3,000 YEARS OF OCCUPATION IN UPPER VALLEY NASCA: EXCAVATIONS AT UPANCA

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We report recent excavations undertaken at the residential village Upanca located 1,600 m above sea level in the Nasca region of Peru in the Central Andes. Although fieldwork was initiated to evaluate the site's participation in the Early Nasca craft economy, excavations revealed a long occupation beginning in the Late Archaic (ca. 3000–1800 B.C.) and extending into the Early Intermediate period (ca. A.D. 1–750), with a principal component dating to the Early Nasca period (ca. A.D. 1–450). The Early Nasca component revealed high polychrome consumption, confirming previous assessments of Early Nasca's craft economy, and association with extensive agricultural terracing, suggesting surplus production beginning in the Early Intermediate period.

En este artículo informamos las recientes excavaciones realizadas en la aldea residencial de Upanca, a 1,600 msnm en la región de Nasca, Perú. Aunque la finalidad del trabajo de campo fue evaluar su participación dentro de la economía de producción Nasca temprana, las excavaciones revelaron una larga ocupación, empezando en el Arcaico Tardío (ca. 3000–1800 a.C.) y extendiéndose hasta el período Intermedio Temprano (ca. 1–750 d.C.) con un componente principal fechado para el período Nasca Temprano (ca. 1–450 d.C.). Este componente reveló un alto consumo de cerámica polícroma, confirmando va loraciones previas de la economía de producción de Nasca Temprana, y la asociación con extensas terrazas agrícolas sugieren excedentes de producción empezando en el período Intermedio Temprano.

Because of interest in a spectacular material culture including polychrome ceramics and textiles, the Nasca culture has been the subject of ongoing archaeological investigations for over a century. Until recently, however, two critical aspects of Nasca society were still poorly understood: (1) the residential villages that made up the majority of Nasca's population and (2) the context in which this material culture, in particular ceramics, was integrated into daily life.

Recently, efforts have been made to better understand these aspects of Nasca through excavations at the residential site Marcaya and by attempting to understand the production, distribution, and consumption of Nasca polychrome pottery (Vaughn 2004; Vaughn and Neff 2004; Vaughn et al. 2006). These projects have revealed insights into Early Nasca village and craft economies and have given archaeologists a clearer understanding of how Early Nasca society was organized. Specifically, we now know that Early Nasca villages were relatively self-sufficient economically, with the exception of polychrome pottery production; villages relied on specialists at the ceremonial center Cahuachi to produce and subsequently distribute polychrome pottery (Vaughn 2005a).

Here, we report recent work undertaken at Upanca, an upper valley (1,600 m above sea level) site in the Nasca region that adds to our understanding of these critical aspects of Early Nasca society.[1] The principal research objective in fieldwork at Upanca was to determine how sites most distant from Cahuachi, the ceremonial core of Nasca, were involved in the consumption and distribution of Nasca polychromes. Previous excavations at Marcaya (Vaughn 2004) determined that polychromes were the principal serving vessels at small habitations, but it was unclear if the same pattern existed at sites farther from the ceremonial center. In summary, our work at the site revealed

