

A FRONTIER PERSPECTIVE ON PARACAS SOCIETY AND NASCA ETHNOGENESIS

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It has long been recognized that the Nasca culture (ca. A.D. 1–750) of the Peruvian south coast finds its roots in the Paracas society (ca. 800 B.C.–A.D. 1). Yet the social mechanisms responsible for the innovations that characterize the transition are poorly known. The southern Nasca region, which became the most dynamic region in terms of ceremonial life and intervalley integration, however, was never an important area of Paracas occupation. In this article I use literature on migration and frontier development to explain the genesis of Nasca society. Four phenomena that are common on historical frontiers seem to have been at play in the southern Nasca region: initial simplification of hierarchy, pioneer effect, “wealth-in-people,” and factionalism. Based on data from excavations at La Puntilla, a settlement that spanned the Late Paracas–Initial Nasca transition, I argue that the needs of interregional integration and cooperation following initial settlement of the frontier by Paracas populations and subsequent demographic growth prompted the genesis of Nasca society. The proposed long-term scenario also provides a context for later innovations in water management and agricultural intensification.

La cultura Nasca (ca. 1–750 d.C.) de la costa sur peruana tiene sus raíces en la sociedad Paracas (ca. 800 a.C.–1 d.C.); aunque los mecanismos sociales responsables de las innovaciones que caracterizan su transición son desconocidos. Sin embargo, el sur de Nasca, que se convirtió en la región más dinámica para el ceremonialismo y la integración inter-valles, nunca fue un área importante de la ocupación Paracas. En este artículo utilizo literatura sobre la migración y el desarrollo de fronteras para entender la génesis de la sociedad Nasca. Cuatro fenómenos, comunes en las fronteras históricas, parecen haber ocurrido en el sur de Nasca: simplificación inicial de las bases jerárquicas, efecto pionero, enriquecimiento de la gente y faccionalismo. De acuerdo con los datos procedentes de excavaciones en el sitio La Puntilla, un sitio de la transición Paracas Tardío–Nasca Inicial, argumento que la génesis de la sociedad Nasca respondió a necesidades de integración y de cooperación interregional posteriores al establecimiento inicial de la frontera por las poblaciones de Paracas y al subsiguiente crecimiento de la población. El escenario propuesto provee igualmente un contexto para comprender mejor las innovaciones en el manejo hidráulico y la intensificación agrícola.

The implications of Frederick Jackson Turner's reading of his controversial paper in 1893 are well known to historians and sociologists. Titled “The Significance of the Frontier in American History,” it marked the beginning of several decades of scholarly debate over the mechanisms that link the frontier as a geosocial phenomenon with social change. While the essay sparked both indignation and awe among scholars, its imprint on American historical traditions is indelible, and it remains a pertinent read for the student of the genesis of social formations. Since the inception of the concept, some have likened the frontier phenomenon to a “freer of energies” (Thompson 1994:230) or, as Turner (1920) him-

self described it, a “safety valve” (e.g., Billington 1977:4), whence selected societal segments, “lovers of separation” (Hine 1980:255), or “outcasts” (de Crèvecoeur 1912:47) could choose to shed much of their superfluous cultural baggage and negotiate, among each other and with the environment, new social realities.

Various scholars (Casagrande et al. 1964; Kopytoff 1987; Thompson 1973; Thompson 1994, among others) have outlined phenomena taking place on frontiers that are likely to inform studies of archaeological frontiers and hinterlands and their potential for understanding episodes of social change. I define a frontier as a geographical area that is situated outside of the boundaries of ordi-

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nary social existence and which is comparatively devoid of legitimate authority from the perspective of the intrusive group. When they enter and settle a frontier, selected societal segments can manipulate and negotiate tradition to their own advantage, which necessarily has transformative effects, especially in middle-range societies in which frontier leadership is not regulated by a centralized authority.

Here I develop a framework to understand episodes of rapid social change associated with demographic expansion in the archaeological record. The argument I present is inspired equally by the broad ideas in Turner's work and by what I will argue is its conceptual kin: Carneiro's (1970, 1973 [1961]) notion of social circumscription and its links to social change. The framework, characterized by four common frontier processes, will be addressed with excavation data from Nasca to evaluate regionally the relationship between the frontier and rapid social change and ethnogenesis. The various differences between Paracas and Nasca will then be evaluated in light of the new findings and the expectations of the frontier framework.

An episode of rapid social change occurred in the southern Nasca region of the Peruvian south coast during the transition between the Early horizon (ca. 800 B.C.–A.D. 1) and the Early Intermediate period (ca. A.D. 1–750). During the Early horizon the southern Nasca region (Figure 1) remained marginal to major south coast cultural developments (i.e., Paracas society and its Initial period predecessors) and may not have been settled by permanent sedentary groups until the very late portion of that period (Schreiber 1998:262; Schreiber and Lancho 2003:13; Van Gijsegem 2004). Nevertheless, shortly after populations bearing Paracas material culture entered Nasca's four southernmost valleys, the region became one of primary importance and saw the rise of a supraregional center of worship and pilgrimage at Cahuachi (Orefici 1988, 1996; Silverman 1993; Silverman and Proulx 2002), as a major concentration of geoglyphs. I contend that the genesis of Nasca society was the result of important historical events, one of which was the colonization of perhaps the last available frontier as a means of delaying drastic social reorganization caused by population growth. The ensuing conditions necessitated social and religious innovations that we

recognize today materially as part of Nasca culture.

Frontiers and Social Change

Frontiers are anything but passive receptors of outside influence. While the arrival of outsiders necessarily stimulates frontier development, it is their decisions, purposes, motivations, and strategies that dictate the social forms that will develop following the founding of new ethnic enclaves in frontier territories. I consider frontier sociopolitical change to result from a subgroup's decisions regarding its withdrawal from a political environment that reproduces itself into long periods of stasis or, conversely, that is experiencing drastic reorganization. On the frontier, comparatively more permissive because of its lack of institutionalized authority, change can occur with surprising rapidity, where "the frontiersmen could literally *construct* a desirable social order" (Kopytoff 1987:12; see also Wright 1972:68). Hine states that "the frontier's more fundamental temptation may have been toward philosophical anarchy" (1980:252; see also Leyburn 1970 [1935]:231–233).

The interpretations of Turner's work are varied, but his notion of the frontier as a safety valve to discontented components of society is apt to engender interesting research questions. Conceptually, Carneiro's (1970) social circumscription model and Turner's frontier hypothesis are remarkably similar. Carneiro argues that social change and complexity arise as a response to conditions where discontented societal segments *cannot* move away. Turner proposed, referring to the western United States, that it is this very possibility that promoted the development of forms of American democracy: independence, power sharing, and autoregulation. According to Carneiro (1970, 1973 [1961]), when fission and frontier migration are impossible, states are likely to arise through conquest and tribute demands and more broadly, increasing complexity in wealth and leadership differences. Presumably, if a safety valve is available, migration remains an option prior to—in fact it *prevents*—state formation and episodes of important social change in general (see Hacker 1972:55). We seldom consider the migrants that overspill a region that is reaching the limits of tolerable population density. Carneiro may never have been directly influenced by Turner

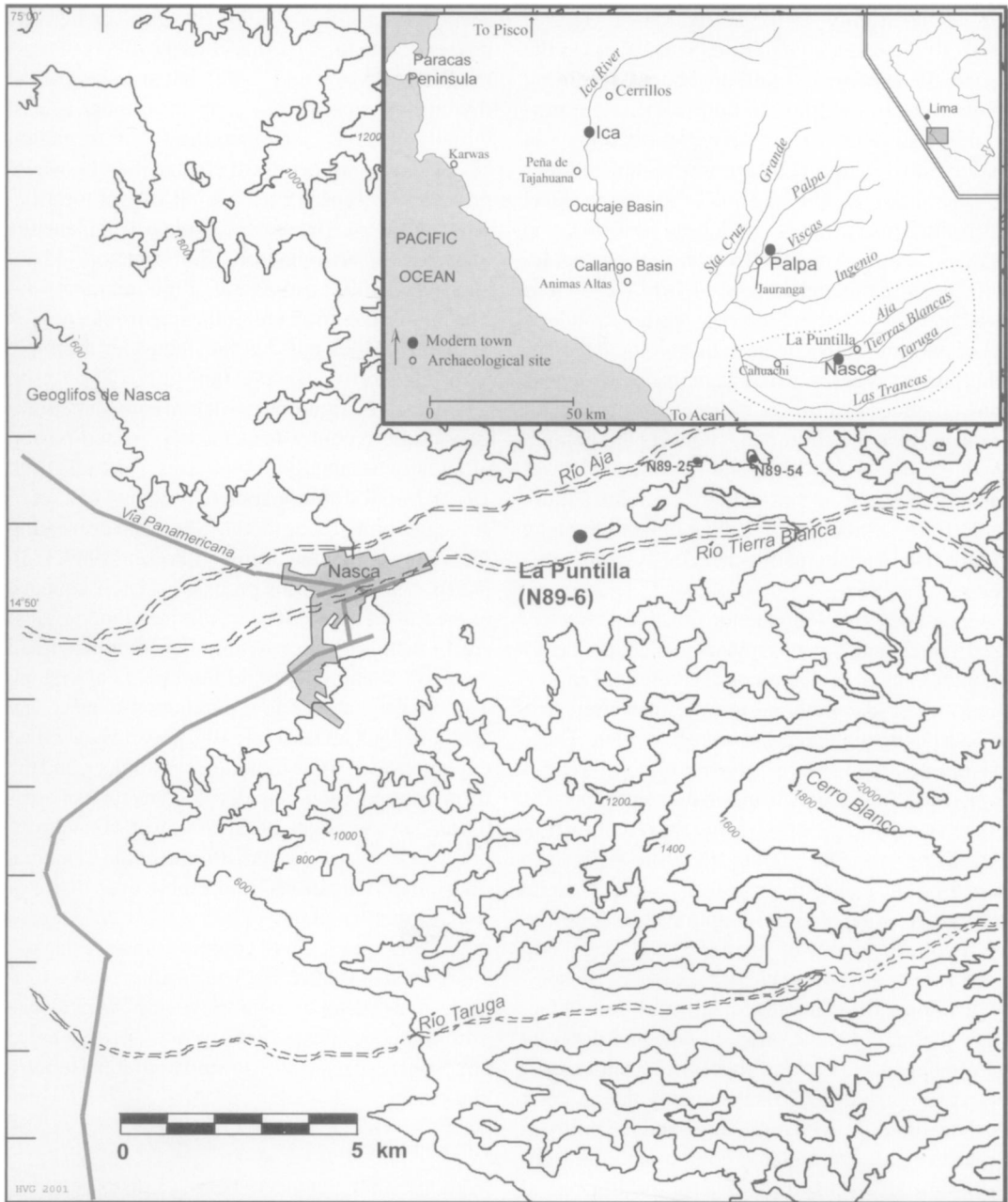


Figure 1. The Nasca region with the location of La Puntilla, the Nasca lines, and Cerro Blanco. Inset: The Paracas Peninsula-Ica-Nasca area, with the southern Nasca region outlined.

