continuing with analysis of these words as concepts and their place in understanding textiles today, I want to compliment the authors of the papers for providing their thoughtful and richly documented examples of textile traditions that emerge from Africa and Asia with impact on other continents. Each author provided in-depth knowledge about a specific textile or related set of textiles: Lutz’s example of Indian cloths prepared for export to West Africa; Akou’s example of West African indigo and mud-dyed cloths Africa; and Daly’s example of Afghan women’s embroideries.

Certainly, the details in their papers along with other examples emerging from the symposium prod us to question what fashion, tradition, and globalization mean. In our own panel, Akou provided an easy launching place for defining fashion and tradition. She points out a discrepancy between Roach-Higgins’ and Blumer’s definitions of fashion. However, consistent in each is the idea that change occurs whether we are consciously aware of it or not. She quotes Blumer who says that a primary response to fashion is seen “chiefly as doing what is believed as the superior practice.” Abandoning that which is no longer superior means changing one’s practice. Even though we may have few disagreements about the role of change in fashion, the problems arise in our use of traditional and tradition in relationship to fashion. The implication is that anything that comes from a tradition and is thus traditional has not, does not, and will not change.

John Picton takes issue with this view. He abandoned the use of traditional because it implies being authentic. In viewing or researching other cultures, Westerners seem to have focused on identifying the distinctive practices that allowed us to classify a textile or a dress ensemble as traditional or authentic. In searching to identify what makes a textile “authentic,” we assume people do not change their practices in other cultures. I suspect that early anthropological writing and use of the “ethnographic present” which did not focus on history and changing practices contributed to this assumption about traditional. In addition, we have made, in the past, assumptions about boundedness of cultures which implies little or no contact with outsiders. Boundedness downplays the influence of trade and borrowing of artifacts and practices. In contrast, each presenter today gives rich detail about influence of outsiders and the permeability of boundaries. In Daly’s paper, the non-governmental organizations encouraged Afghan women to embroider items for tourist consumption without stipulating or judging quality. In Lutz’s paper, the Kalabari asked Madras textile producers to reproduce historic velvets that the Kalabari had sequestered for decades. In Akou’s paper, the example of the Dutch manufacturers imitated Indonesian batiks for the West African market.

Actually, these three papers vividly illustrate that what is now being called globalization has existed as far back in the history of human beings as contact among groups has occurred. Imitating others, borrowing, using, and modifying objects and practices is a human trait. Lutz's paper illustrates a wide variety of such borrowings and modifications that span oceans and centuries. The colonial involvement of the English in India led to textiles being transported and traded throughout the British empire, yet significant changes occurred through the demands of West Africans, in this case, the Nigerian Kalabari customers. Sometimes, changes may not come from customer demands but from the creativity of the artist who responds to changing technology and different resources as Heather Akou indicates. Similarly Daly points to tourist demand for buying something Afghan as being responsible for some old embroidered textiles being cut up and set forth as either a discrete art object (such as medallions) or attached to something else (such as purses or other clothing).

I present these comments to stimulate discussion, although I suspect these comments are like preaching to the converted. I see tradition and fashion as a continuum and have serious questions about what makes a textile or dress ensemble "authentic." In regard to the latter, I don't believe that "authenticity" is based on lack of change, but instead on various elements of style, color, form, silhouette, or technique, some of which may continue as stable and some of which may change. Each of these papers indicates that the researcher does not see fashion and tradition as opposites, but instead as intermingled and on a continuum.

As a concluding comment, I want to point out that the papers in this panel are almost in direct opposition to the preceding panel entitled "Reflecting on the Upper World: Textiles of Heaven and Earth." Presenters and members of the audience for that panel lamented the disappearance of textiles identified, described, and idealized as traditional. A lively discussion could arise by comparing these contrasting points of view.

Policarpio Valencia's Embroidered Poetry

by
Annin Barrett

Policarpio Valencia was an artist, a poet, a salt merchant, farmer, water ditch boss, miller, town philosopher, and justice of the peace in the town of Santa Cruz, New Mexico, 25 miles north of Santa Fe. He lived in a section of Santa Cruz named El Santo Niño his whole life, from 1854 until 1931, where he married and had two children. Residents there were known as "*Cañaderos*" because they lived close to the old Santa Cruz Mission (built in the 1730s) which was called Santa Cruz de la Cañada. To get an idea of how geographically isolated this community was, it is interesting to note that he was considered a well traveled man because for a few years he had a trade route from Santa Cruz to Santa Fe to Taos, a distance of only about 70 miles.¹

Hispanic communities first began settling along the Rio Grande River in the 1590s. Franciscan friars came with these early Spanish settlers preaching a strong Christian moral code. They left Spain during the infamous Spanish Inquisition. In New Mexico, one of the most remote places in the Spanish Empire, there was not a lot of direct contact with the Roman Catholic Church. Those priests who were sent concentrated their efforts on converting Native Americans to Christianity. Spanish Catholics were largely left to themselves to practice their religion on their own. The *Penitentes* are a lay order of Catholicism that developed in Colonial New Mexico from followers of the Brotherhood of the Third Order of St. Francis, which began in 13th century Spain. They perform acts of charity, community service, and do penance in the form of self-flagellation and reenacting the crucifixion every Easter. They identify with the suffering of Christ by physical experience of pain in order to attain a higher spiritual awareness. Their rituals are controversial and they have often had to practice them covertly or be persecuted.

Policarpio Valencia may well have been a Penitente since during his lifetime most prominent members of New Mexico Spanish communities belonged to the Brotherhood, and Santa Cruz de la Cañada was a center of Penitente activity.² Whether or not he actually was one, there existed a general cultural aesthetic that valued self-denial and religious devotion. This coexisted with the frontier traits of self-sufficiency, reinventing traditions from the "old" country, and a keen awareness of death. Spanish New Mexicans made their own artwork out of local materials and developed a style that can still be seen today, called *santero* folk art. *Santos* are rough-hewn wooden carvings or painted panels of the saints. The crudeness of these pieces has a directness that can be compelling and even shocking. The realness of the spiritual realm in everyday life is an important feature of this style. Also, there was *colcha* embroidery used as altar cloths, made by women known as the *Carmelitas*, who are the female counterpart of the Brotherhood. Images of the Maltese cross, the Virgin Mary, or floral motifs were couch stitched in wool yarn. However, these colchas are very different visually, technically, and conceptually from Valencia's work.

Valencia's embroidery can be viewed as a kind of penance. Multiple layers of stitches completely cover the ground cloth in an obsessive working and reworking of the surface. It is done mostly in buttonhole stitch, with a few variations. This embroidery is outside of any traditional needlework style, but his work is very true to his cultural heritage of self-sufficiency, reinventing customs, and religious fervor. His innovative approach to embroidery utilized common four-ply cotton rug warp on used and patched fabrics. He stitched pictures of animals and floral designs as well as abstract geometric shapes and poetry. The subjects are often religious or moral messages. Nine of the ten known embroideries by Policarpo Valencia reside at the Museum of International Folk Art in Santa Fe. Several were originally accessioned by E. Boyd, curator of Spanish Colonial Arts at the Museum of New Mexico. A tenth piece is in the collection of The Heard Museum in Phoenix, Arizona. Irene Emery analyzed four of these pieces in the early 1950s. She called them "unlikely, even unbelievable," which is a fair description.³

Most of Valencia's stitchery is worked on pieced and patched used clothing or household textiles. Recycling is a way of life for isolated communities and Valencia made use of old rag rugs, scraps of cotton mattress ticking, knit underwear, and parts of a wool jacket for the ground cloth of his pieces. After he'd basted together enough scraps for a base, he'd cover the surface with a solid layer of buttonhole stitches. The colors have faded, but it is clear he used a variety of hues: orange, red, yellow, purple, blue, brown and white in an apparently random selection. If there was a hole or a missing corner he'd fill that in with needle lace, which is done the same way as a buttonhole stitch, but without piercing the cloth. Next, he'd stitch another layer of design: plants, animals or text.

Sacred symbols are found alongside the mundane facts of daily activities in Valencia's work. In one embroidery, the ground cloth is a wool blanket made by the Beacon Company, similar to a Pendleton blanket. It has Maltese crosses woven into its pattern. This medieval symbol has four arms representing the cross on which Jesus suffered, with eight points symbolizing the Beatitudes. Valencia repeated these crosses in buttonhole stitch interspersed with pictures of animals used by early Spanish settlers, and text describing how domestic animals were used. Another piece commemorates a local event in Valencia's lifetime, the reburial of the bones of 13 priests, with pictures of the crypts.⁴ Animals appear in this piece too, fit in among the deceased and the text. Familiarity with death is integral to Hispanic culture in America, and in particular to the Penitentes. Pictures of their favorite saints always show them holding a cross in one hand and a skull in the other.⁵

Valencia's embroideries are often made without a set orientation. The viewer is required to physically move around the piece to read the pictures and the writing. This is the case in *Sobremesa Antigua*, or Old Tablecloth, where one line of text is upside-down from the other. Perhaps Valencia still thought of the piece as a tablecloth to be placed on a table and viewed horizontally, but it is stiff with stitches and obviously no longer utilitarian. He has titled and signed this abstract geometric composition as part of the stitched design. This self-conscious awareness of artmaking is highly unusual for New

Mexican embroidery in the early 1900s. Colcha embroideries stitched by women were not signed.

Even more intriguing is the hidden poem in another piece. Valencia stitched a message onto the reverse side of a heavily embroidered abstract pattern, which translates into English as:

If this treasure should be lost, as
It is wont to happen, I entreat the one who finds
It he must give it back to me, and if he should be
Long of fingernails and short of understanding
I beg of him to be mindful of the

Seventh commandment. That is all.⁶

This is an eloquent warning label written as a poem. It gives an indication of Valencia's quirky sense of humor even while cautioning the reader not to steal.

The subject of morality is a recurrent theme in Valencia's poetry. In one piece the seven deadly sins are reviewed, and advice given for how to live a good life. It is written in a stream-of-consciousness style starting with, "December 15th I began to put these letters here..." The language is conversational and the reader is addressed directly. He signs this prose poem with, "I write for you – Policarpio Valencia."⁷ There are no pictures in this piece. The text is the design, squeezing into every part of the composition.

In a similar way, Medieval Islamic art sometimes used verses of the Koran as compositional elements. The legacy of Moorish Islamic art has filtered down through Spanish culture with its concept of iconoclasm and love of pattern, both of which occur in Valencia's work. In its strictest form, iconoclasm prohibits the representation of any image, regarding that as competing with God and therefore immoral. Valencia wrestles with this problem in an embroidered piece where he stitched pictures of animals and accompanied them with the following text: "Here are seen likenesses of animals that in all ways resemble their real appearance. There is an adage that says the lion is not as he is painted even if by a good painter. He who painted it first did so even to the color and so it is and shall be."⁸

An overwhelming concern with morality is also evident in probably the best known of Valencia's works. It is a *despedimiento*, or *alabado* poem written at the end of life asking forgiveness of one's sins and admonishing those who remain to live virtuously. The tradition of alabado poetry has been handed down through generations of Spanish New Mexicans to celebrate Christ (specifically Christ's Passion), the Virgin Mary, and also as a reminder of Judgment Day.⁹ This is another one of Valencia's embroideries where the text is the major design element. The commercially woven belt inserted near the bottom is the only area not completely covered with stitches and text. The lines of text gently curve in opposing arcs against the background layer of stitches, creating the illusion of three dimensions, a kind of vortex around which the words swirl.

Policarpio Valencia was a unique artist and while there is no other work quite like his, a similar spirit of innovation, religious observation, and directness is seen in other Northern New Mexico Hispanic folk art of his era. Conceptual elements of Moorish Islamic art can also be seen in his work with its emphasis on pattern and text. By the turn of the last century, the recent arrival of the railroad had brought a flood of Anglos and Anglo culture to Santa Fe. It is possible Valencia saw Victorian pieced quilts or stitched samplers and incorporated these design ideas into his own compositions as well. But he was a true textile maverick, and his work reflects his artistic genius.

Notes

1. Claudia Larcombe, Samuel Larcombe, and Marta Weigle, "E. Boyd's Working Notes on Policarpio Valencia and His Alabado Embroidery," in *Hispanic Arts and Ethnohistory in the Southwest*, (Santa Fe, N.M.: Ancient City Press, 1983), 129-30.
2. Alice Corbin Henderson, *Brothers of Light*, (New York, N.Y.: Harcourt, Brace and Co., 1937), 53-4.
3. Irene Emery, "Samplers Embroidered in String," in *El Palacio*, vol. 60, no. 2, 1953, 42.
4. Information from 1978 notes by Reynalda Dinkel in the archives of the Museum of International Folk Art, Santa Fe, N.M.
5. Ray John de Aragón, *Hermanos de la Luz: Brothers of the Light* (Santa Fe, N.M.: Heartfire Books, 1998), 253.
6. Virginia Churchill Bath, *Needlework in America* (New York, N.Y.: Viking Press, 1979), 120.
7. Translated by Pris Anton in 1992, in the archives of the Museum of International Folk Art, Santa Fe, N.M.
8. Charlene Cerny and Christine Mather, "Textile Production in Twentieth Century New Mexico," in *Rio Grande Textiles*, Nora Fisher, ed. (Santa Fe, N.M.: Museum of New Mexico Press, 1994), 145.
9. Weigle, ed. *Hispanic Arts and Ethnohistory in the Southwest*, 134.

Turkoman Embroidery and Women's Magic

Kate Fitz Gibbon

Turkoman embroidered materials from the late 19th and early 20th centuries collected in Afghanistan were largely unaffected by the commercial pressures brought to bear at that time on other women's handicrafts such as carpets and kilims. Over time, the relative affluence of different tribal groups and the free time available for embroidery affected the style and richness of embroidered materials, but dowry robes, hats, bags and numerous talismanic objects continued to be embroidered for family use. Examination and comparison of these materials with others in museum collections from neighboring Turkmenistan reveal close parallels in pattern and composition, as well as in the inclusion of specifically apotropaic and magical elements within the designs. Although many border and field patterns are widely distributed among the Turkoman tribes, the overtly protective elements within embroideries often take unique, individually creative forms. Many are closely related to talismanic forms found in jewelry. Embroidered protective elements are found primarily in the garments of children and women of child-bearing age, who are most vulnerable to evil influences from human and spirit contacts. Stories and sayings collected from Turkoman women, who act as midwives and traditional healers in communities distant from modern medical facilities may help to explain the meaning and use of these embroidered articles. The author's own fieldwork is supplemented by the analyses contained within the extensive Soviet ethnological studies of the 1940s to the 1960s.

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Embodying Embroidery: Researching Women's Folk Art in Western India

Michele Hardy

Introduction

South Asia is home to an incredibly rich variety of embroideries that include folk, courtly, ritual, and commercial traditions. The scholarly literature on South Asian embroidery has been meagre however and historically emphasised professional embroideries at the expense of the folk¹. With few recent exceptions² folk embroidery in the Sub-Continent has most often been described and classified without reference to the women who make it or the specific cultural traditions that support and give meaning to it³. These 'characterising' accounts of folk embroidery are likely the result of historic circumstance and ancient bias⁴, but they are also the result of certain methodological shortcomings. My research attempts to counter these shortcomings through the use of embodiment and focusing not strictly on embroidery, but embroidering—the processes involved, their contexts, change, and women's perceptions of meaning. Despite the growing influence of theories of praxis and embodiment on the social sciences⁵ and their demonstrated potential for furthering understanding of gender and textiles⁶, there has yet to be an experiential, embodied account of embroidery in South Asia. This paper will examine the potential of embodiment to further women-centred, praxis-oriented research, enhancing understanding of embroidery and women's relationship with it.

Let me take a moment to spell out exactly what I mean by embodiment and how it differs from more traditional ethnographic field methods. Traditionally, ethnography has been based on 'participant observation' where the researcher, him or herself, is assumed to be the "main tool" of inquiry⁷. That said, 'participation' has often involved a more physical than emotional engagement. The emotions and the senses, together with intuition and spirituality are considered suspect, biased, and denied recognition as legitimate 'ways of knowing'. They are trivialised—as the prerogative of women—or relativised—as the prerogative of 'others'⁸. The 'observation' half of the ethnographic equation has tended to privilege sight and the seen (including texts) which are assumed to be objective, impartial, and authoritative. An experiential, embodied approach to ethnographic research challenges the implied dualism of mind and body, subjects and objects. It emphasises the role of whole sensing-thinking-feeling bodies—not just parts of them—in the production of ethnographic knowledge. Moreover, by stressing relationships and interactions it promotes an ethical co-production of knowledge⁹. An embodied approach reminds us that researchers are not the main *tools* of inquiry, but the main *bodies* of inquiry.

The Mutwa of Kutch

My doctoral research has involved documenting recent shifts to folk embroidery in Western India and eliciting women's perceptions of these changes. I have been working with a Muslim clan known as the Mutwa who live in a cluster of villages along the northern frontier of Banni, a semi-isolated tract of land in northern Kutch in the State of Gujarat (Ill.1). Mutwa women are locally, and increasingly internationally¹⁰, renowned for the intricate, mirror-studded embroidery they produce. Although the Mutwa have never been isolated from change, since the mid 1960's the pace and direction of change has been unprecedented. Traditionally cattle herders, they have been forced by altered environmental conditions to seek new occupations¹¹. The construction of roads, telephone lines, and the introduction of regular bus service has linked the Mutwa with urban centres as never before. While this new accessibility has opened up the world to the Mutwa, it has also brought the world to the Mutwa. Visitors arrive almost daily—many bemoaning the Mutwa's 'degraded' traditions, others dismissing them as backwards. Not surprisingly the Mutwa, particularly the youth, have an increasingly ambiguous relationship with 'tradition'.

Although mirror embroidery is widely produced in Kutch and neighbouring areas¹², Mutwa mirror embroidery is among the finest. The Mutwa share with other groups in Kutch a limited repertoire of stitches; each deploys in their own characteristic ways. Motifs are also widely shared although those favoured by the Mutwa tend to stylised flowers and geometric patterns in keeping with Islamic iconoclasm. Before the partition of India and Pakistan in 1947 the Mutwa used cotton thread or untwisted silk floss (*pat*) obtained from markets in Sindh. Currently they use rayon floss ('*art silk*') on cotton or synthetic fabrics purchased for them by male kin in town. Embroidery has been used to embellish women and children's clothing, domestic items like quilts, bags, and cushions (Ill.5), and a variety of textiles used during the wedding ceremony including a mask (*serra*) worn by the groom (Ill.6). This list of embroidered objects is inherently partial and shifting. At some time in the distant past the Mutwa stitched tents (*maroe*) for the bridal couple however they have not been used since partition. Similarly, heavily embroidered dresses worn by young girls (*udarne*) and young women (*choori*) began to fall out of fashion 60-70 years ago. Currently, it is only married women over the age of about 25 who wear embroidered blouses (*kungeree*) (Ill.2). Although specific blouses embellished with prescribed motifs and colour combinations once identified women at different life stages, those associated with the youngest women and brides have fallen out of fashion. Until recently, brides used to wear a special wedding blouse (*guj*) adorned with tiny shells, tassels, and stitched *chandre* (moons) over each breast and shoulder (Illus.7&8)—widely acknowledged symbols of women's fertility¹³. Young brides rarely, if ever, wear *guj* while the motifs associated with them are no longer stitched. Although many women under 25 are exceptional embroiderers, they do not wear embroidered blouses. Currently young women prefer un-embroidered Punjabi suits—long, semi-fitted dresses worn with gathered trousers—perceiving these as more modern, more modest, and more in keeping with their evolving Islamic identity.

Beginning in the 1960's and 70's and coinciding with the environmental changes that forced the Mutwa to seek new occupations, outside interest in Mutwa embroidery was piqued. Many collections of Mutwa embroidery were built at that time¹⁴ even though, for some women, selling off their embroidery was a last resort. At the same time the Mutwa begin stitching commercially for a local NGO. While outside interest in embroidery and the new availability of inexpensive materials temporarily stimulated production of embroidery for the Mutwa's own use, currently married women spend most of their time stitching embroidery for sale. Where mothers-in-law traditionally gave three special blouses to new daughters-in-law (Illus.3&4), these are now generally replaced with Punjabi suits. Although blouses are still occasionally given, they are acknowledged 'sentimental' gifts which the bride is expected to sell not wear.

The Embodied Embroiderer

My embroidery lessons began slowly with Nani. We both felt shy and self-conscious. She took me to her grandfather's house where a chest of embroidery was kept for sale to tourists. She pointed out the different stitches and identified a number of motifs. She drew a simple design on a scrap of cloth and demonstrated pucco before turning back to her own embroidery. It looked so easy. Commonly called the 'open chain' or 'ladder stitch' in English, pucco is the most prevalent stitch used by Mutwa women. "It is a simple craft, anyone can do it," I had heard people say again and again. Yet after painstakingly stitching, watching my orange ladder veer left and right, swelling and constricting, I realised 'they' had probably never tried it.

I had obtained my supplies from the markets in town learning, in the process, to ask for unspun rayon floss that is 'guaranteed' colour fast as opposed to only possibly so, a difference reflected in the price. I also learned to look for the thin, unblemished pieces of mirror the Mutwa cut into tiny circles to embellish their embroidery with. For my first round of samples, I had especially purchased hand woven white cotton fabric. To my mind, and according to my previous experience, that was what you learned to embroider on—white because it forms a neutral background, cotton because it feels nice, and hand woven because it is easy to stitch through. Returning to the village, I quickly learned why white was not a practical choice in a village

essentially built of mud and dung. More slowly I realised that Mutwa women virtually never wear white¹⁵ and never embroider on white hence, even though I had chosen the proper thread colours, the designs never 'looked right'¹⁶.

*My working relationship with Nani gradually settled into a regular pattern. We generally met in her extended family's courtyard in the morning, then drifted off to her father's house if the children became too rambunctious—or even if they didn't. She preferred to embroider in her own home, against the wall by the window for light. Generally it was just the two of us though occasionally a cousin or a girlfriend would join us or one or the other of her brothers would drift in to watch for a while. Sometimes Nani's mother would sit on one side quietly stitching or cutting mirrors while listening to the Quran reading broadcast on Radio Pakistan every morning. And sometimes she would spread her prayer mat and do her **namaz** (prostration and prayer) right there. Nani often cared for her uncle's two young daughters, who would sit quietly watching her stitch, absorbing its colours, its patterns and rhythms. After their brother was born he too was frequently included in our circle.*

I spent a lot of time stitching with Nani. Although I had initially hoped to learn with an older woman, one who, to my mind at the time, was a more 'authentic' embroiderer, learning with Nani had distinct advantages. For one thing, she had the time and the interest. When I started my research Nani was 17, unmarried, and spent most of her time stitching. Her aunt and grandmother, though renowned embroiderers in their time, were busy caring for husbands and children and periodically claimed they weren't interested in embroidering any more. Unlike most married women (and many other unmarried women) who stitched almost exclusively for sale, Nani was embroidering items for her dowry (*dagio*) as well as for sale. Stitching with Nani I realised women employ different stitching strategies depending on the intended use and destination of their embroidery¹⁷. Another advantage of stitching with Nani was that, unlike many of her elders, she embraced rather than dismissed change. She was a patient teacher putting up with my need for repeated stitch demonstrations and endless, seemingly irrelevant questions. Still, there were many things Nani couldn't explain or I didn't know to ask. It took, for example, many hours of tortured stitching before I began to appreciate the relationship between needle size, cloth texture, and stitch fineness. It wasn't until much later that I realised my efforts to stitch finely and evenly were being hindered by my reliance on sight. I discovered, quite by accident, late one afternoon as the sun was setting and the light was growing dim, that my stitching improved as I was forced to trust my sense of touch and the rhythms I had embodied but not yet exercised. While these insights are likely not revolutionary, they suggest an altered experience of time and space, and the relative role of the senses in knowing betrayed by normative ethnographic methods.

Late one afternoon I was sitting with Nani in her father's house embroidering. We sat in the light near the door, facing her grandfather's house—Nani was on one side, out of sight of passers-by. I sat in the middle of the light shining through the open doorway. Bent over my work I didn't notice the group of Border Security officers who had gathered in the courtyard. I found out later that they were a newly posted group who had come to ask Nani's grandfather about the foreigner who was living in the village. They must have stood there watching me for several minutes before I happened to glance up. I saw the shiny black boots, the green uniforms, the rifles, the fixed brown stares and realised I was being surveyed. I retreated self consciously into my stitching, no nod, no smile. My eyes, my thoughts protected. Stitching. Bored or convinced of my innocuousness, they shuffled away.

The Mutwa observe a form of purdah that discourages photographs of women and curbs the interaction between women and men outside of their extended families. Because most of the men in the village are considered kin, purdah is relatively relaxed within the village¹⁸. That said, as young women mature they tend to remain close to home at least until their own children have grown. Although male visitors from other villages should avoid contact with non-related women, occasionally it is unavoidable. Caught unaware women dive for cover or, if not possible or if the

man is not too serious a threat, they tug at their veils, lower their eyes and retreat into their embroidery. I had seen women react this way in front of strangers as well as, though less stringently, elder males or women they were not interested in interacting with. I had even done it myself. There was a young woman in the village who used to occasionally follow me around and harass me. Avoiding her was not always possible in such a small village. Instead, Nani and I would grow uncharacteristically quiet, and focus intently on our stitching until she grew bored and moved on. It didn't always work—sometimes she would just snatch my embroidery away and knot all the threads. Embroidery, for the most part, offers women not just a guise or a productive excuse, but a physical means of protection, a means of claiming integrity and chastity, of including or excluding, showing respect or disdain for others.

I returned to Kutch last May to visit the Mutwa. I had been away for 18 months so there was much catching up to do. There had been births, deaths, weddings, engagements, fights and reconciliations that I was anxious to hear all about. I hadn't intended on embroidering during my visit as time was short and I was concerned that the Mutwa might be offended if I seemed to focus more on embroidery than our conversations. But after a couple of days they asked why I wasn't stitching, as if something were amiss. I recalled a comment Nani's aunt had once made—that my embroidering was "very good". I thought she had meant that my stitching was good or at least it was improving but I began to realise she had meant I was good because I stitched. I spent my time embroidering rather than running around here and there—something the young woman who periodically harassed me was criticised for. She rarely embroidered anymore and when she did it was careless. She ran the risk of being labelled "halky-halky"—literally, fast. I was judged against a backdrop of foreign tourists and textile researchers who had come before me—in fact had come and gone but seldom stayed and stitched for any length of time. 'My idea', was acknowledged as 'a good idea'—which I took to mean that my approach to learning embroidery, an approach which involved learning about being a Mutwa women, was appropriate and supported.

A Mutwa woman who spends a lot of time stitching and stitches well is said to have "hooner". This suggests that skill, while ostensibly about technical ability, embraces temporal and moral dimensions. I was 'good' because my embroidering implied concentration, discipline, and industriousness—qualities ideally associated with women in purdah. Anthropologists have tended to view purdah primarily as a means of controlling and controlling access to women—at best partial views that overlook Muslim women's impressions, incentives, and experiences¹⁹. Given that Islam is a religion that places enormous emphasis on 'right practice' as opposed to 'right belief'²⁰, an alternative understanding of purdah is as a form of praxis or 'esteemed behaviour' for Muslim women²¹. For the Mutwa, embroidery is evidence of purdah observed. Similarly, embroidering is an important means of instilling good habits and moral qualities.

Conclusion

As a maker of textiles who shifted to study other makers it was perhaps only natural that I would insist on an embodied approach to researching women and embroidery. But apart from a whim, embodiment has proved a uniquely suitable and insightful means of approaching embroidery. As a craft exclusively associated with women in Kutch, there are no histories of folk embroidery, no records, nor formal means of instruction. While motifs and stitches are readily named, meanings are often barely articulated, implicit, and shared.

My research involved over 22 months of fieldwork; much of it spent bent over a scrap of cloth torturing my fingers and knees. It was wonderful. Sitting there stitching, day after day, facilitated discussions of embroidery issues, examination of embroidery in production and use, participation in decisions about design, marketing, gifting and other related strategies. And as I have tried to suggest here, embodiment added further depth, enhancing normative ethnographic methods that have tended, if not to overlook, to undermine the complex meanings associated with Indian folk embroidery. An embodied approach shed insight into the performative aspects of embroidery—how embroidering is a means of

including and excluding, of showing respect or disdain for others. Moreover, in a context where embroidery is increasingly produced for sale to outsiders and is no longer worn by young Mutwa women, embodiment revealed how embroidery is being displaced—its symbolic significance denounced and censured. Where embroidery has often been associated with women in purdah, embodiment suggested ways in which embroidering not just demonstrates morality, but actually enhances it. Embodiment provided a means of eliciting the subtle connections and disconnections between Mutwa women's bodies and their embroidery. As both a method and a motif, embodiment expands the discussion of embroidery beyond the embellished surface, promoting a more finely textured understanding of women and folk embroidery in South Asia and, potentially, beyond.

Illustration 1. Map of Western India showing Kutch

(highlighted).

Illustration 2. Contemporary Mutwa *kungeree*.





Illustration 3. Mutwa *kungeroo*, c. 1988. *Kungeroo* were traditionally gifted to new brides by their mothers-in-law.

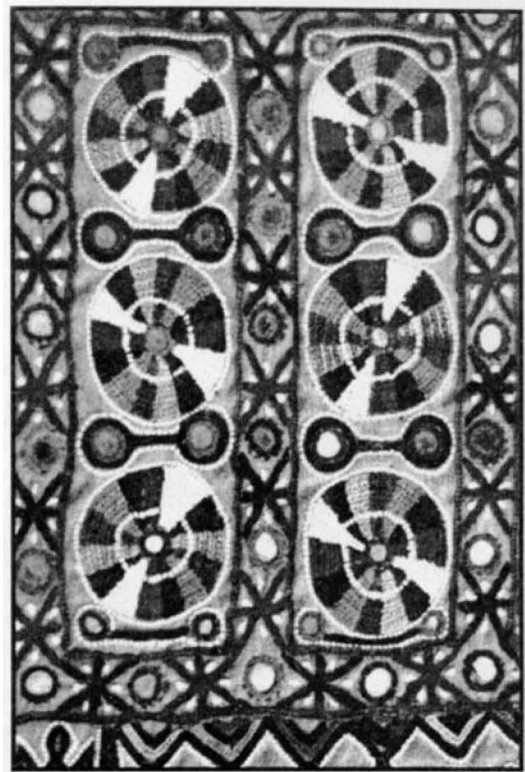


Illustration 4. Mutwa *kungeroo*, detail of Ill. 3.

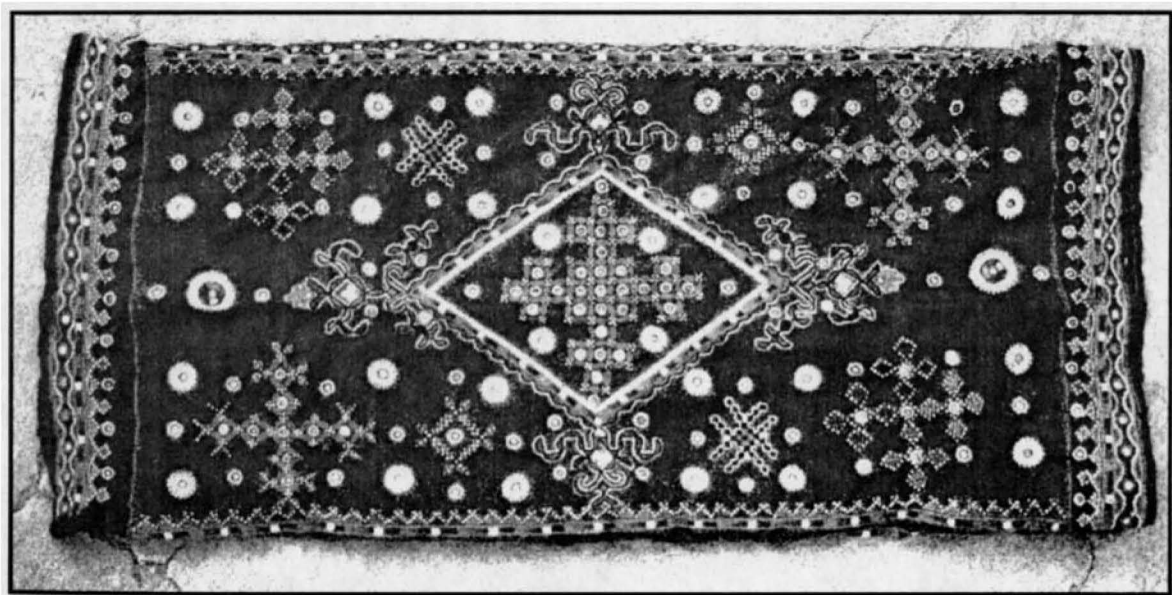


Illustration 5. Cushion cover (*ooseeko*), c. 1990. Young Mutwa women traditionally stitched a cushion cover for their dowries.



Illustration 6. *Four Mutwa grooms wearing embroidered and beaded masks (serra), 1998.*



Illustration 7. *Mutwa wedding blouse (guj), c. 1970.*

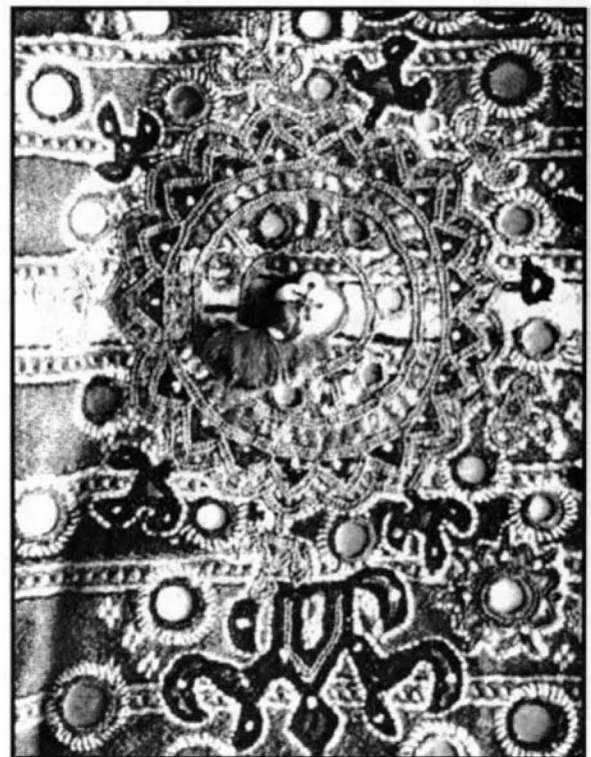


Illustration 8. *Detail of Ill.7 showing the moon motif (chandre).*

A c k n o w l e d g e m e n t s

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N o t e s

¹ See the *Journal of Indian Textile History*; Irwin, J. and Hall, M. *Indian Embroideries*. Ahmedabad: Calico Museum, 1973; Irwin, J. "The Commercial Embroidery of Gujarat in the Seventeenth Century", *Journal of Indian Society of Oriental Art* 17, 1949, 51-56.

² Frater, J. "The Meaning of Folk Art in Rabari Life", *Textile Museum Journal* 4, 1975, 47-60; Frater, J. *Threads of Identity: Embroidery and Adornment of the Nomadic Rabaris*. Ahmedabad: Mapin, 1995; Tarlo, E. *Clothing Matters: Dress and Identity in India*. New Delhi: Viking, 1996; Elson, V. *Dowries of Kutch: A Women's Folk Art Tradition in India*. Los Angeles: University of California, 1979; Jain, J. *Folk Art and Culture of Gujarat*. Ahmedabad: Shreyas Folk Museum, 1980.

³ For example: Nanavati, J.M., et al., (1966). *The Embroidery and Beadwork of Kutch and Saurashtra*. Baroda: Museum Monograph Series, 1966; Grewel, N. and Grewel, A. *The Needle Lore*. Delhi: Ajanta, 1988; Chattopadhyay, K. *Indian Embroidery*. New Delhi: Wiley, 1977.

⁴ While these 'characterising' accounts have been shaped by the availability of historic evidence, it can also be argued that they have been effected by widely held gender biases, Orientalism, and particular European ideas regarding the relative merit of the arts. See, for example: Parker, R. *The Subversive Stitch: Embroidery and the Making of the Feminine*. London: Women's Press, 1984; Said, E.W. *Orientalism*. New York: Random House, 1979; Kristeller, P.O. "The Modern System of the Arts: A Study in the History of Aesthetics (I)", *Journal of the History of Ideas* 12, 1951, 496-527.

⁵ Coy, M.W. (ed.): *Apprenticeship: From Theory to Method and Back Again*. New York: State University of New York, 1989; Jackson, M. "Knowledge of the Body", *Man*, 18, 1983, 327-345; Csordas, T.J. "Embodiment as a Paradigm for Anthropology", *Ethos*, 18, 1990, 5-47.

⁶ Dilley, R. M. "Secrets and Skills: Apprenticeship Among Tukolor Weavers", in Coy, M.W. (ed.): *Apprenticeship: From Theory to Method and Back Again*, New York: State University of New York, 1989, 181-287; Messick, B. "Subordinate Discourse: Women, Weaving, and Gender Relations in North Africa", *American Ethnologist* 14, 1987, 210-225; Mehta, D. *Work, Ritual, Biography: A Muslim Community in North India*. Delhi: Oxford University Press, 1997.

⁷ Burgess, B.G. (ed.): *Field Research: A Sourcebook and Field Manual*, London: George Allen and Unwin, 1982.

⁸ Code, L. *What Can She Know?* Ithaca: Cornell University Press, 1991; Young, D.E. and Goulet, J.G. (eds.): *Being Changed: The Anthropology of Extraordinary Experience*. Peterborough: Broadview Press, 1994; Hardy, M. "Crafts and Knowledge", in Hickey, G. (ed.): *Making and Metaphor: A Discussion of Meaning in Contemporary Craft*, Hull: Canadian Museum of Civilization, 1994, 48-57.

⁹ Harding, S. "Introduction: Is There a Feminist Method?" in Harding, S. (ed.): *Feminism and Methodology*, Bloomington: Indiana University Press, 1987, 1-14; Abu-Lughod, L. "Writing Against Culture", in Fox, R.G. (ed.): *Recapturing Anthropology: Working in the Present*, Santa Fe: School of

American Research Press, 1991, 137-162; Visweswaran, K. *Fictions of Feminist Ethnography*. Minneapolis: University of Minnesota Press, 1994.

¹⁰ Elson, V. *Dowries of Kutch: A Women's Folk Art Tradition in India*. Los Angeles: University of California, 1979; Jain, J. *Folk Art and Culture of Gujarat*. Ahmedabad: Shreyas Folk Museum, 1980.

¹¹ Mehta, L. Kutch, the Sardar Sarovar Project and the Socio-Economic Component in Water Resources Management: The Case of Kanmer in Eastern Kutch (Final Report). London: Overseas Development Institute, 1996; Williams, L.F. *The Black Hills. Kutch in History and Legend: A Study in Indian Local Loyalties*. London: Weidenfeld and Nicolson, 1981.

¹² Mirror embroidery is common in Sindh, Pakistan, Kutch and Saurashtra in Gujarat and western Rajasthan. See: Askari, N. and Crill, R. *Colours of the Indus: Costumes and Textiles of Pakistan*. London: Victoria and Albert Museum, 1997; Nabholz-Kartaschoff, M.L. *Golden Sprays and Scarlet Flowers: Traditional Indian Textiles*. Kyoto: Shiksha, 1986.

¹³ Paine, S. *Embroidered Textiles: Traditional Patterns From Five Continents*. London: Thames and Hudson, 1990.

¹⁴ See, for example, the prefaces to Jain and Elson, op cit.

¹⁵ Unlike Mutwa men who wear white cloth for any special occasion, Mutwa women only wear white when they marry, when they go on pilgrimage to Mecca, and after they die.

¹⁶ Unbeknownst to me at the time I was re-enacting cultural preferences that had 'coloured' the export market for Indian textiles to Europe two hundred years ago. Irwin notes that it was not until Indian artisans started producing coloured designs on white backgrounds (as opposed to reserved white designs on coloured backgrounds) that Indian painted textiles gained popularity in Europe ("Indian Textile Trade in the Seventeenth Century: 1) Western India", *Journal of Indian Textile History* 1, 1955, 5-30.

¹⁷ In stitching for commercial purposes women simplify stitches, tend to make them larger with thicker threads and emphasise patterns that can be produced more quickly. In her recent book on the Chikan embroidery of Lucknow, Clare Wilkinson-Weber makes a similar, more thoroughly documented, point (*Embroidering Lives: Women's Work and Skill in the Lucknow Embroidery Industry*. Albany: State University of N.Y., 1999).

¹⁸ For a discussion of the differences between Muslim and Hindu forms of purdah in South Asia see: Vatuk, S. "Purdah Revisited: A Comparison of Hindu and Muslim Interpretations of the Cultural Meaning of Purdah in South Asia", in Papanek, H. and Minault, G. (eds.): *Separate Worlds: Studies of Purdah in South Asia*, Delhi: Chanakya, 1982, 54-78.

¹⁹ Lazreg, M. "Feminism and Difference: The Perils of Writing as a Woman on Women in Algeria", *Feminist Studies*, 14, 1988, 81-107.

²⁰ Esposito, J.L. *Islam: The Straight Path*. Oxford: Oxford University Press, 1988.

²¹ My thoughts on purdah as praxis are inspired by A. Boudhiba's discussion of Muslim habits and embodiment (*Sexuality in Islam*. London: Routledge, 1985), and Barbara Metcalf's edited work on *adab* (*Moral Conduct and Authority: The Place of Adab in South Asian Islam*. Berkeley: University of California, 1984).

**Heavens' Embroidered Cloths - textiles from the
Honan Chapel, University College Cork, Ireland**

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Introduction

University College Cork was founded in 1845 as Queen's College, at that time a secular state institution for third level education for men. By the end of the century the College had prospered and was taking in students not only from the city but from the whole county. Since Queen's College was non-sectarian, initially there was no Chapel built for College use. The Honan Chapel was built by private bequest to fill this gap and to provide a spiritual base for Roman Catholic students attending College. Robert, Matthew and Isabella Honan, brothers and sister, were the last of a wealthy Cork merchant family who wished to make a bequest to College; leaving its disposition to John O'Connell, their lawyer.

It is to John O'Connell, a devout man who later, after the death of his wife became a priest, that we owe the unique composition that is the Honan Chapel and its contents. He was supported by the President of College at the time, Bertram Windle. At the end of the nineteenth century Irish ecclesiastical architecture, fittings and liturgical textiles were strongly influenced by other Catholic European countries and in many cases materials were brought in from abroad. The startling innovation of John O'Connell's concept was to look back to Early Christian Irish buildings and artefacts for inspiration, and to insist that Irish artists and craftspeople would design and make almost everything in the Chapel.¹ This inspiration seems to have sprung from his religious convictions but this was also a time of powerful development of Irish national consciousness, and of growing demands for independence. It was a happy confluence of events that the project took place at the height of the European Arts and Crafts Movement when many countries were looking back into their earlier histories to regain or reinforce their sense of identity. Those within the Movement were, at the same time, eager to abandon the standardisation and degradation of design and craftsmanship resulting from factory production.

The Chapel and its contents were all designed and constructed at the one time. It happened that the Chapel was consecrated in 1916, the same year in which the Irish Revolution took place.

To understand the ecclesiastical textiles in the Honan it is important to demonstrate something of the richness of the other elements that make up the Chapel which itself uses components from several Irish Romanesque churches including the twelfth century Cormac's Chapel, Cashel, Co. Tipperary. The stained glass windows are by Harry Clarke and Sarah Purser and show in vivid colours a panoply of Cork and Irish saints. There are silver altar fittings by Edmond Johnson of Dublin and William Egan & Sons of Cork. The enamelled tabernacle is by Oswald Reeves, the illuminated mass cards and missals by Joseph Tierney with the bookbindings by Eleanor Kelly. The Chapel furniture was made by John Sisk & Co.; they also built the Chapel, and the firm is still very successfully in business today.^{2,3} This gives but a small appreciation of these treasures but sets the textiles in context. They, as part of the whole, are firmly grounded in their cultural, geographic and temporal setting

THE TEXTILES

The textiles in the collection comprise all the articles necessary for the life of worship of the church. They may be divided into two separate parts; the first being the **vestments and accessories** associated with the celebration of the sacraments, and the second those **items which furnish the altar and chancel**. The majority of altar furnishings is linked with the vestments in that they constitute sets specific to seasons of the Church's year. For example, there are altar frontals (*antependia*) and the hangings behind (*dossals*) to match each of the sets of chasubles and copes for festivals, penitential and ordinary seasons.

Presently there is a known total of just over one hundred items and these are mainly listed in the Inventory compiled in 1989.⁴ Here then are some of the high-points to give a flavor of the collection.

VESTMENTS

In the first group there are sets of **gold, white, red, violet, black and green vestments and Eucharistic accessories** each to be used at different seasons. In general terms the gold and white are for festivals; the red for Whitsuntide and festivals of martyrs; green was used between Epiphany and Lent, and between Trinity and Advent; violet for Advent and Lent; and black for funerals and masses for the dead. The sets to be used for High Mass would consist of **chasuble, cope, two dalmatics, stoles, maniples, humeral veil, chalice veil and chalice burse**.⁵ The embroideries on the vestments are all of the Early Irish style drawing their inspiration from the Book of Durrow and the Book of Kells. They are worked mainly on **Irish poplin** which is a mixed weave of silk and wool, or cotton, or unusually, linen. The vestments seem to be made with a silk warp and a wool weft. Often the wool was a fine merino from Australia. The cloth needs to be light and relatively cool since the vestments were worn over other clothing. The typically ribbed effect of poplin is created by using a silk warp system and a thicker cylindrical weft system. When the weft picks are woven in, the silk warp ends completely cover them but the 'ribs' stand out.

The exception is the gold set which is made of '**cloth of gold**,' a cloth incorporating gold metal thread. This would be worn at festivals. Several firms in Dublin were then still weaving poplin and 'cloth of gold'; they include Atkinsons, Elliotts, Pymms and Frys, all well established in their manufacture.⁶ These background cloths are themselves valuable survivals from the period when the manufacture of Irish poplin was still successful and not yet in decline. The pieces of cloth that constitute the vestments are now precious survivals since sadly poplin is no longer being made in Dublin. Thomas Elliott & Sons had premises in Clonakilty, Co. Cork until 1979, and poplin is still woven in Belfast by Atkinsons. Linen surplices made to an antique pattern were also made up.

The vestments, of poplin, cloth of gold or linen, were all designed and made in Cork. The sewing and embroidery were carried out in the workshops of William Egan & Sons. The firm was long-established with a strong tradition for excellence, having been founded in 1823.⁷ A group of about thirty girls over an eighteen month period completed the work with Barry Michael Egan in charge.⁸ The 'cloth of gold' set was designed by Ethel Josephine Scally who died in 1915 before she could see her plans completed. The chasuble displays examples of the Celtic style embroideries although at some time in the past it has been cut from the original cloth and remounted, presumably

due to the deterioration of this last. Most regrettably the cope in this set has not survived well and cannot be displayed. There are illustrations of the *morse* or clasp on the cope and the edge of the *humeral veil* which show off the quality of the cloth. So some pieces in the original cloth do survive but in a bad state. Indeed some sets of vestments now appear to be incomplete.

One of the pleasing aspects of the textiles is the more intimate knowledge of the women who made and embroidered the vestments which is afforded by the embroidered inscription on the interior of the chasuble. This gives all their names including that of Ethel Scally the designer, and a prayer for the repose of her soul. Here is also the evidence that the work involved Barry Egan, then in charge of the family firm at 32 Patrick Street, Cork. This dedication was transferred to the new backing.

A question that comes to mind is why were conditions right at the time in Cork for this flowering of talent and skill? There seem to be several reasons. A very immediate one is that Barry Egan as a young man spent several years of apprenticeship in silversmithing and vestment making in both Belgium and France. In 1900 he went to Paris where he spent time with Biais Freres, one of the most important manufacturers of these items whose premises were located in la Place St. Sulpice.⁹ It was on his return that he set up an embroidery and vestment workshop above the shop.

There had also been a movement in Cork since the middle of the nineteenth century to promote female employment and skills. Numerous groups were set up by convents and benevolent ladies of all religious denominations which trained and sometimes employed girls in crochet work, silk hair net making, knitting, making shirt fronts, general needlework and embroidery. There were other schemes connected with large commercial textile establishments who ran industrial schools-cum-factories with mainly young women employees who thus developed sewing skills.¹⁰ The founding of the Cork School of Art and of a Cork school of needlework in the 1880s, and the general development of interest in decorative textiles led to a climate sympathetic to the ideals of the Arts and Crafts Movement.¹¹

Another development was that of the Irish lace industry which can only be mentioned briefly here. It was at this time that Cork, Youghal, Limerick, Carrickmacross and other lace flourished.¹²

ALTAR FURNISHINGS

The second group of textiles includes the altar frontals and back hangings, all made by Evelyn Gleeson and the Dun Emer Guild in Dublin. They are of course used in conjunction with the appropriate vestments at the different seasons.

The black set is, for example, used for the Annual Founders Mass which takes place in the third week of October, and is traditionally the ceremonial memorial for the Honan family. There is a **white antependium with blue applique panels** and embroideries which show it was made for the Feast Days of the Blessed Virgin Mary. Here we see scenes from the life of Mary which embody a delicacy and charm totally suitable to their subject. First there is the Annunciation (*Mater Dolorosa*), then the Assumption (*Regina Coeli*) in the center, and finally the Nativity (*Mater Dei*). There are delightful red-headed Irish angels paying their respects to Mary and her Babe, and assisting in the other panels. This last item and the following ones display a completely different inspiration to that of the Egan vestments.

Three other very interesting pieces made by the Guild are **the banner of St. FinnBarr**, the **embroidered antependium of Our Lord with Irish saints** and the **wool tapestry dossal**. **The banner** shows St. FinnBarr in the vestments suited to a Bishop, and wearing one glove. Behind the gloved hand a small tree is bursting into flower. On the other side of the Saint a lamb is standing. The Saint's gloved hand refers to the legend attributed to him that Christ touched his hand whilst he was praying, and he then, out of humility, wore a glove to disguise the fact. The small tree is a hazel bush FinnBarr caused to break into flower in the winter-time.¹³ The whole surface of the banner is embroidered in a variety of stitches, including variations of laid and cord work, and satin and split stitch.

The antependium is also completely covered with embroidery. Close examination gives some idea of the quality and variety of the work. Here we have a seated figure of Our Lord holding the Book of the Gospels. The other figures, from the left, are St. Ita, St. Columcille, St. Patrick, St. Brigid, St. FinnBarr and St. Colman.

The wool tapestry dossal is a work of great visual richness set on a deep red ground. The tapestry is divided into four panels containing the traditional symbols of the Evangelists. Matthew is represented by a man; Mark by a lion; Luke by an ox; and John by an eagle.

The Guild also made a **set of carpets** for the chancel and altar steps; this was another of its specialities. There is also a single round cushion, with St. John's eagle; perhaps there were three others originally. The design is very close to that of the eagle on the dossal.

DUN EMER GUILD

The Dun Emer Guild had been started in 1902 by **Evelyn Gleeson** and **Susan (Lily) and Elizabeth (Lolly) Yeats**, sisters, of course of William Butler and Jack Yeats (the poet and the artist).¹⁴ The high quality output of the Guild was an important part of the Celtic Revival, and the Arts and Crafts Movement in which it was active for many years, finally declining into closure around 1964. In its heyday the Guild was most productive, with tapestries, carpets, vestments and embroideries being pre-eminent. There was also a printing and publishing Press and later enamel work was undertaken.¹⁵ Evelyn Gleeson was so determined to weave tapestries authentically that she borrowed an old loom from the National Museum.¹⁶

After 1908 the Yeats sisters were no longer connected with the Guild, leaving to set up their own Cuala enterprise. Later Evelyn Gleeson's niece **Katherine or Kitty MacCormack**, having been brought up at Dun Emer, began to work as a designer and part of the group. **May Kerley**, a niece of Augustine Henry was also an important member of the group. These names appear on pieces of the Honan textiles

Here it is appropriate to underline the interesting role played by women artists and craftworkers in the Irish Arts and Crafts Movement. As was also true in Scotland and England, young women eagerly took advantage of the opening and development of art colleges in both Dublin and Cork. Alternatively, like the Yeats sisters they taught themselves the skills they needed to thrive outside the home. From the names quoted here, it can be seen that the Honan treasures stem from the talents of Sarah Purser, Eleanor Kelly, Evelyn Gleeson and the women named on the textiles just as much as from the gifted men involved. It was an exciting time for women as they enthusiastically became engaged with the wider world.

And finally, why choose the W.B. Yeats' quotation, aside from the fact it is from a poem that so many people know and love? It came in mind when considering the background to the Honan textiles, and their general ambience. Although the poem was written before 1899, it certainly seems likely that W.B. Yeats would have a clear idea of how 'heavens' embroidered cloths' might have looked. He would have been very aware of the excitement generated by the 'new' textiles of the Movement. Living in London at that time he had become a friend of William Morris; his sister Lily had worked with Morris's daughter May in that family's famous textile and embroidery workshop. Lily learnt to embroider and sometimes design textiles there. Textiles were central to the vision of the Arts and Crafts Movement, not marginalised, as they sometimes seem to be nowadays. Later both William and Jack were very supportive of their sisters' involvement in the Dun Emer project with advice and specific designs. Just as every part of the Honan Chapel and its contents has its own integrity and value so all the arts and crafts of the celtic renaissance were held in high esteem. The textiles made and embroidered for the Honan Chapel can take their place proudly among the other treasures there. Surely William Butler Yeats' lines are an appropriate, though unwitting, description of this dazzling collection.

HE WISHES FOR THE CLOTHS OF HEAVEN

Had I the heavens' embroidered cloths,
 Enwrought with golden and silver light,
 The blue and the dim and the dark cloths
 Of night and light and the half-light,
 I would spread the cloths under your feet:
 But I, being poor, have only my dreams;
 I have spread my dreams under your feet;
 Tread softly because you tread on my dreams.

W.B. Yeats (*from The Wind among the Reeds, 1899*)

References

- ¹ O'Connell, John. *The Collegiate Chapel Cork*, Cork University Press, 1932.
- ² *ibid.*
- ³ O'Kelly, Michael.J. *The Honan Chapel, University College Cork*, Cork University Press, Cork, 1966.
- ⁴ Wincott Hockett, Elizabeth and Teehan C. Virginia *The Honan Chapel Collection, University College Cork - an inventory*. (unpublished) 1991.
- ⁵ James, Raymund *The Origin and development of Roman liturgical vestments*. Catholic Records Press, Exeter. 1934, pp. 3-12.
- ⁶ Campion, Mary 1963 'An old Dublin industry - poplin' (from the old Dublin Society, 28 November 1962) *Dublin Historical Record* 19, pp. 1-14. (Australian wool p. 9. cloth of gold pp. 12-13)

- ⁷ *Cork Examiner*, November 28, 1979, p. 8.
- ⁸ Larmour, Paul *The Arts and Crafts movement in Ireland*. Friar's Bush Press, Belfast. 1992, p. 134.
- ⁹ O Mahony, Eoin 'Our notable men' *The Chrystal*, Cork, 1927 p. 200.
- ¹⁰ Cronin, Moira 'Work and Workers' (eds) Patrick o'Flanagan and Cornelius Buttimer *Cork History and Society*) Geography Publications, Dublin 1993, pp.721-58. (p.738).
- ¹¹ Murray, Peter 'Art institutions in nineteenth-century Cork (eds) Patrick O'Flanagan and Cornelius Buttimer *Cork History and Society*, Geography Publications, Dublin 1993 pp. 813-72. (pp. 856-69).
- ¹² Longfield, Ada *Guide to the Collection of Lace in the National Museum of Ireland*, the Stationery Office, Dublin. 1982, pp.26-43.
- ¹³ . O'Kelly, Michael.J. *The Honan Chapel, University College Cork*, Cork University Press, Cork, 1966.
- ¹⁴ Hardwick, Joan *The Yeats Sisters - a biography of Susan and Elizabeth Yeats* HarperCollins London. 1996, pp. 117-121.
- ¹⁵ Paul Larmour, *The Arts and Crafts movement in Ireland* Friar's Bush Press, Belfast. 1992, pp. 151-161.
- ¹⁶ Mairead Dunlevy 'The Honan Hostel Chapel - an observation' in (eds) Elizabeth Wincott Heckett and C. Virginia Teehan *The Honan Collection, University College Cork - an inventory*. p. 16 (of Dunlevy section). (unpublished) 1991.

ADDENDUM

For the general interest of TSA members the following American references from the Irish Arts and Crafts Movement have been collated from Paul Larmour's *The Arts and Crafts Movement in Ireland* cited above.

In 1908 Dun Emer Guild and Cuala Industries (rival groups by then) displayed at the Irish Industrial Exposition in Madison Square Gardens, NY. p159.

In 1923 they provided vestments for St. Patrick's Church, San Francisco to the order of Monsignor Roberts. 'Designed by Katherine MacCormack these vestments were lavishly ornamented with panels of Celtic pattern and medallions of Irish saints embroidered in 'cloth of gold' specially made by Atkinsons the well-known Dublin poplin manufacturers.' p.160. (also see *Irish Builder and Engineer*, 11 August 1923, p. 605). (St. Patrick's still stands but a friend who visited there a few years ago reported that nothing is now known of the whereabouts of the vestments.)

Embroidery from Kenmare Convent, Co. Kerry (Poor Clare Sisters), was shown and won a medal at Chicago Exhibition of 1893. The Sisters showed a set of Celtic ornamented chasubles and accessories made for Cardinal Gibbons. p.15. (also see *Irish Textile Journal*, 15 February 1893 p. 20, and 15 March 93, p. 38; *The Queen*, 7 January 1893 p. 8 - 'Irish exhibits for Chicago.'

**CONTEMPORARY POLISH TEXTILE ART:
A LEGACY IN TRANSITION
Gayle Wimmer**

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(The following is an outline of the above-titled presentation which was based upon 160 research slide images projected simultaneously on two screens).

The observation and interpretation of trends in the visual arts can contribute to a broad-based understanding of the political, economic, historical and cultural developments in a given region and time. This has been particularly true during the past ten years in the countries of East Central Europe and the former Soviet Union. Throughout thirty years of my association with Poland, I have observed and documented the effects of an actively evolving political, economic and ecological environment upon the Polish textile art movement.

In 1999 I returned to Poland on a five-month fellowship sponsored by the International Research and Exchanges Board (IREX) and supported by the National Endowment for the Humanities. My primary goal was to study the effects of the emergence of capitalism and the market economy upon three generations of textile artists and their work. Although not part of my original research plan, I also became involved in identifying and documenting the social, historical and political factors which were the initial catalysts in the development of this remarkable movement in the arts. I shall begin by identifying some of the elements essential to 20th century urban Polish cultural identity and I will examine the range of their impact upon the work of six contemporary Polish textile artists.

Poland has experienced a painful history, and to that end nationalism has played a leading role in the lives of all Poles. By the mid 17th century the country was disintegrating from within. From that time until 1989 Poland was partitioned and/or occupied by its "neighbors" to the East and West. The only exception was the brief period between the two World Wars in the 20th century, when Poland became an independent country from 1919 until 1939. Keeping this historical framework in mind should be most helpful in understanding the works that follow as models for national identity during the past 50 years:

- The "Syrena" (Mermaid):
Beloved Heroine and defender of the country
- Surviving Pre-World War II Buildings:
Represent the homeland as they designate a sense of place. They uphold the dignity of history. and in sustaining the marks and scars of battle, record the struggle and instill pride in the miracle of survival. These war -torn structures

have been preserved as they were left: to bear witness to past struggle which included wars and the shroud of 45 years of Communism.

- Atlantes and Caryatids:
Popular in pre-World War II architecture; representative of the Polish nation in struggle. They are powerful, imposing, romantic and heroic as they metaphorically support the weight of the nation and its burdens.
- Social-Realist Public Sculpture:
Idealized figures adorning building facades and public arcades, they were the Communist/Socialist interpretation of the Atlantes and Caryatids. Heroic figures such as the steelworker, farmer, teacher, or weaver glorified the role of those working for and contributing to the new society.

I would now like to move forward to THE NEW POLAND for a brief look at the impact of Western influences and the market economy in Poland since 1989. “Communism with a human face” has been replaced with the a turbulent capitalist market economy .

- The surfaces of the ubiquitous “pure” (i.e. socialist) red trams have been hired out and covered with advertisements.
- Smoking, a national custom/habit has undergone revision. The cigarette ad informs us “The more you know” (implied: “The more you know about the dangers of smoking, the more you will choose to smoke my brand”). The chic capitalist “model smoker” has changed in appearance from the pre-war and communist models of powerful hero. He is slender and refined in demeanor. He looks you in the eye. He informs you of the dangers and then advises you of the best choice, his choice, his brand.
- The computer woman and car quite cleverly signify economic and social change in the new Poland. The urgency to learn skills such as computer literacy and English, and the necessity to be mobile and to have access to one’s own mode of transportation are critical in the new economy which is modeled upon Western standards.

It is important to remember that, just as the emergence of the market economy in Poland impacted the visual arts, so too, the demise of communism brought about critical changes. During the communist period, “culture” was spelled with a capital K, elevated to a high level, and made accessible to all members of society. The Communist government was the generous primary patron of the visual arts and was especially supportive of the emergent field of textile art. It is for this reason that large scale textile artworks became so popular. The massive scale of the work perpetuated the heroic notions symbolized by the Atlantes and the social-realist models. The government gave studio and material stipends to artists, and funded exhibitions, the publication of catalogues and the transportation of artwork to the far corners of the world. Museums and galleries within Poland received funding from the Ministry of Culture to purchase works for permanent collections. After the fall of Communism however, there was little funding available for the arts, private patrons had to be found, and most Polish artists were forced to change the focus and the scale of their work.

We shall look at the transition of the legacy of contemporary Polish textile art through the work of six well-established artists. Many of the distinguishing characteristics of Polish textile art since the sixties are metaphorically related to the examples of the Atlantes and Social Realist models in terms of a shifting sense of place, time and politic. The evolution of the work of these six artists directly reflects the political, and economic changes since the demise of communism in East Central Europe and the former Soviet Union.

- JOSEF LUKOMSKI

Lukomski's work stresses the importance of confining elements within a given space.

The simple worn clothing represents the eschatological remnants of human existence.

The work serves as a caution to remember that "we are all human".

All told, a search for traces left by the individual. This concept was particularly relevant to Lukomski from the end of the Second World War and on through the Communist Period until 1990.

Lukomski died in the late 1990's.

- MAGDALENA ABAKANOWICZ

Abakanowicz tends to explore a concept extensively until she feels she has exhausted its potential.

Working in this way she seeks to reveal the duality of individuality and anonymity existing within one structure.

The use of "poor materials" such as burlap, string and recycled wooden elements reference the human condition.

Her use of heroic scale and multiples strongly reflect the influences of her culture and surroundings, as well as does her search for individual traces among the sameness of human existence.

- JOLANTA OWIDZKA

Owidzka's work becomes looser as she progresses in her search.

For Owidzka, textiles combine the mysteriousness of painting, graphics and sculpture.

Favors working in textile because "In textile work it is possible to build an 'inner space'".

Her work, which has become more experimental in the 90's, addresses the search for the personal in an increasingly more mechanized and standardized world.

- URSZULA PLEWKA-SCHMIDT

The tapestry as diary.

Images are constructed, deconstructed and reconstructed using a numerical system and a grid to symbolize the process.

Uses time to chart memory, and memory to chart time by incorporating popular contemporary and historical symbols into her imagery.

“It is an honor to work in an art form that can express the world’s most contemporary issues by means of one of its oldest crafts”.

- **WOJCIECH SADLEY**

Sadley follows the voice of myths as he recounts the story of life and the human condition in his works.

“I desire to create forms capable of responding to the yearnings that accompany man throughout his life”.

Works in a variety of materials and processes. Is interested in transformation through natural process.

Believes that ...”truly good works are never finished. They should have the appearance of being technically consummate, but in fact remain forever unfinished...”

- **ANNA GOEBEL**

“I need to discover the (for me) unknown, and then search (again) to express those discoveries”.

Her earlier work with birch branches carries with it a sense of melancholy for home and place -- birch is a beloved symbol of the Polish landscape.

Goebel’s work from the 90’s and beyond becomes more experimental and attempts to create material transformations, first using paper and then later with the use of leaves and their decomposition.

All of Goebel’s work seeks to transform common material and in doing so to alter its worth as a symbol.

Shibori: Tradition and Innovation

Ana Lisa Hedstrom

Shibori has recently become part of American textile vernacular. Folk traditions have often been sources of inspiration and appropriation by Western craftsmen and designers. The phenomenon of shibori is not only how it has been embraced by Americans, but how our viewpoints and adaptation of techniques have also changed and inspired craftsmen in Arimatsu, Japan, the center for production of indigo dyed cotton shibori. Today, in Japan, plastic plumbing pipe is used for Arashi, polyester is replacing cotton to create permanently textured shibori fabrics, and Western industrial techniques of cloque and devoré enhance traditional patterns.

I propose to follow how American shibori has thrived in conjunction with the growth of atelier created art clothing. The competitive fashion world has instigated much of the development of "shibori language" as designers seek a signature fabric. I will speak from my own experience in the studio, the museum, and the marketplace, and share the work of other designers who have created an individual look: Marien Clayden, Carter Smith, Joan McGee and Genvieve Dion.

For centuries both economic stress and opportunity have challenged the shibori craftsman in Japan. Today young designers such as Reiko Sudo and Yoshiki Hishinuma are again innovators with their high tech shibori-heat shrinking, laminating, and dissolving threads.

In a world where many textile traditions have been undermined or diminished by change, shibori is a success story with a sense of history, an international production and marketplace, and an exciting integration with technology. This could be a model for the 21st century.

California artist craftsman Ana Lisa Hedstrom has been an innovator in the field of surface design and art clothing. Her work has been exhibited internationally and published in periodicals and books including *Art to Wear* by Julie Schaffler Dale, *Shibori* by Yoshiko Wada, and *California Designers* by Doug Bullis. Examples of her fabrics and clothing are in the collections of The American Craft Museum, the Cooper Hewitt Museum, and the DeYoung Museum. She was the recipient of NEA craftsman grants in 1982 and 1989, and was awarded the Ideacomo Award at the Third International Fashion Foundation Textile Competition in Tokyo in 1998.

A frequent teacher and lecturer, she has been a speaker/presenter at the International Shibori Symposiums in Japan in 1993, in India in 1996, and in Chile in 1999.

Teaching and Learning :

A University Studio Art Experience of Trique Weaving

by Laura Strand

To learn through an apprenticeship, in which the master sits beside you and guides you step by step through a complex process, is the oldest and most durable method through which the textile arts have passed from generation to generation and from culture to culture. Through the process of making, the meanings embedded in the objects are revealed.

Over the past five years I have had the privilege of studying weaving with three Trique weavers from San Andres Chicahuaxtla in the Sierra Madres Mountains of Oaxaca State, Mexico. The Trique huipil is a densely encoded cultural document. The registers of symbolic motifs which line this long wide over-garment, function as a text in Trique culture. Through variations in this code the separate Trique towns identify themselves. Motifs and variations of motifs passed down through generations are freely mixed with new and creatively imagined representations of the modern world and its events and objects. The garment itself is symbolic of womanhood in both obvious and subtle ways and the loom is an integral part of Trique mythology.

Through four study trips of three weeks each, my students and I have woven with our Trique teachers, all day, each day. We learn the motifs one at a time. The ingenious and individual method of the making of each motif provides clues to its understanding. Each year, learning through our fingers as well as through our eyes and ears, we delve deeper into both the meanings of the symbolic motifs in the huipils and of the meaning of weaving in their lives and in ours.

In the talk I will offer my observations of the study of the Trique weavers and their weavings through a discussion about the learning process of making.

Laura Strand is an Assistant Professor of Art, directing the Textile Arts program at Southern Illinois University, Edwardsville. She earned her Master of Fine Arts degree studying with Cynthia Schira at the University of Kansas, Lawrence, has taught at Skidmore College, University of Massachusetts, Dartmouth and is now in her sixth year at Southern Illinois University. Her own artwork is shown widely. The two semester travel study discussed in this talk starts in Mexico and continues into the fall semester, culminating in an exhibition and catalog of artwork and writings.

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A Sense of Place and Identity in Aotearoa New Zealand
By Kelly Thompson - Artist, Lecturer, and Head of Textiles at the
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*"The intersections of nature, culture, history and ideology form the ground on which we stand- our land, our place, the local. The lure of the local is the pull of place that operates on each of us, exposing our politics and our spiritual legacies."*¹

This presentation focuses on a few contemporary artists who use textiles to express connections with place and sense of self, in the "Land of the Long White Cloud", Aotearoa New Zealand. It is a subjective selection, representing both established practitioners and emergent voices, people who are approaching concepts in textile media from varying viewpoints and sources, including cultural, geographical and material relationships.

Being an island nation, in the southern part of the South Pacific, this is a land in which various waves of migration have occurred, beginning with the original settlers, the Maori. According to current archaeological evidence the first wave of planned colonisation occurred by Polynesian people approximately 1000 years ago.² These ancestors of the present day Maori, made long voyages in large canoes, bringing with them animals and plants for domestic needs and progressively discovering, utilising and adapting the rich natural resources of birds, sea life, and plants which enabled continued survival in the cooler climate.

Subsequent migrations occurred from the 1840's onward, predominantly from the British Isles; people collectively referred to by the Maori the term, Pakeha. Gold discoveries in the 1860's brought many Chinese immigrants who established themselves as traders and market gardeners, with migration from people of the Pacific Islands from the 1950's onward. My own family benefited from the 'open door policy' of the 1970's, which saw many Europeans and Americans escaping the pressures of industrialised, crowded states for what was perceived as a 'rural paradise' in the South Pacific. Further immigration from Asian countries from the mid-1980's onward has again changed the cultural profile of the country.

Ann Salmond has extensively researched the narratives of the first cross-cultural contacts, both oral and written between Europeans and Maori. 'Zeelandia Nova' first appears in European accounts by the Dutch voyager Abel Tasman in 1642 and more extensively in the accounts and items collected by Captain James Cook and crew of the Endeavour from

¹ Lippard, Lucy R. *The Lure of the Local – senses of place in a multicentered society*. p.7 The New Press, New York 1997

² Davidson, Janet "Maori Prehistory" in *Maori Art and Culture*, p.8-10 edited by DC Starzecka. Published by David Bateman Ltd, in association with the British Museum Press, 1996

1769 onwards.³ The articles collected from this time, including textiles, continue to provide a rich point of reference for contemporary Maori artists. Drawings, maps, and descriptions from the European perspective are also being critiqued and referred to by artists in explorations of national identity, in our so-called post-colonial era.

It is 160 years since the signing of the Treaty of Waitangi - an agreement between nearly 500 Maori chiefs and representatives of the British Crown. Through this treaty the British gained in effect, sovereignty, while to the Maori people, it was understood as a guarantee of their rights to the land, sea and other resources. Subtle differences between the Maori and English texts of the Treaty, and subsequent settler and government actions, resulted in disputes over land, with both physical and legal wars being fought in the decades following the signing.

The colonisers assumption of forging 'one people', building a special relationship between European and indigenous people has not resulted. Although the treaty over the years has had a modifying influence on official dealings with Maori people, public policy and some attitudes, the historical record shows the European determination to dominate. Since the 1980's, however, New Zealand society has increasingly evolved toward a policy that "acknowledged indigenous precedence...based on reciprocity, ritual and protocol that was constitutive of Maori sociality".⁵ The concept of Partnership is legislated, but is only slowly making inroads into organisational thinking.

The Waitangi Tribunal (a government judicial body) is slowly addressing Maori land and resource grievances, while language initiatives have seen a revival in the cultural, visual and performing arts. As Nicholas Thomas comments:

*"Colonial relationships certainly endure, but they are in the process of being criticised, reflected upon and undone; and if this continues to be an incomplete process, it nevertheless entails deliberate efforts of decolonisation and redefinition, which are particularly conspicuous in the domain of art"*⁶

A new commentary, of hybridised and entangled histories is emerging in the textile arts. Fresh threads evoking the people, land, rivers and oceans of this bi-cultural land. Although people have migrated here from all points of the compass, the bi-cultural relationship of Maori to all subsequent settlers is paramount. The current generation of artists make positive use of diverse cultural influences; acknowledging mixed ancestry and experiences of place, as they begin to define Aotearoa in the 21st Century.

The prestigious feather and fiber cloaks of the Maori may be well recognised internationally, but another form of fiber art which has become very emblematic as a

³ Salmond, Anne *Two Worlds – first meetings between Maori and Europeans 1642-1772*. Viking Penguin Books (NZ) Ltd 1991

⁴ Orange, Claudia *The Treaty of Waitangi* p.4 Allen and Unwin, New Zealand Ltd 1987

⁵ Thomas, Nicolas 'New New Zealand Art: an introduction' in *Pasifika*, Exhibition Catalogue. Canberra Contemporary Art Space 1998

⁶ Thomas, Nicholas *Oceanic Art* p.198. Thames and Hudson Ltd, London 1995

mark of pride in cultural identity is the plaited basket, or *kete*, made of New Zealand flax, *kiekie*, *pingao* or other leaf fibres.

Christina Hurihia Wirihana is an eminent contemporary Maori weaver, artist and teacher from Rotourua. She is known as a superb mat and *kete* weaver, but she also works experimentally from this base to make sculptural objects and installations. She acknowledges her mother as her most significant weaving teacher, along with the importance of her *whakapapa*, (ancestors or lineage). Her work involves an exploration of native plant materials found in the bush, gathered and handled with the respect of a conservationist. At times the personality of leaf ends are allowed to emerge from the tight woven structure. In *Kete* and other works, dyed fiber is worked in complex plaited patterns to form rich surfaces.

Non-Maori weavers have also picked up the *kete* form, using industrial materials to make cultural references to different experiences. Emily Siddell draws on the internationalism of handbags, Victorian beaded evening bags, Maori feather ketes; crossing Pacific forms with the urban materials of electrical and industrial wire, plastic, and fused glass. Her European ancestry informs her vocabulary of skills – crochet, weaving, twining – while her locality, the multicultural Auckland (known as the largest Polynesian city in the world) provides a broader visual reference. This is work which pays homage to these diverse cultures, appropriating and quietly transforming them, through her fresh aesthetic and empathy with found and recycled materials.

David Edwin Thomas has selected celluloid movie strips, a ready-made element, to weave into mats and *ketes*, presenting them on light boxes in order to catch glimpses of intersecting events. Rich colour and pattern are the first impressions one sees and then the overlapping history or social comments become evident. Iconic New Zealand films such as “Once were Warriors”, “War Stories” and *Topless Women Talk about their Lives* have been incorporated. These films portray slices of social experiences, a layering of identity beyond a “clean-green Pacific paradise”. Old and new technologies merge; eurocentric modernist ideals and indigenous practices are intentionally hybridised with urban materials.

Being of Maori, Irish, Scottish and Yorkshire descent, are factors Maureen Lander cites as influencing the approach taken in her work, which involves ephemeral installations utilising fiber, space, stories and light and interaction. Recent multi-media works may incorporate sound, plastic, nylon monofilament, light sensitive string games, all making patterns in space, along with more traditional materials like *muka*, and *harekeke*. The particular locations where work is to be installed shapes the conceptual decisions, whether it be “art belonging to or inspired by the tradition of Maori weaving”⁷, or Western art practices and museum contexts. A work from last year combines the weavers’ symbolism of the spider web, with the World Wide Web. It incorporated flax components like *piupiu* (Maori ceremonial shirts worn during performances) and small speakers with recordings of her daughter working a keyboard, the clacking sound which

⁷ Tamiti-Quennell, Megan. *Pu Manawa – A Celebration of Whatu, Rananga and Taniko*. p 32 Museum of New Zealand Te Papa Tongarewa 1993

emanates connecting two similar sounds and two realities. Titled www.chat/ipu/korero which translates as “a container for talk”, it reflects her interests in language. A recent collaborative installation “Hyperthreads” continues this examination of new and old media, and digital language from several perspectives.

Emergent textile practitioners selected from the Otago Polytechnic School of Art express their bi-cultural reality through a variety of cross-disciplinary workings. Many Maori tertiary students do not know the language. Their parent’s and grandparent’s generation were actively discouraged or banned from using Maori in school and in social contexts and this has impacted on the recent tertiary generation. Now many students learn the language through University study, although pre-school and primary school immersion programmes established in the last decade will have interesting flow on effects. Maori is a legal language, in theory able to be used in any transaction with the Crown and indeed Parliament itself. An increasing number of Maori words are in common usage by the media and society generally.

Janina Dell is a young graduate, of Maori and Pakeha parentage, who uses textile materials and structures to express abstractly the impact the degradation of language has had over the generations. This work consists of an installation of 7 nets, made from dyed flax leaf and fiber, mono-filament, and plastic bags, worked in knotted netting and knitting, with printed texts woven into mats on the floor. Each net symbolises a period of history, a marker in the shaping of Aotearoa, reflecting also Dell’s awareness of her own identity and language issues.

Kerry Arlidge grew up as the daughter of an artist. Her father was actively involved in an influential movement of Maori artists and teachers in the 50’s and 60’s. Under the Education Department, the Tovey group looked to Maori art traditions but worked to find new ways to express ideas of cultural identity and increase pride in things Maori. Kerry has also looked to traditional concepts and forms, but works with silk organza, canvas, dyeing and sewing, printing and painting. The content makes reference to cloaks, *wakas* (canoes) and intermingling the patterns and symbols of ancestors, with the symbols of the Christian colonisers, including her Pakeha ancestry. She builds up images, layer upon layer, colour upon colour, responding to and affected by what has come before, much like the layers of history imprinted on the land.

The length of this paper has unfortunately precluded an investigation into the contemporary work from within and shaped by the Pacific Island or Asian communities in New Zealand. However, one significant young artist working from a strong textile craft base is Ani O’Neill. Resisting traditional distinctions between the fine arts and craft, O’Neill employs the Pacific craft forms of *tivaevae*, lei making, weaving and crochet, interrogating notions of the local and global. Her lurid colour crocheted targets allude to Jasper Johns’ famous target series, while also referencing the Pacifika fascination with hip-hop street culture. She also has a performance role with the Pacific Sisters, a music and dance group.

