

The Historical Development of a Coastal Andean Social
Formation in Central Peru, 6000 to 500 B.C.

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Archaeologists have written a good deal about the development and transformation of Andean societies on the central coast of Peru--especially about the changes they perceive as having occurred during the second and third millennia B.C. (Moseley 1975; Osborn 1977; Raymond 1981; Wilson 1981). While there is some disagreement over the relative importance of particular economic practices at different points in time--and hence with the periodization of Andean prehistory--most archaeologists would agree that three major stages of socioeconomic development can be discerned from the archaeological record.

Societies of the early stage, which began before about 6000 B.C. and lasted to 3250 B.C., had economic bases dominated by labor processes and activities that involved fishing, shellfish harvesting, hunting, and foraging; the residential communities were small, and the settlements were occupied either seasonally or on a year-round basis, depending on whether or not the subsistence resources were located in close proximity to each other. The societies of the middle stage, which spanned the period from about 3250 to 2350 B.C., had economic bases that were dominated by labor processes involving fishing; the largest settlements were occupied throughout the year and were located near marine resource areas; agriculture was a minor subsistence activity, since cotton was clearly the most important

crop being grown. Societies of the late stage, which began about 2350 B.C. and ended about 500 B.C., had economic bases dominated by agricultural food production, the establishment of residential communities in areas with environmental conditions well-suited for growing particular crops, and the appropriation of large amounts of labor for the construction of U-shaped platform mounds and water management systems.

Most archaeologists who have dealt with the questions of social change and development on the Peruvian coast have adopted, either consciously or unconsciously, a theoretical position grounded in positivism. Consequently, they have usually relied on functionalist explanations of change, which are typically based on the occurrence of some generalized precedent condition or event impinging on the society and producing the kind of change that is observed in the archaeological record (Bock 1963; Smith 1973). These precedent conditions or events-- ecological change, population pressure, diffusion, or the emergence of great men, to name only a few of more popular ones at the present time--are external to the society, to the relations that existed between the people who composed it, and to the activities that resulted from these relations. In other words, their explanations are unsatisfactory, not because they ultimately capitulate to one form or another of determinism but because they are ahistorical. We should seriously consider rejecting the positivist problematic and the intellectual baggage that accompanies it.

To do so, of course, would leave us in something of a theoretical vacuum unless we can develop a theoretical problematic

that will allow us to deal with people and their history as aspects of the same human activities rather than different orders of phenomena. I have suggested elsewhere that the historical materialist problematic is the only one that has any history of dealing with this problem in a meaningful way (Patterson 1982). Central to the problematic is the idea that the determining factor in human history is, in the final instance, the production and reproduction of the conditions essential for life (Engels 1972:71-72). On the one hand, this involves the production of food, clothing, dwellings, and the tools required to acquire and transform raw materials into useful items. On the other hand, it also involves the propagation of the species which, in economic terms, is merely the reproduction of labor power in all of its forms. No consideration of the production and reproduction of the conditions essential for life can avoid examining the connections that exist between the producers and their means of production and the social relations that are necessary for setting the productive processes in motion.

In the earliest coastal society that we can now analyze in any detail from the historical materialist perspective--what I propose to call the Paloma social formation which began before 6000 B.C. and ended about 3250 B.C.--there was a division of labor based on sex and, to a lesser extent, age, judging by the tools associated with different burials at Paloma. The presence of burials beneath house floors, the continued use of these structures after the interments, and the occurrence of storage pits in close proximity to the

buildings indicate that the household group was a primary production-consumption unit in Paloma society (Quilter 1980). The presence of infants and children as well as adult men and women among the burials suggests that filiation--the relations of dependence which an individual has initially to the members of preceding generations and later to those of succeeding ones--was the organizing principle for the production, circulation, and consumption of many subsistence items in Paloma society (Meillassoux 1981:19-22).