(if he was, it remained unacknowledged), but his model turns Turner’s idea on its head and asks: *What happens when there is no safety valve?*

The Frontier and Ethnogenesis

Some authors emphasize the conservative nature

of the frontier. Hartz’s (1964) “fragment theory” states that a frontier society is composed of a substratum of a larger social group at a certain point of its history, a brief snapshot of the donor society. The frontier social landscape, therefore, is composed of—and will develop in accordance with—something akin to a cultural “founder’s

effect" (Anthony 1990; Hartz 1964; Meltzer 2002:40; Petersen 1958; Thompson 1973). As the metropole experiences further changes according to its own immediate sociohistorical circumstances, so does the frontier, but both are not expected to develop in a coordinated manner (Casagrande et al. 1964:282). The greater the level of frontier insularity, the wider the historical gap that will develop, and the frontier will be characterized, from the archaeologist's bird's-eye view, as a "new" society or at the very least, as a sudden set of discontinuities in the archaeological record. This process is described by Thompson, who states that "pioneer culture is simpler, in almost all respects, than the culture the pioneers left behind. With the passage of time, and the onward movement of the frontier, a new, more complex culture takes form, which resembles the old one in many details but which in many others is essentially different" (1973:3).

Here I describe four phenomena that characterize frontier social environments that are pervasive enough in agrarian frontiers, regardless of immediate historical conditions, to warrant examination in addressing the Paracas–Nasca transition. These are initial simplification, pioneer effect, "wealth-in-people," and factionalism. All four are symptoms of the frontier as permissive and devoid of institutionalized rule. One should therefore be able to detect on an archaeological frontier the material traces of a period of initial simplification, followed by a rearrangement of hierarchy and leadership patterns, marked perhaps by efforts of self-realization and aggrandizement by different factions that enforce and promote new and different ideologies. A mature and successful frontier society should achieve a balance among the interests of the individual, the community, and the polity in order to minimize regional conflict and the frontier's initial dispositions toward "philosophical anarchy" (Hine 1980:252).

Initial Simplification and Inertia

One of the most generalized characteristics of frontiers is a momentary "ironing out" of institutionalized inequalities (Hartz 1964; Kopytoff 1987; Petersen 1958; Statski 1998; Thompson 1973), as social roles and statuses become less specialized and permanent and more repetitive and interchangeable (Casagrande et al. 1964:294–295).

Some scholars (Statski 1998) have designated this process "structural inertia." Inertia affects the distribution of power and wealth but also the general rhythm and tempo of change on the frontier, at least initially, whereby the emerging social formation "loses the stimulus toward change that the whole provides. It lapses into a kind of immobility" (Hartz 1964:3). The reasons evoked to explain this phenomenon are numerous. Some authors (Mann and Loren 2001) estimate that the migrants who find themselves in an unfamiliar environment seek to maintain lifeways that they consider desirable and "take refuge in the familiar" (Thompson 1994:230). Institutional structures are sometimes imported but confer leaders only limited power, often only nominally (e.g., Elkins and McKittrick 1972). Initial simplification may be part of a set of strategies aimed at attracting allies and preventing them from continuing further (Shrestha 1989:373). Harris (1977) sees this process as a consequence of the loss of specialized institutions that progressively lack relevance within a decentralized and demographically poor and fluid political system. The convergence of low population density and available land, at least initially, prevents the direct exploitation of some individuals by others, and the frontier population may develop an ethos of egalitarianism (Schlegel 1992:390–391). Hine attributes the decrease in wealth differences to "a natural division of obligations" and a more even distribution of wealth and power but, significantly, warns "that dilution of class consciousness is usually short-lived" (1980:253). The ensuing reorganization, adapted to immediate sociohistorical circumstances, often takes place in a general atmosphere of resistance toward traditional ideosocial tenets.

Pioneer Effect

What I term the pioneer effect is a distinctly frontier form of inequality that may involve actors largely different from those of the metropole. This nearly universal form of frontier inequality tends to develop between pioneers and their followers (Burt 1957; Haenn 1999; Kopytoff 1987; Murphy and Bledsoe 1987; Shrestha 1989:373). Pioneers have both responsibility and power over people and resources, which by and large, is a return on the risks generated by the voyage and settlement, initial investments in infrastructure, and the critical first

agricultural cycle (e.g., Elkins and McKittrick 1972; Sutlive 1978:25; Whiteley 1988:118). In cases in which they can establish a viable frontier economy, however rudimentary, they can attract kin, allies, and dissidents and sponsor their arrival and settlement, resulting in the establishment of debt relationships between pioneers and latecomers.

Power has the potential to be wielded in many ways and to different degrees: lineage claims to land and irrigation water is a primary example. Pioneers also have the prerogative to accept or reject new migrants (Cliggett 2000:130; Haenn 1999; Shrestha 1989:373) and enforce a social order that they deem desirable through the arbitrary imposition of levies and sanctions.

Pioneer prerogatives can be less explicit through toponymy and the development of a culturally significant landscape. Kopytoff maintains that “being the first settler in an area gave one a special kind of seniority—it gave one the right to ‘show the place’ . . . to those who came later” (1987:22). “Showing the place” has deep implications for the ways in which the social order is enforced (Myers 2000:90; see also McGovern 1985:280). Pioneers are likely to create or adapt origin myths and cosmology in which landscape features play a prominent role. These and associated ritual practices may reproduce and legitimize their positions of authority. They co-opt the immediate geography by associating it with commonly understood ideological icons’ repertoire, making it culturally coherent and relevant. Giving names and supernatural attributes to locales and natural features is therefore a powerful vector of power acquisition and maintenance (Bender 2001; Snead and Preucel 1999).

Frontier Demography: Wealth-in-People

In agrarian societies access to land is a premium. In frontier situations, however, land access may not be restricted or limited. For this reason land is often less prized than the ability to work on it: frontier settlers, by will or necessity entrepreneurs, initially need people (Hayden 1995:66; Nyerges 1992). Compelling kin and allies to follow the lead of the settlers enhances their power and authority on the emerging social landscape (e.g., Kopytoff 1987:44) and promotes basic networks of cooperation, defense, trade, and labor (Shrestha 1989). Consequently, the potential for wealth comes from the ability to control human energy rather than access

to land. Therefore, “the dominant group’s policy [has] to be subtle, fluid, reversible, and ambiguous—a judicious mixture of appeasement and bullying, of assertion of relationships and its denial, of power-sharing and exclusion from power” (Kopytoff 1987:53).

Factionalism

Factionalism refers to the exercise of distinct social aspirations centered on a collectivity and its associated demands of self-realization, legitimization, and recognition, evolving along the lines of kinship, class, gender, age, or other culturally defined groups (Brumfiel 1992). Because of the limitations inherent to their data, archaeologists often overlook age and fail to take into account variations in the development of the domestic cycle (Van Gijsegem 2001; Wilk 1990) and cross-generational strains, a process that can be active on the frontier following the incidence of a “premier event” of settlement (e.g., Pauketat 2001:87).

Frontiers have embedded within their burgeoning history the potential for discord. Although the precise nature of the conflicts varies according to circumstances, it is often centered on the pioneer–latecomer dichotomy (Cliggett 2000:130; Haenn 1999:36; Lucassen and Lucassen 1997:18; Robertson 1978; Shrestha 1989:373). Additionally, an ideological opposition often develops pitting those who want to “maintain the old” against those who want to “achieve the new” (Petersen 1958:258). Whatever social universe is created on the frontier may be short-lived and contested if it is reinforced neither by long-standing practices nor by institutionalized rules of leadership and descent (Kopytoff 1987:44; Thompson 1973:15–18).

This potential instability is exacerbated not only by the noncompliance of latecomers but also by that of further generations born on the frontier. They are often the ones that innovate, that provide a stimulus toward change by lessening the grip of the frontier on inertia (Dawson 1932:48; Thompson 1994:226–227). This may create “an intergenerational strain that is not unusual in any immigrant community” (Thompson 1973:16).

I apply these four concepts to a pre-Hispanic frontier on the south Peruvian coast, in which major social innovations occurred within a short amount of time. This period marks the Paracas to Nasca transition.

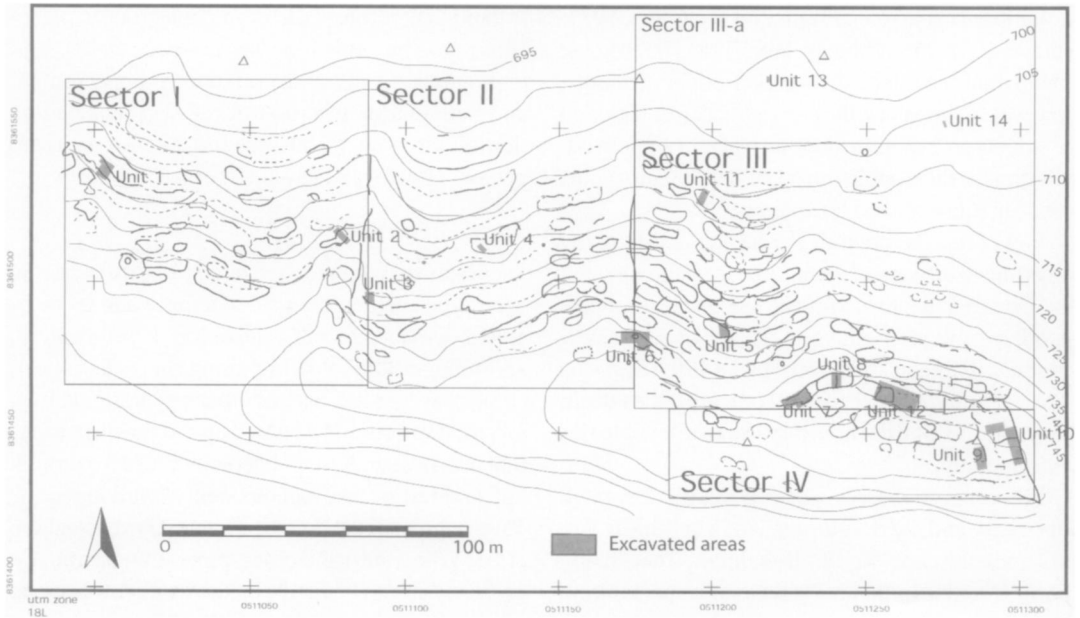


Figure 2. The site of La Puntilla.