Other more established artists look to the land and sea, connecting with place through direct experience. Yvonne Sloan has been working on a theme of South Pacific Sails

series since 1990, along with weaving inspired by the native bush, particularly the Nikau palm. Complex colour changes in a twill structure play on the shifting light qualities of forest or water. The installation shown here is developed from her exploration and melding of the European and Oceanic sail shapes. To quote: "Most of our ancestors have come to NZ by sail. We are surrounded by the sea, set in the South Pacific. Historically sailing and arriving in NZ is important regardless of one's origin and culture."⁸

The sense of place, expressed through multi-layered relationships and connections is also relevant in Judy McIntosh Wilson's work. Her earlier sculptural work utilised natural wool fleece in woven constructions and this same aesthetic extends to the installations made of carefully arranged materials from where she lives: river stone, bark, driftwood, sea shells. Her installations such as 'Wiakuku' or 'Tideline' refers to her rural environment and while not using textile structures, uses the pattern of repeating elements, contrasting surfaces with a sensitivity to materials. Wilson speaks of an activity begun at an early age, that of 'wandering around and picking things up', which she continues to do, renewing regularly her connection with the particularities of the Canterbury land and seascape. Exhibiting internationally, Wilson draws her strength and inspiration from the local.⁹

Lucy Lippard discusses the concept thus:

*"Inherent in the local is the concept of place- a portion of land/town/cityscape seen from the inside, the resonance of a specific location that is known and familiar. Most often place applies to our own "local"- entwined with personal memory, known or unknown histories, marks made in the land that provoke and evoke."*¹⁰

My own work over the last few years has been concerned with place in a different sense. It is very definitely of the Pacific; images of coasts, landfall, maps, codes and symbols, weaving colonial histories with personal narratives. Childhood experiences of living on a tall ship; sailing between California, Hawaii and Tahiti; coastal sailing in New Zealand waters; formative and lasting experiences. Journeying is a recurring theme, journeys of the past intermingling with the present: each leaving, strengthens the return.

The double-layered weaving technique I generally use is influenced by ikat textiles which lends a watery, blurry edge to the images, not dissimilar to the processes of memory. The specific landscape of my current home on the Otago Peninsula appears more than once – a particular consciousness, a particular place.

In one narrative, the marks of mapping, ordering and naming occur in the same space as a representation of an early encounter between an English officer and a Maori - each extending hands in a gesture of reciprocal greeting and exchange. This image by an

⁸ Exhibition catalogue *New Zealand Weaving* – Yvonne Sloan, Ian Spalding at the Crawford Arts Centre, St Andrews, Scotland 1998

⁹ Fearnley, Laurence *Earthwalk: Judy McIntosh Wilson: A Survey 1981-1998*. Exhibition catalogue. Dowse Art Museum, Lower Hutt 1998

¹⁰ Lippard, Lucy R op cited. p.7

unknown artist is used as an iconic motif in Anne Salmond's book *Two Worlds*¹¹ from which I borrowed influences for my work "Several Worlds" a 5 metre long journey of close and distant viewpoints. Another work titled "Charts" leaves space for the histories yet to be written: the boundaries are sketched out, some recordings are made, but with the potential as yet unfulfilled.

A series called "Constructed Surfaces" represents a new concern with the abstracted marks of geography, the dominant grid and screens through which the world is viewed and analysed. These mappings however are less obvious creating space, open spaces; new stories in cloth in which narratives can unfold. A space in which discovery continues. The metaphors between weaving and location are many. Although Lucy Lippard is not referring to weaving, the link is one I make:

*"Place is latitudinal and longitudinal within the map of a person's life. It is temporal and spatial, personal and political. A layered location replete with human histories and memories, place has width as well as depth. It is about connections, what surrounds it, what formed it, what happened there, what will happen there."*¹²

The mapping of nationhood continues to be drawn and redrawn; cultural and personal identities are tried and tested; fresh voices articulate the traditions of making; while artists working in textiles, continue to explore the terrain of our place; Aotearoa, a Pacific nation and location.

¹¹ Salmond, Anne, op cited

¹² Lippard, Lucy R op cited. p.7

Old Ties and New Points

Keiko Kobayashi

This paper discusses the development and technical transfer of what is perhaps the world's tiniest double ikat, Kasuri, developed in Japan after the Meiji restoration of 1868. Around the early 20th century, Japanese Kasuri was at the zenith of its quality, in creating geometric as well as pictorial designs using a very advanced form of color and weave effect. There were three reasons for this development during this period. The first reason was in the improvement of the "Orijime" technique which is a uniquely Japanese method in making kasuri threads using the loom. The second reason was the importation of knowledge from Lyon, France, on how to use graph paper which greatly contributed to making the designs of the finished textile products more sophisticated and pictorial. The third reason was social in that during this period, there was a rise in the demand for clothing in Japan as the country was becoming modernized. This demand fueled the designers and weavers with the energy to weave better and higher quality textiles in larger quantities.

In this paper, I will explain the significance that western technology had on the development of Japanese Kasuri. I will do this by first chronicling the historical development in the method of making Kasuri textile from the late 19th century and then discuss regarding the great improvements in design that occurred after the use of graph paper.

Before writing about the fully developed sophisticated craftsmanship involved in making silk double Kasuri, I will start by discussing the Kasuri technique called Orijime developed in Kurume, city in Kyushu. Several different tasks are involved in making a Kasuri of which the "Orijime" or "creating resists by tying on the loom" is an important step. The threads used to weave the repeating 2 to 4 mm dot design on the cotton double Kasuri (flourished ca.1880), was produced in large quantities using the Orijime technique (fig.1 and 2).

In the Orijime process the wefts are woven with spaced warps, thus creating highly pressured sections on the weft at certain areas, which later will resist the colors in the dyeing process. It is this weft that will later become both the warp and the weft Kasuri threads for the final textile. The finished Orijime when taken off the loom looks like a woven mat and is dipped in dye. The section in the mat between the spaced warps absorbs the dye. All warp threads are removed after dyeing and the end result is wefts with miniscule white undyed spots that later create the Kasuri design (fig.3).

Now I would like to change my topic and explain about the process of silk Kasuri. Oshima Kasuri made from silk, called Oshima Tsumugi, has been produced on Amami Oshima Island located between Okinawa and Kagoshima, south of the Japanese mainland. The island's location puts it in the Okinawa cultural sphere which affects some of the methods in the creating process. Traditionally, Kasuri in this area was made by hand tying with natural fibers available as resists.

In Oshima, we see two Kasuri threads and two plain ground color threads being alternately woven to create the traditional textile. Around 1905, the Orijime technique also started to be used in this area. In the Orijime process for the Oshima Kasuri 12 to 16 threads of fine silk are bunched together for the wefts by using a glue made from seaweeds. The bonded silk threads are then wound around a flat wooden shuttle to be passed through the shed.

Compared to the Kurume Kasuri, more sophisticated patterns were designed and tied on the Oshima Kasuri. Unlike the monotonous dotted design of those seen in Kurume, the complicated patterns of the silk Kasuri, demanded the exchange of warp threading at each change of design in each row of the textile. Cotton threads were employed as warps. The design on the Oshima Kasuri is made up of a combination of countless numbers of tiny dots and short lines. The most basic dot in the design is created by inserting eight warps through a single dent of the reed (fig.4). The mapping out of the design during this period was done by using symbols on plain paper. When craftsmen started using graph paper it was understood that one marked point on the cross section of a graph paper denoted the most basic dot in a design for a finished double Kasuri and that in the production of the threads eight warps were put through a dent at every third dent. The reed made from bamboo was marked with ink at the dents to facilitate this process. In the present sophisticated Oshima, each line on the graph paper carries ever changing combinations of different patterns (fig.5). In order to realize the sophisticated design on the textile the craftsman making Kasuri threads changes the warp threading following the marks on the drafted design. The threading of the warps is changed for every different design of each row in which the second row is threaded after the first and so on in consecutive order.

When the craftman changes the warp combination on the loom, he adds warps where needed and takes them out where there is no need. The unused warp threads are hung on hooks attached to the wall in front of loom until it is used for a design in the proceeding rows of wefts. The ends of the warps on the threads that are being used are knotted and are laced with a rope which are attached on to nails on the front beam of the loom. This quickens the threading process of the warps and facilitates in the adjustment of the tension of the threads. The work is very efficiently planned but the craftsmen are only able to repeat the rethreading process an average of ten times in a day.

The repeated pattern of the warp Kasuri is kept to the width of the loom in order to make the process efficient (fig.6). Threads with resisted patterns for repeats in the warp direction for several kimonos with the same pattern are produced in one Orijime process. Individual pieces of cloth in the shape of small mats result for each Kasuri warp that is made following marks drafted on each line of a graph paper.

Now I will discuss the process of creating weft Kasuri threads using the Orijime technique. Unlike the individually tied Orijime of the warp Kasuri a weft Kasuri thread, when woven in the final textile has to be one continuous strand with resisted designs for each horizontal row on this single thread (fig.7). Because same patterns are tied at one time, the end results of the Orijime process look like woven bands connected to each other. Unlike warp kasuri, in producing the weft many shuttles are used to raise productivity (fig.8). Each shuttle goes and returns successively to one side since as mentioned before, traditionally Oshima Kasuri has always been composed of two Kasuri threads woven together as one (fig.9). To make two Kasuri wefts continuously, the craftsman runs each flat shuttle twice and returns to the original position (fig.10 and 11).

In the very early 20th century although there were developments in the design, graph paper was still not used in Oshima for designing Kasuri. Designs were made by Orijime craftsman and were originally drawn on a notebook without using graph paper. The accompanying texts explained the design more than the drawing itself. Designs consisting of points and short line combinations continued as a tradition.

A further development in design was started around the Taisho period (1913-25). A design pattern that used single Kasuri threads for both warps and wefts were added during this period to the traditional pattern of always using two Kasuri threads and two ground colored threads in alternating order (fig.12). In this Kasuri pattern, two Kasuri threads alternated with two ground threads, followed by a single Kasuri thread alternating with one ground thread (2-2-1-1 pattern) (fig.13). By the creation of just this one variation, craftsmen were now able to make very complicated designs. Color and weave effects (like the log-cabin weaving pattern) were produced within the plain weave resulting from variations in combination of ground color and resisted white warps and wefts.

To utilize this new design for the final process, the weaver had to use more than two shuttles for the Kasuri wefts. Aged weavers in their 90's today still proudly explain how difficult it was to remember the order of the eight to twelve shuttles they juggled to manage the 2-2-1-1 pattern. The remains of the fragments in this period show these complicated design patterns that were surprisingly woven without drafted patterns on the graph paper.

The designs from the Taisho period were advanced, but it didn't compare anywhere near in its sophistication to the remaining fragments woven in the early Showa period (1927 to 1940). It was in this period that the knowledge of graph paper spread to different Kasuri producers. The Showa designs were pictorial and used patterns consisting of the 2-2-1-1 thread order (fig.14). It would have been impossible to create such a complicated Kasuri pattern without using the graph paper for drafting. By using graph paper, the drafting became more precise, the alternation of two Kasuri, two ground, single kasuri, single ground pattern (2-2-1-1) and so on was consecutively created using the Orijime technique on a continuous thread (fig. 15). The rules of drafting on the graph paper were decided so that the marks landing on the graph lines symbolized two Kasuri threads and those landing on areas "between" the graph lines symbolized a single Kasuri.

Although the use of graph paper brought about precise design, it also prolonged the craftsman's time for producing these long continuous weft Kasuri threads. Instead of running the shuttle thread to go and come back on the loom, all the shuttles were passed through in a single direction, thus producing a long strand of a sash-like cloth (fig.16). In other words two Kasuri wefts were now tied on two consecutive strands before the warp threads were re-threaded to create the next variation for a Kasuri design.

Because of its high quality and extreme labor intensity Oshima Tsumugi was highly valued and expensive. It was soon imitated by other places of Kasuri production in the North which used the technique of Itajime, board clamped dye, which was a more mechanized method of producing resists on the Kasuri. In examining the finished kasuri of different areas it is certain that sophisticated patterns found in extant woven textiles of the Taisho-Showa period must have employed graph paper in the designing process. Moreover, identical recurring designs in different production areas show that design patterns on finished textiles were being recorded and redrafted on graph paper to be transmitted to various manufacturers of Itajime Kasuri. The graph paper technique was

now being used to draft new design as well as to copy the design from the finished textiles of true Oshima Kasuri. The ultimate use of graph paper (for designing purpose or copying purpose) differed according to the area. There were many production sites for board clamped Kasuri in Japan from the late Meiji to the middle of Showa period.

In order to understand the technology transfer, I will now explain the techniques in producing clamp board dyed Kasuri. Clamp boards are made by carving grooves into wooden boards, where the ground color is planned on the textile. The raised plateau of the lines between those grooves can be as thin as 1 mm, which is the width of a point of the double Kasuri. Threads are clamped tightly on to the grooved boards, however threads of warp Kasuri and weft Kasuri are differently placed on boards (fig. 17 and 18). These threads will result in having numerous continuous repeated patterns when dyed.

When being dyed, both the warp and weft Kasuri threads which have been tightly clamped are hung in mid air. The grooved lines are placed vertically when pouring the liquid dye. In a single round of dyeing, large quantities of clearly resisted threads are obtained. The board are reusable for many rounds of the same process.

It was graph paper that made it possible for craftsmen of Itajime Kasuri to copy the design patterns of the expensive Oshima Kasuri using the Orijime technique. Through tracing written historical documents and by comparing samples of extant textile fragments from this period, I have been able to track how the use of graph paper has affected the Kasuri weavers and their art.

It has been documented that Isezaki in northern Kanto, known for the production of Itajime Kasuri in the Late Meiji invited a technician from Kyoto in 1914 to learn the use of graph paper. Kyoto was the most advanced area in weaving technology at the time because the weavers of Nishijin district had brought back the technique and tools for the Jacquard mechanism from Lyon in 1875. Lyon at this time had already a tradition for using graph paper in designing patterns for French ikat called Chine. The weavers in Nishijin were influenced by not only the technique but also the systematic idea which was also later employed for designing kasuri.

Only three years later, in 1917, Isezaki was already able to copy true Oshima Kasuri designs, by using the graph paper technique, which they had learned from Kyoto. Next, in 1918, craftsmen from Musashi Murayama in the outskirts of Tokyo invited a technician from Isezaki to teach them the methods of using graph paper and making grooved boards for Kasuri. In a small museum in Murayama, a complex sample that uses one Kasuri thread in addition to the traditional 2-2 design pattern is exhibited today. The call number for the sample was No.33 (fig.19). The same number is also found to denote a textile pattern found in Isezaki. It is known that the textile design found in Isezaki was copied from a true Oshima in 1917. I also discovered a fragment of a Taisho period fabric with the exact same design in Oshima as fabric No.33 in Isezaki and Murayama. It is apparent that Oshima who was advanced in design and technique was the originator although they did not yet have the knowledge of graph paper (fig.20). Murayama craftsmen had used the same number “thirty-three” as Isezaki had done to name their first piece made in the Taisho period. The textile sample and the coinciding call number shows that the transfer of designs in the Kasuri patterns were easily carried out between areas of Kasuri production by using graph paper.

The technique of using graph paper was then transferred in 1919 from Isezaki to Amami Oshima where the Orijime technique had been used. It is recorded that Chokichi Takahashi was invited from Isezaki as the teacher. I have interviewed two aged drafters

who learned the technique in the early Showa, from him. They drafters explained that previously, the designing and making of threads were done by the same person but since the profession of drawing the pattern was established through the education of using graph paper, a division of labor has occurred. The quality of the design of Oshima Kasuri advanced in leaps and bounds after 1927. This division of labor as well as the establishment of The Research Institute for Oshima Tsumugi, built in 1927 contributed to the development. The research institute had created many pictorially complicated Kasuri designs using the technique of employing graph paper until 1941 at the start of World War II. The complicated patterns were first drawn in order to create an effect of dimensionality in the designs. In forming patterns only limited variation of colors and limited elements of point and short line combinations were available to the designers. This “lack” forced them to create methods in order to enhance their design vocabulary.

After Amami Oshima itself learned the use of graph paper many outstanding complicated patterns were soon created with ease. The weaver appreciated the continuous Kasuri weft because the use of many shuttles were avoidable. However, the design was easily copied in other kasuri manufacturing areas where graph paper was also used. Kasuri manufacturing areas which used the less expensive Itajime technique were able to easily copy the new designs that were produced in Oshima. The use of graph paper stimulated production in both areas. As design leaders Oshima tried to produce more complicated and sophisticated designs that were difficult to be copied by the others in order to keep their originality. The followers looked for ways to make better and faster copies of the original. This is an example of a penetration of a completely new method of design, brought in from the West that had stimulated the growth of a leading Japanese craft.

(Translated by Naomi Nagano)

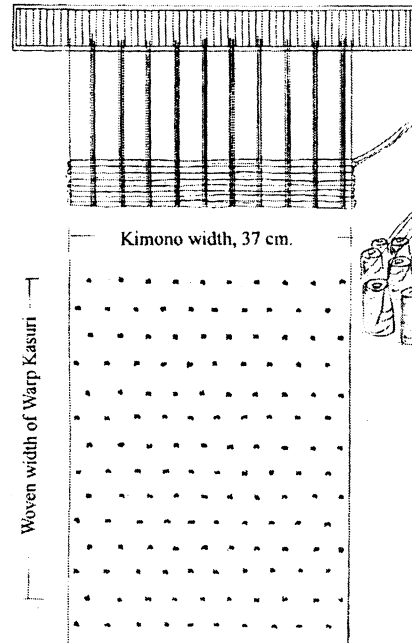
Bibliography

1. FAYARD, Pierre, “Elaboration et Fabrication des Tissus Chines a la Blanche,” *C.I.E.T.A. Bulletin*, No.57-58, 1983-I et II.
2. **Honba Amami Oshima Tsumugi Kyodokumiai Soritsu Hachijushunen Kinen, (History of Amami Oshima Tsumugi on the Eighth Centennial of Amami Oshima Tsumugi Cooperative Association)**, Cooperative Association of Amami Oshima Tsumugi, Amami Oshima, 1981.
3. **Isezaki Orimonoshi, (History of Isezaki Weaving), Cooperative Association of Isezaki Weavers**, Isezaki, 1966.
4. **Kurume Kasuri**, Kurume Kasuri Preservation Association, Kurume, 1969.
5. **Murayama Orimonoshi, (History of Murayama Weaving)**, Cooperative Association of Murayama Weavers. Tokyo, 1982.
6. **Senshokugaku Taiyo, (Textile Studies: Techniques of Oshima Kasuri)**, Kagoshima Research Institute for Oshima Tsumugi, Kagoshima, 1955.

Illustration of Orijime for Dot Designs of Kurume Double Kasuri.

The wefts (a bunch of threads) are woven with spaced warps to create color resisted dot design.

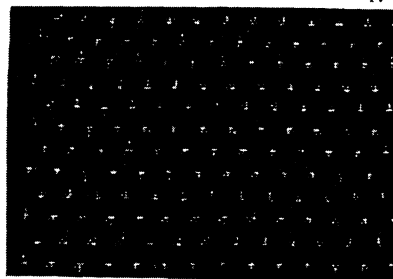
(fig. 1) Weft Kasuri



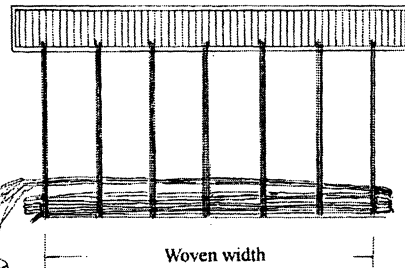
When making the Orijime for the weft Kasuri, the width is that of a width of the kimono.

A bunch of threads is inserted through the warp with a shuttle as in an ordinary weaving process.

Full sized copy

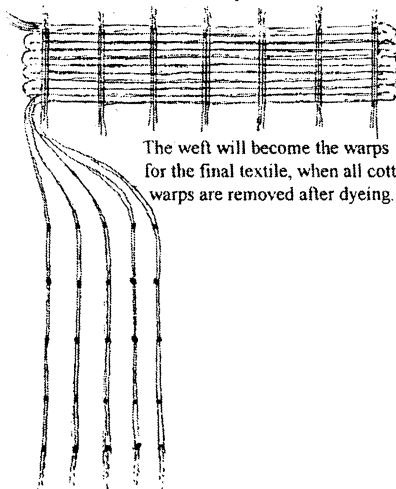


(fig. 2) Warp Kasuri



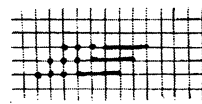
When making the Orijime of the warp Kasuri, the woven width is of any length that is convenient for the craftman. The threads when being tied on the loom are drawn directly from the cones, which are placed on the floor for ease of handling. The bunch of threads goes and returns through the shed in a zigzag movement.

(fig. 3) The finished Orijime looks like a mat.



The weft will become the warps for the final textile, when all cotton warps are removed after dyeing.

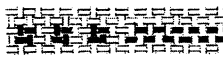
Orijime of Oshima Kasuri



(fig. 4)
Points and lines
on graph paper.

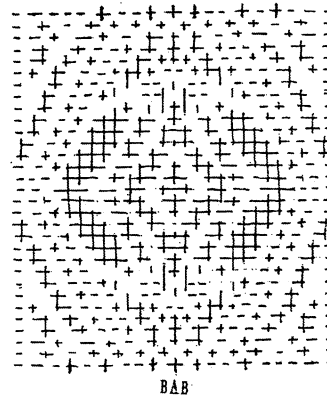


Warp threading
on a reed.



Kasuri design.

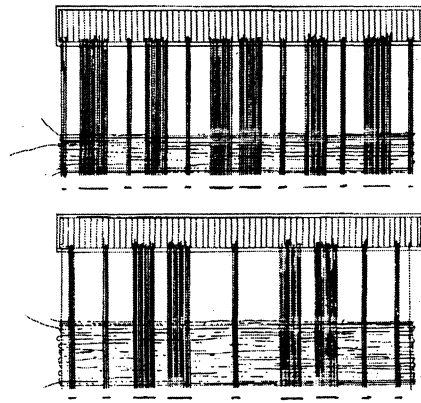
(fig. 5) Design of Oshima



BAB

(fig. 6) Warp Kasuri of Oshima

In this discussion we will call this single patterned warp as line A for convenience sake. After the Kasuri warp from line A is woven into mat form, the craftsman secures the finished mat by weaving one more centimeter of textile using cotton threads to treat the end of the cotton warps. The threading is then changed for the next design on graph Line B. Finished warp Kasuri results like a mat.



A

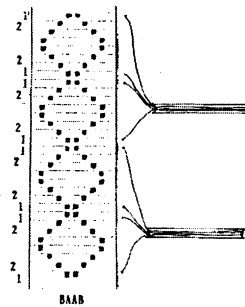
B

Weft Kasuri

(fig. 7) Weft kasuri has to be one continuous strand.

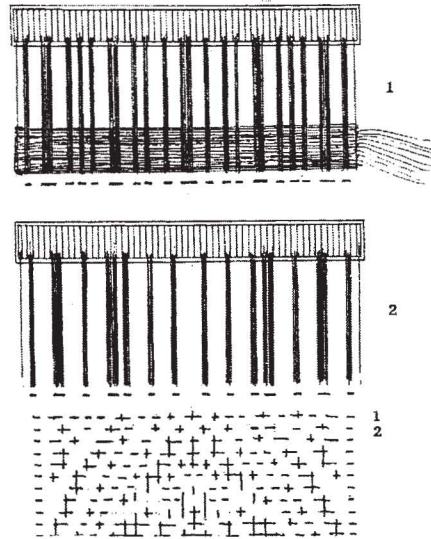


(fig. 8) Many shuttles are used for repeated patterns.



BAAB

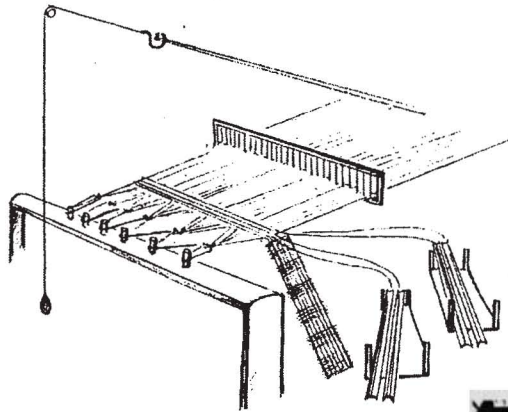
(fig. 9) Weft Kasuri of Oshijima



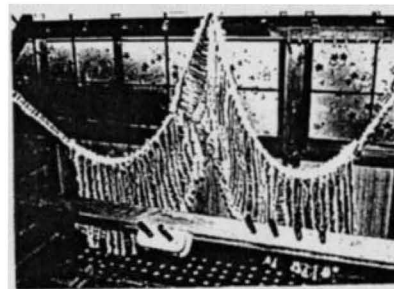
Many shuttles go and return to one side to make two Kasuri threads continuously.

After all the shuttles have returned, the threading of the warps is changed for a different design on row 2, and so on in consecutive order.

As the shuttles return to the selvage, they are stacked consecutively in a box formed from a base and just four poles in each of the corners. When all shuttles have returned to one selvage and into this box, they are turned upside down into another box. The shuttle that was used first comes to the top of the pile again. The process when finished results in making the tied pieces connected and hanging at one side when taken off the loom (fig. 11).

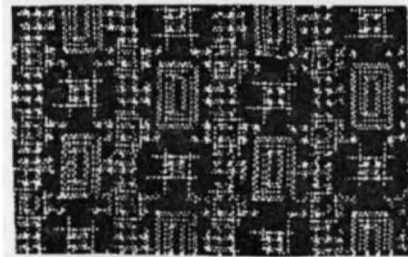
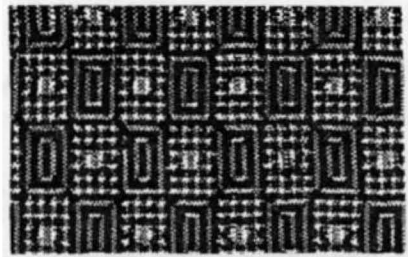


(fig. 10) Unused warps are hung on hooks.
The end of warps are laced with a rope.



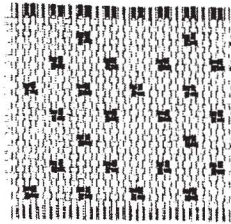
(fig. 11) Connected pieces for 2.2 Kasuri.

Oshima Kasuri in Taisho, before the use of graph paper.

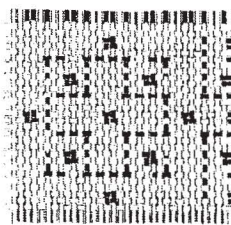


(fig. 14) Three fragments from Showa.

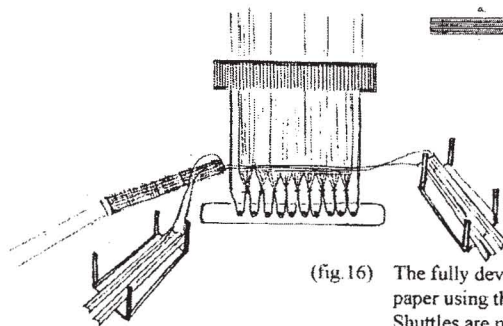
(fig. 12) 2-2 pattern



(fig. 13) 2-2-1-1 pattern



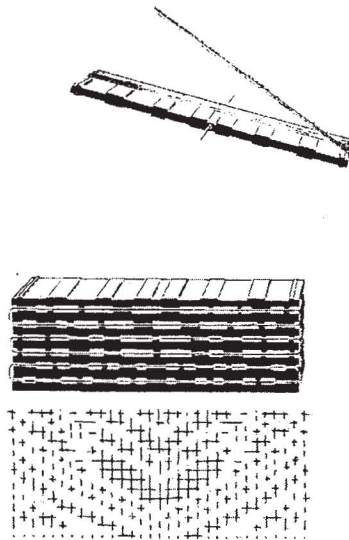
(fig. 15) 2-2-1-1 Kasuri pattern and its continuous Orijime.



(fig. 16) The fully developed Kasuri design on graph paper using the 2-2-1-1 Orijime process. Shuttles are passed in a single direction and boxes are placed on both sides to efficiently hold the shuttle in order.

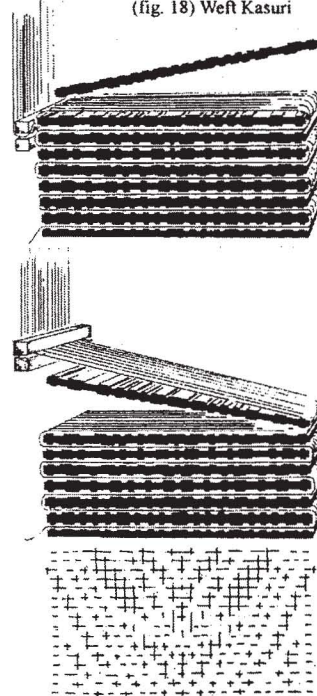
Itajime, clamp board dyed Kasuri

(fig. 17) Warp Kasuri

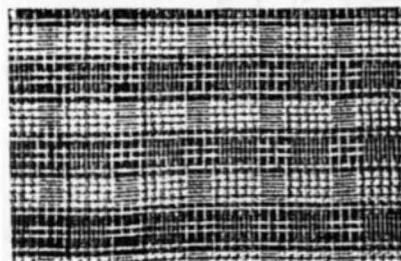


Repeat patterns for the warp Kasuri, are carved on both sides of the clamp board. A bunch of threads are carefully lined and wound around this board. The board is attached to a motor and is rotated to wind the threads evenly and tautly around it. Separate boards are carved as a pair with the same carved patterns on facing sides of the clamp board. These multiple sets of two boards come in stacked fashion when assembled between large clamps to be dyed later.

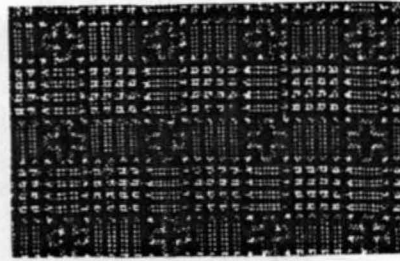
(fig. 18) Weft Kasuri



For the weft Kasuri, identically grooved surfaces of facing boards sandwich the threads. Boards are placed on the horizontal and threads are laid flatly, folding around the boards in a zigzag manner. These threads are held by two rectangular blocks to be clamped tightly between the grooved boards.



(fig. 19) No.33 Itajime Kasuri found in a museum at Murayama.



(fig.20) Oshima in Taisho.

Bureaucratic Ideals and Artisanal Reality
Survival Strategies in the Production of Echigo *J u*
Melissa M. Rinne

The production of Echigo *j u*, a fine Japanese ramie textile, is in crisis. Woven on a body-tension loom from hand-plied threads and often incorporating detailed warp and weft *kasuri (ikat)*, Echigo *j u* is arguably one of the most sophisticated extant bast-fiber traditions in Japan, and perhaps the world. Media and researchers alike regularly laud its ancient production processes, but contemporary makers are facing the almost insurmountable challenge of remaining financially solvent in a rapidly diminishing kimono market, with an increasing scarcity of artisans. One reason that Echigo *j u* survives today is because it has been designated an Important Intangible Cultural Property by the government of Japan. This designation, given only to a small number of outstanding craft traditions, stipulates adherence to a set of specific highly skilled and non-mechanized production processes. It is significant to note that four out of the five woven textile industries to which the government has granted this status require the use of labor-intensive hand-plied or hand-spun thread in both the warp and the weft. While the recognition and subsidies accompanying the Important Intangible Cultural Property designation have unquestionably benefited Echigo *j u* as a tradition, the high standards and expectations they have set for the industry have not always concurred with practical reality. At the crux of the problem is the fact that Echigo *j u* is made not by one artisan but by a complex system of divided labor. Each time even a single link is cut from the production chain of craftspeople, makers are forced to either discretely find alternative means and sources or face the very real prospect of losing their livelihood. Only after I had worked side-by-side for months with weavers and textile producers was it admitted to me that a dearth of local artisans has forced thread merchants to look abroad for hand-plied thread. Such alternative solutions are strictly guarded trade secrets known by almost no one outside the industry including the government, creating an ironic gap between surface image and inner reality. This paper will examine the significance of these changes and analyze their social and economic causes. It will then consider possible future directions and alternatives for Echigo *j u* and other Japanese bast-fiber textiles.

Melissa M. Rinne is curatorial assistant and Web site director at the Kyoto National Museum and research associate at the Nara National Museum's Buddhist Art Foundation. She is currently a Ph.D. candidate in Japanese Art History at Kyoto University, specializing in medieval Japanese Buddhist textiles and portraiture. Her interest in textiles began at Brown University, where she studied Guatemalan *huipiles* at the Haffenreffer Museum of Anthropology. She spent two years in Japan as an undergraduate student, living in a small village for six months to study the bleached ramie cloth Nara *sarashi*. After graduation in 1992, she returned to Japan on a Mombusho scholarship to study Japanese bast-fiber textiles at Kyoto City University of Arts. During this time she was able to enroll in a select training course for weaving the fine ramie textile Echigo *j u* and lived for six months in the snow country of Japan Niigata Prefecture. She became the first foreigner to weave a bolt of the Important Intangible Cultural Property-designated cloth, the subject of her subsequent Masters thesis in Japanese. She received her M.A. in Art History from Kyoto City University of Arts in 1996.

JAPANESE KIMONO FASHION OF THE EARLY TWENTIETH CENTURY

Annie Van Asche

Introduction

This paper examines the development of popular kimono fashion from the late 19th century through the mid-20th century. I focus on kimono worn by modern-thinking young women whose wardrobes, by the 1920's, included both new Western and recreated Japanese garments and accessories. The *meisen kasuri* kimono, the most popular new style of kimono among women living in the growing urban metropolitan centers, is highlighted.¹ It covers an unprecedented historical period of rapid modernization and Westernization of Japan, which brought about societal changes that dramatically--and positively--transformed the lives of Japanese women. I begin with a historical sketch of the industrialization of the silk industry in the Meiji period (1868-1912) and the concurrent marketing of the "fashion" kimono throughout Japan (fig 1).

By the Taisho period (1912-1926), a new breed of textile designer had emerged--a graduate from one of the new art colleges working in the design section for a large department store. I show several examples of these new design-made kimono--a hybridized garment with Western design motifs interspersed with new interpretations of traditional Japanese ones. Popular trends in the development of early 20th century kimono fashion are identified and studied throughout these three main phases.

The essential structure of the kimono has changed only slightly in its 800 year-old history (fig. 2). Two straight panels approximately 14 inches wide and slightly more than twice the height of an individual in length, make up the kimono body. The sleeves are made of two panels attached to each of the outer edges. Add two half-width panels to the front edges and a long collar and you have a complete kimono. It is wrapped in front, left over right, and held together by a sash at the waist. It is economical from the standpoint that there is little waste from cutting. While its basic structure has remained constant throughout history, designs applied to the surface of the kimono have acted as indicator of change and carrier of code (gender, age, social class, rural/urban, etc.).

In the Meiji period, silk kimono became available to women of all social classes for the first time since the Heian period.² By the early 1900's, an increased demand for silk kimono spurred the rise of new textile centers throughout Japan, and good kimono designers were highly sought after. In the 1910's, newly founded department stores, such

¹ For more information on *meisen kasuri* kimono, see TSA's 1998 symposium proceedings by Yoshiko Wada, Kazuo Mutoh, and Masanao Arai.

2

Silk was considered a luxury item for all but the wealthy throughout the Edo period. People of the lower classes primarily wore kimono made of cotton or low-grade bast fibers until the mid-Meiji period. See Hauser 1975, 62-67.

as Mitsukoshi in Tokyo and Daimaru in Osaka, established design sections and began marketing “*zuan-zukuri*” (design-made) kimono. In 1920's Japan, designers were creating new and exciting kimono with bright colors and bold motifs which appealed to *the moga* or brazen “modern girl” (fig 3). Well aware of the exotic hold that Western garments had on this new generation of sophisticated young urban women, designers embraced Japan's traditional costume and by doing so successfully transformed it into a new garment that equally appealed to these women.

Competition among garment retailers was steep in Meiji Japan. While the wealthy and upper class bought expensive imported Western clothes, the emerging middle class demanded inexpensive silk kimono in the latest Western-inspired designs. The kimono industry responded with affordable and stylish silk kimono that could be worn for everyday wear, and as work and school uniforms.

The kimono fashion of the Meiji period was a hybrid, as women mixed Western items such as coats, hats, and leather shoes with kimono. By doing so, they both satisfied their material needs and demonstrated their patriotic attempts to modernize.

Meiji Japan (1868-1912)

In the Meiji period (1868-1912), Japan was abruptly shaken from two-and-a-half centuries of isolation and feudal rule. The new order restored direct imperial rule, and the capital was moved from Kyoto to Tokyo. Its young leaders set out to create a modern centralized state, under the rubric “Civilization and Enlightenment.” Traditional artisans, who for centuries had relied on government patronage, now found themselves independent agents of their own fate. Many artisans did not survive this transition, while those who applied Western science and technologies to their craft fared better.

The textile industry--in particular silk--was enormously important to the government during this transitional period and became the mainstay of Japan's industrial revolution. Silk was Japan's number one export product in the Meiji period, and there were strong government incentives to increase consumption within and outside of Japan. The rapid industrialization and Westernization of Meiji Japan--rather than suppress Japan's traditional costume--acted as a catalyst for its preservations. By the 1920's, the development of new and less expensive fabrics produced with timesaving dyeing and weaving methods combined wider distribution and availability due to the establishment of a nation-wide rail system provided women a wider choice of clothing types and styles than ever before.

In 1870, the first modern silk filature factory was built by the Maebashi clan north of Tokyo in Gunma Pref (fig. 4). A Swiss expert named Mueller (living in Yokohama) was hired to establish a silk reeling factory using Italian imported equipment. It opened with 24 female employees, and soon moved to the western suburbs of Tokyo. Mueller was next hired to build the Ono Silk Filature factory in 1871 in Tokyo. This factory had 60 silk reeling machines, the largest of its kind. Soon thereafter steam-driven pumps were introduced to power the reeling machines. There were also government-run factories--like the one under French supervision in Tomioka (Gunma Pref.) in 1872--which was much larger and more efficient. Eighty percent of the workforce in the silk industry was young women--mainly from rural areas, living in crowded dormitories, underpaid and working long hours. And yet even under these harsh conditions, this lifestyle offered certain advances for those aspiring to gain economic mobility, independence and become part of the growing urban middle class.

Rapid advancements in technology in the first two decades of the Meiji period revolutionized not only silk as an export product, but also the kimono as the national costume. German aniline dyes first shown at the Vienna World Exposition in 1875 were brought to Japan shortly thereafter. Around this same time, the fly shuttle loom was brought to Japan from Europe. Western mechanical spinning machines--specially designed to spin both reeled and floss silks--were introduced to silk centers throughout Japan. Jacquard looms were imported from France in 1873, and they were soon replicated by Japanese entrepreneurs. European books and manuals on the mechanization of the textile industry were also being distributed in Japan.

Application of these new technologies was strongly encouraged by both local and central governments. Nishijin Kyoto, long the capital of Japan's traditional textile industry and home to *yuzen* (dyeing with the use of rice paste as a resist), lead the way. But it was not easy for Kyoto kimono designers born into a textile family--taught the value of strict conservatism for many generations--to change. While a small number of professional kimono designers were sent to Europe for training, those at home struggled with fresh interpretations of Edo-style kimono designs. At first, they resisted using chemical dyes with their bright colors and strong contrasts, in spite of their obvious conveniences and practicalities. Progressive Tokyo, on the other hand, provided fertile turf for a new generation of kimono designer as entrepreneur. These first generation designers, without the burden of tradition, enthusiastically plunged into this exciting new industry, creating fresh interpretations of traditional designs applied to mechanical-spun silk fabrics woven on automated looms.

Kimono Fashion Trends of the Meiji Period

Popular everyday kimono designs in the early Meiji periods included wide stripes, or uncomplicated *kasuri* patterns in subdued colors on thick machine-spun and woven floss silk fabric (figs. 5 and 6). While outer kimono designs remained relatively conservative, designs on women's underkimono (*nagajuban*) were increasingly flamboyant. Many however are defective in their color-fastness, due to the European dyes requiring mordants, with which the Japanese kimono designers were not yet familiar (fig 7). Moreover, designs are often awkward and unsuccessful (fig. 8). Because of the continuous wrapping--from front to back--of the uncut body panels of the kimono, patterns become flopped on the back side, posing a special challenge to this new generation of kimono designers. By the mid-1910s, designers had learned to avoid this problem by either making patterns with no specific orientation, or by adding a seam to the back panel and reversing the fabric.

Meisen Kimono

By the late Meiji period, *meisen* kimono was the most popular style and was being produced in numbers unparalleled in the history of kimono. *Meisen* kimono was worn as casual everyday wear--as girl's school uniforms (often worn as an ensemble with matching jackets called *haori*), and as work uniforms (figs. 9 and 10).

Meisen is a silk fabric made with machine-spun and woven floss silk (*mawata*). Because cocoons unsuited for filament silk were mechanically processed for *meisen* silk fabric, it was relatively inexpensive. With the *meisen* method, stencils are used to direct-dye the design, enabling designers to produce intricately patterned fabric in a fraction of the time it would take to produce real *kasuri*. It resembles taffeta silk in its somewhat stiff

draped and shiny surface. Although generally described as a plain weave, *meisen* was also done on ribbed fabrics, twills, searsuckers, and crepes. Due to its practicality, affordability, and durability, it proved well suited for household items as well as for everyday clothing.

Taisho Japan (1912-1926)

By the 1910s, bold and colorful kimono with modern motifs was *de rigueur* for young fashion-conscious women. To keep up with demand, the government encouraged Universities to add design departments and hire the best artists of the day to teach Western art theories and contemporary art movements. “*Zuan-zukuri*”--literally meaning “design-made” but carrying the nuance of “original”--was a new concept being applied to all of Japan's traditional crafts (lacquer, ceramics, textiles, etc.). Newly formed design groups promoted their “original/creative designs” (*s saku zuan*). Department stores established design sections and hired young art college graduates who produced interesting and appealing designs for their various products, as well as for posters, advertisement, and packaging.

By the 1920s, Japanese designers were well versed in the exercise of absorbing, assimilating, and applying design principles emerging out of Western art movements. They borrowed heavily from all of the major movements of their day--German Expressionism, Cubism, Futurism, Constructivism, Bauhaus, Art Deco, and Russian Avant-Garde (fig 11).

Showa Japan (1926-1989)

As the economic demands of increased overseas military activities in the late 1930s became felt in Japan, the government began a national campaign of frugality at home. People were told not to spend money on unnecessary items. Steel machinery, including those used in the silk industry, were commandeered for war equipment. Eventually, people witnessed a decline in their lifestyle. Reflective of the times, kimono designs increasingly became somber in color, the motifs smaller in scale, and sleeves shorter. As its appeal as a fashion garment ultimately began to wane, the kimono industry responded with one last surge of fresh and dynamic designs (figs. 12, 13, and 14).

After 1945

The war had a devastating effect on Japan on many levels. On the physical level, people living in one of the bombed-out metropolitan areas found themselves homeless and without possessions. On the psychological level, the conspicuous presence of the American military reminded people of their defeat, and shame and disgust permeated the national psyche. The consequences of these effects forced a cultural schism upon Japan resulting in a conscious rejection of traditional values and blanket adoption of Western culture and its value systems (fig. 15).

Conclusion

After W.W. II the kimono ceased to be worn as an everyday garment. Sadly, this dramatic 50-year period of high fashion kimono ended precisely when designers were at the peak of their virtuosity in skill and execution, as well as in quality and variety of design.

The kimono of the 50 or so years covered in this paper represent the last remnants of what I call the “living kimono”--kimono as an everyday fashionable garment. As people rebuilt their wardrobes after the war, Western clothing was chosen for its practicality--it could be sewn on electric sewing machines at home with inexpensive commercial fabrics much more quickly than the time it took to sew a kimono by hand. Moreover, the pessimistic mood that followed Japan's defeat in the war negatively impacted people's thinking about their traditional culture. It is for these reasons that I believe that the kimono changed from being an everyday garment to what it is today--a ceremonial garment worn exclusively for special occasions such as weddings, funerals, children's day, and summer festivals.

Bibliography

Ajioka Chiaki, John Clark, Jackie Menzies, and Mizusawa Tsutomu. *Modern Boy Modern Girl: Modernity in Japanese Art, 1910-1935*. Exh. Cata. Sydney: Art Gallery of New South Wales, 1998.

Bernstein, Gail Lee, ed. *Recreating Japanese Women, 1600-1945*. Berkeley: University of California Press, 1991.

Brandon, Reiko Mochinaga. *Bright and Daring: Japanese Kimonos in the Taishō Mode*. Honolulu: Honolulu Academy of Arts, 1996.

Bunka Publishing Bureau, ed. *Terminology Dictionary of the Latest Kimono*. Tokyo: Bunka Publishing Bureau, 1997.

Dalby, Liza Crichfield. *Kimono: Fashioning Culture*. New Haven: Yale University Press, 1993.

Ema Tsutomu. *Fukusō no Rekishi* (The History of Dress). Tokyo: Chūōkōronsha, 1998.

Fujimura-Faneslow, Kumiko, and Atsuko Kameda, ed. *Japanese Women: New Feminist Perspectives on the Past, Present, and Future*. New York: The Feminist Press, at The City University of New York, 1995.

Fuji Kenzō. *Kindai no Senshoku* (Modern Japanese Textiles). Kyoto Shoin's Art Library of Japanese Textiles, Volume 17. Kyoto: Kyōtoshoin, 1993.

Gluckman, Dale Carolyn and Sharon Sadako Takeda. *When Art Became Fashion*. New York: Weatherhill, 1992.

Kindai no Senshoku (Modern Textiles). In *Nihon no Senshoku*, No. 10. Tokyo: Chūōkōronsha, 1954.

Kitamura Tetsuro. *Nihon no Senshoku* (Japanese Textiles). Tokyo: Geiryusha, 1988.

“Meiji Taisho no Senshoku” (Textiles of the Meiji and Taisho periods). In *Senshoku no bi* (Textile Art), No. 25. Kyoto: Kyoto Shoin, 1983.

National Museum of Modern Art, Tokyo, Crafts Gallery. *Design in Transition 1868-1945*. Exh. Cata. Tokyo: National Museum of Modern Art, 1988.

Sandai no Onnatachi--Meiji/Taisho (Three Generations of Women in the Meiji and Taisho periods), *Nihonjin*, No. 1. Osaka: Mainichi Shimbun, February 1981.

Nihonjin, No. 2. *Sandai no Onnatachi--Senzen Showa* (Three Generations of Women in pre-war Showa). Osaka: Mainichi Shimbun, April 1981.

Tanida Sekiji, and Koike Mie. *Nihon Fukushoku-shi* (History of Japanese Fashion). Tokyo: Kōseikan, 1989.

Ueda Mie, ed. *Mie Kimono Shiryokan Zuroku* (Mie Culture Museum Archive) Tokyo: Mie Shiryokan, 1992.

Uehara, Iwao. *Taisho Showa Josei no Fuzōkū rokujūnen* (Sixty Years of Women's Manners and Customs in the Taisho and Showa periods), *Shūfu no Tomo Deluxe Series*. Tokyo: Shūfu no Tomosha, 1977.

Tokapu Messages

Catherine Julien

Tokapu are geometric designs that were woven into Inca tapestry garments. They were also used in the design of lacquered wooden cups, although perhaps not before the time of the Spanish arrival in the Andes in the mid-sixteenth century. During the time of Spanish colonial rule a richly narrative style of representation developed that depicted people and objects in a variety of scenes. *Tokapu* appear as abstract geometric motifs on cups that have narrative scenes in other registers. They also continue to be used on men's and women's garments, as they had in the prehispanic period.¹ Students of Andean art of the sixteenth century have argued that the new narrative style was a result of contact with European styles of representation--that Andean art did not use a narrative format.² All of the objects on which the new style appear are portable and do not tend to survive in archaeological contexts, making a study of any Inca antecedents extremely difficult. The body of materials that can be dated, even by stylistic arguments, are from the 17th and 18th centuries.³ Regardless of how the narrative style developed, *tokapu* designs themselves clearly evolved from an Inca and not a Spanish stylistic tradition.

How to interpret the meaning of *tokapu*, either before or after the Spanish arrival, has evaded those who have tried, although *tokapu* almost certainly had some kind of symbolic meaning. One native author, Felipe Guaman Poma de Ayala, illustrated Inca tapestry tunics in a manuscript he finished in the early seventeenth century, and sometimes represents *tokapu* schematically as numbers or letters. *Tokapu* were geometric; they did not resemble numbers or letters. What Guaman Poma appears to be trying to convey is that, like numbers and letters, *tokapu* had a meaning that could be read.⁴ A more recent study by David de Rojas y Silva concludes that *tokapu* were heraldic, that is, like European heraldic signs, they symbolized membership in a family or lineage.⁵

A reference to an Inca tapestry tunic, collected in Cuzco in the late sixteenth century, suggests another interpretation. The viceroy Francisco de Toledo collected a number of things in Cuzco to send to Philip II of Spain, sending them back with a special envoy in 1572. After Philip's death in 1598, the collection was inventoried. The description of one Inca tunic is of interest here:

Item 4767. Another native tunic that they call *cumbi*, woven of diverse colors and motifs. The motifs are emblematic of the provinces that the Inca possessed, and by which they were known; it is moth-eaten and full of holes and has no value.⁶

The description suggests that the tunic was decorated with *tokapu*, whether with bands of *tokapu* or all-over design.⁷ Some of the Inca men's tunics that have survived may bear representations of this sort, but a preliminary examination of published examples suggests that *tokapu* also had other meanings. Moreover, to make the argument that the *tokapu* on an actual Inca tunic represent provinces, particular *tokapu* on that shirt would have to be decoded first.

It may not be possible to decode very many *tokapu*, but the meaning of at least one can be understood from its depiction on lacquered cups. This *tokapu* is an abstract geometric representation of an Inca shield. It appears as both a shield in the narrative registers of lacquered wooden cups and as a *tokapu* motif on both lacquered cups and tapestry tunics. When it appears as a shield, it is held by men who are also wearing other

items of dress that identify them as Incas. This *tokapu*, then, represented an actual object, but it also signified the identity of a particular people or province.

The shield/*tokapu* has a central design space that is divided in half and surrounded on three sides by a wide band. The upper half of the central space has a rectangle, a triangle or a semi-circle at its upper edge, the edge that is not surrounded by the wide band. The lower part of the central space is most often divided again by a zig-zag line, whether with two or three points. The colors used vary, but the surrounding band is usually yellow or white. The upper part of the central space is red; the triangle, square or semicircular space is either yellow or white. The lower part is more variable as to colors and their order, but a color other than red usually appears above the zig-zag, since that color borders on the red of the upper part.⁸

What is most interesting about this *tokapu* design is the variety of contexts in which it appears. As already noted, it can appear as a shield in the narrative registers of lacquered cups, and in other registers as a *tokapu*, sometimes on the same cup.⁹ The shield is most easily identified when it is carried. When men are shown carrying shields with the design just described, they may be elaborately dressed, but their tunics do not resemble the design of the shield. They also carry staffs with a feather decoration at the top.¹⁰ Men shown carrying the shield could be shown in scenes depicting aggressive acts. When they are, the staff has what may be an axe blade hafted near the top. In other scenes, the men wear a headdress like a helmet. Some of the figures carrying the shield are involved in battle. In one such scene, the figures hold the shield in front of them, extending it horizontally. Just what purpose this posture would serve--beyond keeping someone else at arm's length--is difficult to ascertain. Still, these scenes suggest that the shields were more than decorative, and that their use was not entirely analogous to the use of shields in European warfare at the time.¹¹ Another kind of figure is shown seated, and the shield, together with the staff, is held in the same arm. The object directly above the shield may be a helmet. The person may be the Inca, as he wears what appears to be the *mascapaycha*, a headband with a fringe decoration on the forehead that only the Inca wore. The representation of the shield, the staff and the helmet together is something that usually accompanies the seated figure.¹² The shield, associated with a staff of some kind and other objects in the same position as the helmet, can also occur alone, as a motif in the register of the cup where narrative scenes usually appear. It also appears as an abstract *tokapu* design, in registers which usually do not carry narrative scenes, often in association with incised concentric squares.¹³ Finally, the design also appears as *tokapu* on Inca men's tunics, in the open field below the bands of *tokapu* that run horizontally just below the waist.¹⁴

The shield/*tokapu* appears on both Formal and Free style wooden cups, as defined by John Rowe. Formal style cups usually show human figures in a static position, sometimes both a man and a woman, but other times a single figure accompanied by flowers, beneath a rainbow. Free style cups, on the other hand, are decorated by figures in a greater variety of poses, and sometimes, with narrative scenes.¹⁵ Rowe hypothesized, on the basis of stylistic attributes, that Formal style cups were generally earlier than Free style cups. Certainly some of the costumes on Free style cups date to the eighteenth century.¹⁶ Using dress to suggest the date of the cup is difficult in the case of cups with figures carrying shields, however, since the figures shown appear to be deliberate representations of prehispanic people; with rare exceptions, these figures never wear pants.

Perhaps the earliest representations of the shield are those illustrated in watercolor drawings of the Incas that accompanied the manuscript of Martín de Morúa, finished at the end of the sixteenth or the beginning of the seventeenth century. In one drawing, the first Inca, Manco Capac, is shown investing his son Sinchi Roca with the insignia of the Inca. A shield, represented in the same fashion as the shields shown on lacquered cups, is one of these items. Various Incas carry shields of the same design, including Yahuar Huaca, Viracocha, Topa Inca and Huayna Capac. Where an Inca is shown wearing the helmet-like headdress, that Inca also has a staff and a shield.¹⁷

Tokapu designs could symbolize peoples or provinces. The shield/*tokapu* could symbolize Inca identity. But, what about *tokapu* that symbolize other groups, and not the Incas? In only a few instances can an argument be made that a shield or *tokapu* symbol symbolizes some other group. One is a figure carrying a shield that is significantly different from the Inca shield.¹⁸ The other is a composition with a shield and staff--analogous to the composition with an Inca shield--but the shield has a different design.¹⁹ The same design appears as an abstract motif.²⁰ As is usually case with the sources or objects that originated with the Incas, we learn almost exclusively about them.

Whether the design of the shield recalls the design of actual Inca shields cannot be known. There seem to be no surviving examples of shields. Bernabé Cobo, a Jesuit who wrote in 1653, describes two different shields. One is a round shield worn on the back; the other is a somewhat bigger shield that carried in the hand. The latter, like Spanish *escudos*, were used to protect the head from blows and from hurled stones. They were elongated, lined with deerskin, and covered on the outside with a rich cloth of cotton, wool or feathers, elaborated in various colors. Cobo says that "they used to paint their devices and coats of arms" on them.²¹ Cobo may not have seen an actual shield, and his reference to wool and even feathers suggests that their "coats of arms" may have been woven, and not painted.

Since Cobo likened the Inca shield to Spanish *escudos*, whether the depictions on 17th and 18th century cups reproduce ideas about heraldry from an Inca or a Spanish tradition has to be considered. The Incas were not immune to Spanish heraldic practice, in fact, they often petitioned the Spanish crown for the right to use coats of arms, in exactly the same way Spaniards did.²² And here is where the difference appears: the coat of arms represented the noble lineage; it was associated with a particular family. The shield we have seen is so ubiquitous and--in the case of the seated figures--so obviously associated with other symbols of Inca identity that it appears to represent the larger group--a people--rather than a noble lineage. Spanish-style coats of arms, moreover, were commonly painted on banners, on cloth worn by horses and on the portals of houses than on shields. The design of shields tended to repeat the decorative treatment of armour and swords, which had designs that could not be seen from any distance.²³

Spanish practice was both understood and used. Spanish-style coats of arms could be represented on a wooden cup.²⁴ Spanish-style elements could be incorporated in what is basically an Inca motif.²⁵ The Morúa drawings that show Incas carrying shields can also have representations of Spanish-style coats of arms in an upper corner; three full-page representations of Spanish-style heraldic designs were also included.²⁶ The Incas were perfectly able to make use of Spanish heraldic practice at the same time as their own.

Tokapu design flourished on Inca wooden cups in the 17th and 18th centuries, as well as on men's tapestry tunics. A *tokapu* that represented an Inca shield was only one

of many geometric designs used as *tokapu*, but in this one instance, we can understand its meaning.

Endnotes

¹A work with numerous color illustrations of lacquered cups that will be much-cited in the present paper is Jorge A. Flores Ochoa, Elizabeth Kuon Arce, and Roberto Samané, *Qeros: Arte Inka en vasos ceremoniales* (Lima: Banco de Crédito del Perú, 1998). These cups, called *qeros*, often bear *tokapu* decoration (73, 100, 114, 161, 162 passim); For men's tapestry tunics, see *Ibid.*, 72; Craig Morris and Adriana von Hagen, *The Inka Empire and its Andean Origins* (New York: American Museum of Natural History, Abbeville Press, 1993), 150; Hans Dietrich Disselhoff, *Daily Life in Ancient Peru* (New York: McGraw-Hill, 1967), 69.

²For recent studies related to Inca symbolic representation see Thomas Bitting F. Cummins, "Abstraction to Narration: Kero Imagery of Peru and the Colonial Alteration of Native Identity." (Ph.D. Diss., University of Chicago, 1988); and Carolyn Dean, *Inka Bodies and the Body of Christ: Corpus Christi in Colonial Cuzco*, Peru. Durham: Duke University Press, 1999.

³John Howland Rowe was the first to analyze the style of Inca wooden cups and develop a relative chronology. His original paper was reproduced as "The Chronology of Inca Wooden Cups" (Department of Anthropology, University of California, Berkeley, mimeographed). It was published with the same title in *Essays in Pre-Columbian Art and Archaeology*, edited by Samuel K. Lothrop et. al. (Cambridge, 1961), 317-341, 473-475, 498-500.

⁴Felipe Guaman Poma de Ayala, *El primer nueva corónica y buen gobierno* [c. 1615] (México: Siglo Veintiuno, 1980) 96, 98, 100, 102, 104, 106, 110.

⁵David de Rojas y Silva, "Los tocapu: Un programa de interpretación." *Arte y Arqueología* 7 (1981), 119-132.

⁶Catherine Jean Julien, "History and Art in Translation: The *Paños* and Other Objects Collected by Francisco de Toledo." *Colonial Latin American Review* 8, no. 1 (June 1999), 89.

⁷A tunic in the Dumbarton Oaks collection has all over *tokapu* design, see John Howland Rowe and Ann Pollard Rowe, "Inca Tunics," in *Andean Art at Dumbarton Oaks*, edited by Elizabeth Hill Boone, (Washington, D.C.: Dumbarton Oaks, 1996), 2: 458-459.

⁸Flores Ochoa, et. al., *Qeros*, 122.

⁹*Ibid.*, 114, 211.

¹⁰*Ibid.*, 122.

¹¹*Ibid.*, 137, 161, 164, 169.

¹²*Ibid.*, 76, 100, 103, 104, 105, 106, 165, 209, 307.

¹³*Ibid.*, 51, 57, 91, 114, 211, 263, 292, 303.

¹⁴*Ibid.*, 72; Hans Dietrich Disselhoff, *Daily Life in Ancient Peru* (New York: McGraw-Hill, 1967), 69.

¹⁵John Howland Rowe, "The Chronology of Inca Wooden Cups" (Department of Anthropology, University of California, Berkeley, mimeographed), 10. Formal style cups are shown in Flores Ochoa, et. al., *Qeros*, 209, 302; Free style cups appear in *Ibid.*, 163, 164.

- ¹⁶Rowe, "The Chronology of Inca Wooden Cups," 11-12.
- ¹⁷Juan M. Ossio A., *Los retratos de los incas en la crónica de fray Martín de Morúa* (Lima: Corporación Financiera de Desarrollo (COFIDE, Industrial Gráfica, 1985), III, XI, XIII, XVIII, XX, XXVII.
- ¹⁸Flores Ochoa, et. al., *Qeros*, 95.
- ¹⁹Ibid., 278.
- ²⁰Ibid., 282.
- ²¹Bernabé Cobo, *Historia del nuevo mundo* [1653], vol. 4 (Seville: Sociedad de Bibliófilos Andaluces, 1893), bk. 14, chp. 9, 193-194.
- ²²Franklin Pease García Yrigoyen, *Perú, hombre e historia: entre el siglo XVI y el XVIII*, vol. 2 (Lima: Edubanco), illustration facing 323.
- ²³Hugo Soly, ed. *Karl V. und seine Zeit: 1500-1558*. (Cologne: Dumont, 2000), 420, 428; Wilfried Seipel, ed. *Kaiser Karl V. (1500-1558): Macht und Ohnmacht Europas* (Vienna: Kunsthistorisches Museum Wien; Milan: Skira, 2000), VIII-IX, 39, 158-159, 181, 185, 188, 209, 340-341.
- ²⁴Flores Ochoa, et. al., *Qeros*, 68.
- ²⁵Ibid., 57, 208.
- ²⁶Ossio A., *Los retratos de los incas*, I, II, XI, XIII, XXXIX.

Bibliography

- Cobo, Bernabé. *Historia del Nuevo Mundo* [1653]. 4 vols. Seville: Sociedad de Bibliófilos Andaluces, 1890-95.
- Cummins, Thomas Bitting F. "Abstraction to Narration: Kero Imagery of Peru and the Colonial Alteration of Native Identity." Ph.D. Diss., University of Chicago, 1988.
- Dean, Carolyn. *Inka Bodies and the Body of Christ: Corpus Christi in Colonial Cuzco*, Peru. Durham: Duke University Press, 1999.
- Disselhoff, Hans Dietrich. *Daily Life in Ancient Peru*. New York: McGraw-Hill, 1967.
- Flores Ochoa, Jorge A., Elizabeth Kuon, and Roberto Samané Argumedo. *Qeros: Arte Inka en vasos ceremoniales*. Lima: Banco de Crédito del Perú, 1998.
- Guaman Poma de Ayala, Felipe. *El primer nueva corónica y buen gobierno* [c. 1615]. México: Siglo Veintiuno, 1980.
- Julien, Catherine Jean. "History and Art in Translation: The *Paños* and Other Objects Collected by Francisco de Toledo." *Colonial Latin American Review* 8, no. 1 (June 1999), 61-89.
- Morris, Craig, and Adriana von Hagen. *The Inka Empire and its Andean Origins*. New York: American Museum of Natural History, Abbeville Press, 1993.
- Ossio A., Juan M. *Los retratos de los incas en la crónica de fray Martín de Morúa*. Lima: Corporación Financiera de Desarrollo (COFIDE, Industrial Gráfica, 1985).
- Pease García Yrigoyen, Franklin. *Perú, hombre e historia: entre el siglo XVI y el XVIII*, II. Lima: Edubanco.
- Rojas y Silva, David de. "Los tocapu: Un programa de interpretación." *Arte y Arqueología* 7 (1981), 119-132.
- Rowe, John Howland. "The Chronology of Inca Wooden Cups" (Department of Anthropology, University of California, Berkeley, mimeographed).

- _____. "The Chronology of Inca Wooden Cups." *Essays in Pre-Columbian Art and Archaeology*, edited by Samuel K. Lothrop et. al., 317-341, 473-475, 498-500. Cambridge, 1961.
- Rowe, John Howland, and Ann Pollard Rowe. "Inca Tunics." In *Andean Art at Dumbarton Oaks*, edited by Elizabeth Hill Boone, vol. 2, 453-465. Washington, D.C.: Dumbarton Oaks, 1996.
- Seipel, Wilfried, ed. *Kaiser Karl V. (1500-1558): Macht und Ohnmacht Europas*. Vienna: Kunsthistorisches Museum Wien; Milan: Skira, 2000.
- Soly, Hugo, ed. *Karl V. und seine Zeit: 1500-1558*. Cologne: Dumont, 2000.

**Textiles and Their Messages: Perspectives from the Central Andes:
An examination of structure as “message” in the Chavin textiles.**

William J Conklin

The Chavin cotton textiles created during the first millenium bc contain both painted and structured images. These images closely resemble both the carved stone images found on the temple of Chavin de Huantar and the images portrayed on the metal and stone artifacts attributed to Chavin burials. Through iconographic analysis it is possible to easily trace the influence that Chavin images had on the imagery of subsequent Andean cultures, but it is also quite possible to trace the influence that the Chavin structural techniques had on subsequent Andean weaving. This paper examines the relationship between the use of textile structures in the Chavin textiles and the use of those structures in cultures that show direct Chavin visual influence and on cultures whose visual connection to Chavin iconography seems remote. The question is examined as to whether the new technical fabric structures found in the Chavin textiles were in themselves the “messages” or at least part of the “messages” or were merely techniques subservient to the “messages” that were conveyed by the iconography.

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Clothes from Cactus? Ancient and Contemporary Examples of Cactus Fiber Clothes and Textiles in Ecuador

Lynn A. Meisch

Indigenous Andeans and the Spanish chroniclers in the early colonial era wrote about the pre-Hispanic and colonial use of what we commonly call cactus fiber for clothing and other textiles in Ecuador. In this paper I use colonial accounts and ethnographic evidence to examine the use of such fibers in clothing and other textiles and their social and cultural significance. For example, the Incas considered cactus-fiber garments barbarous and uncivilized compared to those made of cotton and camelid hair, and used this as part of their justification for conquest; they were bringing civilization to the savages. While Ecuador's damper climate prevents the preservation of pre-Hispanic textiles like those found on Peru's arid coast, there is some archaeological and ethnohistorical evidence that allows us to trace continuities in the use of cactus fiber for cloth. This practice continues today with fiber from the *Furcraea* and *Agave* plants, the former indigenous to the Andes and the latter introduced from Mexico. Although there have been changes in many of the garments and textiles produced, recent ethnographic research conducted by myself and others offers information about how *Furcraea* and *Agave* are harvested, processed, spun, and woven or looped into finished textiles, which permits us to postulate how pre-Hispanic cactus-fiber cloth may have been made. Such reconstruction is possible because of the conservatism of cactus fiber-processing techniques in the Ecuadorian Andes. Barbarous or practical? Savage or sophisticated? Cactus-fiber textiles obviously convey multiple messages.

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The Multiple Layers of Meaning in a Paracas Necrópolis Textile

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The focus of this article is a quite small, very old, structurally simple poncho that is the repository of multiple meanings and messages (Figures 1 and 2). It was made by weavers affiliated with the Paracas/Topará cultural tradition of south coastal Peru, probably buried during Early Intermediate Period 1 (ca. 0 – 100 AD) in a cemetery called the Necrópolis de Wari Kayan on the Paracas Peninsula.¹ The analysis of this weaving is based on the interpretative results of several previous studies, each of which uses a large sample of Paracas Necrópolis-style textiles. Here, my aim is to show how several different aspects of iconography and design may have operated within a single garment.

The camelid fiber plain weave poncho measures 49 cm by 57.8 cm (not including the fringe sleeves) and has a vertical neck slit. When worn it would have covered only the upper torso, with the ends of the side fringes touching the elbows. Anthropomorphic figures embroidered in stem stitch appear against a solid color background in borders and in the field. This iconographic type, which is present on several dozen different Paracas Necrópolis embroideries, has been interpreted in one study as an ecstatic shaman (Paul and Turpin 1986). It is characterized by a human body arched backwards, a head with unbound hair thrown back, and arms that stretch to the sides; the nude torso often has skeletonized ribs. This cluster of attributes, accompanied by specific accessories such as the fan and pectoral present in the poncho depictions, set the motif apart from other Paracas Necrópolis themes, and are the key traits that portray the sacred ecstatic condition of the shaman during his voyage to the lands of the spirits and of the dead. An alternative, slightly different, interpretation, proposes that the figures represent not the religious specialist himself but rather the spirit of a returning ancestor summoned during priestly séances (Frank Salomon, personal communication 1986, quoted in Paul forthcoming a). In either case, the garments on which the figure appears were likely worn by the high-ranking members of Paracas/Topará society, those men who were buried in the large funerary bundles that contained weavings such as this poncho. One of the important functions of such a person would have been to mediate between man and the supernatural forces that influence and determine events in life. Hence, the poncho embellished with shaman figures may have served as a badge of office, marking the special relationship of the wearer to the supernatural.

The garment has two L-shaped borders embroidered on the ground cloth around the exterior edges, as well as one around the neck slit. Two spaces of ground cloth are left uncovered on the sides, a design feature present on nearly all of the 163 Paracas Necrópolis ponchos examined in another study (see Paul 2000a: 104). The gaps are usually quite obvious, but they can also be so narrow as to be almost invisible (they measure only three mm on one poncho!; *ibid.*: fig. 4). Within the Paracas/Topará cultural

¹ The poncho (accession number 1958.292) is in the collections of The Art Institute of Chicago, its exact provenience unknown. It very likely originated from one of the Necrópolis burial bundles.

tradition, as it is known to us through the contents of the burial bundles excavated from the Necrópolis de Wari Kayan, ponchos were produced for well over 200 years, from Early Horizon 10B until the end of Early Intermediate Period 2 (ca. 50 BC – 200 AD). The border format described here appears during that entire time period; since this particular configuration is of such long duration it is likely that the arrangement itself carries symbolic content. In particular, I think that it could be an abstract image of a segment of two twisting strands (Figure 3). As noted elsewhere,

there is a tantalizing visual similarity between the images of twisted strands on some Early Horizon 9 Paracas Ocucaje looped tunics and the border format of Necrópolis ponchos...² At the point in the looped imagery where one strand passes over another strand of the same color, the notion of depth – of one strand being in front of the other – is effected by a break in the body of the underlying strand. Without this convention it would not be possible to say with certainty that the two identically-colored strands twist around each other. A segment of the angularized twisted S or Z strands in the looped tunic... prefigures the border format of Paracas Necrópolis ponchos..., with the 'breaking points' of the underlying strands equivalent to the gaps in the poncho border formats. (Paul 2000a: 107)

When these spaces are in the upper left/lower right corners, as in the poncho examined here, they replicate the image of S strands (the yarns employed in the fabrication of Paracas Necrópolis textiles are normally Z spun and S plied). A second level of iconography on this garment, then, is a reference, embedded in the disposition of the pair of exterior borders, to two twisting strands.

The act of spinning was obviously of paramount importance in a culture that produced so much yarn for weaving and embroidering. To produce an S twist yarn, the weaver spins clockwise; spinning in the opposite direction produces a Z twist yarn. An interest in such directional issues may be present in the orientation of figures in the borders. For easier "reading", the depictions of shamans in the diagram in Figure 2 are represented by arrows in which the shaft corresponds to the axis of the lower torso and legs, and the crook to the direction in which the head is thrown back. All border figures are placed parallel to the edges of the cloth, with the heads of those in the L-shaped borders pointing clockwise and those in the neck border pointing counterclockwise. The choice of directions is not fortuitous: 98 percent of the over 100 ponchos that have asymmetrical images repeating in glide reflection (the symmetry operation present in this poncho) position figures in the exterior borders so that the tops of their heads point in a clockwise direction (ibid.: 109). Furthermore, 83 percent of the images in the neck borders of these same garments are positioned in an opposite, counterclockwise direction, as in this poncho. These frequencies indicate that there was an intentional selection of either a clockwise or counterclockwise orientation of motifs, depending on whether the border was an exterior or interior one. As with border format, it seems conceivable that symbolic concerns underlie this aspect of design. Could it be that one aspect of figural orientation alludes to the imaginary circuits of spinning and plying?

² M. Frame (1986: fig. 29) was the first to identify the images on the Ocucaje tunics as twisted strands. These garments predate the Necrópolis material and come from the Ica Valley.

Normally, a single iconographic type appears on a textile; when this motif is repeated along a straight line, as it is in borders, a band pattern results. Although there are seven different types of regular band patterns (see Washburn and Crowe 1988: 57-58 and fig. 2.26), each characterized by a particular motion of repetition, Paracas Necrópolis borders almost always employ either glide reflection or bifold rotation. For example, the figures in the borders of this garment repeat using glide reflection: looking at the left-hand side of the diagram in Figure 2, starting near the bottom of the border, we can imagine that as the arrow glides upwards, it reflects horizontally in a mirror. The motifs in over 97 percent of the borders in a sample of 543 textiles repeat using either this symmetry operation or bifold rotation (Paul forthcoming b). This fact is especially interesting in light of Washburn and Crowe's observation that:

symmetry classifications of bodies of data from ethnographic groups have revealed that cultural groups (i.e., interacting peoples who share a common life system) have preferential ways of arranging design elements. That is, rather than randomly using all seven one-dimensional classes and all seventeen two-dimensional classes and numerous of the infinite number of finite classes, a given cultural group will consistently use only several specific symmetries in their design system. (Washburn and Crowe 1988: 24)

A fundamental question raised by Washburn and Crowe's findings is "Why do people consistently prefer and choose certain ordering systems?" (ibid.: 29). Part of the answer for Paracas/Topará weavers undoubtedly lies in M. Frame's idea that the motions of symmetry used in the repetition of design units on many Andean textiles are comparable to the symmetry of fabric structures (Frame 1986). For instance, glide reflection is the basis of the figural repeats in the borders here; this repeating pattern "is generated by the same axes of glide reflection that generate the structure of an oblique interlaced fabric" (Frame 1991: 138-139 and fig. 4.22).³ In other words, the alternation pattern of the shamans may have been determined by, and hence may encode an abstract reference to, three-strand braiding. It is as if, in effect, there were an imaginary braid around all of the edges (interior and exterior) of the garment.

In fact, there is what *looks* like actual braiding attached to these edges, in the form of cross-knit looped edging. Paracas Necrópolis garments, including this one, frequently have these supplementary edgings. Cross-knit looping is a single element construction; though it does not resemble oblique interlacing in its structure its face "is sometimes described as braided" (Emery 1966: 32 and figs. 12, 14, and 373). I submit, then, that a fourth level of iconography comprises a double reference to oblique interlacing around the perimeters of the poncho, one embodied in figural symmetry patterns in the borders and the other in the auxiliary edging.

³ Frame's thesis is supported statistically and contextually in a recent study of the figural orientation patterns in the borders of 543 Paracas Necrópolis textiles (Paul forthcoming b).

Virtually all Paracas Necrópolis embroidered textiles have images embroidered in borders, but relatively few (165) have additional figures embroidered in their fields. The motions of symmetry present in the field patterns of these 165 garments are related to those in borders, and include glide reflection, bifold rotation, translation, and mirror reflection. Using these four isometries Paracas/Topará weavers produced a variety of patterns, some of which may also allude to the symmetry of fabric structures (Paul 2000c). Here, the shamans are positioned at right angles to the sides of the garment with three columns of figures on either side of the neck border, plus one figure at each of its ends. The pattern is not regular in all areas of the cloth: six images in the upper left section of the field are oriented incorrectly relative to the orientation pattern on the rest of the poncho (this section is circled in Figure 2 with a dotted line). In addition, there are inconsistencies in the alignment of these figures due to the fact that columns one and three are each missing a figure at the top, and column two has been shifted upwards to fill up the space. Leaving aside this corner of the poncho, the remaining figures in the three columns on each half of the poncho repeat using glide reflection along vertical axes. Frame (1991: 136-137 and fig. 4.22) was the first to point out that orientation patterns of this type have the same underlying symmetry as that of three-strand oblique interlacing.

One of the defining characteristics of the Paracas Necrópolis textile style is the use of color to encode a specific system of logic on cloth, specifically in the fields of garments. Every image embroidered on a garment is colored according to a particular color plan. This poncho, for example, has a total of 76 figures (including 36 in the borders and 40 in the field), but they are colored in just three different ways. These color configurations, or color blocks, are identified with the letters A, B, and C in the diagram in Figure 4. Field images are aligned so that their color blocks create a regular pattern along the S and Z diagonals, horizontal rows, and vertical columns. Turning the garment on its side so that the legs of the figures are vertical⁴, the color block alternation in both the upper half and the lower half of the field can be described as having tricolor S diagonals, tricolor Z diagonals, tricolor rows, and monocolor color columns (the shorthand code for this pattern is 1 tri.szr, 3 mono.c; Figure 4). Though the color pattern in the two halves is the same, the two sections are not aligned (note, for example, that the monocolor columns in the top half do not align with monocolor columns of the same color block in the bottom half).

When examined alone, isolated from the corpus of Paracas Necrópolis textiles, the significance of the poncho color pattern is not apparent. However, when the arrangements of the color blocks in the fields of 154 Paracas Necrópolis weavings are viewed collectively, it becomes evident that there is an underlying and pervasive system of order present in these color layouts. I have described elsewhere the rules that form the foundation of this system of organization (Paul 1997 and 2000b). The results of those studies indicate that a body of systematized knowledge was embedded in the color patterns of Paracas Necrópolis textiles and that a combinatorial logic was the cornerstone

⁴ This poncho forms a set with other garments (see below) in which the color patterns are based on viewing the shamans with their legs oriented vertically. Hence, for the sake of consistency in coding color block alternation, the poncho is turned on its side.

of Paracas color design. In other words, Paracas/Topará weavers and embroiderers arranged color blocks in as many different color configurations as possible within the limitations of certain compositional restraints and, over time, created a combinatorial structure on cloth through color patterning.

Conclusions

This poncho was originally part of a set of matching clothing that included a mantle and skirt that are now in The Textile Museum, Washington, D.C. (Bird and Bellinger 1952: pls. VI, X, XLV, and XLVI; the mantle is in a fragmentary condition). All three have shaman iconography stitched in three color blocks of similar colors, and all three have the color pattern 1 tri.szz, 3 mono.c in their fields. The images on the mantle and skirt borders repeat using glide reflection, like the poncho, but only the mantle has the same underlying symmetry structure in its field. On the skirt, pairs of design units repeat in bifold rotation on both diagonals (Paul 2000c).

If we imagine a Paracas/Topará man (Figure 5) putting on these garments 2000 years ago for ritual occasions (and I believe that some of the Paracas Necrópolis garments were used in life), what kinds of messages did his dress convey to others, and what kinds of symbolic things did his dress do for him?

