A SOCIOECONOMIC REORGANIZATION OF WEAVERS ROLES IN ANCIENT PERU

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Paper prepared for "South American Archaeology", Professor: Dr. George Gumerman, Flagstaff, Arizona. May 3, 1994.

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Abstract

The development of Andean complex society on Peru's central coast relates to an increase in population and a socioeconomic reorganization, placing a high demand on the production of cotton textiles. This paper examines the shift in weavers' roles from the Post-Glacial Preceramic period to the Cotton Preceramic. The first step in the proposed analysis defines the social context via textile production, social inequality, and division of labor spanning this period of change. Four lines of evidence support my proposed hypothesis: archaeological and ethnohistoric data, current indigenous perspectives, as well as general schemes of the role of craft production and exchange of emerging prestige goods in the rise of complex societies. The conclusion reconstructs the weavers' roles during this duration of change, as well as the organizational foundations for the subordination of women.

Introduction

My primary goals in this research are two-fold. First, I want to engender the archaeological record by evaluating the changes in weavers' roles spanning the Post-Glacial Preceramic to the Cotton Preceramic on Peru's central coast (Figure 1). And second, I want to try and gain a better understanding of the organizational foundations for the subordination of women in complex societies. This is not an easy task given that the creation of the weavers' roles stems from the interaction of a number of factors, including subsistence, exchange, and ideology. Therefore, I thought it necessary to begin this analysis by defining the social context of these two time periods. In doing so, I focus on basically three components of society: social inequality, division of labor and the organization of textile production. Four lines of evidence support my proposed hypothesis: archaeological and ethnohistoric data, current indigenous perspectives, as well as general schemes of the role of craft production and exchange of emerging prestige goods in the rise of complex societies. I demonstrate in my conclusion how and why the subordination of women evolves during a time of extensive social change.

There are many competing models explaining the social organizational changes accompanying the rise of highly stratified complex societies. A majority of these models apply an ecological approach, recognizing the strong correlation between the introduction of irrigation agriculture and the emergence of social hierarchies. This scenario does not appear to explain the rise of Andean complexity. The construction of monumental architecture, requiring the efforts of corporate labor, occurs along Peru's coast before we see any substantial agricultural production (Figure 2).

Michael Moseley's (1975) Maritime Foundations of Andean Civilization hypothesis follows:

> Because the netting of small, schooling fish produces exceptionally high yields with simple technological and organizational prerequisites, the maritime hypothesis holds that the coastal fishery underwrote the local rise of complex society prior to the introduction of, and rapid shift to large-scale irrigation around 1800 B.C. (Moseley 1975, reprinted Moseley 1985;37).

Many Andean archaeologists disagree with Moseley's hypothesis, while many others elaborate on his basic assumptions. The hypothesis I use in this research stems from Jeffrey Quilter, Terry Stocker (1983), and George Gumerman's (1994 class discussion) current views regarding this debate. They place the maritime resource technologies within the context of social interactions, stressing the importance of cotton manufacture. Yet my interests lay in the shifting roles of women and men under these changing technological and ideological conditions.

Before I present my conclusions, I will briefly explain my assumptions, and review the ethnohistoric documents, the current indigenous perspectives, the general schemes of the role of craft production and emerging prestige goods, and the archaeological evidence. All these lines of evidence will lead to a better understanding of textile manufacture, division of labor, and social inequality during these two time periods. These data also provide a current, historic and prehistoric perspective for us to fully understand the role of textiles and their producers in the past.

Past studies of sexual division of labor among hunter-gatherer societies depict males as the family protector, protein supplier and the active agent in social change. Females, on the other hand, are the passive plant gatherers, shell fish collectors, burdened baby makers, and domestic craft producers. Although I disagree with the assumed passivity of female activities, for the purpose of this argument, the women are viewed as the primary gatherers (Draper 1975), and the men are assumed to be the fishers and hunters. I use ethnohistoric documents, paleopathological evidence and Moche iconography to support my contention that women are also the primary weavers.