The Southern Nasca Region as a Paracas Frontier

The arid environment of the Peruvian coast receives essentially no rainfall, but ancient and modern populations have been able to exploit the thin river valleys that cut across the desert landscape. The Nasca drainage is composed of 10 perennial rivers that gradually meet to form the Río Grande de Nasca. Generally speaking, these river valleys become farther apart and receive less water as one moves south (Oficina Nacional de Evaluación de Recursos Naturales 1971; Schreiber and Lancho 2003: fig. 2.3). The driest, least reliable rivers of the “Southern Nasca Region” (SNR [after Vaughn 2004]) would have been the last habitable refuge for populations that were squeezed out of a circumscribed environment rendered unstable by demographic growth or climatic perturbations. In the Ica and Nasca valleys, because of particular geomorphologic features, it is impossible to practice agriculture in a wide alluvial plain, as is done in most Peruvian coastal valleys. Instead, their floodplains and irrigated lands are located inland in circumscribed oases. Moreover, Nasca’s southern rivers have no surface water in long stretches for most or all of the year, and ancient and modern populations have designed, in the form of *puquios*, ways of tapping

the phreatic layer and bringing water to the surface, a practice probably begun in Early Intermediate period (EIP) phase 5 (Schreiber and Lancho 1995, 2003:139). The SNR is formed by the four southernmost rivers of Nasca: Aja, Tierras Blancas, Taruga, and Las Trancas. They are separated from the northern drainage by the wide pampa where the most famous Nasca geoglyphs are located.

The prehistoric groups that fall under the denomination “Paracas” occupied parts of the south coast of Peru during the Early horizon (EH). Nasca society, as traditionally defined, belongs to the subsequent EIP (Table 1). Traditionally we consider the main difference between the cultural traditions the use of prefire polychrome slips in the EIP replacing postfire polychrome resins on ceramics (Menzel et al. 1964:251) within a context of general cultural continuity. The transition was also accompanied by new vessel forms and icons and the disappearance of others, like the Oculate Being as a major mythical figure and grater bowls, one of the most diagnostic EH vessel forms. Both societies are assumed to have shared broad cultural traditions, language, and elements of religion and ideology (e.g., Silverman 2002b:137).

Paracas cultural elements were first described by Tello and his collaborators (Tello 1959; Tello and Mejía Xesspe 1979; Yacovleff and Muelle

Table 1. Comparison of Paracas-Nasca Chronologies.

| Period | Epoch | Ica Ceramic Styles | Ica Culture Phases | Nasca Culture Phases |
|---------------------------|-------------------|------------------------|-----------------------|-------------------------|
| Early Intermediate Period | EIP 3 | Nasca 3 | | |
| | EIP 2 | Nasca 2 | Early Nasca | Early Nasca |
| | EIP 1 | Nasca 1 | Proto-Nasca | Montana |
| Early Horizon | EH 10 | Ocucaje 10 | | |
| | EH 9 | Ocucaje 9 | Late Paracas | |
| | EH 8 | Ocucaje 8 | | Puntilla |
| | EH 7 ^a | Ocucaje 7 ^a | Middle Paracas | |
| | EH 6 | Ocucaje 6 | | |
| | EH 5 | Ocucaje 5 | | |
| | EH 4 ^a | Ocucaje 4 ^a | | |
| | EH 3 | Ocucaje 3 | Early Paracas | |
| | EH 2 ^a | Ocucaje 2 ^a | | |
| | EH 1 ^a | Ocucaje 1 ^a | | |

^aHypothetical

1932, 1934), who subdivided the burial tradition of the Paracas Peninsula into two chronological styles: Cavernas and Necrópolis. Since then the Ica Valley and some valleys farther north have been the focus of various regional studies whose object was the geographic delineation of the culture and the examination of socioeconomic features and material tradition (Browne 1992; Browne and Baraybar 1988; Canziani 1992; Cook 1999; DeLeonardis 1991, 1997; Isla and Schreiber 1997; Kroeber and Collier 1998; Massey 1986, 1991; Peters 1997; Reindel et al. 1999; Robinson 1957; Schreiber 1989; Silverman 1994; Wallace 1962, 1971, 1984; Williams and Pazos 1977). The 10-phase Ocucaje seriation of ceramic material from the Ica Valley (Menzel et al. 1964) forms the broad outline for the Paracas chronological framework (Table 1). Ocucaje phase 3 corresponds to a period during which interregional contacts with the highland Chavín tradition may have been peaking. The definition of subsequent phases varies in precision until Ocucaje phases 8, 9, and 10, the existence and validity of which are generally not disputed (García and Pinilla 1995; Massey 1991; Peters 1997; Rowe 1973 [1963]).

At a time corresponding to EH 8, or perhaps slightly earlier, some populations bearing Paracas material moved southward entering the SNR, as testified by a massive increase in the number of settlements (Schreiber 1998:262; Van Gijsegem 2004; Van Gijsegem and De La Torre 2002, 2005). Whether this expansion was related to population growth, environmental degradation, social tensions, or other reasons is not yet clear. The colonizers of

the SNR were primarily organized in small villages scattered across the region's four southernmost valleys. These villages were concentrated above the lower plain, sheltered by the Andean foothills, and the flat lower valleys were not settled until EIP 1. The largest of these settlements, La Puntilla, on which I base the present work, is 3 ha in area. None of the southern Nasca settlements exhibits the complexity of contemporaneous Ica Valley sites, which include house mounds, elite compounds, monumental architecture, and the use of adobes for construction. This situation echoes the one found in Ingenio, the valley immediately north of the SNR (Silverman 1994:375). Paracas elite burials have yet to be encountered in Nasca, but an impressive offering of a Paracas cloth was found at Cahuachi (Strong 1957).

Undoubtedly the SNR was known to south coastal populations and had been used in various contexts prior to its permanent settlement. Strong (1957) has documented deep Archaic period shell mounds along the littoral, and Isla (1990) excavated near Cahuachi a preceramic structure dated to the third millennium B.C. However, there is a dearth of evidence for a permanent agricultural population in periods preceding the scattering of small settlements at a time corresponding to EH 8. There is no Initial period ceramic tradition for the SNR, although this situation differs in the northern region, where Johnny Isla and Markus Reindel have uncovered Initial period and Early Paracas components near Palpa (Deutsches Archäologisches Institut 2005; Reindel and Isla 2004). The northern region seems to have maintained contacts and cultural

similarity more closely with Ica than the SNR (see Isla et al. 2003).

Evidence for Migration and Historical Context

In the present work I am less concerned with the reasons why people move to a frontier than with (1) who the settlers are in terms of social identity and (2) what happens once they get to the frontier in terms of identity maintenance and transformation and changes in social and political institutions. The archaeological proof of migration, a major challenge in contemporary studies of archaeological migrations, is somewhat unambiguous on most frontiers for their lack of significant indigenous populations. Intuitively, "there is hardly any other way of accounting for the total abandonment of sites or the foundation of new ones" (Adams et al. 1978:488). Here I describe Late Paracas settlements and ceramics in the Ica Valley and the SNR. I concentrate on the Lower Ica Valley, particularly the Callango Basin, because of its proximity to the Nasca region and because the Paracas ceramics from Nasca correspond more closely to the Callango Basin and Lower Valley substyles as defined by Menzel, Rowe, and Dawson (1964) than with any other part of the valley.

Transitional Settlement

Ica. The period that corresponds to the initial settlement of the SNR was punctuated in the Ica Valley by cycles of settlement nucleation and dispersal, population growth, and the elaboration of large public centers with monumental architecture (Cook 1999; DeLeonardis 1997; DeLeonardis and Lau 2004; Rowe 1973 [1963]). EH 8 was the stage for massive nucleation of previously scattered settlements in the Callango subregion of the Lower Ica Valley, notably at the site of Animas Bajas (DeLeonardis and Lau 2004:98; Massey 1986). Some large settlements are thought to have been fortified (Menzel et al. 1964:104; Silverman 1996:124). The trend continued in EH 9, during which most settlements in the Callango Basin were abandoned and nearly all of the region's population clustered in a single settlement: Animas Altas/Media Luna, half a kilometer from Animas Bajas, by then already abandoned (Massey 1986:343, 1991). Menzel (1971) attributes this pat-

tern to a rise in warfare, which she also correlates with the rise of trophy head taking and related iconography. Foreign influence and territorial encroachment may also have constituted potential factors of change in the region, in the form of the introduction of ceramic technologies characteristic of the Topará style from the Pisco Valley north of Ica (see Massey 1986; Wallace 1986). Peters (1997:883–884) reconstructs a period of coexistence of Paracas and Topará populations within the Ica Valley.

The EH 10 phase in Ica once again saw population dispersal and the abandonment of large sites (DeLeonardis 1991; Massey 1991:339). Most scholars agree that phase 10 of the Ocucaje sequence is at least partially contemporaneous with phase 1 of the Nasca sequence (see Cook 1999; Sawyer 1966:96).

Nasca. Paracas and Nasca 1 settlements are located on low Andean foothills, where water is available above the valleys' infiltration zone (Schreiber and Lancho 2003). The dry middle valleys were unoccupied except for cemeteries. Nasca 1 settlements are located defensively in much the same types of locations as previously, and Schreiber and Lancho (2003:14) see a population rise at that time. Many sites described by Schreiber that I have visited have concentrations of sling stones, and their presence seems to increase in Nasca 1.

Soon following the initial settlement of the SNR the area became a seemingly central region, which included the founding of a massive ceremonial and pilgrimage center at Cahuachi (Silverman 1993), the great concentration of geoglyphs on the nearby pampa, and an expansion of settlements toward the flat plains of the lower valleys. In both the Ica and Nasca regions there was an important phase of settlement reorganization at the start of EIP 2, corresponding to Nasca phase 2 or the onset of Early Nasca culture (Massey 1992; Schreiber and Lancho 2003:14; Silverman 2002a:140, 165). This represents a symptom of the cementing of a new social order throughout the region that echoes, among other things, a diminution of internecine conflict as well as the start of a period in which Cahuachi's influence was at its peak.

As Vaughn (2004, 2005a) and Silverman (2002a:13) point out, neo-evolutionary models of sociopolitical organization may be counterproductive in trying to decipher patterns of power and pol-

itics in the emerging Nasca society; social models of power such as heterarchy and recursive hierarchy may be more useful. The Nasca world may have been united by a common cult, possibly based on regular and formal gatherings, including pilgrimages to Nasca in which unity and distinctiveness were reified within a common and coherent ritual experience. In most other respects the Nasca social universe may have been composed of fairly autonomous groups with their own regional centers of political authority such as Los Molinos and La Muña in the Palpa region (Reindel and Isla 2001; Reindel et al. 1999).