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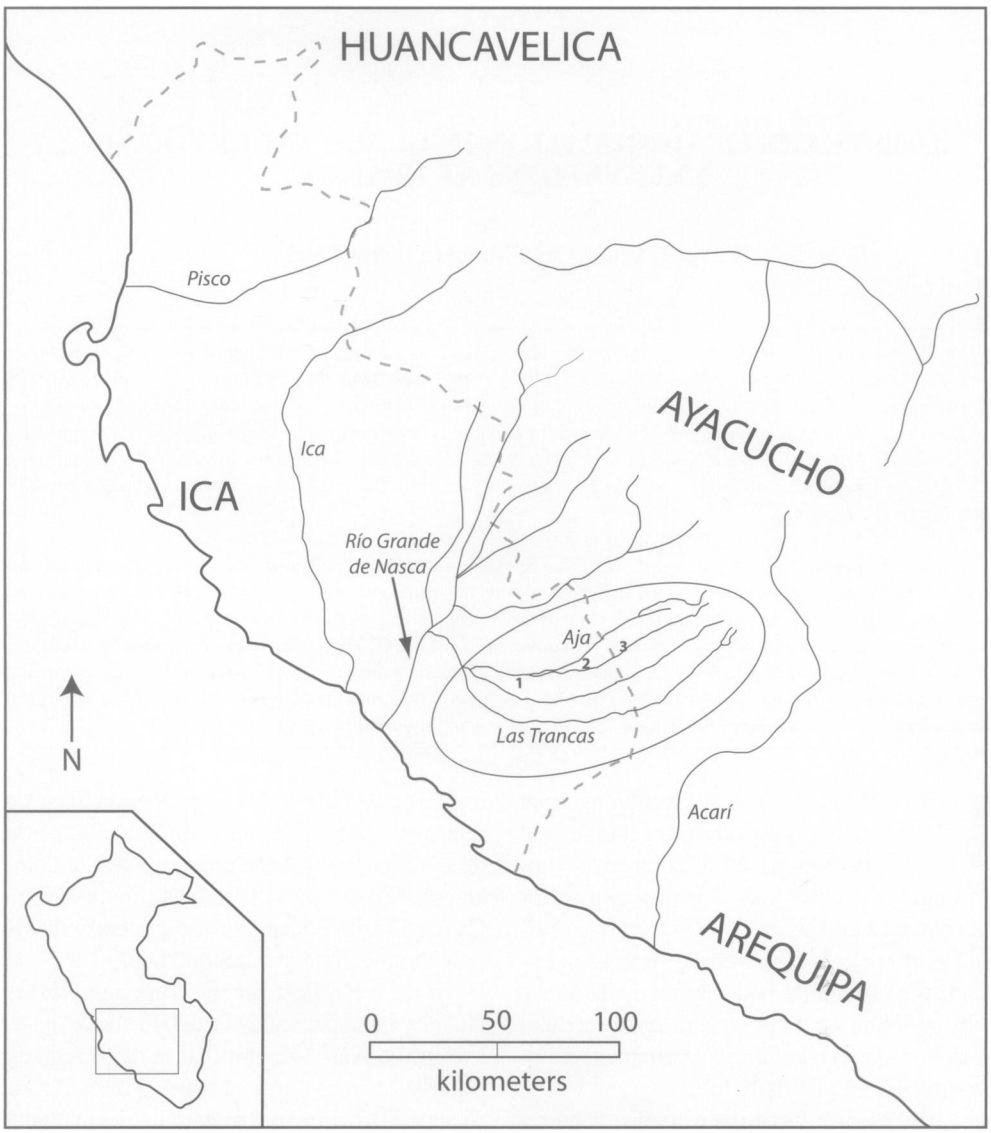

Figure 1. Map of the south coast of Peru with the Southern Nasca Region (SNR) encircled and major river valleys highlighted. The stippling outlines the modern Department of Ica. Sites mentioned in the text: (1) Cahuachi, (2) Marcaya, and (3) Upanca. Note that Upanca is located in the Department of Ayacucho.

(1) a long occupation beginning at least in the Late Archaic (ca. 2400 cal B.C.) and (2) a high consumption of polychrome pottery despite Upanca's remote location relative to Cahuachi.[2]

We begin by introducing the regional archaeological context. We specifically focus on (1) previous excavations at Marcaya, our only window into Early Nasca village life, and (2) models for pottery production in Nasca. We introduce Upanca, discuss its environmental context, and situate it within the broader regional archaeological context. We present the 2002 excavations, and conclude with a discussion of how Upanca fits into the wider context of the region's prehistory and some thoughts for future research at the site.