First, the shaman iconography likely signaled to those around him his status within the community. Much of the textile iconography in a bundle informs us of the social roles fulfilled by the person in that bundle; one theme that is often present in bundles is that of the shaman (Paul 1991). Unfortunately, the poncho, mantle, and skirt presented in this paper are orphans, lacking all scientific information about their bundle provenience. Though it is impossible to reconstruct the universe of embroidered images with which they were originally buried, we may conjecture that it was similar to that in the scientifically-excavated bundles, in which the textile iconography tells us that the ritual obligations of those men responsible for the welfare of Paracas/Topará communities remained fairly constant over time.

Second, when the poncho was pulled over his head, this individual became caught between two twisting strands (the exterior borders) with immaterial circuits moving in opposite directions around his neck (figural orientation in exterior and interior borders). The skirt, with its border images oriented clockwise, was placed against the body and wrapped counterclockwise. The mantle shrouded the torso, with one U-shaped border draped around the neck, either wrapped in front of the chest or left to hang down the front of the body; the second border brushed the back of the knees, horizontal to the ground. When viewed on a human body, mantle images in the upper border are oriented in a counterclockwise direction, while those on the bottom border point clockwise.⁵ Like the

⁵ There are other fragments of the Textile Museum mantle in the Staatliches Museum für Völkerkunde, Munich (accession number 78-300457) and in the Seattle Art Museum (accession number PC 40.37). I have reconstructed this description of how a mantle was worn based on all of these mantle pieces and on my studies of many complete mantles.

References

- Bird, Junius B., and Louisa Bellinger. Paracas Fabrics and Nazca Needlework: 3rd century B.C. – 3rd century A.D.: The Textile Museum. Catalogue Raisonné. Washington, D.C.: National Publishing Company, 1952.
- Frame, Mary. "The Visual Images of Fabric Structures in Ancient Peruvian Art." In The Junius B. Bird Conference on Andean Textiles, April 7th and 8th, 1984, pp. 47-80. Edited by Ann Pollard Rowe. Washington, D.C.: The Textile Museum, 1986.
- _____. "Structure, Image, and Abstraction: Paracas Necrópolis Headbands as System Templates." In Paracas Art and Architecture: Object and Context in South Coastal Peru, pp. 110-171. Edited by Anne Paul. Iowa City: University of Iowa Press, 1991.
- Paul, Anne. "Bodiless Human Heads in Paracas Necrópolis Textile Iconography." Andean Past 6 (forthcoming a).
- _____. "Protective Perimeters: the Symbolism of Borders on Paracas Textiles." RES 38 Autumn 2000 (forthcoming b).
- _____. "Paracas Necrópolis Bundle 89." In Paracas Art and Architecture: Object and Context in South Coastal Peru, pp. 172-221. Edited by Anne Paul. Iowa City: University of Iowa Press, 1991.
- _____. "Color patterns on Paracas Necrópolis weavings: a combinatorial language on ancient cloth." Techniques et culture 29 (1997):113-153. Paris: Editions de la Maison des Sciences de l'Homme.
- _____. "The configuration and iconography of borders on Paracas Necrópolis ponchos." In Lisières & Bordures, pp. 101-115. Edited by F. Cousin, S. Desrosiers, D. Geirnaert, and N. Pellegrin. Poitiers: Editions Les Gorgones, 2000a.
- _____. "Rank & File: Colour Block Patterning on Paracas Necropolis Textiles." Hali 109 (2000b):112-120.
- _____. "Symmetry schemes on Paracas Necrópolis textiles." Paper presented at Amerind New World Studies Seminar *Embedded Symmetries*, April 13-17, 2000. Dragoon, Arizona: The Amerind Foundation, Inc., 2000c.
- Paul, Anne, and Solveig A. Turpin. "The Ecstatic Shaman Theme of Paracas Textiles." Archaeology 39(5) (1986):20-27.

Washburn, Dorothy K., and Donald W. Crowe. Symmetries of Culture: Theory and Practice of Plane Pattern Analysis. Seattle and London: University of Washington Press, 1988.

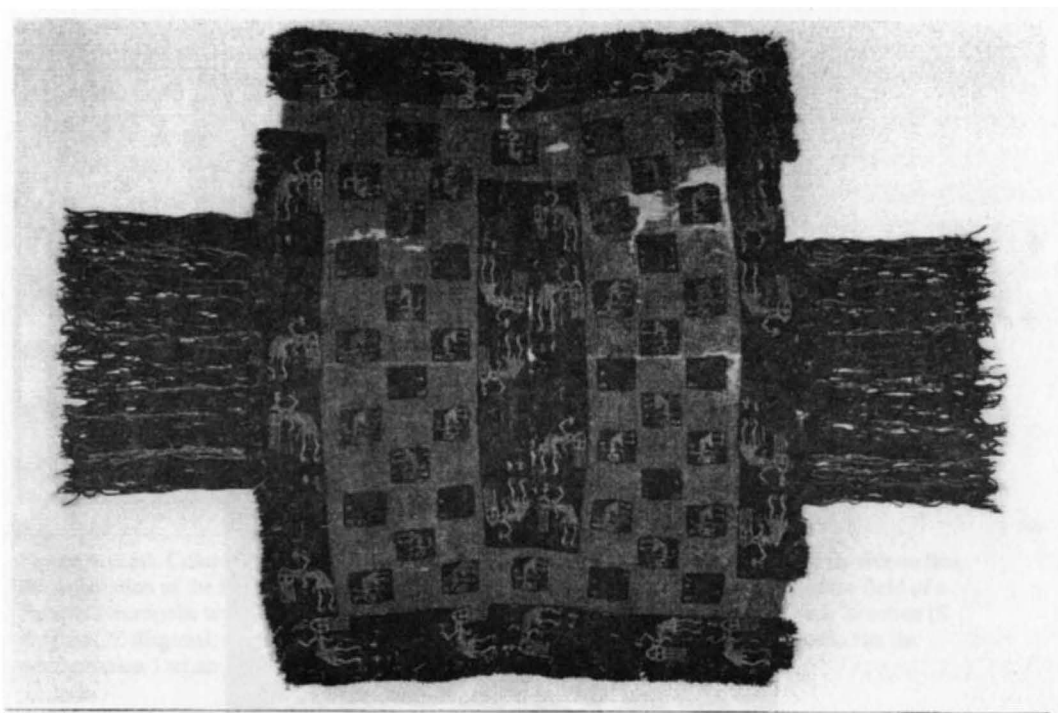


Figure 1. Paracas Necrópolis-style poncho, probably Early Intermediate Period 1, ca. 0-100 AD. AIC 1958.292, Edward E. Ayer, Harriott A. Fox and Samuel P. Avery endowments. Photograph courtesy of The Art Institute of Chicago, © 2000. All Rights Reserved.

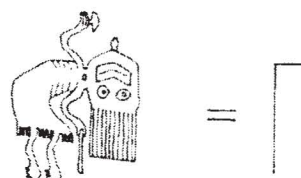
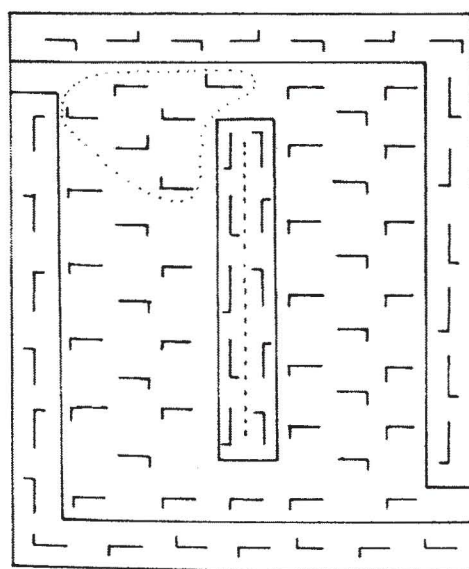


Figure 2. Orientation pattern and embroidered image on poncho AIC 1958.292.

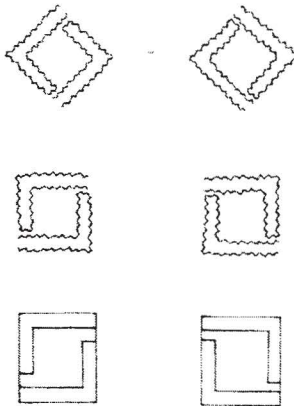


Figure 3. Paracas Ocucaje looped tunic, Early Horizon 9, ca. 200 BC – 100 BC. TM 91.489. Images of S and Z twisted strands are worked into the structure of the garment. Photograph courtesy of The Textile Museum, Washington, D.C., no. 91.489. The drawings below the photograph depict segments of the angularized white Z (on left) and S (on right) strand images in the looped tunic and the border formats of Paracas Necrópolis ponchos.

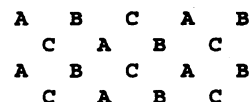
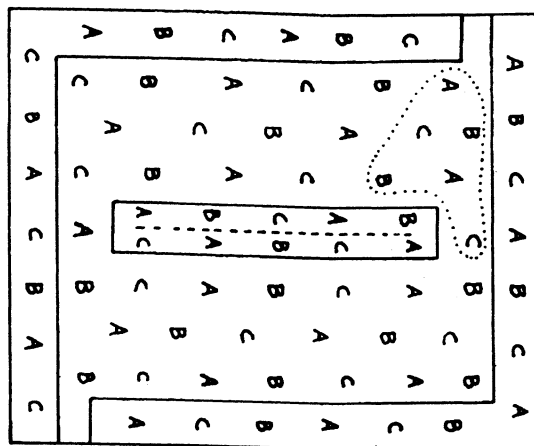


Figure 4. Left: Color block pattern on poncho AIC 1958.292 (the garment is turned on its side so that the orientation of the field figures is vertical; see Figure 2). Right: The color pattern in the field of a Paracas Necrópolis textile is coded by the type of color block alternation present in each direction (S diagonal, Z diagonal, row, and column). When turned on its side (see note 4) this poncho has the configuration 1 tri.szz, 3 mono.c, the same pattern present on a dozen other textiles.

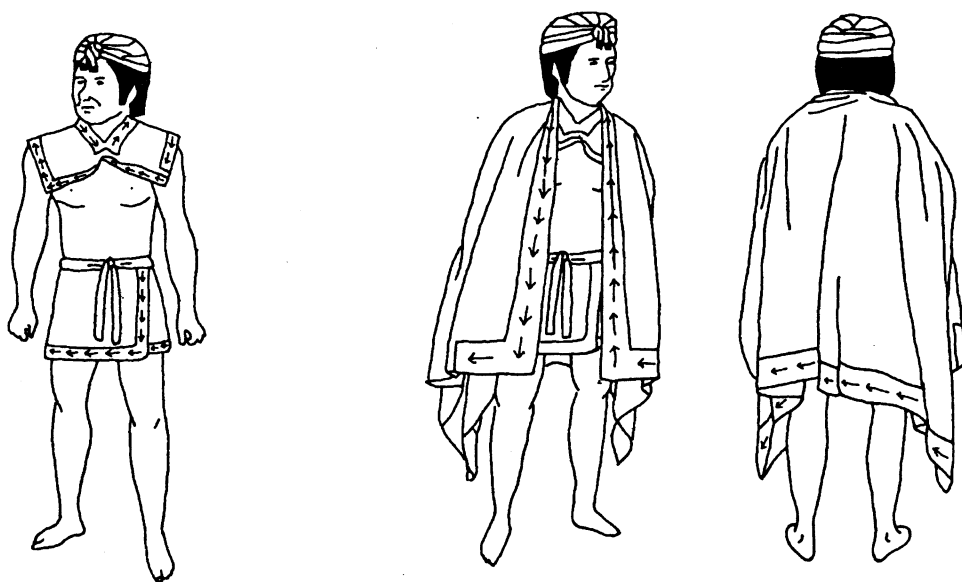


Figure 5. Drawings showing an individual dressed in a Paracas Necrópolis-style headband, poncho, skirt, and (on the right) mantle. The arrows in the borders indicate the direction in which the shamans' heads point.

Z-spun and S-plied threads that were used to weave and embroider the garments analyzed here, the border figural orientation and method of wearing each item of clothing created opposing circular movements within a single garment.

Third, the number of ways of arranging motifs in Paracas Necrópolis borders is so restricted that it is probable that symmetry type itself constitutes another level of iconography. The poncho, mantle, and skirt each carry references to the structure of oblique interlacing in their borders. This abstract allusion to a fabric structure may have provided symbolic, protective boundaries on the weavings by partially "sealing" their edges, an idea that I develop in another study (see Paul forthcoming b). When draped over, on, and around the human body the garments may have conferred similar protection on the individual who wore them, since his entire body would have been enveloped with conceptual fabric structures.

Fourth, the field symmetry patterns of these three items of clothing may derive from the underlying symmetry structures of certain fabrics, possibly reflecting the importance in Paracas/Topará culture of manipulating fiber. Finally, their color block alternation patterns place the poncho, mantle, and skirt within a much broader symbolic context – one in which a system of symbols (the color blocks) was conceived as a means of communicating an idea (an internally coherent system of relationships that constitutes a specific type of logic).

To conclude, while I am well aware of the fact that questions concerning the meaning of ancient artifacts are impossible to answer with any measure of certainty, it is also true that purposeful choices of long duration permeate Paracas Necrópolis textile design. I believe that there were underlying symbolic reasons for adhering to certain elements of iconography and design. I present here the kinds of multiple messages that may have been embedded in one poncho, without pretending that all of my interpretations can be "proved". My objective is to open up new ways of looking at Andean cloth in order to better understand the startling complexities hidden in the woven world of a remarkable Andean people.

Acknowledgments

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‘Tornesol’: a Colonial synthesis of European and Andean textile traditions

Elena Phipps

Of all the beautiful, colored and patterned textiles produced in the Andes, one group of plain, black cloth stands out. (Fig.1) Its plain appearance is deceptive, however, and masks the virtuosity of the craftsmanship of the spinner, dyer and weaver. Generally constructed of native camelid fiber warp and imported silk weft, in a simple warp-faced weave, these fabrics, (Fig.2) during the early Colonial period, became an important component in high status native dress and exemplify the integration and adaptation of a European tradition within the Andean weaving vocabulary. Its proliferation throughout the Southern highlands would seemingly indicate a pre-Colonial origin, however, I would propose that, in fact, it is a Colonial construct in a conflagrance of cultural traditions not seen prior to the arrival of the Spanish. Referred to as ‘*tornesol*’ (“turns to the sun”) in colonial documents this fabric constituted some of the finest and most subtle textiles produced by highland Andean weavers¹.

In my own travels around Peru and Bolivia over the last 20 years, I have come across many examples of this fine black cloth, which has always struck my imagination, for its silk-like appearance. Tightly spun and densely woven, these shimmering textiles seemed old, possibly 17th or 18th century—primarily based on their appearance and hand, the way they felt, and aged. The extreme fineness of the yarns, the extent of over-twisting and the luster all speak of a level of craftsmanship seldom encountered in textiles produced long after the conquest. Although, at the same time, they also, in some ways, did not appear similar to textiles produced before the conquest, either. They seemed to have come from a different cultural tradition, reflecting a different aesthetic, embodying a cultural contradiction.

Why weave a predominantly warp faced fabric with a brightly colored weft which would be virtually hidden by the black warps? Looking at these textiles folded up on shelves of the various antique stores and textile merchants’ shops and in museum collections—because, for the most part, these textiles had already left their original owners—one cannot see their true beauty². This comes from seeing the textile in motion, in the three-dimensionality of the garment, as it flows and folds over the shoulders of a manta. The visual effect of the fabric—its texture and sheen—can best be appreciated when worn by another, observed at a distance, in the sunlight.

What I would like to present here will be aspects of my research on Colonial Andean textile traditions, formulating a discussion as to why this particular type of fabric was made in the Andes, its origins and implications. This is a work in progress, which stems from observations both in the field, as well as from detailed examination of the textiles themselves. For those of us who study Andean culture and history, we often want to glean preserved elements of pre-Colonial cultural continuity from our research. An often-unrecognized component of Andean history, however, is the creative absorption of European influences, which in turn, transformed into integral elements of Colonial

¹ Tornesol as a term is found in the Aymara dictionary of Ludovico Bertonio *Vocabulario de la lengua Aymara* [1612] Sucre, 1989.

² Thanks to Nobuko Kajitani for showing me several pieces in her collection, including the beautiful gathered dress shown in Fig.1.

Andean identity. The presence of these ‘tornasol’ fabrics, prolific throughout the Southern Andes, is a striking example of this process.

Tornasol

In Spain, the term ‘tornasol’ is found beginning in the 14th century, according to a scholar of Spanish Medieval textile terminology Martinez Melendez, with references from an Aragon inventory of 1374, to mantles and headcloths made of ‘taffatan of tornasol’³. This fabric continued to be used in Spain as the luxury fabric of nobility, attested to by its depiction in the portraits by Velazques and Zurbaran of the mid-17th century. (Fig.3).

Earlier, we can find visual references to tornasol in Netherlandish tapestries of the 16th century depicting elite personages wearing garments of the fabric. In France, the silk-weaving capitol of Europe, ‘gorge de pigeon’⁴ was produced from at least as early as the 17th and 18th century, evidenced by the presence of samplebooks from 1726, in Nimes—a silk textile producing region of southern France, with examples of a variety of colors⁵.

In South America, from Bolivia, Padre Ludovico Bertonio’s Aymara dictionary of 1612 has a term *Huateca isi*⁶. which he defines as “Tornasol, silk that when turned in one way appears as one color, and in another way, as another color.”⁷ The fact that the term is already in the Aymara vocabulary, with variants, by the early 17th century is notable.

Today, in the Andes, this type of cloth is called *pecho* (or *pechuga*) *de paloma* (doves breast). Dovesbreast is the shimmering effect Andean weavers achieve by using a dark colored warp --generally black (or sometimes green or blue) -- and a bright, contrasting colored weft, in a warp-faced or highly warp-predominant fabric. The dark warp colors predominate, but as the fabric is folded or moved, the light colored hidden weft catches the light, and gives a ‘glimmering’ effect. Most commonly, this was done with a black camelid warp and pink silk weft. The use of silk adds to the suppleness of the fabric, and the bright cochineal color can be seen in brilliant contrast. The weft yarns can also be a light blue, green or yellow. They can also be made of camelid hair, instead of silk. The dense, tightly overspun camelid warp often has a sheen of its own. In

³ Martinez Melendez, Carmen *Los Nombres de Tejidos en Castellano Medieval* Universidad de Granada 1989, p. 516 found the term tornasol in two Spanish texts, one from 1348, and in 1435. It had been used both, for ‘manto and sayo’ (mantle and skirt) as well as from an inventory in 1374, as a lining of a headcloth, described as a ‘taffetan de tornasol’ (pg. 517). (I learned of this interesting book from a citation in C. Julien, “History and Art in Translation: the Paños and Other Objects Collected by Francisco de Toledo” *Colonial Latin American Review*, vol. 8, no. 1, June 1999, pp. 61-89.

⁴ *Gorge de pigeon* is defined in an 18th c. French textile dictionary. (Thanks to Sophie Desrosier for this reference)

⁵ Sample books belongs to the Musee du Vieux Nimes: I came across them by chance, during a visit to the storerooms in 1988. Future examination of other samplebook collections in Europe could yield many other interesting and dated examples.

⁶ Bertonio *Vocabulario* p. 453. *Tornesol ropa or seda q tiene visos: Huateca ifi, Paya famiri ifi.* p. 154 ;*Huateca isi.* Tornasol, seda que buelta de una manera parecese e una color, y de otra manera de otra color; p. 307 Samiri, pospuesto a Paya. Paya famiri ili. Ropa de dos colores, segun esta buelta a la luz. Puraparo hakhsuri ifi. Idem Tornasol.

⁷ Of course for Bertonio, the fabric is silk—whether this refers to a fabric of European origin or not, we can only assume.

combination with the hidden pink weft, a particular combination of black and an iridescent color effect results.

Black garments in the Andes

Plain black garments—worn by men and women—became the staple of highland Andean garments during the Colonial period. The significance of black fabric, and the wearing of black by native populations during the Colonial period was interpreted by the Spanish administrators, in part, as a form of silent protest—a sign of mourning for the lost Inca times.⁸ In a letter from the Viceroy to the Minister of the Indes, in 1781, he recommended a prohibition against the wearing of black.

“For this negation of the Spanish civil politica they keep the said clothing that ... they never abandon the Yacolla [mantle] and the Uncu, nor leave the black color of their clothing that they carry as a sign of mourning for the Spanish who dominate them”⁹

The Spanish themselves were prone to wearing black—elegant silk garments—which came into particular fashion at the court of Phillip IV¹⁰. The Spanish were partial to silk—a luxury fiber raised in Spain since the 12th century--and fabric from the various silk weaving centers throughout Spain, as well as imports from France and Italy. These silks included the tornasol fabrics, as well as plain and patterned silks, damasks and metallic brocades. The use of these luxury fabrics in Spain were regulated by a series of complex sumptuary laws. These laws defined the minutia of social distinctions, including the categories of social class which were allowed to wear particular items or types of cloth, along, of course with other regulations of social behavior.

These sumptuary laws extended to the Andes, under the Viceroyal government, and certain aspects of native Andean dress were also, at various times, regulated by decrees originating in Spain. During part of the 16th century for example, the native people were to “accommodate themselves to our clothing”. At other times, they were not allowed to dress in the Spanish style.¹¹ Additionally, the laws regulated the amount of silk, for example, that a native woman could wear, including the number of pieces of lace that were allowed to be added to their mantles. And in 1571, silk mantles for women of mixed blood were prohibited.¹²

Silk in Peru

⁸In 1781, viceregal administrators were recommending a prohibition against wearing black clothing “... that they use or wear black clothing as a sign of mourning that they use in some provinces as a remembrance of their dead monarchs.” Letter from Virrey Augustin de Jauregui to the Minister of the Indias, Jose de Galvez In Varcancel, C.D. *Fuentes Documentales*, 1974 p. 410 A.G.I Audiencia de Lima, Legajo 1041 (author translation.)

⁹ “Por eso negandose a la politica civil espanola conservan el traje dicho aun en el usual manejo de sus Casas, jamas abandonan la Yacolla y el Uncu, ni dejan el negro color de sus ropas en senal de luto que arrastran por los espanoles que les dominan.” Antonio de Areche, April 14, 1781 Archivos de las Indias, Seville, Folio 5r (author translation)

¹⁰ See M. Defourneaux *Daily Life in Spain in the Golden Age* Stanford University Press, 1966 p. 56

¹¹ “They are prohibited to dress themselves like us” Royal Cedula 43, Madrid 1791, p. 403.

¹² See E. Phipps. “Textiles as Cultural Memory: Andean Garments in the Colonial Period” in *Converging Cultures: Art and Identity in Spanish America*. The Brooklyn Museum, NY 1997, p.152; “11 February 1571, D. Felipe II. Madrid: That the free Negroes and Mulattos [female] do not wear gold, silk mantles, nor pearls.” Madrid, 1791, p., 369.

The importation of silk from China to Lima via the Manila Galleons began as early as 1534¹³. To guard against excessive luxury, and to protect their domestic trade, the Spanish controlled the shipping of silk from Asia to the New World,¹⁴ and at various times prohibited its sale¹⁵. While available in the highlands, legally or illegally, silk was an expensive and highly desired luxury material.

We don't know whether the use of silk as hidden weft in the tornasol fabrics stems from the prohibition of silk for native women, or rather reflects the modified incorporation of a foreign, expensive material into a long established Andean weaving tradition. Other examples of silk used as hidden weft yarns in a warp-faced weaving tradition, can be seen in examples of what are probably late 17th or 18th century womens' mantles and headcloths from the Lake Titicaca region. In these Lake fabrics, we find the possibly illicit use of silk weft yarns to produce in these exceptionally, fine high status, yet typical, warp-faced, warp-patterned fabrics.

Tornasol as weaving effect

Historically, we know little about the highland weaving patterns of the pre-Spanish period. Although extant warp-faced, warp-patterned textiles from the pre-Conquest period are very rare, those which have survived in the burials, for example, along the South coast do not exhibit the weaving effect of a tornasol fabric. I believe that this 'effect' is entirely a European construct adapted brilliantly by Andean weavers, and incorporated into the highland weaving tradition. To trace this process of how it became incorporated into the weaving vocabulary, we need to examine some precursors in the Inka weaving traditions, and to understand the characteristics of the fabrics, themselves.

For the Inca, the fabrics of the highest quality were called *cumbi* which, according to the late 16th and early 17th century dictionaries and other sources, seem primarily to refer to tapestry woven cloth. Extant garments of the Inca elite were all tapestry woven¹⁶, produced under the auspices of the royal workshops.

In the post-Inca period, the tornasol fabric associated with nobility and high status, as a fabric type, however, does not evolve from a tapestry tradition. The tornasol fabric depends on the ability to partially exposed weaving elements—either through spacing between warps and wefts, or through flexing the fabric to reveal the hidden element. In tapestry, or weft-faced weaving, the solidity of the fabric does not allow any of the underlying warp yarns to be exposed, and the resultant fabric itself is not as flexible. These features make it impossible to create the same special shimmering effect when folded or moved. However, the idea to create a cloth with a certain type of visual

¹³ Silk primarily came through import from China (via Alcapulco ports) and was also raised in Mexico, beginning in the sixteenth century. In one of the Gremios of Lima governing the "Gorreros y sederos, [hatmakers and silkworkers] 1608 number 17...ordered and mandated... that the silk sellers do not mix silk of the 'misteca' with the silk from China in fringes or other things." (author translation) (Quiroz Chueca, Francisco, *Las Ordenanzas de Gremios de Lima* (s. XVI-XVIII). Lima: Artes disenografico, 1986. p. 19)

¹⁴ These shipments included silk cloth, and also yarns, in bulk used as packing materials. The silks were precious, and trade from the port of Callao, near Lima to the Colonial cities in the highlands followed both land and sea routes. See William Shurz, *The Manila Galleons*, NY, Dutton, 1939

¹⁵ Shurz, 1939.

¹⁶ See J. Rowe, 1979 "Standardization in Inca Tapestry Tunics" *In Junius Bird Pre-Columbian Textile Conference*. Textile Museum, Washington, D.C. pp 239-264.

surface play could still be achieved—in another way—through the mixing of colors—not by juxtaposing them in warp and weft, but rather, within a single yarn.

For the most part, pre-Conquest Andean weavers did not create plyed, two-colored yarns¹⁷. Where it does occur, is a rare exception. In the evolution of the post-Inca weaving traditions during the early periods of Colonial rule, though, mixing of contrasting colors in the ply, or sometimes winding two separate colored 2-ply yarns together—was used as a method for creating a specific type of color effect.

Chi'mi

Known in Aymara as '*ch'imi*', the mixing of two colors, often those which are closer in hue, such as brown and purple, or black and blue, could be used to re-create some of the 'shimmering' lustrous effect of the 'tornasol' fabric. Often seen in the plain sections—the 'pampas'-- of warp-faced woven mantles of the 18th-19th centuries, this speckled color effect has a subtlety and richness quite different than what would have been achieved with the plying of more contrasting colors, like red and white, or blue and yellow¹⁸. In the layout of the textiles, it is generally used in wider sections, to amplify the full color effect, rather than in the narrow stripes of the *pallai*. (or pattern areas). Today, we generally associate this effect with warp-faced weaving-- particularly the mantas of the altiplano-- but some pre-cursors indicate that it was also used in the post-Inca 'cumbi' Colonial tapestry weave tradition.

The earliest example I have found of the use of *ch'imi* in a tapestry-woven garment is in an Inca-style Colonial uncu¹⁹ where the effect is used in the ground of the tunic. It is a *tocapu* waistband tunic with a pair of pumas at the lower base of the stepped *ahuauqui* neck yoke. From the fineness of the weave, and the technical features of the treatment of the warp ends, I estimate the date of this tunic to be late 16th century. The ground of the tunic is composed of a red and blue plyed yarn, which creates a kind of 'tornasol' effect of a purplish color. Constructed as a '*chi'mi*', the overall effect is that of a 'tornasol'. To date, it is the only uncu amongst all of the thirty or so extant examples of the Inca style colonial garments that I am aware of, with this particular weave effect. There are several other *tocapu* tunics with a puma neckline and purple ground. One belonging to the Textile Museum has an unusual reddish-purple dyed color in the ground weave²⁰. The hue of the color is unusual and it is slightly uneven as a result of its dyeing process. The resulting color is remarkably close to the overall vibrant effect of the plied red and blue yarns from the first tunic. Perhaps purple, in general, as a dyed color primarily made up of a double-dyeing process in which a yarn is dyed first with one color, then over-dyed with the next, had some special connotation²¹. And in this

¹⁷ Warp yarns, of cotton and wool, often brown and white or two shades of brown, are found to be plyed in various coastal weaving as well as highland. These, however, are not meant to be seen—but are covered in weft-faced weavings. We have very few archaeological examples. (Some Paracas embroideries, some Nasca and possibly some rare cases in Wari/Tiahuanaco tunics but not generally in Inca garments.)

¹⁸ Guaman Poma describes the fifth Inca King, Capac Yupanqui as wearing the mantle of "encarnado mezcla de colorado". In other words, with two shades of red, mixed together. Ayala, Guaman Poma de *El Primer Nueva Coronio y Buen Gobierno* [1613] 1989 Paris, pg. 101.

¹⁹ The tunic is in a private collection.

²⁰ TM 1984.50.1 Textile Museum, Washington, D.C.

²¹ Purple dyeing in the highland was achieved in a variety of ways. The most common would have been the over-dyeing of cochineal and indigo. Purple was also used by the Inca, in a very deep shade, to connote

example, the visual intensity and liveliness of the color itself would seem to have some special significance. Interestingly, Melendez indicates that while Medieval Spanish use of 'tornesol' as a term meant 'visos' [luster], she cites early sources that postulate that it might connote a color dyed in a fermented bath, which gave the cloth a violet blue color. (azul violaceo)²².

Colonial Documents

Documentary sources, primarily written by Spanish observers and Spanish-educated native nobility, provide us with some clues as to the types of garments, and variations of cloth used by native Andean people, during this early transitional period after the conquest. In studying these sources, I have found references to the tornasol fabric, which provides additional confirmation as to its use in the late 16th- to early 17th century in the Andes.

A 17th century manuscript by Martín de Murúa, *Historia General del Perú* belonging to the J. Paul Getty Museum,²³ contains 46 colored drawings of the Inca kings and queens, wearing their traditional royal garments. The manuscript was written by a Spanish friar, but the artist or artists who illustrated the manuscript demonstrate intimate knowledge of Andean color values and garment design, representing the garments in ways that integrate recognizable renderings of native Andean textiles, combined with what appears to be stylized European design conventions. Murúa's manuscript, completed in 1613, is one of the few written sources from the period with polychrome illustrations. These colored drawings illustrate the succession of Inca rulers and their wives, as royal couples engendering the legitimacy of Inca rule from the mythic Manco Capac, who came out from the mythic origin caves of Paucaritambo, to Huascar Inca, who was killed by the Spanish conquistadors in 1532. After examination of the manuscript in detail, I believe that the depictions of the garments, rather than being merely stylistically Europeanized, are in fact illustrating a specific European fabric type—that of tornesol. In the colored illustrations, most of the mantles (and even some of the uncus) of the Inca kings appear to be represented as 'tornesol' fabrics²⁴. Generally, they are shown as blue and pink or green and yellow.

black – as we see in some of the Inca 'key' tunics. In the colonial period, if not before, sometimes purple was achieved by the dyeing of a red color (probably cochineal, but could also have been *Relbunium*) with an iron mordant. Cobo, in the early 17th century is the first to note this practice. B. Cobo, 1956 *Historia del Nuevo Mondo* [1653] Madrid, vol 1, pp; 113-116.

²² Martínez Melendez, 1989 p. 516

²³ Ludwig ms. XIII, 83 MP159. J. Paul Getty Museum, Los Angeles. I had the great privilege to examine this manuscript intensively, as a Getty Museum Guest Scholar, Oct-Nov., 1999. My research, during this residential fellowship period focused on Inca and Colonial colorants used to depict textiles in the manuscript, analyzed with the Paper Conservator, Nancy Turner, and conservation scientists David Scott and Narayan Khandekar, the Getty Museum Conservation Laboratory.

²⁴ Of course, the drawings themselves, follow a European style, far more than those of Guaman Poma (although some of the illustrations are considered to have been done by Guaman Poma – see J. Ossio, Una nueva versión de la coronica de Fray Martín de Morúa. *Revista del Museo Nacional* XLVI: 567-75. Also, E. Phipps, *Investigation of the Colorants in the Marín de Murúa Historia General del Perú*, ms report 1999). While we cannot use the illustrations as 'verbatim' evidence, I think that they do reflect a predominance of fashion of the period, and is not merely the result of random, artistic license taken by the

Contemporary to the Murúa manuscript, Guaman Poma de Ayala, an Andean native produced a book with a series of over 400 folios of drawings and text, depicting Colonial life. He also presents the lineage of the Inca kings and queens, and described each according to their character and deeds, as well as the type and color of their garments. “Mango Capac”, for example, the first mythical Inka king, is characterized as the father of the Incas, who constructed the Coricancha, the great temple of the Sun in Cuzco, and instigated the practice of the worship of the sun, the *huacas* and other sacred things. He is described as wearing his crimson mantle, and his tunic, with a red upper section, three rows of *tocapu* (the Inca royal insignia) at the waistline and light blue below.

Topa Inca Yupanqui, the 10th Inca king, wears a special uncu with *tocapu* overall, and a *manta* which, according to Guaman Poma, was “*torne azul*”. Assuming that the term, which he uses several times,²⁵ is not a transcription error for ‘*torne a sol*’, I think that it would have referred to a blue shimmering ‘*tornasol*’ fabric—like the one excavated by Bandalier in the late 19th century, in Bolivia belonging to the American Museum of Natural History, New York, with its blue warp and pink weft²⁶. (Fig. 4). Murúa strikingly shows him also wearing his blue *tornesol* mantle, shown with its pink iridescent accents²⁷. (Fig. 5)

These colonial documents confirm, both visually, and in textual references, that the *tornesol* fabric was used in the late 16th century in the Andes. It is interesting that, in both contexts, these artists are assigning the use of this fabric, of European origin, to the imperial garments of the Inca kings. In fact, they are attributing the use of the fabric prior to its actual appearance in the Andes, which is a part of the process of Colonial revisionist history.²⁸

Summary

While the Spanish brought with them extreme political, religious and social programs disenfranchising the native populations and altering the history of the entire continent, certainly the Andean weavers, if nothing else, would have admired the luxurious cloth of their attire. That appreciation of the richness and beauty brought new ideas, and resulted in these surface effects created by the weaver, engaged in the creative adaptations of cultural values. They represent a manifestation of the process of adaptation and co-

artist. In Murúa, at least thirteen of the fifteen illustrations of Inca kings have ‘*tornesol*’ type mantles indicated. The women depicted in the manuscript do not wear *tornesol* *llicllas*.

²⁵ Also, the twelfth Inca Guascarina is described as wearing a light blue mantle, with a shirt of the upper part *torne azul*, three rows of *tocapu* in the middle, and green below. (Guaman Poma, p.116 Paris 1989 edition) author translation.

²⁶ According to notes in the AMNH, the pieces as “found in a square adobe at Pata Kamaya, Bolivia.” It is 19 ½” H x 18” w. Blue/purple camelid warp and red silk weft. It has 2 white silk heading cords, and has old silk repairs.

²⁷ Guaman Poma de Ayala, *Historia* 16, pg. 104. There is little concordance between Guaman Poma’s description with Murúa’s drawings. Rather than describing the clothing in the text, as Guaman Poma does, he refers to the drawing, indicating. “Su figura es esta que se ve.” His figure is as you see it (referring to the drawing.)

²⁸ See J. Rappaport 1990, *The Politics of Memory: Native Historical Interpretations in the Colombian Andes*. Cambridge University Press, Cambridge.

opting of a valued attribute from one culture, by another. They in turn become one of the hallmarks of Andean cultural identity, and in doing so are testaments to the complex cultural interchange of the Colonial process.



**Figure 1: Tornosol dress
(Collection of N. Kajitani) and
Mantle (Collection of author).
Photo: author**

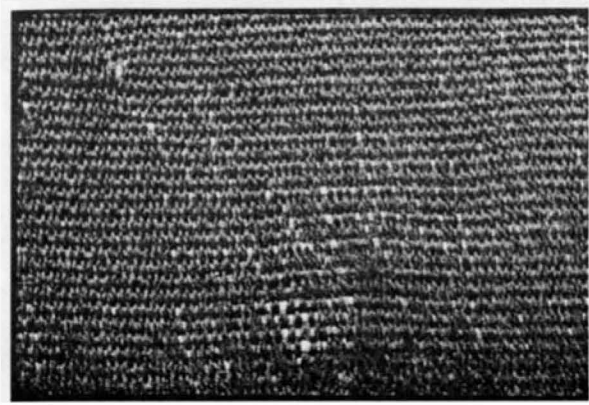


Figure 2: Detail of Mantle: Plainweave with black camelid warp, pink silk weft, 10x magnification. Photo: author



Figure 3: Detail, painting "Vanitas Allegorie" by Antonio de Pereda, c. 1654, Kunsthistorisches Museum, Vienna

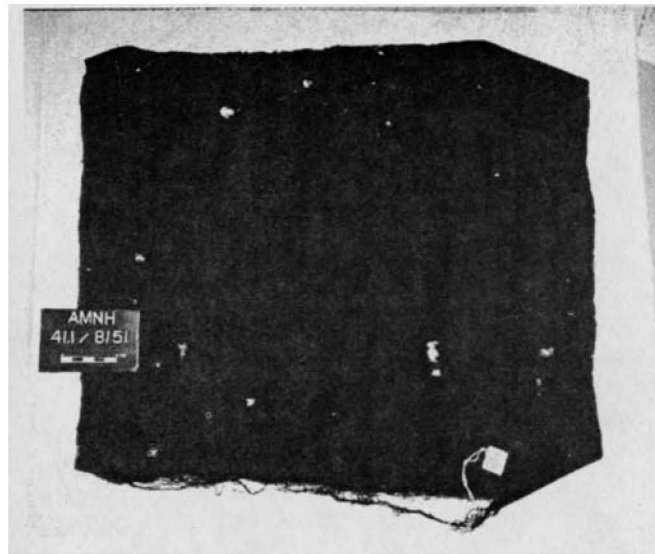


Figure 4: Tornosol mantle excavated by Bandalier at Pata Kamaya, Bolivia. American Museum of Natural History, New York 41.1/8151. Photo: V. Roussakkis



Figure 5: Capac Yupanqui with blue tornesol mantle. Marin de Murua, Historia General del Peru. J. Paul Getty Museum, Ludwig ms. XIII, 83MP159 folio 59r. Photo: Courtesy J. Paul Getty Museum

Of Gods and Men, Ancestors and Tapestry in the Central Andes

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During the Andean Middle Horizon, a period that lasted from approximately the eighth to perhaps the twelfth century, a new religion swept the Peruvian coast. In the previous period, known as the Early Intermediate, no single culture nor religion could characterize the entire region. Instead Paracas and later Nasca in the south, Lima in central Peru, and Moche in the north, each developed independent and very strong traditions that included distinct customs, deities, garment styles, textile structures, architecture, and burial pattern. This paper discusses the period following these seemingly strong and independent local cultural traditions along the Peruvian coast when a new religion spread from the adjacent highlands in association with the Wari culture (Figure 1). Some see the spread of Wari as distinctly militaristic and others as a more passive adoption of a new religion following local cultural decline and perhaps both of these scenarios formed part of this developing Peruvian complex (Isbel and McEwan 1991; Shimada 1991).

Actually, although the specific changes noticed along the Peruvian coast do appear to derive from Wari, the gods and religion itself did not originate there but further south in the Bolivian altiplano and the site of Tiwanaku where gods and attendants were carved in stone in gateways and incised in the surface of standing statues in human form centuries earlier. Textiles are rarely preserved in these highland environments where annual wet seasons destroy cloth and other perishable materials.

It is notable however, that by the eighth century Wari religion is visible in a variety of ways along the Peruvian coast. In this desert environment where preservation is exceptional, textiles provide the most important record of the new widespread religion. The religion is associated with the distribution of large funeral bundles containing a variety of Wari textile types. The bundles have been uncovered where they were placed in abandoned formerly sacred huacas or holy places, usually early pyramids, all along the Peruvian coast. In the late nineteenth century Wilhelm Reiss and Alphons Stubel (1880-87) uncovered Wari related bundles in the cemetery of the central coast at Ancon (Kaulicke 1997). At the beginning of the twentieth century, Max Uhle (1903), following their lead, found similar burial collections of Wari material in Pachacamac along the south central coast and in terraces of the temple at Chimu Capac in the Supe Valley (Kroeber 1925; Rodman n.d.). Further north Uhle again discovered the same burial complex on the largest pyramid of the earlier Moche culture in the Moche Valley, known as the Pyramid of the Sun or Site A (Kroeber 1925; Uhle 1913). Heiko Pruemers (1990; 1995) discussed the same collection of material uncovered in the Huarney Valley at El Castillo. Most recently Peruvian investigators working at the Moche site of Huaca Cao in the Chicama Valley at El Brujo also discovered funeral bundles with at least a small portion of Wari textile styles (Fernandez 1998; Franco et. al 1994; Rodman and Fernandez n.d.). All of these sites demonstrate the new religion arrived with the placement of large cloth-covered funeral bundles in tombs within sacred precincts.

Some of the characteristics of this burial cult include large stone-lined tombs, collective burials in the tombs, and elaborate tunics placed as the outside garment. Not all

garments and ceramics are Wari highland styles and it appears that local cultures adopted Wari styles and added local components or techniques along with Wari motifs. But actual Wari ceramics and textiles are often included in these burial grounds far from the highland Wari capital. The most elaborate Wari textiles included are tapestry tunics and tie-dye mantles. Wari tapestry tunics are woven of two individual panels almost seven feet in length and just over two feet wide (Rodman and Cassman 1995). One loomend is cut and obliquely interlaced and on the other warp end the loomcord is removed and the remaining warp loops are chained together. The two pieces are stitched along the center and the long rectangle is folded and stitched along the sides leaving the arm holes and neck slit open. Although simple in construction, the appeal of Wari tunics is in the fine spinning and weaving of camelid yarns probably selected alpaca or vicuna often woven over cotton warps, and in bold, repetitive patterning with vibrant coloring. Several aspects of these garments suggest that they were actually woven in highland workshops and distributed throughout the vast range of this new Wari influenced coast. The upright tapestry loom and the interlocking wefts are essentially highland traditions where coastal people generally wove on the backstrap loom in a slit-tapestry or kelim technique (Rodman 1997; Rowe 1977). The warps are also revealing. In many tunics it is possible to plot a variety of different warp yarns used in the same garment with bichrome cotton and alpaca plied yarns of different colors distributed irregularly throughout the web (Bird and Skinner 1974). It appears that the person who warped the loom may not have been the same person who spun the warps and perhaps not even the one who would weave the tapestry. If one could imagine such an event one thousand years ago, the image would be of warping the loom with balls of spun and plied yarns of a great variety of types. It seems appropriate to suggest that these were probably spun by many different individuals and sent to this central location. This sort of redistribution was known to have taken place in the making of later Inca tapestry tunics and it is very possible that the Wari had earlier established workshops in a similar way (A. Rowe 1978; J. Rowe 1979). In addition, long diagonal lines especially visible in the plain colored ground between pattern stripes in some Wari tapestry tunics, identify weft yarns that have not been interlocked. Here is another area where a possible highland workshop situation might be imagined. These lines specify independent work sections where at least two individuals sat side by side weaving the cloth separately and building up the areas where they are working without interlocking the wefts of the weaver next to them. Wari tunics reflect the finest of Andean highland tapestry styles.

In what ways these tunics may have been used in daily life is not known and few if any have been uncovered with patterns of wear. Instead, it is in burial where these garments have been discovered as the outermost covering of large mummy bales. Unfortunately few of these bundles have been excavated with complete contexts and associations of other grave goods are rarely known. In Pachacamac Uhle (1903:30-32) described Wari tunics and mentioned that these were uncovered in direct association with a particular Wari style textile, the tie-dye patchwork or discontinuous warp and weft tie-dye. Also from the Middle Horizon cemetery of Pachacamac Uhle discussed small squares that he called "fetiches" (Uhle 1903:30) and said they were placed as separate textiles around the mummy bundles. These small tapestries are not representative of highland Wari style. They are usually woven in slit-tapestry with images derived, but removed from highland motifs. They represent instead the fusion of the new religion as it

traveled to the Peruvian coast. The individual cloth tapestry squares often portrayed a single figure with arms raised and legs spread within a bordered space. Uhle (1903:30) noted the importance of these elaborately woven textiles and suggested that their inclusion in the bundles showed their mythological connections: "The figure of the design represented the divinity which protected them in life".

Uhle left few records of his discoveries in other cemeteries but it is clear from the collections themselves that he uncovered material of a similar nature. He found a tapestry square at Moche on the terrace of the Huaca del Sol and he uncovered many individually woven tapestry pieces in the large cemetery of Chimú Capac. At Chimú Capac Uhle excavated at least four Wari tapestry tunics and a great variety of tie-dye. Heiko Pruemers' (1990; 1995) analysis of the cemeteries on the mound known as El Castillo in the Huarney Valley also discovered the same pattern of material: Wari tapestry tunics, individually woven tapestry plaques, and tie-dye, along with a great variety of other textile types such as the Moche derived double cloth with discontinuous weft color "spots" woven over supplementary warp floats, a structure identified by William Conklin (1979) as particular to earlier Moche styles. Many have discussed the northern influences apparent in a variety of cultural artifacts during this period of the late Middle Horizon. In textiles this combination of a northern textile type of doublecloth with the new addition of brilliantly colored camelid fiber yarns is also an indication. Moche textiles are primarily woven of cotton (Donnan and Donnan 1997) and Moche doublecloth principally uses two colors of natural cotton. It is especially in this period of Wari influence when large quantities of camelid fibers appear in collections, spun and woven, often combined with local cotton, all included in the new burial bundles. Textiles woven in a variety of structures including supplementary weft patterning often include brilliant camelid fiber that particularly distinguishes collections from earlier and later periods in the Early and Late Intermediate when the local coastal cotton appears to have been the preferred fiber in most textile production.

Although it is not at all clear how Wari spread this similar cult, the religious icons, and the distinctive textile and ceramic styles associated with the religion make it apparent that the cult was spread over a wide portion of the Peruvian coast. The same techniques, structures, colors, images, and associated religion were adopted where formerly distinctive and very different cultural traditions prevailed. Even the Peruvian north coast, a region far from the Wari southern highland capital, was affected by this new religion and burial pattern. Recently, the same ceramics, textiles, and collective burials have been uncovered at the site of El Brujo in the Chicama Valley. Hundreds of burials were excavated in the fill covering the abandoned earlier Moche pyramid known as Huaca Cao Viejo (Franco et al 1994, Rodman and Fernandez n.d.). The burial bundles are particularly distinctive in this Moche region where extended burials were formerly the norm and ceramics and textiles identify a different cultural tradition following Moche decline.

The earliest of the burials at El Brujo appear similar to the collection of material discussed previously from more southern regions such as Pachacamac and Chimú Capac, but at least in the collection yet analyzed, a strong local tradition is combined with the new style. At El Brujo only one Wari tapestry (Figure 2) has yet been discovered and this garment did not constitute the outer covering of the funeral bundle but instead was burned as an offering along with the typically associated tie-dye patchwork and other

tapestry of a coastal style. The principal individual in the tomb was wearing a man's sleeved cotton shirt (Figure 3) with a tapestry plaque and a Wari derived design sewn below the neck (Figure 4). Another similar shirt was placed in the funeral bundle also containing a tapestry plaque with a related Wari design (Figure 5).

The El Brujo cemetery has revealed other associated individuals, women, men, and children who form part of this style and widespread Wari related cult. Other shirts with tapestry plaques have been discovered, as well as burials as Uhle described for Pachacamac with small tapestry plaques rolled and added to the funeral bundle. Another important discovery here at El Brujo was the determination of a clothing style particular to women. Women wore a very large dress woven in two long loom widths, sewn horizontally together and secured in a tubular fashion and sew across the shoulders leaving space for the neck and armholes across the top. Additionally, these long, wide dresses were worn with narrow doublecloth belts (Figure 6) woven in the distinctive red and white pattern with discontinuous weft color spots over supplementary warps, typical for the period. The textile styles identified here do not appear to be highland styles transported to the coast, but instead a fusion of highland and coastal images and structures reflecting both regions in the creation of the new religious ideas.

The religion was apparently centered on a single deity, a male sky god depicted as facing directly forward with arms outstretched and legs splayed along with attendant figures in profile. His image is especially obvious in the small woven tapestry plaques that were fastened onto shirt fronts or rolled and left as offerings with the dead. But he was also represented in reliefs molded on ceramics and especially in bold images painted on plainwoven cloth from cemeteries of the central coast. Uhle uncovered over 150 of these painted images in the cemetery of Chimu Capac, many with representations of the Middle Horizon god and attendant figures as well as rayed designs suggesting the brilliance of celestial bodies in the sky, animals on earth, and fish in the sea (Menzel 1977). As Uhle suggested, the information being presented in these textiles placed with the dead appears to relate to stories of creation and myths of powerful, fertile gods. Ancient Peruvians certainly named these gods, but they were not recorded until the Spanish described them beginning in the sixteenth century. By then the Peruvian coast had known a series of transformations and cultural identities, the last two including the Inca invasions of the fifteenth century and that of the Spanish in the next. In the Spanish texts or early chronicles there were certain gods specifically mentioned as early and important beyond all the rest: Con and Pachacamac of the coast (Rostworowski 1989), Tunapu or Tarapaca of the southern highlands, and Viracocha of the Incas. Their stories are often interchangeable. Gutierrez de Santa Clara (1905, tomo III, cap. LVI: 493-495) discusses the Peruvian god Con:

“In all this land, large as it is, the Inca lords that there were, and all the Indians that inhabited it, adored two gods, one that was called Cons and the other Pachacama, as principal gods, and as helpers they had the Sun and the Moon . . . They say, the very old Indians that are now living, that they heard from their ancestors that the first god that was in the world was called Cons, he who formed the sky, sun, the moon, stars, and the earth, with all the animals and everything else that there is, that it was only with his thoughts and his breath, and that crossing these lands, that were totally empty,

unpopulated, he made and created all the things which are seen and known here...and that after this he went to the sea and that he walked with dry feet over it..and that he created all the fish that there are, with only his word, and that he made other marvelous things, and that afterwards he left this earth and rose to the sky. They say more these Indians, that after much time had passed and many years and centuries there came to the earth another god more powerful than Cons, called Pachacama, that means to say Maker of the earth or reformer, and that he destroyed with fire and water all that the god Cons had made and created. . . and that after he made these things and many others, they say that he returned to the sky. For this reason the Indians took as preeminent these two gods Cons and Pachacama, because they were more powerful than the sun, the moon, or the earth.”(Translation the author).

We will never know for certain exactly what he was called, but this god brought to the Peruvian coast during the late Middle Horizon was represented as a fertile, sexual entity, clearly male. He was associated with symbols that appear to place him in the sky, often over fish of the sea, and with animals of his creation. Images of this deity were brought to the Peruvian coast by the Wari or along with the religion transmitted through Wari and the result was the abandonment of earlier practices. A specific burial form, the funeral bundle and Wari influenced textiles and ceramics were added to local styles and forms. We know from accounts made at the time of the conquest that burial places were regularly visited by the living (Salomon 1995). Dead ancestors were entrusted with the capacity to control earth’s productivity, bring the rains, encourage the crops, and it was through them that humans could mediate power and ancestral wisdom (Salomon 1995). These funeral bundles, placed in principal and highly visible coastal huacas, must have created a vital link between living communities life-controlling gods.

In the periods following, funeral bundles do continue as the principal burial form, but the textiles contain a distinct textile style associated with a similar, but altered deity. At El Brujo for example, a very different style characterizes the burials that appear to follow the earlier Wari influenced styles. Large transparent cotton shirts decorated with lateral tapestry bands (Figure 7) identify the same front-facing god (Figure 8) but the associated ceramics and overall different textile style define cultural connections with the powerful Lambayeque region further north. By the fourteenth century, north coastal allegiances switched again to Chimú dominance. This change is evident in the burial pattern noted at El Brujo in distinct funeral bundles covered with narrow straw robes and a different garment and textile assembly. But in Chimú textiles the same deity is visible, repeated as an important image associated with funeral bundles of the culture.

The ubiquity of the same front-facing figure with legs splayed and arms raised suggests that the associated rituals continued as well. These rituals involving the Andean dead which literally connected humans with the original creator were much too potent to neglect. Centuries later, the Inca placed mummified ancestors in the center of state religion. Throughout the Andes during the Middle Horizon the local name of the creator will never be absolutely identified. It was surely something like that reported at the time of the conquest: Con Ticci Tocapo Viracocha, the maker of all things, the one at the beginning, he who created it all with only his breath, all the humans that there are, the animals, the sun, moon, and stars, lowering the mountains and raising the valleys, with

only his will., He went away, or so they say, foam of the sea, walking across the water. He was remembered even then, in the sixteenth century when the Spanish arrived and asked, the images of him buried more than six centuries, now nearly a thousand years.

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REFERENCES CITED

- Bird, Junius B. and Milica D. Skinner
1974 The Technical Features of a Middle Horizon Tapestry Shirt from Peru. **Museum Journal**: 4(1):5-13. Washington, D.C.
- Conklin, William J.
1979 Moche Textile Structures. In **The Junius B. Bird Pre-Columbian Textile Conference, May 19th and 20th, 1973**, edited by Ann P. Rowe, Elizabeth P. Benson, and Anne-Louise Schaffer, pp. 165-184. The Textile Museum And Dumbarton Oaks, Washington, D.C.
- Donnan, Christopher B. and Sharon G. Donnan
1997 Moche Textiles from Pacatnamu. In **The Pacatnamu Papers Volume 2, The Moche Occupation**, edited by Christopher B. Donnan and Guillermo A. Cock, pp. 215-242. Fowler Museum of Cultural History, University of California, Los Angeles.
- Fernandez, Arabel
1994 Estudio de los Materiales, Textiles In **Programa Arqueologico Complejo "El Brujo" Programa 1994 Infore Final**, pp. 127-161. Convenio: Fundacion A.N.
- Wiese, I.R.C./L.L. and U.N.T.
1995 Estudios Textiles In **Programa Arqueologico Complejo "El Brujo" Infore 1995**, pp. 99-137. Convenio: Fundacion A.N.
- Wiese, I.R.C./L.L. and U.N.T., Trujillo.
1996a Estudios Textiles, Indumentaria y Accesorios Textiles Hechos en Base A Paneles, In **Programa Arqueologico Complejo "El Brujo" Infore 1996**, pp. 71-85. Convenio: Fundacion A.N.
- Wiese, I.R.C./L.L. and U.N.T.
1996b Apendice, Apertura de un Fardo Lambayeque, In **Programa Arqueologico Complejo "El Brujo" Infore 1996**, pp. 100-118. Convenio: Fundacion A.N.
- Wiese, I.R.C./L.L. and U.N.T.
1997 Textiles de Chimú. In **Programa Arqueologico Complejo "El Brujo" Infore 1998**. Convenio: Fundacion A.N.
- Wiese, I.R.C./L.L. and U.N.T.
1998 Textiles de Transicion. In **Programa Arqueologico Complejo "El Brujo"**
- Franco, Regulo, Cesar Galvez, and Segundo Vaquez
1994 Arquitectura y decoracion Mochica en la Huaca Cao Viejo, Complejo el Brujo: Resultados Preliminares. In **Moche: Propuestas y Perspectivas**, edited by

- Santiago Uceda and Elias Mujica. Actas del Primer Coloquio sobre la Cultura Moche (Trujillo, 12 al 16 de abril de 1993). **Travaux de l'Institut Francais d'Etudes Andines** 79:147-180, Lima.
- Kaulicke, Peter
- 1997 **Contextos Funerarios de Ancon, Esbozo de una sintesis analitica.** Pontificia Universidad Catolica del Peru, Lima.
- Gutierrez de Santa Clara, Pedro
- 1905 Historia de las Guerras Civiles del Peru (1544-1548) y de Otros Sucesos de las Indias, Tomo Tercero, Libreria General de Victoriano Suarez, Madrid.
- Isbell, William H. and Gordon F. McEwan.
- 1991 **Huari Administrative Structure.** Dumbarton Oaks Research Library and Collection, Washington, D.C.
- Kroeber, Alfred L.
- 1925 The Uhle Pottery Collection from Moche and The Uhle Pottery Collection From Supe. **University of California Publications in American Archaeology and Ethnology.** University of California Press, Berkeley.
- Menzel, Dorothy
- 1977 **The Archaeology of Ancient Peru and the Work of Max Uhle.** R.H. Lowie Museum of Anthropology, University of California, Berkeley.
- Prumers, Heiko
- 1990 Der Fundort "El Castillo" im Huarmeytal, Peru. Ein Beitrag zum Problem des Moche-Huari Textilstils. **Mundus Reihe Alt-Amerikanistik Band 4.** Holos Verlag, Bonn.
- 1995 **Ein ungewöhnliches Moche-Gewebe aus dem Grab des "Fürsten von Sipan". (Lambayeque-Tal, Nordperu).** Beiträge zur Allgemeinen und Vergleichenden Archäologie Band 15. Verlag Philipp von Zabern, Mainz.
- Reiss, Wilhelm and Stubel, Alphons
- 1880-87 **The Necropolis of Ancon in Peru: a contribution to our knowledge of the culture and industries of the empire of the Incas, being the results of excavations made on the spot.** Translated by A.H. Keane. A. Asher & Co., 3 vols. Berlin.
- Rodman, Amy Oakland
- n.d. Supe Archaeology and the Painted Textiles of Chimú Capac. Paper presented at the College Art Association, Session on Precolumbian Art History and Archaeology. February 12-15, 1997. New York.
- 1997 Weaving in a High Land: A Continuous Tradition. In **Traditional Textiles of the Andes, Life and Cloth in the Highlands.** Edited by Lynn A. Meisch, pp. 16-27. Thames and Hudson and Fine Arts Museums of San Francisco.
- n.d. Max Uhle's Notebook found, The twenty grave lots from Chimú Capac, Supe Valley, Peru. Paper presented at the 38th Annual Meeting of the Institute of Andean Studies, January 9-11, 1998. University of California, Berkeley.
- Rodman, Amy Oakland and Vicki Cassman
- 1995 Andean Tapestry: Structure Informs the Surface. In **Art Journal** 54(2)33-39.

- Rodman, Amy Oakland and Arabel Fernandez
 n.d. North Coast Style after Moche, Clothing and Textiles from El Brujo, Chicama Valley, Peru. Paper presented at the 64th Annual Meeting of the Society for American Archaeology, March 24-28, Chicago, Illinois.
- Rostowrowski, Maria
 1989 Origen Religioso de los Dibujos y Rayas de Nasca. **Journal Societe Des Americanistes** LXXIX: 189-202.
- Rowe, Ann P.
 1977 Warp-patterned Weaves of the Andes. The Textile Museum, Washington D.C.
 1978 Technical Features of Inca Tapestry Tunics. *Textile Museum Journal* 17:5-28.
 1984 **Costumes and Featherwork of the Lords of Chimor: Textiles From Peru's North Coast**. The Textile Museum, Washington, D.C.
- Rowe, John H.
 1979 Standardization in Inca Tapestry Tunics. In **The Junius B. Bird Pre-Columbian Textile Conference**, 1973. edited by Ann P. Rowe, Elizabeth B. Benson, and Anne- Louise Schaffer, pp. 239-264. Textile Museum and Dumbarton Oaks, Washington, D.C.
- Salomon, Frank
 1995 The Beautiful Grandparents: Andean Ancestor Shrines and Mortuary Ritual as Seen Through Colonial Records. In **Tombs for the Living: Andean Mortuary Practices**, edited by Tom Dillehey, pp 315-353. Dumbarton Oaks Research Library and Collection, Washington, D.C.
- Shimada, Izumi
 1991 Pachacamac Archaeology: Retrospect and Prospect. In **Pachacamac**, by Max Uhle, edited by Izumi Shimada, pp XVI-LXVI. Reprinted. Originally published 1903, Monograph 62, University Museum of Archaeology and Anthropology, University of Pennsylvania, Philadelphia.
- Uhle, Max
 1903 **Pachacamac; report of the William Pepper, M.D., LL.D. Peruvian Expedition of 1896**. Monograph 62. University Museum of Archaeology and Anthropology, Philadelphia.
 1913 Die Ruinen von Moche. **Journal de la Societe des Americanistes**. Vol X(1)95-117. Paris.



Fig. 1 Map of the Andean region with sites mentioned in the text

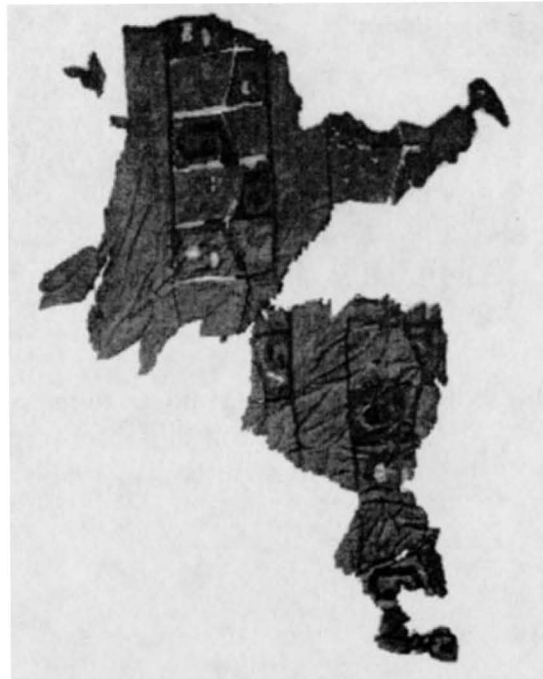


Fig. 2 Fragment of a Wari tapestry tunic discovered in Burial 1 of 1995 at Huaca Cao Viejo, El Brujo.

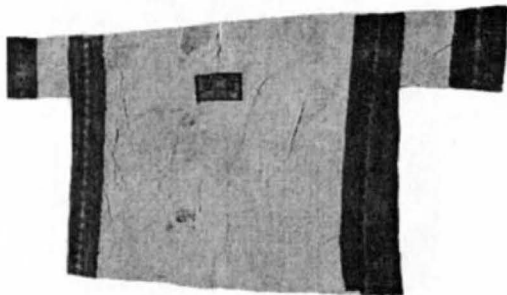


Fig. 3 Outermost shirt of Burial 1 of 1995 El Brujo. The shirt is cotton with warp-patterned bands and a tapestry plaque applied to the surface



Fig. 4 Tapestry plaque applied to the outermost shirt from Burial 1 excavated at El Brujo.



Fig. 5 Tapestry plaque applied to the surface of a sleeved cotton shirt discovered in the interior of Burial 1 of 1995 at El Brujo.



Fig. 6 Woman's doublecloth belt worn with cotton dresses at El Brujo.

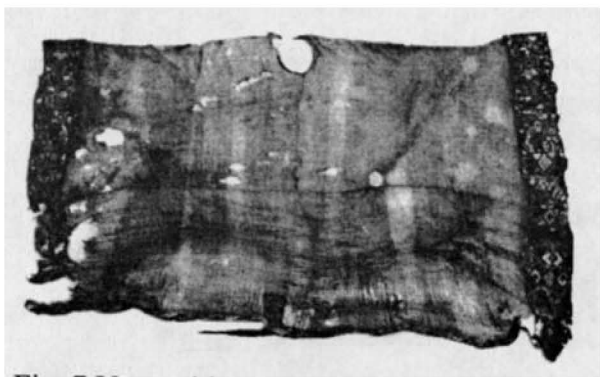


Fig. 7 Very wide, transparent cotton shirt with brilliantly dyed camelid-fiber tapestry bands sewn to the sides.



Fig. 8 Detail of tapestry band in a Lambayeque period burial at El Brujo, Chicama Valley, Peru.

Fiber Art/Works of Art: Positioning and Perception in the Marketplace

Alice Zrebiec

Contemporary works made of fiber or incorporating textile techniques frequently encounter an identity crisis. Craft? Fiber Art? Fine Art? How do these descriptions limit marketability and representation of the work, or, conversely, open up new horizons for talented artists? The owners of five galleries presented their viewpoints with specific reference to the focus of their galleries, the artists they represent, and the context in which they present textile-related works to the viewing public. They addressed the following issues: How did these galleries evolve their specific visions? Where is their emphasis: on materials and techniques, craftsmanship, or artistic content and expression? What criteria – aesthetic and economic - do they use to cultivate new artists for their galleries?

Rachel Brown, of Weaving Southwest in Taos, has presented and promoted the work of tapestry weavers living in New Mexico for many years. Although Bellas Artes in Santa Fe is often associated with contemporary fiber art, Charlotte and Bob Kornstein do not use medium as a determinate for the works they exhibit, objects that challenge the distinction between craft and art. Jill Heppenheimer explores the artistic endeavors of the Art-to-Wear movement at the Santa Fe Weaving Gallery. Terry McGrath Craig and Martha Hibberd showcase fiber artists, particularly but not exclusively those creating small-scale embroideries, at the Hibberd McGrath Gallery in Breckenridge, Colorado. Rob Coffland, co-owner of Tai Gallery/Textile Arts in Santa Fe, has brought the work of contemporary Japanese bamboo artists to the attention of American audiences. Each participant presented a slide-illustrated overview of their gallery and the work of the artists they represent, discussing how they, the owners, present these objects to the public. A panel discussion and questions from the audience followed the individual presentations. Alice Zrebiec served as moderator.

Rachel Brown, Weaving Southwest, Taos, NM

Rachel Brown received her BA from Radcliffe College and continued her art studies at the Art Students League and Cooper Union in New York. After moving to Taos in 1956 she delved into all types of southwestern weavings, particularly those inspired by Navajo and Rio Grande textiles. In the late sixties, she traveled to Mexico, Central and South America, immersing herself in technical studies, and upon her return wrote *The Weaving, Spinning, and Dyeing Book* (Alfred A. Knopf, 1978). During the 80's she helped found Tierra Wools – a worker-owned weaving business -- in Los Ojos, NM. She started Rio Grande Weavers Supply (1985) for the manufacture of looms and wheels and hand-dyed yarns, and in 1987 she opened an adjoining gallery, Weaving Southwest, to promote and exhibit the work of contemporary New Mexican tapestry weavers. The gallery currently shows the work of approximately twenty weavers. In 1993 Brown received a LifeTime Achievement award at the Museum of Women in the Arts in Washington, D.C.

Charlotte and Bob Kornstein, Bellas Artes, Santa Fe, NM

For nearly twenty years the focus of Bellas Artes has been the aesthetic viewpoint of its owners/directors rather than art from a particular time period, culture, or medium. Thus, there have been exhibitions of pre-Columbian, African, Japanese and Chinese art as well as one-person exhibitions for twentieth-century artists. These latter shows included the work of Antoni Tàpies, Louise Nevelson, Judy Pfaff, Richard DeVore, and Ruth Duckworth, and that of Olga de Amaral, Shihoko Fukumoto and Norma Minkowitz, the three artists working in fiber who are represented by the gallery. The exhibitions for Lucas Samaras and Robert Kushner – artists who work in various media – included painting, sculpture, drawings and fiber.

Jill Heppenheimer, Co-Owner with Barbara Lanning, Santa Fe Weaving Gallery, Santa Fe, NM

The Santa Fe Weaving Gallery represents thirty of the most accomplished and creative textile designer-artists in America. Each of the Art-to-Wear artists has achieved national status for her/his technical mastery, innovative creative expression and integrity of design - from the creation of the fabric to the fashioning of the garment. Santa Fe Weaving Gallery pushes the boundaries of conventional clothing and style trends by showcasing artwork that blends the voice of the artist with the personal statement of the collector. A sampling of the artists represented includes Tim Harding, Ana Lisa Hedstrom, Jean Cacicedo, Susan Summa, Maude Andrade, Gina D'Ambrosio and Ina Kozel.

Terry McGrath Craig and Martha Hibberd, Hibberd McGrath Gallery, Breckenridge, CO

Martha grew up on the East Coast and migrated to Colorado after earning a ceramics degree at Alfred University. Terry grew up in the Midwest and Colorado, and after earning a Geography degree at the University of Missouri and studying weaving in Vermont, she settled back in Colorado. In 1982, after some independent wearable art shows, they started the Hibberd McGrath Gallery, where fiber-based artwork and textile influences have been a continuing theme. The Gallery - unusual for the mountain resort community of Breckenridge - has evolved over the years. The owners like to work with an artist as he/she evolves. The gallery has shown contemporary basketry and quilts, and the owners have an ongoing interest in the small-scale embroideries of Tom Lundberg, Missy Stevens, Beth Nobles and others.

Robert T. Coffland, Jr., Co-owner with Mary Hunt Kahlenberg of Tai Gallery/Textile Arts, Santa Fe, NM

Robert T. Coffland applies his extensive experience in communications, business management, product development and marketing within food industries to the art world. In 1982 he first visited Japan. Subsequently, he curated with his wife, Mary Hunt Kahlenberg, two exhibitions in Japan on American Indian art and African art: *Mother Earth Father Sky* and *Matisse's Secret: Kuba Textiles of Zaire*. Their Tai Gallery is involved in developing and curating public and private collections in the United States,

Europe and Asia. Coffland is a writer and researcher on Japanese bamboo arts, and in 2000 he published his first book on the subject, *Contemporary Japanese Bamboo Arts*. He currently serves as the chairman of the New Mexico Arts Commission.

Alice Zrebiec – Moderator, Santa Fe, NM

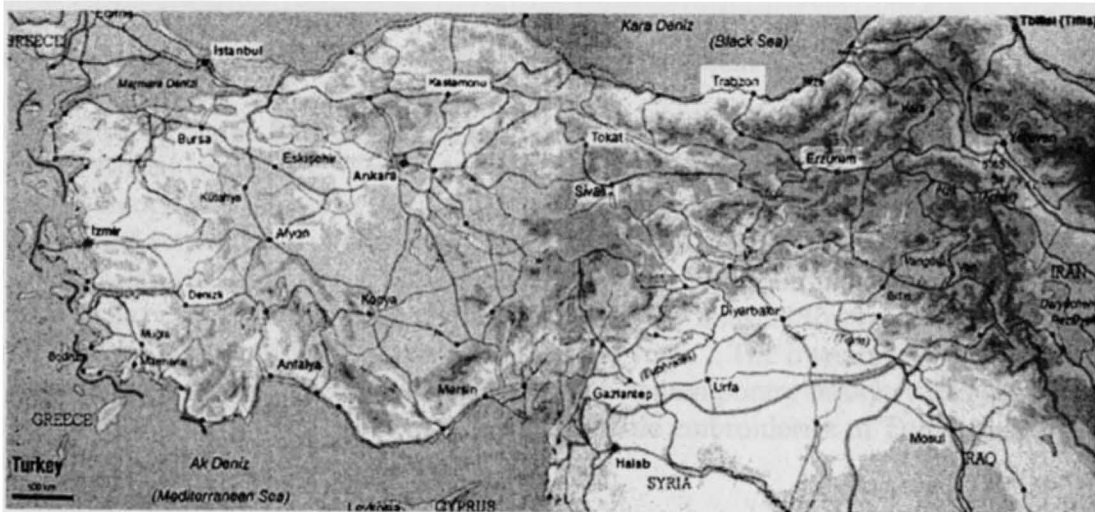
Alice Zrebiec received her PhD from the Institute of Fine Arts – New York University. Her dissertation, *American Tapestry Manufactures – 1893-1933*, examined the work of three prominent ateliers and the artistic and cultural milieu in which this work was produced. Formerly curator of textiles in the department of European Sculpture and Decorative Arts at the Metropolitan Museum of Art, she is currently a curatorial consultant based in Santa Fe and textile curator for the Denver Art Museum.

THE GAZIANTEP CLOTH TRADE: A STUDY OF A PUTTING-OUT SYSTEM OF CLOTH PRODUCTION IN SOUTHEASTERN TURKEY

Charlotte Jirousek

An Ottoman era system of cloth production and marketing identified in Gaziantep is a rare survival of traditional production patterns once central to the Ottoman Turkish economy.

This system is descended from the much older Ottoman production system that once organized textile manufacturing throughout the Ottoman Empire. Textile manufacturing had been an important part of the economy of Asia Minor since the dawn of history. It was noteworthy throughout this region in both the Roman and Byzantine eras, and during the early Muslim rule of the Selcuk Turks beginning in the eleventh century. The legendary silk road linking east and west was really a network of trade routes connecting various northern and southern routes between the cities of Asia and the entrepôts of the Eastern Mediterranean. Therefore it should not be surprising that during and after the Ottoman conquest in the thirteenth to fifteenth centuries, textiles were being produced commercially in every part of Anatolia. The silk textiles of Bursa and the court manufactories of Constantinople are well known, as is Aleppo as a center of the silk trade. However, these centers were in fact the mercantile hubs of a much larger network of production. Gaziantep cloth production had strong connections to Aleppo, about 60 miles to the south. Prior to the breakup of the Ottoman Empire these towns were part of one economic and political region, and international textile trade network that also included Urfa, Maras and Kilis to the north (See Map).



Map of Turkey, highlighting selected textile producing towns

In the sixteenth century Gaziantep (known as Aintab until the 1920s) was already a substantial city in the Ottoman tax roles. It was not so well known for silk, but was rather a center for the production of red dyed leather and cloth. The raising and use of madder red as a trade good and as the basis for a dyeing industry was important. Trade in wool, leather and mutton were also important, as Aintab along with other cities in the region was a center for the products of the Turkmen nomads of Southeastern Anatolia, who brought their herds to the markets of Aintab seasonally to sell animals, wool, and their own weaving. Later as cotton expanded as a crop in the region, they also became important producers of red cotton cloth, and

competed successfully with the Aleppo production. Aintab was also an important producer of the silk and cotton cloth known as *alaca* by the end of the nineteenth century (Quataert, 1993). Sericulture and silk weaving was practiced not only in Aleppo, but also as early as the fifteenth century in outlying districts such as Tarsus to the West, according to a very graphic European traveller's description (Purchas, 1625). Urfa and Diyarbakir to the East were also centers of silk production. Thus sericulture and at least some silk crafts were probably done in the area from a fairly early date, with the output sold by villagers to supply the Aleppo manufactories and markets.

Until the end of the nineteenth century, however, silk weaving was not an important part of Aintab manufacturing. Some silk weavers may have moved there from centers further east such as Urfa and Diyarbakir after 1890, since the number of looms in Aintab increased markedly in the mid nineties. Even greater numbers arrived from Aleppo, to the south, following the revolution that ended the Ottoman Empire and established the Turkish Republic in the early 1920s. At that time the neighboring and closely related cities of Aintab and Aleppo were separated by the border that created the new nation of Syria out of the old Ottoman province. Many Turks living in Aleppo moved 60 miles north, together with the tools of their professions, and Armenians and Arabs moved south to Aleppo. The father of my primary contact in the Gaziantep cloth trade was born in Aleppo and brought his family north to settle during the revolution. The family still retains ties with kin in Aleppo.

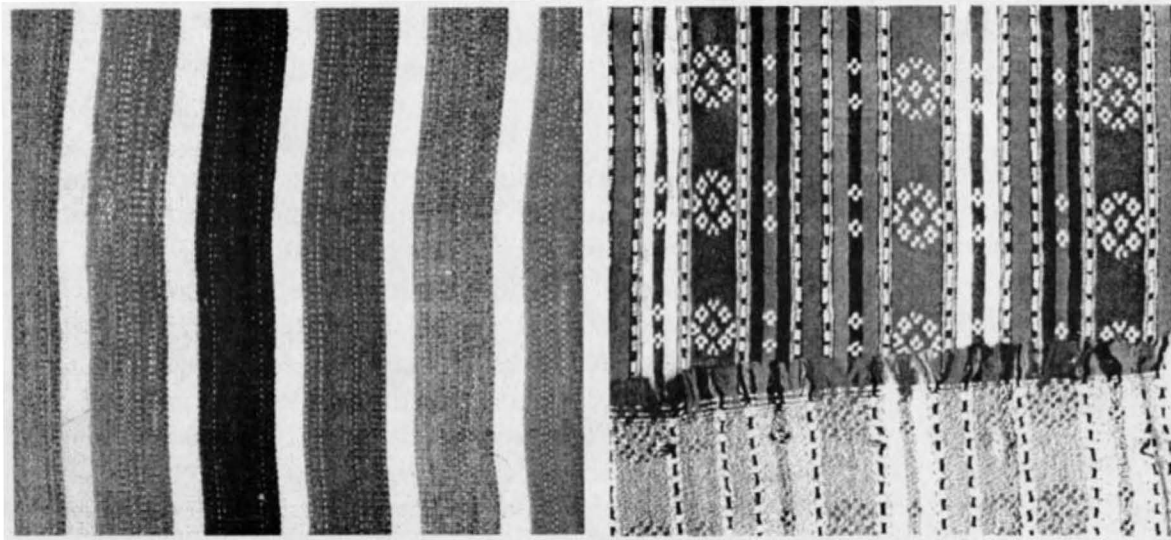
The manufacturing systems and fragments of the old trade networks survived well into the twentieth century throughout the former Ottoman world. Even today there are quite a number of communities in Anatolia where textile production still continues in the traditional mode.

Textile Production

Sericulture and silk weaving had long been important around Adana and Tarsus to the west, and along the Mediterranean coast, as well as in the Hatay, to the south. Isolated silk weavers can still be found in these cities. Gaziantep has the most intact and extensive traditional putting out system devoted to traditional textile production that I have seen in Turkey, producing silk in plain weaves, satin weaves and rep weave *moire*, done in a variety of patterned, striped, plain, and ikat designs, known as *alaca* and *kutnu*. Although weaving towns in western Turkey still follow the traditional putting out system, only in Gaziantep is the system engaged in substantial production of traditional cloth. (Plate 1)

Alaca and *kutnu* cloth was once produced in many different towns and cities throughout Anatolia and was widely used for traditional costume in all parts of Turkey and the Ottoman Empire. Both the rep weave *alaca* and the similar but cheaper *medeniye*, as well as the satin weave *kutnu* were woven with silk warp and cotton weft, although an all-cotton version became a common variant in the nineteenth century. The use of the cotton, particularly in the satin weave *kutnu*, meant that the outer warp-faced satin was primarily silk, while the inner, weft-faced side was primarily cotton. Not only was such silk cloth cheaper, many devout Muslims held that the wearing of silk next to the skin was an impious luxury (Tezcan & Delibaş). These two reasons combined meant that these types of cloth were widely used and popular with both the rich and the poor. They were used for regional dress in every part of Anatolia, and in most parts of the

larger Ottoman world, from royal court to village. Furthermore, these weaves were known and used throughout the near east. One trade historian has noted that there was in the sixteenth century a considerable demand in the Aleppo markets for the *kutni* of Cairo, considered to be of exceptional quality (Inalcik & Quataert, 1994).