Transitional Ceramics

In the SNR, there have been many finds of Paracas incised polychrome ceramics (Schreiber 1989; Schreiber and Lancho 2003). This material is similar to phase 8 decorated wares from the Lower Ica Valley and is characterized by rectilinear zoned incised designs painted in resin pigment. Most published material consists of bowls decorated on the outside and of fancy red-slipped grater bowls (e.g., Silverman 1991: Figures 9.5, 9.11). Another decorative technique that is a hallmark of Paracas ceramic technology is negative decoration. The SNR collection recovered in the La Puntilla excavations shares many stylistic elements with Ica's Callango Valley substyle (Van Gijsegem 2005). William D. Strong (1957: fig. 6a–c) found very few true Paracas ceramics at Cahuachi, mostly pertaining to phase 10, which he termed "Late Paracas"; whereas in Nasca, Kroeber and Collier (1998:245) found a single postfire and incised sherd. Schreiber, however, has identified a number of sites in the SNR in which these wares were found along with incised utilitarian ware (Schreiber and Lancho 2003).

Nasca 1 ceramics show greater control of firing atmosphere as well as remarkably fine paste and inclusions. The most distinctive trait of Nasca 1 ceramic manufacture is the use of polychrome slip paints combined with incised designs on bottles (incised designs were essentially abandoned by EIP 2), but this class of vessel is rare (Menzel et al. 1964:251; Silverman and Proulx 2002:25). Much of the Nasca 1 assemblages found in surveys consist of thin plainware bowls with some variety of cream or white slip as well as, occasionally, a band of red slip around the rim. The adoption of prefire

slips was undoubtedly the result of close contact between Late Paracas groups and the makers of Topará ceramics based in the Pisco Valley (Peters 1997; Wallace 1986). Processes ranging from peaceful imitation to military conquest are cited as mechanisms of transmission of this technology into the Ica Valley southward. The use of slips to paint "false negative" designs is probably a local survival of the negative paint of earlier Early horizon phases, especially as some Paracas negative and Nasca 1 false negative designs are similar (Silverman 2002a:83). Nasca 1 ceramics are remarkably consistent over a very large region of the south coast.

During his excavations at Cahuachi, Strong (1957) unearthed a series of transition-period material that he grouped under various labels. The wares that he identifies as Late Paracas and Proto-Nasca are summarized in Table 2. His "Modeled and Incised Proto-Nasca" corresponds to decorated utilitarian ware that appears to crosscut many phases of the EH and the EIP. Strong depicts the ceramics in terms similar to those used by Silverman (1994) to describe the Tajo style of the Ingenio Valley, and this class of incised utilitarian vessel has analogues throughout the Andean area during the EH.

Attention must be brought to two classes of blackware that Strong calls "Cahuachi Stylus-Decorated" and "Cahuachi Polished Black Incised," perhaps the most enigmatic transitional wares found in Nasca. They are characterized by vessels fired in a reducing atmosphere, with very thin walls and remarkably fine paste. They sometimes bear shallow, simple incisions in the form of regularly spaced vertical lines on the outside of bowls or, less frequently, more complex designs. The inside of some bowls is decorated with simple designs etched into the hardening clay, such that one can only see them when light strikes the vessel at a proper angle. In the Ica Valley, this class of vessel has traditionally been grouped as part of the Ocucaje phase 10 stylistic assemblage (Menzel et al. 1964:233) and is clearly an offshoot of the Topará Chongos phase (Peters 1997:877; Wallace 1986:37). In Nasca, however, after several seasons excavating at Cahuachi, Orefici suggested that they are, properly speaking, neither part of the Ocucaje sequence nor part of the traditional Nasca sequence but, rather, an independent phenomenon altogether, which he labels "Nasca 0." This blackware, indeed, is ubiquitous in certain sectors of Cahuachi (Orefici

Table 2. Cultural-Chronological Context for the Types of Wares Identified by W.D. Strong at Cahuachi, Based on More Recent Literature.

| Strong's culture name | Strong's ceramic terminology | Menzel et al. (1964) | Note |
|-----------------------|--|----------------------|-------------------------------|
| Late Paracas | Cahuachi Slipped Red | Ocucaje 8 | ^a |
| | Cahuachi Incised Interior Bowl | Ocucaje 8 to 10 | ^a |
| | Ocucaje Postfire Polychrome | Ocucaje 8 to 10 | Paracas Fineware ^a |
| | Cahuachi Negative Bowl | Ocucaje 9 and 10 | |
| | Cahuachi White-Slipped Necropolis | Nasca 1 | Possibly Topará |
| | Cahuachi Red and White Decorated | Nasca 1 | False Negative |
| Proto-Nazca | Cahuachi Modeled | Ocucaje 10 | |
| | Modeled and Incised Proto-Nazca | — ^b | Plainware ^c |
| | Cahuachi Stylus-Decorated | Ocucaje 10 | Blackware |
| | Cahuachi Polished Black Incised | Ocucaje 10 | Blackware |
| | Cahuachi Polychrome Incised Thick | Nasca 1 | |
| | Cahuachi Polychrome Incised and Modeled Thin | Nasca 1 | Nasca 1 Fineware ^d |

^aRare at Cahuachi.

^bCould have existed throughout Early Horizon into Early Intermediate Period.

^cAppears to correspond broadly to Silverman's (1994) "Tajo" style.

^dPresent at Cahuachi, but rare elsewhere.

1996), sometimes in association with Nasca 1 material, sometimes independent; but seldom can it be argued to be part of a broader "Late Paracas" assemblage, as would be expected from Ica's vantage point, because Ocucaje phase 10, as traditionally defined, is scarce to nonexistent at Cahuachi (Orefici 1996:176). Based on stratigraphic distribution Strong (1957:24) concedes that this type of blackware probably extended well into the EIP. For the present purposes, it is considered to be part of Nasca 1.

In summary, both the Ica Valley and the Nasca drainage were experiencing important changes as part of the Paracas–Nasca transition, before the embryonic Nasca 1 culture coalesced in EIP 2 as Early Nasca society. The south coast archaeological literature reflects a justified ambivalence between statements that stress continuity and those that emphasize change during the EH–EIP transition. The new themes rendered on ceramics, changes in settlement patterns and community organization (particularly in the scale and locus of ritual [see Vaughn 2005b]), and the foundation of Cahuachi all mark important changes in the sociopolitical regime of the inhabitants of the Nasca region.

Although there is a relationship linking the later phases of Paracas with the onset of Nasca society, there are also sharp breaks that go beyond technological innovation. Cycles of settlement nucleation and dispersal, intravalley warfare, a homogeniza-

tion of emblematic styles, and foreign encroachment also characterize EH 8 to 10 in Ica. In southern Nasca, the initial recognizable settlement system founded by people who bore and produced Paracas material also occurred during this time, and this was followed by episodes of demographic rise, eventually to bear witness to the founding of Cahuachi and a new era of pan-regional cooperation and ceremonial cohesiveness. Below I examine excavation data from the SNR in relation to some elements of frontier social organization to better understand this process.

La Puntilla in a Regional Context

In 2001, Juan Carlos De La Torre and I excavated at the site of La Puntilla (De La Torre and Van Gijseghem 2005; Van Gijseghem 2004; Van Gijseghem and De La Torre 2005). The settlement (Figure 2) covers 3 ha on the north-facing slope of a small hill that marks the receding Andean foothills, at a point where the Aja and Tierras Blancas river valleys meet. It is the largest Early horizon site in the SNR, and given its advantageous situation in terms of water availability, defensibility, and the extent of its view shed, the locale may have been occupied early in the settlement process. It is composed of habitation terraces constructed on the north side of a steep hill. Much of the terrace superstructure was built of perishable material, although some buildings have stone walls, and

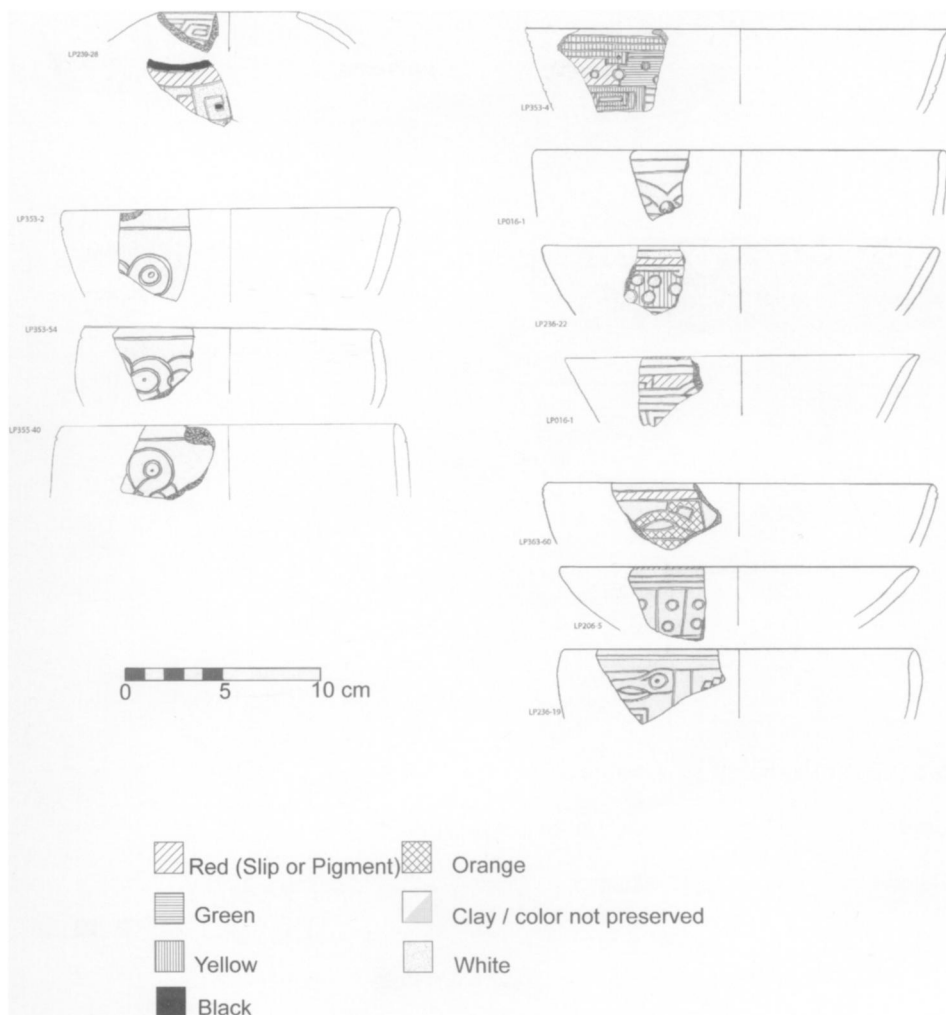


Figure 3. Incised postfire polychrome bowls from La Puntilla.

the backs of habitations would have abutted the natural bedrock.