Sixteenth century Peruvian documents, suggest the Andean norms define "certain tasks as appropriate to men and others to women" (Silverblatt 1987:9). Women's work appears to dominate the domestic sphere. Ethnohistoric pictures and documents depict Andean women always weaving. "Never idle, women were always spinning -- on walks, during conversations with family, while watching over the children" (Silverblatt 1987:9) (Figure 3). Women's activities also include, "cooking, brewing *chicha*, preparing fields for cultivation, planting seeds,

child rearing, harvesting, weeding, hoeing, herding, and carrying water" (Silverblatt 1987:9). These documents and pictures aid in our understanding of women's daily activities, but they have limited value. They provide a narrow focus and an oversimplication of women's activities. This portrait of women's activities dominating the domestic sphere, does "not comment upon the ties between these activities and other demographic, economic, and political structures in sixteenth century" (Brumfiel 1991:224) Peru. Women's textile products circulate beyond the household.

In addition to the ethnohistoric documents, Moche ceramic iconography depicts "women weaving beneath a ramada" (Moseley 1992:68) (Figure 4).

And finally, paleopathological analysis from the site of Paloma (Post-Glacial Preceramic) concludes that many of the male skeletons have an ear disease associated with deep sea diving (Quilter 1989:64). This suggests men spent a great deal of their time obtaining shell fish. Drawing from these multiple lines of evidence, I assume women are the primary textile producers. In this study, I elaborate on their active role in social and ideological, order and change.

Coroma Village Leader Pio Cruz's Current Views on Peruvian Textiles

We must also consider the use and meaning of the fabric to those who weave, wear and worship the items. Presently, the Aymara Indians of Coroma, Bolivia (part of the ancient Incan empire), fight to regain possession of their sacred, ancient textiles that were stolen from them. The textiles, communally owned, play an important role in Andean culture.

> 'In our sacred weavings are expressions of our philosophy, and the basis for our social organization,' explained Coroma village leader Pio Cruz. 'It is through the sacred weavings that our community authorities are chosen, and through them that we maintain our links to our ancestors, the founding Grandmothers and Grandfathers (Anner 1994:23).'

The Aymara store the weavings in *q'epis*, sacred bundles. They consult them as oracles. When they discovered the disappearance of the ancient weavings, the oracles advised a journey to the United States to retrieve them (Anner 1994:23).

> 'The spirits of our ancestors were lonely, and they called us,' said Pio Cruz. 'Without them, bad luck has fallen on our village and the crops are dying (Anner 1994:23).

These passages reflect the sacredness of the textiles in modern Andean communities.

In present-day Andean communities, the worn fabric also serves as a basis for ethnicity (Gumerman 1994, class presentation). The fabric metaphorically expresses ethnic identity. The sharing of textile technology, style and design between individuals conveys a message of who they are. Thus, Andean communities feel a sense of social belonging. This, in turn, suggests the weaver's role is a vital one, contributing to intra-group and inter-group identity.

Prehistoric Andean communities undergo extensive changes from the the Cotton Preceramic to the present. Yet, considerable cultural continuity connects the modern communities with ancient prehistoric communities. Perhaps the above general meanings associated with textiles did not drastically change. If not, then the role of the weavers is extremely important to the acceptance, maintenance and continuation of Andean social order.

Before I present the archaeological data I want to review two models that take into account the role of craft production and the exchange of emerging prestige goods in the rise on complex societies. These two models provide frameworks, that I will return to in the conclusion, for understanding textiles as crafts, as well as emerging prestige goods.

The role of craft production and exchange of emerging prestige goods

Colin Renfrew refers to the interaction produced by the trade of prestige goods as the "multiplier effect," where changes in different parts of a society reinforce and amplify each other (Renfrew 1984:258-283). Renfrew identifies culture as a system made up of interconnected subsystems linked at the level of the individual. The interconnectedness of the subsystems allows for growth. The multiplier effect is a positive feedback loop connecting different levels of individual activities that favor innovation (Renfrew 1984:258-283).

> Changes or innovations occurring in one field of human activity (in one subsystem of a culture) sometimes act so as to favour changes in other fields (in other subsystems). The multiplier effect is said to operate when these induced changes in one or more subsystems themselves act so as to enhance the original changes in the first subsystem (Renfrew 1984:274).

For society to take-off into a growth cycle, at least two systems must be changing and mutually influencing their changes (Renfrew 1984:276). The emergence of a highly stratified society assumes that high status correlates with material wealth. Industrial goods (textiles) rather than

food products often express material wealth in these socially differentiated societies. For a society to take-off, the food products must support more than those directly engaged in producing it (Renfrew 1984:286).