1. Left: *alaca* cloth, a warp-faced weave with silk warp and cotton weft. *Medeniye* is the same structure but with warp more widely spaced, hence cheaper. Right: *Kutnu* cloth, a warp-faced satin weave with silk warp and cotton weft.

Weaving of this cloth is even to be found in Muslim (or formerly Muslim) regions of North India and Pakistan. There it is known as *mashru* (which translates as permitted), meaning permitted for the wear of Muslims, because of its cotton back. Indian historians assert that this weaving came to India from Ottoman Aleppo. (Dhamija & Jain, 1989) Furthermore, a loom with a warp tensioning system virtually unique to Anatolia appears to be in use in some *mashru* weaving, further suggesting an Anatolian or Ottoman origin.

The Production System

The putting out system as practiced in Turkey consists of a division of labor in textile production in which separate craft specialists are organized and paid by a capitalist/entrepreneur. Work may be done in the artisan's home or in a workshop. Production is organized and financed by capitalist entrepreneurs who may have begun their careers as craftsmen. Some are themselves merchants, who provide capital and raw materials to craftsmen, whom they also pay for labor, and then market the cloth that they have commissioned. One putting out system I observed was managed by the senior dye master. Another was run by a businessman who began life as a maker and threader of reeds and harnesses (*tarakci*). The largest putting out system was managed by a man who sells cloth wholesale and retail; but his father was a weaver, and he worked at the loom as a child.

For a variety of cultural and economic reasons, the putting-out system continued in use in Ottoman Turkey long after it had generally disappeared in Europe, a fact that long misled historians of nineteenth century Ottoman manufacturing who tended to equate centralized

factories with meaningful industrial production (Quataert, 1993). Thus some have argued that Ottoman textile manufacturing declined in the nineteenth century, based on the lack of centralized factories, but in reality a vigorous textile industry continued. However cloth production was now mostly for domestic markets, and exports were primarily of reeled silk and raw materials (cocoons , wool, cotton, mohair).

There were two main reasons why the putting out system continued in use: individual ownership of skills and equipment; and use of female labor. The fact that craftsmen usually owned and controlled their own equipment and tools, and that the various skills of production were divided into distinct but interdependent specialities encouraged continuance of the traditional decentralized system, even when new technologies were introduced. Although the capitalist/entrepreneur owns some equipment and has the funds to operate the system, most equipment was owned by the craftsmen, and thus the capital was relatively widely distributed. So a craftsman or entrepreneur might buy a new loom, but (until recently, at least) not a factory full of looms. Also, in a Muslim society it was until recently unthinkable for most women to work outside the home, and so the desire to take advantage of female labor was a further disincentive for centralization. Thus large centralized factories were slow in coming, although this kind of production did gradually emerge beginning in the latter nineteenth century in some urban areas.

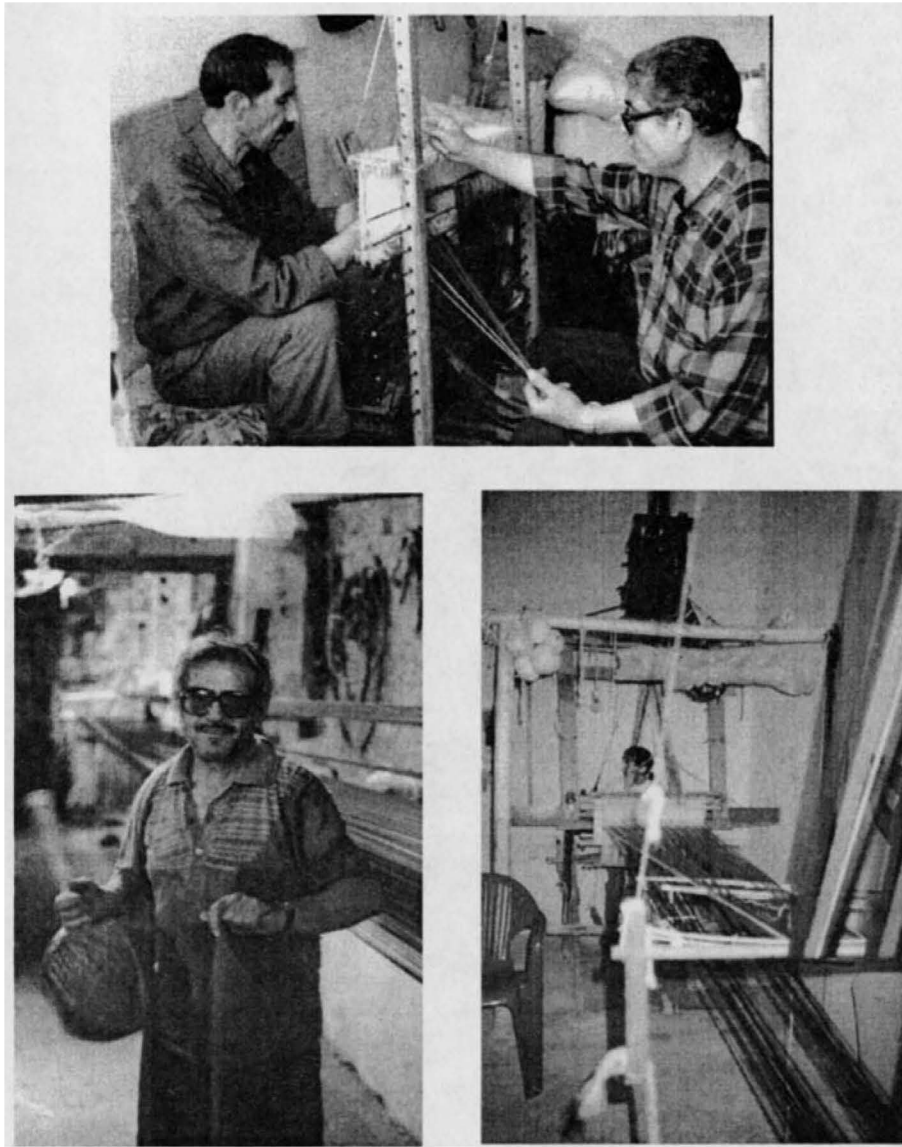
The original Ottoman system of *gedik*, or crafts trades, usually operated within a Guild (*hurfet*) system that was both similar to and different from the European model. Craftsmen achieved their *gedik* through an apprentice system of training, following which they could set up shop on their own and practice their speciality. The Guilds or *hurfet* were chartered by the Ottoman government to produce a required product, but they did not control all production. There was no formal legal code that licensed and regulated guilds (Inalcik, 1994). Individual capitalist-entrepreneurs could contract for labor or product through Guild members, or operate independent putting-out systems of craftsmen themselves outside of the Guilds. The Ottoman craft production system had in some ways a less formalized relationship to Ottoman bureaucracy and was generally more flexible than the European guild system (Faroqhi, 1995) in terms of control of the craftsmen and their freedom to practice their trade. However, Ottoman guilds and independent craftsmen were also more subject to the whims of the Ottoman government that took no interest in the economic benefits of trade but instead viewed the supply needs of the army and court as preeminent over profitability and even survival of a manufacturing community. Depending on the period and the community, a guild might include Muslim, Christian, and Jewish Ottomans, or it might include only members of just one religious community.

Of course, formal Guild structure is no more in Gaziantep. Until about 1994 there was a textile craft association director (*Başkan*) who was a respected elder of the textile community. When the last *Başkan* died, he was not replaced, because it was felt that the community had grown too small to require a formal director. The *Başkan* was responsible for allocation of resources and labor, but in practice mainly was called on to arbitrate disputes if and when they occurred.

Entire communities of putting out system production can still be seen in several places, notably in towns and villages around Denizli and Aydin in southwestern Turkey, (Erdogan, 1996) to a lesser extent along the Black Sea, and also in Gaziantep in the Southeast. In many of these communities most of the production (but not all) has been converted from traditional textiles to modern products such as toweling, curtains or sheeting, woven on power looms, but still housed and owned in family compounds. Only since the Turkish economic boom of the 1980s have a number of individual weavers expanded their production into modern factory systems. Ancient cottage industry skills have thus spawned a textile and apparel manufacturing boom of immense proportions that is transforming the towns and cities of southern and western Turkey.

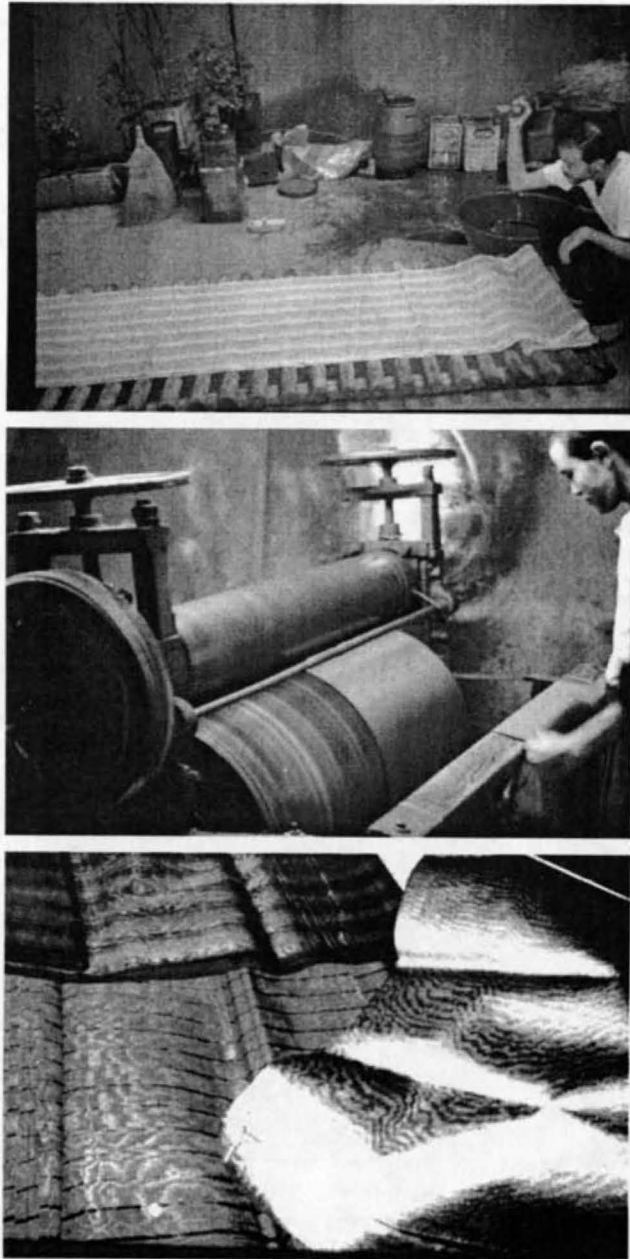
In Gaziantep, too, many families that were once involved in the weaving of traditional cloth are now owners of factories producing printed textiles, lace curtains, socks, underwear, and blue jeans, sweaters and other clothing. However a few have stayed with the old production as either managers of putting out systems or craftsmen within such systems. In Gaziantep there remained as late as 1999 about 165 looms still producing traditional cloth. Of this number about 3/4 are handlooms. Since about seven sets of hands are involved in preparing the warps, wefts and looms for weaving, and in finishing the woven cloth, this represents a significant body of skilled workmen. Those who stay with this work do so for various reasons. For some older craftsmen it is the only work they know. For others, it is the family business. But for some it is the love of the traditional cloth, and the desire to preserve a tradition they view as peculiarly Turkish. And by this tradition I mean that these people care about both the making of the cloth and the system of producing it.

The cloth still produced in Gaziantep is produced in a system of independently owned and managed workshops, some in homes and some not, depending on the nature of the production task. The 165 weavers, who operate looms ranging from seven harness to jacquard handlooms and a variety of power looms are part of a compartmentalized production system that also includes six other specialities: the makers and threaders of harnesses and reeds, warp winders, warp finishers (including ikat tying and sizing), dyers, loom preparers, and fabric finishers.(Plate 2)



2. Three textile craft specialties: *tarakci* --makers and threaders of harnesses (top); *mezekci*--(above left) preparation of warps (ikat tying, sizing, and rolling warp balls) *Dokumaci*--(above right) Weavers. In this instance a jacquard loom operated by this family for more than 100 years.

One particular craft specialty that is quite distinctive is the finishing of the rep weave *alaca* cloth. The effect achieved is *moire* patterning, and it is probable that the methods used in Gaziantep are the last surviving instance of the effect sometimes referred to as "watered" silk. The techniques used have been described by sixteenth century travelers for whom this method was associated with the production of camlets, the fine, soft mohair (later, mohair and silk) fabric then highly prized in Europe, and originating in Anatolia. The technique used by Ottoman



3. Procedure for moire finishing. Top, yardage is sprinkled with drops of water. Center, cloth is pressed two layers together. Facing inner surfaces will receive moire patterning. Bottom, *alaca* cloth with moire finish.

craftsmen to achieve the watered finish was of great interest to European visitors. (Busbecq, 1633) The process involved, and involves, two steps: watering distributed unevenly, so that large drops moisten some spots and other areas remain dry. The cloth is folded and left to cure overnight, under a board held down by heavy weights. The next day it is pressed. The system I documented used a large heated cylinder (*cendere*). The cylinder is essentially smooth but not perfectly shaped, and so the pressure it gives is slightly uneven, which may contribute to the pressed moire patterning. However, the craftsmen insisted that the irregularity of the dampness

in the cloth was the primary cause of the irregular “watered” design, since the degree of dampness would cause variance in the compressability of the cloth. The result is a *moire* pattern that does not repeat, since it is not dependent on the variations in the repeating turning of a cylinder as is the case in European *moire*. However, there was another method of pressing the cloth practiced until 1992 when the last workshop closed. This involved beating the cloth with mallets, an ancient method that would surely not produce a repeating pattern.(Plate 3)

Continuance of the traditional putting out system is dependent on the continuance of each speciality, and for this reason the survival of the craft is in serious danger. At present there is only one dye workshop left, run by a man in his late seventies. Since I did my research, one of the pair of harness makers and threaders that I documented has died, and the other has consequently retired, since it is a two-man task. While there are others who thread harnesses, there is only one more workshop for producing new harnesses for handlooms. Today the *kutnu* and *alaca* production systems are struggling to survive. Although there is a market for their traditional cloth, the entrepreneurs are also constantly trying to find new ways to redesign it for new markets in a changing world. However, the real crisis is in the availability of skilled workers. In many parts of Turkey I have observed that the only practitioners of handweaving left are old, with no younger generation coming up to replace them. Yet in Gaziantep I did see young craftsmen and apprentices, though most of the workers are aging. In some crafts there are not enough young apprentices to replace those who are retiring or dying. Sooner or later one of the essential crafts will be lost, and the whole system will fall. So the craft will inevitably shrink and fade away unless there is outside support. The head of and the application of pressure. The cloth is opened out at length and sprinkled liberally with drops of water, using a whisk. The water is purposely the largest putting out system, who has worked hard to preserve this craft, claims that what is needed most is social security and health benefits for the self-employed cottage industry workers and educational support for an apprentice program. Cottage industry workers are currently not eligible to join and pay into government retirement and health programs available to factory workers. He claims that if this were to change, and if a training program could be organized with government support as is done for other crafts, there would be no shortage of workers. This cloth is part of Turkish heritage, much as tartan is part of Scottish heritage. Perhaps before it is too late something will be done to save this craft; but perhaps not.



4. Dye workshop, left. Display of *kutnu* and *alaca* cloth and traditional costume, right.

All photographs by the author.

REFERENCES

de Busbecq, Ogier Ghiselin. *The Turkish Letters of Ogier Ghiselin de Busbecq. (Reprint of Elzevir edition, 1633)* Oxford: Clarendon Press, 1926.

Erdoğan, Zeynep. *Research on Weaving and some Properties of the Woven materials Produced in Buldan*. Ph. D. dissertation, (Ankara University, 1996).

Faroghi, Suraiya. *Making a Living in the Ottoman Lands 1480 to 1820*. Analecta Isisiana XVIII. Istanbul: The Isis Press, 1995.

Handwoven Fabrics of India, Ahmedabad: Jasleen Dhamija and Jyotindra Jain, editors. Mapin Publishing, 1989, 92.

Inalcik, Halil, with Donald Quataert. *An Economic and Social History of the Ottoman Empire 1300-1914*. Cambridge University Press, 1994.

Purchas, Samuel. Letter to Master William Biddulph from Aleppo. *Purchase His Pilgrimes*. Vol 2, Chapt. 9. London: W. Stansby for H. Featherstone, 1625.

Quataert, Donald. *Ottoman Manufacturing in the Age of the Industrial Revolution*. Cambridge: Cambridge University, 1993.

Tezcan, Hülye. and Selma Delibaş. *The Topkapi Saray Museum: Costumes, Embroideries, and other Textiles*. London: 1986.

AJRAK: CLOTH FROM THE SOIL OF SINDH

NOORJEHAN BILGRAMI



Teli ajrak: tre-hashe-wali (ajrak with three borders)

Ajrak is a traditional cloth from the province of Sindh in Pakistan, whose lineage dates back to the period of the Indus Valley Civilization which flourished from 2500 - 1500 BC.

Pakistan, bordered by India, Afghanistan and Iran, has the River Indus flowing southwards from the Himalayas and emptying into the Arabian Sea. Pakistan is only fifty-three years old as an independent country but excavations here have revealed several major ancient cities and their material cultures, which existed on this land thousands of years ago. Amongst a wealth of pottery and ornaments discovered at the site of Mehrgarh (6500 – 4500 BC) was found the impression of a woven cloth.



King Priest – terra-cotta statuary
excavated from Moenjodaro: 7" high,
draped in a shawl with the trefoil motif.

Photo courtesy: Dr. Mark Kenoyer

The celebrated statue of the King Priest discovered at Moenjodaro has a trefoil motif on the draped shawl. The *ajrak* craftsmen claim that the pattern is *kakar*, a cloud pattern. The same trefoil is seen on the Hathor Cow and on the bodies of

Sumerian bulls in Mesopotamia where the concept of trinity was evolved. The trefoil is thought to be composed of three sun discs fused together to represent the inseparable unity of the Gods of Sun, Water and Earth.



Plant of *Indigo Ferra Tinctoria*

One of the greatest accomplishments of the sub-continent was the development of the technology of dyeing and printing of fabric. This is evident from the discovery of a dyer's workshop at Moenjodaro. *Indigo Ferra Tinctoria*, the most ancient fabled dye also grew in abundance on the banks of River Indus.

In 1930, hundreds of cotton fragments were retrieved from *Al Fustat* – harbor of Old Cairo – dating from the 11th to the 14th century AD. These fragments are the earliest known printed textiles. The simple patterns printed with small sized blocks, resist dyed in indigo and madder, bear a striking similarity to *ajrak*.

Historically, Sindh has been trade-oriented and receptive to external influences. Over a period of time, the craftsmen developed printing techniques from simple resist patterning on one side, to the rich tonal, two-sided resist-printed cloth, the '*ajrak*'.

There are some spectacular burial sites in Sindh. The Chawkandi and Makli tombs, the largest necropolis in the world, dating 11th to 19th century AD, appear like a conglomeration of gold-jeweled sculptures in the stark desert. Intricately carved to a depth of three layers are the patterns reminiscent of Buddhist, Hindu and Central Asian influences. These incredible carvings that transcend time, illustrate the similarity of motifs in the design repertoire of other traditional crafts of Sindh.



Shepherd with an *ajrak* turban



Mohd. Siddique in an *ajrak* shawl



Ajrak covering for a bullock cart

The people of Sindh have a deep reverence for *ajrak*. From birth to marriage, until death, *ajrak* commemorates all significant events of the life cycle. This cloth is not only used for special occasions but also has multifarious usage in every day living. It is used and re-used till threadbare. It is worn as turban, a shawl, spread as a bedsheet, table cloth and when worn out, recycled as a hammock, cover for a bullock cart, and most commonly used as a backing to patchwork quilts, called *rillis*. *Ajrak* is a cloth commonly worn by different income groups from the wealthy to the poor. The colors, patterns and designs remain the same; the only difference would be in the quality of the fabric.



Ajrak backing on a *rilli* (patch-work

quilt)

Knowledge is handed down through generations. It is not recorded but learnt through experience and an inner intuition.

*“God spreads the scrolls
upon the heavens, until
man learns to read them
once he can read them
he can roll up the
scrolls and put them away”*

- ‘The Sufi’ by Laleh Bakhtiar

Nature plays an important role in the making of *ajrak*. The *ajrak* craftsman works in total harmony with his environment, where the sun, river, animals, trees and mud are all part of its making.

A *teli ajrak* – (an oily *ajrak*) is known for its unique property: the more it is used, the more the colors intensify and mature. The complex making of a *teli ajrak* is further explained in detail.



Khumbh: Steaming of the cloth.

Bales of cloth are torn into 10-meter long sheets. These are soaked in carbonate of soda and taken to the river to be washed. The cloth is coiled and placed on top of a slated, copper vat and the bundle is covered with a quilt to prevent the steam from escaping. This vat is heated through the night and the next day. Steam opens the pores of the cloth and makes it soft so that the impurities can be easily cleansed. This process is called *Khumbh*.

The next stage is *Saaj*, in which camel dung, oil of the *Eruca Sativa* seeds and water are mixed together for the fabric to soak in. Dung enables the cloth to become softer and acts as a bleaching agent. This stage is very crucial in determining the quality of an *ajrak*. The wet cloth is then tied into an airtight bundle and kept for 5-10 days, depending upon the weather. A distinct smell of mango pickle emanating from the bundle confirms that the fibers have been impregnated with oil. The cloth is spread to dry in the sun and then torn from the middle to make pairs.

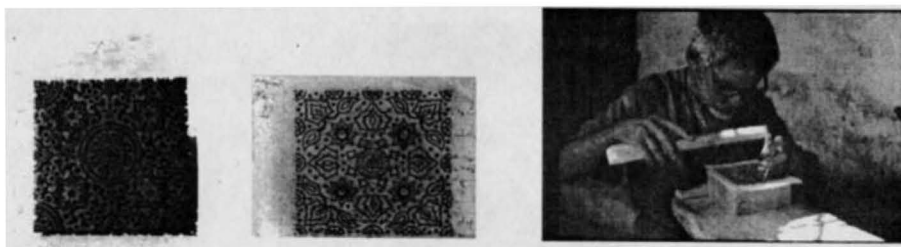
Preparation of the fabric for the most crucial stage — *Saaj*.
Haji Porra ties the bundle.



Washing the fabric at the river.

After another rinsing in carbonate of soda and a wash, it is given an oil treatment. The oil is curdled with soda solution and the cloth is again soaked to ensure maximum penetration of the oil in the fibers. The cloth is left in the open to dry overnight. After a thorough wash in the river the next day, it is soaked in a mixture of *Sakun* — Galls of Tamarisk, dried lemons, molasses, castor oil and water. The women prepare the mixture at home. The wet cloth after drying is brought to the workshop for printing. This process is called *Kasai*.

At this point I shall digress a little to talk about the wooden blocks or the *pors*. The *pors* are carved from the *Acacia Arabica* trees, indigenous to the Sindh region. The repeat pattern, which gives the design its character, is determined by a grid system. The pattern is first transferred to the block and then carved with great precision by the block maker, using very simple tools. The blocks are carved in pairs that can register an exact inverted image on the other side. Today, there is only one surviving member of a family of block-makers whose forefathers were skilled in this craft.



Asl, an outline for the *por* (block)

Wahid Buksh traces the pattern on the wood block

Back to the process: *Kiryana* is a resist made with rice paste, acacia gum and lime. Using the outline block, the printer dips his block in the paste contained in a small terracotta tray, to print on both sides of the cloth. The printed pattern remains white.



Printing of the *Kiryana*, the outline resist to remain white after dyeing

Kut is the printing of the black areas. A mixture of Ferrous Sulphate, Fuller's earth, gum and water is stamped on the cloth with a filler block known as *Datta*.

For the next stage, gum is mixed with rice paste, alum, molasses, fennel, Fuller's earth and other herbs to form the mud resist paste – the *Kharrh*. This paste is printed on the areas that are to be protected against indigo dye, that is, the white, black and the portions that are to become red.



The first indigo dyeing of an *ajrak*

The cloth goes through the first indigo dye, which, unfortunately, is synthetic indigo, as the usage of natural dyes had been abandoned over 50 years ago. Usually the *Usto* – the master-dyer, who is the owner of the workshop, himself does the dyeing in the vat. The dyed cloth is then taken to the river the next morning before sunrise.



Vicharrh, the thrashing and rigorous cleansing after the dye



Soaking of *ajraks* in *Sakun* solution

All the *ajraks* are submerged in the water for at least an hour. To a rhythmic count, the craftsmen swish and thrash the *ajraks* in the water for an hour or more until the gum and the excess dye have been washed off and the white areas become clear. The cloth is soaked in the *sakun* solution for deeper red registration.



Nisar, preparing the alizarine dye bath in a copper vat

In a large copper vat the *ajraks* are dyed with alizarine (no longer in *Manjeeth* – *Rubia Cordifolia*). Heated by log fire the craftsman diligently lifts and immerses the cloth repeatedly for a couple of hours till the desired red color is reached.

It is again soaked in *gissi*, (camel dung) to clear the white areas.



Tapai, the artisan sprinkles water on the ajraks



Meena, printing of the *Kharrh*, the resist mud paste

On the banks of the river, for *Tapai* the red *ajraks* are spread out to partially dry in the sun, the artisan scoops the water to sprinkle on the cloth. The alternate drying and drenching of the cloth bleaches the white area and deepens and matures the other colors. This continues for a couple of hours before they are washed, dried and then taken to the workshop.

The mud resist mixture is again printed to cover the red areas and immediately sprinkled with the sifted, dried cow dung to dry the wet areas. This process is called *Meena*.

The thick, mud-encrusted cloth is folded and slowly lowered in the indigo vat for the second time. The *ajraks* are dried, rolled into a bundle and then taken to the river for the final wash. The craftsmen fold the *ajraks* while still damp and the weight presses them as they become dry.



Detail of a *trej hashe wali ajrak*

My involvement with *ajrak* began fourteen years ago, when by chance I stumbled upon this incredulous process. It was astonishing to learn that *ajrak* making activity has been carried out for centuries, unnoticed, in the villages. I felt it was important to document the oral tradition; the complex process of 21 different stages, and most importantly record the 15 centers and the 78 master craftsmen, practicing in towns and villages of Lower Sindh. For two years I carried out the survey and in 1990, it took the form of a book – ‘*Sindh jo Ajrak*’, and eventually I got an opportunity to make a documentary video, ‘*Sun, Fire, River, Ajrak, Cloth from the Soil of Sindh*’, to capture the inherent Sufi rhythm and spirit of *ajrak*-making.

During my research I learnt that the craftsmen had abandoned the use of natural dyes two generations ago and were using only imported, synthetic indigo and alizarine, yet they continued to process the cloth as it was done earlier for natural dyes. My present focus is to gradually

convince the craftsmen to revert to natural dyes. It took me a few years to find the person possessing the knowledge of indigo dye-making and to coax some farmers to grow indigo again. It is a long story, but after a battle against all odds, it is being cultivated once again. A few weeks ago I convinced a craftsman to dye a few *ajraks* with indigo and madder. The activity attracted the attention of many other craftsmen; they could not believe that the leaves and roots of plants could give out such rich colors! To revert to the original is possible; but it will be a slow, uphill task.

Will there be a continuity of this ancient craft tradition? The younger generation is seeking more lucrative work; work that is less labor-intensive with short-term gains. Some are taking short cuts by reducing the number of essential stages in the making; others simply have switched to printing cheap silk-screen versions.

Unlike their forefathers, the craftsmen have little incentive to continue with *ajrak* making. It is therefore imperative to give due respect and recognition to the master craftsmen so that the next generation is encouraged to carry on with these craft skills.

To sustain any craft, the product has to be economically viable. Alternative markets have to be explored and developed, since the traditional social structure is going through a major change. As time passes, festivals and ceremonies play a less significant role in their lives. Political uncertainties, fashion and consumer dictates and pressures from the urban areas are all contributing to change that is not relevant to their way of life.

The continuity of *ajrak* production and use over the centuries is maintained only because it is an integral part of Sindhi culture. Its usage is evident at all levels of society and the cloth is held in high esteem with the utmost respect given to it.

I trust the world would give protection to preserve this incredible process and this precious, ancient craft tradition.

*“What do we perceive of his life,
his secret joys, his anguish?
For there are so many alternative solutions –
but there are also many richnesses,
the web, faith and penetration of his eyes and hands,
and the joys that are fast disappearing.”*

- Anonymous

* Source/owner of all the images (except the King Priest) is Noorjehan Bilgrami.

SELECTED BIBLIOGRAPHY

E.H. Aitken, *Gazetter of the Province of Sind* (1907)

Laleh Bakhtiar, *Sufi – Expression of the Mystic Quest* (1976)

George Birdwood, *Industrial Arts of India* (c. M., C.S.I., M.E. EDIN. 1880)

Ethel-Jane W. Bunting, *Sindhi Tombs and Textiles. The Persistence of Pattern*. (The Maxwell Museum of Anthropology and the University of New Mexico Press Albuquerque. 1980)

Richard F. Burton, *Sindh and the Races that Inhabit the Valley of the Indus*. (1973)

Cousin Francoise, “*Lumiere et ombre, bleu et rouge: Le Azrak du Sind*”.
(Objects et Mondes Volumes 16, Fasc 2-ETF 1976. Musee de l’Homme, Paris.)

Adrian Duarte, *The Crafts and Textiles of Sindh and Baluchistan*. (Institute of Sindhology. 1982)

John Irwin and Margaret Hall, *Indian, Painted and Printed Fabrics Vol. 1*.
(Ahmedabad, Calico Museum. 1971)

Pupul Jayakar and John Irwin, *Textiles and Ornaments of India*. (The Museum of Modern Art. New York. 1956)

Hamida Khuhro (Ed.), *Sind Through the Centuries*. (Oxford University Press. 1981)

Sir John Marshall, *Moenjodaro and the Indus Valley*. (London: Arthur Probsthain. 1931)

Issam El Said and Ayse Parman, *Geometric Concepts in Islamic Art*. (1976)

H.T. Sorley, *Shah Adul Latif of Bhit*. A study of literary, social and economic conditions in 18th century Sind. (Ashish Publishing House. New Delhi. 1984)

Padmini Tolat, *Natural Indigo and its use*. (Diploma Project N.I.D. Ahmedabad. 1980)

Lotika Varadrajan, *Ajrak and related Techniques*. (The New Order Book Co, Ahmedabad. 1983)

Feliccia Yacopina, *Theadlines Pakistan*. (Published by the Ministry of Industries. Government of Pakistan. 1987)

AFRICAN AMERICAN WOMEN: PLANTATION TEXTILE PRODUCTION FROM 1750 TO 1830

By
Karen Hampton

Introduction

Two hundred years ago the American landscape included African American women and children toiling in the indigo and cotton fields. Indigo stains covered their arms, and the fermenting stench followed them around the landscape. During this time weaving mills began to appear on plantations and these same women were trained in the craft of weaving. Today that history is all but lost.

Certainly, these African American women weavers succeeded in dressing their mistresses; however, their most important impact on the American economic scene was to complete their masters' plan to create a self-sustaining slave based economy. Not only was slave labor valued for profit and prestige, it provided the planters with a chance to create a self-sustaining farm. The plan was that the costs and expenses of slavery would be absorbed by the labor of the slaves themselves. It was this philosophy that led to the creation of a slave-based textile industry and the creation of the female Negro textile artisan.

In the low country of North and South Carolina and the Chesapeake Bay region of Virginia, African American women played a very important role in the development of textile production prior to the industrial revolution. Beginning with the development of indigo production in the mid-1700s and expanding to cotton, African American women began working in what was to become the early textile economy. They worked the cotton and indigo fields, then toiled over the stench of the indigo vats. Thereafter, these women became the spinners, weavers and dyers of the plantation south, and the actual originators of a robust textile economy.

The period from 1750 to 1830 was historically the time of the *Planter class*. All of the plantations that are the subject of this paper belonged to the budding upperclass of planters. In South Carolina many of these plantations played major roles in the Revolutionary War. Their owners were men of privilege who held substantial plantation lands dating from earlier land grants. These were gentlemen of some social stature, with holdings of between 150 and 500 African American slaves.

This paper distinguishes between two different groups of slaves; those involved in field production and those involved in the production and care of cloth. The women who are the subject of this paper -- both free and slave -- provided the backbone of heavy labor needed for the development of indigo, cotton production and plantation weaving. This paper will examine evidence substantiating how numerous colonial plantations that were connected through the Revolution and the creation of a slave based textile plantation economy.

Indigo

As noted in *Slave Counterpoint*, Morgan notes that Alexander Gordon in a letter dated July 5, 1749 proclaimed Carolina "one of the best Indigo Countrys in the World.", then notes that a few years later, a Doctor Alexander Garden observed that planters were "so Intoxicate[d] with Indigo that . . . not nothing else but Indigo, Indigo hold be heard of."¹

Prior to the Revolutionary War, indigo was the second largest field crop in the colonies, second only to rice. Production was subsidized by the British and large quantities of dye were exported. Britain was in great need of indigo for its own swelling textile industry. Wild indigo grew throughout South Carolina and there is documented research that the Huguenots began experimentation and production in the early 1700's.²

Prior to the mid-1700's, indigo had been grown on plantations throughout the Caribbean where much of its production was controlled by the French. Britain was forced to pay high tariffs, and thus felt the need for land to expand the crop.³ "Indica" as it was then known, was brought as seed from the Caribbean where it had been grown by both the French and British. Expansion began in the mid 1700's as Britain's need for blue dye increased.

The greatest expansion of indigo production was from 1745 to 1775. Folklore credits this expansion to Eliza Lucas Pinckney, the daughter of Governor Lucas of Montserrat, who sent her to South Carolina to oversee his plantations.⁴ Whether Eliza Lucas Pinckney was or was not the "Mother of American indigo", she did play an important role in its establishment as a major crop. Eliza with her family connections and the labor of her slaves contributed to the success with which indigo production expanded. In those 30 years indigo exports increased tenfold, from 100,000 pounds to 1,150,662 pounds.⁵

Following Eliza Pinckney's successful experiments with indigo, Thomas Boone was appointed the "Surveyor and Inspector General of Indigo" in 1762. The production and sale of indigo was controlled by some 25 planters and merchants. Most of the production was located in the Sea Islands off the coast of South Carolina with production extending along the South Carolina coast. While indigo was a very important crop historically, it was considered as a secondary crop, and it was planted during the fallow season of rice, and cotton.

The processing of indigo was considered good work for female slaves. It required only a few skilled laborers. The work was similar to the domestic work done on the plantations.

The growing season for indigo began in April with a first harvest in July and a second in September. Slaves worked in the fields tending the crop and keeping them weed free. They were expected to cultivate between 1-1/2 and 2 acres a day. Each acre was expected to produce approximately 50 pounds of indigo.⁶ After the crop was harvested the plants were quickly transported through a series of different vats. First the steeper vat then the fermentation vat and finally the lime vat. The fermentation of indigo needed to be completed swiftly. It was difficult work because of the intense labor and the harsh working conditions. For the slaves, processing indigo involved beating the plants and pouring on and off large amounts of water. All this while working under the harsh conditions created from the putrid smell of fermenting indigo and the

myriad of insects attracted to the vats.⁷ The stench was so great on the plantation that owners frequently located the processing area at least one quarter mile from their residence. This processing took from 12-15 hours and as soon as a batch was completed in the steeper, the next was delivered.

Morgan (161) quotes a Planter describing the labor associated with indigo production. "it generally takes two Negroes near an hour and is considered hard labour" -- and the "violent, constant stirring and beating" of the fermented liquid lasted from about July to October. Nevertheless, processing ended at about the same time as harvesting, for, after the indigo paste was allowed to dry before being packed for export.⁸

In a Federal Writers Project interview Annie Ruth Davis conducted with Eugenia Woodberry, an ex-slave describes indigo on the plantation along the S.C coast.

Den dey make de blue cloth outer dat t'ing dat dey raise right dere on de plantation call indigo. Dere some uv dat indigo dat does grow up dere on de Sand Hills dis day en time but ain' nobody ne'er worry 'bout it no more.⁹

The effects of indigo extended far into the culture of the South Carolina Gullah slaves. In West Africa it was traditional that, following the completion of an indigo vat, villagers used the sludge to color their doors and windows. During WPA interviews of former slaves spoke of how that most slave cabins were painted blue and that it was believed to keep the evil spirits away, by reminding them of heaven.¹⁰

Cotton

Following the Revolutionary War, indigo subsidies collapsed, forcing the fall of indigo. However, it was not until the 1790's that indigo production finally died out due to the rise in cotton production. Cotton was becoming *King*. The cotton gin was created and a cheaper short stable cotton allowed production to flourish. This new type of cotton, combined with new technology, no longer required the great labor formerly associated with its production and use.

By 1800, the cotton harvests of South Carolina's plantations grew to 6,000,000 pounds.¹¹ Following the invention of the cotton gin, cotton became more widely grown and plantation weaving developed as a cottage industry. Prior to the expansion of the 1790's, Sea Island cotton (a long stable cotton) had been grown as a small cottage crop frequently found in slave gardens. This allowed slave women freedom to spin and weave small amounts of cloth for their families or for bartering.¹²

Cotton, unlike rice or indigo, required few skills and turned a great profit. The cotton gin led to greater efficiency allowing for short stable cotton to be separated and cleaned in a very short time. This increased the quantity of cotton on the plantations, thus putting more of a strain on the slaves in the field. There was great fear on the part of planters that slaves would become economically independent. Accordingly, in 1796 South Carolina enacted laws preventing shop owners from trading with slaves.¹³

The cotton gin was invented in 1793, and allowed cotton production to expand, which, in turn, enabled more planters to move into the Planter class. One example of this was Thomas Boone, the Surveyor and Inspector General of Indigo who owned Boone Hall, one of the largest cotton plantations just outside of Charles Towne, South Carolina. In 1817 Boone Hall had 97 slaves. Approximately one third of the field workers at Boone Hall were African American women.

During an interview conducted by Ann Ruth Davis an ex-slave describes how cotton was put in the gin and separated and pressed into bales.

Minus on Chrismus Gause hab job dere to de gin house. Dey'ud jes put de cotton in dat gin en de seed go one way ne de lent go de udder way. Minus hadder feed de gin en dem udder helper hadder hand de cotton. Den Bacchus hadder work de sorew dat press de bale togedder. Yunnah chillun ain' ne'er see nuthin lak dat dese days. Dem hosses pull dat t'ing round en round en dat screw ge' tighter en tighter. Turn out pretty uh bale uv cotton us yunnah o'er hear 'bout in no time tall. My laws, I 'member dey is hab bale uv cotton pile up aw 'bout dat gin house.¹⁴

Somerset Place plantation, located on 1600 acres in the northeastern region of North Carolina was established five years after the Declaration of Independence. Somerset Place was another example of a self-sustaining plantation. Nearly everything used by the Collin family and its slaves was produced on the plantation, including cotton and flax. From 1838 to 1839, 80,000 bales of cotton were picked from 20 acres. Cotton fields covered 201 acres and 53 slaves worked the fields. The plantation housed both a gin, a loom house and had twelve slave quarters devoted to artisans and house slaves.¹⁵

Clothing

On average slaves were given one set of clothing for the winter and a lighter set for the summer. The cloth was coarse, usually of wool or linen. After 1790, cotton clothing replaced linen. The general allotment of fabric for a slave's clothing was 5 yards a year. Fabric was either left natural or dyed in indigo. Indigo was usually applied in stripe, although occasionally a whole cloth might be dyed.¹⁶ Prior to plantation weaving most of the cloth was imported from Britain or Germany. Frequently, they received the ends of lots so slaves wore an unusual mix of different cloth. By the turn of the century, cotton cloth was being produced locally and the quality standardized.

Free Negro clothing was prescribed in 1735 with the adoption of the Negro Act, which ensured that free Negro clothing was kept to a standard just above that of slaves.¹⁷ The clothing of both free Negroes and slaves was generally of coarse and inexpensive material. Flax and cotton were acceptable. Clothing was to be natural or blue with stripes, check, gingham or calico.

Production Spinning and Weaving

From the mid-1700's weaving mills, spinning rooms and loom houses began to appear throughout South and North Carolina and Virginia. Hirsch (Huguenots of Colonial South

Carolina) quotes Seabrook, *Memoirs on Cotton*, Published in the S. C. American General Gazette, Jan. 30, 1777 .

“We are well informed that a planter to the Southward who 3 months ago had not a Negro that could either spin or weave has now 30 hands constantly employed from whom he gets 120 yards of good wearable stuff made of woollen and cotton every week. He had only one white woman to instruct the Negroes in spinning and one white man to instruct in weaving. Soon he will clothe all of his own Negroes and supply neighbors. This is a most effectual way of lessening the present exorbitant prices of cloth.”

As early as 1745, Governor Lucas wrote to his daughter Eliza Pinckney of the value slave women could be if they were trained to spin and weave, and this was found to be true throughout the region. More and more planters were looking to make their plantations self-sufficient. Textiles were the key, made possible by the invention of the cotton gin 1790, the hand carding machine, and the fly shuttle loom. Planters began to train a number of 2nd and 3rd generation female slaves in textile production.¹⁸ As Governor Lucas stated in 1745:

I send by this Sloop two Irish servants, viz.: A Weaver and a Spinner. I am informed Mr. Cattle hath produced both Flax and Hemp. I pray you will purchase some, and order a loom and spinning-wheel to be made for them, and set them to work. I shall order Flax sent from Philadelphia with seed, that they may not be idle. I pray you will also purchase Wool and sett them to making Negroes clothing which may sufficient for my own People. As I am afraid one spinner can't keep a loom at work, I pray you will order a sensible Negroe woman or two to learn to spin, and wheels to be made for them; the man Servant will direct the Carpenter in making the loom and the woman will redirect the Wheel.

The following year Eliza Pinckney responded to her father that the woman had spun all the material they could get, so were idle; that the loom had been made, but had no tackling; that she would make the harness for it, if two pounds of shoemaker's thread were sent her. "The sensible Negro woman and hundreds of others learned well to spin, and excellent cloth has been always woven in the low country of Carolina, as well as in the upper districts, till our own time."¹⁹

In 1775 one South Carolina planter, Ralph Izad, promised to pay Martha Chubb 100 pounds a year for 4 years to have 8 slave girls trained to spin and weave and another 50 pounds to knit. In 1752 Landon Carter introduced spinning and weaving to his slave at his Virginia plantation Sabine Hall. Carter constructed a *weaving manufactory* where he kept 2 looms, 1 cotton gin, 4 flax wheels, 5 great wheels, 5 pairs of wool cards and 1 hackle for processing linen.²⁰

By 1814 President Thomas Jefferson was producing 1200 yards of cloth at his Monticello Plantation and was clothing 130 slaves. At Monticello, Jefferson's created an institution where the girls of Mulberry Row learned to spin. Mulberry Row housed both the craftspeople and the house slaves of the plantation. At 10 years old female slaves were introduced to the loom room and spinning, where they worked until they reached 16 years old.²¹ At that time, their work was

evaluated by the head spinner and weavers they were either to continue spinning, move on to weaving or go to the fields. The cloth factory was located at the end of Mulberry Row closest to the main house.

Frequently the women chosen for this work were related to the master of the plantation and were very light in complexion, sometimes looking white. At Monticello, the slave relatives of Thomas Jefferson made up much of the artisan class. The head weaver, Mary was Martha Jefferson half-niece and Harriet, Thomas Jefferson's young slave daughter, were, respectively, a weaver and spinner.²²

Tempe Herndon Durham, in her post Civil War narrative below, not only describes the loom room but also addresses what individual talents were and how the slaves created community amongst themselves as they wove.

Dey was a big weaving' room whare de blankets was wove, and' dey wove de cloth for de winter clothes to. Linda Hernton an' Milla Edwards was de head weavers, dey looked after de weaving, of da fancy blankets. Mis' Betsy was a good weaver too. She weave de same as de niggers. She say she love de clackin' soun' of de loom an' de way de shuttles run in an' out carrying' a tael of bright colored thread. Some days she set at de loom all de mawning' peddlin' wid her fets an' her white ha's flittin' over de bobbins. De carding' and' spinnin' room was full of niggers. I can hear dem spinnin' wheels now turnin' roun' an' sayin' hum-m-m-, hum-m-m-m, an' hear de slaves singin' while dey spin. Mammy Rachel stayed in de dyein' room²³.

As shown by the inclusion of quotations from the narratives and journals of former slaves and slave owners, and use of historical evidence I have demonstrated how the African American female slaves were clearly tied to early American textile production. The recollections of these participants, from both sides of the slave-based textile economy, provides evidence of the expectations that were demanded of the female slave textile artisans, what they produced and what their harsh working environment looked like.

Conclusion

In my quest to explore my heritage and understand slavery I discovered a thread connecting me to the colonial past. As an African American weaver I have questioned why African Americans were so underrepresented in the contemporary weaving community. Believing as I do that all things having a traceable history I was driven to understand the lack there of. Through research I have come to understand how this history was forgotten and the importance of inclusion. History is constructed of many stories, and through the sharing of story will we move forward to create a new reality, and though the validation of voice can we feel our own value and have the strength to learn our own life lessons. I believe that only by examining history and looking at its demons are we able to heal and create new realities.

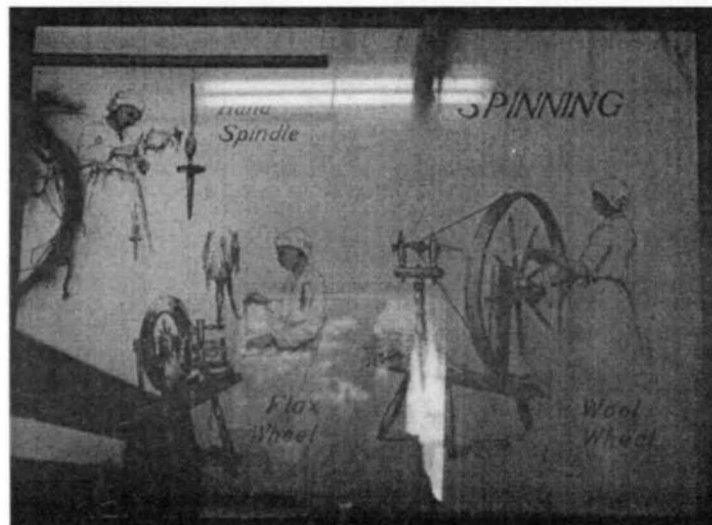
- ¹ Philip Morgan, *Slave Counterpoint: Black Culture in the 18th c. Chesapeake and Low Country*, University of North Carolina, 159.
- ² Arthur Henry Hirsch, Ph.D., *Huguenots of Colonial South Carolina*, (London Archon Books, 1962), 214
- ³ George C. Rogers, Jr., *The History of Georgetown County, South Carolina*, (University of South Carolina Press 1970), 215.
- ⁴ Eliza Pinckney edited by Elise Pinckney and Marvin Zahniser, *The Letterbook of Eliza Lucas Pinckney 1739-1762*, (University of South Carolina Press 1972) xvi.
- ⁵ Hirsch, 217.
- ⁶ Morgan, 89.
- ⁷ Ibid, 163.
- ⁸ Ibid. 161
- ⁹ Retrieved February 15, 2000 from the World Wide Web: <http://search.ancestry.com/cgi-bin/sse.dll>
- ¹⁰ Margaret Washington Creel, *A Peculiar People –Slave Religion and Community-Culture Among the Gullahs*, (New York University Press 1988) 321.
- ¹¹ Ira Berlin, *Many Thousands Gone The First Two Centuries Of Slavery In North America*, (Harvard Press 1998), 307.
- ¹² Ibid 302.
- ¹³ Betty Wood, *Women's Work, Men's Work*, (University of Georgia Press 1995) 77.
- ¹⁴ Retrieved April 7, 2000 from the World Wide Web: <http://search.ancestry.com/cgi-bin/sse.dll>
- ¹⁵ *The Independent*, Elizabeth City, NC Sept. 28, 1916.
- ¹⁶ Collins memo book, Josiah Collins Papers, NCSA.
- ¹⁷ *Everyday Life in Colonial South Carolina*, 189.
- ¹⁸ Ibid., 189.
- ¹⁹ John Michael Vlach, *Back of the Big House*, (Chapel Hill 1977).
- ²⁰ Monticello, Mulberry Row Interpreter July 18, 1999.
- ²¹ Thomas Jefferson Farm Book, 152.
- ²² George P. Renwick, *The American Slave Vol. II*, (Greenwood Publishing 1972), North Carolina Narratives, 284.

Selected Bibliography

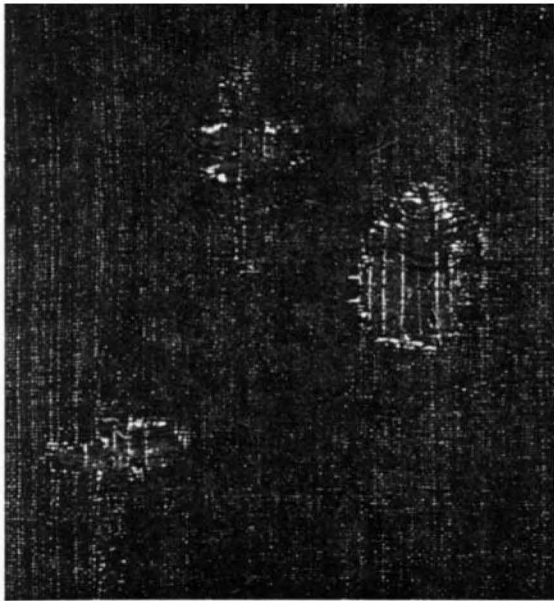
- Morgan, Philip D. *Slave Counterpoint: Black Culture in the 18th c Chesapeake and Low Country* University of North Carolina 1998
- Fox-Genovese, Elizabeth *Within the Plantation Household* University of North Carolina Press 1988
- Twining, Mary A. Baird, Keith *Sea Island Roots* Africa World Press 1991
- Berlin, Ira *MANY THOUSANDS GONE The First Two Centuries of Slavery in North America* Harvard University Press 1998
- Earle, Alice M. *Home Life in Colonial Days* Macmillan 1899
- Wood, Betty *Women's Work, Men's Work: The Informal Slave Economies of Lowcountry Georgia* University of Georgia Press 1995
- Foner, Philip S. Lewis, Ronald L. *The Black Worker to 1869* Temple University Press 1978
- Hayden, Dolores *The Power of Place Urban Landscapes as Public History* MIT Press 1995
- Curtis, Nancy *Black Heritage Sites* The New Press 1996
- Pinckney, Eliza *Women of Colonial and Revolutionary Times* University Press, Cambridge 1896
- Ball, Edward *Slaves In The Family* Farrar Straus and Girous 1998
- Vlach, John Michael *Back of the Big House* Chapel Hill 1977
- Singleton, Theresa A. *The Archaeology of Slavery and Plantation Life* South Carolina State Museum Columbia, South Carolina 1978
- The Diary of Landon Carter* University of Virginia 1965
- Rawick *The American Slave Vol. II & III* Greenwood Publishing 1972
- Rawick *The American Slave: A Composite Autobiography Vol. I & II* Greenwood Publishing 1977
- Walsh, Lorena Seebach *From Calabar to Carter's Grove: The History of a Virginia Slave Community* University Press of Virginia 1986
- Lewis, Kenneth E. *Hampton II* Columbia, South Carolina: The Institute 1980
- Newton, James E. & Lewis, Ronald *The Other Slaves Mechanics, Artisans and Craftsmen* Library of Congress 197
- Escot, Paul *Slavery Remembered* Chapel Hill 1978
- Blassingame, James W. *The Slave Community* Oxford University Press 1972
- Campbell, Edward D. C. & Rice, Kym S. *Before Freedom Came African American Life in the Antebellum South* The Museum of the Confederacy and University Press in Virginia 1991
- Rosengarten, Theodore *TOMBEE, Portrait of a Cotton Plantation* William Morrow and Co. 1986
- Baron, Robert C. *The Garden and Farm Books of Thomas Jefferson* Fulcrom 1986
- Winbery, John J. *Reputation Of Carolina Indigo* July 1979 South Carolina Historical Magazine Vol. 80 Number 3
- Interview conducted in Georgetown, SC 1937 with Eugenia Woodberry. Retrieved February 15, 2000 from the World Wide Web: <http://search.ancestry.com/cgi-bin/sse.dll>
- Retrieved April 7, 2000 from the World Wide Web: <http://search.ancestry.com/cgi-bin/sse.dll>



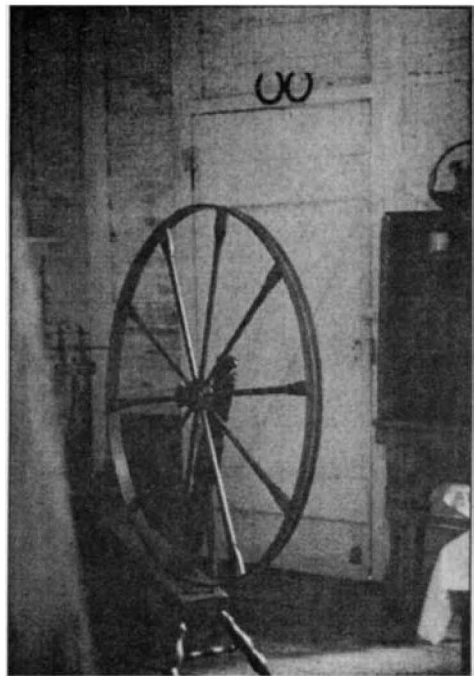
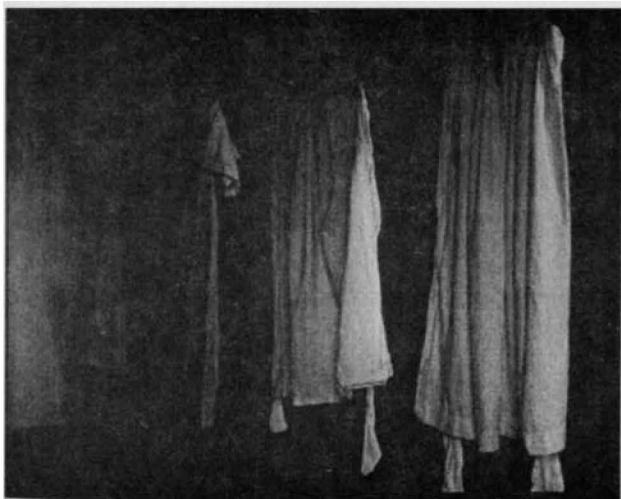
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The “Invasion” of Zapotec Textiles: Indian Art “Made in Mexico” and the Indian Arts and Crafts Act

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In May 2000, in Capitol Hill hearing testimony Andy Abeita described the “threat”, largely coming from South of the border as an “onslaught” creating “significant losses” because of “unfair competition.” He further described the situation as a “takeover” causing “economic harm” against which those in the U.S. should be “protect[ed].” Abeita’s choice of vocabulary was not out of the ordinary.¹ As a number of authors have pointed out, Mexican workers are often described as an invasionary force.² Illegal and legal Mexican migration and work in the U.S. or in the *maquiladora* manufacturing plants that have sprung up along the border from Tijuana in the West to Nueva Leon in the East, are frequently framed in just this manner in public discourse. What made Abeita’s Senate testimony unusual was his target-- not migrant farm workers in California or Ciudad Juarez automobile plant workers, but crafters some of whom, at least for the case of “Mexican” textiles sold in galleries and gift shops throughout the U.S., are Native American artists. In the case of the “Navajo-like” woolen textiles sold throughout the American Southwest, many of these indigenous Americans live in the Southern Mexican state of Oaxaca.³

The Capitol Hill hearings in which Abeita and others testified were part of a long-standing effort to deal with the problem of “fake Indian” art and craft items. Formed in 1935, the Indian Arts and Crafts Board was established to both promote and regulate commerce in these items.⁴ The act of congress that founded the Board also established a number of guidelines for the sale of “Indian” crafted items, including the creation of the “Board’s trademark” for identifying indigenous crafts and the promulgation of penalties for both foreign and domestically made “counterfeit” items. Unfortunately, the act was seldom enforced: the trademark was never developed, much less enforced, and in 1990, the Indian Arts and Crafts Act was passed by Congress in another attempt to curb what it called an increase in “fraudulent sales” that were

¹ United States Cong.: Senate, Committee on Indian Affairs Oversight Hearing on the Implementation of the American Indian Arts and Crafts Protection Act Public Law 101-644. “Testimony.” (Washington: GPO, 2000), 1-3.

² Hugh Mehan, “The Discourse of the Illegal Immigration Debate: A Case Study in the Politics of Representation.” *Discourse and Society*. 8(1997):2:249-270; Phyllis Pease Chock, “Ambiguity in Policy Discourse: Congressional Talk about Immigration.” *Policy Sciences*. 28(1995):165-184; Otto Santa Ana, “‘Like an Animal I was Treated’: Anti-immigrant Metaphor in U.S. Public Discourse.” *Discourse and Society*. 10(1999):2:191-224.; and Pablo Vila, “Narrative Identities: The Employment of the Mexican on the U.S.-Mexican Border.” *Sociological Quarterly*. 38(1997):147-183.

³ U.S. Cong.: Senate, 1.

⁴ United States Cong.: House, Indian Arts and Crafts Act of 1990. 101st Congress, 2nd Session. Rept. 101-400, Part 2. (Washington: GPO, 1990), 4.

“siphoning an estimated \$40 to \$80 million from the genuine manufacturers markets” on a yearly basis.⁵

The spring 2000 Congressional hearings, marking ten years after the passage of the 1990 act, are testimony to this continuing “problem” and to an inability to deal with it effectively. I argue here that this inability is essentially a consequence of a lack of understanding of the problem itself. This essay explores the origin and form of one type of “fake Indian art,” Zapotec textiles, to demonstrate why, after nearly seventy years of hearings and legislation, the United States Congress and the Indian Arts and Crafts Board still seem unable to curb the “onslaught” described by Abeita. I argue that, at least for the case of Zapotec textiles, the persistent problems with the Arts and Crafts Board legislation rest squarely on the shoulders of researchers and writers who inform understanding of Native American art as well as ethnic arts and crafts more generally.

In so doing, I borrow from Arjun Appadurai’s conception of the translocality.⁶ A recent flurry of research and writing by social scientists (especially anthropologists) on the issue of “locality” reveals that the localities in which people live, and which are often taken to be the setting for their lives, are actually created by the people whose lives social scientists study. As such, localities should not be taken as the backdrop or setting for social science research, but as an object of study in and of themselves.⁷ Benedict Anderson’s well-known work on nationalism and the creation of nation (localities of great geo-political importance in the early 21st century) as an “imagined community” is just one example-- an example with direct relevance to this essay, as legislative efforts to define “Indian” in the United States Congress reveal.⁸

Translocalities are simultaneously several places: here and there, north and south, periphery and metropole. They are created in the circulation of and ties among people, objects, and ideas. Places like Santa Fe and Taos, New Mexico, the villages in southern Mexico where Zapotec textiles are, at least in part, made, as well as villages in India and the Philippines mentioned in congressional testimony as places where fake Indian art is produced, are all translocalities, connected by a network of people involved in the creation of the Santa Fe area of the American Southwest as a tourist destination as well as interior design and ethnic art mecca-- the “Land of Enchantment,” as proclaimed on New Mexican automobile license plates. In this brief essay, I sketch out an argument that treats the places where Zapotec textiles are made and sold as translocalities-- places, quite literally (and regardless of geographic location), in the “land of enchantment.” Finally, I explore the implications this reconceptualization of the “invasion” of Zapotec textiles has for attempts to legislate participation in the American Southwest’s Indian art market.

⁵ Ibid., 5-6.

⁶ Arjun Appadurai, *Modernity at Large: The Cultural Dimensions of Globalization*. Minneapolis: (University of Minnesota Press, 1996).

⁷ Akhil Gupta and James Ferguson eds., *Anthropological Locations: Boundaries and Grounds of a Field Science*. (Berkeley: University of California Press, 1997); Akhil Gupta and James Ferguson eds., *Culture, Power, Place: Explorations in Critical Anthropology*. (Durham: Duke University Press, 1997); Karen Fog Olwig and Kirsten Hastrup eds., *Siting Culture: The Shifting Anthropological Object*. (New York: Routledge, 1997); see also Appadurai, 178-199.

⁸ Benedict Anderson ed., *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. (London: Verso, 1991).

Zapotec Textiles: Made in Mexico?

Traveling through Southern Mexico in the 1950s, the journalist and travel writer Helen Augur described a small Zapotec Indian village situated among the foothills of the Sierra Madre mountains and noted that its “craft is a transition from Indian to European methods and has scarcely changed since the Conquest, for no part of the craft is mechanical.”⁹ The village was the well-known weaving center of Teotitlán del Valle in the state of Oaxaca. Some twenty years earlier, Elsie Clews Parsons, student of Franz Boas and highly regarded anthropologist in her own right, undertook ethnographic research in the nearby town of Mitla and wrote that Teotitlán was the “outstanding serape-weaving *pueblo* of the valley.”¹⁰ Anthropologist Robert Taylor conducted research in Teotitlán in the late 1950s, and Emily Vargas-Baron provided the first comprehensive account of Zapotec textile production, documenting that the craft of weaving had indeed changed since the Conquest and coining the phrase “weaving production complex” (WPC) to describe the inter-connected nature of woolen textile production in several towns nearby Teotitlán-- all situated in the Tlacolula arm of the Oaxaca Valley.¹¹

Vargas-Baron described how, for certain historical reasons, Teotitlán had come to dominate a system of subcontracting where local merchants (those selling textiles made by others) had managed to garner control of the regional, national, and international markets for the textiles. Her research revealed that, at least since the 1890s, a small group of merchants, almost exclusively from Teotitlán, had developed a system in which they acted as both buyers-up and as the organizers and overseers of piecework and subcontracted forms of textile production. Teotitecan merchants created both large workshops and at-home piecework relations in Teotitlán and the communities of Santa Ana del Valle and Díaz Ordaz. Since the completion of Vargas-Baron’s study, a number of authors have built upon her ideas and described how merchants in Teotitlán have built an ever-widening circle of contact with and control over newly developing markets and weavers-- including weavers in the nearby community of San Miguel del Valle.¹² More particularly, they describe how this expanding control and circle of influence works within the WPC and highlight how the Zapotec use kin, fictive-kin (primarily god-parentage), and ritual obligations as means of controlling the productive activities associated with textile production.

⁹ Helen Augur, *Zapotec*. (Garden City: Doubleday, 1954), 62.

¹⁰ Elsie Clews Parsons. *Mitla: Town of Souls and Other Zapoteco-Speaking Pueblos of Oaxaca, Mexico*. (Chicago: University of Chicago Press, 1936), 45.

¹¹ Robert Taylor, “Teotitlán del Valle: A Typical Mesoamerican Community.” Ph.D. dissertation. (University of Oregon, 1960) and Emily Vargas-Baron, “Development and Change in Rural Artisanry: Weaving Industries of the Oaxacan Valley, Mexico.” Ph.D. dissertation. (Stanford University, 1968).

¹² Jeffrey Cohen, *Cooperation and Community: Economy and Society in Oaxaca*. (Austin: University of Texas Press, 2000); Scott Cook and Leigh Binford, *Obliging Need: Rural Petty Industry in Mexican Capitalism*. (Austin: University of Texas Press, 1990); Lynn Stephen, “Zapotec Weavers of Oaxaca: Development and Control.” *Cultural Survival Quarterly*. 11(1987):1:46-48; *Zapotec Women*. (Austin: University of Texas Press, 1992); and “Weaving in the Fast Lane: Class, Ethnicity, and Gender in Zapotec Craft Commercialization.” In *Crafts in the World Market: The Impact of Global Exchange on Middle American Artisans*, ed. J. Nash. (Albany: State University of New York Press, 1993).

With few exceptions, from the 1940s well into the 1970s the marketing and consumption of Zapotec textiles was intimately tied to tourism in Mexico. Zapotec textiles were sold in Teotitlán, at tourism sites in Oaxaca, in Mexico City, and throughout Mexico wherever people vacationed. By-and-large, merchants from Teotitlán bought up textiles from independent producers, pieceworkers, or sometimes produced large quantities of them in family workshops, which they then transported by muleteer, truck, or train to retailers throughout Mexico or sold to other businesses (including those based in the U.S.) for resale.¹³ In the late 1960s a handful of U.S. based wholesale and retail business owners began to travel to Oaxaca to purchase weavings in bulk from those merchants. This general pattern changed in the 1980s, however, when large quantities of textiles began to be exported to the U.S. to supply a newly developing market.¹⁴ Santa Fe and Taos, New Mexico's importance as vacation destinations had reemerged and the emblems of the "Southwestern" or "Santa Fe" style (and of the "land of enchantment") gained widespread popularity including: adobe or "mission" architecture, Tex-Mex cuisine, and, most importantly for the purposes of this essay, Native American and Hispanic arts and crafts. As it turns out, however, many of the textiles marketed and sold as emblematic of the "land of enchantment" were in fact made in Oaxaca by Zapotec Indians.

Throughout the 1980s, as the newly emerged Southwestern market for Zapotec textiles gained momentum and more wholesalers and retailers from that region began to visit Teotitlán and to buy large quantities of textiles on a regular basis, they also changed how they did business with Teotitlécans. While as few as a half-a-dozen individuals made trips to Teotitlán to purchase textiles in the 1970s, their numbers increased significantly in the early- and mid-1980s. More importantly, business owners from the U.S. who had worked in Teotitlán in the 70s describe a dramatic shift in their relation to Zapotec textile businesses and in how textile production was organized.¹⁵ Two important features of this shift help to distinguish it from the earlier pattern, as described in the ethnographic literature. First, after the shift, wholesalers and retailers from the U.S. were no longer solely buying textiles from Teotitlécans and then transporting them to markets. After the shift, they began to work directly with merchants and weavers in their workshops taking increasing control over the production process, instead of simply making purchases from the existing stock of textiles. This work was initially limited to creating new designs and overseeing the dyeing of wool into colors they knew would sell well in the U.S. market. Eventually, however, nearly every aspect of textile production, from design creation, to wool and yarn preparation and dyeing, would come under their control-- everything except the actual work at the loom.

The second important feature of this shift was that Zapotec textiles were no longer being sold as Zapotec textiles, but rather as inexpensive, vaguely "ethnic" or "Indian" textiles.¹⁶ Since the late 1980s a large number of Navajo-like textiles have been produced, at least in part, in the Tlacolula Valley WPC. The 1980s shift in the ways that wholesalers and retailers with

¹³ Cook and Binford; Stephen *Zapotec Women*, "Weaving in Fast Lane"; and Vargas-Baron.

¹⁴ W. Warner Wood, "To Learn Weaving Below the Rock: Making Zapotec Textiles and Artisans in Teotitlán del Valle, Mexico." Ph.D. dissertation. (University of Illinois, Urbana-Champaign, 1997) and "Flexible Production, Households, and Fieldwork: Multisited Zapotec Weavers in the Era of Late Capitalism." *Ethnology*. 39(2000):2:133-48.

¹⁵ Ibid.

¹⁶ Ibid.

businesses based in the U.S. interacted with businesses in the Tlacolula Valley WPC mark initial changes in the organization of Zapotec textile production that by the early 1990s had radically altered the nature of the businesses based in both Oaxaca and the Southwestern U.S. By the early 1990s Teotitlán had begun to take on many of the characteristics of an off-shore production zone, something described as “flexible production” in the economic literature.¹⁷

The ethnographic investigation of how the Tlacolula Valley WPC became an outsourcing center where “Southwestern” style textiles were produced more cheaply than they could be in the Santa Fe area requires a research design that focuses on the multiple spaces or sites where these textiles are produced. Most significantly, these changes cannot be understood apart from the work that wholesalers and retailers with businesses based in the U.S. also do coordinating the production of Zapotec textiles in multiple places in Southern Mexico and the Southwestern U.S. In a very real sense, the Zapotec textiles that find their way to the gift shops and galleries of Santa Fe and Taos are better understood as, simultaneously, a product of Mexico and New Mexico.

Zapotec Textiles: Made in the Land of Enchantment?

The relationship which exists among Tlacolula Valley WPC merchants, gallery and gift shop owners, and wholesale ethnic art distributors from Santa Fe, Taos, and the broader Southwestern U.S. area grew out of a 1980s tourism boom based not in Teotitlán del Valle, Mexico but in Santa Fe, New Mexico. In addition, the “Southwestern look” interior design craze that swept the U.S. in the mid-1980s created a wider market for interior design accouterments in that style. Consequently, enterprising business owners responded to demands for more affordable souvenirs and pieces to decorate “Santa Fe-style interiors” by importing craft items from Third World countries. Those with existing ties to businesses in the Tlacolula Valley WPC were quick to take advantage of the Santa Fe style’s new-found popularity. In the case of the “Southwestern” or “Santa Fe” market, however, Zapotec textiles were not simply packaged and shipped North to the U.S. as one might assume and as has been described by others.¹⁸ During the 1980s (as described above) the work of wholesalers and retailers with businesses based in the U.S. involved less the buying of finished textiles for shipment to the U.S. and more the subcontracting of small batches of textiles in an off-shore production zone.¹⁹

David Harvey describes how since the 1970s, mostly as a consequence of contradictions inherent to capitalism and technological advances, regimes of “flexible accumulation” (including the creation of off-shore production manufacturing plants of the *maquiladora* variety) have developed. Subcontracting, outsourcing, and the general dispersal of productive activities around small-batch production are the rule, as full time labor forces are shifted to the temporary and part-time employment of marginal and more easily exploitable populations. Most important to my argument here is Harvey’s contention that such flexible relations of production not only

¹⁷ Wood “Flexible Production.”

¹⁸ Cook and Binford; Stephen “Zapotec Weavers,” *Zapotec Women*, and “Weaving Fast Lane.”

¹⁹ Wood “Flexible Production.”

incorporate already existing systems for organizing manufacturing and controlling labor, but make them, “centrepieces rather than... appendages to the production system.”²⁰

As described in the extensive ethnographic literature related to Zapotec textile production, the domestic, familial, and paternalistic forms for organizing manufacturing and controlling labor Harvey identifies were already in place in the Tlacolula Valley WPC prior to its incorporation into the production of inexpensive ethnic and Indian art for the Santa Fe market. I have argued elsewhere that beginning in the 1980s many textiles woven in the Tlacolula Valley WPC are the product-- indeed, following Harvey, the “centerpiece”-- of a subcontracting network that churns out inexpensive “Indian art” for the Santa Fe market.²¹ The Tlacolula Valley WPC now incorporated families and businesses well beyond the Zapotec communities of the Tlacolula Valley of Oaxaca-- it had become a transnational weaving production complex incorporating businesses in both Mexico and New Mexico. At the same time, in the Santa Fe, New Mexico area reaction to the influx of these transnationally produced ethnic art items finds its origin in the ethnic and racial politics particular to that region of the American Southwest.

The Production of Locality in a Translocality

In the Santa Fe and Taos region of the American Southwest, the value ascribed by tourists to “Mexican” blankets vis à vis Navajo blankets parallels social relations in that region. In Taos, New Mexico and the surrounding region, researchers have shown how Mexican American culture is devalued by the Anglo population as dirty, cheap, shoddy, and common, while local indigenous culture is often privileged as it is understood to be both quaint and noble.²² According to Sylvia Rodríguez, this tripartite social division -- Anglo, Indian, Mexican American -- is based upon culturally defined notions of race and class. She traces the development of Taos, New Mexico as an art colony and positions the artists’ and tourists’ fascination with the Indian as it has developed historically over the last century.

Rodríguez writes that artists first began arriving in the region at the turn of the 20th century for several reasons, including “‘spectacular’ natural scenery” and “isolation and rusticity.”²³ Within this “fantastic” environment, a tripartite social division of labor developed early on in which Anglo artists painted, local Indians modeled for them, and Mexican Americans worked as domestics for the Anglo painters. Mexican Americans seldom worked as models for Anglo artists; even when they did, they were portrayed differently than indigenous models who were cast as romanticized noble savages while Mexican American models, on the other hand, were “cast as distinct individuals in their traditional workaday world.”²⁴

²⁰ David Harvey, *The Condition of Postmodernity: An Inquiry into the Origins of Cultural Change*. (Oxford: Blackwell, 1989), 147-57; see also Scott Lash and John Urry, *The End of Organized Capitalism*. (Madison: University of Wisconsin Press, 1987).

²¹ Wood “Flexible Production.”

²² John Bodine, *A Tri-Ethnic Trap: The Spanish American in Taos*. (Seattle: University of Washington Press, 1968) and Sylvia Rodríguez, “Art, Tourism, and Race Relations in Taos: Toward a Sociology of the Art Colony.” *Journal of Anthropological Research* 45(1989):1:77-100.

²³ Rodríguez, 80.

²⁴ *Ibid.*, 83.

John Bodine coined the term “tri-ethnic trap” to describe the position of the Mexican American population in the Santa Fe-Taos area’s tripartite social division.²⁵ Rodríguez, building upon his work, noted that in this trap, Mexican Americans are “conquered, dispossessed, dependent, ghettoized, and above all, witness to the Indian’s spiritual and moral elevation above themselves in Anglo eyes.”²⁶ This tripartite social division is a version of the well documented pattern where Mexican Americans and Mexicans, as well as their cultural products (material and otherwise), are devalued and made to stand as a symbol of poverty in the U.S.²⁷ Mexican immigration, of bodies and products, is framed in terms of a flood, onslaught, or invasion of the U.S., a “nation” which is, in turn, metaphorically understood in terms of family, house, and community.²⁸

Zapotec textiles are frequently framed discursively as Mexican textiles (and not “Indian”), a practice carrying a number of implications for their value in Santa Fe’s social hierarchy-- and which also frames them as a foreign product and, by logical extension, their appearance in the Santa Fe art market as a flood, onslaught, or invasion. Within the translocal “land of enchantment,” then, certain populations and their art are made to be permanent foreigners and thereby interlopers in one of the more lucrative parts of the region’s economy-- the Native American art market.

When one enters a gallery in Santa Fe or Taos, the same tripartite social division structures the presentation and value ascribed to the textiles on display. Local indigenous textiles are hung in upscale gallery windows and displayed in well-lit, prominent locations in the gallery space to attract customers, while textiles made by Zapotec Native Americans living in Mexico are folded and in piles in the back. Many of the more upscale galleries will not sell textiles made in Mexico; those businesses that do so, market them as a more affordable alternative to purchasing a Navajo textile. That is, they are not marketed as worthy of purchase in their own right as a Native American craft, but as a cheaper substitute for the “real thing”-- a Navajo textile.

In Santa Fe, visitors are advised against purchasing “cheap,” “machine made,” “Mexican souvenirs” masquerading as Native American crafts. Newspapers routinely feature articles, and guides printed expressly for “Indian Market” include pieces, warning against counterfeit Native American art.²⁹ In addition, articles and sections of books written about collecting Indian art are dedicated to helping spot these “fakes.” In his 1914 classic on the history, aesthetics, and manufacture of Indian blankets, George Wharton James devotes an entire chapter to the problem of “Imitation Navaho Blankets.”³⁰ Regarding Mexican weavings he writes, “it must be remembered that some blankets are sold as Indian blankets which are made by Mexicans, and it

²⁵ Bodine.

²⁶ Rodríguez, 87.

²⁷ Mehan; Pease Chock; Santa Ana, and Vila.

²⁸ Santa Ana.

²⁹ Indian Market in an organized event for the promotion of “Native American” art--see Colman Cornelius, “Two Days, 1,200 Artists, 100,100 Buyers: The 71st Indian Market Gears Up.” In *The Albuquerque Journal’s Guide to the 71 Santa Fe Indian Market*. (Santa Fe, 1992), 6-7.

³⁰ George Wharton James, *Indian Blankets and Their Makers*. (Chicago: A.C. McClurg, 1914. Reprint, New York: Dover, 1974).

requires knowledge to differentiate between an Indian blanket and a Mexican Blanket.”³¹ As the above quote demonstrates, for James Mexican cannot equal Indian-- the two are, for all intents and purposes, mutually exclusive categories.

In Mexico, however, hundreds of Native American languages are spoken by thousands of people still living in the same villages that their ancestors inhabited well before the arrival of Christopher Columbus, Hernan Cortez and other Europeans. How might anyone accept that a handicraft item from Mexico made by a Zapotec weaver (for example) might not, or more accurately could not, be made by a Native American and was therefore a “counterfeit?” A closer look at the Indian Arts and Craft Act of 1990 begins to reveal part of the answer.

Defining “Indian-made” for a Trans-locale Art

So many textiles were produced in the newly developed transnational WPC that Zapotec textiles became well recognized as one of the many art forms to which Abeita was referring during his Congressional testimony in May 2000. The 1990 Indian Arts and Crafts Act was designed, in part, with Zapotec textiles in mind. With the passage of this act, the U.S. Congress reaffirmed racialized definitions of who was Indian by making it illegal to market as Indian art any item made by someone who did not meet certain very specific criterion.³² The May 2000 hearings re-asserted (with minor revisions) the original 1935 legislation stating that:

the term ‘Indian’ means any individual who is a member of an Indian tribe; or... is certified as an Indian artisan by an Indian tribe... band, nation, Alaska Native village, or other organized group or community which is recognized as eligible for the special programs and services provided by the United States to Indians because of their states as Indians.³³

This definition is dependent upon the particulars of U.S. governmental policies that have been developed to deal with the indigenous populations of the U.S., and they do not easily apply to indigenous populations in other national contexts. Entities such as tribe, band, and nation, for example, are not legally recognized in many countries in the Western hemisphere where Native Americans reside and few Native Americans residing outside the U.S. are members of “tribes” recognized by the United States Department of the Interior.