Matrimonial relations--mating and the rearing of children--occurred in the context of already existing household units. The reproductive capacity of these relations ultimately depended on and was limited by the number of pubescent women in the group. Given the small size of the Paloma households and residential communities--settlements estimated to have had 20 to 75 inhabitants (Quilter 1980:51-53)--it would have been impossible for either group to have been a self-sufficient breeding population (Quilter 1980:51-53); consequently, settlements must have been linked to other residential communities, and there must have been matrimonial mobility in Paloma society--either the women moved to different residential communities or the men did (Meillassoux 1981:25, 42-49). This inference is based on two lines of reasoning: one is that the re-building or re-occupation of domestic structures suggests that households did not move freely from one residential community to another which implies that there were relatively stable connections between households in the same settlement, and the other is evidence from later social formations in the area which indicates the

occurrence of female mobility between settlements. What this means is that filiation was patrilineal in Paloma society, involving a man, his siblings, his own children and those of his brothers, and that residence was patrilocal. In other words, a settlement consisted of nuclei of related men who cooperated repeatedly with each other in collective activities, even those organized on an impromptu or ad hoc basis, and adult women who came from other residential communities.

The residents of two contemporary settlements in the Chilca Valley-- Paloma and Chilca Monument I--located in easy walking distance of each other, harvested and consumed different arrays of shellfish (Donnan and Quilter, personal communications). This suggests that the major means of production, which were appropriated by the constituent households of a settlement, were owned or controlled by the residential communities. In other words, they were durable property. One sure way of guaranteeing the transmission of unequivocal or unambiguous property rights is to base inheritance on the principle of filiation (Lowie 1920:149; Fortes 1953:25-28, 31); however, for filiation to be a completely unambiguous basis for inheritance, the principle must be extended beyond two generations--i.e., it must incorporate three or more generations. This strongly implies the existence of unilineal descent groups in Paloma society with the ties established through women providing the basis for fission, and, thus, for the generation of a segmentary organization.

During the later stages of the Paloma social formation, its members began to adopt agricultural production techniques and plants

that had been domesticated elsewhere. Land was gradually transformed from an object of labor that was provisioned by nature and provided instantaneous returns to an instrument of labor--a major means of production--that yielded returns only after considerable investments of labor over extended periods of time. The productivity of the initial agricultural endeavors in Paloma society was low, judging by the paucity of domesticated plant remains in archaeological deposits from the period. Agriculture was merely one of a number of subsistence practices; it was adopted because the productivity of other subsistence practices--especially fishing--was sufficient and reliable enough to permit individuals to engage in activities where consumption was delayed for significant periods of time.

New forms of production developed after 3250 B.C. in the context of the social organization defined by the existing relations of production and relations of reproduction. At the most basic level, the new practices consisted of four interrelated features. The dominant one was the increased productivity of the labor processes associated with the extraction of marine resources. The second was the development of new labor processes associated with the production and appropriation of agricultural produce--especially cotton. The third was the emergence of collective labor processes associated with the construction of platform mounds and large architectural complexes. The fourth involved the circulation of subsistence goods between the economically specialized farming and fishing settlements of the Conchas social formation, which lasted until about 2350 B.C. (Moseley 1975; Patterson 1971).

At the level of the productive forces, the new forms of production were reflected by the settlements and the relations that existed between their processes involved in the appropriation of nature. This connection was reflected not only by the proximity of settlements to the resource areas being exploited by their residents but also by their size, which reflected in a rough way the number of individuals involved in those labor processes.

The linkages that existed between the economically specialized farming and fishing settlements of Conchas society occurred at the level of the community rather than at that of the constituent households. Textiles made from cotton--the most important crop in Conchas agriculture and the one most extensively planted--were associated with a majority of the burials in the fishing villages; these fabrics were most likely produced by the members of the domestic groups using them, judging by the presence of weaving implements in some of the burials. What this means is that a small number of farmers produced the cotton and other domesticates used or consumed by the remainder of the community. In return, they received marine products and other items from the fishing villages during the time they were engaged in agricultural activities. In other words, while the circuits through which most agricultural items moved were still limited to the level of the domestic group as they had been earlier, cotton and marine products were exceptions that circulated at the level of the settlements composing the larger community.

While the households continued to be important production-consumption units in Conchas society, there were labor

processes that were beyond the capacities of the members of a single domestic group or even a small number of cooperating ones. These involved the construction of platform mounds at Aspero and Rio Seco and the large architectural complex at El Paraiso. The labor required for building each of the platform mounds was in excess of 60,000 man-days, while that required for El Paraiso was more than 1.9 million man-days (Patterson 1982, Tables 1-2). This focuses attention on the relations of production in Conchas society. How was the surplus social product that resulted from the new labor processes and the ways of organizing work extracted? What was the framework of power in which it occurred?