> The precondition for take-off into sustained growth for an industrial society, as described by Rostow (1953) are precisely that production, including agricultural production, be stimulated by the demand for goods. Although no prehistoric society was an industrial society in this sense, a clearly analogous process may be identified, where the demand for goods must be recognised as a significant factor favouring increase both in craft and subsistence production (Renfrew 1984:287).

Mary Helms, on the other hand, identifies the roles' prestige goods play in chiefdom level societies from more of a political-ideological sense. On-site craft specialization increases the political-ideological "vertical" control, and foreign, prestige good exchange increases the political-ideological "horizontal" control. In a developing social hierarchy, there is a need for justifying the control of an elite group. In order for the principle of a hierarchy to exist it has to appear as "*natural (cosmological)* or *sacred*-- and therefore unquestionable" (Helms 1992:324). The acquisition of wealth visibly distinguishes the elite from the commoners. In non-industrial societies, horizontal distance "correlates with supernatural qualities" (Helms 1992:318). Therefore the display of foreign prestige goods, aids in sanctifying chiefly authority. The vertical cosmological dimension correlates with spiritual travel, rather than physical travel. The priests or shamans usually partake in these kinds of journeys.

> Craftsmen and artisans skilled in other modes of expression of esoteric knowledge, including potters who mold and paint polychrome ceramics, metallurgists who shape gold and copper into intriguingly designed ornamentation, weavers who create and decorate fine textiles, sculptors who carve bone and stone and wood, are often thought to be endowed with exceptional, mystical powers and knowledge (Helms 1992:321).

When worn or displayed, the craft person's final products carry aesthetic, symbolic and sociopolitical value. The introduction of textile production, seen in this light, explains a few reasons for the emergence and success of prehistoric Andean societies.

Archaeological Evidence

In an attempt to reconstruct the weavers' roles I provide a brief summary of settlement, subsistence and social organization representative of these times. It is also necessary for me to

focus on three components of society: social inequality, division of labor, and the organization of textile production. An interaction of these variables ultimately forms and transforms the changing weavers' roles. First I will examine the Post-Glacial Preceramic, then I move on to discuss the Cotton Preceramic.

Post Glacial Preceramic (5500-2500 B.C.)

Paloma is a coastal site roughly dating to 5500-3600 B.C. (Figure 1). There are over 4000 non-contemporaneous circular earthen structures located near a loma. A loma is a low hill at the edge of the coastal plain. Fog from the coast reaches the hill and the air condenses to produce a small oasis in the desert. The Palomans are sedentary on seasonal basis, moving back and forth between the maritime and lomas resources. They live in circular domed-shaped structures, measuring roughly 11sq. m. x 40 cm. deep. Their diet consists of marine foods, such as mollusks, sea birds, marine mammals and anchovies, supplemented with the terrestrial lomas foods and industrial products, such as fruit, seeds, wood, small mammals and rodents (sometimes deer at the larger lomas). Cultivation of beans, squash and gourds is a common practice. They demonstrate clever industrious skills by using gourds for containers, fiber for fishing line and nets, wood for cooking fuel and other materials for water craft. Dependence on environmental resources is a prerequisite to maintain and supplement their maritime existence. Yet Quilter's (1987) interpretation of the archaeological evidence indicates the Palomans overexploited their lomas. To sustain their growing terrestrial needs they moved to a more environmentally stable area, like the Chilca river valley.

Burial practices reveal an enormous amount of information regarding social organization, sexual inequality and division of labor. Although the "emphasis in death and life was on the household or family" (Quilter 1989:64) level, unique burial circumstances insinuate social role distinctions. Household groups reflect differences of relative burial *wealth,* and diet, as well as variations in special interment facilities (Quilter 1989:65). Yet, the evidence supports the notion of an egalitarian society with differences in social status reflecting lifetime achievements. Location of burials in domestic structures reflects that loyalty to the household group outweigh

any considerations for a larger group. Success to a Paloman means "providing food for one's family and propagating the social unit in the next generation" (Quilter 1989:65).