In Santa Fe and Taos, the popular conception seems to be that Mexico is inhabited by “Mexicans,” its indigenous population having long ago “disappeared.” The textiles produced in Mexico are therefore made by Mexicans not Indians. At the same time, in the Southwestern U.S. weaving practices have been shaped by influences that cross geopolitical borders; between European and indigenous cultures (Navajo, Hopi, and Rio Grande Hispanic weaving traditions were all influenced or introduced by Spanish colonial settlers-- as were Zapotec weaving traditions), as well as between different indigenous cultures for several centuries. Any assertion, then, that any textile produced in Mexico or the Southwestern U.S. is distinctly and, in terms of design and techniques of manufacture, strictly Mexican, American, Navajo, Hopi, or Zapotec

³¹ Ibid., 160.

³² Gail K. Sheffield *The Arbitrary Indian: The Indian Arts and Crafts Act of 1990*. (Norman: University of Oklahoma Press, 1997); and U.S. Cong: House.

³³ U.S. Cong.: Senate, 2.

must be understood as a discursive strategy which functions to occlude such transnational and intercultural connections.

As Pease Chock reminds us in regard to immigration law, the terms employed in any discursive construction occlude as much as they reveal. She examined how the “erasure” of various subjectivities (e.g. gender, racial, and class based) occurs through the use of a “natural science” discourse that employs terms such as “population.”³⁴ “Perceived threats to social order” such as Mexican immigrants, can be “reconstituted” in scientific terms which deny “humanity to immigrants” from a supposedly unbiased scientific perspective.³⁵ Ultimately, of course, such discursive strategies silence those “whose lives would be most immediately affected.”³⁶ Making Zapotec textiles into Mexican textiles through the use of social scientific terms, such as “tribe” and “band” (terms that Anthropologists have been instrumental in formulating), enable those participating in the public debate surrounding how the Indian Arts and Crafts Act is written to occlude the ethnicity of Zapotec weavers and frame their identity in terms of nation-- a strategy which effectively writes them into the “land of enchantment” as “foreign” and the presence of their textiles as an “invasion.” The logic of the “land of enchantment’s” tripartite social order is thereby given the force of law and the very same discursive strategies used to devalue Mexican and Mexican Americans and their culture are also used, in the end, to devalue and indeed to vilify the Zapotec, their culture, and the textiles they make.

Epilogue: Enforcing the Indian Arts and Crafts Act for Trans-locale Art

Current attempts to legislate and legally enforce the Santa Fe and Taos art market’s ethnically segregated “tripartite social world” through compliance with the Indian Arts and Crafts Act of 1990 face a number of difficulties. Foremost among them include attempts to deal with the influx of “fake” Native American art as though it were the product of Mexico or the Philippines, and simply imported into the U.S. ignoring the complexity of who and where these products, in their entirety, are made.

Zapotec textiles offer an interesting case in point, given that one may legitimately ask whether they are even “made in Mexico?” The places and people involved in the creation of Zapotec textiles that were available for purchase in 1998 in Chimayó, New Mexico are illustrative of this point as they were made of wool from New Zealand that was processed in Texas and shipped to Ocotlan, Mexico for spinning before shipment to Teotitlán where the yarn was dyed and distributed to weavers. The designs for the textiles had been photocopied from museum exhibition catalogs by the Chimayó business owner, who mailed them to Ocotlan and from there they were sent, with the yarn, to merchants in Teotitlán who distributed the design and dyed yarn to weavers in Teotitlán and in Santa Ana. When finished, the textiles were delivered back to Teotitlan merchants and then to Ocotlan before being shipped to the U.S. and ultimately a house front gift shop in Chimayó.

Finally, the angora blended yarn shipped from New Zealand, to Texas and to Ocotlan, Mexico for spinning into yarn is also dyed there and then shipped to a number of trading posts in the American Southwest where it is purchased by Navajo weavers.³⁷ Like Zapotec textiles then,

³⁴ Pease Chock, 174.

³⁵ Ibid., 168.

³⁶ Ibid., 180.

³⁷ Graham Johnson, Interviewed by Author. Ocotlan, Oaxaca, Mexico. 14 August 2000.

the complexity of where and by whom some Navajo textiles, in their entirety, are also made, makes attributing a national origin to them an equally difficult endeavor.

Notes

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Weaving and the World Economy or How Colonialism and Coffee Affected the Indigenous Weaving Industry in Zuénoula, Côte d'Ivoire.

Barbara Sumberg

The Gouro people of Côte d'Ivoire are renowned weavers in the memories of Ivoirians. They are acknowledged as the premiere weavers of the past who possibly taught the premiere weavers of the present, the Baulé, their craft. Cloth production and trade were major industries among the Gouro from possibly as early as the 15th century until the late 1950s and locally produced cloth was crucial in many social and cultural situations. Weaving continues today but has withered away among the Gouro while it has thrived among the Baulé and other ethnic groups in the same country. In this paper I will discuss the changes through time that led to the present state of the local industry and will relate those changes to changes in the cloth actually produced. In visual terms I ask how the most valued cloth in a small scale society went from a hand spun and woven cotton indigo dyed, striped cloth with a few simple supplementary weft motifs to an elaborately decorated cloth made from commercially spun cotton and brightly colored acrylic yarns and in socio-economic terms how does a society go from a weaver or weavers in every household to a just few old men weaving.

To begin I'll briefly describe the people and the area I'm talking about. The Gouro are an ethnic group of about 220,000¹ souls who live in central Côte d'Ivoire in West Africa. The language they speak, Gouro, is classified as a Southern Mandé language. It is thought they migrated from Mali to within the borders of present day Côte d'Ivoire perhaps as early as the 12th century AD. After a series of shorter-distance moves they settled in their present day territory in the 16th century. The Gouro region covers an area of 16,000 square kilometers and is contained within four prefectures or administrative divisions. During the course of my research I found there are actually 3 centers of production in the geographic and cultural area known as the Gouro region. This paper deals with the northernmost division of Zuénoula where the most extensive cloth industry existed.

Before their conquest by the French in 1912 the Gouro lived in what is known as a segmentary or stateless society, that is to say that large, extended families were the political unit. There was no centralized ruling force. Kingship was unknown and there was no courtly tradition of textile production. Cloth was produced within the family for family use or for trade. Within these extended families the oldest male was in charge of managing production and distributing the produce. This included the cultivation of cotton and the production of cloth.

Cloth in Gouro Society

Tasks were assigned on a gender basis; female members planted and harvested cotton which was intercropped with food crops, prepared and spun the fiber, and dyed the yarn when needed. Male family members cleared the fields in preparation for planting, dyed yarn as needed, wove long strips on the small treadle looms that are common to West Africa, and sewed the strips together to

¹1. J. A. Olson, *Peoples of Africa: An Ethnohistorical Dictionary*. (Westport, CN: Greenwood Press, 1996).

form cloths. Most men wove in conjunction with farming and hunting and some were more accomplished weavers than others. The family head could decide to spend all of his time weaving if he wanted, thus becoming more of a specialized weaver than other men in the family and producing the higher quality cloths needed for prestigious gifts and ceremonies. In addition to their cloth related tasks women worked in the fields, processed and prepared all the food, raised the children, and maintained the home. Women were also a crucial link in the long distance trade in kola nuts and cloth.

Many different cloths were produced in the Zuénoula area. Most were striped and the basic color scheme was very dark indigo blue, a lighter blue, and white with an occasional dash of imported red yarn. Each pattern of stripes has a **name**. Small designs were brocaded with a supplementary weft technique. Men and women used the same types of cloth but in different sizes. The two main kinds of cloth were that used everyday and that used for ceremonies. Some of these different cloths were **bia**, **kaludaane**, **vaudango**, **groninfies** ; and **da n**.

Besides being worn as clothing, cloth played an important role in social relations and was a crucial element of most ceremonies. Cloth was given at marriage and at death and as reparation by the guilty party in a conflict between individuals, families, and villages. It was used in the religious context and in masquerades. Cloth was an essential component of Gouro social life. Wrapped around the living body it protected and beautified. It described social standing and cultural belonging. At death it defined family relationships and community status. Cloth breached the gaps created by conflict. Literally and figuratively, it enveloped individuals and communities, holding them together and covering their failings.

Cloth and Trade

Cloth was also a primary item of trade among the Zuénoula Gouro. Zuénoula lies in a transitional zone between the dense tropical rainforest to the south and the dry savannah to the north. The area is perfectly situated to be a central link in the north-south trade route that supplied kola nuts, gathered in the forest, to the savannah dwellers in the north to whom they were an essential part of ceremonial life. Gouro women carried cloths produced in the Zuénoula area to the forests to trade for kola nuts. They carried the kola back to regional markets and traded it for goods from the north, one of which was cloth. Through this trade the Gouro, who were farmers, hunters, and weavers but not primarily merchants, met their needs for goods they didn't produce themselves. Zuénoula was thus a crossroads for cloth from a wide geographic region. This is evident when you look at cloth from northern Côte d'Ivoire, Mali, Guinea, and Burkina Faso. Many similarities in designs and motifs are seen. This also makes it difficult sometimes to assign a definite provenance to some cloths.

French colonization, beginning effectively in this area in 1912, changed all this. Every African over the age of 10 was compelled to pay a yearly tax. This required French currency which was introduced in the Gouro region at pacification—1912. The use of local currency called **broh** was prohibited in 1915² and barter was discouraged by the colonial administration.³ The kola trade

² Archives National de la République de la Côte d'Ivoire 1.QQ.42-V

was disrupted by the French and the Gouro were pushed out of the trade early in the colonial period. The basis of the traditional regional trading economy was thus undermined.

Despite all this, weaving for domestic use and trade continued well into this century. While the forest region to the south was being incorporated into the world commodity market with plantations of coffee and cocoa, Zuénoula was on the margins of the coffee belt and too far north for viable commercial production of cocoa. Cash was raised to pay taxes and buy imported goods that were no longer directly available through barter by the sale of cloth produced in the home. Imported cloth, available since at least 1912, was too expensive for the average Gouro to buy and wear, especially when it could be produced at home. And colonial officials noted that the Gouro seemed to prefer their own cloth to the imported varieties.⁴ During this period all the types of cloth mentioned above continued to be made and used. The colonial administration recognized that the weaving industry was essential to the new cash economy. One official in 1922⁵ went so far as to encourage the development of the local industry and noted that the cloth was highly valued by coastal people living nearly 200 miles away from Zuénoula.⁶

Changes in Economy, Changes in Cloth

During my interviews with older Gouro, I noticed a consistent inconsistency when discussing cloth production. Interviewees would never give a date or even an estimation of a date when asked. But when asked about the introduction of commercially spun yarn, which is the only yarn used today in Zuénoula, they always answered 1946. Upon further investigation I came to understand the importance of that date which signified the end of forced labor in the French colonies. At that time, Africans were finally free to, and encouraged by the colonial administration to, make their own plantations of cash crops of cocoa and coffee. Although there was initial resistance to the idea, the northern Gouro did plant coffee and began to be directly incorporated into the world commodity market.

Coffee plantations take a few years to bear a significant yield so it was in the early 1950s that their effects on cloth production began to be noticeable. You can see on this graph the nearly vertical line showing the rise in coffee harvested in the Zuénoula area from 1950 to 1955.

I'll turn now to the framework of analysis I use to discuss the larger problem of survival of local cloth production in the context of industrial production. Many different reasons have been offered to explain the vitality or disappearance of hand weaving traditions. John Picton lists three

³ Zamblé Bi Justin, "L'homme et la terre en pays guro du milieu de XIXième siècle à 1958." (Ph.D diss. Abidjan: Université de Côte d'Ivoire, 1992).

⁴ ANRCI 1.EE.167, 4th trimester report, subdivision of Zuénoula, 1922.

⁵ ANRCI 1.EE.167, 2nd Trimester report, subdivision of Zuénoula, 1922.

⁶ Ibid.

points to consider when thinking about cloth production. The first point is that “textile traditions will survive if the product has some continuing relevance. . . . This is . . . a matter of local perceptions of the status of particular forms of textiles.”⁷ This relates textiles and their production to matters of identity, status, cultural integration, and fashion. Secondly he points to the market and the relationship between weaver and customer. He reminds us that a weaver has to be able to make money in order to continue working. Thirdly, the internal dynamics of a particular tradition must be taken into consideration. Is there room for innovation and development or is the tradition rigid in its adherence to aesthetic demands and use? Picton states, “If weavers are within a tradition that presents no options, where invention is culturally inappropriate, that tradition will not have the capacity to survive unless it is specially protected for reasons of ethnicity and esteem that have a wide acceptance.”⁸

The first thing that happened with this influx of cash to the Gouro was that hand made cloth for everyday wear was abandoned. Some older women expressed to me that they felt a cloth scarcity before the 1950s. No one had more than two outfits and that wasn’t enough. With their husbands’ new ability to buy industrially produced cloth they and their families could have more cloth and clothing than ever before. Women who I interviewed also cited the comfort and ease-of-washing of factory-made cloth as a reason for its ready adoption. Without the need to produce quantities of cloth to clothe his family, the nonspecialist weaver stopped weaving. Although there was a definite social aspect to preparing and spinning cotton in the family and village context, with the heavy workload that occupied women’s days, spinning was gladly abandoned by most women.

Simultaneously, and I want to emphasize here that these changes did not happen overnight, it was probably a gradual process over a number of years, affecting different people in different locations in different ways, male weavers and clients were able to buy industrially spun yarn with their income from coffee sales. Now they didn’t need female family members to produce the yarn before they could weave. The reciprocal and gender complementary nature of family labor was changing.⁹

Claude Meillassoux, an anthropologist who was working in the Gouro region in 1958 and 1959 remarked at that time on the disappearance of weaving from many villages and the specialization

⁷ John Picton, “Tradition, Technology, and Lurex: Some Comments on Textile History and Design in West Africa.” in *History, Design, and Craft in West African Strip Woven Cloth*, (1992), 45.

⁸ *ibid.*, p. 47.

⁹ This aspect of cloth production wasn’t the focus of my field research and more needs to be done in this area. The gendered division of labor might have started changing before this but in the context of my research it started here.

of a few villages in the production of prestige cloths.¹⁰ He notes that Gouro planters told him they “didn’t have enough time to weave.”¹¹ My interviewees reiterated this, saying it was easier to make money planting coffee than by weaving. But at the same time there was a fluorescence in the weaving of expensive prestige cloths by specialist weavers. With the income from coffee Gouro men had disposable cash with which to commission cloths for themselves, family members, and for social obligations. Some weavers remembered the 1970s and early 1980s as being a busy and prosperous time for them as weavers. The weavers who continued to weave moved from being specialists among many weavers to professionals, weaving primarily for money.

New materials brought about the most dramatic changes in handwoven cloth in the Zuénoula area. Working weavers who I interviewed seemed to be happy to use industrially produced yarn because they found it to be stronger and more consistent. They were also able to incorporate more color into their cloths by using commercially dyed cotton and acrylic yarns. You can see in these slides the differences that are apparent. The incorporation of words as a design motif, now a fairly common sight on Baoulé cloths, seems to have started with the Gouro. One of the oldest weavers in Gohitafla, a village near Zuénoula with the largest number of weavers today, claims to have been the first to incorporate words, specifically names, on cloth in 1963. Although illiterate he wove in the name of Modibo Keita, the first president of Mali, on a cloth to be presented to him. Since then, this innovation has been associated with Gouro cloth and has also been appropriated by other weavers in Côte d’Ivoire.

All of this evidence points to an inherent flexibility in the weaving tradition, Picton’s third point. As for the ability of weaving to be an economic activity, his second point, that potential seems to be there presently. Two basic kinds of cloth are now being woven. Highly decorated prestige cloths are commissioned by the customer who pays anywhere from \$70 to over \$200 for a cloth, depending on the style, the weaver, and the customers’ bargaining ability. The other kind of cloth made is a small, simple, and inexpensive cloth called **kaludaane**, used in religious practice and in medium demand. Weavers will make this and sell it when needed rather than working only on commission, since it doesn’t require as big an investment in materials as the other cloths do. Most weavers are still farmers and divide their time between the two activities. The youngest weaver I found, a man of about 60 years, estimated that he made more money from weaving than he did from farming.

It is in considering the first assumption, the assumption that the product has some continuing relevance in the lives of the people concerned, that things get a little sticky. Cloth is still thought to be essential in many realms of Gouro life when discussing normative ideology. But the reality of practice is more complex. Cloth is still given at funerals, for example but according to my observations, cloth made elsewhere is frequently substituted for locally made cloth. When I

¹⁰ Claude Meillassoux, *Athropologie Econonique des Gouro* (Paris: Mouton and Co. 1964), 194.

¹¹ *ibid.*

asked if that was because the local types were more expensive I was told no, the others that come from Ghana are more expensive and therefore more desirable to show off wealth. At the other extreme, less expensive factory woven and printed cloth is sometimes substituted for hand made.

The situation now with weavers in the Zuénoula area is bleak. As I just said, the youngest weaver I found is in his 60s and the rest are considerably older. No young men or women are learning and the art seems destined to die out in this area. Using Picton's three points as a reference--1) cloth continuing to be relevant to social life, 2) weavers making money, and 3) the flexibility of tradition-I would expect the opposite. Ideologically, cloth is still highly relevant to Gouro life, the tradition is flexible and allows for innovation, and weavers seem to make money at their work. Why then does it seem to be on its death bed in the Zuénoula area?

I believe there's an important, almost psychological, factor that is not explicitly mentioned above but is contained in the first assumption, that the product has some continuing relevance and this is a matter of local perceptions of the status of particular forms of textiles. It is also a matter of perception of the occupational status of weaving and spinning by young Gouro people. Spinning, weaving, and the wearing of hand made cloth is perceived as old fashioned and out of date. I base this statement on observation of the existence of strong weaving industries in other parts of the country, other towns of equal size where locally made cloth is worn regularly, and on the use, in the very cosmopolitan city of Abidjan, of hand woven cloth to make fashionable outfits worn to 'cultural' events such as theater and concert performances. The Gouro, due to their geographical location far away from the railroad, which historically was the most important axis of transportation, or the main highway axis, were historically isolated until fairly recently from most of the most wrenching modernizing trends. Due to their unwillingness until recently to give up their own religion and convert to Christianity or Islam, they have been perceived as somewhat backwards in the eyes of their compatriots. I think I can infer a desire to participate in the wider world of Ivoirian and West African fashion as an aspect of modernity, as a motivation for the abandonment of hand made cloth for daily wear, even while hand made cloth is valued in other parts of the country. They have given up many of their 'old ways' with a vengeance, including all hand craft production except the carving of masks, for which there's a large commercial market in Abidjan and abroad. This perception of modernity, of how to relate to new economic conditions not faced by their parents and grandparents, has most strongly affected the survival of cloth production among the Gouro.

In conclusion, I'd like to emphasize two points. The first is that although factory woven cloth was available in West Africa from the nineteenth century on, that fact alone wasn't enough to overpower local hand woven cloth industries. Weaving industries exist today all over the region and in some places, quite strongly. The economics of production, while an important factor as noted in my findings, are not the sole variable and the availability of cheap manufactured goods, while important, cannot be viewed simplistically as the only determining factor. But when considering the survival or demise of a particular local industry, other factors that are perhaps more obscure and therefore more difficult to assess directly, such as attitudes about identity, modernity, and perception of self and others, have as strong an impact on a culturally rooted tradition, such as weaving, as other more discernible points.

A Textile Enterprise As a Tool of Economic Development: Part I

By
Haddy Prom
The Gambia, West Africa

This presentation describes how artisans in The Gambia, West Africa, continue to employ the cultural traditions of tie dye, batik, and embroidery in the patterning and construction of clothing in the modern global economy. I came to the United States to attend college where I majored in finance. After graduating, I chose to apply my knowledge and training as an entrepreneur first in the Washington, D.C. area where I operated several hair braiding salons. Later upon returning to The Gambia, I established a tailoring studio where I employ several tailors and embroiderers, about five on the average. I chose this enterprise because I have always loved fashion and had identified a potential customer base while residing in the United States. While I have total management responsibility doing all of the purchasing, marketing, supervision of production, and much of the design as required by the enterprise, I am fortunate to have the assistance of my husband, a computer specialist, in managing logistical arrangements.

With the exception of prints made in Senegal and Cote d'Ivoire, most of the fabrics which I used are purchased and dyed in The Gambia. (Note: Numbers in parentheses in the text which follows correspond to the photo montage entitled "Contemporary Dyeing and Tailoring in The Gambia.") The undyed damask or brocade used for most tie-dye or batik in The Gambia is imported from the United Kingdom, China, or India and is retailed by citizens of Lebanese descent living in the Gambia. (1,2) The fabric used is generally 100 percent cotton. Dyers who usually purchase the damask for dyeing can tell if the fabric will take dye well by breathing through it: if condensation penetrates the reverse side, it means the cloth will dye well. Cotton fabrics retail from \$1.95 to \$12.00 per yard. The upper limit includes silk-cotton blends. These prices are negotiable and depend upon your bargaining skill.

There are two techniques mainly used by Gambian dyers to apply patterns to fabrics. To tie-dye fabric, an artist will stitch a pattern on the fabric and pull the threads tightly or wrap portions of the fabric with plastic or string. (3,4) In the case of batik, the design is drawn on the fabric and the area not to be dyed is coated with candle wax. (5) Each of these techniques prevents dye from penetrating the cloth in unwanted areas. The fabric is then dipped into the dye (6), usually synthetic dyes imported from Germany mixed with hot water, and sodium hydroxide in uncertain measures which makes it difficult to replicate the exact shades created. After soaking the fabric in the dye for a certain time--depending upon the intensity of the desired color--the fabric is then hung to drip-dry. Experienced dyers can tell what other colors can be added to the mixture in order to achieve a deeper color without soaking for a longer period.

In the batik or wax-resist process, the fabric after drying is taken to a table where the wax is scraped off and other portions are waxed for the next color. This process is repeated until the desired number of colors is achieved. "Hassi" is a particular type of batik pattern obtained by waxing the entire fabric with either flour paste or candle wax and using combs or shells to draw swirls into the wax or paste. When the whole process of dying is finished, the material is soaked in hot water to removed the leftover wax, washed with soap, and hung to dry. (7) Batiks are then ironed, usually with either flat irons heated on a charcoal stove or with an iron which contains a "goose-like" charcoal pot which sits above the flat surface. The supply of electricity is irregular and costly; therefore, nonelectric equipment is more accessible for finishing.

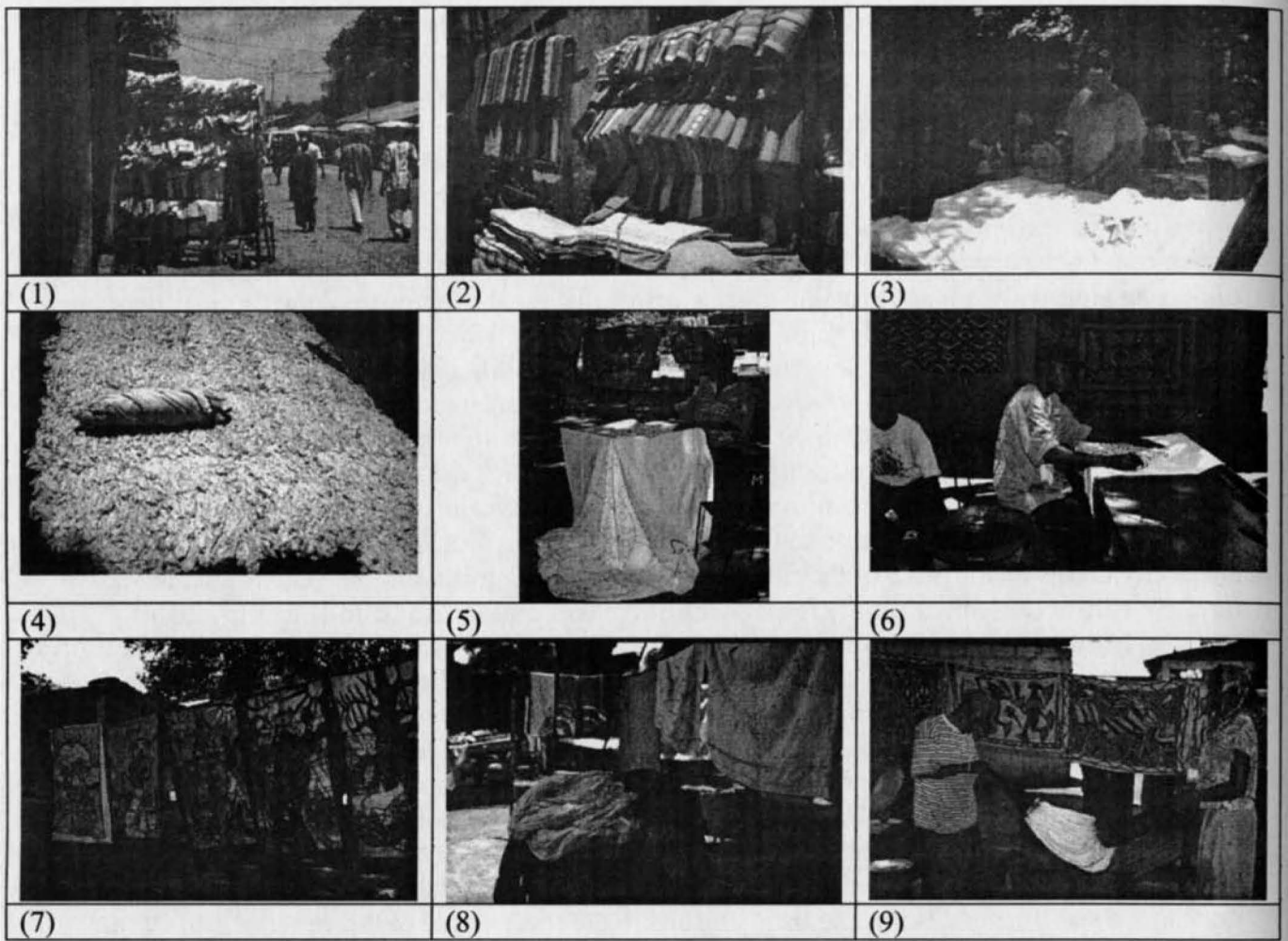
In the case of tie-dye, materials to be dyed are hand stitched with factory spun polyester yarns pulled tightly to prevent dye from penetrating the fabrics and then placed in the dye bath. Fabrics may be tie-dyed in several color combinations which are achieved by drip-drying between each color submersion to remove excess dye. (8) Tie dye requires two people to unwrap the cloth to prevent dyed areas from touching cloth not to be dyed. (9) When the dyeing process is completed, the dyed cloth is rinsed in cold water with soap, dipped in light cassava starch and hung to dry. (10) When dry, the tie-dyed fabric is pounded with wooden mallets to give it a shine and soften the fabric (which breaks the threads), a technique which dyers prefer to the iron. I always wonder why anyone would prefer such a labor intensive approach, but was told by an elderly dyer that the mallet gives a better shine that remains until the fabric is washed. (11,12) The fabric is then ready to be sold or to be sewn by tailors. (13,14)

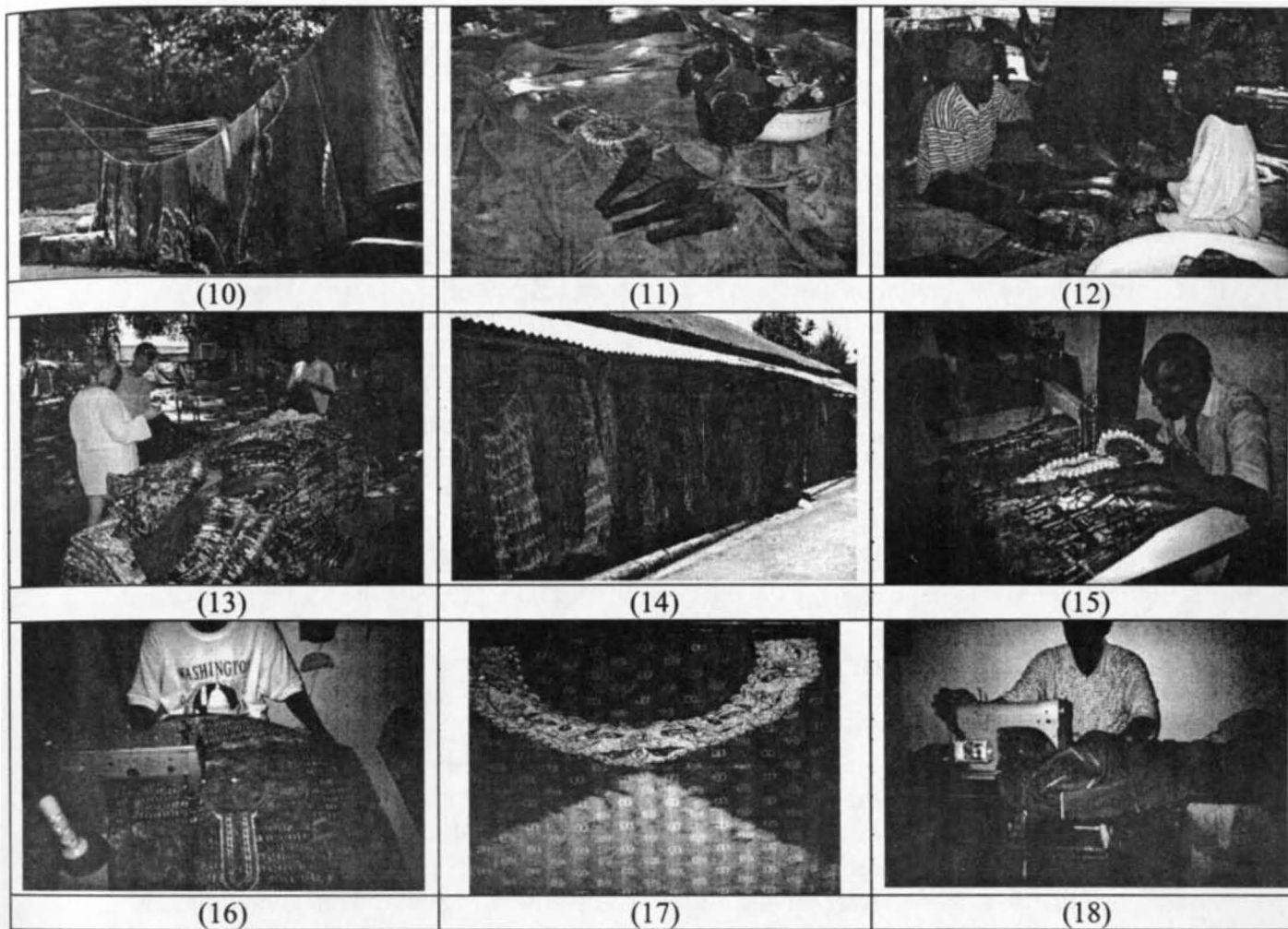
Since dyeing is done out-of-doors, dyers can only work in dry months from December through May. Dyers are usually women because men can get higher paying jobs. Women take up dyeing as a profession to add to the little money received for household expenses from their husbands. Most dyers have limited education and do not have the skills to accurately compute their costs and profit margins. I show them how to calculate their selling price and I refuse to buy from dyers who do not charge so that they will make a profit. The dyes used and the cost of electricity drives up the price of the finished dyed fabric. Tailors work the year around but are rarely female because their family responsibilities make them less reliable as employees.

The type of embroidery to be used for clothing is usually decided before the garment is cut for sewing. The tailor is instructed on the style to be executed, cuts the fabric, gives pieces as required to the embroiderer. Two types of machine embroidery stitches are commonly used. "Dahomey" is a chain stitch named after the ethnic group who once did that work by hand and created the designs without a pattern. The designs are now accomplished by machine using a winding controller attachment. (15) This is the embroidery most commonly seen on goods in the marketplace. The second method is called the "dusand dusette" or "two hundred and seventeen" named after the French machine used for the designs in a satin stitch. The desired pattern is first drawn on a stabilizing backing and then attached to the reverse side of the garment piece with a warm iron. The fabric back is then embroidered following the drawn lines. (16) Experienced embroiderers are usually able to execute designs without using patterns. After the embroidery is completed, the neckline or sleeve is trimmed of excess fabric and the stiffening is removed. (17) The embroidered design is then ironed to give a better finish. Given the expense and unreliability of electricity, a propane gas iron is preferred. A tailor then takes the embroidered piece and assembles the specified garment. (18)

I have several retail merchants in the U.S. that I supply with merchandise made to their specifications. I also create garments that appeal to the taste of my own personal retail customer base that I have developed which includes both Americans and Gambians living in the United States. I personally deliver my merchandise two to three times a year, supplemented as needed by air freight. In the future, I expect to increase my merchant accounts to the level where I do not have to travel with my merchandise.

In summary, I am participating in a profitable enterprise that I enjoy and can operate independently with the flexibility to attend to my family as needed. It also provides employment for fellow Gambians and a business opportunity which my own children may choose to continue someday.





A Textile Enterprise As a Tool of Economic Development: Part II

by
June Pearson Bland

The production and trade of handwoven textiles were well established in West Africa when the Europeans arrived in the fifteenth century; however, the use of handwoven cloth, except for ceremonial purposes, was soon replaced by imported manufactured cloth. The volume of less expensive fabric from Europe influenced this change, which coincided with the Islamic tradition of voluminous gowns, the aesthetic qualities of cloth created by foreign technology, and the alteration of the economic structure as a result of colonialism. Although textile manufacturing is now established to some degree in West African countries in the forty years since the countries' independence, the major textile product in The Gambia is patterning imported cloth, using resist methods of tie and dye, or drawing or stamping techniques as described by Haddy Prom in Part I of our presentation. These resist-patterns became popular in the U.S. when introduced by returning Peace Corps volunteers and African-American tourists from newly independent African nations. Although not as visible as in the sixties and seventies, African textiles and clothing have remained popular with those African Americans, who want to identify their ethnic heritage and among the designers of high fashion who look to Africa for inspiration in recurring cycles.

The focus of this presentation, however, examines handcrafted clothing as a model for economic development advocated by the Kenyan economist, Ali Mazrui (1980), among others, who encouraged low tech, culturally relevant enterprises that will make a respectable contribution to the gross national product of developing countries while providing a sustainable income to the participants. Mazrui's concept of the social benefits of private enterprise and the opportunity to buy textiles for pleasure and profit really appealed to me. My mother and I co-founded our company, *Originally Africa*, after our first trip to Africa in 1987 and informally sold the surplus purchases from our travel and additional inventory procured from contacts made during subsequent visits.

During my dissertation research in 1995, I found that producing and/or selling resist-dyed textiles were an important source of income, particularly for women with limited educations (Bland, 1995). As an occupation for females, it was second only to employment as domestics. Handwoven cloth, produced exclusively by men in The Gambia, is less commonly used for clothing. Both the female and male producers of textiles and clothing that I interviewed were acutely aware that they had to expand their markets beyond the tourist trade and the mercurial interest of the local clientele.

After several years of direct marketing such as vendoring and private sales, I feel very fortunate to have linked with Haddy Prom, who I first met when she was a college student and newly married into the Gambian family who introduced me to Africa. At a young age, she had already developed a steady clientele in the U.S. and at my age, I was no longer interested in the physical expenditure of energy required for direct sales. So I approached her about developing limited line of clothing designs that would (1) appeal to both ethnic and contemporary interests of potential customers and (2) could be sold by mail order and online. Both of us saw this as a way to increase our customer base and decrease the expenditure of time and energy required for direct sales.

In our initial catalog, mailed in April 2000, we selected three products which are popular items sold in the tourist markets. The numbers in the parentheses which follow correspond to the montage captioned: "*Originally Africa Presents . . .* "

- Two styles of caftans, (1) in a polyester/cotton blend and (2) in 100% cotton.
- A roomy tote bag (3) made from scraps of leftover machine printed fabrics from Senegal

I selected the second group of clothing from Haddy's own line because they were popular items among her own customers:

- Unisex loose tops in tie-dye (4) or paste resist patterns of cotton damask (5) and a handwoven cotton with embroidered trim (6).
- Two caftan and pants sets, (7) worn primarily by men and (8) designed for women, both custom-dyed in several color options and made to order in a combination of solid and the hassi patterned cotton damask.

Haddy and I collaborated in the design of the remaining items which are custom made to be sold exclusively through the catalog:

- Two ensembles for women, each including a skirt, pants, and blouse, one set in calico cotton dyed in solid and tie-dyed, patterned indigo (9, 10, and 11) and the other in cotton damask in solid brown overdyed over grey and in the hassi paste resist-pattern (12 and 13). Each ensemble includes a vest and jacket reversible from solid to pattern. These ensembles were designed in response to specific requests for African fabrics in western styles.

Finally, our "piece de resistance" (we thought):

- An ensemble (14) in the finest damask of cotton and a silk blend executed in a handsome lattice embroidered caftan, with pants and shirt edged in a satin stitch worn by the male model. The woman's ensemble is in the same fabric, styled in a simple loose blouse with a neckline edged in the satin stitch and the blouse and sleeve hems beautifully embroidered in the lattice pattern which are interspersed with hearts in pale blue and pink that are repeated at the side split of the skirt.

While we have received very favorable reviews, the response to the catalog and website has not been overwhelming-- although I was forewarned of that possibility. Obviously, just because you open a store does not mean customers will flock to your door and the same is true of a website or catalog. Of particular concern is the lost advantage of direct sales: to educate the customer. Appreciation of handcrafted products is an acquired taste made possible by exposure and education and the elimination of arts and home economics in our school curriculum means that often that content is not imparted in a meaningful way. Then there is another group of potential customers who cannot distinguish between authentic African goods and imitations from non-African countries or goods of poor quality created for the unsuspecting consumer. Museums can hopefully fulfill part of the void by helping the novice to identify how textiles are made, by whom, and for what purpose, a strategy used by the Textile Museum (Washington, D.C.) which as a docent, I find particularly helpful in introducing novices to textiles. The bottom line is that I have to target more precisely the audience already appreciative of handcrafted textiles and introduce and educate the uninformed.

There are successful examples in both developed and developing countries where culturally based, artistic producers and private enterprise, such as the *Peruvian Connection* and *The Body Shop*, have connected and contributed to the economic sustainability of the participants. National governments often overlook small, cottage industries. While being overlooked by the public sector can be of some benefit (no taxes), it also means crafters do not receive the support they need to increase their customer base because their governments are more focused on attracting foreign investment from large multinational corporations. Some international lending institutions are just recently discovering these artisans and are now considering strategies for supporting indigenous enterprises heretofore supported by nongovernment agencies with their meager funds. Reliable energy sources, transportation and communications, training programs, and the consumption of locally made products also play a roll in the productive employment of youth and adults. In the case of The Gambia and most African counties, citizens must be encouraged by their respective governments to reduce their reliance on imports which render goods made locally more expensive and less competitive in world markets.

The international community, particularly lending agencies, has a critical role in the survival of indigenous crafts. Although we cannot get into a discussion here about the detrimental effects of bad loans and unscrupulous leaders, nevertheless, the financial burden required by the repayment of outstanding debt makes it virtually impossible for governments of developing countries to meet the social needs of their citizenry in the areas of education, health, and housing - critical requirements if the population is going to be economically productive. Secondly, industrialized nations often impose trade restrictions on handcrafted products from developing nations, yet require the exporting nation to open its markets to importers. This is really a two-edged sword giving industrialized nations a distinct advantage. Case in point: The recent U.S. trade bill contains limited textile exceptions for exports from African and Caribbean nations which had to be negotiated with U.S.American textile interests who really needed no protection, not from those regions.

Originally Africa does not promote catalog items as "authentic" and "traditional" and tries to avoid the entanglements created by the use of those terms (Picton, 1992). Instead, we emphasize "quality," "handcrafted," "cultural heritage," and "artistic integrity." It is appropriate to direct attention to traditional influences where the textile artist obviously draws upon his or her "cultural history" and combines those elements with contemporary images and products to create a design that will excite today's customer.

Endnotes

Mazrui, Ali A. "Beyond Dependency in the Black World: Five Strategies for Decolonization." Decolonization and Dependency: Problems of Development of African Societies. Edited by Aguibou Y. Yansane. Westport, Connecticut: Greenwood Press, 1980.

Picton, John. "Tradition, Technology, and Lurex: Some Comments on Textile History and Design in West Africa." History, Design, and Craft in West African Strip-Woven Cloth. Washington, D.C.: Smithsonian Institution, 1992.

(alternate layout – 7 +7, pg. 1)



(1)



(2)



(3)



(4)



(5)



(6)



(7)

(alternate layout – 7+7, pg. 2)



(8)



(9)



(10)



(11)



(12)



(13)



(14)

Expanding Textile Studies Through the use of a University Costume Collection

by Gayle Strege

The Historic Costume & Textiles Collection at The Ohio State University (OSU) is a research facility in the Consumer & Textile Sciences Department of the College of Human Ecology. Begun as a teaching tool by the Textiles and Clothing faculty in the 1940s, the Collection now numbers over 10,000 artifacts, including men's, women's and children's clothing and accessories dating from the eighteenth century to the present day, and textiles ranging from pre-Columbian archeological fragments to European Renaissance liturgical textiles, to twentieth century furnishing fabrics.

Clothing is inseparable from textiles, since it is predominantly made of the latter, and the qualities of the textile have a profound effect on the behavior of a garment. Over 1000 costume and textile artifacts are used annually in classroom teaching, exhibitions, and research at OSU. The curriculum includes courses in textile chemistry, textile physics, historic costume, and historic textiles. Artifacts from the Collection are prime examples of full-scale end-use textile fibers and structures. A full garment is a much more effective representation of a textile's qualities than a 2 x 3" swatch, and an actual garment is better than a picture.

Our recent exhibition, *Textile Treasures*, highlighted significant selections from the Collection, and also featured student research. Through the various textiles selected, the exhibition explored textile history and its relationship to social and cultural history, techniques utilized in textile manufacturing and embellishment, and end-use of textiles, including 2-dimensional textiles draped or wrapped around the body.

Gayle Strege is currently the curator for the Historic Costume & Textiles Collection at The Ohio State University, having previously worked in the Hope B. McCormick Costume Center of the Chicago Historical Society. She received her MA in Museum Studies from the Fashion Institute of Technology after a prior career in theatrical costuming. Ms Strege has curated several exhibitions, and has consulted on costume mounts for exhibitions, including The American Textile History Museum's *Textiles in America*, and The Wexner Center for the Arts' *Julie Taymor: Playing with Fire*.

A Faculty / Staff Discussion Seminar on Textiles

Deborah A. Brothers
Costume Designer and Lecturer in Theatre
Williams College
Williamstown , MA

Williams College is a small liberal arts college in Massachusetts, with about 300 faculty and 2000 undergraduates. Here at the college, there is a Center for Humanities and Social Sciences, whose purpose is to foster inter-discipline research and discussion for the faculty. The Oakley Center has allowed interested faculty the opportunity to present ideas in various types of seminars, so that new topics of scholarship can be researched, with the participation of faculty in unrelated fields.

In the fall of 1999, a Faculty and Staff Discussion Seminar on Weaving and Textiles was offered at the Oakley Center. Meredith Hoppin, a Classics Professor and then the Director of the Center, had early meetings with me about focusing on this broad topic for one of the Center's offerings for that particular school year. I am the Costume Designer for the Theatre Department at Williams College. My interest in textiles is an obvious one. Textiles are part of my every day work. Here was an opportunity to explore ideas with a complement of scholars from many fields. Meredith and I began to shape this offering for the upcoming fall.

The seminar was open to the college's faculty and staff. Both Meredith and I knew of various professors and professionals who have some interest in textiles, and we both hoped that they would take part in the seminar. Some of these people were connoisseurs and collectors with a narrow interest in one particular subject, such as kilim fragments or lace. Some were weavers themselves. Some had an interest in Women's Studies, while others were interested in the use of weaving language in storytelling. And finally, we had some who had no knowledge of any study of textiles or understanding of any aspect of the topic we were exploring. So we had a broad range of interests that could travel far. Also we had a wonderful coincidence take place as we began our preliminary meetings in the spring, when we discovered that Nancy Matthew's, a curator at the Williams College Museum of Art, was planning to exhibit textiles from the college's holdings in January 2000. This was the first time that textiles were ever exhibited at the museum. And the seminar helped Nancy as an unofficial advisory group.

The final participants included faculty and professional staff. The fields and organizations represented were: Sociology, Economics, English, Religion, History, Classics, Theatre, Williams College Alumni Review, and Williams College Museum of Art.

Meredith and I chose the early readings from scholarly essays, and we also solicited offerings from the entire seminar population. We began by selecting several chapters from Elizabeth Barber's *WOMEN'S WORK THE FIRST 20,000 YEARS*. We also included essays on indigo production in Indonesia, linen making in the 18th century

Europe and sections on weaving, looms and basic fibers. These readings came from CLOTH AND HUMAN EXPERIENCE, edited by Annette B. Weiner and Jane Schneider and A HISTORY OF TEXTILE ART, by Agnes Geijer. And we chose sections from the Iliad and Odyssey, for a discussion of the use of weaving as metaphor in the poetry of Homer.

In addition to the readings, Meredith and I both felt that whenever possible, we should provide a sample, on hand, of the objects discussed. Also, the seminar participants had an early meeting at a local weaving studio to see looms and the amount of preparation that went into the threading of the looms. We then had the opportunity to go to the study room of the College Art Museum to see examples of the collection that was being prepared for exhibition. We went to one participant's home to view their carpet collection. One member of the seminar, whose background was in textile surface design, had led a group of students through India, documenting various dyeing techniques, so we had a video session on that material. In fact there were two participants who had traveled extensively in India, and they brought multiple examples of cloth for the group to see. Because of the variety of backgrounds of our group, Meredith and I tried to include readings that supplemented and complemented the objects that we were seeing.

We felt it was the combination of discussing essays along with the practical viewing of looms and textiles that made the seminar so enjoyable. The abstract ideas had practical manifestation. The worlds of words and objects were in the same place. This seminar brought together people who could share both their theories and their appreciation of textiles and to teach us all something new on many different levels.

We met roughly every two weeks over the course of a thirteen weeks semester. Then in May of 2000, the Oakley Center sponsored a mini symposium that was a direct result of the discussion seminar on Textiles and Weaving. We were able to bring Elizabeth Barber, who wrote WOMEN'S WORK THE FIRST 20,000 YEARS, to the college, as a visiting Bernhard Scholar. She gave a series of public and college wide lectures which included her presentations, "Archaeological Origins of East European Costume", and "Penelope and the Origins of Greek Art". She visited classes and gave a slide lecture for a classics and history course on "Women in Greece and Rome". And Professor Barber was the speaker for the Humanities Center symposium, which was attended by some of the discussion seminar participants, other interested faculty and a selected group of students.

This discussion seminar has also given Meredith, a Professor in Classics, and me, a Lecturer in Theatre, the opportunity to teach a winter term course in textile in the near future. This type of inter-disciplinary program allows for a new type of learning for the faculty, staff and eventually students at my institution. Having this opportunity to use textiles as a topic for discussion and as an outreach topic across fields is a fine example of the liberal arts tradition. It is my hope that this model can be incorporated into other programs and that is why I am presenting it to you today.

EXPANDING TEXTILE STUDY: SOME RECENT APPROACHES

A Museum Approach to Exhibiting a History of American Textiles

Karen J. Herbaugh

The Museum began in 1960 as the Merrimack Valley Textile Museum with the original collections focused on machinery--both hand-powered and industrial, while the textiles themselves were of minor importance. The few textiles originally collected focused only on wool. Gradually over the years the policy broadened to include other natural fibers and eventually fiber content restrictions were eliminated. However, the focus of the Museum remained machinery and how it related to industrial archeology and labor history.

This caused much confusion to the public since the Museum's name, Merrimack Valley Textile Museum (later changed to the Museum of American Textile History and then American Textile History Museum), always contained the word *textile*, implying to the public that when they came to the Museum there would be textiles on display. There were some temporary exhibits that showcased textiles but the permanent exhibit centered on machinery and only a shawl and a few sample sheets were included. A complaint of visitors was that the Museum was supposed to be a textile museum but there were no textiles!

By the 1980s the textile collection had grown considerably as well as all the other collections resulting in a storage shortage. This combined with an increased desire to expand public programming resulted in the Museum's board deciding to relocate the Museum.

A shift in priorities took place during the planning of the new exhibition space. The amount of exhibition space available would increase from 4,000 to 35,000 sf. This greatly influenced the staff's decision about what to include in the exhibit Textiles in America. By this time, the early 1990s, the Museum had amassed an unparalleled sample book collection and a substantial number of woven, flat textiles including linens, blankets, and coverlets. Certainly plenty to put in an exhibit! However, as the staff made plans they realized that these objects and the machinery were not sufficient to accurately portray the whole story of textiles. Another concern was whether or not visitors would be able to make the link from hundreds of samples to the wide array of fabrics available for clothing and home furnishings without actually seeing end products.

For these reasons, ATHM decided that it was necessary to include clothing, accessories, and other finished textile goods to help the visitors relate to the textiles. This was a major decision for the Museum because it had not previously collected clothing, accessories, or other three-dimensional objects. The new policy required the acquisition of objects that would demonstrate the points staff were trying to make about the fabric. For example, an embroidered silk dress was acquired to reflect the luxury fabrics imported from Europe at the end of the eighteenth century. Sample cards of car upholstery were exhibited with a 1926 Ford showing the latest in automobile interiors. Printed cotton dresses from the turn of the twentieth century were compared to silk dresses with like patterns to show the differences in women's economic and social situations.

The other major component decided upon for Textiles in America was that machinery should be operated. Some demonstrations of machinery were conducted at the old location, and it was decided at the new location that this feature would be expanded to include a running weave shed so visitors could see woven cloth being produced. The visitors not only needed to see the end products but also all the steps involved in making textiles. By taking this approach visitors were not viewing the textiles in isolation from all the other elements that impacted their development, i.e. fiber preparation, fabric design, weaving, finishing etc.

When visitors are asked what they like most about the Textiles in America exhibit common responses are: the *Clothing displays.....*, *The dresses.....*, *.....seeing all the different clothing*, *The operating looms*, *.....equipment in operation*, and *Seeing the looms working*. The feedback to the Museum, through both the visitor services staff and visitor comments cards, has led the staff to believe that including both of these approaches in the exhibit was the right decision.

Textiles, Scholarship, and Art Education: An Art College Perspective

by
Wendy Landry

In many communities the art college is the last formal refuge of active textile-making knowledge and heritage. This location appears to value playful, risky, or challenging material explorations which might result in creative design or meaningful visual expression. This should be the best environment for cultivating adventurous students able to integrate a wide range of experience and resources towards generating new ideas for interesting contemporary textiles. It could be a good place in which to discover how textiles contribute to human experience and history, and how they are meaningful. However, I submit that this art environment is still detrimental to the full realization of these potentials, and that we need to examine the attitudes and educational practices there to improve the status and effectiveness of education for and about textiles.

Both art objects and textiles are products of human acts – human behaviour. They both fulfill human purposes – sometimes practical, sometimes communicative, sometimes to elaborate, evoke, or provoke human experience. So it is reasonable to value and to study such artifacts, not only as artifacts with certain meanings, roles, or aesthetic effects, but also as products of meaningful acts and behaviours. This includes how producing such objects relates to motivating purposes, cultural environments, and acts of judgment and interpretation. This broad liberal arts approach is the study of art and artifacts as humanities study. It does not limit visual arts education or textiles study to the prevailing vocational model of producing professional artists, designers, artisans, historians, or teachers. As liberal arts study, it can be valued as general education, as a means of educating students towards understanding and engaging with the visual artifacts they will encounter, and as a means of understanding their culture. Since the number of students who will ultimately make a living directly producing objects is relatively small, it seems appropriate to ensure that its broader educational benefits are strong and clear. At degree-granting institutions, this strength should imply academic rigour, understanding, and articulation in addition to the development of artistry, talent, or craftsmanship. This approach could pave the way towards developing advanced levels of textiles scholarship as a consolidated field of study in visual arts programmes.

The Nova Scotia College of Art and Design, where I teach and study, appears typical of many art college and university programmes in that the dominance of the contemporary art world has impeded the development of vital aspects of crafting and textile scholarship. The absence of these vital aspects is keenly felt in the craft division where textiles is kept. But before I continue, I wish to clarify that my comments are not directed at faculty members, who I generally believe to be knowledgeable, thoughtful people who do care about educating students, despite holding conflicting views about how to do so. And I do not oppose the art world. My comments are an attempt to describe concisely a situation caused by wide-spread attitudes which have evolved within a certain educational system and historical, cultural trajectory. All I ask is that we

examine how well the resulting system fits our current needs and how that fit might be improved.

Throughout the twentieth century, visual arts production became fragmented in terms of a hierarchy of three roughly distinct although overlapping worlds – fine art, design, and craft. Fine art moved towards a focus on abstract ideation and eventually a critical stance. Intellectually, all visual arts practices came to be measured by the criteria, theories and strategies of avant-garde fine art, especially in terms of addressing modernity, although the distinctions among the categories tended to be ill-defined, poorly communicated, or crudely applied along superficial lines. Theoretical interpretation of the developmental trajectory of contemporary visual art tended to reject the artifacts, practices, purposes and underlying values of traditional crafting, design and commercial production. Due to the strength and apparent universality of the fine arts theoretical perspective, especially in terms of formal, visual “literacy” and later semiotics and cultural theories, and the absence of viable alternatives, those criteria were assumed to be an appropriate basis for all visual art forms. But as these dominant criteria of art shifted alongside avant-garde art ideas, it became clear that some values and interests important to design and craft world purposes fit less and less well with those shifts in art world criteria.

Embedded in the body of visual art knowledge taught in art institutions, the dominant assumptions underlying understandings about art have obscured crucial distinctions, which design and craft worlds have a legitimate interest in making. But the criteria and defined bounds of art history tend to forestall the development of craft history and textiles history, diverting what specific textiles scholarship might be done into other disciplines (eg. anthropology and ethnography). Art world values and purposes have interfered with, and then denigrated, those of craft and design worlds, thus confusing students, limiting options, and undermining both quality and fruitful interactions in all three realms. Art programmes have tried to subsume contemporary visual arts practices under one illusory umbrella of assumed critical criteria and then criticised and ostracised amateur, craft and design expressions for not meeting these art world standards, neglecting to examine whether designers and craftspeople are even trying to fulfill the same ends. Is it appropriate to criticize someone as failing to achieve something they never set out to do? These art world attitudes, useful or otherwise, are rarely challenged by either carefully rigorous theoretical study or debate, or a strong opposition from minority positions. This is partly because there is no forum available in which to do so, and little willingness in the art world to seriously examine inconsistencies in those assumptions, or to debate with outsiders. It is also because there is little opportunity for others to develop the necessary research, ideas, and counter-arguments. The difficulties in bringing about the necessary changes in art education which might support textiles scholarship are further exacerbated by currently severe fiscal and political pressures and unsympathetic public attitudes towards visual arts education.

Another impediment to textiles scholarship, especially in MFA studies, arises from the art college’s traditional focus on the production of “finished objects” suitable for presentation in the gallery exhibition format. Entrenched in the programme requirements

and the experience of the faculty, this model constrains the acceptable form and content of textile studies. The typical products of textiles scholarship – samples, documentation, extensive research, written historical, analytical, or philosophical argumentation – do not fit this dominant model well. If faculty cannot guide or trust students outside the parameters of the typical focus on finished objects, students attempting a scholarship approach may not receive the degree of guidance which could render their studies more effective and their results more productive. Their ability to learn and to contribute is thereby compromised. As a result, many potentially fruitful approaches which could expand textiles studies into scholarship are curtailed, especially those which require the facilities available in making institutions for making samples.

Textiles scholarship is also deterred by the still prevalent attitude which privileges the artistic vision or idea as a pre-existing or separate entity to which medium is subordinate. In addition, the “post-modern critical stance” is the preferred perspective. Traditional or technical ideas, simple explorations to discover or understand textile qualities or meanings, are rarely deemed appropriate under these criteria. Clearly, ideas in and of the medium itself may be less perceptible or less interesting to a non-specialist audience. But they are not less intellectual or of lesser import because their purposes and fields of exploration differ from those of interest to the art world or a broad audience. As ideas relevant to the design and crafting of textiles, whether as subject matter for expression, as aesthetic or functional form, or as a path towards understanding the making and circulation of textiles in the world, they are an essential type of textile knowledge. The pursuit and worth of such ideas should not be dismissed by the art college system, if that is where textiles studies are pursued.

The dominant academic position of traditional art history, and its wide relevance, overshadows the legitimate and keenly-felt need for focussed textiles history. It is reasonable that students majoring in textiles should learn some of that history, if their studies are intended to give them a deeper understanding of textiles. Textiles history requires interpreting the relations among technical and materials history, the evolution and exchange of cultural and technical ideas, and features of economic and social import, in balance with those of the development of imagery, symbolic expression, meaning and patronage. Students also need ways to better understand the meaningful contexts of the foreign textiles which inspire them aesthetically and technically. It seems that only within such textiles scholarship can certain cultural meanings implicit in textile-making acts or knowledge emerge.

Unfortunately, the organization of NSCAD’s academic programmes around art history makes the provision of textile history, and non-Western material, difficult. Art historians still tend to dismiss the import of the above mentioned aspects, especially materials and technical contexts, as art history has not traditionally included those aspects. The art history department is unfairly expected to provide services they are unprepared for, because they have the requisite academic qualifications. And it is not clear that this should be the job of art history. Indeed, if the criteria determining the content of art history are not sensitive to what is important in textile history, including the possibility of meaning and symbolism deriving from making acts and usage, then art

history should not develop textile history. But if not within art history, then where? With no design or craft history programmes in Canada, the content and faculty specialties of available art history programmes severely constrain advanced study of textiles, decorative arts, or craft histories, and limit research of Canadian material. Those specialists are very rare. So, although textiles media have been taught at NSCAD since 1919, textiles history was introduced last year for the first time. Their continuation is uncertain, for it currently depends upon the specific qualifications and availability of the originating instructor as a parttime appointee.

Textiles studies in other fields, and symposia such as this one, clearly indicate the potential of textiles studies to reveal useful and interesting aspects of human experience. However, virtually all the advanced textiles-related studies carried on in Halifax goes on outside NSCAD, in universities with neither art nor textiles studies programmes, under the auspices of anthropology, women's studies, ethnography, etc. While this distribution of knowledge permits an invaluable range of useful perspectives and resources, it also prevents textiles scholarship from consolidating that knowledge coherently within a focal discipline with, by, and for the benefit of those students and scholars most clearly interested in it. Furthermore, this segregation of academic textile scholarship from textile-making students deprives them of a valuable role model, which might inspire or benefit their own scholarship interests.

Financial resources aside, textiles scholarship is also severely limited by the available literature and visual material. The literature available for textiles study is still considerably more sparse, and sometimes less scholarly, than comparable literature for art history, especially regarding contemporary textiles. Textile scholarship is needed to identify and fill the gaps, to expand the points of view available for discussion, and to describe and evaluate the range and variety of both historical and current textiles and practices. Visual resources require similar attention. In particular, textiles study is significantly tactile and structural. Neither of these aspects is adequately handled without a broad, well-documented study collection of actual textiles, accessible to all. Students gain much more from actual textiles examples than from slides. This is especially important to develop at NSCAD, as access to actual textile works in museums is rarely available. It is unfair to fill this need through instructors' collections, and the results of doing so will be uneven.

Despite the stress on the intellectual nature of visual art, NSCAD students and some instructors often resist academic approaches and standards, and their importance in making the fine arts degree a meaningful achievement and credential. But regarding academic approaches as unconnected or antithetical to studio-making experience prevents both from achieving the maximal benefit. Articulation and careful examination of criteria, visual effects, and ideas is not incompatible with the intuitive processes of artistry. Instructors must be able to articulate and lead productive discussions about what qualities to seek and value in objects, and why, and what kinds of processes and strategies to practice or attend to during or after the making process. Good scholarship is needed to develop fine but crucial distinctions, clarifying issues of language and interpretation important in understanding the communication interaction at the heart of

both visual and educational practice. Some of that scholarship exists in the field of art education.

The literature of art education examines many questions confronting post-secondary art instructors, not only about teaching and learning, but also about aesthetic sensitivities and the nature of visual arts. Art educators propose theoretical foundations to assist in developing effective studio programmes and seek to understand the processes underlying learning, creating and interpreting material artifacts. Unfortunately, these resources of art education are rarely sought out. Often the very teachers most interested in educating students to professional art practice are themselves not well-educated in the profession they practice – education. An exhibition record is a primary criterion for art college faculty, perpetuating the idea that art teachers are hired as artists, not teachers. Not only is an exhibition record not related to teaching ability, it is biased against some scholarly approaches to textile making, to which exhibiting may not be relevant. This prejudice against education studies is also reflected in the limited and random art education training and unguided experience required at the MFA level, despite the fact that this is a terminal degree for teaching. Several unexamined assumptions about post-secondary teaching underly this situation. One is that the main role of instructors is to spot and cultivate talent. Another is that observation or practice alone will educate students adequately, in art-making and in teaching. Another is that art education studies have nothing to offer to the teaching of art. These assumptions ignore that teaching is a specific practice with its own useful and necessary content which deserves equal consideration alongside clearly understanding the content being taught. Effective teaching depends on understanding interactive communication – both verbal and demonstrative – and interpretive processes, as well as the many ways by which learning can and does occur. Carefully directed and sensitive orchestration is needed to evaluate and cultivate students' talents, abilities, and understanding in the desired directions. Teaching effectiveness cannot be preprogrammed, but it can be assisted through better provision of teaching and evaluation skills, curricular planning and administrative issues, with regular guidance, discussion and feedback to and among MFA students about their teaching, learning and making experiences.

Communication is also a vital aspect of making and interpreting textiles. Communication and interpretation both revolve around meaning. Art college instructors try to guide students towards effective matching of ideas with medium, to convey or evoke meanings. It follows, then, that understanding how things mean is important to the understanding of material artifacts. What is often overlooked, however, is that meaning also emerges from participatory experience with objects, beyond contemplation. Material culture studies of textiles reveal that their meaningfulness often depends as much or more from their contexts of making and use as from any symbolic representations. Indeed, the power of a symbol to mean anything frequently arises from the use or role of what is signified, and ensuing use of the symbol. From this perspective, traditional purposes, the urge to make by hand, and the satisfactions derived by amateurs from tackling the challenges of textile making, are also vitally relevant to understanding the meaningfulness of textiles and are worthy of scholarship, in addition to the resulting objects.

Many art college instructors do operate with broad conceptions of art, able to accommodate a range of textile work. The current vagueness of conceptions of art can be helpful as much as detrimental. But this vagueness also masks crucial disjunctions and omissions. Not all artifacts are art in the contemporary art world sense, not do they seek to be. Nevertheless, textiles and crafting scholars must confront the wide-spread, institutionalized attitudes about art – and non-art – as well as their own, if they are to attain the desired progress, respect, support and on-going vitality of both textiles scholarship and making practices. In addition to the passion, commitment, evangelizing and careful scholarship described and demonstrated by others here, this confrontation requires thorough, rigorous, philosophical development of the necessary concepts and positions, encompassing and expanding relative to, and often from within, the art world.

If the study of material objects is important because they are products of purposeful human acts, and thereby carry meaning, then perhaps meaning and how it is generated and affected by human acts is an important bridge linking media and different worlds, which textiles and art education scholarship can help build. For Canadian liberal arts programmes, this expansive humanities approach seems richer and more generally valuable than a primarily professional or vocational model.

Conservators' Approaches to Viewing Textiles

Harold F. Mailand

Abstract

Though conservation is often thought synonymous with preservation treatments, this discipline also includes numerous approaches to examination and investigation that can offer a more complete understanding of a textile. In addition to prolonging the life of an object, a conservator works to determine the piece's construction, materials, condition, and authenticity. These approaches can range from "low tech" means such as the use of the unaided eye to sophisticated scientific instrumentation.

Systematic visual examination procedures can provide a framework for solid data that can be used for comparative analysis. Scientific examination can supply information about the materials used in the textile's fabrication, various stages of construction, later alterations, and its' present condition. In a museum this evidence is an invaluable guide to the curator in charting the history of a piece, to a collector or dealer in supporting the object's "story line", and to the conservator in treating it.

To gain these viewpoints a conservator may put a particular object through a series of low and high magnification examinations, chemical tests, and photographic procedures. This paper will present approaches which have been explored during the course of treating textiles.

Selected case studies will be presented that describe the methodology used along with the subsequent understanding gained from these investigations.

Introduction

When you think of a conservator, you may imagine someone wearing a lab coat and/or someone being referred to as a "pseudo-scientist or as a "pedantic, nay-sayer". I want to assure you that I now only wear a lab coat to take off the chill during the summer months in my climate-controlled lab. I am not a scientist, so if I can understand and find value in the following, you may also find this paper of interest to you. What I would like to do is share with you some procedures that my colleagues and I have used ourselves, or have collaborated with specialists in other fields to gain a deeper understanding of the complex arena of textiles.

In the late 1970's and the first half of the 1980's, this textile conservator was part of a dynamic conservation team with specialists in painting, sculpture, and paper at the Indianapolis Museum of Art (IMA). It was by then a matter of procedure for objects entering the museum as purchase considerations and gifts for the permanent collection, or loans for temporary exhibitions to go through an examination process to determine their materials, techniques and conditions. This information was then presented to the curatorial board which they in turn could consider the findings and get a better idea if the object being considered was authentic, and the materials and procedures to stabilize the object before it could enter the permanent collection or to be placed on exhibition. For this procedure, the data from each object was recorded on specially

designed worksheets. Along with black and white photographs or color slides this documentation was kept in a permanent file for future research. This form of detailed analysis generally does not appear on a standard accession card file, a computer data entry set-up, exhibition label, or catalog. An exception to this was the seminal work published by the Indianapolis Museum of Art which celebrated its centennial anniversary in 1983 with an exhibition of its textile and costume masterpieces. The catalog, collated by the late Peggy Gilfoy, brought together the curatorial expertise of her colleagues, as well as data and research from other sources. This proved to be a unique venture between museum curators and conservators, and analytical scientists in the academic, industrial, and the research and development community. It provided a valuable reference for future research as well as comparisons of similar textiles and costumes. Following are brief reviews of the procedures used for this publication and subsequent analytical work by others in the field of textile conservation.

Examination and Photo-Documentation of Textiles using Visible and Invisible Radiation

Visible light: Most conservation work and examination procedures are done under normal light conditions, in other words: daylight, incandescent or fluorescent light with the unaided eye. Ambient or directed light sources are generally the first means of looking at, and documenting an object to assess overall condition and construction. Transmitted light, or light that is projected behind the object, is helpful in observing specific condition problems, such as abrasion, slits, and loss. Raking light, which is light cast across the object, can detect surface anomalies such as old crease lines, impressions from missing embellishments, or perforations from previous stitching.

Structural Analysis: To analyze a textile's weave structure, embroidery stitches, and the twist and ply of individual yarns the unaided eye is possible, but more information is discernible through a simple mono or stereo-microscope with a 10 x to 20 x magnification and directed light.

Thread Count: To determine an accurate thread, mesh, or knot count of a textile a monocular instrument with an interchangeable 7X or 14 X lens and touch control counter is used.

Fiber Identification: Individual elements of construction are identified through micro-sampling. Fragments of each different fiber component (warp, weft, and/or surface embellishment) measuring approximately 1/8" are placed on a glass slide, separated and observed with transmitted or reflected light using a microscope capable of higher magnification. The individual characteristics of the fiber are then compared to standard (i.e., known) fiber specimens.

Photo-Documentation: Along with written records, photographic procedures are indispensable aids in documenting the physical components and condition of a textile. Photographic instrumentation can document what the eye can see under normal light, and with appropriate filtration can record non-visible radiation. Most conservators use 35 mm color slides, or work with professional photographers to obtain 4 x 5 in color

transparencies or black and white prints. By employing photomicrography a more detailed and permanent record of a particular construction or condition can be provided. By using a camera and various kinds of microscopes it is possible to enlarge an area from 10X magnification with an ordinary microscope, to 5,000 X magnification, and greater when necessary, with a scanning electron microscope. This form of examination requires the removal and mounting of a small sample, but provides a wealth of detailed information. The photographic documentation generated precludes the necessity of re-examining the piece, and therefore spares the piece from unnecessary handling in the future.

Ultra-Violet Fluorescence: The degree to which textiles absorb ultraviolet, as well as the amount of visible fluorescence they produce, is of interest to the conservator. By viewing a textile under ultraviolet light a conservator can discern irregularities on the surface, such as dyes, fabric finishes, repairs, previous treatments such as, bleaching, adhesives, or cleaning with optical whiteners or brighteners. A common "black light" fluorescent tube can detect such anomalies, and a camera which is fitted with a filter that absorbs other wavelengths can record visible fluorescence.

X-Radiography: X-rays are capable of penetrating substances that appear opaque to the unaided eye. Exposing film to x-rays as they pass through an object produces an x-radiograph. The different densities of the different materials, and their ability to absorb, or transmit the x-rays produces an image on the film. This method has proved useful in examining multi-layered textiles without physically separating and removing original material for analysis, and thus disrupt the historical integrity of the piece.

Examination of Textiles with Chemical Dye Tests

Thin Layer Chromatography (TLC): Mary Ballard, at the Smithsonian Center for Materials Research and Education, Washington DC, has been instrumental in introducing many conservators to the natural dye analysis work of the German scientist, Dr. Helmut Schweppe. His testing procedures are carried out with simple equipment to extract natural dyestuffs from old samples. Thin layer chromatography can be carried out with minute samples, and identification is made with known comparative materials.

Schweppe Aniline Dye Test: Polly Willman has described an approach to determine the presence of aniline dyes found in the First Ladies collection, Smithsonian Institution, Washington, DC. The purple dye in the supplemental wefts of the flowers in the gown worn by Mary Todd Lincoln 1861-62 was tested using the Schweppe Aniline dye test method. A small thread sample was placed into a "watch glass"; sequential solutions of sulfuric acid, and water were added, and the color changes were noted. The dye in the supplemental wefts tested to be Perkin's Purple (mauvine). Not only did this test confirm that it was an example of the first synthetic dye patented in 1856 by Perkins, but also how rapid the industry adapted to this new dye technology, and that Mrs. Lincoln was indeed at the forefront of fashion.

Specialized Methods of Examining Textiles

In 1982-83, as we were preparing textiles for the IMA Centennial Exhibition, we noticed that metallic threads were used by many cultures over the centuries, and realized that we knew very little about this technology other than to say they looked like gold or silver. So one day Dr. Leon Stodulski, Associate Professor of Analytical Chemistry at Indiana University Purdue University Indianapolis (IUPUI) was in the IMA Conservation Laboratory, and I approached him with the question of how can we learn more about precious metal in textile and costumes. His eyes lit up and then he went over my head with what could be done with the right instrumentation. We did not have it, he did not have all of it, but local industry did, and was happy to help us with our study.

Atomic Emission Spectrographic Analysis: This analysis was performed at IUPUI through micro-sampling. A 3 mm length of the sample was removed and placed in a graphite electrode, packed with pure graphite, and subjected to Atomic Emission Spectrographic analysis. The metallic elements present were determined spectrographically and estimates of the relative amounts of gold, silver, copper, and other elements in each strip were obtained by comparing spectral line intensities with a series of known standards. Each element could therefore be identified as a major, minor, or trace amount.

Scanning Electron Microscopy (SEM): This process involves examining a cross section of the metallic thread that has been mounted in epoxy resin. The sample was then sectioned by cutting it perpendicular to its length using a diamond knife. This specimen was then placed in a vacuum chamber of the microscope and scanned with a narrow beam of high energy electrons. Using an x-ray energy analyzer, the scientists could determine the identity and estimate the relative amounts of the metallic elements present throughout the strip. Photographs were taken for study of the specimens at magnifications of up to 5,000 x.

Note: By taking a closer look via the above two methods we were able to categorize the different manufacturing techniques employed by the metallurgist. We also learned more about the composition of the metal strips wound around the core thread in terms of major, minor, and trace elements. This study suggests that there maybe identifiable technical and compositional patterns that can be used to help date and authenticate unknowns.

Energy-Dispersive X-Ray Fluorescence (XRF): This approach is used for the characterization of metal alloys, glass, ceramics, and pigments. This analytical technique is very quick and entirely non-destructive. Before Perkin's discovery of the artificial dye "mauvine" there were innovations in the 19th c. that led to the development of "mineral dyes". These colorants were based on inorganic paint pigments that were applied to a textile surface. Attempts to create fast and inexpensive dyes were patented and documented in the textile trade literature. Thus by determining the existence of mineral dyes on textile goods it could help to distinguish this technology as well as to date the object. XRF was applied by Joy Gardiner, and others at the Winterthur Museum which did indicate mineral dyes were used in early 19th c. American Quilts found in their collection.

Observations, Speculations, and Connections

Sometimes just by examining and treating textiles we can just be lucky in gaining insights. By working directly on tapestries over the past 25 years I have developed a working theory that there was a Renaissance in repairing tapestries in the last two decades of the 19th and the first decade of the 20th c. Reweaving gave work to skilled weavers whose market for new tapestry production was crashing. In turn this met the need of a new market, collecting historic tapestries for the new museums and mansions in the States. While preparing a pair of tapestries for cleaning we discovered rare documents attached to the top backs of the tapestries and behind the linen lining. Needlepoint on canvas labels stated that these tapestries were repaired in London in 1889 by G.

Herpin & Co.. This not only added to the provenance of the tapestries, but also gave us a clear point in time when aniline dyes, and weighted silk yarns were available in the market place, and incorporated in the efforts to preserve these objects. Because of the characteristic fading and color change of early synthetic dyes, and the accelerated break down of weighted silk yarns we know when and where this work was introduced.

As Polly Willman was preparing the First Ladies Gowns for re-exhibition, she took a closer look at the gown worn by Mrs. McKinley, 1901. The silk satin ground was in poor condition with numerous vertical slits, especially where exposed to light. A standard burn test was conducted. The warp threads reacted normally by melting and forming a brittle bead. However, the weft was non-characteristic of silk in that it left a white ash. Under SEM the warp and weft were analyzed and showed the presence of tin in the weft. This shows that the silk was weighted in the yarn stage, not the fabric stage. This also explains why the degradation was isolated to the weft yarns, which created only vertical slits. This gives new insights into the weighted silk problems that haunts many of us today.

Along with my interest in the preservation of textiles, I am also interested in the preservation of rare livestock breeds. Yes, I grew up on a farm, and now I have a little farm where I have been involved in raising endangered breeds of farm animals. Where am I going with this? Well, during one of the American Livestock Breeds Conservancy (ALBC) annual meetings, I was enchanted to hear that work is being done to characterize certain breeds of sheep through genetic mapping. We have learned in the past decade that we humans have both common and unique characteristics that can be identified through our DNA. Likewise animal scientists are looking at micro-satellite places on the chromosomes that may characterize certain breeds within sheep. So what? Well we often just characterize most historic fibers as cellulose: cotton, linen, etc.; and protein: silk, wool, etc. which really, by itself, may not help in dating the object or give insight into its provenance.

Around this time we were treating a tapestry that had a lot of abrasion and loss of the weft elements. However this loss revealed the warps which had an intriguing use of both natural "white" wool and pigmented "black" wool. This seemed uncharacteristic of most Northern European tapestries of the 17th c. which have uniform unpigmented wool warps. This discovery got me questioning again: What did these sheep look like? When and where were they raised? What if we could determine the breed of sheep by just a

small sample of its wool or hair? For example, if the sample had characteristics of a Merino we could deduce that it was from one of the earliest attempts at European selective breeding practices during the 18th c.; if a particular sample proved to be from Navajo-Churro sheep we could say that the wool was from sheep raised in the Southwestern United States and not a commercial wool produced from sheep raised in the Eastern United States or from European imports, etc..

After listening to Elizabeth Barber's paper this spring on her research on wool mummy covering's from Urumchi, I was even more curious about what kind of genetic information could be extrapolated from wool. She has found that these mummified people were Caucasian, but lived and died in a desolate part of present-day Chinese Turkistan. She took a sample from local live sheep that she found at a nearby zoo for comparison with the mummy wrapping fibers. This got me going again! Were the sheep that produced the wool from these early people from China, or were they brought in from the West? Likewise, was the wool found in Coptic textiles from native sheep on the African continent, or was it imported from the North or Eastern Mediterranean areas. This raises new questions and new ways of tracking trade around the world. Documented samples of wool found in tapestries and other textiles could provide a set of known controls for comparisons. Hence, we would have another tool for dating and establishing the provenance of "unknown" or questionable attributions in many collections around the world. Again, it is all about comparisons to known controls, taking the time, interest, and making the connections.

Conclusion

Today I concentrate on my business which preserves textiles for museums and private clients. I do not conduct a lot of formal analysis, because my clients generally do not request it. Nevertheless, I still have questions as we continue to treat a wide range of textiles and costumes. I may not have a lot sophisticated equipment in my own lab, but I know I can get information from other sources if I am really haunted by something or that my client too, is curious.

Personnel in the conservation, scientific, educational, and business communities have much to offer in the line of equipment and expertise. Often these fields are unaware of the questions you and I may have. Likewise, we as historians, curators, educators, and conservators are not aware of their equipment and expertise nor how to apply it to our concerns. Often they can be lured into sharing. I was surprised with their willingness and interest to share in the past. So please think of Conservators as a viable link to gaining new insights. Conservators love problem solving, challenges, and to be engaged. Just ask us. We may not know all the answers, but we both will learn something by working together.

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References

Barber, Elizabeth Wayland. 1999. *The Mummies of Urumchi*. New York and London: W. W. Norton.

Barber, Elizabeth Wayland. 2000. The Mummies of Chinese Turkistan, Keynote Address. *North American Textile Conservation Conference 2000: Conservation Combinations, Preprints*. Asheville, NC.

Gardiner, Joy, J. Carlson, L. Eaton, and K. Duffy. 2000. "That Fabric Seems Extremely Bright": non-destructive characterization of nineteenth century mineral dyes via XRF analysis". *North American Textile Conservation Conference 2000: Conservation Combinations, Preprints*. Asheville, NC: Biltmore House Textile Conservation Staff. 101-115.

Gilfoy, Peggy Stoltz. 1983. Fabrics in *Celebration from the Collection*. Indianapolis: Indianapolis Museum of Art.