Appropriation occurred at the level of both the household and the community. When raw materials were procured and transformed at the level of the domestic group, there was always the potential for unequal accumulation. Households with large numbers of individuals in the productive age and sex categories, given the division of labor, had the ability to produce above and beyond what was required to ensure the continuity and reproduction of the group. Households with fewer individuals in the productive age and sex categories were able to produce smaller quantities of these items. The inequalities that were based on differences in the size, composition, and developmental cycles of the households were temporary. The presence and absence of grave goods, as well as differences in the quantity and variety of the items associated with interments, indicate that there were inequalities in Conchas society. Some individuals were buried without grave goods, while others were interred with fabrics

and other objects that represented labor investments of hundreds of hours. Yet, there is nothing inherent in the grave goods or in their distribution among the various burials which suggests there was a social division of labor in Conchas society--i.e., that some individuals had exclusive access or greater access than others to particular goods. This suggests that the inequalities reflected by differences in the quantity and variety of grave goods represented differences in the productivity of the various domestic groups rather than class distinctions in which one class had the ability to appropriate for its own use certain materials or the labor power of the remainder of the community.

When real appropriation occurred at the level of the domestic production units, some of the surplus social product was used to ensure the reproduction of those groups. It was used to acquire women from other settlements, judging by the three to one ratio of adult males and adolescents to adult women among the primary burials at various settlements. In a sense, the surplus product was transferred from the members of one generation in the domestic production unit to those of the next. At the same time, however, the domestic groups had to maintain access to the collective resources of the community--i.e., those that were owned or controlled by the constituent households. To do so meant that the other part of the surplus produced by the households was appropriated at the community level. This entailed the appropriation of goods such as fish or cotton or of labor power for the construction and maintenance of platform mounds and architectural complexes and for ceremonies. In

other words, the unequal accumulation of the autonomous domestic production-consumption units of Conchas society was continually transformed into the accumulation of surplus social product by the community as a whole. Those households with access to more labor power contributed more to the reproduction of the community than those with access to less, yet their contributions were structurally equivalent. Any tendency for accumulation by the individual domestic groups was continually transformed into the growth of the community as a whole.

The intensification of agricultural production, based largely on cotton, laid the foundations for the development of new forms of production and appropriation after about 2350 B.C.--in what I propose to call the La Florida social formation (Patterson 1982). These new forms reflected the decisive role then played by agricultural food production in determining the social organization of the community. They consisted of several interrelated features. The dominant one was the increased productivity of labor processes associated with the production of domesticated plant foods. The second involved the development of new labor processes associated with the production and appropriation of cultivated plant foods. The third involved the intensification of the collective labor processes involved in the construction of platform mounds. The fourth involved the increased appropriation of collective labor power at the community level to ensure the continued productivity of agricultural activities.

At the level of the productive forces, the new forms of production involved the establishment of economically specialized

hamlets in localities with environmental conditions that were well-suited for the production of particular food crops--like the coca fields in mid-valley localities--and the construction of water management systems. Nearly all of the known La Florida settlements are located inland near arable land and away from marine resource areas. Also, virtually all of the large-scale construction activities of La Florida society occurred at inland locations. Together with the greater quantity and variety of domesticated food plant remains in refuse deposits at the coastal fishing village of Ancón, these indicate the greater importance of agriculture in the subsistence economy and suggest that a significantly greater portion of the total population was engaged in agricultural food production.

This shift occurred in the context of the existing relations of production. The established relations of production were extended to include the residents of the economically specialized agricultural settlements located away from the coast; the labor processes involved with the production and circulation of foodstuffs were intensified as were those involved with the construction of pyramids and irrigation canals.