Although both males and females contribute equally to the household subsistence base, there are indications of sexual inequality. A high percentage of male burial locations occurs in the center of the houses. "Their central burial in house floors probably mimics their central roles in the social structure" (Quilter 1989:64). The repeated tendency to bury males in the center of the household suggests males have higher status than females. Quilter speculates that the Palomans have a patrilineal kinship system (Quilter 1989:65). Adult female burial good caches decrease over time, which may indicate a decrease in the status of women in the communities that lived at Paloma (Quilter 1989:64). Overall, the archaeological evidence suggests that women and men equally share subsistence activities. They both contribute to the household for daily cooking and consumption. The production of surplus beyond the household level is non-existent. Therefore, all production contributes to the maintenance of the household.

Many of the male skeletons have an ear disease associated with deep sea diving, which indicate that "there may have been a sexual division of labor in which men were the chief hunters and fishermen and women the collectors and preparer of plants" (Quilter 1989:64). Furthermore, male skeletons tend to have a lower strontium level versus the female skeletons, suggesting they eat more marine resources. This does not necessarily mean sexual inequality. Rather the males spend more time fishing, thus they eat more fish.

Female infanticide, on the other hand, provides clear evidence of sexual inequality. Why are females the victims? "It is likely that infanticide was carried out at Paloma either regretfully or 'unintentionally,' given the apparent importance of households and families in the burial data. The people of Paloma are caught in a conflict between the desire to have children and the need to control population size" (Quilter 1989:67). The practice of female infanticide does not occur until the end of occupation at Paloma. Most likely, the population pressure and lomas resource depletion contribute to this custom.

With the overexploitation of the lomas, it appears that some of the population shifts to the site of Chilca (3600-2500 B.C.) (Figure 1). Chilca consists of 100 contemporary circular earthen structures, representing a year-round occupation. The Chilcans continue their egalitarian, tribal-level, shamanistic, marine/terrestrial subsistence economy, but begin increasing cultivation of squash, beans and gourds. Shorter birth spacing periods and stable food resources allow for population growth. With this we see a slow shift to sedentism.

The last bit of evidence I will review pertains to textile production during the Post-Glacial Preceramic. Material types and technology limit the manufacture of textiles in this time period. They construct mats, bags, and nets out of sedge, bast fibers, and wild plants, producing utilitarian finger-twined fabrics (Moseley 1975:64) (Figure 5). The adult burials associated with numerous grave goods "tend to have many textile objects as well, and there are clear distinctions in the quality of the mats and the fineness of the textiles" (Quilter 1989:65). Although the textiles reveal "elaborate treatment and skilled workmanship" (Quilter 1989:65), there is little decoration. In addition, most of the products serve utilitarian purposes (Quilter 1989:65). Textile manufacture is a daily practice, serving immediate needs.

Cotton Preceramic 2500-1800 B.C.

Cultural continuity exists between the Post-Glacial Preceramic cultures and the Cotton Preceramic cultures, but the exploitation of cotton floodplain agriculture sets the stage for social and ideological change. Large monumental centers strategically develop along rich agricultural floodplains adjacent to the sea. These large centers coexist with smaller village-based fisherfolk communities (Rio Seco, Salinas de Chao, Los Morteros). The diets of the people living in these large centers and fisherfolk communities predominantly consist of maritime resources (anchovies, shell fish, etc.), supplemented with a few domesticates (squash, beans, lima beans, and tubers-jicama and achira). Quilter's (1991) excavations of domestic midden deposits at El Paraiso, a Cotton Preceramic site (Figure 1), reveal quite a diverse subsistence base with a focus on cotton production. Marine resources (bony fishes and mollusks) comprise 90% of the animals identified (Quilter et al 1991:279). An analysis of the domesticates include the gourd, squash,

chili pepper, achira, jicama, beans, lima beans, fruit trees and cotton (Quilter et al 1991:280). Cotton ranks in the top five of plants found at the site (Quilter et al 1991:280).

El Paraiso is the largest monumental architectural endeavor in the western hemisphere. The architectural engineering required to build such enormous structures requires large labor forces. Feldman (1985) examines the corporate labor involved with the construction, reconstruction and maintenance of the large "elite" structures at Aspero, another Cotton Preceramic site (Figure 1).

> Corporate labor (Moseley 1975; Feldman n.d.a.) is group labor that draws its work force from separate households, either from within a single community or from separate communities. The laborers work together in a collective, integrated manner for a specific purpose, which is defined and sanctioned by an authoritative body that coordinates the project and to which the will of the individual is subservient while participating in the project. Corporate labor is an organizational concept that implies the existence of an authority that has the rights and ability to mobilize people and direct their actions (Feldman 1985:82).