Archaeological Context

The Nasca culture developed on the south coast of Peru between approximately A.D. 1 and 750 within the Ica and Río Grande de Nasca drainages and their tributaries (Figure 1; Table 1). The region is hot and

Table 1. Peruvian and Nasca Chronology.

Horizon/Intermediate Period	Culture	Nasca Phases	Approximate Dates
Late Intermediate Period	Tiza	n/a	A.D. 1000–1476
Middle Horizon	Loro, Wari	Nasca 8, MH 1–2	A.D. 750–1000
Early Intermediate Period	Late Nasca	Nasca 6–7	A.D. 550–750
	Middle Nasca	Nasca 5	A.D. 450–550
	Early Nasca	Nasca 2–4	A.D. 1–450
Early Horizon	Proto Nasca	Nasca 1	100 B.C.–A.D. 1
	Paracas		900–100 B.C.
Initial Period	n/a		1800–800 B.C.
Archaic	Late Archaic		3000–1800 B.C.
	Middle Archaic		6000–3000 B.C.
	Early Archaic		10000–6000 B.C.

Sources: Conlee 2003; Schreiber and Lancho Rojas 2003; Vaughn 2004.

arid with little measurable rainfall. Because of the lack of rainfall, the rivers flow only for a few weeks in December or January with runoff from rains in the highlands. In particularly dry seasons, they do not flow at all. Despite the economic limitations posed by an unpredictable water source, Nasca culture developed and flourished. Focus here is placed on the Southern Nasca Region (SNR), that area between the Aja Valley to the north and the Las Trancas Valley to the south.

Early settlement of the SNR dates to the Archaic, with coastal fishing villages (Strong 1957) and small lowland occupations focused on a mixed adaptation of fishing, hunting, and foraging (Isla Cuadrado 1990). By the Early horizon the SNR was settled by migrating populations from Ica (Van Gijseghem 2004). During this time it is clear that Cahuachi, a site in the Lower Nasca Valley, became a prominent regional focus of ritual (Vaughn and Van Gijseghem 2007). A change in settlement characterized the Early Nasca period (A.D. 1–450), when Cahuachi reached a florescence to become the regional seat of power serving as a sacred pilgrimage center (Silverman 1993; Silverman and Proulx 2002). Recent evidence also indicates that an early occupation at the site included the elites of Early Nasca, who focused their efforts on group ceremonies and feasting (Vaughn 2004). These activities at Cahuachi served to reinforce Nasca ideology centering on agricultural fertility and water (Carmichael 1998; Silverman and Proulx 2002).

The archaeological evidence for materialized ideology (e.g., DeMarrais et al. 1996) in Nasca is painted polychrome pottery. Polychromes, renowned because of many studies of museum specimens, bear an elaborate iconography featuring natural and supernatural motifs referring to themes of water, fertility, and propagation, all important concepts in the dry desert landscape of the Nasca region (Carmichael 1998). Because of their role as materialized ideology, polychromes were a critical source of power for Early Nasca elites (Vaughn 2005a).

To understand better the role of polychrome pottery at residential sites, excavations were undertaken at Marcaya, one of many Early Nasca villages recorded by Schreiber (e.g., 1999, 2001). Work at Marcaya revealed an economically self-sufficient community with the exception of polychrome pottery production and possibly obsidian acquisition. The community was engaged in mixed agropastoralism, lithic and textile production, and the extensive consumption of polychrome pottery. Despite the fact that they were not produced there, polychromes were used by individuals and households of both high and low status. Polychrome bowls and vases were used for daily consumption by all households; however, only higher-status households had access to several vessel shapes, including "headjars" and cup bowls. Based on this work, Vaughn (2004) argues that polychrome pottery was broadly used in Nasca because it was integral to ritual consumption that first took place in feasting ceremonies at Cahuachi, and certain vessels were restricted to high-status households that acted as intermediaries between Cahuachi and the village.