Schweppe, Helmut. 1980. Identification of Dyes on Old Textiles. *Journal of the American Institute for Conservation* 19:14-23.

Schweppe, Helmut. 1987. Practical Information for the Identification of Early Synthetic Dyes/Practical hints on dyeing with Early Synthetic Dyes". Washington DC: Smithsonian Institution, CAL.

Schweppe, Helmut. Practical Information on the Identification of Natural Dyes on Historic Textiles. Washington DC: Smithsonian Institution, SCMRE. Videotape #V301

Willman, Polly. 2000. "First Ladies Gowns". Little Rock: Old State House Museum. Unpublished lecture.

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Discussion of Recent Approaches to Expanding Textile Studies

Patricia A. Cunningham

We are all committed to extending the knowledge of textiles. These papers offer outstanding examples of how museum curators, an academic, and a conservator have expanded audiences and brought new materials to telling the textile story. Major themes have emerged from their papers, and are worthy of further consideration.

First, it is quite apparent that professionals in museums need to work together. Harold Mailand has shown what the conservator can bring to the curator in the interpretation of textiles. I contend that textile department and costume departments should work together, and collaborate with other departments in their institutions. I am sure that many do this now.

Second, it is clear from Gayle Strege that costumes should be thought of as part of textile collections, and that flat textiles, those that are really draped clothing, should be viewed as such, literally. Again, this is an opportunity for collaboration. In university textiles classes students should have the opportunity to become engaged with the finished product, which could be an upholstered chair or a swimsuit. Karen Herbaugh, also made this clear for the museum exhibition. Why not see the whole picture from fiber through manufactured product and end use, and maybe even reuse. The story has a beginning and an end.

Third, Deborah Brothers has shown us how academics can think outside of the box, and engage academics from a broad spectrum of fields to consider the importance of textiles. I would like to see Regional Centers for the Study of Textiles and Dress that would allow such events to occur more easily.

Fourth, these scholars have made it clear that we need to rethink how we consider textiles. But how should we think about them? They might be beautiful objects, but were they meant to be thought of as art? Was/is their usefulness to their makers and users their most important trait? Do we distort their cultural meanings by hanging them on walls. What can we learn about a culture by studying them in full--their materials, design, makers and uses. What did they mean to their makers and users; what do they mean to us now?

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**Bringing It Home: Extracultural Experiences in the Art of
Carolyn Price Dyer**
Mary Lane

"We travel, some of us forever, to seek other states, other lives, other souls."

This quote from The Diary of Anais Nin, might well describe many artists' experience. The journey that solidifies creative impulses into aesthetic objects often involves experiences that lie outside the artist's own culture. These other lives and other states of perception act as catalysts, generating new forms in the liminal space which travelers' frequent. For Carolyn Price Dyer, the germane shifting cultural boundaries are those between the Western aesthetics of Modernism and the Bauhaus and the Eastern aesthetics of Asian art. Trained under the former, the latter Asian influences spring from graduate studies in Asian art history, work experience at the Seattle Asian Art Museum and travel experiences. My approach in this paper will also be based on the idea of travel, of developing a narrative path through the artist's work, hoping neither to cover the entire diversity of her work nor every aspect of the work that I do discuss. Rather, I hope to trace certain themes in Dyer's work as they develop over time. My own interest sends me off in search of those special cases when form and content, technique and meaning merge, working together to produce art that is both sensual and intellectual, physical and conceptual.

Stylistically Dyer's work reflects her interest in Asian art, the clean lines and abstraction of Modernism and the sensitivity to materials promoted by the Bauhaus. Dyer's spare aesthetic and deliberate compositional approach balances the energy of line, the weight of mass and the emotion of color, or color's absence. Her work relies on the power of the materials and the suggestiveness of simplified forms to develop content. *Great Forest II* is a 46" x 80" tapestry from 1982 which illustrates this aesthetic. The flattened space and abstract forms reject the idea of mimetic art based on illusionistic techniques. Instead of creating a transparent window onto the world, this tapestry calls attention to its identity as an object, a piece of cloth whose image is a product of a particular process of making.

Textile artists often speak of the importance of process in their work, comparing it to a journey. For the artist who weaves this journey starts at one point and moves in one direction. Progress is marked by the accumulation of hundreds, or even thousands, of repeated actions. The repetition inherent in the weaving process is, for many artists, meditative. Images composed of solid form and strong color, such as *Great Forest II* reflect the technical and material reality of weaving, the building up of shapes and the density of color. Exploiting the qualities of materials and the techniques of weaving to develop meaning in the image results in a merging of form and content. Another example of this fusion is the artist's use of a colored warp which is allowed to peek through the weft. The colored warp highlights the texture of the weaving and adds an additional dimension to the image, sometimes reinforcing the color of the weft, sometimes subduing the weft color through the dissonance of complementary colors.

The juxtaposition of circles and lines characterizes much of Dyer's work. Her use of these two elements has followed many paths. Lines are agents of energy, directional forces which guide our journey through the image. Circles are more static forms, in

which the energy of the line turns back upon itself. Compositionally circles can create areas of density and weight or they can open up the surface by creating voids. The circle is a symbol of completion and wholeness. In Taoist thought it is the coming together of the Yin and the Yang, two complementary forces which must be united in order to achieve the perfection of the whole. The communicative power of simple forms such as the circle and the square is referred to in *Signals II*, a 33" x 62" tapestry from 1968. The woven shapes suggest a code, such as road signs, in which the combination of shapes and colors have specific meanings. Taken to this degree of abstraction, images become language, symbolic forms whose meaning is arbitrary and conventional.

In Japan and China the departure from naturalism and the tendency towards abstraction is considered to open up the poetic and metaphoric potential of an image. This belief develops out of the Tao, the metaphysical and spiritual ultimate which itself is completely abstract. Consequently, less naturalistic work is considered suggestive of the spiritual world.¹ Perhaps the ultimate example of this is the mandala. Mandalas are images which combine geometric figures such as the circle, the square and the triangle. Mandalas represent wholeness, the perfect state which results in an ordered synthesis of all dualisms. Mandalas are used in meditative practices to attain spiritual states of consciousness.

Dyer has worked with the idea of mandalas in a series of pieces that combine weaving, collage and surface design. *Golden Mandala*, a 40" x 30" piece from 1993, combines a cotton warp with cut paper weft. Dyer began to incorporate paper into her weavings in the late 1980s. She was attracted to the textures and colors of paper and enjoyed both its feel and sound. The papers that Dyer uses are found material. They have, through chance, intersected with her life. Many contemporary artists have been drawn to working with found materials. Pedestrian materials, such as reused paper are cheap and abundant. They do not have the connotations of the more precious materials associated with art making. Gold, marble, silk or even oil paint suggest a sumptuousness and economic value that supports a more elite attitude towards art. The familiarity and abundance of found materials, on the other hand, offer a more democratic vision of art making.

In *Golden Mandala* the paper used for the weft is a Taiwanese newspaper which the artist acquired while she was teaching at Cal Tech. Dyer cannot read their language, and after being cut apart for weaving, it might be difficult for anyone to follow the text, however, the papers retain their meaning, both as a cultural product and as a source of historical information. The complex layering of meaning which arises out of the material's former use and the artist's intent and manipulation of those materials produces a polyvalent voice within the artwork. The artist relinquishes a certain amount of ownership and control by using materials which bring with them their own voice and significance. In the case of *Golden Mandala* the identity and literal content of the newspaper grounds the work to our life on earth at the same time that the surface image of the mandala offers a path to the world of the spirit.

The layers of meaning found in the Mandala series is also reflected in Dyer's technical process which combines weaving, drawing and collage. Mixed media approaches have been a hallmark of late twentieth century art. They reflect an interest in complexity and hybridity, in density and layering. They thwart traditional categories of art making. In *Golden Mandala* the artist has drawn upon the collaged newspaper and

embellished it with gold foil squares, her aunt's candy wrappers. It is then fused onto a translucent backing material and cut into strips for weaving. Dyer's work is all plain weave, the most simple of the weave constructions. This technical simplicity focuses attention on the materials and on the surface images. In *Golden Mandala* the thin, widely spaced white warp highlights the wide, flat paper weft. The rigid perpendicularity of the warp and weft contrasts with the freely colored circles, balancing the more spontaneous energy of the surface imagery with a formal grid. The web of the woven grid flattens space at the same time that the more fluid circles open it up.

In the more colorful *Media Mandala* of 1992, made from the Los Angeles Times funny papers, the painted circles are surrounded by a diffuse halo of color. This aura suggests both the attainment of a spiritual state and the sun itself. The spiritual has been associated with the sky in many cultures and it does not seem surprising that Dyer began, in the mid 1990s, a Cosmos series. Similar in both materials and technique to the Mandala pieces, these works leave behind the more structured notion of a mandala, traveling into a space that is both celestial and contemplative, perhaps to the space which the mandala makes attainable.

In *Black Cosmos*, which measures 30" x 40" and was created in 1996, the rigidity of the rectangular format is broken by the unbound warp ends. It is as though the energy of the cosmos could not be contained within a right angled format. *Small Cosmos*, from the following year, shows Dyer's continued use of the Taiwanese newspapers as a base for her work. The circle is now a negative space cut out of the paper, a void opening into the background. In Eastern philosophy voids have a psychological intensity which is suggestive of the non material nature of the Tao. Voids also highlight the importance of the relationship between positive and negative space. The balancing of these two forces so that neither overwhelms reflects the synergy of the yin and the yang.² In the Cosmos series these counteracting forces also include the tension between the regularity of the woven structure and the spontaneity of the surface design.

The non symmetrical composition used in the Cosmos series has freed the circles from the mandala, allowing them to absorb content, becoming stars, suns and black holes. The steady, measured path of the warp under, then over the paper weft binds the celestial orbs with the earthly and mundane reality reported in the newspapers. Instead of forming a uniform and uninterrupted grid over the surface, however, the different colors of the warp disappear and reappear as they cross the drawing and collaged paper. Functionally the warp binds, but conceptually it is fraught with holes. The three dimensional space of the Cosmos has overpowered the two dimensional grid, allowing a freer interaction between the ethereal painted surface and the earthly newspaper.

The dominance of the surface imagery increases through the Cosmos series. In *Black Energy Cosmos* of 1999 the artist introduces dashed lines. The static woven grid is overpowered by the energy of the drawing. The surface undulates as the drawn lines fly out of and spin back into the voids. This effect is intensified by the use of opposites - the colors black and white and reflective and nonreflective materials. It is the tension of these kinds of oppositions, or dualities that the return to a symmetrical mandala seen in this piece can unify.

The most recent pieces in the Cosmos series, such as *Yellow Cosmos*, *Sky Flag*, approximately 40" x 30" and created in 1998 are collaged together, drawn upon, but never cut into strips and woven. The power of the woven grid to contain the surface

imagery has been abandoned, thereby dissipating the tension between the openness of the celestial orbs and the bound nature of weaving. In addition, the density of the drawing masks the earthly reality of the newspaper. In *Yellow Cosmos* the energy of the radiating dashed lines is unbroken as it speeds around the celestial bodies, setting them spinning. In *Blue Cosmos* the drawn line has become so dense that it begins to coalesce into circles of its own. The energy in both of these pieces is intense and unbounded, spiraling into, and off of the surface of the work.

At the same time that Dyer's artistic journey was focusing skyward, she was also noticing changes in the nearer atmosphere. The three weavings on the left, *Window II / Gray Sky*, *Window I / Dark Sky* and *Window III / Red Sky*, also titled *Bad Air Day*, range from 60" x 36" to 40" x 30". As part of the Particulate Matter series they reflect the artist's growing concern with the deterioration of the air quality in her environment. The perspective of this highly distilled image is that of looking out a window at the sky. The window is framed on the bottom by the ends of a scaffolded warp, the actual process of making the work again becoming part of its content. The reduction of the image to two or three rectangles is a calm respite from the spiraling energy of the *Cosmos* series. This sparseness reflects the gravity of the subject matter, quiet, somber and serious.

The Particulate Matter series is woven from the now familiar Taiwanese newspaper, a particularly well suited material for the subject matter. The printing on the paper produces a gritty, steely gray that suggests the build up of soot and grime. In addition, it is the paper pulp industry that is a major contributor to the declining air quality in Dyer's surroundings, the Pacific Northwest. Ironically, the artist has woven these pieces with recycled paper. The simplicity of the flat, broad weft traveling under and over the widely spaced thin warp creates a transparent structure that draws attention to the materials. The colored warp adds a subtle variation to the grays - Pacific Northwesterners are astute at reading grays - but the brightness of the red as it protrudes beyond the edges of *Window III / Red Sky* hints at the artificial, manipulated quality of our surroundings. The exposed warp ends and the bits of paper weft extending beyond the edges suggest the chaos and imbalance that humans introduce into their environment.

The intense mining of the Taiwanese papers as a material continues in the latest works of Dyer. *Golden Till* and *Granite Till* both measure 18" x 18" and were woven in 2000. Till is a heterogeneous mixture of sand, gravel and rocks deposited by a glacier. It is also a verb that refers to turning the earth, which is just what a glacier does in order to deposit its till. Dyer's attention has returned to the earth and to a very distilled landscape. The contemplative mood of the quiet colors and the abstracted nature of the images lend these works a meditative and metaphoric quality. The paper in these pieces has been spun to form a kind of paper yarn. The irregularity of the twists and the reflective qualities of the papers suggest the furrowing of newly tilled fields and the golden rows of ripened grain. This use of the materials to develop meaning has been consistent throughout Dyer's work. Her abstract, minimal aesthetic highlights the power of the materials' physical qualities to suggest content. This fusion of form and content within the language of abstraction creates a depth to the work that pulls the viewer in, asking for extended contemplation and multiple readings. It is that suggestiveness that has guided my path through Dyer's work.

Endnotes

- ¹ Jerome Silbergeld, Chinese Painting Style: Media, Methods, and Principles of Form (Seattle: University of Washington Press, 1982) 40-41. The connection between abstraction and the world of the spirit was also promoted by Wassily Kandinsky, Concerning the Spiritual in Art (New York: Dover Publications, 1977). Dyer admits the influence of Kandinsky, whose work was available to her at the Norton Simon Museum in Pasadena, CA.
- ² Silbergeld, 48.

Examining Mid-Century Decorative Arts: Pipsan Saarinen Swanson's Printed Textiles for the Saarinen Swanson Group

Ashley Brown, Curator, Henry D. Green Center for the Study of the Decorative Arts,
Georgia Museum of Art, University of Georgia

In 1923 Pipsan Saarinen Swanson (1905-1979) moved with her family from their native Finland to the United States and soon settled in Bloomfield Hills, Michigan near the newly established artistic and educational community of Cranbrook. The Saarinens' European home, Hvitträsk, was a cultural center in Finland—filled with beautifully handcrafted furnishings, frequented by noted artists and musicians, and designed by Pipsan's father, the illustrious Finnish-American architect, Eliel Saarinen. At Cranbrook, Eliel created distinctive modern structures for the schools, art academy, and faculty residences. The Saarinen family collaborated on the interiors of these buildings—Loja (Pipsan's mother) designed rugs, carpets, and upholstery fabrics that were hand-woven on campus, while Pipsan and her brother, architect and designer Eero Saarinen, contributed decorative ceiling and wall treatments and furniture designs. Through careful consideration of how each element would relate to its surrounding furnishings, architecture, and natural setting, the Saarinens created an environment at Cranbrook where art was integrated with daily life.

Pipsan's unique artistic heritage manifest itself in her varied and successful career as a designer. She not only explored many areas of design, including fashion, glass, metalwork, furniture, and textiles, but she also considered how her designs would relate to their settings, and as an interior designer, created many environments in which they were used. One facet of Pipsan's career which clearly illustrates her adherence to a total design concept is the set of printed fabrics she created for the Saarinen Swanson Group, a coordinated line of affordable modern home furnishings introduced in 1947. [Figures 1 and 2.] Approaching these textiles from the perspective of a decorative arts historian provides an opportunity to examine how they worked within the full home furnishings line, met the needs of postwar consumers, and embodied ideas inherent in Cranbrook.

In 1939, Pipsan, her architect husband J. Robert F. Swanson, and Eliel introduced the Flexible Home Arrangements line. This consisted of thirty-two pieces of natural birch furniture with simple, clean lines and an emphasis on versatility. Because the pieces were light-weight and of related proportions, they could be arranged to accommodate any size room. Pipsan later explained that she and her husband developed the furniture to meet a need—in trying to furnish the modern buildings that J. Robert F. Swanson designed, they discovered a lack of affordable modern furniture so they created their own.¹

Pipsan and her husband also faced the difficulty of finding appropriate modern home furnishing accessories for their projects, but it was not until after World War II that they were able to introduce the Saarinen Swanson Group. This new collection incorporated the Flexible Home Arrangements line and added twenty-two pieces of furniture as well as an assortment of accessories. For the Saarinen Swanson Group, Pipsan and her husband worked with four artists closely related to Cranbrook: Marianne Strengell, who designed the woven textiles; Lydia Winston, who was responsible for ceramic dishes and vases; Benjamin Baldwin, who created lighting fixture designs; and Charles Dusenbury, who made small sculptures. J. Robert F. Swanson designed metal

fireplace tools and worked with his wife on the additional furniture designs. Pipsan also designed metal items, lamps, a variety of glass objects, and printed textiles. As with the Saarinen family collaborations at Cranbrook, the Saarinen Swanson Group artists created elements that interrelated. While the earlier Cranbrook projects (c. 1925-1932) focused on individual objects for a specific location, the Saarinen Swanson Group sought to make good modern design available to a wide market. By working with major manufacturers and displaying their products in both museums and department stores, the Saarinen Swanson Group artists presented a modern line of furnishings and accessories that was both well designed and affordable.

The Saarinen Swanson Group display at the Grand Rapids showroom of the Johnson Furniture Company (manufacturers of the Saarinen Swanson Group furniture) presented a variety of rooms illustrating the versatility of the line by utilizing pieces differently from room to room. The varying range of room sizes and formality further emphasized the adaptability of the line. Through the Johnson Furniture Company's display, Pipsan illustrated her beliefs that rooms should not overpower the people living in them. *House and Garden* described the Saarinen Swanson Group arrangements as "backgrounds for living, not stage settings."² Pipsan achieved this by using limited patterns, usually only one, per room. As illustrated in Figure 3, she used her printed fabrics, in this case *Curliques*, to create the splash of pattern and color.

Pipsan designed seven patterns for the Saarinen Swanson Group: *Caprice*, *Dress Parade*, *Mardigras*, *Curliques*, *Low Tide*, *Vibrations*, and *Purists Choice*, all manufactured as hand silk-screened prints on a linen-type weave in cotton, rayon, and mohair by Goodall Fabrics of New York. These light-hearted, abstract repeated patterns represented the modern style. Though, like the Saarinen Swanson Group furniture, they were a conservative version of modern addressed to a middle to upper middle range audience and intended to be livable items rather than high design pieces. In 1947 the American Institute of Decorators gave Pipsan an award for her Goodall printed fabrics, indicating peer approval of her designs.³

The Saarinen Swanson Group textiles were printed in a special palette of colors devised by Pipsan and described as "fifteen shades with a fresh outlook on life."⁴ *House and Garden* noted that while there were several "exciting hues," emphasis was placed on "subtle combinations rather than sharp contrasts," in keeping with the idea that the Saarinen Swanson Group should create backgrounds for living.⁵

In addition to Pipsan's personal design background, the Saarinen Swanson Group printed textiles also reflect aspects of postwar American design. Though World War II ended in 1945, the magazine *Interiors* described 1947 (the year the Saarinen Swanson Group was introduced) as the first postwar year as far as furnishing fabrics were concerned because it was the first time that a reasonable supply of materials were available and that new designs were reaching the market.⁶ The method of production, silk-screen printing, also reflected a postwar shift. Prior to the war, most printed textiles were printed with engraved metal rollers, many of which were melted down for war use. After the war, it was more cost efficient to develop silk screens rather than new rollers. Silk screens could be changed easily and inexpensively, allowing textile manufacturers to keep pace with quickly changing fashions.⁷ By utilizing new printing techniques, Pipsan's textiles represent "modern" not only in their design, but also in their manufacture.

In 1948, Pipsan and her husband redesigned the Birmingham National Bank in Birmingham, Michigan, furnishing the interior with Saarinen Swanson Group items. Figure 4 illustrates the Directors' Room, with Pipsan's textile *Low Tide* serving as the room's single patterned element. Filling the room are simple chairs and lighting fixtures from the Saarinen Swanson Group. The designs created a modern atmosphere, but the understated arrangement maintained a sense that the space was intended for use. In the Swansons' new interior for the bank, modern design was subtly integrated into the daily activities. Figures 5 and 6 present the original classical exterior and proposed modern exterior for the building, illustrating the Swansons' goal of creating a total new environment.

Because Pipsan Saarinen Swanson's printed textile designs for the Saarinen Swanson Group were conceived as part of a larger scheme, they should be approached not as isolated designs but as part of the larger contexts of the Saarinen Swanson Group, Pipsan's design background, and modern American design of the postwar years. Examining Pipsan's textiles from the perspective of a decorative arts historian reveals how they closely relate to her unique background while embodying the styles and technology of their own time period. *House and Garden* noted that while the Saarinen Swanson Group was not directly a Cranbrook project, that it reflected "the Cranbrook principle that architects, art and interior design are mutually integrated parts of living."⁸ Like her mother's hand-woven textiles for Cranbrook, Pipsan's silk-screen printed Saarinen Swanson Group fabrics were designed to relate to their surrounding furnishings, architectural setting, and cultural environment.

¹ Letter from Pipsan Saarinen Swanson to Ann Stacy, Executive Director, Michigan Society of Architects, 29 July 1969. J. Robert F. Swanson and Pipsan Saarinen Swanson papers. Cranbrook Archives.

² "Art, Architecture and Decoration Merge Ideally in Saarinen-Swanson Modern," *House and Garden* (October 1947), 152.

³ Christian T. Fedderson, *Scandinavians in Michigan, Vol. 1* (Romeo, Michigan, 1968), 89.

⁴ General Session (Possibly Johnson Furniture Company), Evening May 5, 1947. J. Robert F. Swanson and Pipsan Saarinen Swanson papers. Cranbrook Archives. [The fifteen colors were: lacquer, chalk, yellow, lime, olive, sapphire, pumpkin, natural, beige, turquoise, brown, cerise, gray, caribbean, and chartreuse.]

⁵ "Art, Architecture and Decoration," 152.

⁶ "The Good Word in Fabrics," *Interiors* (November 1947), 101.

⁷ Mary Schoeser, *Fabrics and Wallpaper: Twentieth-Century Design* (New York, 1986), 79 and Paul T. Frankl, *American Textiles* (London, 1954), 10.

⁸ Art, Architecture and Decoration," 152.



Figure 1. Pipsan Saarinen Swanson with *Curliques and Mardigras*, 1947. Courtesy of Ronald Saarinen Swanson.

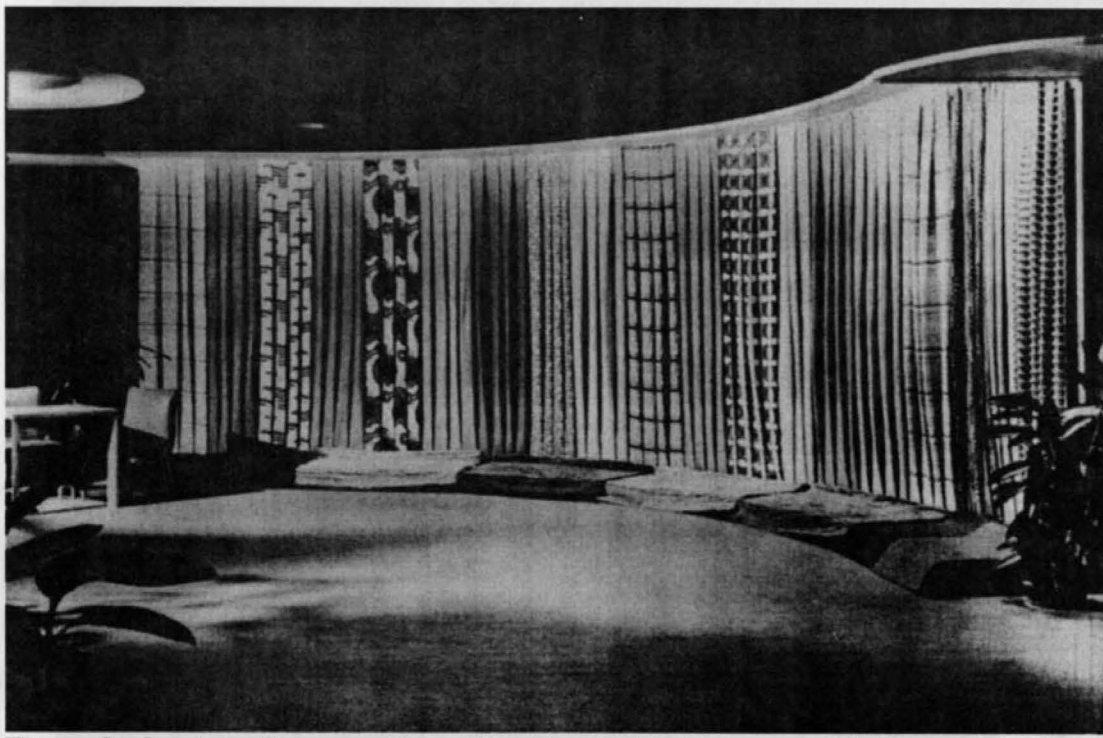


Figure 2. Saarinen Swanson Group Textiles, 1947. Courtesy of Cranbrook Archives



Saarinen Swanson Group Installation with *Curlicues*, 1947. Courtesy of Cranbrook Archives.

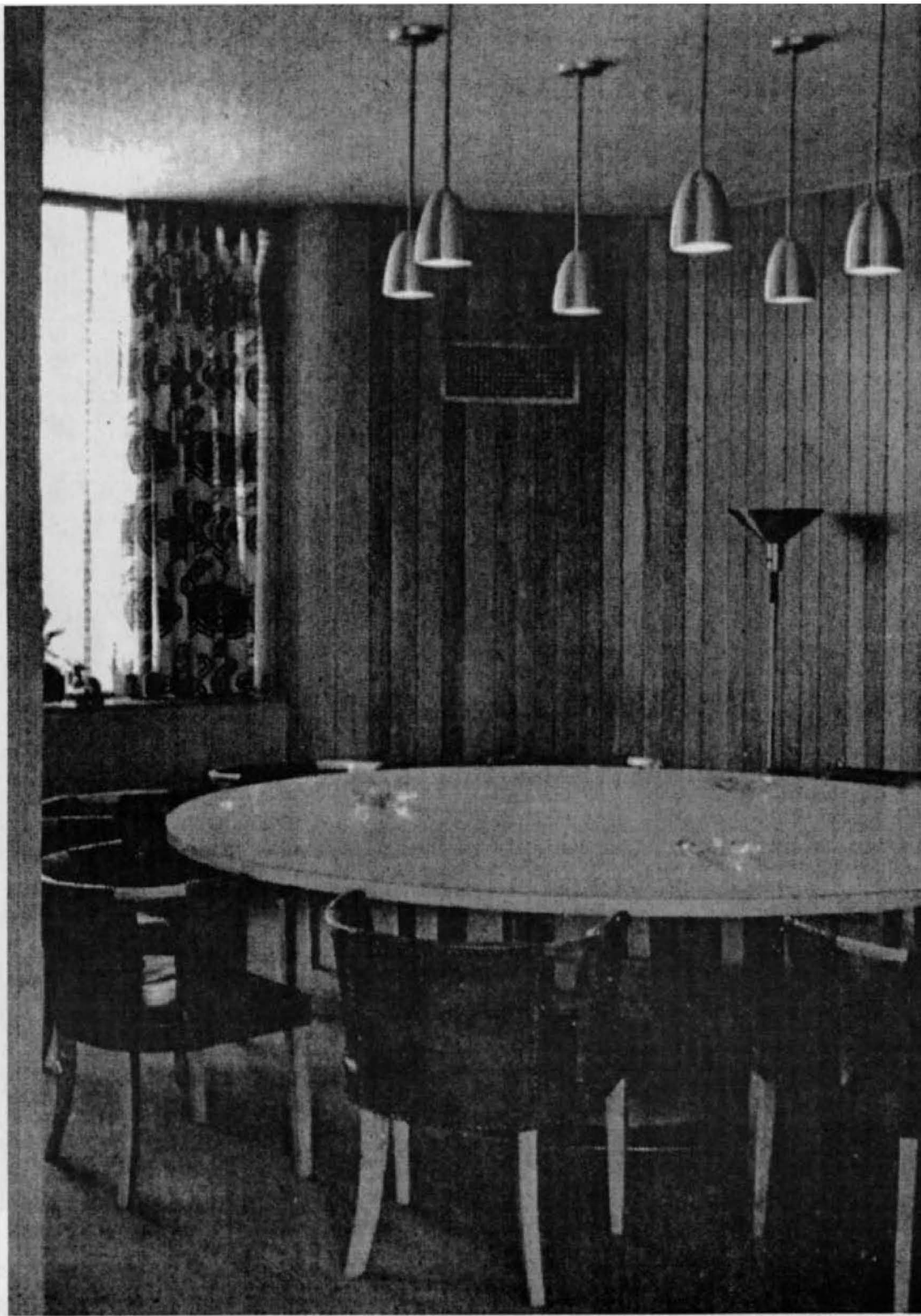


Figure 4. Directors' Room, Birmingham National Bank with *Low Tide*, 1948. Courtesy of Cranbrook Archives.



Figure 5. Birmingham National Bank Exterior, 1948. Courtesy of Cranbrook Archives.



Birmingham National Bank Proposed Exterior, 1948. Courtesy of Cranbrook Archives.

**From Paint to Wool:
Artist-Weavers at the Victorian Tapestry Workshop**

Tina Kane

Introduction

This paper considers the relation between painting and contemporary tapestry. I will be asking the question: does the translation of a painting into a tapestry accomplish something more, categorically, than would the painting on its own? As we will see, this question suggests another, larger one: did tapestry emerge in the twentieth century as an authentic, original artform in its own right?

For years tapestry was considered a mere decorative accessory to painting, in part, because the artist, the designer, did not participate directly in its actual production. In an attempt to redress this prejudice, a model of collaboration between artist and weaver evolved during the last century. This collaboration put the weaver on equal footing with the artist in the interpretive process. Now we may ask, how successful has that collaboration been? And moreover, has tapestry weaving changed significantly as a result? To address these general questions more specifically, I will focus on one workshop, the Victorian Tapestry Workshop (or VTW) in Melbourne, Australia.

The VTW is one of only a few successful tapestry workshops operating today. It was set up in 1976 on the initiative of the state government of Victoria through its ministry for the arts. The previous year, Archie Brennan, then Director of the Dovecot (now the Edinburgh Tapestry Company), had advised on the feasibility of establishing a workshop in Melbourne, and, upon his recommendation, Belinda Ramson came from the Edinburgh College of Art to train weavers. Accordingly, the VTW began operation.

Although there had never been a tapestry tradition in Australia, one of the elements contributing to the establishment of the Workshop in Melbourne was the fact that Australia is a wool producing country. Yarns suitable for tapestry have been designed and spun for the VTW. They use a worsted yarn in 3/20's count from a Corriedale crossbreed fleece, dyed on the premises with Ciba Geigy dyes in a palette of 371 colors.¹

But the more important reason for setting up a tapestry workshop in Australia had to do with the lively artistic community there and the historically strong interest in the visual arts. This created an atmosphere in which it was possible to obtain financial assistance from the government, which continues, in part, to support the Workshop. In the past twenty-five years it has produced over 250 tapestries for both private and corporate clients. It has been directed since its inception by Sue Walker whose administrative skills and artistic vision have been central to the Workshop's survival and success.

The Workshop's policy is to hire weavers who have been trained as artists, with the idea that this will facilitate collaboration between the artists who design the tapestries and the

weavers who work with those designs. This policy may sound uncontroversial, even commonsensical, but in fact it points to a long-standing question about the extent to which weavers actually interpret or "translate" an original work of art. To understand this we need to consider the historical context of the issue. Have tapestry weavers traditionally been active collaborators?

Cartoons

In 1854, William Morris, visiting the Gobelins Tapestry Workshop, remarked, "It would be mild to say what they [the weavers] do is worthless,...a more idiotic waste of human labour and skill it is impossible to conceive."² And in 1886 Jules Guiffrey, soon to become Director of the Gobelins himself, complained that, "By making the interpreter [the weaver] slavishly copy their paintings ...the artists reduce the weavers to an insipid and inferior role ..."³ Guiffrey and Morris were not alone in thinking that by the second half of the nineteenth century, and even earlier, the art of tapestry was in trouble.⁴

Is Guiffrey's complaint that the weaver had become no more than a skilled copyist valid? By looking at the format of the design, or cartoon, that the weaver was given, we can determine to some degree the extent to which the weaver, historically, either merely copied or actively collaborated. This can be gauged to some extent by the amount of information given to the weaver in the cartoons.

A cartoon is a full scale drawing or painting of an original design. Depending upon whether the loom was horizontal or upright, the cartoon was placed either under the warp or behind the weaver (in which case the weaver viewed it in a mirror). The degree of information given to the weaver in the cartoon changed significantly over the last five centuries. Before making the cartoon, drawings or paintings referred to as *modelli* were made.

In the Middle Ages, when Western European tapestry flourished, *modelli* for tapestries were line drawings with light color washes. There is not great deal of specific detail, but instead, a general outline indicating iconographic content, figure groupings, and narrative text. The only examples we have from the fifteenth century can be seen in the Louvre. They are for a series of tapestries about the Trojan War.⁵

One of the few surviving early cartoons we have is for a sixteenth-century tapestry which depicts the life of St. Paul. It is on display in the *Maison du Roi* in Brussels and consists of a chiaroscuro tempera painting on strips of heavy paper. There are some indications regarding color.⁶ However, the weavers were probably responsible for further decisions about color and other details, perhaps in collaboration with the artists.

This format changed dramatically in 1515 when Pope Leo X commissioned Raphael to paint cartoons for a set of tapestries called *The Acts of the Apostles* for the Sistine Chapel. [See Figure 1] These cartoons resemble finished paintings much more than do the sketchier ones for the St. Paul tapestries. Archie Brennan points to the Raphael cartoons

as "the first step towards the painted cartoon where every detail was drawn and painted in final form."⁷ This increase in information reduced the interpretive role of the weaver.

The Raphael tapestries set a far-reaching precedent. The role of the painter subsequently became more important in the production of tapestry, replacing the anonymous artists and craftsmen of the Middle Ages. The designer of *The Hunt of the Unicorn* tapestries, for instance, is unknown. As oil painting became more valued in the High Renaissance, tapestry followed suit by becoming increasingly painterly.

During the next several centuries tapestry models and cartoons continued to resemble finished paintings. This practice of giving weavers detailed cartoons gradually resulted in reducing the weaver to a skilled copier, which contributed to the situation lamented by Guiffrey and Morris.

William Morris's response to what he called an "idiotic waste of human labor and skill" was to start his own tapestry studio at Merton Abbey in 1881. In attempting to revive the art of tapestry, Morris used a different format for tapestry cartoons. First the artist made a small sketch of figure groups, often copied from medieval or renaissance tapestries. Then the sketches were photographically blown up to full scale. Foreground and background details were traced from a stock of previous images done by the artists. The photographic cartoons were given to the weavers who combined them with the tracings.⁸

To what degree were the weavers active collaborators at Merton Abbey? Morris says, "a considerable latitude in the choice and arrangement of tints in shading, etc. is allowed to the executants [the weavers] themselves who are, in fact, both by nature and training artists, not animated machines." Certain details, flowers in particular, were copied from nature at the loom.⁹

In France, in 1933, in another attempt to revive tapestry, Marie Cuttoli ordered cartoons from modern artists including Leger, and Jean Lurçat, to be woven at Aubusson. The weavers were given oil paintings which they copied. The complaint about this experiment, in the words of one tapestry historian was "... [that] from a distance it was impossible to distinguish the painting from the woven replica, which amounted to the very negation of tapestry."¹⁰ However, despite this criticism, interest in tapestry was revived and it opened the way for Jean Lurçat to, in his own words, "spread the tapestry bug all over the world."¹¹

Lurçat also believed that, "Tapestry should not be a copy of a picture but a creation in its own right."¹² As a result of this conviction, he preferred a cartoon that was a partially painted and encoded outline.¹³ The code of numbers and letters written onto the cartoon corresponded to a selection of dyed yarns, called a "rosary," which was given to the weavers. The weavers then matched the numbered color yarn to the numbered element of the design on the cartoon.

Archie Brennan, while Director of the Dovecot Tapestry Studio, turned the weaver into a more active artistic collaborator than did either Morris or Lurçat by having the weaver, not the designer, make the cartoon. The cartoons were tracings, "precisely detailed line drawings in which each tiny patch of 'discrete' colour in the original was rendered by its outline."¹⁴ The same format is now used by VTW weavers. [Figure 2]

Collaboration

To understand the significance of the weaver's current collaborative role, we will look at the steps involved in producing a specific tapestry. In the early 1980's the VTW was commissioned to weave a monumental tapestry, measuring approximately 30 X 65 feet, for the new Parliament House in Canberra.

It was designed by the Australian painter Arthur Boyd at his property, "Shoalhaven," after which the tapestry is named. The original painting was about 5 X 15 feet. Boyd's model is not much different from post-renaissance models in that it is a finished painting. But it is translated into a new image, a black and white line drawing, a map of the original, by the weavers when they make the cartoon. The weavers do this by tracing from the painting onto acrylic sheets for photographic enlargement. Andrea May, a VTW weaver, says of this procedure: "Making a cartoon is one of the most crucial and decisive moments in the interpretive process. Drawing a cartoon for tapestry involves a continual move towards the essence of the image. The cartoon anticipates the transformation of a work into a new medium, mediating the gap between the translation and the original."¹⁵

After the tracing has been blown up to full scale, the weavers ink the design onto the warp. The cartoon is hung on a board behind the warp which can be pulled forward when needed for closer reference. Samples are then woven to establish a palette, in partnership with the artist. I should add that Boyd, like many of the artists who work with the VTW, was consulted at every step in the interpretation of his painting into tapestry.

The VTW uses only upright looms. Most tapestries are woven from the front, displaying the image as it will be seen when the tapestry hangs. *Shoalhaven* was woven in four sections over five years. When the tapestry was installed the four separate pieces were attached with velcro strips.

By comparing the woven and the painted image one sees the weavers translating the texture of the paint as part of the design. In some cases this actually becomes an important element. There are many examples of this in the VTW's portfolio. The Australian watercolorist Mary MacQueen's paintings have been woven to represent the appearance of watercolor washes. John Olsen uses wet on wet paint and this also has been translated into wool. [Figure 3]

Another good example of imitating paint can be seen in a Gareth Sansom tapestry called *Family Trust*. Sansom challenged the weavers to reproduce a variety of paint textures.

When the Workshop first approached him to prepare a design for a tapestry he said that he was not interested. "I just didn't think it could work," he said. "My painting is so grungy, so thick and thin, scraped and sprayed that I didn't think it could be adequately portrayed in the medium of tapestry...I tried all the stylistic tricks I'd ever done in painting trying to make it impossible... But they absolutely pulled it off. They worked out how to do drips, spots, stains, spray. Family Trust is three times larger than the painting I gave them...it's very powerful, fantastic."¹⁶

Given their remarkable skills, these weavers could weave practically anything. For example they have interpreted a nearly photo-realist watercolor botanical painting by Celia Rosser, Australia's premier botanical artist, into tapestry. They have also translated an asymmetrical painting by Frank Stella into an asymmetrical tapestry. The workshop has worked from other graphic art including collage and photography. There have also been many collaborations with contemporary Aboriginal artists.

Using tapestry to mimic artists' materials is not unique to the VTW. Other examples of this can be found in the work of both the Edinburgh Tapestry Company and the West Dean Tapestry Studio in England. For example, in the nineteen eighties West Dean completed a collaboration with the artist Henry Moore. The weavers learned to translate, among other textures, the appearance of wax crayon, charcoal, and watercolor on blotting paper into tapestry.¹⁷

We have been trying to gain a clearer understanding of the success of a "collaborative model."¹⁸ The VTW and other workshops have carried forward the legacy of Lurçat and Brennan, who wanted to free the weaver from the role of copyist. This creative independence is expected to be evident in the quality and vitality of the final product. Most viewers would agree that these tapestries exhibit vitality and that they are impeccably woven.

Freeing the weaver from copying was also to free tapestry from being a mere copy of a painting, to allow it to be something in its own right. But while weavers from modern workshops are not copying paintings, in mimicking paint and other artist's media they produce tapestry that is super-mimetic. While I do not believe there is anything objectionable about wool emulating paint, there is something ironical in this development.

Freeing the weaver to interpret contemporary images has also caused fundamental changes in how tapestries are woven. This could constitute a separate study. I will discuss only one of the most significant changes which is the diminished use of hatching. Hatching is a technique used in drawing, engraving and tapestry to indicate shading. Practically every tapestry woven between the fourteenth and twentieth century in Western Europe used this technique. Laying in parallel rows of alternating colored weft to indicate lines of shading and color shift was particularly suited to the grid of the warp and weft of tapestry weave. It was tapestry's signature and kept tapestry clearly within the idiom of textiles. Hatching is now rarely seen in modern tapestries. It has become

the exception, instead of the rule. Contemporary weavers, instead of using hatching, often mix multiple colored yarns on bobbins to indicate color change.

There have been other technical changes as well, some of which are due to economic conditions. The rarity of contemporary tapestry workshops is an indication of how difficult it is to support such a labor intensive industry. The VTW's support from the government has been crucial to its economic success. It is notable that today in the United States there is no full scale tapestry workshop.

Conclusion

We have been considering the collaborative model of tapestry design. By following the evolution of the tapestry cartoon we saw how, historically, the role of the weaver in the production of tapestry has changed over the past six hundred years from some degree of active participation in the Middle Ages to skilled copyist after the Renaissance and then again to active collaborator in the twentieth century. We have also seen examples of the results of the collaborative model as it is practiced at the VTW.

Perhaps now we can draw some provisional conclusions concerning our initial questions. To what degree has the collaboration between contemporary artist and weaver enabled tapestry to emerge as an authentic art in its own right, independent of the painting upon which it is based? And, do some of these tapestries accomplish something categorically more than would the painting on its own (aside from size and mobility)?

On the one hand, tapestry is still a neglected art. It would be difficult, for example, to find a contemporary tapestry hanging in any major museum in New York City. But is this neglect the result of the old prejudice against tapestry as decorative accessory? Or is it valid judgment upon the irrelevance of the art? By sticking so close to paintings and artists' images, has contemporary tapestry become a hybrid, neither one thing nor another? Or, on the other hand, has tapestry been transformed from a dull, derivative medium into a dynamic, exciting art form with its own aesthetic language?

My conclusion is that workshop tapestry has been revitalized in the last century as a result of the collaborative model. [Figure 4] I do not believe that the VTW, or other workshops, could have enjoyed the success they have had without this change. And yet there are still questions that tapestry weavers and designers must ask about the relationship of paint to woven fabric. One of these questions is, has tapestry's autonomy been compromised by its close relationship to painting and other graphic art?¹⁹

However, putting these questions aside, if we consider the history of tapestry as a continuum, we can see this ancient art has once again reinvented itself, not only surviving a threat, but thriving in the process. At times in this reinvention it has found a way to fulfill the aim of the collaborative transformation of paint into wool. When it does fulfill this aim, tapestry transcends mimesis to become not just a translation but a transfiguration, a reinventing of one form of art into a new form, grander and more vital.

Perhaps viewers generations ahead will come to honor some of these tapestries in the way we do now the Raphaels and the Unicorns.

Endnotes

- ¹ These yarns are sold to knitters and weavers in many countries as well as in Australia.
- ² Linda Parry, *William Morris Textiles* (London: The Viking Press, 1993), p. 102.
- ³ Jules Guiffrey, *Histoire de la tapisserie depuis le Moyen Age jusqu'à nos jours* (Paris: np, 1886).
- ⁴ F.P Thomson, *Tapestry Mirror of History*. (New York: Crown Publishers, Inc., 1980), p. 134. In 1748 Jean Baptiste Oudry, inspector of the Gobelins, bitterly complained about what he called "work of pure routine." And Thomson remarks that it was then that "Gobelins tapestries became merely woven pictures; exact and lifeless copies of the painted original."
- ⁵ Fabienne Joubert, *La Tapisserie*, Typologie des Sources du Moyen Age Occidental, Fasc. 67, B-I B.4 (Turnhout, Belgium: Brepols, 1993), p. 41.
- ⁶ Marthe Crick-Kuntziger, *Les Tapisseries de l'Hôtel de Ville* (Anvers: De Sikkel, 1944), p. 25.
- ⁷ Archie Brennan, *Master Weavers, Tapestry from the Dovecot Studios 1912-1980* (Edinburgh: Canongate Publishing Ltd., 1980), p.33.
- ⁸ Parry, *William Morris Textiles*, p. 106.
- ⁹ Parry, *William Morris Textiles*, p. 105.
- ¹⁰ Pierre Verlet, *The Book of Tapestry* (New York: The Viking Press, 1977), p. 119.
- ¹¹ Verlet, *The Book of Tapestry*, p.121.
- ¹² Verlet, *The Book of Tapestry*, p.122.
- ¹³ Archie Brennan, *Master Weavers*, p.34.
- ¹⁴ Harold Cohen, *Master Weavers*, p.14.
- ¹⁵ Victorian Tapestry Workshop, *Interpretations: The Woven Language of the Victorian Tapestry Workshop* (Melbourne: McKellar Renown Press, 1997), p.3.
- ¹⁶ Victorian Tapestry Workshop, *Interpretations*, p. 5.
- ¹⁷ Ann Garrould and Valerie Power, *Henry Moore Tapestries* (London: The Henry Moore Foundation, 1988), p.105.
- ¹⁸ Lawrence Knowles, "Woven Together: The Collaborative Model for Tapestry Studios," *Fibre Arts* March/April, 1999, pp. 32-41. A discussion of collaboration as practiced in three contemporary tapestry workshops: the VTW, Westdean, and the Edinburgh Tapestry Company.
- ¹⁹ *The Age*, (Melbourne, October 4, 2000), p. 11. In an article on a new tapestry, a portrait of Dame Elisabeth Murdoch, woven from a cartoon based on a digitalized photograph, the reporter says: "But it's not a painting, much as it looks like one. It's a tapestry," and later quotes the director of the National Portrait Gallery saying Dumbrell [the weaver] "is a weaver of magic [using] colors as if they were paints on an artist's palette." This is a good example of the inability to think of tapestry outside the comparative context of painting as fine art. In this instance the comments are particularly confused, as this tapestry is based on a photograph rather than a painted image. Twentieth century tapestry, in spite of the concerted effort to free itself from being seen as an adjunct to painting, has largely failed to educate or, perhaps, convince many of its viewers of its autonomy.

Figures



Fig. 1. Victoria & Albert Museum, The Royal Collection, *The Miraculous Draft of Fishes*, 1515-16, (tapestry cartoon) (after Raphael).

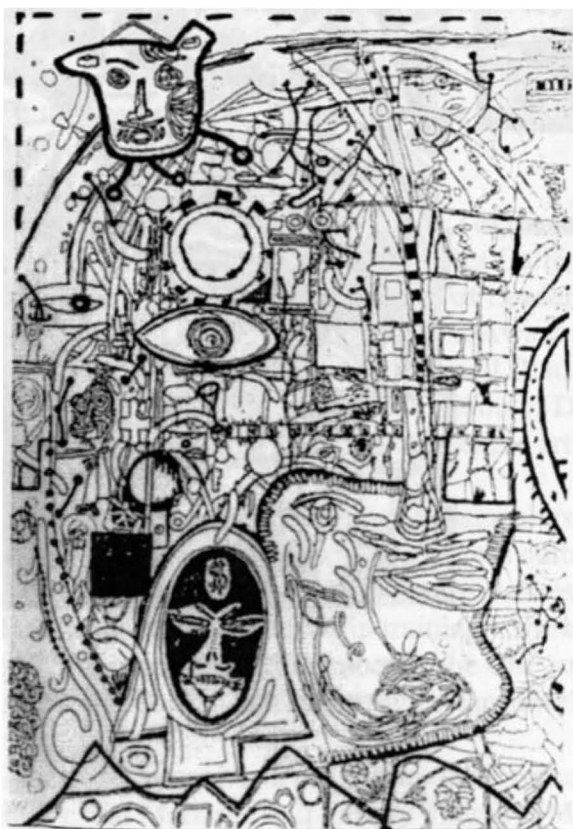


Fig. 2. VTW, Melbourne, *Family Trust*, 1998, (tapestry cartoon detail), (after Gareth Sansom).



Fig. 3. VTW, Melbourne,
Happy Days, 1994, (tapestry detail),
(after John Olsen).



Fig. 4. VTW, Melbourne
Aotea Tapestry, 1997,
(after Robert Ellis)

Reinventing a Cultural Self: Textile Design and Native American Youth

Wendy Weiss
Mary Lee Johns

This presentation shows how the University Textiles, Clothing and Design department and the Indian Center of Lincoln, Inc., are collaborating to provide creative textile design programs for a group of 12 at-risk Native American youth, 12-18 years old. Family therapist, Dr. Gloria Gonzalez-Kruger, is conducting a research component which assesses the project's impact on youth development, cultural identity development, and intercultural relationships. The data will provide information on how to develop and implement culturally competent programs for youth.

Fall 1998, the youth began a series of short programs working at the university design studios. They worked with graduate students in a seminar on community based art to design and construct their own embellished tote bags, followed by a printed installation project with visiting artist Maria Tyniec of Poland. The images spoke about the ethnic traditions of the cultures of the youth and graduate students. Spring 1999, the youth designed a project for a daytime facility for homeless and near homeless adults. Modeled on the work with the Polish artist, the youth designed printed pillows hooked together to create a sound absorbing wall hanging for a high traffic space. The young people learned how to interview vulnerable adults to find out what subject matter was important to clients of diverse backgrounds. Fall 2000 the youth will work with visiting Native American designer, Madonna Thunderhawk, to design dance outfits for the girls in the youth group. They will create their own outfits that are both reflective of tradition and contemporary design.

Wendy Weiss is associate professor in the Textiles, Clothing & Design department and is the director of the Robert Hillestad Textiles Gallery at University of Nebraska in Lincoln. Awards include the 1999 Shades of Leadership Culture Center for her work with young people of color; Women's Artist Award, Lincoln/Lancaster Women's Commission, 1997; the Nebraska Arts Council Distinguished Artist Fellowship, 1995. Weiss organized the national touring exhibition of Different Voices: New Art from Poland featuring 20 contemporary women textile artists from Poland.

Mary Lee Johns has over 25 years of professional experience with an emphasis on program administration, Native American cross cultural education and training, program development and proposal writing, community assessments, organizing and development, health planning and youth leadership training. She has degrees in Human Services and Sociology. She is an enrolled member of the Cheyenne River Sioux Tribe and writes poetry, paints and design contemporary Indian Jewelry using a variety of mixed media.

Gloria Gonzalez-Kruger has a background in Psychology (B.S.), Family Studies (M.A./Ph.D.), and Marriage and Family Therapy (M.A.). Her primary objective is to engage in collaborative educational, research, and clinical experiences that develop or enhance services for people that are culturally relevant, responsive, and competent.

Reinventing a Cultural Self: Textile Design and Native American Youth
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Abstract. This paper presents a description of a textile based program for Native American youth and an investigation that resulted from a community-university collaborative effort. This paper can help inform practice, academic, and policy related professionals who are interested in developing, implementing, or evaluating youth programming and culturally-based programs. The purpose of the project was threefold: 1) to involve youth from the Indian Center, Inc. of Lincoln in the design and creation of an art project, which was installed at the Daywatch facility in Lincoln, Nebraska, 2) to examine how the cultural knowledge, perceptions, beliefs, and identity of youth from the Indian Center were influenced by their participation in this project, and 3) to identify strengths and weaknesses of the youth program that would be used to inform future decisions about programming. This paper will focus on the first objective while providing a summary of the investigation.

Introduction

This paper provides an overview of an art project and research study that was conducted by an interdisciplinary collaborative community-university team (see Simon & Lerner, 1998, for review of university-community collaborative models) of faculty, services providers, community volunteers, and university students with adolescent youth from the Indian Center. The advantages of working collaboratively and the implications of the research findings are highlighted to assist others in developing and implementing culturally based youth programs (see Locke, 1992 for model of multicultural understanding).

Summary of Project and Research

The art project and research study became a reality through efforts of a variety of community members and a university member who had a history of collaboration to provide service to members of the community. The faculty member from the Textiles, Clothing, and Design department invited a member of the department of Family and Consumer Sciences with an interest in youth development (see Lerner and Spanier, 1980 for review on adolescent development) to become part of the collaborative team. Through discussions between the faculty, the coordinator of a youth program at the Indian Center, and the director at a community facility for the homeless population the art project and research were developed and implemented. Community volunteers, Native American youth, homeless or near-homeless clients from the Daywatch facility and service providers at Daywatch also participated in the art project.

The purpose of this art project was to provide a creative textile design program for a group of 11 at-risk youth, ranging in age from 12-18 years old. Youth from the Indian Center, Inc. of Lincoln were involved in the design and creation of a sound absorbing wall of pillows connected in a grid to be installed at the Daywatch facility in Lincoln. The research component, an ethnographic research study (see Schensul & LeCompte, 1999, for review of ethnography), was added to assess the youth program and the creative

project to identify areas where changes could be made for a more effective youth program and project. The project and study were modified, which is appropriate in ethnography when the information, observations, and interactions inform and necessitate the changes. The primary change was to focus on the youth instead of the initial goal to study the interactions between youth and the clients at Daywatch, the homeless shelter.

Methodology

Art Project. In Spring 1999, the youth designed a project for a daytime facility for homeless and near homeless adults. Modeled on previous work (see Figure 1) with a visiting Polish artist, Maria Tyniec, this project, facilitated by the faculty member in Textiles, Clothing, and Design, used the format of printing on pillows hooked together to create a sound absorbing wall hanging for a high traffic space. The project was structured so the young people could learn how to interview vulnerable adults to find out what subject matter was important to clients of diverse backgrounds, could learn creative thinking and art skills, and could become more knowledgeable about culture and diversity, with a focus on their culture. The youth met at the Indian Center for preliminary discussions, role-playing activities (see Figure 2), and research interviews followed by design activities at the university. The facilitators provided snacks during an informal group reflection period.



Figure 1. Pillows Talk, Project with Maria Tyniec
Photo: Wendy Weiss



Figure 2. Role playing at the Indian Center
Photo: Wendy Weiss

Research Study. A faculty member in the Department of Family and Consumer Sciences, who is also a licensed marriage and family therapist, conducted this ethnographic study which was approved by the governing institutional review board for research with human subjects. An overview of the research design and results that are relevant to developing culturally competent youth programs are reported. The suggestions provided are based on quantitative and qualitative data collected from the youth in their natural settings (i.e., observations at Indian Center, university, and homeless shelter). The youth completed survey questionnaires, with open and closed ended questions, at the start and end of the project that focused on racial and cultural identity, multicultural knowledge and contact, expectations of the project, their experience in the project, and the skills they developed. Youths also participated in a post

face-to-face 30-60 minute interview that gave them an opportunity to reflect on their experiences in the art project and youth group in more depth. In addition, the researcher documented the activity in the 16 sessions, the interactions between the facilitators and participants, and the process that developed as a result of the ongoing interactions between all of the participants of the project (facilitators, volunteers, students, and Daywatch clients).

Results

Quantitative Study

Sample and Cultural Identity. Eleven Native American youth participated in the art project and ten participated in the research component of the project. Of the ten youth, there were seven females and three males who ranged in age from 12 to 18 (M=15). All of the youth identified as being Indian/Native American when they were responding to a question that listed racial and ethnic groups. However, in an open-ended question, the responses were more variable (Native American, 4; American Indian, 3; Urban Indian, 2, and American Native, 1) and fit under more than one category (e.g., racial, cultural, and ethnic identity). All of the youth identified as being from multiple racial, cultural, or ethnic groups. (i.e., White, Native American, Omaha, Mexican/Chicano, Native American, half-breed, American Indian, Urban Indian– Sioux, Lakota). One youth denied being a member of a racial group even though the youth did identify as Native American.

Experiences with other cultures. Prior to the art project, eighty percent of the youth had little to no contact with people who were homeless. However, forty percent stated they were very comfortable with the idea of being around people who were homeless. Their contact with the five major racial/ethnic groups was high with the exception of the Asian Americans (20%) and to a lesser degree, Hispanics (see Table 1).

Table 1. Experiences with Racial/Cultural Groups

| | African American | American Indians | Asian Americans | Hispanics | Whites |
|--|------------------|------------------|-----------------|-----------|--------|
| A lot of contact | 80 | 100 | 20 | 70 | 90 |
| A lot of knowledge | 30 | 80 | 10 | 40 | 70 |
| Very much in circle of friends | 90 | 100 | 40 | 60 | 80 |
| Provided most services in community | 50 | 80 | 30 | 50 | 80 |
| Feel very comfortable with | 70 | 100 | 50 | 60 | 60 |
| Feel very understood by | 80 | 100 | 20 | 50 | 40 |
| Would accept help from | 80 | 100 | 70 | 70 | 100 |
| Very respectful of Native American culture | 90 | 90 | 30 | 60 | 10 |

Note: Percentages of youths are based on 100% for each item by cultural group.

Comfort Level, Friendship, Understanding and Respect. As the chart indicates, all of the youth reported high levels of comfort with people of their own culture. Given the high percentage of youth who have a lot of contact and friendships with people from the

White culture, it is surprising to consider the low percentage of youth who felt very understood (40%) and highly respected (10%) by people from this group. In addition, few youth had friendships or only somewhat of a friendship with Asian Americans (10% and 40%, respectively) and Hispanics (20% and 10%, respectively).

Cultural Identity Issues Before and After the Art Project. All of the youth identified cultural identity as important to them and to others. More specifically, eighty percent of the youth strongly agreed cultural identity was important to them while only 20% strongly agreed that it was important to others. All of the youth perceived that the project would recognize their cultural values and help them increase their awareness and appreciation of their own and other cultures. Only one youth did not believe the art project would expose him/her to new cultural perspectives and another youth did not expect that the project would increase understanding of other cultures.

After the completion of the art project, half of the youth reported that the art project recognized their cultural values (50%), while one-fifth of the youth increased their awareness of their culture (20%). The majority of the youth indicated they were exposed to new perspectives with the homeless (90%), Hispanics (90%), Whites (80%), and Native American (70%). The percentage of youth exposed to new perspectives on African Americans (30%) and Asian Americans (10%) dropped, possibly as a result of the low participation of these groups in the sample of homeless clients.

Building Creative Skills. The majority of youth had a positive experience as members of the art project. Sixty percent of the youths reported that they experienced with new methods, materials, and techniques (see Figure 3). Half of the youth indicated that they had expanded how they thought about making artwork. Overall, most of the youth believed their interactions with the workshop instructor exposed them to new perspectives (70%), expanded their approach to drawing (90%) and screen printing (80%), built their confidence to be creative (80%), and prepared them to work on their own (80%). Only half of the youth considered their interactions with other youth to be related to their higher level of creative confidence.

Qualitative Data Analysis

Below is a listing of issues that were relevant to more than half of the youth as revealed throughout the project and observations:

- surprise at being given the responsibility to be "real artists."
- experienced feelings of respect from multiple sources, in response to artwork.
- expressed a greater understanding of themselves, but more importantly, found it easier to communicate this to other people.
- felt they gained a clearer understanding of the meaning and power of imagery and storytelling in their culture.
- felt the importance and power of being part of a larger community when they visualized the final artwork at Daywatch.
- reported feeling sensitized to the humanness (e.g., similarities and differences between them and others) of homeless or near-homeless people.

- understood the importance of facilitators' flexibility, and creativity in conveying instructions (e.g., gesture drawing, role playing, role modeling)
- learned culturally responsive communication styles that were consistent with Daywatch clients.

In response to specific questions in the interviews, youth reported the following.

Motivation for Participation in Project. The stipend that youth received was the least significant motivator for them although they each commented that it would be helpful to have this money. Their motivation was more frequently related to the desire to connect with the other youth in the program, with giving back to those less fortunate than themselves, and being with adults who "respected" them.

Youths' Perceptions of Interactions with Daywatch Clients. When the youth were asked about their experience with the Daywatch clients, the males and females responded differently, indicating gender differences in their perception of experiences. The males were observed to consistently be less interactive during the Daywatch visits with clients and staff. The majority of the female youth were observed to be increasingly interactive with clients and staff at the center. The females reported that the importance of helping people less fortunate, connectedness, and carrying out traditions of their culture was brought to life through this project. The youth reported feeling proud of their heritage even though they did not have as much knowledge as they believed they should have.

The developmental process of engaging in relationships was evident to the youth. The youth described increasing comfort each time they visited the Daywatch facility. They believe sharing their "Indian tacos" was a way to reach out to people and a way to share the importance of culture. Half of the students commented on the importance of food in their culture ("having a meal with somebody will make it easier to start friendships," male participant; and "anytime you want people to feel cared about, you make them something to eat in our culture" female participant). A final perception of their experience was that adults provided them with a high level of autonomy, especially at Daywatch. Ten of the eleven youth agreed that this was difficult at first, but they saw it as helpful in getting comfortable with the clients and the process. Two youth agreed that it showed that the adults respected and trusted them.

The Function of Food to the Project. Food and sharing meals provided an opportunity for relationships to develop between the youth and adults, for youth to talk about their experiences that day, and for the adults to listen to the youths' needs and experiences. Food played an important role in building relationships, making connections both within the youth group, the art project, and the work with the Daywatch clients. Information could be gathered in this context that was not likely to be shared in a one-to-one interaction or by direct questioning. Through these naturally-occurring conversations, it became apparent that youth were aware of and interested in health issues that were related to their Native American culture as well as the dominant culture ("Most of the families I know that are Native American, including my own, don't eat healthy at all – there's a lot of fat in our food"). This may illustrate the lack of information on how the Native American community has been impacted by the dominant culture and their history. In addition, it indicated that the majority of youth had a desire to be more health conscious.

The Importance of Power and Control to Youth Development. Youth reports and observational data illustrated a need to include teaching and learning experiences that would help some of the youth develop skills that are critical to taking on expanded roles and participating more fully in the decision-making process. Eight of the eleven youth commented positively on the adults' willingness or decision to "let us make decisions and do things on our own as much as we did," however, the program did not provide the learning experiences necessary for the less confident and inexperienced of the group. About half of the youth had less voice. One youth commented "Every time I tried to be a leader, I was shut down – I don't know what I'm doing wrong but they don't want me to be a leader." Another youth stated, "I don't know – I just don't know what I'm suppose to do - I can't decide what I like best." The youth selected their roles each time a visit was planned to go to Daywatch. Those who were less extroverted or confident in developing new relationships took roles that required fewer interactions with clients. The youths with the broader range of interpersonal skills and higher levels of self-confidence with new people and situations took the responsibility of building the bridges with the Daywatch clients and staff. A consistent strategy to respond to the different developmental needs of this group of youth is necessary.

Examples of the youths' creativity, use of power, and decision-making was evident throughout the project. One idea was to create a handout in Spanish to increase the opportunity for Spanish-speaking clients at Daywatch to participate. Later, one of the youth suggested that clients be invited to provide their handprint on a pillow. This suggestion was followed by another youth that said food (Indian tacos) be provided to the Daywatch clients. The youth set up a rainbow of textile paint colors and square pieces of material for clients to place their handprints on to create a variety of designs. Daywatch client feedback on the initial set of designs (see Figure 4) was considered "too cute." They reported that the designs lacked meaning or a message consistent with the Daywatch facility. Youth came up with culturally appropriate ideas including quotes, "Jesus te ama" and "Virgin de Guadalupe" which were inspirational to the Spanish-speaking clients at Daywatch.



Figure 3. Design Work by Youth.
Photo: Wendy Weiss



Figure 4. Presentation of initial design
at Daywatch. Photo: Wendy Weiss.

It became apparent that critical time and discussion were needed to help many of the youth develop skills necessary to engage in decision-making to develop appropriate

designs for the approximately 32 pillows needed. At this stage, the Daywatch clients' ideas and the youth's interpretation of the ideas were still separate. About half of the youth were experiencing frustration at this point as evidenced by silence, comments ("I don't know" heard repeatedly by many of the youth; "I can't do it,"), and behavior (physical and emotional distancing and withdrawal from group process). Youth were struggling with how to make decisions ("how do we decide when some liked a design and some didn't?"; "How are we supposed to figure out what they want?"). This was an opportunity for learning group processes and decision-making. Although the youth were supported and encouraged to engage in this type of critical thinking, it became apparent that their ability to make these decisions was limited. They did not have the skills necessary to engage fully in this decision making process, or the context did not allow these skills to be expressed. Guidance and direction from the adults allowed the youth to ultimately integrate client and staff feedback into the revised designs.

This part of the project was one illustration of the need to include a teaching and learning process into the artistic component of the program that attends to the cognitive, emotional, and psychosocial development of youth, in this case, Native American youth. This can assist in increasing an understanding of the similarities and uniqueness of the developmental and learning needs of the youth and how programs can be developed that will respond to these issues. The result would be to make an artistic activity an opportunity to teach the youth concepts that are relevant to life skills and would build their strengths while simultaneously having fun and being creative.

Artwork and the Learning Experience. During the process of selecting the type of designs identified by clients, 4 themes emerged: images of nature, religion, values of children, and hope. The decision was made to not use any religious themes since the number of panels would not provide the space to represent the diversity of beliefs or religions held by clients at Daywatch.

Once the designs were completed, the youth learned how to screen-print. When imagery required complex drawing or letters, they used a light safe pen or contact paper to create their designs and lettering. It was more difficult to engage the males in this part of the project. All the males reported being tired and one youth was slept for a short time during one of these sessions. During other sessions, the males and two of the females needed more encouragement and direction to remain on task. Even with encouragement and support, a pattern of withdrawal and resistance to participating in this particular activity became most evident with the males. On a couple of occasions, the males engaged in varying degrees of inappropriate behaviors that led to adults being more directive and on one occasion, a youth being taken home. These observations necessitate that future programming consider processes and structures that allow youth to engage in self-reflection and dialogue about their own reactions to challenging situations.

The youngest member of the group facilitated the final selections for the artwork. She became the most vocal about which selections to use when the other youths were struggling with how to engage in this group decision-making. Over half of the youth made comments or reported that they did not want to choose because they didn't want to hurt people's feelings. A decision was made to keep the following: image of African American girl, outstretched hand, butterflies, big fish, jagged mountain scene, flowers, sun design. Once the designs were selected, the youth chose the design they wanted to

create. This discussion and decision-making process was challenging for the youth and required them to engage in thoughtful discussion and reflection about what their clients were asking for. They needed to envision the completed designs that would be joined to create the final wall hanging. After this process, the youth became quiet and they were unable to focus. Each time this occurred, the facilitators knew it was time for a break and some food. During this day, pizza was on the menu. The group again was quiet and engaged minimally in any interactions. There appeared to be a sense of contentment in the room and the genders sat separately.

Challenging Moments in the Project. Three incidents of high conflict occurred with the youth. Twice between two youths and once when a youth was found lying to youth director (one of the facilitators) about his need to go home early from the activity. These types of incidents must be expected when youth participate in groups and activities. Adolescents vary in their skills to communicate, negotiate, and engage in decision-making processes. The three adult leaders never clearly articulated a guideline for who was ultimately responsible for addressing psychosocial and socio-emotional needs of the youth. There were no structured plans, roles, or responses to address the needs of the youths in these tense situations. The director of the youth program was the identified person given her relationship with the youth, however, she was not always attentive to these needs.

The director had to talk with the male youths several times about their behavior, their lack of consistent involvement in the activities. A few times one of the facilitators had to remind the youth they needed to work in order to earn the money. This was primarily directed to the male youth who were challenged at times with focusing their attention on the tasks involved. The building level of frustration was met with two responses. If redirection did not work, the director talked with them individually, and in one instance, one youth was taken home after he was noncompliant. The youth director verbalized a need to keep the males following the rules. At times, the authority role and the structure of the program appeared to minimize staff's ability to take on the supporting role.

A third solution evolved given the problems the males were having. The male artist worked with the male youth during the next session at the Indian Center to work on the artwork. Three females made a trip to a local tent and awning shop with the female artist to use a special machine to install grommets. These supportive roles provided more interaction and guidance for youth. Although the males were overtly needing support in psycho-social and emotional development, females were observed and reported a need to have someone to help them when they're struggling with self- and other- issues. The youth were unable to come to any conclusions about what kind of help they needed or wanted. Examples include youths' statements, "I know I get quiet but when I get mad that's what I do" and "I know I'm a real problem sometimes but when I'm angry I can't stop myself." *Responding to Youth Issues.* After a particularly difficult session, the adults met to discuss the situation. The youth director provided background to enhance understanding of the dynamics occurring between the youth. The researcher completed a genogram (see McGoldrick & Gerson, 1985), which are designed to provide a visual representation of families. It also provides a visual image of relationships among and between members of a family. The genogram made evident the youths' membership in

overlapping family systems. There were large families, inter-racial marriages, extended family systems within households, multiple divorces, and familial relationships between the youth. Two of the youth were cousins, two were sisters, two were half brothers, and two were half sisters. Although this is not an inclusive listing, family issues included a chronic illness, problem drinking and alcoholism, a history of criminal activity by adults and youth, homelessness, and sexual acting out. These family structures and dynamics create a context for youth that can make it more challenging to their psychosocial and educational development. Individual challenges for youth included a learning disability, fetal alcohol effects, and school behavior, involvement, and academic problems. This helped to explain why transitions from one activity to another were difficult for some of the youth. This necessitates that an environment, structure, and process be created that respond to the special needs of youth that are challenged by these factors.

One of the youth programmers, a college student, described the importance of returning to the Indian world. This is supported by the enculturation hypothesis that indicates that individuals who know and identify with their traditional ethnic culture will have a greater sense of psychological well-being and fewer problem behaviors (see Zimmerman et al., 1995 for review). She reported that she would go into the college world where she maintained a peer group that was typically not from her culture. She would return to the Indian world after each trip to the outer world where she would find the resources necessary to make that trip back out to the college world where she experienced herself as more separate. She perceived that the youth also had similar experiences and she had seen them come in to the youth group with a sense of relief, returning to their Indian world. The community artist was successful at developing relationships with youth and motivating them to connect with their artistic self. He engaged with them in a collegial manner that the youth identified as "he was just a friend-like." His non-threatening role allowed relationships to develop naturally without a high level of expectations being experienced by the youth. They perceived the community artist as "supportive" and "great to be around."

The university artist took on the role of project coordinator, which was challenging given the broad range of participants and the planning that was entailed in making this a successful project. Duties included keeping the project moving forward, planning, selecting and providing work materials, linking the various organizations participating in this joint project, and taking responsibility for meeting deadlines. The feedback from the youth was positive and focused on the concrete things they learned from the university artist. The youth were overt in their feelings about her talent. As a female youth summarized, "she's very different from people I know – she's so good at her art and putting things together and she really wants to help us learn how to put those art things together-that is so great."

Implications

This study illustrates the importance of collaborative community-university models to the effective development and implementation of youth groups. Collaboration is most effective when the relationships are developed over time. These relationships are essential for the kind of frank discussion that is necessary to address the complex needs of the youth. Flexibility is required to maintain an effective program that balances the

individual and group needs of youth and adults so people can maintain a balance of autonomy and interdependence. Without attention to these areas, individuals and the group are at risk of stress-related burn out.

Youth groups designed for people of color must be recognized as valuable to the development of youth. Culturally based youth groups provide a shelter from the outside world where the youth can interact in a context that is supportive of their self-identity and development. Recognizing and valuing youths' multiple cultures, diverse backgrounds, experiences, and learning styles requires that structures, strategies, and processes be incorporated into the youth program that are consistent with these goals. Programming staff, including non-professionals in other areas, must continually be in a state of "becoming" cognizant of the various developmental and cultural needs of adolescents and when and how to most effectively involve families. Youth programs can be designed and scheduled so older adolescents can continue to be involved. The involvement of older youth would enhance the program for the younger youth and role model the importance of staying involved in the group. Youth groups that can support the development of group cohesiveness will provide a sense of connectedness and security for participants.

In summary, youth groups for people of color have a place in community programming and scholarly activities. Through the continued work of people in the community and in academia, studies must continue to be developed and implemented that will provide a stronger base of knowledge that can be used to inform policy and programming decisions. This will encourage a move toward an increase in resources to address the needs of youth of color, given the challenges of unique cultural issues and stressors that these youth may experience (e.g., discrimination, acculturative stress, oppressive forces, historical challenges, high rate of school drop out) (Berry, 1994).

References

- Berry, J.W. 1994. Acculturation stress. In J.W. Lonner and R. Malpass (Eds.), *Psychology and culture*. Boston: Allyn and Bacon.
- LeCompte, M. D., and Schensul, J. J. (1999). *Designing and conducting ethnographic Research*, Volume 1. Walnut Creek, CA: AltaMira Press, A Division of Sage Publications.
- Lerner, R.M. and G. B. Spanier. 1980. *Adolescent Development: A Life-Span Perspective*. New York : McGraw-Hill.
- Lerner, R. M. and Simon, L. K. 1998. *University-community collaborations for the twenty-first century: Outreach scholarship for youth and families*. New York: Garland Publishers.
- Locke, D. C. 1992. *Increasing multicultural understanding: A comprehensive model*. Newbury Park, CA: Sage Publications.
- McGoldrick, M & Gerson, R. (1985). *Genograms in family assessment*. New York: W. W. Norton & Company.

Zimmerman, M.A., Ramirez, J., Washiendo, K. M., Walter, B., & Dyer, S. 1995.
Enculturation hypothesis: Exploring direct and protective effects among Native American youth. In H. I. McCubbin, E. A. Thompson, A. I. Thompson, & J. E. Fromer (Eds.), *Resiliency in Ethnic Minority Families: Native and American Families*, Volume 1. Madison, WI: The University of Wisconsin System Center for Excellence in Family Studies.

Ixchel and Cotton Cloth Production in Classic Period Northern Yucatan

Traci Ardren

Woven cotton mantles constituted one of the most important trade and tribute items produced during Classic Maya times. The northern Yucatan peninsula is a perfect environment for cotton cultivation and Maya women of the area have a long and illustrious textile tradition. From this same area come native depictions of weavers and their supernatural patron, the goddess IxChel. These depictions, or native codices, contain a wealth of information about how weavers ensured the protection of their goddess through offerings of cotton and cloth. Archaeological evidence from the northern Maya lowlands, especially along the Caribbean coast provides data on the temples and artifacts associated with these offerings. This paper will examine the role the Weaving Goddess played in the manufacture of cotton cloth in Yucatan as demonstrated in both archaeological and iconographic data from the Classic Maya period. It will also examine evidence for the native weaving industry in the northern lowlands and suggest a model for the gendered production of household wealth during Classic times.

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Revisiting Kashmir in Spirit

Peter Harris

Ladies and gentlemen, I stand before you, a fish out of water. I'm not primarily a scholar of textiles, but simply a maker of them, a visual artist working in the medium of tapestry weaving. The Symposium theme, "Approaching Textiles, Varying Viewpoints", is the perfect opportunity for me to point out that the rewarding time I have had studying Kashmir shawl weaving technique, was the result of a unique combination of interests, tapestry weaving and travel to India.

I've been surprised at how little cross-over interest there seems to be among textile *artists*, for textile *history*, as if being engaged in current artistic practice begins and ends with the person doing it. Subscribe, as I do, to several of the newsletters maintained by groups of textile artists, and you rarely see mention of scholarly studies on the one hand, or the local spinners-and-weavers guilds on the other, and no regular listings of their activities. Surely a missed opportunity I think, because each in our way, we are struggling to keep alive the same skills that are in danger of disappearance.

Personally, I'm not connected with any sort of academic institution, and, when I was, I took only the least number of art history classes I could get away with. After studying philosophy and English at university I drifted into various kinds of craft work, and ten years later I decided to go to art college to upgrade my general design and conceptual skills. Because I had most recently been working in leather, I gravitated toward the textiles department, but shied away from loomweaving, which seemed too pre-planned and mechanical.

Then something happened quite suddenly: I was introduced to tapestry weaving and became completely absorbed in its possibilities. It was a revelation, an answer for which I had been too lazy and carefree to formulate the question. Tapestry combined a satisfyingly elemental craft activity, a representational art medium with a great range of stylistic and expressive possibilities, and a powerful philosophical metaphor for making sense of the world. It grabbed hold of me and hasn't let go yet – ever since then I've felt underemployed when there wasn't a project on the loom. After the first couple of years at the art college, I moved out of the city to a farmhouse, and combined weaving, part-time studies, gardening, chickens, and other chores, a formula that provides about half the time needed for each. "Tapestry weaver" is now part of my identity, something to do, advocate, teach, research, and write about; in a good year I'll add six or eight lines to my CV, finish *one* woven piece, and earn a couple hundred bucks in fees. It's the vegetable garden that puts the food on our table.

Since my university days, I had travelled to India a couple of times, and been to Kashmir once before, but it wasn't until the third trip that I had any reason to be professionally curious about textiles – before that, I had bought textile pieces as souvenirs without realizing they were in tapestry technique. This time I was playing tour guide as we celebrated my partner's graduation from the textiles program, and I resolved that the first night of our seven-month tour of India and Nepal would be spent on one of the houseboats on Dal Lake, on the outskirts of Srinagar.

During a day of haphazard sightseeing in the city, we found ourselves at the School of Designs, a row of workrooms where a few artisans were demonstrating typical Kashmiri crafts, including patterned loomweaving that I recognized as a tapestry technique. In the

days before and after, we were shown hundreds of shawls, by dealers who boarded our houseboat or ambushed us at every turn, but all of them were either plain fabrics or embroidered. In the following months of touring around India, we grew more skilled in our inquiries and saw many fine textile techniques in action, but no other tapestry traditions except the simple geometric patterns of Kulu shawls and flatwoven dhurru carpets.