Stratigraphic evidence at Aspero (Feldman 1985:76), La Galgada (Grieder et al 1988:197) and El Paraiso (Quilter 1985) reveals the use of bagged fill to build mounds and new buildings. Feldman concludes that Aspero characterizes what Colin Renfrew terms a "group-oriented" chiefdomship, "where there is little evidence of accumulation of personal wealth, but clear indications of communal or corporate activities" (Feldman 1985:84). This might also be the case for the other Cotton Preceramic sites mentioned, like El Paraiso and La Galgada.

The following evidence suggests an emerging elite class. At Aspero, in the Huaca de los Idolos, the decoration of specific rooms is outstanding, containing numerous unique artifact caches. Feldman concurs these are "high status" spaces (Feldman 1985:82). Within the deep confines of Huaca de los Idolos, an "inner sanctum" with extraordinary caches of *prestige* goods was excavated. Sally Foster sees that architectural space is "both produced by, and in turn produces and reproduces social relations" (Foster 1989:40).

> A building is made up of walls which define a series of enclosed spaces, the boundaries between which may be broken by doorways allowing access from one area to another. The importance of the doors is not only do they open, but more importantly that they can close, effectively segregating spaces and controlling the means of access to any particular point (Foster 1989:41).

The "inner sanctum" restricts space and caches of prestige goods, thus indicating differential access and control of "wealth."

Along with the "high status" spaces, there is a burial of a "wealthy" newborn infant on the floor of Huaca de los Sacrificios. The burial of a two-month-old child and an adult (the latter lacking grave goods) disclose numerous *prestige* items. An elaborate cap with beads covers the child's head. Over 500 shells, plant and clay beads with numerous other "wealthy" goods adorn this child. Two white cotton textiles and one with brown decorations completely cover the infant. The quantity and quality of grave goods placed with this burial far exceed that of the two other infants or four adult burials found at Aspero (Feldman 1985:81). "The combination of the grave goods, association with the adult burial, and positioning on a floor of the mound indicates preferential treatment for this young individual" (Feldman 1985:81), thus reflecting ascribed status.

Therefore, Cotton Preceramic evidence insinuates a "group-oriented" chiefdomship with an emerging elite class. This senario has many implications on the organization of the weavers' roles. Next, I will discuss the organization of Cotton Preceramic textile production.

Cotton plays a crucial role in Cotton Preceramic life. La Galgada has a tremendous quantity of cotton remains. "From the top to the bottom, the site was strewn with fragments indicating use of cotton" (Grieder et al 1988:133). Smith asserts that it "must have been a center for the production of cotton" (Grieder et al 1988:133). Through indirect archaeological evidence, we can understand the overall organization of cotton production and manufacture. Unfortunately, weaving (actually finger twining) during the Cotton Preceramic does not involve tools. Therefore, we have to rely on the levels of standardization, efficiency, skill and regional variation of the final products to infer craft specialization (Costin 1991a:32-43). Considering my lack of information, an adequate examination of the regional variation is impossible at this time.

Due to the lack of archaeological evidence, the organization of distribution remains unclear. Marine shells, such as natural shells, beads, necklace and ear pendants, are common tomb caches, indicating some coastal connection (Grieder et al 1988:200). *Spondylus* shells from Ecuador "make a single appearance in the Preceramic as the central pendants of two necklaces on women's bodies" (Grieder et al 1988:200). Whether textiles are part of this

interaction sphere is ambiguous. Yet the light weight of textiles permits easy transportation along this conjectural trade route.

Two general textile manufacturing techniques distinguish the Cotton Preceramic from the later time periods. The first technique, known as "single-element construction" entails the use of one continuous yarn, repeatably interworked with itself (Moseley 1975:66). The manufacture of fish nets, mesh bags, and some clothing items employ the single-element construction (Moseley 1975:66) (Figure 6). There are two types of single-element construction, looping and linking (Grieder et al 1988:155). The fiber type determines the uses. Both produce a dense solid cloth, usually in the form of circular bags, and rarely flat cloth (Grieder et al 1988:155).