The site was divided into four sectors following natural and cultural features. Paracas fineware (Figure 3) and finely made grater bowls (Figure 4) are concentrated in Sector III, whereas Nasca 1 bowls (Figure 5) are found throughout the site (Table 3). Incised utilitarian ware, as well as plainware (Figure 6), seems to be more or less evenly distributed throughout all sectors. The architecture in Sector III is more elaborate, especially in upper areas, where rectangular rooms and double-faced cut-stone walls are occasionally found. Structures associated with Nasca 1 material were built on long, broad terraces, whereas the habitation rooms of

Sector III are smaller, more tightly agglutinated, and sometimes have stone walls or foundations on all sides, usually with small bench structures toward the back, abutting the bedrock. A fairly consistent theme in Sector III house construction that is found in neither Sector I nor Sector II is the excavation of irregular trenches into the bedrock prior to, or during, terrace construction that often contained carbonized food remains. Their purpose is unknown.

A series of cleared patios and nonresidential platforms (Sector IV) overlooks the habitation areas and is associated visually with Cerro Blanco, Nasca's sacred mountain through historical times (Figure 1, Figure 7). Sector IV is the only area in

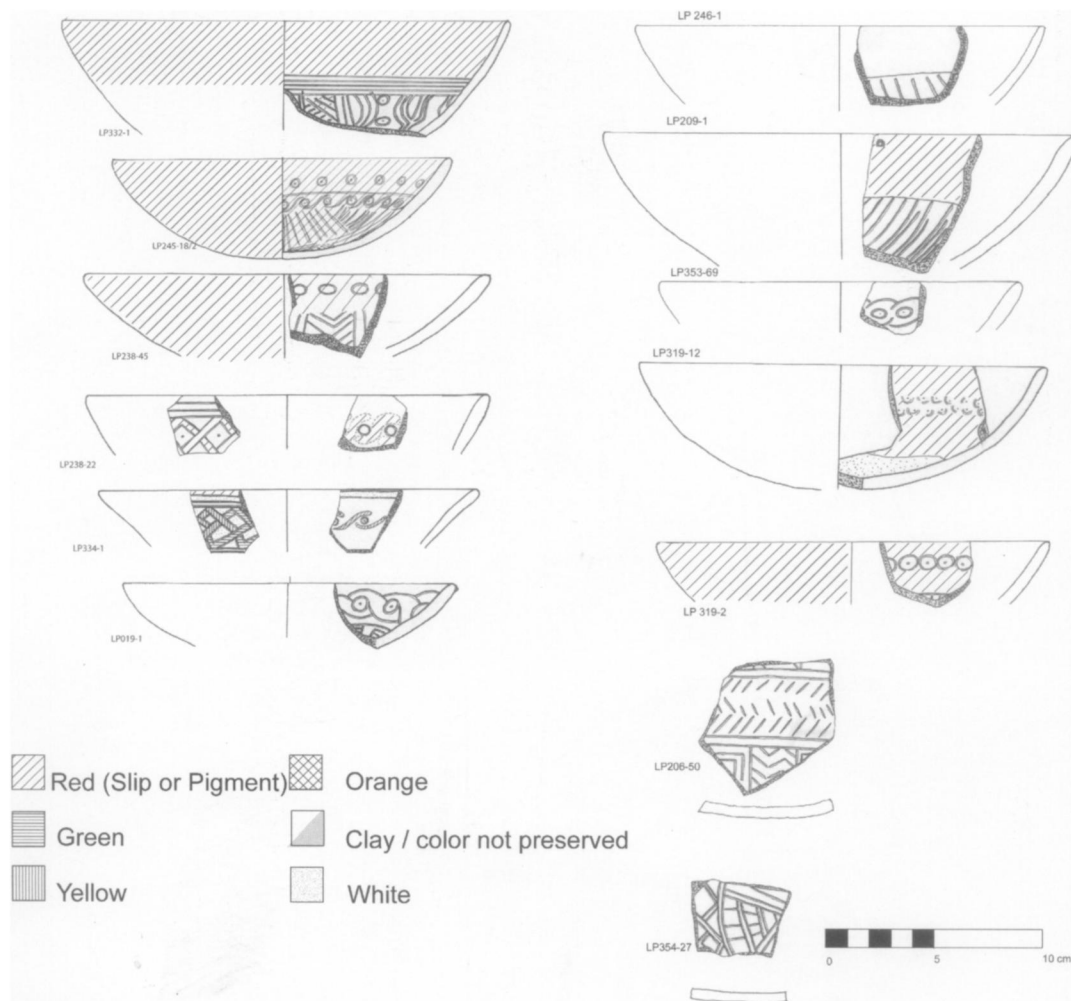


Figure 4. Finely made grater bowls from La Puntilla.

the site from which Cerro Blanco can be seen. The team encountered on Cerro Blanco ceramics identical to those found at La Puntilla, along with fragments from virtually every subsequent time period, suggesting that it already had ritual significance during the Early horizon. The difficult terrain and a large wall built on the site's eastern margin some time after terrace construction restrict access to the nonresidential area of Sector IV.

Initial Simplification and Inertia at La Puntilla

Initial simplification and structural inertia can be seen at La Puntilla as well as regionally in the SNR. At the site level, the architectural variability, access patterns, and artifact content of houses suggest

slight socioeconomic inequalities. They do not, however, compare favorably with patterns of inequality in contemporaneous Ica. In Callango, DeLeonardis (1997) documented orthogonal adobe architecture atop artificial mounds, interpreted to be elite residences. Wallace (1962) also excavated parts of a ceremonial-habitation complex at Cerillos, which includes monumental spaces and extensive use of adobe as the primary building material. The presence, starting in EH 8, of massive settlements composed of complexes of artificial mounds also testifies to the presence of important differences in power and authority in Ica. In this section, comparisons with Paracas sites in the Ica Valley necessarily remain cursory because

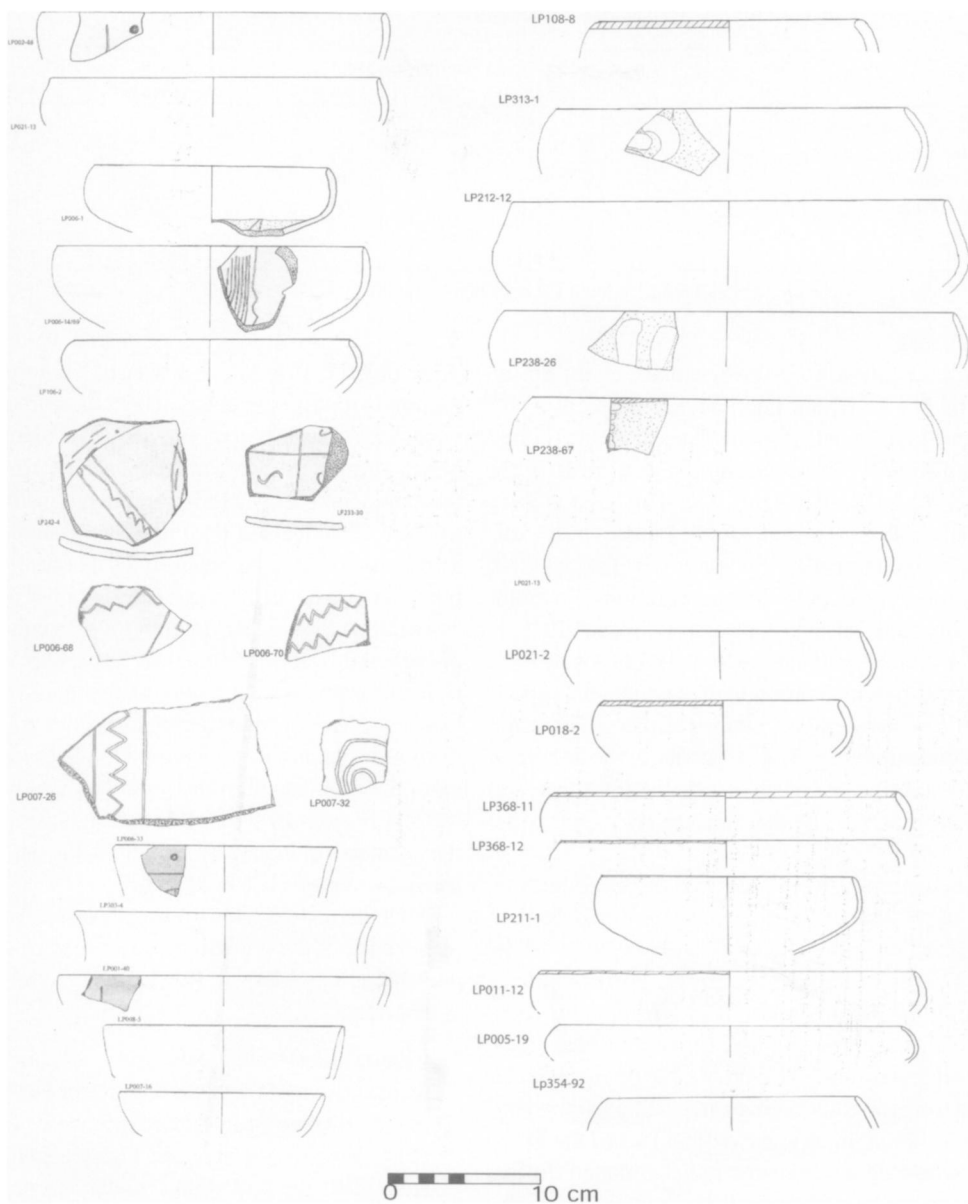


Figure 5. Nasca 1 bowls from La Puntilla, including blackware (left) and oxidized, cream-slipped bowls (right).

of the lack of excavation data from that valley, except for a few notable exceptions, such as DeLeonardis's (1997) study of three Callango Basin residential sites and Wallace's (1962) excavations at Cerrillos in the Upper Ica Valley.

In the SNR, for the latter part of the Early horizon, all sites are smaller than 3 ha, with most less than 1 ha. These small villages and hamlets are scat-

tered throughout the drainage, and most are located defensively, on low hills or on lower reaches of the foothills. There is no clustering of sites, and most may have been more or less independent from each other, from the Ica Valley, and from the northern drainage. Surface inspection of some of these sites does not reveal sharp differences in domestic architecture or monumental construction.