The labor required for the construction of platform mounds on the central coast during the second millenium B.C. exceeded 12 million man-days (Patterson 1982; Scheele 1969; Williams Leon 1981). This suggests that labor was appropriated at a rate that was two to three and a half times greater than it had been in Conchas society. These construction activities were clearly beyond the capacity of individual production units and even settlements. They involved the

appropriation of labor at the community level and in the context of the linkages that already existed between the residents of the economically specialized settlements. These connections involved a division of labor based on farming and fishing in the broadest sense of the terms; the circulation of foodstuffs, raw materials, and perhaps some finished goods; the division of labor based on age and sex within the household production-consumption units; and the matrimonial mobility of women. The construction activities benefited the entire community not only by intensifying agricultural production through the development and extension of irrigation systems but also by providing the setting for those predictions, rituals, and offerings that occurred at the pyramids and that were essential for providing and maintaining the conditions required for successful farming (Burger and Burger 1982).

Real appropriation also still occurred at the level of the constituent domestic units, judging from the various kinds of toolkits found among the grave goods in different interments, the association of storage pits and refuse deposits with residential structures, and inequalities reflected by differences in the quantity and variety of grave goods associated with various burials. The intensification of the labor processes involved with the production of foodstuffs and the acquisition of raw materials led to a concentration of labor power by the various domestic groups. This meant that there was an increase in the number of individuals associated with these groups and, of course, the number that participated in the labor processes involving the members of the

domestic production-consumption units. Judging by significant increases in the volumes of cooking vessels and the absence of significant changes in the capacities of serving vessels, the size of the residential groups doubled or tripled during the early years of the La Florida social formation. It involved a change from a group consuming nine servings at the beginning of the second millenium B.C. to one consuming twenty servings a century or so later and, finally, to one consuming thirty servings a century after that. The increased size of the domestic units dampened the effects of demographic factors and random fluctuations on the age and sex composition of the group. This, in turn, reduced the impact of demographic and statistical factors on the ability of the members of a domestic group to develop their own production in relation to their ability to mobilize the labor power of their members. The increased size of the domestic groups also enhanced any tendencies they had toward unequal accumulation. The fact that unequal accumulation continued to occur only within the constraints that already existed focuses attention once more on the contradiction that existed between the relations of production, on the one hand, and the relations of reproduction, on the other, for it has a number of implications concerning the organization of La Florida society.

First, the contradiction was reflected in the incompatibility between any tendencies for unequal accumulation by households and the necessity they had of maintaining equal access to the collective resources of the community. Any tendency for the domestic groups to accumulate brought about increased production to retain access to the

resources of the community. In other words, unequal accumulation was continually transformed into the economic growth of the community as a whole. The high rate of growth or expansion would remain so only as long as the contradiction between the relations of production and the relations of reproduction persisted.

Second, the segmentary organization of the community, which reflects the contradiction between the relations of production and the relations of reproduction, incorporates the territorial organization of the constituent domestic groups into the production process, since each of them must have access to all or part of the territory held by the community as a whole (Bonte 1979). This form of organization established the structural equivalence of the various domestic production units, providing them with equal access to the collective resources of the community in spite of any tendencies toward unequal production. It shifted or exported the problems resulting from the unequal production and accumulation of the domestic production units to the periphery of the social formation, where they were resolved by expansion into previously unoccupied territories, raiding, or the creation of matrimonial alliances with groups outside the larger community.

Third, given the lack of correspondence between the relations of production and the relations of reproduction in La Florida society and its predecessors, it is unlikely that any organizing authority involved in the administration of production and redistribution was vested in the same individuals or groups that were concerned with creating and maintaining the conditions necessary for the acquisition

of pubescent women. The purely political activities involved in the latter were distinct from the managerial, administrative, and ritual activities involved in the allocation of tasks, the organization and supervision of production and redistribution, and the performance of ceremonies which also involved offerings at the pyramids.

Fourth, the contradiction between the relations of production and the relations of reproduction was the dynamic mechanism for social transformation in the Andean social formations of the central coast of Peru. The segmentary lineage organization of La Florida society ultimately gave way to one with social classes. This change occurred when surplus labor ceased to be appropriated for the reproduction of the community as a whole and was directed, instead, toward the creation and maintenance of social classes defined in terms of unequal distribution and unequal access to the collective resources of the community. When this happened about the middle of the first millenium B.C., the peoples of the central coast of Peru stopped building pyramids.

Footnotes

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