The second technique, "multiple-element construction," involves two sets of yarn (Moseley 1975:66). A set of longitudinal parallel warp elements crosses at right angles and interlocks by a series of transverse weft elements (Moseley 1975:66). There are two general types of multiple-element textiles: (1) a woven structure resembling the simple weaves produced on the heddle looms; and, (2) weft twining (Moseley 1975:66) (Figure 7). The latter technique "is not particularly common, and they never constituted more than about 15% of the textile assemblage at any coastal settlement" (Moseley 1975:66). Weft twining, on the other hand, is the established technique, characterizing a majority of the textiles. Most often its use entails the manufacture of flat cloth in the form of mantles and shawls (Grieder et al 1988:155-156). Alternate warp pairs, versus parallel and transposed, is the basic technique for the plain weft-twined flat mantles and blankets. There is no evident change in this technique over the period it is in use (Grieder et al 1988:156).

Although the techniques do not change over time, there is variability represented in the "hand-manipulated textiles of the Preceramic Period" (Grieder et al 1988:152). In demonstrating the validity of his sample, Grieder writes, "Each item is so individual in its thread, construction, and decoration that one can be reasonably sure about the number of items" (Grieder et al 1988:152). This, in turn, suggests a certain degree of specialization. The various techniques apply to specific forms and material types and they do not vary considerably. On the other hand,

Grieder senses a certain degree of individuality characterizing each item. Depending on "the type of object, the technology, its function, and the nature of demand" (Costin 1991a:34), this standardization measures the relative degree of specialization. This degree of specialization does not emphasize "routinized" or "industrialized" production (Costin 1991a:33). Rather, there is room for individual expression within certain standardized confines.

How much time do the weavers spend on textile manufacture in an average day? These products are all hand-crafted. The heddle loom, making this process more efficient, does not show up in the archaeological record until the Initial Period (1800 - 500 B.C.). Twining does not use a true loom. Rather, twining requires "a support structure to keep the warp yarns suspended and properly spaced and ordered" (Moseley 1975:67). No matter the nature of the support structure, the products result from finger manipulation, a time and energy consuming procedure (Moseley 1975:67). Therefore, we assume the weavers spend a large portion of their day weaving.

Why is so much energy expended to make these products? Cotton textile manufacture is an innovation of the times. The textiles not only increase subsistence, but they also "carry social information that the consumer wishes to broadcast" (Costin 1991b:37; Gero 1989; Pollock 1983). The consumers of the finer textiles are the elites. They need to establish their positions by identifying themselves as distinct and powerful compared to the commoners. The incorporation of the heddle loom reduces the energy costs, and eliminates the elaborate decorations associated with finger weaving (Grieder et al 1988:199). During the Initial Period, the elites are already an established controlling body, therefore the symbolic social information does not carry as much meaning. Thus, they do not tolerate the high energy costs of finger manipulation.

The degree of skill, another factor determining the degree of specialization, is harder to determine objectively (Costin 1991a:394). The textiles Grieder analyzes from La Galgada represent a biased sample "skewed toward the finest products of the fiber arts" (Grieder et al 1988:154). The research design focuses on the excavation of the ceremonial areas, rather than

the residential areas (Grieder et al 1988:154). Therefore, we can assume the textiles he examines represent items with possible elite and/or ritual value. Some of his stylistic conclusions follow:

> La Galgada's Preceramic art found its most varied expression in textiles, which offered a limited range of possibilities in size, mass, colors, textures, and precision of detail. One of the notable features of the Preceramic textiles is that decorations are always built into the structure of the cloth. That means that decorative units must be planned ahead, not created spontaneously as the work proceeds. The number of threads in a particular color must be counted as they are placed, and that number must be matched or varied to control the design (Grieder et al 1988:208).

The looped and linked bags are the main vehicle for individual expression (Grieder et al 1988:199) (Figure 7).

The complications with the dyeing process compound this level of difficulty. The weavers incorporate a full range of colors into the design beyond the natural undyed cotton (yellow, tan and cream). These colors include: a brownish-black (possibly *tannin*), red or brick-red (*Relbunium nitidum*), yellow, blue (possibly *indigo*), bright blue and brilliant emerald green (Grieder et al 1988:180-181). This, in turn, suggests not everyone could just pick up cotton thread and start weaving.