Table 3. Relative Frequency of Different Types of Diagnostic Bowls at La Puntilla.

| | Sector I–II | | Sector III | |
|-----------------------|--------------|------------------|--------------|------------|
| | percentage | MVC ^a | percentage | MVC |
| Paracas Incised Bowls | 4.9 | 5 | 27.9 | 46 |
| Paracas Graters | 1.0 | 1 | 27.9 | 46 |
| Nasca 1 Black | 35.3 | 36 | 19.4 | 32 |
| Nasca 1 Pink | 58.8 | 60 | 24.8 | 41 |
| Total | 100.0 | 102.0 | 100.0 | 165 |

^aThe Minimum Vessel Count (MVC) refers to the number of non-conjoining rim sherds.

At La Puntilla, habitations situated on the upper part of Sector III are qualitatively different from those elsewhere at the site, with terraces and rooms predominantly subrectangular and built with double-faced walls (Figure 8a). This area is also the only access to the ceremonial spaces of Sector IV. The upper section of Sector III also yielded more decorated polychrome ceramics, in both quantity and variety. The rest of Sector III has higher-quality architecture than the houses of Sectors I and II, which probably had perishable superstructures on irregularly shaped terraces. There are therefore subtle signs of inequality in the architecture and artifact content of houses, but these are slight compared with the situation prevalent in the Ica Valley.

The ceramic styles produced at or around the time of settlement “lasted longer” in the SNR than in Ica. This claim rests on two observations. The first relates to Paracas ceramics, corresponding roughly to Ocucaje phase 8 in Ica. They include polychrome bowls (Figure 3) as well as fancy red-slipped grater bowls (Figure 4). No bottles typical of Ica were found. Moreover, much of what we consider as belonging to phases 9 and 10 of the Ocucaje sequence never seems to have made it to the southern region, at least when it comes to the distinctive incised and polychrome fineware. The fact that polychrome bottles are absent also indicates changes in the material signature of elites. Also noticeably absent from La Puntilla is negative decoration on fineware, testifying to selectivity in the material features that were brought and maintained on the frontier.

By itself the relative scarcity of phase 9 and 10 fineware of the Ocucaje sequence does not demonstrate a local survival of conservative or archaizing features. However, the stratigraphy in Sector III of La Puntilla—the only sector in which large quan-

ties of both Paracas and Nasca 1 wares were found—strongly suggests that both these traditions were, for a time, in use simultaneously. Paracas and Nasca 1 fragments were indeed discarded in much the same contexts, including terrace construction fill (Van Gijsegheem 2004: Figure 5.38), indicating a period of overlap between styles that we liken to phase 8 of the Ocucaje sequence and those that we associate with Nasca 1, in effect leapfrogging the phase 9 and 10 styles of fineware as they are known in Ica. For this reason I suggest that locally there was a survival of older ceramic technologies and decorative techniques, when the Ica Valley’s population was engaged in the production and use of the phase 9 and 10 styles. These trends permeated the northern drainage, as testified by the data from the Palpa region (Isla et al. 2003).

That inertia was taking place in Nasca, from the perspective of the Ica Valley, was hinted at several decades ago by Menzel, Rowe, and Dawson, who claimed that

there is not sufficient evidence to explain the reappearance of the older features in Phase 8 of the Callango Basin substyle. In view of the close relationship between Phase 8 pottery from Callango and similar pottery from the Nasca drainage, however, it is possible that what appear to be archaizing features may actually represent influences from the Nasca drainage, where these older features of the Paracas tradition could have been preserved longer than at Ica [1964:102].

This statement presupposes that the period of inertia started before phase 8, which is not inconsistent with the present data. These older components, however, if they exist in the SNR, remain largely undetected (but see Figure 3, left).¹ Nonetheless, were they to be encountered, the present argument

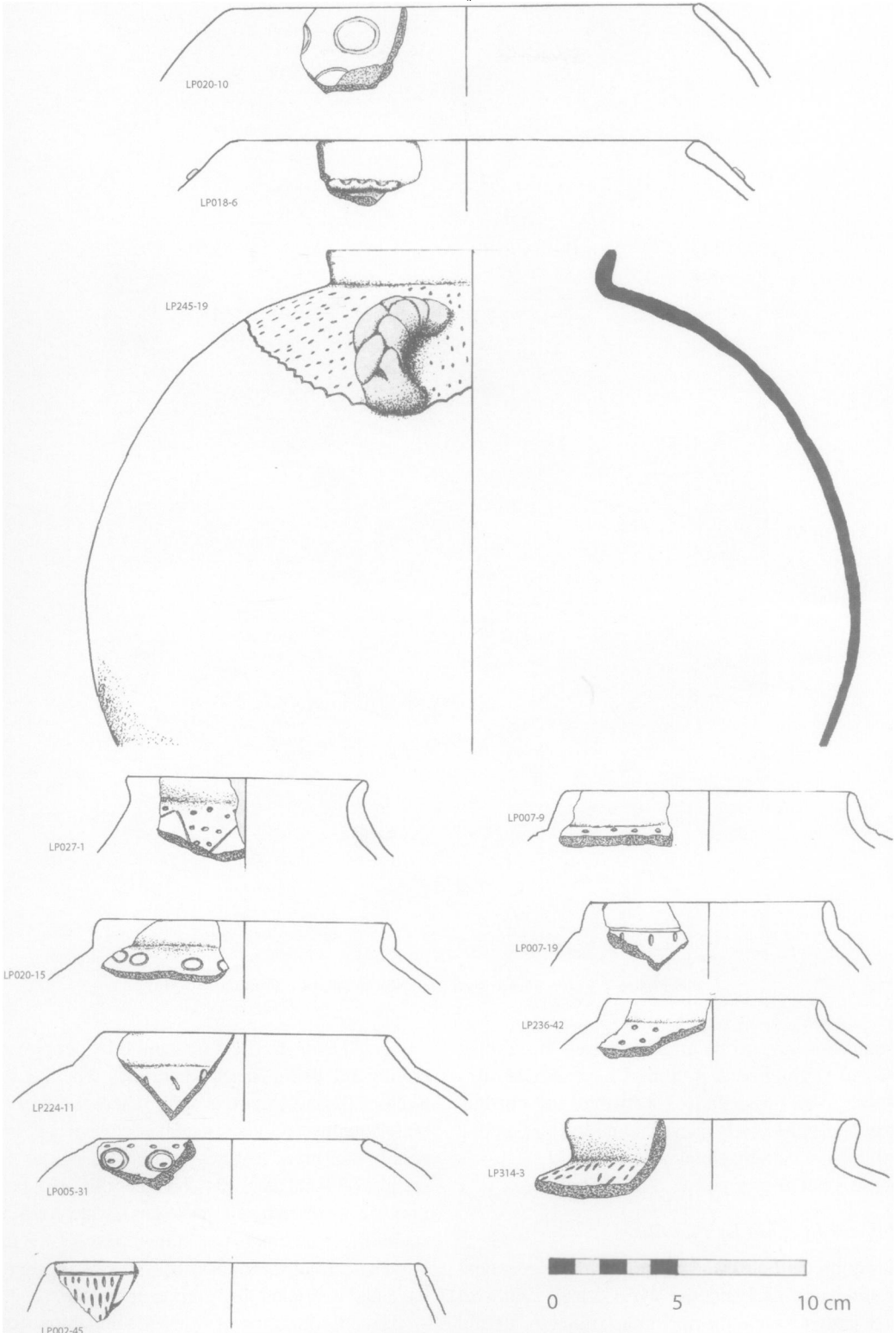


Figure 6. Incised utilitarian ware from La Puntilla.



Figure 7. Cerro Blanco seen from Sector IV at La Puntilla.

would not have to be greatly revised but, rather, pushed slightly back in time. I have argued elsewhere (Van Gijsegem 2005) that polychrome fineware, particularly incised feline and bird motifs, exhibits archaizing elements typical of Callango's phase 8 but also of phases 5 through 7.

Pioneer Effect at La Puntilla

Based on ceramic data as well as on independent architectural analysis, the site of La Puntilla was first settled around the upper part of Sector III and Sector IV (Van Gijsegem 2003, 2004). Settlement

expanded later into Sectors I and II by people producing and using Nasca 1 ceramics. The fact that Sectors III and IV are exactly where we find the better-quality architecture and exclusive access to ceremonial areas testifies to the hold of the first comers on local authority. Whether this apex position was justified by claims to land, water, or other social mechanisms is not known. Except for fine Paracas ceramics, no class of material appears to have had restricted distribution at the site.

The appropriation of ritual life and knowledge is a strong mechanism of power acquisition and the