Later, during a stopover in London on our way home to Canada, I came across a reprint of *The Kashmir Shawl* by John Irwin in the bookshop of the Victoria and Albert Museum, and quickly realized it referred to the technique I had seen at the School of Designs, although Irwin wrote in 1955 that “the shawl industry was dead, and the art of its weavers irrecoverably lost” by the end of the 19th century.¹

One of the plates in John Irwin’s book² shows one page of *talim*, a version of the visual design in the form of line-by-line instructions for the weaver. Through guesswork and simple logic I was able to piece together the numerical value of the various symbols, and obtain a coherent image of the part of the design represented by that page.

My initial success drew me on to consider how this short-hand record of the design is translated into weaving. The reconstruction of a carpet design, for which in Kashmir *talim* is also used, would seem relatively straightforward. The refinements visible in shawl fabrics – twill weave, excessively fine scale, interlocking, and continually adding and dropping different-coloured wefts – call for a tapestry weaver’s understanding. I had to wonder what the numbers referred to, and how many picks of weaving were made following each line of text. It wasn’t so easy to resolve these basic questions of procedure, that any of the weavers at the School of Designs could have answered in a moment. I inspected with a magnifier shawls in the collection of the Museum for Textiles, in Toronto. It was sobering to realize what eye-strainingly fine work was required at a typical thread count of 100 ends per inch. My own tapestry work is usually at 4 warps to the inch. I set up a small weaving sample in 2/2 twill and double-interlock, using sewing thread and individual strands of embroidery floss, for a brief, thoroughly intimidating experience of working at such fine scale. I grew convinced that the process still needs documentation to guard against “irrecoverable loss”.

At the same time, I was fascinated by the broad sweep of the story of the Kashmir shawl phenomenon – the economic and technological importance, the influential patrons, the fickle imperatives of fashion. I dusted off the necessary essay-writing skills from my university days, producing the one and only long essay of my art-college career. Shortly after, it was published in *Ars Textrina*, in 1991.

Peter Harris received his honours diploma in textiles from the Ontario College of Art and Design, in Toronto, and what began as a college research essay has led to several published articles on Kashmir shawl weaving, in Ars Textrina (December 1991), Shuttle Spindle & Dyepot (Spring 1997), The Kashmir Shawl by Frank Ames (3rd edition, 1997), and Hali (Issue 110, 2000).

Notes:

¹John Irwin, *The Kashmir Shawl*. (London: Her Majesty’s Stationery Office, 1973), 18.

²Irwin, opposite page 11.

This was my introduction to the hidden world of scholarship, to the backstage offices and bottom drawers of grand museums, the challenge cheerfully taken up by librarians to locate real but elusive old sources, the chivalric code of the scholarly quest. I realized there were only a few specialists with a scholarly interest in Kashmir shawls, and I was perhaps *the only one* with a working knowledge of tapestry weaving. Nearly every time we exchanged letters, my respondents, helpful as they were, began by saying they had no knowledge of weaving. But we did exchange letters, real ones. When I tried in vain to locate a copy of a source I first saw in his book, Frank Ames kindly told me he found it at the New York Public Library, and in due course they sent me a photocopy.

Though the European travellers who witnessed the process in its heyday knew its economic importance and wrote meticulous descriptions of what they saw, none could appreciate the simplicity, necessity, and efficiency of the weaving process, so that at its heart it remained a mysterious thing that weavers do. Most secondary accounts lean heavily on the description made in 1823 by William Moorcroft, who was either a daring and inquisitive travelling businessman or a spy for the East India Company, during a six-year trek from western Tibet to Afghanistan and Central Asia. Recently reading his two-volume *Travels...* I learned that while moving up the Kulu Valley in the early stages of his journey, he noted “On the 11th [of August 1820] we passed a house belonging to the Raja on our right, situated on an eminence...”³ From the balcony of this royal hunting lodge, now a tourist guest house, we took photos in 1985 that resulted in this tapestry. Moorcroft’s party, on the other side of the river, moved up the valley from left to right on their way to Ladakh.

G. W. Leitner was an educator and Orientalist, based in Lahore. In 1882 he published a miscellany of notes on several code languages and a collection of material about shawl talim including a four-page talim text, drawings of the design, lists of the number and colour symbols, even fabric swatches of 53 commonly-used colours.⁴ The talim features a consistent pattern of “half” units at the beginning and end of every second line, something not found in the Irwin talim. This one clue, correlated with the cycle of four picks in a 2/2 twill weave structure, led me to several conclusions: first, that each line of text is woven in two picks (generally supported by my examination of shawl fabrics); second, it specifies the offset relationship of the lines due to the twill displacement; and third, that the best approximation of the design on graph paper would be with a brick grid, not a square grid. These points prepared me to take a practical approach to designing and weaving a sample with the basic design and structure of the shawl technique.

When my partner and I had flown in to Srinagar in 1985, Immigration checkpoints were more interested in finding out the nature of our business there, than in looking after our safety, and we were more concerned at seeing the army pickets guarding the airfield during our stopover in Amritsar. At that time it was not a year since the assassination of

³William Moorcroft and George Trebeck, *Travels in the Himalayan Provinces of Hindustan and the Punjab, in Ladakh and Kashmir from 1819-1825*. (London, 1841), vol. 1, 184.

⁴G. W. Leitner, *Linguistic Fragments...followed by An Account of Shawl Weaving*. (Lahore, India: Punjab Government Civil Secretariat Press, 1882).

Indira Gandhi in connection with the storming of the Golden Temple, and before a group of foreign tourists was kidnapped in the hills overlooking Srinagar. It is well known that Kashmir has been a recurrent source of conflict between India and Pakistan, since their independence fifty years ago, and in recent years has reached an entrenched, costly, and dangerous stalemate. Actually, through the centuries that it has been known for shawlweaving, Kashmir was a coveted tributary of Mughal, Afghan and Sikh regional powers, because of the revenue and prestige of its famous product. In Delhi, people who knew how interested I was in Kashmir would talk about the place only reluctantly and obliquely, as the British used to refer to the “troubles” in Northern Ireland, or as Montreal Anglophones are heartily tired of discussing Quebec sovereignty. From the archetypal spring garden of the Indian landscape, Kashmir has turned into a cultural black hole. Perhaps I’ve had an easier time of it, trying to learn shawlweaving from a handful of museum artifacts, than if I had tried to elicit the cultural birthright and commercial trade secrets of a traditional weaver. As an artist of the individualistic West, I have always felt that techniques can be shared freely because one artist’s expression will always differ from another’s. Even today, unexpectedly many Kashmiris learn to recognize talim and the shawlweaving tradition, probably through childhood experience in the knotted-carpet industry. None would see any career future in earning a living by the slow rigours of shawl weaving, in today’s world of globalization and get-rich-quick, but it is still a source of pride.

I have witnessed several instances where, feeling absolutely secure in the knowledge that only fellow Kashmiris can recognize and understand the talim, mischievous weavers and sly dealers misrepresented examples of talim they were showing. In one case a page of talim was placed upside-down on the loom for the documentarian’s published photograph.⁵ In another more serious fraud, a collection of ten separately-named samples of talim, each with a corresponding fabric sample, was offered for sale to a museum. When I drafted the talim data I found that six of the fragments formed one continuous design, unrelated to any of the fabric samples. Meanwhile I also came across one of the same talim fragments, paired with a different fabric swatch from the collection, published under a new pattern name.⁶ In any discussion of the antiquarian value of a talim, the ultimate put-down is to say, “It’s only a carpet talim”, a claim that is not only about the talim, but also asserts “I know the difference and you don’t”. I confess it gives me a little thrill of private satisfaction to think, “Oh yes, I do”.

I first acquired a computer only in 1998. At the same time as I had been resisting getting one to do things I didn’t need to do, or that I was quite happy doing by more old-fashioned means, I had speculated about what sort of program would help me make correctable graphed designs of talim data. When a weaving colleague showed me *Stitch Painter*, the program I had dreamed of, I could no longer procrastinate.

A talim, whether for shawl or carpet, describes a rectangular area of weaving, so many warps wide by so many picks high. So the numerical total of each line of text should be the same. Usually there are mistakes that have crept in during recopying, and lie hidden

⁵Abdul Ahad, *Kashmir to Frankfurt, A Study of Arts and Crafts*. (New Delhi: Rima Publishing House, 1987), plate between 128-129.

⁶Jaya Jaitly, ed., *Crafts of Jammu, Kashmir and Ladakh*. (Ahmadabad: Mapin, 1987).

in the coded text waiting to trip up the unsuspecting weaver. It takes surprisingly few mistakes in counting, each one displacing the rest of the line which follows it, to disrupt the design. With my markers and graph paper it was frustrating to try to find by trial and error exactly where the mistakes lay. With the computer I could easily shift parts of lines until they conformed to the overall dimensions and design. Whether or not I was entitled to correct the data based on subjective judgement, I just did it and moved on to new realizations. I first drafted the Leitner talim almost 9 years ago and had never been able to conclude if it formed a complete pattern unit. After a series of slight revisions on the computer, it was clear that the design is complete, bounded on both sides by opposing, bilaterally-symmetrical figures, and seems to work convincingly in mirror-repeat. To create new designs is simply a matter of painting on a grid that reflects the structure of the weaving. *Stitch Painter* even generates a line-by-line count of the coloured units, exactly like the talim.

In the 19th century, western technology superceded the shawl weaver by substituting a different weave structure, the Jacquard-woven “Paisley” shawl. Ironically, now the computer can automate the jobs of the designer, the colour-caller (tarah guru) and the talim clerk (talim nawi), who were the elite workers of the shawl industry. But still there is no mechanical replacement for the complex manipulations of the tapestry-weaver’s fingers.

Absorbed as I was by the relation of talim to shawl weaving, I began to ask myself what lessons I could apply to my own tapestry work, where I normally strive for naturalistic, three-dimensional pictorial effects. I had already learned that including as much detail as I could was more engaging than long, boring, plain passages, and the example of shawl weaving reinforced that. Nevertheless the assurance that pre-planned or repeated details will fall neatly into place is comforting. By following the stitch-by-stitch directions of a talim or graphpaper design, all the “tight corners” are worked out the first time through, assisting later repeats with well-practised familiarity and unconscious memorization. My challenge was to use patterning in a pictorial setting to evoke the textile nature of my medium, without making it seem flat or wooden.

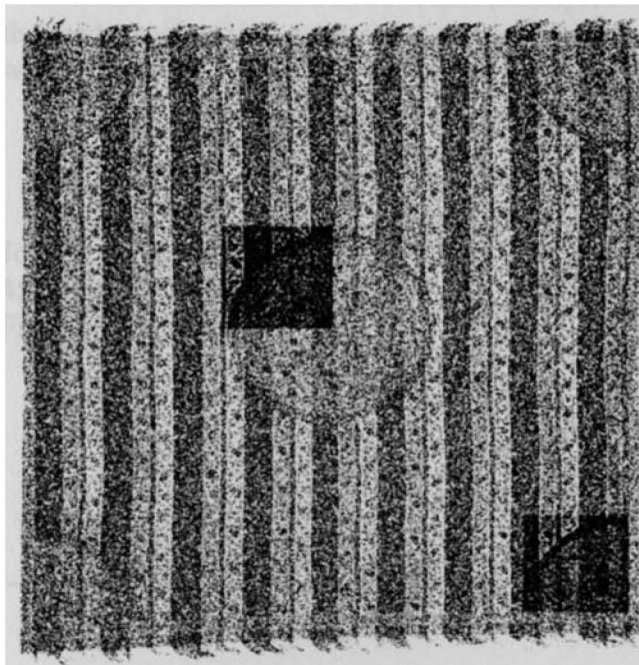
The talim itself has many advantages for the shawl weaver, who faced a very demanding situation, working at fine scale, from the reverse side of the fabric cluttered with bobbins, loops, and loose ends, following an elaborate and arbitrary design. The talim provides a fixed set of complete, precise, step-by-step instructions, and demands only accurate, consistent counting. It offers little scope for creative alteration or adjustment – there is no easy way to change the scale of the design, or find your place partway through a line or the width of a design. But it makes very resourceful and economical use of pattern repeats, presenting the instructions for a complete shawl, millions of stitches, on a minimum of pages.

This typical square moon shawl provides an example. In the first slide, the highlighted portion shows the main talim required for one quarter of the central medallion, with the same repeated in one corner. The other three quarters of the medallion, and their respective corners, are made from the same talim by reading the lines in different combinations of top/bottom and left/right. The second slide shows all the required talim components for the entire shawl, vertical border, horizontal border, medallion, and field background coordinated with the warp stripes. Talim were saved and recopied to be used

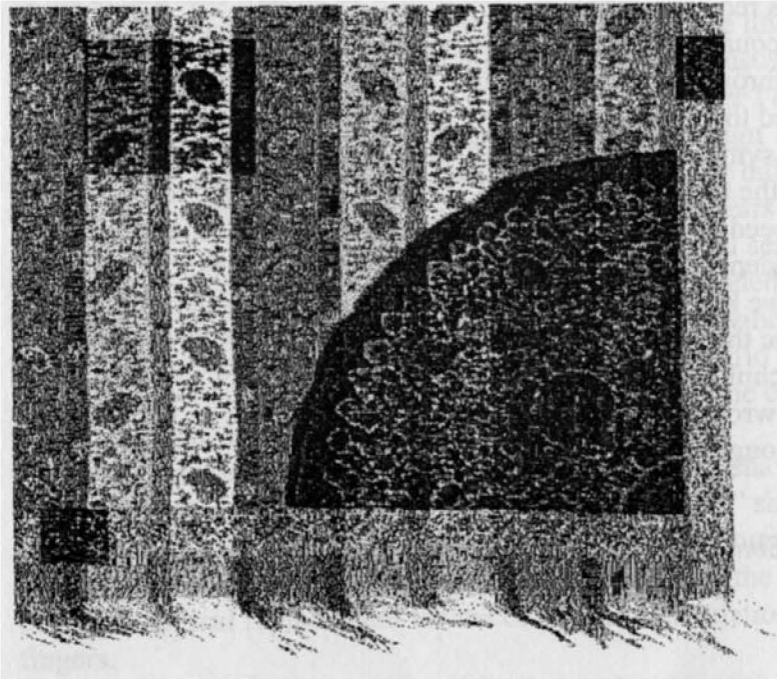
again and again, in different combinations, or with colours substituted according to a colour card, to meet the client's requirements.

It's not a new claim that the Jacquard weaving mechanism was the forerunner of the first mechanical computers, which through many generations of relentless technological Darwinism have now conquered the entire planet. And the mechanization of textile manufacturing was a powerful symbol of the Industrial Revolution. These processes were just getting under way at the beginning of the 19th century. The Jacquard mechanism came into use to speed up the production of loom-controlled imitations of the Kashmir shawl, which was suddenly in great demand in Europe. Is it not fair to speculate that the "developed" world as we know it today, owes its inspiration to an obscure but extremely clever craft technique that was brought to flower in a small, remote, medieval Asian kingdom? A tapestry technique, and a metaphorical link between: Present and Past...inseparably wrought
Into the seamless tapestry of thought.⁷

⁷James R. Lowell, *Under Old Elm*, II.iii (1875), cited under "tapestry" in OED.



1. A typical square moon shawl, with one quarter of the medallion design motif, as would be described by the main talim.



1. One corner of the moon shawl, showing all necessary talim components: vertical border, horizontal border, medallion, and field background.

Reed Screens of Central Asia

John L. Sommer

Reed Screens are basic furnishings of the traditional Central Asian nomad's round, felt-covered tent that, in English, we call a *yurt*. Traditionally, Central Asian pastoral nomads migrated seasonally with all household items, family and flocks. Useless items had no place. A pretty thing had to be a useful thing.

Reed screens are made of tall grass stems, wrapped with dyed but unspun wool fibers and bound together. The art of the decorated reed screen found its highest level among the Kyrgyz and Kazak nomads of Central Asia. Nearly unknown here in the west, such reed screens often show the great skill of their master makers. The patterns and motifs resemble those of nomad rugs, felts and of flatwoven kilims, for which these reed screen designs may well be ancient precursors.

In this presentation, John Sommer will tell how he first became acquainted with reed screens, of his visits to Central Asia and of his acquaintance with Professor Klavdiya Antipina, "the mother of Kyrgyz Ethnography." He will describe the traditional Kyrgyz yurt, its construction, its furnishings and something of its symbolism. He will show actual Kyrgyz Reed Screens and slides of 19th and 20th century reed screens, of archival photographs of reed screens in use and of analogous reed screens from other ethnic groups elsewhere in the world.

He will demonstrate the basic principles of the structure and the construction of the reed screen, using a simple apparatus which can be thought of as a kind of early warp-weighted loom.

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Nature as Code
Ruth Scheuing

Introduction

In order to explore 'nature as code', I will look first at the complexities involved in naming and defining "nature" and the assumptions that have historically associated women with nature. I will focus on historical gardens and floral patterns in textiles as cultural constructs of nature. Specifically I will focus on the differences between French formal gardens of the seventeenth century and the picturesque and naturalist English gardens of the eighteenth century. I will examine how these gardens are reflected in textile designs that use floral motifs. Finally, I hope to provide some explanation of the influences of industrial and technological innovations.

Much has been written about women painting flowers, as well as the representation of flowers and their symbolism, so I will not reiterate it here. My interest is to explore representations and codes of meaning, as a language of interpretation, to be examined, in order to uncover that which is hidden in cultural forms and images.

I work in textiles with a specific interest in how textiles function as objects through their historical, social and cultural associations. To this effect, I have altered or deconstructed men's suits by removing threads selectively. I have also constructed women's dresses that are based on nineteenth century dress patterns by using aluminum flashing. Floral designs used in women's dresses and in fabrics for the home such as upholstery and curtains are my most recent area of research. The images will show how the more ordinary and innocuous aspects of textiles influence my approach to textiles.

Recently I have started to work with computer assisted Jacquard weaving ¹. As a result I started to look closely at the development of the Jacquard loom and historical textiles from the period of its development. The Jacquard system with its punched cards was developed in 1800 in France to produce complex imagery of flowers in woven textiles that could compete with imported designs. This suggests that the pursuit of flowers can produce advanced technical change. Ada Lovelace recognized this potential in her often quoted comment of 1843: "The analytical engine weaves algebraic patterns just as the Jacquard loom weaves flowers and leaves."²

Today, as in the early nineteenth century, Jacquard weaving raises questions of what is natural and what is cultural. Contemporary hand-weaving traditions are strongly influenced by William Morris and the Arts and Crafts movement of the late 19th century and their reaction to the technological and industrial changes. Moving to work against many of the harsh and dehumanizing conditions of the industrial revolution, Morris proposed that the natural was defined as good, and what was seen to be artificial, that is industrial or commercial was deemed bad. With the availability today of computerized Jacquard weaving that is able to replace hand weaving, the same questions are asked, but now we have the advantage of hindsight and history with which to answer them.

For better or worse, crafts and fiber/textile arts have been associated with the natural or nature. Recent experience from the hippie era demonstrated how lumpy hand-spun yarns, with their natural look, replaced their commercially produced counterpart. But what constitutes good or bad technologies: the back strap loom, the floor loom, the Jacquard loom, automated looms or a computerized loom? How can we, as textile artists, comment on nature, given this complex resource.

Constructing nature

Looking at definitions of nature reveals a range of contradictory meanings. For the scope of this presentation I will focus on nature or the natural as our physical environment or surrounding landscape. What we mean by nature can range from a park, a land reserve, a rural farm or wilderness. "Our own urban gardens both belong to nature and keeping it at bay." ³ It is consequently likely impossible to find land that can be considered natural, that is untouched by human intervention, consequently is all nature cultural?

Nature is an expression of culture; it constructs nature, according to specific whims and desires, and reflects a socially and culturally constructed environment.

Nature often functions as a concept to suggest that which is separate from human activity and is used to project desires seemingly unattainable, particularly today with the concept of nature as an untouched environment that is disappearing. Nature is then romanticized, patronized and forever the passive recipient of our desires. In today's technologically charged environment, nature is asked to balance stressful lives by identifying an environment that is untouched by humans. "Going back to nature" might be attractive, but may not be an effective tool to save nature. There is also debate on whether or not nature has to be saved, or if nature has always been dynamic and a changing force and condition, part of a human world yet guided by its own inner processes. ⁴

Scientific manipulation of nature has helped humanity in fighting diseases, and in improving and increasing agricultural production, but it can also create monster plants with unknown potential. Nature is usually seen as a highly moralizing force, except in situations where farmers or fishers have to battle its forces to survive, or when tornadoes destroy whole communities. Our sexual conduct, we are taught ought to be natural, although we are also taught to control our instincts, in fact, this is often considered the main purpose of a "civilizing" culture.

Western culture reflects Judeo-Christian values of nature, "man is made for the sake of God, that he may serve him, and the world is made for the sake of man, that it may serve him." ⁵ Ecology denounces a human dominion over nature and questions the privileging of our own species over others, and the fact that we have placed ourselves *outside* nature or more precisely *above* nature.

Postmodern theory examines the symbolic aspect of nature as a tool for suppressing other cultures, of maintaining class and gender status through definitions of what is or is not natural. It also questions the way in which history and tradition, regardless of factual

truth, are seen as natural and thus good. Thus older farming practices might be seen as natural, even though many peasants died of starvation, while others enjoyed literally “the fruit of their labour.”

Feminist positions are ambiguous in their association or identification of women and nature. The earth as mother, or nature as female is an argument in support of ecology and is a reaffirmation of female powers. We can also look at nature constructed as other similar to Simone de Beauvoir's analysis of women as other, which has shaped contemporary feminist analysis. Accordingly both women and nature are viewed as outside the domain of culture and power. Unfortunately this identification also supports traditional roles, and hinders women's ability to participate fully in innovations in culture and technology.

To counteract this trend, Donna Haraway proposes fluid boundaries between humans, animals and machines instead of defining oppositional or binary positions. She questions how each is used by the other: "Nature and culture are reworked; the one can no longer be the resource for appropriation or incorporation by the other" . And as she continues: "We are all chimeras, theorized and fabricated hybrids of machine and organism; in short we are Cyborg" _ . "The Cyborg myth subverts myriad organic wholes, in short, the certainty of what counts as nature - as a source of insight and promise of innocence - is undermined, probably fatally.”⁶

The appealing conclusion is Haraway's trickster solution, the Cyborg, genderless and part machine, part flesh, part science and part myth, is born as the offspring of military and patriarchy to join together exactly those forces that have been traditionally placed in opposition: women and technology, nature and culture.

Recent protest marches against the World Trade Organization in Seattle have shown the benefit of internet communications in disseminating information quickly, cheaply and efficiently to produce results. Haraway's Cyborg could be seen to include women with protease, men with pace-makers and kids with cell-phones glued to their ears, and this textile artist typing away at her computer and communicating across the Web to her own kind.

Constructing gardens and floral textiles: representations of nature in the seventeenth and eighteenth century

Gardens and parks symbolically recreate nature because plants are seen to produce the natural environment and even exotic plants can be grown in Northern countries, by taking them inside for the winter. Floral designs in textiles are a step further removed from nature, as the designer is free to invent whatever plant-like construct is deemed appropriate and/or beautiful. I have decided to isolate specific historical juxtapositions, because the changes dramatically illustrate issues that still exist today.

Gardens throughout history are symbolic representations of nature. They construct nature into roughly three overlapping areas or concepts: first, paradise, a spiritual retreat or Arcadia. Secondly, gardens are places for contemplation and the admiration of beauty. Finally, they also exist to demonstrate ownership, wealth and power.⁷

Flowers and plants as fabric patterns and designs represent imaginary constructions of nature. Textiles used in interior design, such as curtains and upholstery, bring nature inside. Floral designs on women's dresses place women in the realm of nature, particularly when we compare them with the more somber, plain male suit. Floral elements range from realistic depictions of nature, to abstractions of nature as universal geometric forms, and depictions of unnatural or fantasy images. Therefore gardens can be defined as one level removed from nature, and floral design at two levels removed.

Seventeenth century classical French gardens displayed royalty's power over both people and nature. Nature was transformed into a work of art. Classical French gardens were influenced by Renaissance gardens in which the perspective square or rectangle suggested divine order imposed on earthly chaos.

Sculpted plants were set in geometric arrangements, to look like walls, parterres or embroideries. Tapis vert (green carpets), topiaries, knots and mazes were constructed of precisely trimmed evergreen plants such as box wood. The emphasis was on vistas from above or high vantage points; this also reflected a military approach to garden design as it allowed for grand overviews. These gardens were settings for the king's private wanderings and public entertainment. Le Nôtre is best known for designing the gardens at Versailles for Louis XIV and the earlier Le Veau. He added his own emphasis, by creating wide and open allees, radiating in all directions with military precision. He leveled hills, detoured existing streams and created water settings, felled trees and imposed a rigid geometry onto the land. Sculptures, often representing the pagan forces of nature, played an important role. Flowers filled allotted spaces; they were collected from all over the world and while their presence is described in the literature, they are not very evident in the surviving garden designs.

Illusion, fantasy, and other unnatural monsters: from Rococo to Neoclassicism

The Bizarre style peaked around 1700 to challenge established design principles by using deliberate asymmetrical designs, fantastic creatures and the incorporation of architectural elements and rock formations. The resulting Rococo style was also influenced by the grotesque. Developed in Italy in the sixteenth century these images depicted human figures, plants and animals that did not conform to natural laws of proportions and size, rather they used many fantastic composites of human, animal and plant life. The grotesque balanced fear and humour in ways that did not permit clear interpretation between the real and the imaginary. The Rococo even more so exploited an inherent tension between representations of nature and aspects of pure decoration. Chinoiserie added an exotic appeal influenced by new ideas from Asia. Rococo challenged the laws of nature and what would be considered "Crimes against Nature".⁸

Eighteenth century gardens emphasized naturalism and Romantic notions of the sublime and the picturesque. They placed nature in an exalted state, where it served as a tool of transcendence. Their designs were influenced by images of oriental gardens, which had recently reached Europe. The picturesque gardens emphasized curves, open lawns and variations in the landscape. There were no clear boundaries between house, garden and surrounding nature. They invented invisible boundaries or trenches, the so-called 'haha's'. Irregularities were emphasized in opposition to traditional definitions of beauty, balance and symmetry. Gardens and estates also start to represent land ownership of the rising bourgeoisie.

According to E.J. Gombrich "all criticism of the Rococo is against transgressions of the rules of reason and of nature".⁹ Rococo's emphasis on excess in ornamentation, pleasure, innovation and fantasy was challenged by both English and German advocates of the more restrained Neo-classical style. They castigated its Frenchness as foreign and feminizing. When Christopher Wren visited Versailles he found it "crowded with little Curiosities of Ornaments ... and work of Filigrand and little Knacks; the Women make here the Language and Fashions, and meddle with Politicks and Philosophy."¹⁰

Nationalist protective measures established through trade tariffs are evidence that these design/style issues were taken seriously on an economic level. Eastern art was criticized as Sarat Maharaj pointed out in Ruskin's comment about Arachne's tapestry with its ivy leaf motifs, "their wanton running about everywhere".¹¹ Ruskin stresses Arachne's eastern excesses in her imagery, her lack of self-restraint, orientalizing and effeminate imagery vis-a-vis the classical Greek order represented by Athena. Ruskin therefore sees justice in Arachne's condemnation for her trespassing on good taste.

Constable believed that "since nature was the clearest revelation of God's will, the painting of landscape, conceived in the spirit of humble truth, could be a means of conveying moral ideas." Both Constable and Wordsworth believed "that there was something in trees, flowers, meadows and mountains which was ... full of the divine ... and both were inspired by a dream of paradise, and sought to create harmony between man and nature".¹²

Neo-classical views in Britain argued for a return to simple classical styles; "in decoration regular shapes, whether straight, square, round or oval, are preferable". German's were warned that "the decline of good taste in various arts among several of our neighbors is coupled with a decline in the decency of manners".¹³ Rococo was seen as being admired by the wrong people: women, foreigners and the nouveau riches.

The natural look was carefully constructed as many of Humphery Repton's watercolour drawings show. He constructed movable sections that allowed a client to see both the 'before and after' views.¹⁴ Landscape needed to be improved in order to fit expectations and often a plain settings became more dramatic. Landscape was shaped to mimic paintings or literary references, and painters were consulted in the creation of new gardens.

Industrial change and the Arts and Crafts movement

It is of interest to me to see how industrial change might have influenced these reactions. Before the industrial revolution, ornamentation was a sign of status, but industrial processes were well suited to mass-produce complex detailed work using the Jacquard loom and various mechanized looms and printing processes. The middle and lower classes were able to afford highly decorated objects and so the simple and hand-made object became a socially and morally progressive status symbol. Owen Jones promoted Greek stylized design of flowers as idealized designs; they were to be flat, regular and repeats and also followed Pugin's prescriptions "that pattern should not be realistic or call unnecessary attention to itself."¹⁵ This would mean walking on a bed of flowers. Ruskin felt that Renaissance style required intellect rather than emotion for its enjoyment and he supported the latter.

Nature/gardens projected needs and fears that stemmed from the process of urban change and industrialization. People turned to nature out of fear of the modern world.

Conclusion

Interesting parallels can be made between the rise of Neo-classicism and resulting historical eclecticism of the late eighteenth/early nineteenth century and postmodernism today. Both look at the past for inspiration, and they are influenced by a sense of moral outrage in relation to current conditions. Both respond to technological changes: one to the industrial revolution, the other to changes caused by the electronic and information age.

Postmodern practice emerged in the twentieth century with technologies, computers, television mass media and the World Wide Web. They allow for an even wider distribution of images and goods, and thus also cause a reflection of history and the context of making objects and images that reflect on nature. Both movements reacted to problems created by new technologies: labour-issues, social concerns, mass production and changes in nature and the local surroundings.

There are real needs that we hope nature will satisfy, but we also question nostalgic qualities projected onto an ever transformed nature. Nature can no longer be the sum total of our projected desires; this can not help "it/her/him/us". Nature cannot be defined in terms of the artificial enclave or the parks which humans have set aside from the everyday world. All of it is nature, the good, the bad and the ugly, and the way we construct gardens and floral textiles today may uncover some of the conscious processes involved.

Notes

¹ The illustrations are Photoshop files; they were created by the author, from a variety of historical sources, manipulated in Photoshop, then translated into Pointcarré software and woven on a Jacquard hand loom in Montreal at the Centre de Textile Contemporain de Montreal.

² Joan Baum, *The Calculating Passion of Ada Byron* (Hamdon, Conn.: Archon Books, 1986), 71.

³ Kate Soper, *What is Nature? Culture, Politics and the non-Human* (Oxford UK & Cambridge, Mass: Blackwell, 1995), 2.

⁴ Soper, 126.

⁵ Soper, p23.

⁶ Donna J. Haraway, *Simian, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 151.

⁷ the information on the history of gardens is informed in primarily the book by Penelope Hobhouse, *Gardening Through the Ages* (New York: Simon & Schuster, 1993).

⁸ Neil MacInnes, "Crimes against Nature" in *material matters: the Art and Culture of Contemporary Textiles*. ed. Ingrid Bachmann and Ruth Scheuing (Toronto: YYZ Press, 1998).

⁹ E.J Gombrich, *The Sense of Order: A Study in the Psychology of Decorative Arts* (Oxford: Phaidon, 1979), 21.

¹⁰ Gombrich, 123.

¹¹ Sarat Maharaj, "Arachne's Genre: Towards Intercultural Studies in Textiles," in *material matters: the Art and Culture of Contemporary Textiles*. ed. Ingrid Bachmann and Ruth Scheuing (Toronto: YYZ Press, 1998), 158.

¹² Kenneth Clark, *Landscape into Art*, (New York: Harper & Row, 1979), 151.

¹³ Gombrich, 22-24.

¹⁴ Gabrielle van Zuylen, *Paradise on Earth: The Gardens of Western Europe*, trans. Mark Paris (New York: Harry N. Abrams, 1995), 91.

¹⁵ Gombrich, 34.



Flowers and Leaves #1: "The analytical engine weaves algebraic patterns just as the Jacquard loom weaves flowers and leaves." Ada Lovelace, 1998, computer assisted hand-woven Jacquard fabric, 40x 40". (detail) Ruth Scheuing



Flowers and Leaves #9: ...when Women Skip (in) Paradise , 2000, computer assisted hand-woven Jacquard fabric, 54 x 40". (detail) Ruth Scheuing
Nature weaves a digital dream; Flowers culture a garden in cyberspace when women skip (in) paradise

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MATERIAL AND THE PROMISE OF THE IMMATERIAL

Ingrid Bachmann

Imagine. A map, circa late-18th century, somewhere in the New World. The map begins to burn, from the centre out.

Scene 2. Vast plains, an expansive horizon, a fading sunset. Hold that image. From off in the distance, the sound of galloping horses, gradually approaching. Faintly at first, far away, you hear music. You think you recognize it, it has a familiar strain. Quietly, then at full volume, you hear the soundtrack from the 1960's television series Bonanza. Hum along if you like.

Jump cut. Scene 3. New image. Vast, black empty space...outer space—stars and planets, a shooting star, enormous silence...Out of this silence, a voice...Space, the final frontier. These are the voyages of the Starship Enterprise. Its continuing mission is to explore new worlds. To boldly go where no one has gone before.

Scene 4. Imagine. A large white boot descends from a silvery ladder and touches the surface of the moon. One small step for man, a giant step for mankind.

Scene 5. Fingers poised over grey plastic keys, shoulders hunched in dim light, an uncomfortable chair. The world reduced to a fifteen-inch square emanating blue light.

The rhetoric around digital technologies is infused with the utopian promises of deliverance and progress – the promise of another frontier, an original uncharted space, virgin territory, a clean slate, another chance to "get it right". This notion of the frontier has almost mythic proportions in the language and literature of the West. From the 'promised land' offered in the Bible, to the lost Garden of Eden, from Columbus' arrival in the Americas, to the cowboy and Indian films of the 1950's and the space adventure films of the 1980's and 1990's, the notion of the frontier continues to engage the imagination of the West. This adoption of a frontier mentality toward the landscape and vocabulary of cyberspace provokes some interesting observations on how our visions of the future are predicated on the structures of the past.

At a time when resources are diminishing worldwide, when natural frontiers are disappearing, when outer space has not yet proven to be an hospitable and supportable environment for human life, cyberspace provides, however fallaciously, the last frontier. The frontier myth is an enduring one and its adoption into the rhetoric of the digital sphere has serious implications - myths of transcendence and separation between the mind and body, nature and culture, have a long and complicated history and their unacknowledged passage into cyberspace is a disturbing one.

I have titled my contribution to this text "*Material and the Promise of the Immaterial*" because it suggests to me, one of the fundamental contradictions of our time – what we might define as late 20th century, emerging 21st century, the post-colonial, post-industrial, post-modern era – namely, the contradiction between the material and physical conditions of our daily lives and the promise of immateriality or transcendence advanced by the rhetoric around emerging digital and tele-virtual technologies.

Technology is shaped by and is a product of forces that are deeply imbedded in economic, political and cultural structures. In this paper, I would like to examine the discourses and rhetoric around both textile and computer technologies (central to this paper is the view of textiles as a technology), and to explore the ways in which these practices are scripted in contemporary culture and the values and attributes that are ascribed to them. What is the gap between a technology's apparent role, history, perceived use, its expected user, and its actual role, function and history? Why is weaving considered antiquated, artisanal, slow, gendered female? Conversely, why are computers considered as fast, new, state of the art, virtual, gendered male?

The currency or more accurately, lack of currency of textiles as a technology is rather pointedly illustrated in a recent advertisement in *Wired* Magazine for an Internet provider. In the ad, a sexy red head poses provocatively against a computer. The accompanying copy reads, "let's just say that you won't find me on the knitting newsgroup." Clearly, knitting is for doddering old grandmothers, not for foxy cyberbabes or hip infobahn warriors.

Textiles as a practice is still quite firmly rooted in the popular imagination as an artisanal activity, a sometimes quaint, historical craft, one of the 'gentle arts' usually associated with women whose site of production is historically the home, an antiquated process that operates outside the 'real' economy of commodity goods and exchange. It embodies both the nostalgia and historicity surrounding many perceived economically redundant technologies. In a youth obsessed culture with an almost pathological fear of aging, to be old is extremely undesirable. This scripting of textiles and weaving as both a feminine activity as well as an outmoded practice is not unexpected, but it is hugely inaccurate given the seminal role of textile production in both the industrial and digital revolutions of the 19th and 20th centuries respectively. This romantic vision of textiles is further undermined by the global scale of contemporary industrial textile production and the ongoing and enduring presence of sweatshops in the first and developing worlds.¹

After all, it was in the textile industry as well as the transportation industry, that the Industrial Revolution was most strongly felt. The textile industry - including weaving and spinning - was one of the first industries to be mechanized. This mechanization of textiles had an enormous impact socially, culturally and economically. The mechanization of textile mills involved the transfer of workers from the home to the factory, from the country to the city via the newly developed railways powered by the steam engine, and worsened the already deplorable conditions of textile workers. As Karl Marx wrote, "the hand-loom gives you society with the feudal lord; the steam-mill, society with the industrial capitalist."²

The invention of the steam engine, although uneconomical and inefficient to operate by contemporary standards, necessitated a consolidation of resources and machines. Textile machinery, whether a loom or a spindle, is comparatively light and uses little power. For steam power to be effective, the machines need to be assembled in large factories where many looms and spindles can be powered from one steam engine. The only available means of transmitting power in the mid 19th century were mechanical, through the use of shafts, belts and pulleys. Later, with the invention of the electrical motor, machines were driven individually and no longer required mechanical and by extension, spatial connection. But the desire for a consolidation of workers under one roof was not solely necessitated by technological requirements. It was reflected in the 19th century management's desire to maintain discipline and control over workers, something easier to achieve when the workforce is localized and not dispersed. 20th century labour conditions in the textile and electronics industry are distressingly similar. The appalling work conditions of the multi-national electronics industry rival the deplorable conditions of the 19th century textile mills. The shift in population from an agrarian life to an urban, industrial life necessitated by the Industrial Revolution is mirrored today in the large movement of people in the Third world – those who Barbara Ehrenreich and Annette Fuentes have called the world's new industrial proletariat: young, female, Third World, whose existence is signaled through a label or imprint - made in Hong Kong, Taiwan, Korea, the Dominican Republic Mexico,³ – who are forced to move geographically from country side to the city rupturing social and cultural traditions. Ironically, in the developed World where computers are used but not assembled (with a few exceptions), computers have had the opposite effect of dispersing the population, allowing individuals to work anywhere a telephone line and modem can be hooked up.

Within the digital revolution of the 20th century, the role of textile technology is equally seminal. One of the many ironies, as any first year computer science student is well aware, lies in the fact that the forerunner of the first computing machine – Charles Babbage's *Differentiation Engine* – was based on the early 19th Century Jacquard loom.⁴ Joseph-Marie Jacquard's system of pattern punch cards to store and process information for his automated loom were translated into the first computer punch cards.⁵ Weaving after all, is a process of information storage, a binary system of interlocking threads, mirroring the 0 and 1's of computer programming. Yet the image of a weaver in 19th Century Lyon, France, let alone 20th Century America, is strangely at odds with the image of the contemporary computer hacker.

This gap between a technology's perceived and actual function and history, is well illustrated in artist Gwen Zierdt's *The Unabomber Manifesto*, a piece which translates the Unabomber's Manifesto into cloth and pattern. It is a handwoven textile, measuring two by four metres, consisting of horizontal woven strips which translate the first four paragraphs of the Unabomber's Manifesto into a pattern. Within each horizontal strip of cloth, grey and white squares in vertical blocks represent 8-bit binary numbers. These numbers correspond to the text as it is stored in computer memory. The Unabomber's text was downloaded from the Internet and represented by patterns that correspond to the 0's and 1's that are used to store text in computer memory. This pattern was then converted into weaving instructions and woven with a computerized dobby loom.

The Unabomber's Manifesto also known as the "Industrial Society and Its Future," is among other things, a tirade against technology and an exhortation for society to return to a level of technology similar to the one that preceded the Industrial Revolution. In hand weaving the Unabomber's Manifesto in conjunction with computer technology, Zierdt's work offers an ironic commentary on the location of practices in the popular imagination. That weaving, one of the most ancient technologies, a technology that has been at the forefront of both industrialization and digitization, the site of early labour exploitation and later labour organization, should be viewed with the romanticism of hand work inherent in The Unabomber's treatise is ironic. As Zierdt amply demonstrates, the discrepancies and distinctions between textile and digital technologies are not as distinct as they have previously been defined.

Zierdt's *Unabomber Manifesto* also questions the seemingly arbitrary nature of pattern as a collection of random decorative marks and units. *The Unabomber Manifesto* offers a striking contrast between the speed of digital telemedia against the slowness of hand production. The very visible labour of hand weaving is contrasted with the invisible labour of digital technologies and points as well, to the invisibility of the labourers who create textile goods and those who assemble computer goods. These seemingly disparate fields share the commonality of origins and a largely anonymous labour force.

In a 1995 collaborative project entitled *Fault Lines: Measurement, Distance and Place*, Barbara Layne and I explored the complex relationships and interrelationships between hand and high technologies. Our objectives were to incorporate digital technologies into material practices, to link disparate sites through electronic transmission, and to reconsider boundaries, whether based on geography, philosophy, access, to examine the contexts, associations and expectations of the apparently distinct media of weaving and telemedia technologies. The narrative traditions particular to both textiles and technology provided another interesting link in the *Fault Lines* project. Textiles has a very long tradition as a carrier of social and cultural messages: the Bayeux Tapestry, produced in the 11th Century, narrates the tale of the Norman Conquest; in the tales of Ovid, Penelope and Philomela tell their often horrific tales through hand woven cloth; and the contemporary Names Quilt documents the deaths from AIDS. Laurie Anderson has suggested that "technology today is the campfire around which we tell our stories."⁶

Fault Lines involved the simultaneous production of two textiles in two distinct locations, Montréal, Québec and Santa Monica, California, that recorded, measured and transformed the daily seismic activity of those cities into a woven record. Seismic data from Montréal and Los Angeles was uploaded daily by the geological labs at the Canadian Geological Survey in Ottawa, Canada, and the California Institute of Technology in Pasadena, California, to FTP sites on the Internet. The data was exchanged from one site to the other via the Internet to computers attached to each loom. This information was then translated by custom designed software into a woven structure. For a period of one month, weavers at both sites operated the computerized looms and wove the daily seismic record of the other city, creating two continuous lengths of cloth that recorded the shifts of the earth as well as the gestures of the weavers. At the conclusion of the project, two bolts of cloth were produced. Each cloth was 12 inches wide and approx 55 feet long. Woven in black and white yarn, the days were separated by shots of yellow or red yarn and tagged and dated. They were accurate renderings of the seismic data but their truth value was considerably diminished by virtue of their presentation in textile form. The same information presented as a computer print out or a video still image has greater truth value to an observer today than the same data presented in textile form. The information itself has not changed, but its method of representation had. This called into question the seeming neutrality of various forms of representation. Clearly, all representations are mediated and information cannot be independent of the contexts and media in which it is presented.

Textiles are characterized by their haptic qualities and strong visual and tactile presence. The haptic quality of textiles reminds us of our own material origins and the often problematic physical conditions of our daily lives. This tactility and materiality appears to be in direct opposition to the almost antiseptic sterility of the design of computer hardware. To note this is not an attempt to indulge in nostalgic longing for the loss of the haptic, nor to fetishize the labour intrinsic to most textile work, nor to make a claim for the superiority of the haptic. It is to examine the nature of materials and their location within a signifying realm. For what factors determine that textile looms are fabricated in natural woods and not in stainless steel? Conversely, what factors determine that computer hardware is fabricated in heavy duty grey or black plastic melamine rather than in wood? Why isn't fake wood grain an option? It would seem that the choice of materials to house these technologies is based on their associations as signifiers rather than by any strictly functional imperatives.

What is at stake in the scripting of technologies as 'old', 'new', 'hot', 'cold', 'authored', 'anonymous'? And what is at stake with the dismantling of the frontier myth of digital technology? The physical, the material have an uncanny ability to remind us our bodily origins, that messy, leaky terrain of wetware that the rhetoric of digital technology so desperately seeks to escape. We are reminded that even in our newest technologies we remain firmly rooted in the structures of the past.

Endnotes

¹For an excellent resource on contemporary labour conditions in the textile industry, see *No Sweat: Fashion, Free Trade, and the Rights of Garment Workers*, ed. Andrew Ross, New York: Verso, 1997.

²Karl Marx *The German Ideology*, 150.

³Barbara Ehrenreich and Annette Fuentes, "Life on the Global Assembly Line" in *Feminist Frameworks*, ed. Alison M. Jaggar & Paula S. Rothenberg, (New York: McGraw-Hill, 1984), 280.

⁴The abacus, it could be argued, is one of the first computing devices and its history has been traced back as far as ancient Greece and Rome. The abacus, which looks very much like a child's toy, consists of beads strung on rods mounted in a rectangular frame. As the beads are moved back and forth on the rods, their positions represent stored values. It is in the positions of the beads that this 'computer' represents and stores data. An individual is required to position the beads - data input - and is also required to observe the bead position - data output. But the abacus alone is not technically a computer, is a merely a data storage system since it relies on a human operator to create the complete machine.

⁵See Sadie Plant's "The Future Looms: Women, Weaving and Cybernetics" in *Clicking In*, ed. Lynne Herschman, Seattle: Bay City Press, 1996, for an indepth look at the social, historical and cultural relationships between weaving, women and technology.

⁶Laurie Anderson, *Wired Magazine*, March 1994

Performative Textile Gestures

Ann Newdigate

*Moving between the bubbles
of memories not your own,
are you sure that it is really
you in the photo?*

*Evidence of thread has been found
in Paleolithic sites, images of string
surface in dreams and nightmares,
metaphors of yarn persist in language
even after the knowledge of the skills
that bind are lost.*

I wrote that in 1996, when a photograph that I had abandoned 30 years before came back to claim me. The image, of myself and three other young white women on camels in front of the Egyptian pyramids, acquires timelessness because all cars in the large parking lot are artfully invisible. I also wrote that "in the year 2000 I will have been **here** longer than **there**". I speak from a constituency that has no continuity with tradition, and which is removed from ancestors. It was the moment when I began to seek a visible format for the complexities of ambivalence. My ambivalence is probably shared by millions of people who have left their country of birth because political events, for better or worse, have overtaken their expectations. Not growing old with your siblings - **there** - having a new family **here** - are but a part of the immigrant experience. ". I speak from a constituency that has no continuity with tradition, and which is removed from ancestors. This dislocation is a condition that affects most artists working with contemporary concepts, and it demands a negotiating of personal iconographies for each individual.

A prolonged illness on arrival in Canada jolted me into turning away from my degree in African Studies and into becoming an artist, although I did not realise in 1966 that I was performing a redemptive ritual of recovery. Then, going against current art school formalist domination, I went even deeper into ritual by extending drawings into the labour intensive age-old technology of tapestry. The acquisition of skills and knowledge was a prolonged tapestry pilgrimage of necessity outside any institutions except for a post graduate year at the Edinburgh College of art in 1980. I did not think of it as performing mourning and recovery when I went to my loom each day to be immersed in an interface of repetition with intense concentration.

In 1988 I completed my MFA, with a dissertation titled, "Love, Labour and Tapestry: unravelling an Edwardian legacy". This research brought me back to the cerebral when I learned that politics, power, and the stereotyping of value and identity were as prevalent in the art world as they are in the governance of a wider community. Thereafter my work addressed issues of power and authority, and I started to add new technologies, that

resonated with the ways in which advertising borrowed the codes of textiles to sell subliminal meaning. A good example is the image of a small town rendered in simulated stitcher on the cover of Time Magazine to reinforce their article on the movement of people from large centres to small towns. I incorporated photo transfers, xeroxes and finally digital printouts with traditional drawing and tapestry in my investigations of technology, value and identity. My main source, the Bayeux "tapestry" was, however, ancient in process and timeless in intention. A 200 metre long embroidery, The Bayeux narrates the official history of the Norman Conquest of Britain through the wide central panel, while the marginalia run concurrent alternate versions from a low life perspective in which gender politics is explicit. This historical record has particular resonance for me, and my itinerant psyche, since an ancestor of mine accompanied William in his conquest of Britain in 1066.

My Normandy journey resulted in "Ciphers from the Muniments Room", an installation with three parts. (A cipher = a code or person of no account. Muniment = an archive in which documents of privilege and status are kept).

(1) Drawings with dual narratives and mixed technologies.

(2) "Arrival",

a 19 ft. institutionally framed series of tapestries with found text from a primary school text book, "The Romance of Canada", depicting the arrival of the brides in Canada, had a motion-detector activating a collage of sound. This component consisted of a French Canadian woman reading my research about the provenance of the Bayeux tapestry, an official travel guide read by a authoritative typical media male voice, and a big band version of a fifties song lodged in my memory. All were occasionally drowned by the sound of the sea.

(3) In dialogue with "Arrival" was "Letter", a 22' long digital printout on canvas, derived from eight "pages" of shorthand woven in a Gobelin style. This uncensored letter to the author of "The Romance of Canada", was conceived through a diary I kept in the secret language of Pitman's shorthand when returned to South Africa at the end of apartheid. After High School I was trained in stenography and learned Pitman's, but later, needing revision, I found only second hand books frozen in time from the fifties. Images of presumably the ideal secretary on covers of the manuals reminded me how difficult it had been to love my work.

By 1996, when I started the WOUND work, I had decided to move, after 30 years, to my current studio on an island in the Gulf of Georgia. Another major move meant another re-examining of my life, and my work, and a return to the sea. Not surprisingly I had, by this time, developed a certain ambivalence about working in tapestry and the mental gymnastics required in moving between the various art discourses the medium touches upon. Then another kind of reverse unravelling began when I turned to winding, an ancient textile process, which is not invested with years of skill acquisition. I set up a large colour wheel of yarn and, in an act of collaboration, invited people to enter the circle and lend me an object as surrogate for an ambivalent or problematic memory or experience. In exchange for winding the object I received the narrative of ambivalence and I did not use recording devices, but relied on listening and remembering. To fix the

visual memory of each of about fifty objects, through my hand and eye co-ordination, I first drew them with ink on paper. Meanwhile participants typically began their story, and continued it while either they or I wound the object. Some windings took as long as five hours and, after scanning the object directly in the computer, I returned it to its owner. With my body as an extension of the technology, I was revisiting the function of stenographer (an early computer), whose brain, hands and eyes record the invisible words of another person through shorthand for transcription into a visibly written code.

It was in the Banff situation of virtual retreat that I became aware of the work of Peggy Phelan, head of a department of performance art, who has a deep understanding of psychoanalysis. In particular, her book "Mourning Sex: Performing public memory" showed me a way in which I might formulate the WOUND process. Despite the affinities, the word "Performative" is distinct from the word "Performance", and I interpret it as I understand Phelan's reference to "performative writing" - a private pursuit with the promise of a public outcome. This concept revealed that the gradual unfolding of my WOUND work has been something like a book, in which each chapter is a process of mourning that is often not without celebration, containing and contained, that opens a space for respite.

Performing the everyday, the mundane experiences of decision making, of change and yearning, loss and hope, of uncertainty and containment, led to my developing WOUND II at the Banff Centre last year. I was able to resolve the dilemma of what to do with ten years of accumulated copies of the Weekly Mail. This South African newspaper covered the period from the height of apartheid's atrocities to the Truth and Reconciliation Commission that followed its demise. Old issues of this dissident paper were not of value in any collection since the advent of electronic storage, but the readings, the images, and the courage of the reporters held rich personal archives that go beyond its historic significance.

I set up a reading booth in a public passageway at the Banff Centre, and I learned how many other people value and mourn newspapers from their homes when they move. I heard of someone who, after 25 years in Canada, still keeps every copy of an Irish newspaper, and someone who gets Brazilian newspapers sent regularly.

Referencing the surveillance that was prevalent in SA, I mounted a digital camcorder behind a one way mirror on the booth. I learned that, even though it focused on the hands of the reader to allow anonymity, the footage became a surprise metaphor for public commitment because it recorded feet approaching, hesitating or walking straight by.

I put out different copies twice a day, and thereafter wound them into a tight circle that I bound with string. What was revealed on the surface could not easily be controlled, and sometimes an advertisement, a rugby game or someone murdered by government employees, was visible. Not surprisingly, the image of President Nelson Mandela frequently appeared. A ban on publishing his photograph after he went into his 28 years

in jail meant that the public had been left with the image of him as a young pugilistic lawyer and had not seen the grey haired statesman until he walked free in 1990.

WOUND II continues to develop the tension between a textile gesture and digital authority as an investigation of the codes inherent in each. The position that I have chosen between technologies addresses the dilemma of most people, and artists in particular, who are confronted by the impact of the cyberge on everything that is familiar and reassuring. I find that, working from an independent and fairly isolated situation, always outside institutions now, the new pilgrimage for me to acquire skills and knowledge about computers, requires vastly more patience than it does to make a tapestry. The ease of reproduction and manipulation, the general respect, and the cyber excitement provide a reversal of advertising's borrowing from textile imagery by giving textiles an expanded audience where the codes proliferate and inform one another. In the contradictory position between technologies and codes, as a self trained artist drawing with a computer as well as in tapestry, I now find that I am having quite a good time persuading my computer to sing for me as responsively as my loom or pencil.

Ann Newdigate is an image maker who works with digital manipulations of her textiles and drawings as a means of addressing issues of power and value through differing visual texts and codes. She received a BA in African Studies and English Literature from the University of Cape Town, South Africa, and a BFA and MFA from the University of Saskatchewan, Canada. She completed a post-graduate year in the Tapestry Department of the Edinburgh College of Art, Scot Visiting Fellow for 1990 at Monash University, Melbourne, Australia to inaugurate their tapestry program. Her works have been exhibited internationally, including a solo show at the New York Centre for Tapestry Arts. Her recent series, 'Ciphers from the Muniments Room' was shown in Toronto, Halifax, Vancouver, Regina and Saskatoon. Her 16' x 12' mixed media artwork was commissioned for the Council Chamber of Moshe Safdie's new Ottawa City Hall. She has written for many art journals and taught or given lectures and workshops in places as diverse as Tasmania and London, England. She now lives on Hornby Island, British Columbia, Canada.

To see examples of Ann Newdigate's work, including a "letter" woven in Medieval style tapestry using Pitman's shorthand which was put through an inkjet printer onto a 22 ft canvas banner, visit her website at:
www.island.net/~newdigit/index.html.

Weaving From the Womb: Textiles, Gender, and Kinship in Rupshu (Eastern Ladakh)

Monisha Ahmed

This paper examines traditional weaving systems among the nomadic pastoralists of Rupshu in Eastern Ladakh, North India. Local narrative states that the craft of weaving was bestowed upon Rupshu by the gods. In this region both women and men weave, each on a different loom. During my fieldwork here I interacted with female and male weavers and found that the discourse on women's identification with weaving is stronger in Rupshu than a man's. While it is mandatory that all women, including nuns, weave, it is not essential for a man to weave. In this paper I focus on the significance of a woman's weaving, and the importance of her being a competent and skillful weaver. The metaphors associated with the backstrap loom she uses are symbolic of the birth of a child, and the weaving process expresses a woman's role as a procreator and nurturer of life. Further, her woven cloth, as well as the manner in which she distributes it, demonstrates her ability to create and sustain social structures within Rupshu. In this paper then I have looked beyond the design and making of textiles in Rupshu to reveal the role and properties of the loom and weaving as symbols with a multitude of referents. Today, there is external pressure on women to change the structure of their loom so that they can weave faster as well as increase the width of their fabric. So far they have resisted these changes because of the symbolic representations of the craft of weaving and its associations with the sublime.

Monisha Ahmed received her D.Phil in Cultural Anthropology from Oxford University in 1996. The subject of her dissertation was the weaving traditions amongst the nomadic pastoralists of Rupshu in Eastern Ladakh (North India). This work is being published as *Living Fabric: Weaving in Ladakh Himalaya*, and should be out by December 2000. At present she is working on a project to document the textile arts of Ladakh, which is funded by a fellowship from the Cambridge University Museum of Archaeology and Anthropology. She is also co-founder of the Ladakh Arts and Multi-cultural outreach trust that works with local performance artists and women's weaving organisations in Ladakh.

Dynamics of Warp and Weft: Contemporary trends in Naga textiles and the Naga collection at the Pitt Rivers Museum, Oxford

Vibha Joshi

This paper, based on preliminary findings, attempts to show the dynamic processes of change and incorporation of new ideas and materials in the textiles of the Nagas of northeast India by comparing the contemporary textile trends with those seen in the Naga collection at the Pitt Rivers Museum (PRM) in Oxford.

The discussion derives from Emma Tarlo and Appadurai's views on museum collections and the role clothes play in a people's identity. Tarlo (*Clothing Matters*, 1996) writes that textile and clothes displays in museums often take the clothes out of their social, political and economic context. Following Appadurai (*The Social Life of Things*, 1986) she says that 'they rob clothes of much of their usual social life'. 'Clothes, which under normal course of events are exchanged, purchased, worn, stored and discarded, become ossified in the museum display case where their meanings often appears static and rigid' (Tarlo, *ibid.* 6). Thus, in the process making the notion of identity fixed and constrained.

Using data from my preliminary field research and museum inquiry, I explore whether the dynamism one finds in contemporary Naga textiles is also represented in the PRM collection. There are about 4000 objects in PRM, the largest collection of Naga objects anywhere in the world. Out of these about 800 are textiles which were collected mainly by British Political Officers, namely, J. P. Mills, J. H. Hutton, Balfour, Peals, Woodthorpe and Reid sometime between the end of 19th century and 1940s. I begin the paper by introducing the region, its textiles, and then examine some examples from the collection at Pitt Rivers museum and the contemporary trends in Nagaland.

The area and the people

Nagaland is one of the north-eastern states of India which shares its border with Myanmar (Burma). It has an area of 16,527 sq.km. The Eastern Himalayas extend into Nagaland. Most of Nagaland is hilly and covered with thick tropical rain forest abundant in various kinds of flora and fauna. The population of Nagaland is approximately 1.2 million (*Census of India*, 1991). There are sixteen officially recognised Naga ethnic groups in Nagaland and about a half a dozen more in the neighbouring states of Manipur, Assam, Arunachal Pradesh and across the border in Myanmar. Although known collectively as Nagas to the outsiders, each group uses a specific name, such as Sema, Ao, Angami to identify itself, and uses the term Naga as a suffix to the respective community name to distinguish themselves from the neighbouring hill communities.

Although Naga ethnic groups speak distinct Tibeto-Burman languages, they share what has been called a 'hill tribe culture'. Almost all Naga communities practice *jhum* or 'slash and burn' type of agriculture except for the Angamis and Chakhasang of Southern Nagaland who mainly practice wet rice terrace cultivation and supplement this with small plots of *jhum*.

The Nagas traditionally practised head-hunting which was a part of their initiation rites. It is said that the headhunting raids by some Naga groups on the villages in Assam close to the experimental tea gardens planted by the British prompted the British to send punitive expeditions into Naga Hills (as the area was known until the state of Nagaland was formed in 1963). In 1850s the British had also began exploring the area to find a land route from Assam to Burma. The constant raids by the Nagas on the villages under British administration forced the British to annex parts of Naga Hills. In 1867 the district of Naga Hills was formed.

As has happened in other parts of the world, the annexation of the territory paved the way for the missionaries or vice-versa. In the 1870s the American Baptist Mission entered Naga Hills. The conversion to Christianity was a gradual process and different Naga communities had different rates of conversion. A major factor which helped in conversion was opening of schools by the American Baptist missionaries, thus bringing in the modern educational process to the Nagas. The British annexation and the job opportunities the new administration brought in its wake made the Nagas aware of the importance of education. The conversion process gained momentum after the World War II when Battle of Kohima was fought between the Japanese and the Allied Forces in the heart of Naga Hills.

In 1963 Nagaland state was formed with special status¹. Access to Nagaland is restricted as it is a politically sensitive border state. There has been an armed insurgency with a demand for secession by the Nagas since 1947, the year India became Independent. The inner line regulation that was first introduced by the British keep a check on the settlers and movement of British officers has continued. An inner line permit is required by even Indians, and foreigners are not allowed to visit except when visiting affinal relations in Nagaland or the II World War Cemetery in Kohima town.

From this recapitulation of the events in Naga history it is evident that in the last few decades Nagas have experienced tremendous socio-cultural changes as a direct consequence of three major events: the British annexation in the nineteenth century, the Battle of Kohima during the II World War and conversion of 80% of Nagas to Christianity.

In the context of material culture, these changes loosened the previous restrictions. In context of weaving, as we would see later, the changes paved the way for experimentation with new designs, new colour combinations and usage of different yarns.

Textiles

It is well known that textiles have a utilitarian as well as symbolic function. The kind of cloth worn is reflective of social relations and of the expression of social identities and values. The cloth worn by a person is also suggestive of the power relationship he/ she may have with other members of the community. The Nagas are

¹ The land and forests in the state are under private ownership. Nagas are allowed to follow their customary laws to resolve most disputes. Non-Nagas are not allowed to buy land or own business in Nagaland.

traditionally cultivators and as said earlier, were known as warriors and headhunters. These two activities have been responsible for the development of vibrant textiles.

The Nagas used and still use the 'back strap or body tension' loom for weaving fabric. It is the most favoured loom, and is very convenient for the weaver because of its portability. In Nagaland weaving is in the domain of women. Spinning, dyeing and weaving are exclusively undertaken by women. The contribution of men is limited to the making of the weaving instruments, although, sometimes men may help women to warp the thread.

Traditionally, men's contribution to the completed textile was in the form of decorations of the men's kilts and body cloth with cowry shells and jobs' tear seeds and the decorative plate made of wood, cowry shells, plaited cane, and goats hair stitched at one corner of the rich man's cloth as among the Sema Nagas. Among the Ao and Rengma Nagas men also painted the motifs on the median white band of the warrior's cloth.

The fabric woven on back-strap loom is thick; the thickness being achieved by a dense warp which covers the weft. The thickness of the woven fabric depends on the thickness of the yarn used. The finest cloth is made of two-ply yarn. The width of the fabric is narrow to enable the weaving of the cloth without any technical difficulty. Both the shawls and sarongs are made of at least three separate pieces stitched along the length of the fabric. Thus the width of the finished cloth depends on the number and size of the strips of cloth that have been stitched together. The average breadth of a single piece is about 18". Men's cloth is generally made of four such strips and women's cloth could vary in width from that using a single piece to larger ones that use up to three pieces.

Although the most common pattern is of bold colour stripes of varying width, additional pattern in weft is inserted by picking the warp yarn. Most common motifs have geometric designs -- zigzags formed by alternate upright and pendent triangles, lozenges and diamonds. In some textiles the weft motifs occur as floats in the body of the cloth, while in some, for example the Angami *Lohe* cloth, the weft design is woven along only one end of the cloth.

The traditional dress of men comprises an apron or *lengta* and a knee length kilt worn around the waist. Shawl generally measure 60" x 40" almost the size of a single blanket. These are worn wrapped around the body during winters or else thrown over the shoulder². Women wear *mekhela* or sarongs and shawls. The shawls are smaller in dimension compared to the men's. The sarong vary in length from that reaching just below the knee to the those long enough to reach the ankles. Traditionally, in some Naga communities such as the Konyak, and Khiamungan the women did not cover their breasts, while in others like Ao, Sangtam the cloth was worn tightly wrapped around the body, covering the breasts. Among the Angamis the women wore (and still do so) a black tunic known as *vachie* or *todi* over which they tied the knee length sarong.

² In some communities for example, the Sangtam, Yimchungrü and Chang the men tie the shawl in such a way that ends that are diagonally opposite are taken under one arm and tied over the shoulder. The shawl is worn this way only during the festivals otherwise it is generally used as a wrap.

In the past the Naga textiles³ signified the community, gender, and social status of the wearer and there were restrictions on wearing of these shawls. For example, only those men, who had shown bravery in war, could wear the warrior's cloth; only the giver of a series of 'feasts of merit', along with his wife and their children, qualified to wear the elaborate 'rich-men's' cloth. One could not wear a cloth of any other community. The community in which designs are gender (and clan) specific, the men and women could not interchange the patterns on the shawl.

On one hand the patterns of cloth worn by men and women may differ considerably in some Naga communities, while on the other we find that neighbouring communities share similar cloth. For example, men's red body cloth with black stripes and a median white band is used by the Ao, Rengma and Lotha Nagas. An everyday cloth of blue colour with blackish-blue stripes is common to the Ao, Yimchungrü, Sangtam and Khiamungan Nagas. In the past textiles were also traded between these communities. Besides reflecting trade patterns the similarity of cloth and other ornaments also point towards similar legends of migration of these communities.

Some communities had an elaborate range of cloth, which varied according to the age and achievements of the wearer. For example, a cursory look at the catalogue cards of the Naga textiles in PRM gives an idea of a wide range of textiles that existed in a single community with very subtle differences in motifs that reflected the status of its wearer.

Changes in the style of clothing

The first conversions to Christianity were accompanied by severe religious sanction against indulgence in any activity that could be associated with traditional religious beliefs. These sanctions had a direct effect on the style of clothing of the Nagas as some of the cloths could be worn only by those who had acquired the status by showing prowess in war, head-hunting or by giving feasts of merit – all activities associated with the 'heathen' way of life which required performance of rituals related to the native religious beliefs.

As said earlier, the Christian missionaries also opened mission schools. The sanctions against traditional clothing were also applied to all the Naga students who had joined these schools. They were banned from wearing the traditional cloth and ornaments and were encouraged to wear Assam style *dhotis* or western style shorts and shirts.

J. H. Hutton and J. P. Mills, the British Political Officers (and also the writers of the first monographs on Nagas) posted in the Naga Hills in the early 20th century, were quite against this trend. Where they had direct control they exercised their power to retain

³ Ruth Barnes ('Women as headhunters', 1992) has written an interesting article on Naga textiles at the Pitt Rivers Museum, which explores the male/female and domestic/ outside dichotomy in the production and decoration of the cloth for the warriors whose achievements are outside the domestic sphere and those of the feast givers who earn the merit within the domestic sphere.

as much of the 'traditional' outfit as was possible. So the government interpreters were forbidden from wearing western style clothes⁴.

However, the effect of education on the change in the style of dressing continued. By 1920s, women had already begun to wear blouses over their sarongs and the men – shirts and shorts. The trend was more visible among the Christian converts and among the educated Christian Nagas who were employed by the British for administrative work.

Although the Christian converts preferred to wear Western clothing, an interesting development was taking place simultaneously. The converts in certain Naga groups began to wear the cloth, which could traditionally be worn only by those who had earned the right by taking a human head in the raids or given a series of feasts of merit.

In his official tour diary of June 1935, J H Hutton, who was the District Commissioner, mentions the conflict between Christian and non-Christian Sema villagers over wearing of ceremonial cloth and his suggestions to settle it amicably. To quote him:

The question of the patterns of cloths is giving trouble. Certain patterns are worn by householders who have performed certain social ceremonies and by their unmarried sons, when the boy marries he ceases to wear the cloth until he has qualified for it. The pattern is very popular and Christians have started wearing it without qualification which has scandalized the ancients. Both sides came to me about it. I ruled that Ancient had the right to it, but that provided some recognisable alteration was made in the pattern no exception would be taken to Christians wearing similar ones. I suggested a red cross in the middle of the black ground which was accepted without demur by those present.

Today although western dress is part of the everyday clothing in Nagaland, the traditionally woven cloth is in addition, commonly worn as a wrap. In the past there were restrictions on wearing these shawls. One could not wear the cloth of any other community or clan. The community in which designs are gender specific, in the men and women's cloth certain motifs could not be interchanged. Till 1950s there was restriction on weaving other communities designs. I was told that when the government weaving institute was opened in the Naga Hills, weavers from different Naga groups would take turns to weave their designs on the same piece of cloth. Now these restrictions have been done away with and one finds weavers copying motifs of other communities.

Over the years there has been a gradual revival of Naga culture which can be largely explained as their assertion of having a separate identity as 'Nagas' in relation to their neighbours in the plains as well as to other Christian communities. The demand for

⁴ Ironically, it was the British administration that ended up introducing mill made red woollen blankets, which symbolised the office of the *gaonburas* (or GB) i.e., the village elder, who was the government appointed chief of the village. Similarly, red waistcoats identified the office of the government interpreters or *dobashi* at the District Commissioner's court. The offices of GB and *dobashi* have continued till date and so has the wearing of red shawls. Walking into a village or into the district headquarters office one may come across men wearing red woollen wraps and waistcoats.

a separate nation itself brings forth the important question of one's own identity which subsequently gives rise to cultural revivalism.

Today weaving is an important cottage industry in Nagaland. Three types of looms are used for the purpose: back strap or loin loom, fly shuttle loom and power loom. Back strap loom has remained the most popular and most convenient because of its easy transportability from one location to another. It is used for weaving the fabric for shawls, sarongs, kilts, sashes, waist belts and shoulder bags. There are very few fly shuttle looms and negligible number of power looms which have been installed by some weaving co-operatives for producing furnishing cloth and low cost shawls and sarongs.

Traditionally the Nagas used homegrown cotton, and nettle fiber for weaving. Cloth made of nettle fiber was (and still is) used for bedding. Use of home-grown cotton is on decline and one finds it being used only in a few interior villages. Today the most favoured yarn by the weavers is acrylic and a blend of wool and nylon known as 'cashmilon'⁵.

Very few of the old 'traditional' textiles are seen today. Unlike in some other Southeast Asian communities the Nagas do not preserve textiles as family heirlooms. The traditional system of burial required display of the personal belongings of the dead on the grave. This makes the collection in the PRM all the more important from the point of view of studying the textile tradition of the Nagas. A cursory look at the catalogue entries and some textiles tells us the nature of the collection.

It is interesting to note that the collection at PRM seems to reflect the changes which were occurring almost 70-80yrs ago in Naga weaving, the time when most of the textiles were collected. In 1920s and 30s the Nagas had already started using yarn which was imported from the Assam plains and from Burma. The catalogue entries tell us that Burmese yarn and wool obtained from outside Nagaland was used in the manufacture of some of the textiles in PRM collection. A woollen cloth manufactured in the 1920s in the collection is mentioned as the first of its kind woven by a Naga woman.

In this context I would like to mention John Picton's (*African Textiles*, 1989) remarks on African textiles. He says that it is not correct to call the textiles 'traditional' as the phrase 'traditional textile' denotes a category of practice justified by past precedent and essentially unchanging in contrast to possibilities of innovation and development. He talks about a 'textile tradition' rather than 'traditional textiles' and 'contemporary textiles' (ibid.:11). The idea of possibilities of innovations and development within a textile tradition is what I hope to use in the study of textiles of the Nagas.

On comparing the old textile collection with the contemporary textiles, it is very interesting to find that what is considered 'traditional' now was an innovation that took place 60 to 70 years ago. I noticed a catalogue entry in PRM for a Sema Naga women's

⁵ See Joshi, 'Naga Textiles Today', 2000 for a detailed discussion.

cloth which was similar to the one I had selected for an exhibition in 1997⁶, and had been told by the weaver that it was a traditional cloth worn by a rich woman. However, the entry for similar cloth collected by J. P. Mills in 1932, reads: “woman’s cloth with pale blue bands between narrow strips of red, orange-yellow and black with double cross bands of red and yellow worked on one side of the cloth forming a check pattern. A recently invented pattern growing in popularity”.

Similarly, on comparing the Angami textiles in PRM collection with the contemporary ones, I realised that the colour combination of the stripes on the Angami *Lohe* cloth has changed from yellow and orange on a black background to that of various shades of pink and green, or red and green on a black background.

It has been suggested by textile specialists that ‘back strap’ loom permits more artistic control, therefore enabling the weaver to experiment with new motifs (Schneider, ‘The anthropology of cloth’ 1987:423). Perhaps this is reflected in the range of designs and new colour combinations that have come up in recent years.

In last few decades, besides weaving the traditional patterns with traditional colour combinations, the weavers have also experimented with different colour combinations and designs – sometimes inspired from the motifs from neighbouring states as well as motifs associated with Christianity such as those of church bells, holly, etc. Some communities have even redesigned their traditional cloth by choosing a particular colour combination and improvising upon the weft motif. For example, the Lotha Naga women’s cloth (*Kyong Sürüm*) that was developed by the Lotha women’s committee in the 1960s is an improvisation of the old cloth. The old cloth was black blue with light blue stripes with small weft motifs. The new cloth has retained the black colour, but it has multicoloured stripes and more elaborate and elongated weft motif. Interestingly, in the non-traditional range of cloth though using the same traditional motifs in the design, certain colour combinations come into vogue for a couple of years and then get replaced by other. In 1990-91 the Lotha women’s cloth using the colour combination – bottle green and red shawls were popular, and in 1997, orange and light green combination was in vogue. These days a lot of silver and golden thread is used in weaving the weft motifs.

An interesting development has been the modified significance of certain textiles indicative of achievement by an individual. Textiles that were traditionally associated with the warriors status or were presented to only distinguished people is now associated with achievement in the sphere of education. For example, the Chakhasang Naga warrior cloth is now (supposedly) worn only by the graduates; the Angami Nagas have recently (1997) designed a sarong – black with yellow-orange border and orange and green motif – which can be worn only by the women graduates. It is said to be a modified version of the women’s cloth (originally black with orange border) which was presented to a distinguished person.

Weaving is reflective of changes that have occurred in different spheres. Even the ‘Christian way of living’ which is seen in Nagaland now is very different from what was

⁶ ‘Hand made in India’, Crafts Council, London 1998.

proposed by the first missionaries. The missionaries had barred the converts from participating in traditional festivals, dance and songs. But now the Christian Nagas celebrate their group's main festivals. Traditional dances of the Nagas have become part of any festivity ranging from state day celebrations to events like the Baptist centenary. Today textiles have become part of every official gift exchange. To the extent that when a delegation from the North east church went to meet the Pope, they gifted Naga textiles and other accessories which were part of the traditional dress of the headhunters'.

In recent years the most visible incorporation of Naga cloth into the Christian tradition has been the use of Angami white *Lohramoshü* cloth⁷ as the ordination robe for the first Angami priest who was ordained in 1989!

To conclude, we see that a preliminary look at the textiles in the museum collection seems to suggest that they do reflect the socio-cultural changes that were occurring at the time of their collection. Some of the collectors, especially J.H Hutton and J.P. Mills, consciously selected both 'traditional' and any new kind of cloth that they came across. A detailed study of the textile collection at Pitt Rivers Museum would help us understand not only the tradition as it was at the time of collection, but it will also help us see how textile patterns reflect the religious and socio-political changes that were already underway. Complementing this with a study of contemporary trends will give us an idea of the innovations and variations that are occurring in the Naga textile tradition.

⁷ It traditionally had eight float weft motifs of different designs, but nowadays the same design is repeated in all the weft floats.

References

- Appadurai, A. (ed.), *The Social Life of Things: Commodities in Cultural Perspective*. Cambridge University Press, 1986.
- Barnes, R., 'Women as headhunters: The making and meaning of textiles in a Southeast Asian context', in R. Barnes and J.B. Eicher (eds.) *Dress and Gender: Making and Meaning in Cultural Contexts*, Burg, Oxford, pp. 29-43, 1992.
- Census of India*, Delhi, Government of India Publication, 1991.
- Hutton, J. H., 'Tour Diary', Pitt Rivers Museum Archives, June, 1935.
- _____, *Sema Nagas*, Bombay, Oxford University Press, 1968 [1921].
- _____, *Angami Nagas*, Bombay, Oxford University Press, 1969 [1921].
- Joshi, V., 'Naga Textiles Today' in *Oxford Asian Textiles Group*, 15, pp. 7-10, 2000.
- Mills, J. P., *Lhota Nagas*, London, Macmillan & Co, 1922.
- _____, *Ao Nagas*, Bombay, Oxford University Press, 1973 [1926].
- Picton, J., *African Textiles*, London, British Museum Publications, 1989.
- Schneider, J., 'The anthropology of cloth', *Annual Review of Anthropology*, 16, pp. 409-448, 1987.
- Tarlo, E., *Clothing Matters: Dress and Identity in India*, London, Hurst, 1996.

**Symbolic Content in Textile Motifs:
Using the Semiotic Approach
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Defining Semiotics

John Deely (1990) stated that “the whole of human experience...is an interpretive structure mediated and sustained by signs”. The investigation of the role of signs in the sphere of textiles is, to use Deely’s phrase, one of “semiotic consciousness” or the awareness of symbolic content in clothing, cloth and textile motifs.

Semiotics is the theoretical accounting for signs and what they do. It is the study of signs and sign-using behavior including *semiosis* or the action of signs. The action, which may be physical or psychological, takes place between two subjects that exist physically plus a third element that need not be an actual existing thing. For example, action may consist of the motif on a textile, a viewer and a psychological reaction on the part of the viewer.

The words *sign* and *symbol* are not synonymous. A sign is a mark, emblem or pictogram that conveys specific information in a direct and unambiguous manner. A symbol is a sign, device or image that represents one thing but means something else. A symbol derives meaning from those who use it.

A textile sign or symbol may be portrayed realistically (representatively) or in an abstract (simplified) style. A symbol can additionally be portrayed in a non-objective or non-representational style. People who use the symbol in a cultural sense understand its meaning or implication regardless of how it is portrayed.

Obstacles to Understanding

Semiotic research in textile motifs requires a multidisciplinary approach, a familiarity with many facets of the culture and attention to what can seem to be obscure details. Its subjectivity can spark controversy since the investigator must decide which motif might possibly be a symbol and then attempt to decipher the meaning behind that symbol.

When using the semiotic approach in a research problem, it may be difficult for the investigator to uncover the meaning of symbols for several reasons: first, the meaning may be cloaked in secrecy within the society, concealed from ‘outsiders’ and at times, also from some within the society; second, the meaning may be forgotten over time; third, the meaning may change over time; and fourth, the pictorial representation may be altered over time.

Clifford Geertz and Symbolic Anthropology

Symbolic Anthropology, employing semiotics, is a later twentieth century anthropological paradigm. It is dedicated to the study and research of the processes by which people give meaning to their world and their actions in it (Applebaum, 1987). Anthropologists who

use this paradigm engage in research that is universal in scope. They draw upon all types of objects and gestures including signs and symbols connected to all phases of human activity.