This discussion of textile manufacture discloses that there is a certain degree of craft specialization in the Cotton Preceramic. Because the textiles satisfy utilitarian, subsistence and needs of prestige, I imagine there is a considerable amount of pressure on the weavers to convert the cotton into final products. This level of craft specialization suggests there is a demand for these products. The elite display and restriction of access to the finer mantles and shawls demonstrate that the material value of the textiles is increasing proportionately. The increased demand favors specialization. Thus, we have a positive feedback loop contributing to the perpetuation of this textiles innovation. The take-off of Andean society into its growth cycle takes place because of the versatility of the textile products.

Conclusion

What does this all mean to changing weavers' roles in prehistoric Andean society? During the Post-Glacial Preceramic at sites such as Paloma and Chilca, there are three levels of social organization: the band or tribe, the family and the individual. The corporate group is

essentially the household. The archaeological evidence suggests the males control the household activities, but the distribution of resources is equal. Families communally own their resources and cooperation is the key for survival. Everyone has "equal access to the means of subsistence" (Sacks 1975:218), freely exchanging personal possessions. The planning of production revolves around "hospitality and gifts" (Sacks 1975:218). These gifts are things that "everyone has or can expect to have by his or her own effort -- and thus can make an equivalent return in goods" (Sacks 1975:218). The collection and cooking of food is a daily practice, as is textile manufacture. The mats, bags and nets are all utilitarian products serving individual daily needs. Most importantly, production revolves around the domestic sphere. Although some families and individuals enjoy a better diet and are "wealthier" than others, the evidence deduces the differences in social status reflect lifetime achievements. Mortuary practices reveal *who* the person is, rather than *what* rank or status he or she may have held in life (Quilter 1989:66). Therefore, the need to acquire power and prestige does not govern social relations.

The basis for division of labor is based on sex distinctions. Referring to Patricia Draper's work with the !Kung, there is "men's work and women's work...adults of both sexes seem surprisingly willing to do the work of the opposite sex" (Draper 1975:87). Women cook, collect plants and mollusks, cultivate their crops and produce fiber mats, bags and nets. Men spend enough of their time fishing that some of them develop an ear disease only associated with deep sea diving. Their roles interchange when necessary or when they want to.

Once these seasonal populations settle down near the river valleys and successfully experiment with the plant cultigens, the productive economy increases. These conditions allow for shorter birth spacings, thus contributing to a growth in population, as well as a slow shift to sedentism. They possibly form loosely organized kin groups, such as clans and lineages (Gough 1975:65). Each kin group is composed of a number of related families (Gough 1975:65). Interpretation of the archaeological evidence suggests an egalitarian, tribal-level society.

Increased dependence on terrestrial cultigens foreshadows an additional shift to the rich agricultural floodplains adjacent to the sea. Women continue to gather, plant, cook and weave,

while the men primarily fish. The planting, tending and harvesting of cotton by the women are the first steps prehistoric Andean people take to initiate a growth process through textile manufacture (Moseley 1975:65). By utilizing familiar weaving techniques, the Cotton Preceramic peoples teach themselves how to spin, dye and weave utilitarian and fine cloth garments. Through small scale interaction or independent invention this innovation sprouts up along the coast and at intermediate areas like La Galgada.

The take-off of Andean society into its growth cycle takes place because of the versatility of the textile products. Food supplies increase due to the efficiency of the new fishing technology. The small nets allow for greater yield in protein by way of anchovies. The finer textiles bestow status unlike before. Textiles, as carriers of social symbolic meaning, create the secondary individual need to acquire wealth (Renfrew 1984:279). The increased visibility defining the elites from the commoners creates distinctive social classes. Therefore, the demand for textiles not only increases but also stimulates production. Stimulation in production increases specialization. This, in turn, means the weavers spend more of their time producing not only utilitarian products for their immediate households, but they also must produce for the elite class. The original social framework may not be supporting the specialists anymore due to the consequence of the emerging elites. To reiterate their dominance, the emerging elite class possibly begins to manage and organize resident populations to build, rebuild and maintain the ceremonial centers. The ceremonial centers, in turn, rectify the political position of the elites.

Now I will try and answer the "how", "why" and "when" questions pertaining to the subordination of women in class societies; as well as, why male ideals and power predominate in hierarchical societies. In general, Karen Sacks (1975) suggests class societies tend to make a sharp dichotomy between the domestic and public spheres. Women's activities tend to be restricted to the domestic sphere which is not directly associated with "social power or position in the public sphere" (Sacks 1975:229).