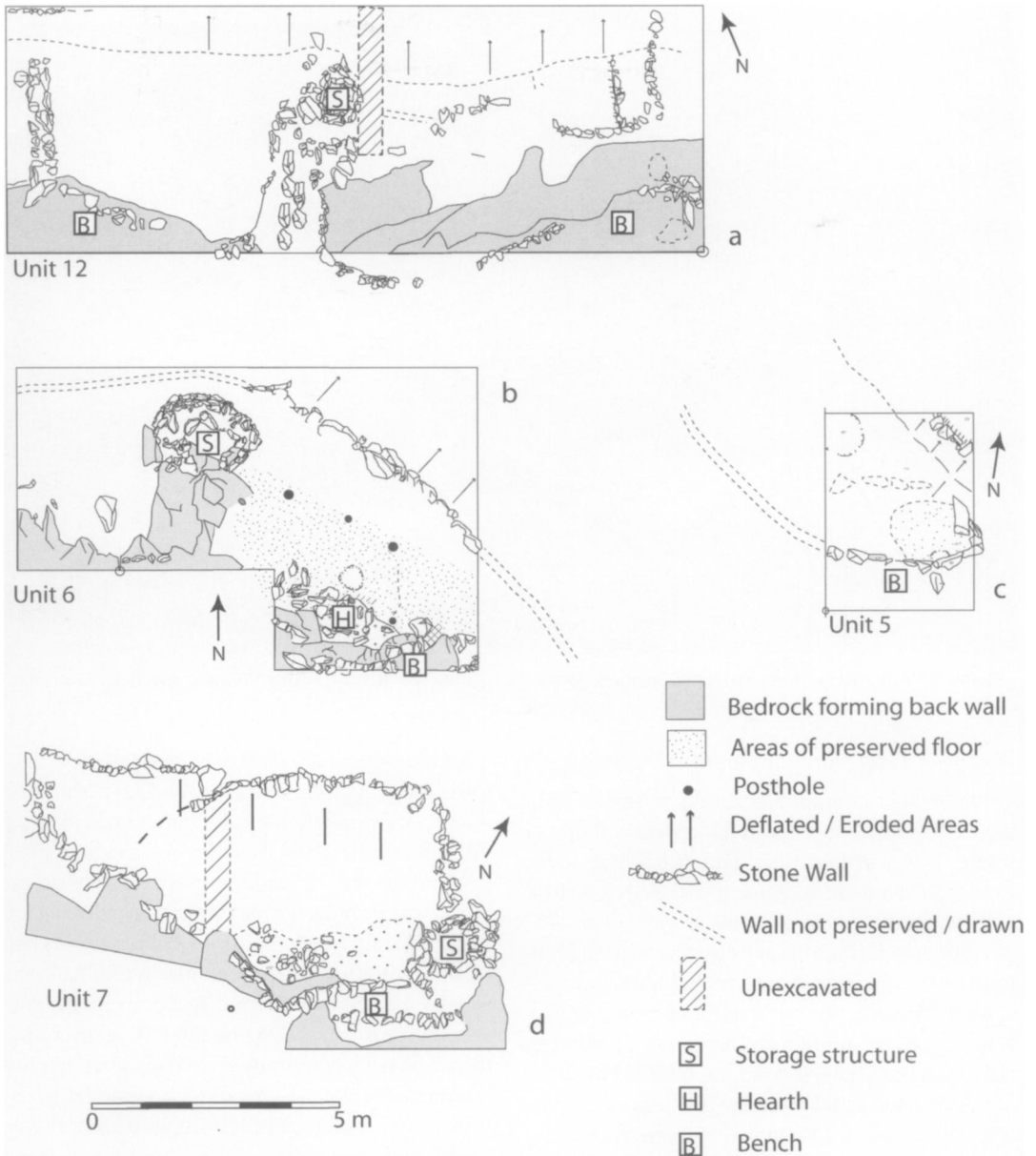


Figure 8. Variability of architectural forms in Sector III at La Puntilla.

reification of mythical history (Baeta Neves Flores 1995; Boone 1991). The exclusive association between Sector IV (and therefore the inhabitants of the upper part of Sector III) and Cerro Blanco may indicate the claim to sacred geographical features. In addition, a geoglyph (Figure 9) that dates to the Early horizon is present on a hillside directly across the Tierras Blancas River from La Puntilla and is only visible from Sector IV; it may have been

part of the creation of a dynamic, culturally potent landscape.² Geoglyphs, at least in part, assumed the function of maintaining social cohesion over a large area during the subsequent Early Intermediate period (Urton 1990:205). Part of the legitimization of sociopolitical power differentials may therefore have found its roots in the exclusive appropriation of the cultural landscape by people with access to Sector IV.

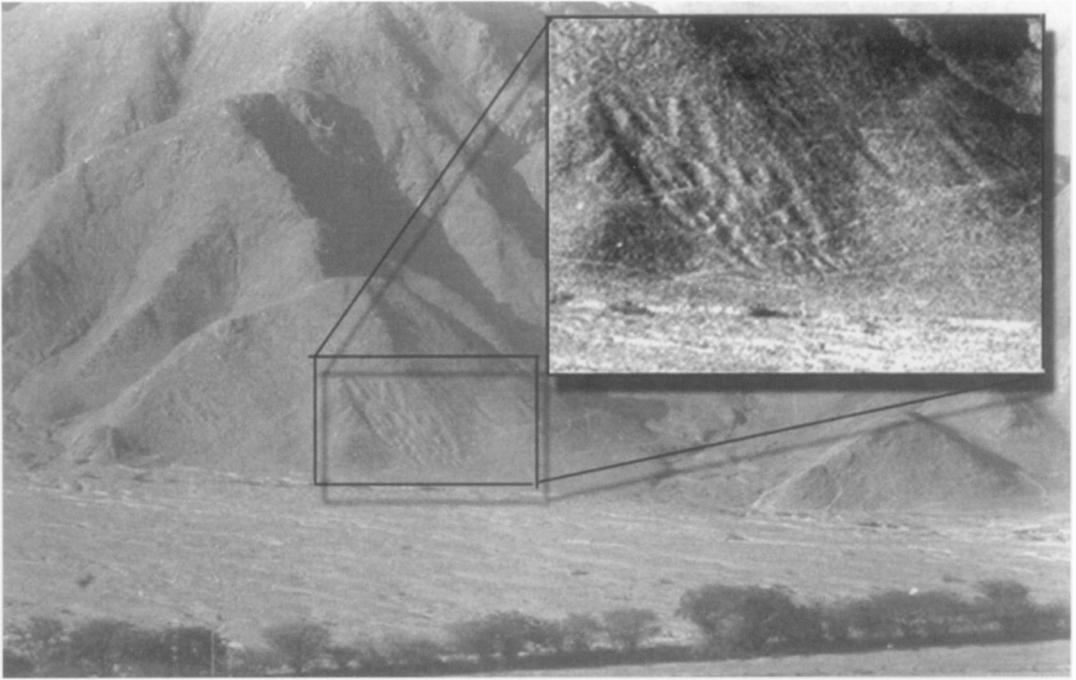


Figure 9. Formative period geoglyph located across the Tierras Blancas River from La Puntilla, seen from Sector IV.

Wealth-in-People at La Puntilla

We know that migration generally engenders further migration. A successful settlement will trigger further waves of kin, allies, and discontents to the frontier. The rate of settlement of the SNR is difficult to reconstruct, but given the scarcity of pre-EH 8 ceramics at La Puntilla and elsewhere in the SNR, it is conceivable that it occurred within a few generations. Whether or not the initial migrants triggered a wave of migration is hard to say, but if they did, it may not have lasted long because fineware of the Ocucaje 9 and 10 styles is absent at La Puntilla. This being said, plainware (Figure 10) that corresponds more closely to these phases is found associated with Nasca 1 ceramics, so if there was a migration stream bringing a steady flux of people in EH 9 and 10, its existence is not indicated by fineware characteristic of those phases. A second major population movement is therefore inferred to have occurred around the start of EIP 1 resulting from the spread of Topará influence and people across the south coast (Peters 1997; Wallace 1986).

Land may not have been at a premium during the Puntilla period, although water may have been. The small size of settlements and their scattered dis-

tribution suggest also that there was little incentive to keep social groups clustered and cooperating on a large scale in agricultural production. Either the villages and stretches of valley were mostly independent, or they spread themselves thinly on the landscape in order to maximize agricultural production using simple irrigation techniques. As part of the migration process, some individuals and groups may have preferred to keep moving into unsettled parts of the region rather than to submit to the authority of recently arrived pioneers. For this reason, the region's four valleys became settled by thinly distributed populations at a remarkable speed. Archaeologically, the resulting picture is one of spontaneous settlement of the four valleys.

Factionalism at La Puntilla

At La Puntilla the expression of diverging interests is found during the Nasca 1 period, the last period of major occupation there. At that time, there existed a clear spatial differentiation in the inhabitants' residential patterns. All Paracas fineware is restricted to Sector III, whereas Nasca 1 blackware as well as oxidized wares are found throughout the site (Table 3). In fact, the flat space at the bottom of Sector III yielded only Nasca 1 material, even if

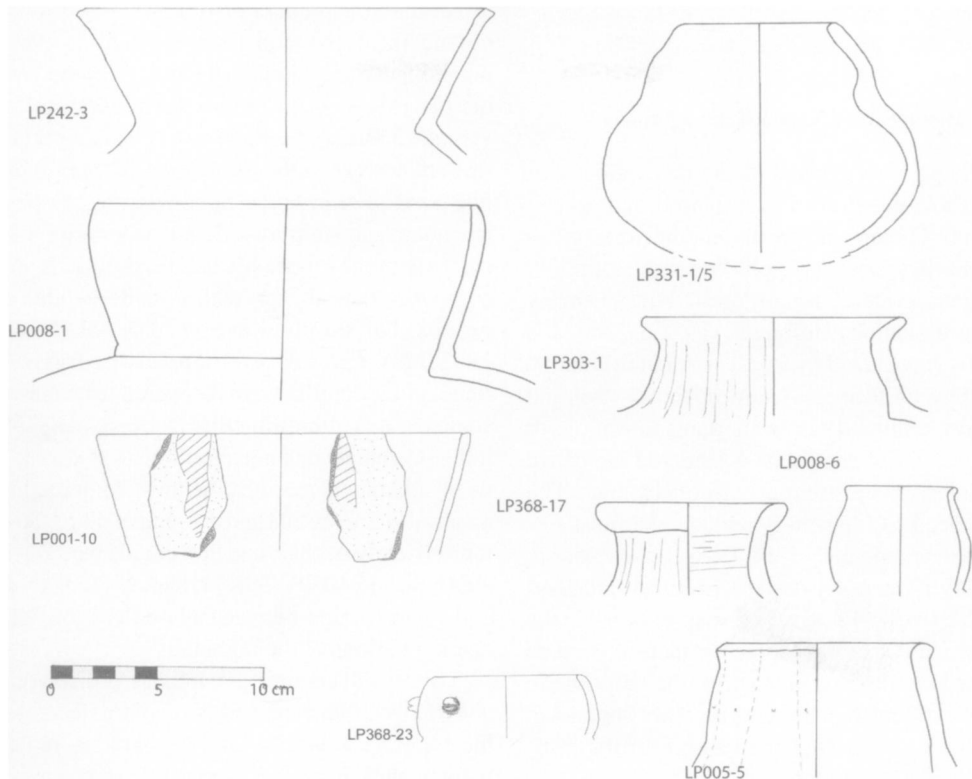


Figure 10. Some Nasca 1 plainware forms.

the test units were located as close as 30 m to Paracas habitations. The inhabitants of Sectors I and II are hypothesized to have been either latecomers bringing with them newly developed Nasca 1 technology and ideology or generations born on the frontier who withdrew from traditional Paracas life-ways and stylistic expression to adopt the innovating frontier identity. Not all sites in the region exhibit this pattern of coexistence, but many Puntilla and Montana sites are located close to each other (Van Gijseghem 2004: Figure 2.6) in defensible locations, and sling stones are often encountered. Conflict may not have been permanent but, rather, characteristic of the turbulent cohabitation of distinct social groups.