Clifford Geertz is the principal architect of this paradigm. His book, *The Interpretation of Cultures* (1973) is considered one of the seminal works on the subject. In symbolic anthropology, people are seen as meaning-seeking, symbol-using animals. Geertz feels that anthropology should shift from searching for explanations to searching for meaning (in other words, how we do things is less important than why we do them).

He emphasized the importance of the case study and the need for using the “native” point of view to seek meaning and to make the researcher sensitive to the views of others. He called this method *thick description*, borrowing the term from philosopher Gilbert Ryle (Geertz, 6). Using *thick description*, Geertz compared one version of an event with another and one set of perceptions with another, while melding the perceptions and knowledge of the observer to those of the “native”. He explained that in evaluating information “you can tell a better account from a worse one...(by)...whether it sorts winks from twitches and real winks from mimicked ones”(16).

Geertz continued by warning the researcher “that to commit oneself to a semiotic concept of culture and an interpretive approach to the study of it is to commit oneself to a view of ethnographic assertion as...’essentially contestable’”. Further, as a science, its “progress is marked less by a perfection of consensus than by a refinement of debate”(29). Essentially, Geertz defends the use of qualitative methods as not only a valid research approach, but also feels that for cultural understanding, it is the most accurate one.

A Moroccan Example of the Process of *Thick Description*

The following anecdote is a simplified illustration of the process that Geertz refers to as *thick description*. In a recent investigation of symbolism in the material culture of Morocco, I observed that a common motif on Moroccan textiles also appeared regularly on village doors. I asked an informant why village doors were decorated with the lozenge-shaped motif and suggested that the design might have some significance. The informant stated that the motif was popular on doors only because door makers liked it. Another informant said that it had no meaning and was merely decorative. I asked a Berber textile merchant about the significance of the motif and was told that it was a protective symbol used to ward off the ‘evil eye’.

In my next inquiry I connected rugs and doors, pointing out to a Berber informant that most doors in the villages were decorated with some version of the same motif that had been identified to me as a protective device by people in the textile market. “Oh yes,” he said, “it is used as a protection against the ‘evil eye’ on textiles, but on doors it is only decorative”. A symbol or sign can have one meaning in one social context and another in a different context; thus the investigator can receive different answers from different informants.

Changes in Meaning

The next step in Clifford Geertz's *thick description* is to "meld the perceptions and knowledge of the observer to those of the 'native' ". In the Moroccan case, it is possible that when nomadic tribes became settled, the protective symbolism shifted from the textile that covered the tent entrance, to the door of the village dwelling. Its original meaning was likely to moderate or disappear as the culture changed with settled life.

The religion of the indigenous Berber people was animistic before their conversion to Islam by Arab invaders and a reluctance to abandon old beliefs has persisted; however, proscriptions against pre-Islamic 'superstitions' are more strongly enforced in urban settings than they are in rural areas. The design on the doorway may have eventually been viewed as an expression of "traditional" design, retaining a vague connection to the idea of positive forces often identified as "good luck". Since textiles retained their basic physical form and function, any symbolism attached to their motifs survived the change of location; whereas a change in material, from yarn to wood in this case, required design modification that caused a weakening in the connection to the original symbol.

Over time, repeated rendering of the same design can also cause the appearance of the motif to change as it is successively duplicated. Makers may see each variation as a different design even when all variations have similar meaning. Over time motifs acquire fanciful names not connected to their original meanings, causing symbolism to be forgotten or altered. This can render once powerful symbolism meaningless even to those within the society in which it originally developed.

Among Moroccan Berber people, two symbols called *lion's paw* and *finger* are very similar in design and have the same meaning, that of protection from evil. Fear of the 'evil eye' is a ruling factor in the lives of people in many conservative rural societies. Being cursed by the 'evil eye' takes a variety of forms associated with disease and infertility not only of people but also of animals and crops. Two other symbols, *spider* and *frog*, have the same basic design structure as the *lion's paw* and *finger* and their meaning is related to magic and fertility.

An Example from Eastern Europe

Textile motifs from other cultures also suggest that many forms derive from common sources and are not only similar in design but have associated meanings. In a case study of Czech and Slovak embroidery using the semiotic approach, I found that most designs used on ceremonial textiles from the 1600s to the 1900s appear to derive from the foliated *tree of life*, *goddess*, *sown field*, and *animal horns* or a combination of them. These motifs, regardless of the names attached to them, are associated with the concepts of protection from evil and fertility (Williams 1999).

Czech investigator Antonin Vaclavik, who worked in the 1950s, reported that an embroidery symbol called *wedding cake* represented poppy seed-filled pastry. He explained that the dots of the motif represented the seeds and the crossbars represented the cheese on the cake. Village women were undoubtedly aware of the traditional allusion to fertility presented by the many seeds of the poppy and visually connected the form of

the motif with a traditional cake served at weddings. In this case the form and symbolic meaning were retained over an extensive period of time.

Familiarity with other symbolism reveals that this motif differs from an ancient fertility symbol only in name and in the perception of what physical object is portrayed in the embroidery. The *wedding cake* symbol seems to be a modern version of an ancient symbol known to archaeologists as the *sown field*. It is found incised on the abdomen of female figurines from the eastern European Cucuteni culture of 4500 BC, where the motif is impressed with real grain. This ideogram was also present on seventh millennium stamp seals from Anatolia.

An additional connection to the ancient *sown field* motif is a symbol that Vaclavik called *dice*. He originally called it *grapes* even though the grapes were square in shape. Vaclavik subsequently found an example of square 'grapes' embroidered next to round ones and concluded that the square ones represented dice used in fortune-telling games. However, when the *dice* motif is traced with the positive and negative elements reversed, a *sown field* fertility symbol results.

Conclusions

Familiarity with a society's spiritual and material culture can reveal to the investigator that the significance of a textile may not be in the cloth or clothing itself, but in the motif on the cloth. I encourage those who investigate textiles, whether or not they have an interest in semiotic research, to include in their inquiries, questions concerning not only the names that are given to motifs, but their significance and whether the motifs appear on other items in the culture.

An abstracted or non-objective textile motif may resemble a row of ducks that in turn, may remind villagers of a proverb dealing with the necessity of conforming to rules. However, inquiry must go beyond this when the same motif also appears on the architecture of the culture or is always deemed necessary on ceremonial clothing. Discovery of such information helps to fill in the 'big picture' of cultural connections. It affirms the importance of textiles as a serious subject of research and contributes to what Clifford Geertz called the "refinement of debate".

References:

- Applebaum, Herbert. *Perspectives in Cultural Anthropology*. Albany: State University of New York. 1987.
- Deely, John. *Basics of Semiotics*. Bloomington: Indiana University Press. 1990.
- Geertz, Clifford. *The Interpretation of Cultures*. Basic Books, Harper-Collins. 1973.
- Vaclavik, Antonin.. *Textile Folk Art*. London: Spring Books. N.D
- Williams, Patricia. "Protection from Harm: The Shawl and Cap in Czech and Slovak Wedding, Birthing and Funerary Rites" in *Folk Dress in Europe and Anatolia Beliefs about Protection and Fertility*, edited by Linda Welters. Oxford: Berg Publishers. 1999.

Perpetuating Ritual Textile Traditions: A Pueblo Example

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For over a thousand years, textiles have played a vital role in Pueblo ritual and social identity, linking past and present and reinforcing cultural bonds between widespread Pueblo communities. The group known collectively as the Pueblo Indians of the southwestern United States includes the Hopi people of northern Arizona, the Acoma, Laguna, and Zuni people of western New Mexico, and a string of Pueblo communities located near the Rio Grande in the vicinity of modern-day Albuquerque, Santa Fe, and Taos. Contemporary Pueblo people use virtually the same styles of ceremonial garments as those worn by their ancestors five to six hundred years ago, decorating these fabrics with motifs derived from ancestral textiles, ceramics, and other media (Dutton 1963; Hibben 1975; Keegan 1999; Kent 1983; Mera 1943; Roediger 1941; Smith 1952).

European colonization of the American Southwest brought dramatic changes to Pueblo societies, first in the form of Spanish tribute and labor demands and later with the transition to the American cash economy. These changes led to major shifts in the production, use, and exchange of Pueblo textiles (Webster 1997, in press).¹ Five aspects of Pueblo textile production were affected: 1) the gender of weavers, 2) the scheduling of production, 3) the settings of production, 4) the materials and tools of production, and 5) networks of textile exchange. In this paper I look at changes to three of these systems--the sexual division of labor, the incorporation of labor-saving materials and techniques, and changes in regional exchange--to see how each contributed to the survival of the craft into modern times.

Pueblo loom weaving was primarily a male activity at the time of contact, with men weaving most if not all of the cotton textiles used in Pueblo rituals. After contact, Pueblo male labor was diverted almost immediately to Spanish agricultural and construction projects. As Spanish tribute demands increased, Pueblo women came to perform many of the spinning, knitting, and weaving tasks required for tribute. This involvement of women in tribute textile production relaxed the cultural mores associated with the division of textile labor, paving the way for women's eventual participation in the production of ritual textiles.

In Spanish times, women's textile labor supplemented but did not replace the textile labor of men. Later, women's involvement in the production of ritual textiles grew to include the application of embroidery to fabrics woven by men. For the New Mexican Pueblos, the turning point came in the late nineteenth century, with the increasing role of Pueblo men in the American cash economy and the growing participation of Pueblo women in needlework and weaving programs sponsored by U.S. government and mission schools. Today women are the principal weavers, embroiderers, and seamstresses among the Rio Grande Pueblos, producing all manner of textiles for ceremonial use. Although a few men are still involved in these activities, it is women who are the major producers of ceremonial garments in this region.

An entirely different situation occurred among the Hopi. Situated 150 miles west of the Rio Grande and major centers of Spanish population, the Hopi were much less impacted by European economic pressures until World War II. In the Hopi villages, men continued to dominate all aspects of textile production into modern times, just as they had in late prehistory. Although Hopi women are beginning to play a greater role in the embroidery and knitting of ritual garments, loom weaving at Hopi remains the domain of men.

This relaxation of traditional gender roles in the production of ritual textiles is one of the most important factors in the survival of the craft. Among the Rio Grande Pueblos in particular, this gender shift is largely responsible for a resurgence of textile production in this region during the twentieth century. It remains to be seen whether Hopi women will increase their involvement in the craft, or if weaving will remain primarily a male specialization among the Hopi people.

A second important factor in the survival of Pueblo textile production is the increasing use of labor-saving materials and techniques. In Pueblo cosmology, cotton serves as a metaphor for clouds and rain, and cotton was and still is the fiber of choice for Pueblo dance costumes and wedding textiles. Within a century of European contact, Pueblo peoples in the Rio Grande had lost much of their prime cotton-growing land to Spanish settlement, and by the early nineteenth century, cotton was being grown in quantities sufficient for textile production only at the Hopi villages and at those Rio Grande Pueblo villages in the vicinity of Albuquerque. Even at these villages, cotton was being grown in decreasing quantities by this time.

Despite efforts to maintain supplies of native-grown cotton, the supply continued to decline, leading Pueblo textile producers to seek out new sources of cotton for their ceremonial garments. One of the most ingenious solutions involved the use of commercial cotton sacking, which the Pueblos acquired in the form of grain sacks in the late 1800s. The relatively coarse weave was well suited for embroidery, and the Pueblos quickly adapted this fabric for use in their ceremonial kilts, breechcloths, and shirts. This use of sacking paved the way for the use of other commercial cotton fabrics, including canvas and later monkscloth. Today nearly all ceremonial kilts, breechcloths, mantas, and shirts made by the New Mexican Pueblos incorporate commercial cotton cloth in their construction.

Commercial cotton string, cotton batting, and bales of raw cotton became available to the Pueblos in the late 1800s and early 1900s. Access to these new cotton supplies led to a resurgence of loom weaving, especially among the Hopi. Pueblo weavers used the cotton string as warp in their kilts and mantas and as a braiding element in their sashes. Employing the traditional stick-and-whorl spindle, they spun commercial cotton fiber and batting into weft. It is rare to find a Pueblo cotton textile made after 1900 that does not contain either commercial cotton cloth as the ground fabric or commercial sources of cotton as warp and weft.

The Spaniards introduced sheep to the Pueblos in the late 1500s, and within a century the Pueblos had substituted wool for cotton in most handwoven textiles except those intended for ceremonial use. In a desert environment, it is much easier to shear a sheep than to grow the same quantity of cotton. With its superior affinity for dyes, wool was used not only to weave blankets, shirts, and mantas, but also to decorate ceremonial cotton fabrics. Eventually commercial woolen yarns, including the well-known Germantown yarns, replaced handspun ones in belts, garters, and embroidered textiles. Today commercial acrylic yarns, more affordable and easier to obtain than woolen yarns, are widely employed. Black and dark blue commercial cloth of wool or synthetic fiber has also largely replaced handspun woolen fabrics for women's manta dresses.

Changes have also occurred in the traditional techniques of production. Knitting was adopted soon after contact, first for tribute production and then for the Pueblos' own use. Later, the European techniques of knitting and crochet were substituted for the more labor-intensive precontact techniques of weft-wrap openwork, interlinking, and looping to produce traditional styles of openwork shirts and leggings. Some time after the adoption of wool, probably in the late 1700s, the Pueblos began using a different type of embroidery stitch, a modified backstitch that replaced the simple running stitch. This new stitch, possibly adapted from Spanish *colcha* embroidery, was more far economical and labor efficient than the earlier stitch because it confined most of the yarn to one face of the fabric, enabling an embroiderer to cover large areas of design in a relatively short period of time. Applying these same principles of economy and efficiency, Hopi weavers also developed a loom-woven analog to embroidery, probably in the late 1700s or early 1800s. This technique, known to textile scholars as "Hopi brocade" (Kent 1983:76), is a supplemental weft-wrap structure related to soumak. At Zuni, appliqué was used in place of embroidery in some turn-of-the-century garments. Today, appliquéd textiles and cotton cloth pre-printed with traditional embroidery designs are becoming increasingly popular in the Rio Grande Pueblo communities, a trend likely to continue in the coming years.

Although Pueblo peoples were put to work in Spanish weaving workshops in the 1600s, there is little to indicate that the European treadle loom was adopted by the Pueblos in Spanish times. It is only in the last century that Pueblo use of the treadle loom has become more widespread. Today weavers at San Juan, Isleta, and Laguna, among other villages, are using treadle looms to weave certain styles of woolen dresses and shawls, notably the black wool manta dress and the white manta with red and blue borders, or "maiden shawl" (Kent 1983:61). Coarser in weave and lacking the complex twill fabric structures of their traditional counterparts, these treadle-loom versions can be produced in only a fraction of the time. To my knowledge, the more complex woolen mantas with the diamond-twill borders are no longer being made to any extent at any of the Pueblo villages. Nonetheless, a need for these styles of garments continues, and these simpler versions now fulfill that demand.

Hopi weavers still use the traditional upright loom to produce their handwoven textiles, but by and large, the trend is for Pueblo textile producers to incorporate ever more modern, labor-saving materials and methods in their work. Contemporary Pueblo

people are full participants in American society, subject to the same competing demands on time and labor as the rest of us. Although Pueblo textile artists continue to produce virtually all of the traditional *garment styles*, doing so has required a progressive streamlining of the production process. The ultimate intent of these producers is to meet the demand for new garments for public ceremonies as the older heirloom pieces are retired from use. In the process, many traditional techniques and weave structures have been lost. Without recourse to modern fabrics, yarns, techniques, and looms, it is unlikely that modern Pueblo textile artists would be able to meet the continuing demand for these garments.

Finally, I wish to discuss changes in networks of exchange. Within two hundred years of contact, Spanish political disruptions and other factors led to a general decline in textile production among the Rio Grande Pueblos. As production declined in this region, Hopi male weavers stepped in as the specialized suppliers of ritual textiles to the New Mexican Pueblos, a role they served well into the mid-1900s and still serve to some extent today. With the growing participation of Hopi men in the American cash economy after World War II, the number of Hopi textile specialists decreased markedly. As the supply of imported Hopi textiles declined in the Rio Grande villages, local weavers picked up the slack. Today most styles of garments formerly acquired from the Hopi in exchange are locally made in the Rio Grande Pueblo towns, albeit using commercial cloth or treadle-loom woven fabrics. A few styles, such as the brocaded sash, continue to be important trade items from Hopi.

Now, in a fascinating reversal of centuries-old trade patterns, certain ceremonial garments made on treadle looms in the Rio Grande are making their way west to Hopi. Hopi weavers no longer make the more labor-intensive woolen mantas, but these items are still needed for Hopi ceremonies. So, Hopi consumers are beginning to use the treadle-loom versions imported from the Rio Grande Pueblos. The most common of these imports is the manta with red and blue borders, or "maiden shawl." These shifting patterns of exchange underscore the flexibility of Pueblo textile networks and their success in keeping critical ritual garments in circulation. Throughout the centuries, Pueblo textile exchange has continued to link producers in one region with consumers in another, ensuring the perpetuation of ancient textile traditions and cultural beliefs, and maintaining critical lines of communication between widespread Pueblo communities.

¹ Much of the historical information presented in this article is extracted from my dissertation (Webster 1997), which examines the effects of European contact on Pueblo textile production for the period A.D. 1540-1850. A book manuscript based on this study is currently in preparation. Information about more recent changes in Pueblo weaving comes largely from my own work with museum collections and personal observations in the Pueblo villages. I recommend Keegan (1999) as a particularly good source of information about the appearance and usage of ceremonial textiles by contemporary Rio Grande Pueblo peoples.

References Cited

- Dutton, Bertha P.
1963 *Sun Father's Way: The Kiva Murals of Kuaua, A Pueblo Ruin, Coronado State Monument, New Mexico*. University of New Mexico Press, Albuquerque.
- Hibben, Frank C.
1975 *Kiva Art of the Anasazi at Pottery Mound*. KC Publications, Las Vegas, Nevada.
- Keegan, Marcia
1999 *Pueblo People: Ancient Traditions, Modern Lives*. Clear Light Publishers, Santa Fe.
- Kent, Kate Peck
1983 *Pueblo Indian Textiles*. School of American Research Press, Santa Fe.
- Mera, H. P.
1943 *Pueblo Indian Embroidery*. Memoirs of the Laboratory of Anthropology, Vol. 4, Santa Fe.
- Roediger, Virginia M.
1941 *Ceremonial Costumes of the Pueblo Indians: Their Evolution, Fabrication, and Significance in the Prayer Drama*. University of California Press, Berkeley.
- Smith, Watson
1952 *Kiva Mural Decorations at Awatovi and Kawaika-a*. Reports of the Awatovi Expedition No. 5. Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University, Vol. 37. Cambridge.
- Webster, Laurie D.
1997 *Effects of European Contact on Textile Production and Exchange in the North American Southwest: A Pueblo Case Study*. Doctoral dissertation, Department of Anthropology, University of Arizona, Tucson. University Microfilms, Ann Arbor.
- In press *An Unbroken Thread: The Persistence of Pueblo Textile Traditions in the Postcolonial Era*. Catalog essay for exhibition, *The Road to Aztlan: Art from a Mythic Homeland*. Los Angeles County Museum of Art, Los Angeles.

TRADITIONAL COSTUME AND THE ZAPATISTAS

Carol Hayman

Traditional costume is an institution embedded in the political, religious, social, and ideological matrix of a society. Costume has three key functions: a) it is a marker of community affiliation and social identity; b) it asserts cultural and individual values; and c) it maintains a distance from the dominant culture, the wearer rejects the dominant cultural values.

As a marker of community affiliation, it provides an outward manifestation of group identity. The costume expresses a particular ethnicity and a specific community locality. The style of the costume is prescribed by the community in forms that are determined by the traditions of the community. It shifts focus from the individual to the community.

An example of how this is evident can be seen in the Zapatista communities of Chiapas in southern Mexico. Their desire for autonomy and self-determination is reflected in their social traditions, including the traditional clothing of the women. Their traditional costume communicates that its wearers hold a certain world view that permeates their way of life, a world view common to other wearers of traditional dress even of different ethnic groups.

When a community with a different world view from that of the national culture feels threatened, it employs strategies for preserving its identity. Costume is one mechanism for maintaining a social distance from the dominant culture by symbolically designating the community's separateness from the outside world. The wearer maintains his or her own cultural values and rejects those of the dominant culture. Costume also emphasizes the separateness and uniqueness of each community, in contrast to neighboring communities.

In a community with inner integrity, one that is in relative equilibrium, one can expect to see a limited range of symbolism and styles acceptable in that community. Color choice and arrangement, shape and structure, are all dictated by community recognized tastes. The techniques and decorations of traditional clothing form a continuity with the past and with surrounding communities with similar, yet different costumes. The continuity serves to reinforce a feeling of belonging in a community. The costume is a reflection of an individual's affiliation indicating conforming participation in a unified community. Its purpose is to "deindividualize the individual." (Yoder 1950,308,318) The individual is submerged in the group personality of the village. It is harder to pick out individuals from a group of women all wearing the red and white *huipiles* of Oventic for example. This idea of deindividualization is further reinforced by the use of the bandana as a mask by the Zapatistas. It is a badge of identity of group membership, yet conceals the identity of the individual and prevents recognition by the army.

Traditional costume functions in a similar way to language. The community language or dialect, different from that spoken by the outside world, isolates that community, yet connects it to other communities that speak the same language. The Zapatistas are mostly Maya Indians, speakers of the *Tzotzil* and *Tzelztal* languages. Costume, like language, isolates a community while connecting the members wearing it.

People can identify the home community of an individual in the market by his or her garments. Use of language and the appearance of an individual's clothing, reinforces commitment to common values through the expectations of certain behavior associated with traditional customs.

Traditional clothing, called *traje* in Mesoamerica, carries an ethnic code woven into the fabric. The shape, the length, the colors, the decorative designs, and the way it is worn, all transmit information. Other members of the wearers' community instinctively understand the information. The costume announces that the wearer subscribes to and supports the values of her community. People outside the group boundary defined by the costume also understand the ethnic code; they may be wearers of a different traditional costume themselves.

Conformity in clothing helps maintain conformity to the accepted pattern of behavior. If a community boundary is strongly defined through ethnic markers such as clothing and language, the existing social order is likely to be supported by strong rationalizations and emotional commitments. The members of a community will have come to the conclusion that their way of life is the best. Such a system is likely to be self-consciously resistant to alteration. It is organized defensively as a result of challenges in the past (SSRC 1954,977).

Commitment to traditional forms is a defensive response to outside threats. Ethnic traits are often intensified through retrenchment, as a result of intimidation from the dominant culture. Change is often viewed as a potential threat to life and property. Interest in protecting a community from change and outside threats, encourages participation in political and religious affairs and commitment to the preservation of the social structure. Conformity in clothing is one mechanism for maintaining the stability of a culture through its solidarity function, the cohesion of in-group consciousness, and a positive affirmation of heritage. People wearing the community costume tend to support the community values and share the same worldview.

The modes of thought and behavior of the subordinate class are visibly different from those of the dominant class. The attitudes toward class are substantially different from each other. The dominant culture imposes its prejudices on the subordinate culture, prejudices implicit because of the world view of the Ladino or mestizo culture. Basic values inform group self-images and influence their mutual relationships. Ladino culture is vertically structured and status conscious. It stresses competition and obedience at work, school, and in the home (Colby 1961,774). Indian culture is conceived in more horizontal terms. Social hierarchy is de-emphasized. There is an attempt to maintain the attitude "Here we are all equal" (Foster 1967,303, Redfield 1950:43). The emphasis is on age and etiquette. Authority is maintained through persuasion and influence (Colby and van den Berghe 1961,774). Continuity with the past is also an important aspect of wearing *traje*. Wearing it shows respect, not only for one's parents and the traditional way of life, but also for one's ancestors. In the codices, we can see pre-hispanic female figures weaving and spinning in the same positions and with the same tools Indian women making traditional costume use today.

The pervasive dual division, between Ladino and Indian world views, extends into the realm of ideas. The unquestioned assumption of cultural superiority by Ladinos is because of their view of cultural differences in hierarchical terms. Ladinos learn in school of their relation to the state, the nation, and to other nations, while Indians try to

maintain a precarious harmony with the cosmological order (Collier 1975,12). The goal of Indian culture is to learn the actions which will prevent misfortune in a universe controlled by unseen, supernatural forces. The goal of Ladino culture is to manipulate the universe, to establish power over things, animals and other men (Gillin 1968,196).

Indian culture is undervalued by the dominant culture, romanticized on one hand and viewed as an impediment to progress on the other. Levi-Strauss explains how dominant cultures view Indians in general:

Primitive peoples are all in their different way, enemies of our society, which pretends to itself that it is investing them with nobility at the very time when it is completing their destruction, whereas it viewed them with terror and disgust when they were genuine adversaries (1974,41).

The Mexican government supports archeology for tourist attractions and glorifies the Indian past while at the same time viewing the Indian of the present as a "hopeless incubus on Mexico's economic and political progress" (Colby 1961,465). Caso of the Instituto Nacional Indigenista, argued that the nation's productivity will increase as the Indian's capability as a worker increases and the awareness of belonging to a vaster social organization is introduced (1958,27). Local ethnic identity has been encouraged by the Mexican and Guatemalan governments as a marketing strategy for tourism, but when the state markets "Indian culture" it does so to indicate the subordinate position of indigenous peoples in the same way that colonialism does (Stephen 1998,16,93).

The concept of the Indian as inherently inferior and incapable of advance developed to rationalize the economic exploitation of the population for cheap labor and the justification for taking indigenous land. An Indian community is often located on marginal land, which in the past was of no interest to the outside world for exploitation.

Population pressure and other factors have made Indian lands more attractive to outsiders. Where Indian lands are of better quality or contain valuable resources such as oil or timber, state policies often have the effect of reducing the amount of land traditionally available (Collier 1975,191).

In 1994 NAFTA, the North American Free Trade Agreement, was implemented between Canada, the US, and Mexico. This agreement is part of the neoliberal economic transformation that opened Mexican and US borders to the world economy. It allows corporations to move factories to low wage countries with lax environmental standards, multinational corporations that have no loyalty to national identity or governments. For Mexico it means that cheap imports out-compete Mexican domestic products, ending jobs, suppressing wages, closing small businesses. For the farmer, it means that cheap American corn, produced with greater amounts of capital, and better lands with higher yields, lowers the price that poor Mexican farmers can get for their crop. It is against this background that the Zapatistas rebelled against NAFTA and the Mexican government and the motivation for their plea for indigenous autonomy. Protecting their traditions and communities is symbolized by their commitment to wearing *traje*. The desire for autonomy includes the desire for education for their children, but this also includes the desire for the control over the education. They desire education in their own languages because control over education is control over the ideology, which teaches that Indians and their traditions are inherently inferior.

The Indians lose in the competition for limited valuable resources. As a consequence of land problems and economic conflict, relationships with the outside world are often hostile, reinforcing their self-defined need to maintain a social distance. The Indians are politically impotent against the superior economic position of Ladinos (de la Fuente 1975, 446). They are resentful and fearful because the authorities protect the exploiters (de la Fuente 1968,94). The police, the army, and private militias assassinate indigenous leaders and local farmers with impunity (Harvey 1998, Human Rights Watch 1997).

Paramilitary organizations, trained and supplied by the Mexican army, harass and murder the indigenous people of Chiapas to drive them off their lands. On December 23, 1997, 45 mostly women and children were massacred in a church in Acteal. Since then members of that community have fled to the community of Polho, which has absorbed 6,000 to 10,000 refugees. The refugees still suffer in makeshift shelters made of plastic posters from billboards, afraid to return to the homes they lost along with their belongings and their animals. The community is protected from invasion by the army by women who guard the entrance. They sit behind a rope, in three hour shifts, working on their embroidery, ready to raise an alarm day or night.

Official policies are also designed to reduce cultural identity, ethnic pride and to increase assimilation and acculturation (Beals 1967,465). Politicians view the process of forcing Indians off traditional lands as aiding in the unification of an ethnically diverse nation. Because of the alienation of their lands, some Indian groups are forced out of their isolation from national life and into the lowest stratum of Ladino life. They give up their costume, language, and rituals and once integrated they become invisible (Salomon Sitton 1981,5). Political submission is a result of intimidation through violence and murder.

The power structure prevents anyone from challenging the situation. Large landowners, timber companies, and cattle barons use private armies and the state police to drive families off land they have claimed traditional rights to, or simply kill them. Or a bribe to the Departamento Agrario dispossesses Indians of their lands. State and Federal machinery is mobilized against litigation by Indians trying to recover their traditional lands. The struggle to preserve Indian cultures and traditions presupposes a fight against nationalism (Salomon Sitton 1981,8). National uniformity of culture is the official agenda (Beals 1967,465).

The attitude of subtle racism that expresses admiration for the long dead "noble savage" while offering a low opinion and poor treatment of the "corrupted" Indian of modern times is mirrored in the dilemma faced by the Indian whose traditional costume is of colonial origin. In the colonial period, the Indian clothing styles were sometimes prescribed by the Spanish colonial administration through formal orders. In some places the style has persisted for many generations and so is considered traditional and evidence of Indianness. A colonial survival can be viewed by Indians as a traditional cultural item because they have made it their own. The idea of having a traditional costume, interpreted their way, unique to their community, is more significant than the actual items of clothing, or their origin. Its function is more important than its form.

The cultural trait of clothing can not be isolated from other aspects of culture. Clothing as a symbol of identity is essential to the maintenance of the traditional Indian society, but is related to other factors. The secular and the sacred can not be separated.

Producing beautiful clothing, carrying layers of cultural meaning, is a religious act, a gift to the gods. The similarity of clothing in a community makes it a collective act. The act of dressing in *traje* is homage paid to the gods and the saints who protect the village.

In many areas, when asked why they wear a costume, the people will answer "es costumbre." It is the custom, because we always have, because it pleases our saint, or our parents told us we should (Cordry and Cordry 1968,11, Branstetter 1974,134, Sayer 1985,225). It is a source of social approval. These sentiments reveal an awareness of how costume is embedded in the matrix of their society. Part of the symbolic value of costume lies in the perception of it as being traditional and the appreciation of its role in the continuity of custom. "It's always been this way," they say, even though it has always been changing, possibly almost imperceptibly, over time.

Under the threat of external political and economic forces traditional societies often feel the need to retrench, to emphasize their own customs and values against those of the dominant national culture. The material symbol of clothing is one way of maintaining a public identity different from that of the dominant culture. Wearing traditional clothing is a socially sanctioned way of feeling superior. Maintaining traditional customs is a form of cultural resistance of the subordinate class to absorption by the hegemonic culture. Clothing as a cultural product, places itself in opposition to the mainstream simply by its existence (Lombardi-Satriani 1974,104). Its contestative function is recognized by the dominant forces. It is implicit in the attitude that to be Indian is to be subversive. This attitude is exemplified by the actions of the Mexican military against the Zapatista Indian communities of Chiapas, where small villages are surrounded by military encampments and subjected to daily military patrols. Resistance is part of the construction and manifestation of ethnic identity. This doesn't necessarily mean isolation or complete rejection of the dominant culture (Stephen 1998,13). One of the objectives of the Zapatista revolution is inclusion into the political system, they want their voices to be heard, their votes to count. They reject the patronage system which speaks for them and want what other Mexicans have: schools, clinics, clean water, electricity. The violence perpetrated against indigenous Zapatista communities has produced an intense collective consciousness and a high degree of internal solidarity, the oppositional process, which encourages the persistence of ethnic identity maintained through clothing.

Ironically, this harassment by the military is one of the factors leading to the empowerment of women. One of the few sources of income for women is the sale of their traditional weavings. The need for this activity has become increasingly desperate, as men are often not able to go to the fields to work, but also more dangerous, as women are assaulted by the military when they leave their communities to purchase thread or sell their work. As a result, they have banded together to form cooperatives to purchase supplies and sell the finished weavings. When women organize in opposition to circumstances that inhibit them from carrying out their traditionally defined domestic roles they become transformed into political actors participating in a group effort to achieve their goals (Stephen 1991,245). In the process they develop leadership skills, become adept at electing representatives, holding office, managing resources, and keeping accounts, while maintaining and participating in their traditional activities.

The characteristics of the community act in concert to maintain the traditional way of life and social continuity. The world view and attitudes towards work of Indian

society are completely different from the values of the national culture. The views are in conflict, both cultures morally certain their way of life is correct and best. Members of each Indian community think their community is the best, but they are generally not in conflict with other communities, rather with the dominant culture. This conflict causes the dominant class to discriminate against the subordinate class. Some individuals, or even entire communities, are unable to endure this discrimination and so change their ethnic identity. They become members of the dominant class, on the lowest rung of the social hierarchy.

In the national culture, Indian languages and culture are undervalued or even actively discouraged. Formal education is an effective means of national integration. Children are particularly sensitive to criticisms and ridicule from authority figures such as teachers, and so gradually reject the ways of their parents. Some groups maintain their sense of value of their way of life. *Traje* helps sustain this sense of value by its symbolic meaning, but the traditional way of life can not survive total disruption of a community through economic oppression, military repression, or natural disasters.

The theory that the only way out of poverty for the Indians is through the abandonment of their few remaining cultural items is fallacious in two ways. First, it is based on the false premise that Indian culture contains few items that are truly Indian. In fact, Indian culture is rich in items that have been symbolically reinterpreted to fit the needs of Indian society. The costume and religious ritual may have many elements of Spanish origin, but are now wholly integrated into the culture. Second, giving up cultural items will not make Indian life richer. The Indian will join Ladino society on its lowest, most poverty stricken level. Many people do make this choice because they see it as a way of obtaining a better life for them and their children. Due to upheaval: social, political, or natural, their traditional way of life can no longer sustain them.

That prosperity can only come to groups who abandon their traditional way of life is often contradicted by reality. Moderate prosperity can have the effect of allowing Indians to maintain their traditional way of life, including wearing their costume. When economic factors cause a drop in the standard of living to below the subsistence level, they have the effect of forcing Indians to become Ladinoized in situ or to migrate to urban areas. Lack of ethnic pride is one result of a depressed economic condition. It is why some groups accept the ideology that Indians are inferior. Part of the population is not inferior, but excluded deliberately. They hover at the intermediate step between Indian and Ladino, the second rate Mexican who speaks Spanish poorly, the illiterate who has no culture. Loss of heritage causes self-depreciation in the spiral towards Ladinoization. On one hand Indians are encouraged to preserve their heritage, by collectors for example, who urge them to reject acrylic yarn, while on the other, their experience suggests that to remain Indian is to accept inferior status.

Not all Indians see the transition to Ladino culture as an improvement in their situation. They recognize the value of retaining their traditional way of life, certain that it is the most appropriate for them and their children. This attitude helps them prevent cultural decay and individual demoralization in the face of cultural encroachment from the dominant society.

Bibliography

Beals, Ralph

1968 (1952) Notes on Acculturation. Heritage of Conquest: The Ethnology of Middle America, Sol Tax, ed. Pp. 225-232. New York: Cooper Square Publishers, Inc.

Branstetter, Katherine Brenda

1974 Tenejapans on Clothing and Vice Versa: The Social Significance of Clothing in a Mayan Community in Chiapas, Mexico. Ph.D Dissertation.

Caso, Alfonso

1958 Ideals of an Action Program. Human Organization 17:27-29.

Colby, Benjamin N. and van den Berghe, Pierre L.

1961 Ethnic Relations in Southeast Mexico. American Anthropologist 63:772-792.

Collier, George

1975 Fields of the Tzotzil: The Ecological Bases of Tradition in Highland Chiapas. Austin, University of Texas Press.

Cordry, Donald and Cordry, Dorothy

1968 Mexican Indian Costumes. Austin, University of Texas Press.

Foster, George M.

1948 Empire's Children: The People of Tzintzuntzan. Smithsonian Institution Institute of Social Anthropology Publication No. 6.

1967 Tzintzuntzan: Mexican Peasants in a Changing World. Boston: Little, Brown & Co.

Friedlander, Judith

1975 Being Indian in Hueyapan: A Study of Forced Identity in Contemporary Mexico. New York, St. Martin's Press.

de la Fuente, Julio

1968 Ethnic and Communal Relations. Heritage of Conquest, Sol Tax, ed. Pp. 76-96. New York, Cooper Square Publishers, Inc.

Gillin, John

1968 (1952) Ethos and Cultural Aspects of Personality. Heritage of Conquest. Sol Tax, ed. Pp.193-212. New York, Cooper Square Publishers, Inc.

Harris, Marvin

1964 Patterns of Race in the Americas. New York, Walker and Company.

Harvey, Neil

1998 The Chiapas Rebellion: The Struggle for Land and Democracy. Durham and London, Duke University Press.

Human Rights Watch, Americas

1997 Implausible Deniability: State Responsibility for Rural Violence in Mexico. New York, Human Rights Watch.

Levi-Strauss, Claude

1974 (1955) Tristes Tropiques. John and Doreen Weightman, trans. New York, Atheneum.

Lombardi-Satriani, Luigi

1974 Folklore as Culture of Contestation. Journal of the Folklore Institute 11:99-121.

Redfield, Robert

1950 A Village that Chose Progress: Chan Kom Revisited. Chicago, University of Chicago Press.

Salomon Sitton, Nahmad

1981 Some Considerations of the Indirect and Controlled Acculturation in the Cora-Huichol Area, trans. Horacio Larrain. Themes of Indigenous Acculturation in Northwest Mexico, Thomas B. Hinton and Phil C. Weigand, eds. Pp. 5-16. Tuscon: University of Arizona Press.

Sayer, Chloe

1985 Costumes of Mexico. Austin: University of Texas Press.

Stephen, Lynn

1991 (1998) Zapotec Women. Austin: University of Texas Press.

The Social Science Research Council Summer Seminar on Acculturation

1954 Acculturation: An Exploratory Formulation. American Anthropologist Pp. 56:973-1002.

Yoder, Don

1972 Folk Costume. Folklore and Folklife: An Introduction, Richard M. Dorson, ed. Pp. 295-323. Chicago, University of Chicago Press.

**Thai Textiles:
The Changing Roles of Ethnic Textiles in Thailand**
Linda McIntosh

Thailand is world renown for its luxurious silk. The weft ikat patterned silk produced in northeast Thailand perhaps represents Thai silk in our minds due to the consumption of this type of silk as souvenirs and as tailored clothing fashioned from old ikat tubeskirts sold in the kingdom and abroad. However, the various ethnic groups living in Thailand produce distinctive textiles using a wide array of techniques, motifs, and materials. A weaver combines of various techniques, motifs, colors and materials to create a textile that is a marker of her identity or of the person she intends the textile for. Although the international community is familiar with some of these textiles through the efforts of development projects marketing hand-woven textile products world-wide and through tourism, very little is known about the identity of a particular hand-woven textile once it leaves the locale of production, the weaver's village.

The Tourism Authority of Thailand (TAT) is one of the numerous government agencies promoting hand-woven textiles as Thai cultural heritage both locally and internationally as a tradition thriving throughout the kingdom. When targeting the consumer market, there is less emphasis on the textiles as markers of identity of the producer but rather as a representation of Thai culture. Government departments and offices involved in the promotion of hand-woven and leading authorities on the subject refer to hand-woven textiles as Thai textiles. Even when a hand-woven textile reaches the urban market, the merchant is unfamiliar with its origin since the textile may have passed through many hands before arriving at the market and is unable to recognize its ethnicity. The merchant thus presents the textile as a Thai textile.

The term Thai textiles appears to refer to ethnic or hand-woven textiles. Which ethnic textiles are included in Thai textiles' definition? Does Thai in this term refer to a national identity where the textiles woven by all the ethnic groups living within the borders of Thailand are represented by the term, or is it exclusive? Are the textiles of only particular ethnic groups living in Thailand considered to be Thai textiles?

Various Ethnicities of Thailand: The Land of Thais?

Phibul Songkhram renamed the kingdom of Siam to Thailand in 1939 during his first regime (1938-1944) (Reynolds, 1991). The justification for the name change was that the name of the kingdom should represent its citizens. However, Thailand is ethnically diverse, and the kingdom is not heavily populated with ethnic Thais, or the Siamese. The Thais or Siamese have been the rulers of the previous kingdom of central Thailand, Ayutthaya (1350-1767), and are the current ruling elite. The Chakri dynasty (1782- present) consolidated what is now present day Thailand approximately 200 years ago. The ethnic groups found within the borders of Thailand include the Khmer, Malay, Chinese, Hmong, and many Tai speaking groups that the Siamese belong to (National, 1996).

The Tai ethnic groups found in Thailand include the Tai Yuan, Phuan, Lue, Lao, Khrang, Lao Song Dam, and Phu Thai (Gittinger, 1992). Along with the consolidation of territory by the Chakri rulers, the kings populated the kingdom with war captives

primarily from the Lao kingdoms. Many people were forcibly moved mainly to central Thailand to fill the sparsely populated land. Although these Tai groups shared linguistic similarities with the Siamese, there were differences in other cultural aspects such as dress and food. Siamese women wore their hair cropped short and wore *chong kraben* (Thai), wrapped lower garments, while women of other Tai groups grew their hair long and wore *pha sin* (Thai), tubeskirts. The Siamese ate jasmine rice, and Tais ate sticky rice. The textiles and dress differentiated one Tai group from another and from other ethnic groups such as the Khmer (the dominant ethnic group of Cambodia) and the Malay despite contact and trade with others. Each group saw one another as distinct from another group.

Thai Textiles

The use of the term Thai textiles is intriguing in contemporary Thailand due to the diversity of the kingdom's citizens and their textile traditions. It is unlikely that the term Thai textiles refers to ethnic Thai or Siamese textiles since the Siamese ceased textile production more than one hundred years ago. The Siamese kingdom of Ayutthaya was a regional trade port importing textiles from India, Cambodia and China for domestic consumption (*Ayutthaya*, 1998). In order to promote a living textile heritage, Thai authorities must borrow textile traditions from other ethnic groups living in the kingdom. The question is whether the authorities include all ethnic minorities or a select few.

Thailand was at the height of its economic crisis, which began in mid 1997, during 1998. Anti foreign sentiment was strong, and the government encouraged the consumption of Thai products instead of imported goods to boost the economy. One popular slogan was "Thais help Thais, Thais eat Thai food, and Thais use Thai goods." The Thai government also promoted the consumption of Thai textiles by Thais. The Office of the National Cultural Commission (ONCC) Cultural Campaigns against Economic Oppression published a pamphlet with guidelines on how to start a Thai textile collection (Office, 1998). A cultural preservation organization, the Conserve Thai Lifestyle Group, held fashion shows of clothing made from Thai textiles. This group claimed that wearing textiles made from Thai textiles "beat the heat," by stating that natural fibers kept the body cool and if the body was cooler, the use of air conditioning was less (Aree, 1998). Lower usage of air conditioning led to less electricity consumption, "beating the heat" from the cost of imported electricity. The ONCC also sponsored seminars such as the one entitled, "Thai Textiles: The Threads of the Economy," and exhibitions of Thai textiles held throughout Bangkok.

Women: Preserving Culture

Rural women, the primary producers of Thai textiles, are responsible for the continuation of textile production in order for the Thai government to promote textiles as a live tradition. The Thai royal family and the government promote the consumption of textiles by urban women, especially to use as clothing. This ongoing consumption creates a market for Thai textiles, enabling their production.

In order to establish a long term perspective on Thai textiles, this research surveyed four Thai women's magazines for content on Thai textiles since women are the

primary producers and consumers of Thai textiles. Three of the magazines, **Sakul Thai**, **Ying Thai**, and **Khwan Ruean** are similar to **Women's Day** while the fourth, **Phraew**, is the Thai version of **Vogue**. Issues of each magazine circulated in 1978, 1982, 1988, 1992 and 1998 were reviewed for any mention of Thai textiles and how the textiles were presented to the readers. The presentation of the textiles to the modern Thai woman was important since most urban women followed western trends, especially fashion, and viewed hand woven, ethnic textiles as old fashioned and primitive.

The majority of the content on Thai textiles occurred during the 1990s. Issues of **Sakul Thai** and **Ying Thai** mentioned Thai textiles but mainly did so when reporting on the royal family's activities. HR Queen Sirikit is a major promoter of hand woven textiles in the kingdom through the work of her foundation, SUPPORT. 1992 was the year of the queen's fifth cycle or sixtieth birthday. The two magazines mentioned earlier contained fashions made from weft ikat silk from the Tai Lao and Khmer of northeast Thailand. **Sakul Thai** encouraged its readers, "to use Thai textiles to help the rural people and to promote culture such that textiles become part of Thai national heritage," and the magazine also stated that the Tai Lao and Khmer weft ikat textiles were symbols of Thai identity (**Sakul Thai**, 11/92). Textiles of other Tai ethnic minorities were featured as Thai textiles such as the traditionally red shoulder cloth of the Phu Tai, the *phrae wa*, and the discontinuous and continuous supplement patterns of the Tai Yuan, Phuan, Lue, and Lao tubeskirts.

During the height of the economic crisis in 1998, Thai textiles appeared in all four magazines. **Sakul Thai** stated that the periodical would adhere to the Thais Help Thais campaign and only feature clothing made from Thai textiles (**Sakul Thai**, 1/98). The magazine stated that, "to wear Thai textiles is to love the nation, it is Thainess" (**Sakul Thai**, 6/98). **Ying Thai** also featured Thai textile fashions on a regular basis. The other periodicals, **Khwan Ruean** and **Phraew**, occasionally carried items related to Thai textiles especially when local designers included Thai textiles in their collections.

The survey of the four women's magazines demonstrated Thai society expects Thai urban women to preserve Thai textiles or cultural heritage by consuming the textiles primarily as clothing. Rural women also contribute to a national cultural heritage as the producers of Thai textiles. However, the producer inadvertently participates in the transformation of the textile as a marker of her identity into a marker of the consumer's identity, a vague Thai identity.

What are Thai Textiles?

Publications, exhibitions, and seminars indicate that Thai textiles represent textiles of various lowland ethnic minority groups in Thailand. The textiles of the Tai ethnic minorities living in Thailand and the Khmer of the southern portion of northeast Thailand are appropriated into the definition of Thai textiles. Thai society rejects the textiles of the upland minority groups such as the Hmong, Akha, Karen, Mien and Lisu as part of their cultural heritage. Thai society also excludes textiles of other lowland ethnic groups such as the Malay, the majority ethnic group of southern Thailand. This exclusion demonstrates the exclusion of the heritage of culturally dissimilar ethnic groups by Thai society even though these peoples are citizens of the nation of Thailand. Thai society appropriates cultural heritage of their "ethnic kin", the Tai minority groups, and the

Khmer. Although the Khmer belong to a different ethno-linguistic group, Khmer culture has influenced the cultures of the historic kingdoms of Laos, Thailand, and Vietnam even though the Khmer were adversaries. The high regard for Khmer material culture allows Thai society to absorb Khmer culture, including textiles, into their own.

The stamps issued in honor of Thai Heritage Conservation Day provide examples of Thai textiles. In Figure 1, four weft ikat patterned silk tubeskirts, *pha sin mii*, were chosen to represent Thai heritage or Thai textiles in 1999. The Thai government and royal family first promoted the weft ikat silks of northeast Thailand as Thai textiles. The tubeskirts depicted in the stamps issued for Thai Heritage Conservation Day 2000 are from other Tai groups living in central and northern Thailand. Weavers from the ethnic groups use similar techniques, motifs and materials to create the tubeskirts, but produce tubeskirts that are distinctive. The Tai Yuan, Phuan and Khrang use discontinuous supplementary weft in the skirt borders for example. There are two examples of Tai Yuan tubeskirts. One is from Chiang Mai province in northern Thailand, and the other is from Ratchaburi province in central Thailand. The Tai Yuan of Ratchaburi originally came from Chiang Saen, which is north of Chiang Mai. Although the structure and motifs of both tubeskirts are alike, the distance between the Tai Yuan groups is evident in the dissimilarities in the tubeskirts. The textiles that are represented in these examples are textiles of the Tai ethnic minorities and the Khmer.

Thai Textiles: The Fabric of Thai Identity?

The Thai elite, the central Thais or Siamese, are unable to promote their own textiles as Thai cultural heritage since production was halted centuries ago. However, ethnic minority groups living within the borders of Thailand continue their weaving traditions to preserve their ethnic identity. In order to promote a viable textile heritage, the Thai elite arbitrarily choose which textile traditions of particular ethnic groups are considered Thai. The term Thai textiles does not apply to the textiles of the nation of Thailand, but identifies what the Thai elite considers worthy to be ethnic Thai despite the original identity of the textile as a marker of the producer's ethnic identity. The adoption of the textiles of Tai and Khmer ethnic minority groups as Thai national heritage and the exclusion of highland minority textiles are examples of this process. The elite exclude the textiles from ethnic groups considered to be inferior in comparison to Thais. Thus, the term Thai textiles identifies textiles produced by certain ethnic minority groups worthy of Thai status.

The Thai elite politically, economically, and socially dominates the ethnic minorities, and *khwam pen thai*, Thainess, reflects this superiority. Recent exhibitions, seminars and publications illustrate the application of Thainess on the categorization of textiles. For example, "Tai Textiles: Thai Heritage," is the title of a seminar held in Lopburi Province, Thailand in 1999, and *Thai Textiles: Tai Textiles*, is a Thai Khadi Institute publication by Suman Thomas in 1998. Another blatant example of the absorption of non Thai or Siamese ethnic textiles into the definition of Thai textiles is the display of textiles and dress of Tai ethnic groups living in Luang Phrabang, Laos, and Chiang Tung, Burma, at the Traditional Thai Textile Fair held in 1998 displayed as Thai.

The definition of Thai textiles is problematic. Thailand attempts to use the term Thai textiles to represent a national textile heritage and as a marker of national identity,

but fails in its arbitrary exclusion of textiles of the ethnic groups considered inferior such as the Hmong or the Karen. Thai textiles symbolize a weak fabric of Thai identity that will quickly unravel if inspected closely.

Bibliography

Anderson, B. *Imagined communities: Reflections on the origin and spread of nationalism*. 2nd ed. London: Verso, 1991.

Aree Thongboonrawd. *The cut of cloth*. Bangkok Post, 4/25/98, p. C5.

Ayutthaya: Asia's silk forest. Sinlapawatthanatham (Art and Culture). (June 98) 19, 8:24-6.

Fashion: Textiles in honor of the Queen's birthday. Ying Thai (Thai Woman). (June 92)401: 3-10.

From the heart: Preservers of Thai textiles. Ying Thai (Thai Woman). (Feb. 92)393: 84-5, 92-5.

Gittinger, M., and Lefferts Jr., H. L. *Textiles and the Tai experience*. Washington, DC: Textile Museum of America, 1992.

Lets use Thai textiles and preserve culture. Sakul Thai (Thai Lineage), April 98, p. 38.

Lefferts Jr., H. L. *Continuity, change and development: the case of Thai textiles*. In M. Parnwell ed., *Uneven development in Thailand* (pp. 146-160). Aldershot: Avebury, 1996.

National Identity Board (NIB). *Thai textiles: Threads of a cultural heritage [Thai Life Series]*. Chiang Mai, Thailand: Chiang Mai University Press, 1996.

Office of the National Cultural Commission (ONCC). *Cultural Campaigns Against Economic Oppression* [brochure]. Bangkok: ONCC, 1998.

Reynolds, C. J. *Introduction: National identity and its defenders*. In C.J. Reynolds ed., *National identity and its defenders: Thailand, 1939-1989* (pp. 1-31). Chiang Mai, Thailand: Silkworm Books, 1991.

Rivers, V. Z. *Recycled textiles: Culture or commodity? Ornament*, (1995)19:1: 38-41.

Sakul Thai (Thai Lineage). (11/92)38, 1986:1-11.

Sakul Thai (Thai Lineage). (1/98)44, 2254:15.

Sakul Thai (Thai Lineage). (4/98)44, 2269:40-1.

Sakul Thai (Thai Lineage). (6/98) 44, 2276:37-40.

Sericulture Research and Training Institute. *Mai: Moradok Thai* (Silk: Thai heritage). Bangkok, Thailand: Ministry of Industry, 1973.

Silverman, K. *Fragments of a fashionable discourse*. In T. Modelski ed., *Studies in entertainment: Critical approaches to mass culture* (pp. 139-152). Bloomington: University of Indiana Press, 1986.

Sirivan Sukhabanij. *Dressing to save*. The Nation, 5/19/98, p. C6.

Sirivan Sukhabanij. *New Thai cuts*. The Nation, 7/28/98, p. C6.

Songsak Prangwatthanakul, ed. *Asia's textile heritage*. Chiang Mai: Chiang Mai University, 1993.

Thomas, S. *Thai textiles: Tai textiles*. Bangkok: Thai Khadi Institute, 1998.

Thongchai Winichakul. *Siam mapped: A history of the geo-body of a nation*. Honolulu: University of Hawaii, 1994.

Figure 1. Thai stamps depicting Tai Lao and Khmer tubeskirts in honor of Thai Heritage Conservation Day 1999.



Figure 2. Thai stamps depicting tubeskirts of various Tai ethnic groups for Thai Heritage Conservation Day 2000.



TIVAEVAE: LOCAL AESTHETICS AND COOK ISLANDS QUILTS¹

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Te tavake...Kua moe ki runga i taku tivaevae
The tropical bird from Havaiki
has fallen asleep upon my tivaevae...

What better image for a Cook Islands tivaevae than the vision of this colorful messenger embellishing the fabric's design in a magical moment of trust and oblivion? The sleeping bird brings tidings from *Havaiki*, the source of myth and memory, and is lured to rest in a field of imaginary flowers a long way from its poetic homeland.

The appliqué or patchwork tivaevae most representative of this genre appear to have been vigorously brushed by the mythical bird's feathers and left shimmering in an array of color. Cook Islands women who have created these patterns speak a language of hue and intensity, of flower and butterfly - not necessarily one shaped by words. Colors resonate while patterns shift from figure to ground in an endless round of interplay between the two. Aesthetically, these visual effects characterize the appliqué style of tivaevae termed *tivaevae manu* rendered in florid colors and opulent, rich imagery upon a contrasting ground fabric.

Typically these compositions are arrangements of radially symmetric or quadrilateral patterns emanating from a designated center point that not only locates the design focus but also tempers the pulse of the composition. Skill at cutting the fabric into multiple yet linked figures works in unison with anticipating but also determining the final result. Thus, the act of cutting follows a precise sequence of carefully folding squares and triangles into quarters and even eighths, then snipping along diagonals to create a very decorative, symmetrical and fully-integrated overlay. One misplaced cut and the intricately constructed design falls to bits.

Tivaevae, *tifaifai*, *iripiti* or Hawaiian quilts are some of the descriptive terms referring to Polynesian pieced and appliquéd textiles associated with the islands of eastern Polynesia. The term 'quilt' conjuring up an image of fabric layers bound together by decorative top-stitching is really not an accurate description of Cook Islands textiles. Quilted materials complete with an inner batting would be unsuitable in that tropical climate. Moreover, the characteristic lines of stitching added for textural and dramatic effect in quilts such as those from Hawaii would certainly detract from the aesthetic of pure flat designs emphasizing pronounced silhouettes and rich planes of overlapping color that visually distinguish tivaevae.

The women in Wellington who collaborated with me in this project, have revitalized Cook Islands tivaevae in a New Zealand context. Revitalization essentially means to "give a new life" to something. Tivaevae in *Aotearoa*/New Zealand exemplify an aesthetic that is both "mutable and unchanging." Vibrant colors may trigger memories of flowers in a warmer climate. They may also challenge the propriety of traditional

customs left behind. When Bridget Kauraka, abiding by her personal taste, chooses black as a dramatic but effective contrasting base fabric, she goes against the conventions “back home” where black is associated with mourning. Bridget explains, “...back at home, black is always a mourning color. But here in New Zealand, it’s different. Because I love black, you know? I like wearing black.”²

When I submitted my proposal for this paper I was quite interested in exploring the conference theme of varying viewpoints by delving into the contradictory interpretations of tivaevae creation offered by writers and scholars matched against the particular aesthetic criteria valued by the stitchers themselves. I also hoped to identify holdovers from pre-European contact belief systems concerning kinship, rank and, possibly, the use of textiles to “desanctify” participants (i.e., specifically using fabric to help defuse the accumulation of sacred power) during contemporary rites of passage such as hair-cutting ceremonies and funerals. I wanted to contrast these vestigial and enigmatic cultural precautions with the “decorative” properties and functions of tivaevae as part of a colonial legacy mainly associated with stitching skills and conditioned by hygienic practices learned from nineteenth century missionaries and maintained by twentieth century government health inspectors.

It became increasingly clear to me from the onset of my interactions with Cook Islands women living in Wellington that the notion of “varying viewpoints” really characterized our constantly shifting expectations of each other. Thus, the conference theme became less speculative and more real – more personal. My first interactions with tivaevae makers in New Zealand who soon became my associates in this research were full of testing and surprise. During the opening prayers and speeches at a well-attended tivaevae exhibition in a downtown Wellington gallery, much to my embarrassment, I was singled out from a dense crowd of strangers by the most charismatic “mama” as a special guest and traveler who had come a great distance to be there. That marked the beginning of my association with Tapaeru Tereora, a master teacher of tivaevae who actively revived the art form in the Islands and later in New Zealand.

I met another woman that evening who invited me to attend her stitching group in Porirua near Wellington. After I spent my first afternoon documenting those women cutting, tacking, stitching and embroidering various tivaevae, the coordinator was convinced that I was now ready to write a book about my experience and expressed the hope that I would soon return with publication-in-hand. Tapaeru and her colleagues were less sanguine about my role and my motivations. On one heart-stopping occasion after our interview session, Tapaeru took me to the local daycare center where the women sometimes work on their tivaevae while the children nap. She introduced me as an accomplished embroiderer and told everyone that I was there to share my skills. Strangely, it was one of those days when no one was sewing tivaevae and no needle or cotton (thread) was to be found. Despite my panic, I was cautious because I did not want Tapaeru to lose face in front of these women on my account. Our mutual predicament was resolved when I learned they were planning an important exhibition of tivaevae in the Civic Center and I volunteered to write the catalogue essay. Thus, began our collaboration with my role now clearly defined vis-à-vis their need while Tapaeru’s status was unaffected – possibly enhanced - by her association with me.

Realities, dynamics, perceptions and expectations implicate us equally in this situation. Where is the difference here between subject and object? Who is studying whom? What about these textiles as products of the politics of creativity – is their manufacture and heritage as contentious as the social dynamics swirling around their edges?

The most commonly revived form of tivaevae in New Zealand is the applique style with its two main versions the unadorned, bi-colored *tivaevae manu*, and the heavily embroidered, *tivaevae tataura*. Both types exemplify the ornate, floral and sumptuously colored tropical textile visually associated with Cook Islands handwork traditions. Possibly, much of the symbolic appeal for collectors and tourists is in the way these fabrics appear to fulfill outsider's perceptions of what a lush tropical icon should be in terms of color and imagery. Interestingly, the notion of cleverly stitching pieces of fabric together to create bedcovers and pillow cases was introduced by members of the London Missionary Society in the early nineteenth century. Thus, tivaevae are not indigenous but originated in the gap between native aesthetic choices and European skills nurtured by foreign work ethics. However, for the majority, these fabrics continue to represent the "exotic" to outsiders and the "homeland" to Island immigrants despite tivaevae's exclusion from the recent cultural revival of such genres as dance and music during the Cook Islands nationalist movement in the 1960s. This was probably due to their strong association with European materials and artistic style.

Traces of missionaries' handwork and sensibility are evident in one of the most popular Cook Islands form of tivaevae, *taorei*, that is pieced together from a myriad of uniformly shaped colored squares. Tapaeru Tereora's reintroduction of tivaevae to contemporary village women in the Islands did not stem from her own experience with the medium but was based on careful looking as well as her talent for reconstructing creative processes from accurate analysis. Although Tapaeru's mother was surprised that her daughter had acquired her competency at designing and stitching through "osmosis" as it were, other mamas claimed she was the incarnation of her grandmother. According to Tapaeru she never knew her grandmother, "They said, 'Oh, you know, maybe you're going to follow the footsteps of your grandmother.' And I said, 'I never knew her!' You know, I never met her? But that was her talent. So, yeah... and also I've seen tivaevae being made years ago by other people."³

Tapaeru's challenge to recreate tivaevae by reviving patterns was compounded by the solitary practices of many Island women who preferred to design alone and even cut their images in private. Tapaeru had to break down the secrecy associated with this process so that all stages of tivaevae creation could be shared collectively. She describes the inherent difficulties because often these designs had been "owned" for generations. As a kind of legacy, it empowered many women. "They reckon it's theirs and that pattern "belongs to my great-grandma and it's been passed down and I shouldn't be sharing." Tapaeru elaborates:

But I'm looking from a different angle. I was challenged by one of the mamas who said to me... who called me stupid, you know, for sharing what I got. And I said, "You know Mama, I know you're a talented woman, and, ah... whatever little I got, I'm sharing. And the talent that you got, if you don't share it with me, you'll take it with you. And then when you're not in this world, nobody knows... But if you give me something, if you share with me, when you're no longer in this world..." And they said, "Oh, Tapaeru, who taught you that?" And I said, "Mama Heather. [Laughs]. That's how tough she is!"⁴

In another story Tapaeru relates how she was inspired to re-create a complex patchwork *tivaevae taorei* when she discovered a fragment of her mother's work during

the aftermath of Hurricane Martin. She had gone back to Manihiki, one of the northern islands:

...and I was cleaning up my auntie's place because the water went right through and ruined everything. So I was actually burning things... and I saw this piece and quickly picked it up. I knew what it was. So I washed it and took it to show my sister. And she said [in a loud voice], "What're you going to do with it?" And I said, "You know this is a *tivaevae* pattern." And she said, "That little thing?" And I said, "Yeah. I'll see what I can do." So, you know, I wash it and brought it and I try to do it here [in New Zealand]. There's the outcome of it... [pointing to a photograph].⁵

In the heavily embroidered *tivaevae tataura* some of the floral patterns have been localized – replacing Cook Islands imagery with designs inspired by New Zealand native plants. Another stitcher, Tekura Nootai, describes her innovation, a design based on kowhai flowers and leaves, "My niece is named 'Kowhai.' She just turned twenty-one, you see? And, I thought, 'I'll do this one for her birthday.' That's how I came up with this pattern, the kowhai." When questioned as to whether this "borrowing" transgressed on anyone's cultural property rights, Tekura qualified her action by identifying her design source, "...actually, I took it from the two-cent piece. Remember there was a kowhai [blossom] on the two-cent piece? I actually took it from there. I got my daughter to draw it for me."

Other Islands immigrants feel that by localizing and appropriating imagery they could be infringing on the cultural property rights of Maori as *tangata whenua* (First People of the Land). Pani Hemaloto lives in Wanganui but originally came from Rarotonga. Although attracted to innovation, she is hesitant to appropriate certain images:

I'd like to use Maori designs and New Zealand flowers in my patterns, but to me I don't think I have a right to do that... to me, it's not our culture. We feel it's tapu... I just couldn't bring myself to use it.⁶

Bridget Kauraka may have broken some time honored conventions by using black for the foundation of her floral *tivaevae tataura*. The dominant opinion among *tivaevae* creators in Wellington, however, extols a palette that is truthful to colors in their natural environment. Non-naturalistic or purely decorative colors have a "false ring" to these women. To western connoisseurs familiar with South Seas iconography and its role in radicalizing Euro-American perceptions of color, this attitude may appear regressive and naive, but Tepaeru is adamant:

As the designer I wouldn't even agree for Bridget to have a blue hibiscus because there's no blue hibiscus. You know, I'll say "yes" if it's yellow. Yes, we do have that. So it's actually up to the person who's helping her choose the right color because people will laugh and say, "Huh, never seen a blue hibiscus in my life!" Like for that tiare Maori...that's the national flower. You'll never have a red one – because we don't have a red. Because that's the only color for that [white]. Maybe some people use cream – sometimes they turn creamy. But...ah...not any other colors.⁷

Tivaevae's symbolic function derived from its personal and social meaning in contemporary ritual contexts is expressed in terms of gift-giving, accumulation and wrapping, and its visibility as backdrops in creating ceremonial stage space. These are just a few of the ways tivaevae links to the use of tapa or bark cloth during the pre-European era. Cloth demarcates sacred and secular spaces, is offered as gifts of grace and empowerment, while it also embraces and binds, deflects evil and absorbs an excess of spiritual power. In New Zealand Cook Islands women continue some of these practices. They create special fabric backdrops composed of tivaevae arrangements for celebrating landmark events like a boy's haircutting ceremony, twenty-first birthdays, and weddings. Some women even create quick-and-easy tivaevae look alikes by tie-dyeing sheets with radially symmetric starbursts and festooning stages and platforms with these cloths to evoke curtains of hand-stitched tivaevae.

In addition to its transformative power as a symbolic presence on these occasions, tivaevae are exchanged as gifts thus generating a long chain of giving and receiving that links generation to generation. When one of these links is broken, it can be disruptive emotionally as well as symbolically. Tepaeru was particularly concerned about the loss of a certain tivaevae that happened to be a casualty of a recent divorce settlement between her nephew (for whom it had been made) and his ex-wife, who took it out of circulation away from the immediate family. Traditionally, this tivaevae should be awarded to the oldest daughter but now that rite of passage was in jeopardy. Tepaeru's bitterness is apparent in her anxiety that the tivaevae has become "unanchored" as the family split up thus acknowledging a value that far exceeds its materiality.

Tivaevae's importance in funerals is as strong in New Zealand as it is in the Cook Islands. These are gifts to go to the grave. Tepaeru describes her experience at the burial of her cousin who was like a brother to her:

...a cousin of mine...I look upon him as a brother, died.
That's the best I can do, to take a tivaevae. There were
other tivaevae there. I don't know who owns them because
I saw them on the evening I got there. And then on the day
when he was buried, there was only mine left. And all the
ladies'... and all the other things had all been taken off.
What made it worse, I was so sad, there weren't any mats.
So I had put my tivaevae underneath then to cover it.

[Before the burial] they said, "Aw, it's a waste. It's
beautiful, you know, take it off." They were going to take it
off and they were going to lower him down. And I got up
and I said, "No, let him take it."

Well, to me, you know, he's taking part of me. Yeah [very
soft]. It is something I have worked on and that's how
much, you know, this person meant. You actually treasure
this person. Yeah. So when you bring the tivaevae, it stays,
I think, it stays with that person and goes into the ground
with that person. Because you... you... that's why you
brought it in the first place.⁸

Stitches of myth and memory. Tivaevae engender connections to the homeland regardless of whether these women now living and creating in New Zealand learned this

art form in the Islands. If all tradition is change, then tivaevae join the past with the present just as the magical bird hovers between two worlds:

*Fly my tropical bird
Your sleeping is done so fly
Take with you to Havaiki
The stories of our home...*

Kauraka Kauraka 1990⁹

¹ Much of the historical information presented in this article is extracted from my dissertation (Webster 1997), which examines the effects of European contact on Pueblo textile production for the period A.D. 1540-1850. A book manuscript based on this study is currently in preparation. Information about more recent changes in Pueblo weaving comes largely from my own work with museum collections and personal observations in the Pueblo villages. I recommend Keegan (1999) as a particularly good source of information about the appearance and usage of ceremonial textiles by contemporary Rio Grande Pueblo peoples.

References Cited

Dutton, Bertha P.

- 1963 *Sun Father's Way: The Kiva Murals of Kuaua, A Pueblo Ruin, Coronado State Monument, New Mexico.* University of New Mexico Press, Albuquerque.

Hibben, Frank C.

- 1975 *Kiva Art of the Anasazi at Pottery Mound.* KC Publications, Las Vegas, Nevada.

Keegan, Marcia

- 1999 *Pueblo People: Ancient Traditions, Modern Lives.* Clear Light Publishers, Santa Fe.

Kent, Kate Peck

- 1983 *Pueblo Indian Textiles.* School of American Research Press, Santa Fe.

Mera, H. P.

- 1943 *Pueblo Indian Embroidery.* Memoirs of the Laboratory of Anthropology, Vol. 4, Santa Fe.

Roediger, Virginia M.

- 1941 *Ceremonial Costumes of the Pueblo Indians: Their Evolution, Fabrication, and Significance in the Prayer Drama*. University of California Press, Berkeley.

Smith, Watson

- 1952 *Kiva Mural Decorations at Awatovi and Kawaika-a*. Reports of the Awatovi Expedition No. 5. Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University, Vol. 37. Cambridge.

Webster, Laurie D.

- 1997 *Effects of European Contact on Textile Production and Exchange in the North American Southwest: A Pueblo Case Study*. Doctoral dissertation, Department of Anthropology, University of Arizona, Tucson. University Microfilms, Ann Arbor.

In press *An Unbroken Thread: The Persistence of Pueblo Textile Traditions in the Postcolonial Era*. Catalog essay for exhibition, *The Road to Aztlan: Art from a Mythic Homeland*. Los Angeles County Museum of Art, Los Angeles.

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² Bridget Kauraka, interview by author, Wellington, New Zealand, August 28, 2000.

³ Tapaeru Tereora, interview by author, Wellington, New Zealand, August 18, 2000.

⁴ Tereora, interview, August 18, 2000.

⁵ Ibid.

⁶ Pani Hemaloto as quoted in *Pacific Fibre Symposium – Wanganui 1991. Proceedings*. Published by Sarjeant Art Gallery, Wanganui, New Zealand (1991), not paginated.

⁷ Tereora interview August 28, 2000.

⁸ Ibid.

⁹ I am grateful to Tapaeru Tereora, Tekura Nootai and Bridget Kauraka for their collaboration in this project and for Tapaeru Tereora's gracious consent to quote from her brother, Kauraka Kauraka's poem. Lines from this poem are also cited in Lynnsay Rongokea, *Tivaevae: Portraits of Cook Islands Quilting*, (Auckland: Daphne Brasell Associates Press, 1992), frontispiece.

REFERENCES

Hammond, Joyce D. *Tifaifai and Quilts of Polynesia*. Honolulu: University of Hawaii Press, 1986.

Jones, Stella M. *Hawaiian Quilts*. Honolulu: Honolulu Academy of Arts and Mission Houses Museum,, 1973.

Lavie, Smadar, Kirin Narayan and Renato Rosaldo, eds. *Creative Anthropology*. Ithaca: Cornell University Press, 1993.

Pacific Fibre Symposium – Wanganui 1991. Published by the Sarjeant Art Gallery, Wanganui, New Zealand, 1991.

Rongokea, Lynnsay. *Portraits of Cook Islands Quilting*. Auckland: Daphne Brasell Associates Press, 1992.

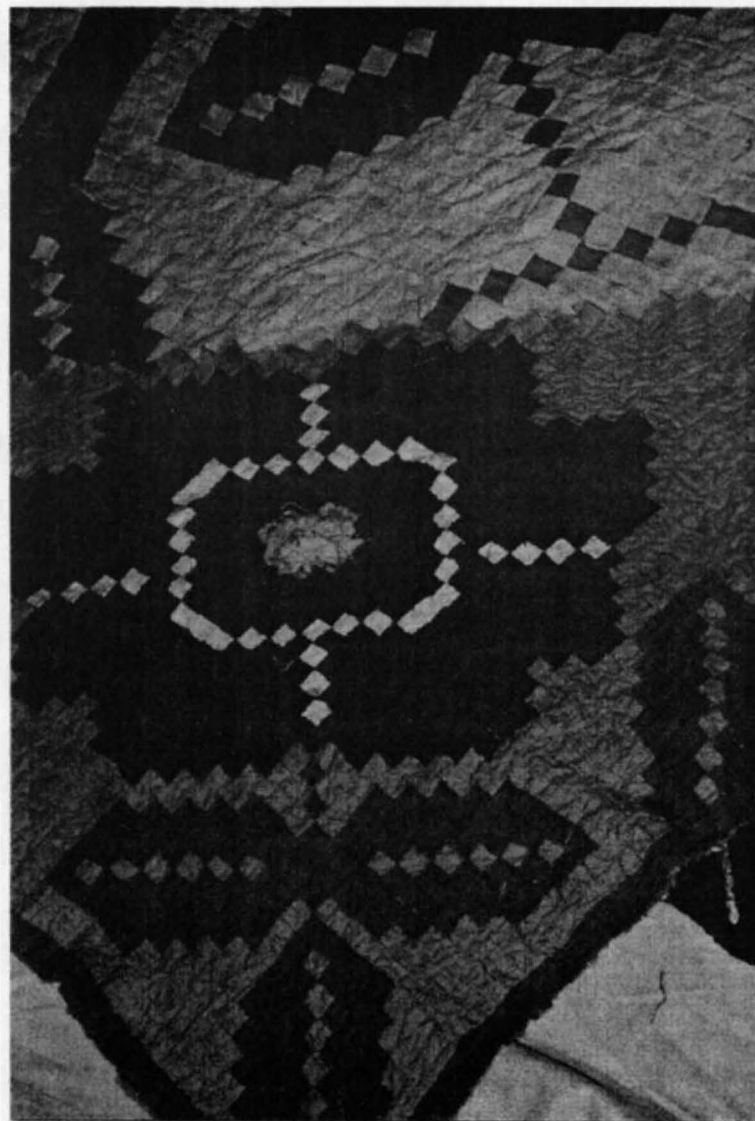
Sissons, Jeffrey. *Nation and Destination: Creating Cook Islands Identity*. Rarotonga: Institute of Pacific Studies and the University of the South Pacific Centre in the Cook Islands, 1999.



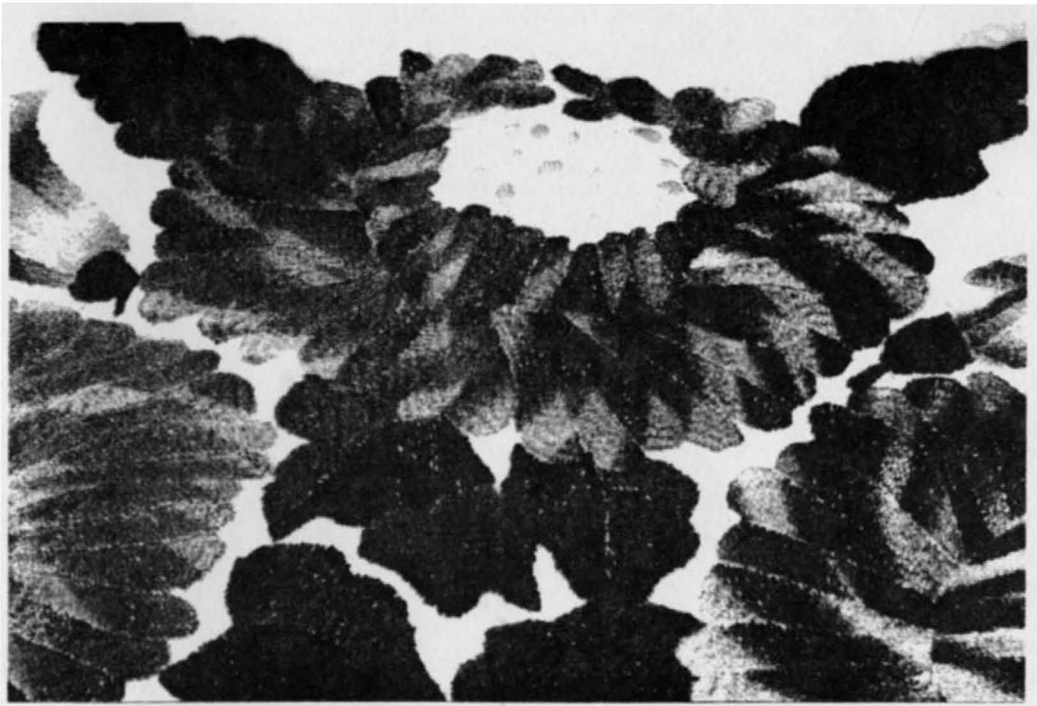
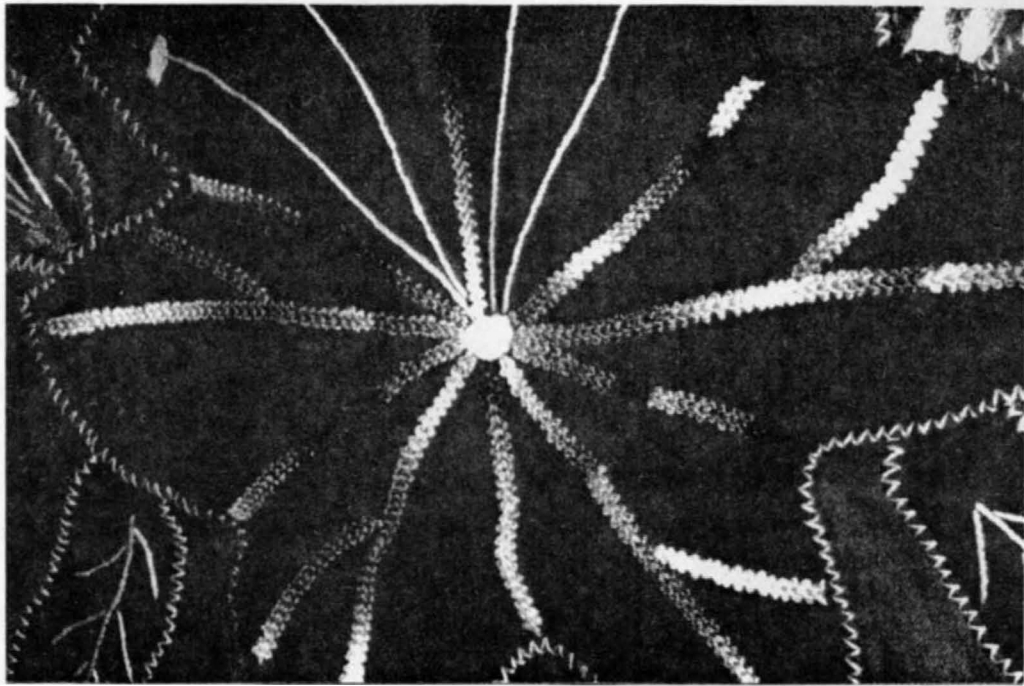
Exhibit of *tivaevae* at Oceania Design, Wellington gallery, July 6, 2000.
Author's photograph.



Cook Islands stitchers at Porirua arranging *tivaevae manu*, July 19, 2000. Author's photo.



Example of old *tivaevae taorei* with new version designed and stitched by Tereora lying underneath. Photo by author, July 7, 2000.



Details from two embroidered *tivaevae tataura*. Author's photo.