What are the circumstances leading early prehistoric Andean society to exclude women from social production? "Class societies are exploitative, which means many people work for

the benefit of a few" (Sacks 1975:230). "It seems that class societies tend to socialize the work of men and domesticate that of women" (Sacks 1975:230). Why are the men exploited? Ruling classes tend to select men as social laborers partly because they are more mobile, but more significantly because they can be more intensively exploited than women. Women must nurse and rear children (Sacks 1975:230). This creates the "material and organizational foundations" (Sacks 1975:230) for the subordination of women. Although, the Cotton Preceramic does not provide evidence for such a class distinction, there is an increase in corporate and social activities.

This paper demonstrates why we see a shift in focus of production. The transfer of domestic production for subsistence, to a greater reliance on production for exchange, happens due to a number of interacting social factors. In Andean society the shift takes place due to the versatility of their innovation -- textile manufacture. There are two sub-systems working to favor this innovation (Renfrew 1984:276). Textile production fulfills the ever increasing subsistence needs, as well as the elite demand for prestigious goods.

Why does the production of exchange become so important? The archaeological evidence clearly demonstrates differential access to goods. Post-Glacial Preceramic gift giving cannot occur anymore. "When the means of subsistence are privately and unequally held, a recipient is often unable to make an equivalent return in goods" (Sacks 1975:218). Therefore, an expectation to return the favor in services emerges. The production of goods to gain control over the services of others contributes to the development of elite-controlled productive forces. This, in turn, justifies elite exploitation of the males in the social or corporate work.

This entire scheme results in the restriction of women in the domestic sphere. Therefore, the women do not own the means of production for more than domestic subsistence. The household as a level of organization does not provide the women with the opportunity to institute social change (Sacks 1975:231).

Men, on the other hand, spend less time at home and a majority of their time in the social sphere of exchange and production. Their contribution to social production gives them the

possibility of instigating social change (Sacks 1975:231). Because of women's exclusion from social production, male social dominance predominates.

Unfortunately, the latter ideas are not directly translatable to the Post-Glacial - Cotton Preceramic transition for two reasons. First, there really is not enough evidence to support that there is a ruling elite class. Rather, it is a system based on reciprocity and labor is communally organized. Yet, differential access to wealth is apparent, as well as status differentiation. In addition, the efforts required to build the monumental structures necessitated some sort of planning. The increase in textile and cotton production in conjunction with the building of the monumental structures does suggest that there is an increase in the division of labor. This in turn, could indicate that women are restricted to the domestic sphere. But how much are they restricted and how much are their views and social influences being subordinated? No one can really know at this point. I chose to examine these two time periods to try and gain a better understanding of the organizational foundations for the subordination of women. In doing so, I have effectively demonstrated how this process might have occurred.

The second problem with this "subordination of women" scenario lay in the following criticism. Restriction of women to the domestic sphere does not necessarily eliminate their influences on societal change. Rather, I have demonstrated that social change does not have to occur in the public sphere of production. Clearly, womens' domestic acitivities, including the new technological innovation of textile manufacture, are primary contributors to the rise of complexity on the central coast of Peru. Womens' ideals may not predominate but they do have an underlying affect on the forces acting within the public sphere.

Discussion

The sequence of events forming and transforming prehistoric Andean society is by no means a linear process. The formation of a class system must be viewed within the web of its social fabric. The development and continual changing of culture are relational processes. Important occurrences happening at one scale have a tremendous effect, not only at that scale, but at other scales as well. The relationships between individuals and society, as well as the

relationships of one society to another society, act as a gear system. All the gears are working together to modify and remodify change or movement. No one gear controls the outcome of another, because more than one gear is always moving. This, in turn, keeps the system changing. This is the case with the development of social classes in prehistoric Peru. The development of cotton floodplain agriculture does not cause the rise of complexity, nor does a substantial food base. Rather, in this case, the acceptance of innovations creates new societal, as well as individual needs, that require fulfillment.

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Disclaimer

Figure 5 came from the excavation report on Asia, author unknown at this time. Figure 6 -- some of the figures came from Grieder et al 1988 and some from the report on Asia, the books were not in the library, therefore I don't know what came from where. Sorry!

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