The Paracas groups of La Puntilla showed increasing marginalization by erecting two and perhaps three walls (one may postdate the site's main occupation) that reinforced social distance and further restricted access to the ceremonial spaces of Sector IV (see Figure 2). These walls were constructed to enhance natural outcrops that defined

the different sectors of the site. Building patterns in Sector III also exhibit much dynamism through house remodeling and the addition of annexes to house terraces (Van Gijseghem and De La Torre 2005). In effect, architectural analysis suggests that the inhabitants of Sector III made an effort to cluster their residences in a limited space. This phenomenon is often linked to a postmarital residential pattern wherein there is a willingness to cement cross-generational ties, hinting at efforts of household social reproduction and identity maintenance (Blanton 1994, 1995; Bourdieu 1976; Goody 1990; Van Gijseghem 2001). The resulting picture is one of a settlement divided into two stylistic and political factions: a traditionalist Paracas population in Sector III, earlier but overlapping temporally with its counterpart, and an innovating, late-coming Nasca 1 population in the newer areas of the site. This pattern may have lasted a very short time, but two accelerator mass spectrometry dates obtained from wood charcoal in Paracas and Nasca 1 contexts, respectively, do suggest close chronological

proximity (AA58745, 2009 ± 50 , $\delta^{13}\text{C} = -22.8\text{‰}$; and AA58743, 2023 ± 38 , $\delta^{13}\text{C} = -24.0\text{‰}$).³

Discussion: Nasca Ethnogenesis

First let us review the significant innovations that characterize the Early Nasca period and, to use once more Thompson's words, attempt to establish in what ways Nasca society "resembles the old [i.e., Paracas culture] in many details but . . . in many others is essentially different" (1973:3). Nasca is primarily recognized by a development in ceramic technology. Paste fineness, atmosphere control, and polychrome slips all were important innovations or adoptions. These should be considered indicative of broader, wide-ranging cultural change. The appearance of Cahuachi is perhaps the most significant development of the Early Nasca period, especially if, as many assert (Schreiber and Lanchó 2003:16), its influence was pan-regional in the Ica–Nasca area. Its development is therefore linked to major historical events that for the first time in south coastal history brought together supralocal populations within a coherent and recurring institutionalized set of ritual practices.

There also was a dramatic elaboration of the geoglyph tradition in Nasca, with major concentrations in the hills adjacent to modern-day Palpa (Reindel et al. 1999) and in the famous pampa downriver from Nasca. This tradition fits within the same set of cultural phenomena responsible for the founding and functioning of Cahuachi. Geoglyphs reveal aspects of the ritual performance of distinct social groups coming together at certain times in a ceremonial context. They reflect the organizing principles of people, groups, and places (Urton 1990) and therefore exhibit the social construction of the frontier landscape.

There are more subtle distinctions between Paracas and Nasca. House forms and village layouts of both cultures in the SNR are different (see, for instance, Van Gijseghem and De La Torre 2005; Vaughn 2004: fig. 4, 2005b). The patio group form documented by Vaughn (2000, 2004, 2005b:98) in the Early Nasca village of Marcaya also seems to constitute a Nasca innovation.

There are indications that Early Nasca ceremonial life was a supralocal affair, whereas during Paracas times it was largely restricted to the community scale (see Vaughn 2005b). There was a flo-

rescence in the production of musical instruments during the transition from Paracas to Nasca, undoubtedly a symptom of changes in the nature of ritual (Massey 1992; Menzel et al. 1964:251; Silverman 2002a:164). Early Intermediate period 1 saw an increase in the acquisition of foreign prestige goods. For instance, *Spondylus*, jasper, obsidian, quartz, and turquoise do not occur prior to EIP contexts in the Upper Ica Valley, signifying more complex relationships with outside locales and groups that supplied exotic material (Massey 1992:223). Five of seven *Spondylus* fragments found at La Puntilla were recovered from Nasca 1 contexts. It is interesting that DeLeonardis (1997) in her Callango Basin excavations found very little obsidian, whereas it is the most common lithic material at La Puntilla and is found in the SNR during very early Archaic and Preceramic periods (Isla 1990; Strong 1957). This perhaps testifies to special relationships between Nasca and obsidian-bearing regions of the highlands.

The overall ceramic assemblage is distinguishable between Paracas and Nasca in a decrease in the use of neckless ollas and their gradual replacement by the tall-necked storage jar, a tendency that is confirmed at La Puntilla (Van Gijseghem 2004), which may represent an increase in the need for the storage of liquids; the growing ritual importance of *chicha* comes to mind as a working hypothesis. For fineware, apart from the oft-cited technological distinctions, Early Nasca iconography relies more on naturalistic themes and designs and on a greater number of depictions of human impersonators of mythical beings, rather than mythical beings themselves, as well as human beings in various more mundane contexts (Silverman 2002b: Table 5.4). Paracas iconography, usually more abstract, emphasizes stylized mythological beings. The techniques used in their rendering echo the rectilinear patterns on textiles, a characteristic that is lost in Early Nasca. The Oculate Being, an important Paracas deity, disappears and may never have had much importance in the SNR other than in geoglyph form, although Silverman (1994: Figure 5) illustrates two fragments from Ingenio. The geoglyphs that seem to represent the Oculate Being in Nasca (see García and Pinilla 1995:66 n. 7) may indicate the co-optation of a powerful traditional symbol in a new and perhaps significantly non-portable and highly visible medium: a permanent

mark on the landscape of the Paracas heritage of the southern Nasca population.

By EIP 2 many valleys were increasingly centralized, which Massey (1992) interprets as a regional reorganization intended to minimize the problems associated with unchecked demographic growth. This same trend of demographic growth, I contend, was linked to a segment of Ica's population's decision to migrate a few generations earlier. In the southern region, Cahuachi was, by EIP 2, a fully functioning ceremonial center, and problems associated with the water regime may have become a concern at that time. Significantly, EIP 2 is also the time in which settlements ceased to be located in defensible locales (Schreiber and Lancho 2003:14), a testament to the imposition of a "pax Nasca," albeit perhaps a precarious one. Later, in EIP 5, the construction of puquios, a technology that allows both extensification and intensification of agricultural production, was the next logical step once the frontier was filled and integrated regionally.

In sum, traditionally defined Nasca ceramic technology may have arisen first in the north, in Ica, as a result of Topará influence (Massey 1986; Peters 1997; Silverman 1994). Although this may be true if we choose to define Nasca primarily in sociopolitical terms rather than in technological ones, it may be fortuitous to seek a hearth of development. Nasca social organization and ethnic identity may simultaneously have developed pan-regionally according to a process similar to peer-polity interaction (e.g., Renfrew and Cherry 1986)—but only once all regions had been settled. Nasca sociopolitical makeup is an offshoot of the imperatives of frontier integration within a larger geosocial sphere following a short period of stasis. If, indeed, Nasca developed politically in a simultaneous manner in several regions, it becomes comprehensible that the identification of a unique center of diffusion has proven to be a difficult and unresolved task.

Conclusion

What, then, did the "frontier" contribution to the genesis of Nasca society, religion, and ethnic identity? Did frontier process play a critical, or significant, role in Nasca's early history?

Nasca society was not born out of the frontier. Paradoxically, its genesis is attributable to the fron-

tier process, which permitted experimentation, innovation, and perhaps the expression of dissent. Consequently, once frontier colonization was complete, intra- and intervalley negotiation became necessary, and social mechanisms of cooperation had to be designed; that is exactly what Nasca society may represent. Perhaps it is more accurate to assert that the presence of a Paracas frontier delayed Nasca genesis.

If we accept Carneiro's (1973 [1961]) thesis even in its broadest strokes, then the process of social change caused by circumscription had to be preceded by demographic expansion into all available vacuums, in this case exemplified by the SNR. This is the very region in which Cahuachi and many geoglyphs, as social technologies of integration, eventually emerged, soon after frontier colonization.

It is therefore unsurprising that demographic expansion occurred at this time, that is, shortly prior to major events of, first, increased complexity (EIP 2) and, second, intensification of agricultural practices (EIP 5). Simply put, a portion of the population migrated out of populated areas *because they could* and there was someplace, albeit less optimal, where they could go. It is worth mentioning that this process may have started much earlier, as Cook (1999) documents increasing exploitation of the narrow Lower Ica Valley starting sometime after EH 5. It is comprehensible that the colonization of the more hydrologically unappealing areas of Nasca occurred shortly afterward. Yet the richer Palpa region of the northern drainage had already been settled for centuries, at least since the Initial period (Reindel and Isla 2004).

In the long term, three important historical steps took place as a response to steady growth: (1) the settlement of the southern frontier associated, in Ica, with increasing warfare and settlement reorganization; (2) the elaboration of pan-regional social mechanisms to decrease warfare and increase collaboration (Carneiro's "confederacies and alliances" [1973 (1961):116], in this case Cahuachi pilgrimages and participation in geoglyph maintenance); and (3) the development of intensification technologies in the elaboration of puquios to exploit untapped but potentially plentiful underground water. Would these processes have led to the development of a true territorial state, as Carneiro's model predicts? I think it wise to adopt a nonde-

terministic approach when it comes to exactly what kind of sociopolitical formation would have emerged. But it is worth noting, as does Silverman (1996:139–140), that specific south coastal conditions constituted a limiting factor on the development of a state yet corresponded quite well to Carneiro's circumscribed oases.

Pioneers, through the networks and relationships that they establish, have the possibility of manipulating tradition and history, cementing and sanctifying their implicit position of power. Historical accounts of important events and figures are strategically selected and altered to structure and reinforce a desired sociopolitical organization. They hold an authority that is moral, economic, ideological, and political, which may be reinforced through debt, threat of sanctions, and the imposition of a constructed landscape that is juxtaposed with cosmology and mythology. In the SNR, Paracas pioneers experienced stylistic inertia, which probably reflects the conditions that compelled them to migrate and a desire to maintain lifeways that were threatened in the homeland. Their participation in the heartland's EH 9 and 10 universe seems to have been limited. This period of inertia was followed by episodes of rapid change that have, at their source, a continuous demographic influx and a need for negotiation and cooperation within the frontier, as well as with outside groups, with whom frontier inhabitants shared a deep heritage. The impossibility of further migration—the frontier being, in effect, packed—and the dangers of competition and arrogation by late-coming populations stimulated the cultural developments that we, today, call Nasca society.

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Notes

- As mentioned previously the archaeological record of the Palpa region seems to present a more complete Paracas occupation than encountered in the southern region (Isla et al. 2003). This may be related to a lack of excavations in the latter region. Silverman (1991, 1994) recovered a few pre-phase 8 sherds from her Ingenio survey and an unprovenienced phase 3 fragment from Nasca.
- Early Horizon geoglyphs are often etched on the side

of hills to be visible from below, and almost all depict anthropomorphic figures (Orefici and Drusini 2003:170–172; see also Reinhard 1988). This practice contrast with the Early Nasca geoglyph tradition, in which zoomorphic or geometric figures are situated on flat plains.

3. These dates are uncalibrated and expressed in years B.P. Calibrated dates, at 2-sigma, are 57 cal B.C.–cal A.D. 177 (AA58745) and 50 cal B.C.–cal A.D. 128 (AA58743),

calibrated with CALIB 5.0.1 (Stuiver and Reimer 1993) using the program's calibration curve for the southern hemisphere (McCormac et al. 2004). Detailed discussion of the contexts is found in Van Gijseghem 2004.

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