Pottery Production

Although some have argued that Nasca pottery was manufactured in a household context (Carmichael

1998; Silverman 1993), Vaughn (2004) has maintained that polychromes were likely produced by artisans who specialized in pottery manufacture. It has been proposed that, because of its importance in materializing ideology, elites at Cahuachi controlled the production of polychrome pottery as part of their prestige-building efforts. Excavations at Marcaya did not reveal evidence for pottery production, and a compositional analysis of a sample of pottery from Marcaya has demonstrated a uniform compositional signature of polychromes, whereas undecorated pottery had various signatures (Vaughn and Neff 2000), suggesting that different sources of clays were exploited to produce the different types of pottery. Other compositional data including polychromes from other Early Nasca sites in the region and an analysis of Early Nasca pigments (Vaughn, Neff, Conlee, and Schreiber 2005; Vaughn et al. 2006) strongly suggest that Nasca polychromes were produced in specialized contexts.

The Nasca scenario of elites controlling the production of important material artifacts is not unique in the Andes. As a comparative study, we can turn to Chapdelaine et al.'s (1995) study of ceramics from the Moche capital Huaca de la Luna, where they found homogeneity in ceramic figurines and finewares, whereas utilitarian vessels were heterogeneous. These differences are related to different production contexts, with finewares and figurines produced under the auspices of elite supervision, while the production of utilitarian vessels was more diversified. Although the Moche and Nasca are not comparable in size and complexity, as Moche clearly was an indigenous state, this case study provides an example in the pre-Hispanic Andes where elites monopolized the production of important ritual objects.

In order to test results from the Marcaya fieldwork as well as subsequent compositional analyses, recently we have been codirecting the Early Nasca Craft Economy (ENCE) project.[3] The project's goals are to gain better insight into the production, circulation, and consumption of Nasca polychrome ceramics. These goals are being met (1) by undertaking a clay survey of the region and (2) through test excavations at contemporaneous villages located throughout the SNR. We have traced the clay used for manufacturing Early Nasca polychrome pottery to a location very near Cahuachi, demonstrating that the ceremonial center was a locus of polychrome pottery production during Early Nasca times (Vaughn and Neff 2004).

We report preliminary conclusions of the second major goal of the ENCE here, describing work undertaken at one contemporaneous village in the SNR: Upanca. As part of the larger goals of the ENCE, the principal research objective in fieldwork at Upanca was to determine how sites farthest from Cahuachi were involved in the consumption and distribution of Nasca polychrome pottery. Through excavations at Marcaya it had been determined that polychromes were the principal serving vessels at small habitations. Does this pattern hold at sites that were located farther from the ceremonial center?

Upanca

Upanca is located on the top of a 30 m knoll that rises over the northern margin of the Tambo Quemado River Valley, in the Department of Ayacucho, approximately 30 km upstream from the modern town of Nasca at 1,600 m above sea level (Figure 2).[4] It is located within the upper valley of the SNR in the *chaupiyunga* ecological zone; there is a permanent water supply in the river here even if its flow can reduce to a trickle in particularly dry years. The site, originally designated 96-285, was recorded by Schreiber and Isla Cuadrado (1996) as part of a regional survey of the SNR. A footpath leading from the local district of Pataraya to Tambo Quemado in the highlands runs through the middle of the site. Despite this frequent foot traffic, the presence of a water pipe that has been lain through part of the site, and some recent looting, the site is fairly well preserved.

The primary area of pre-Hispanic occupation extends approximately five ha on the crest of the knoll, with half of this area composed of dense habitation. To the north across the Quebrada Hualtapuquio are approximately 50 ha of abandoned agricultural terracing (Figure 3). According to local informants, although the terraces are ancient, they are used today mostly to pasture local livestock (especially goats). Additionally, locals note that an irrigation canal located about 50 m up the terraces was built by valley residents in the last century to irrigate the terraces. Surface inspection of the terraces revealed no other traces of irrigation canals. Thus, we believe that ancient use of the terraces

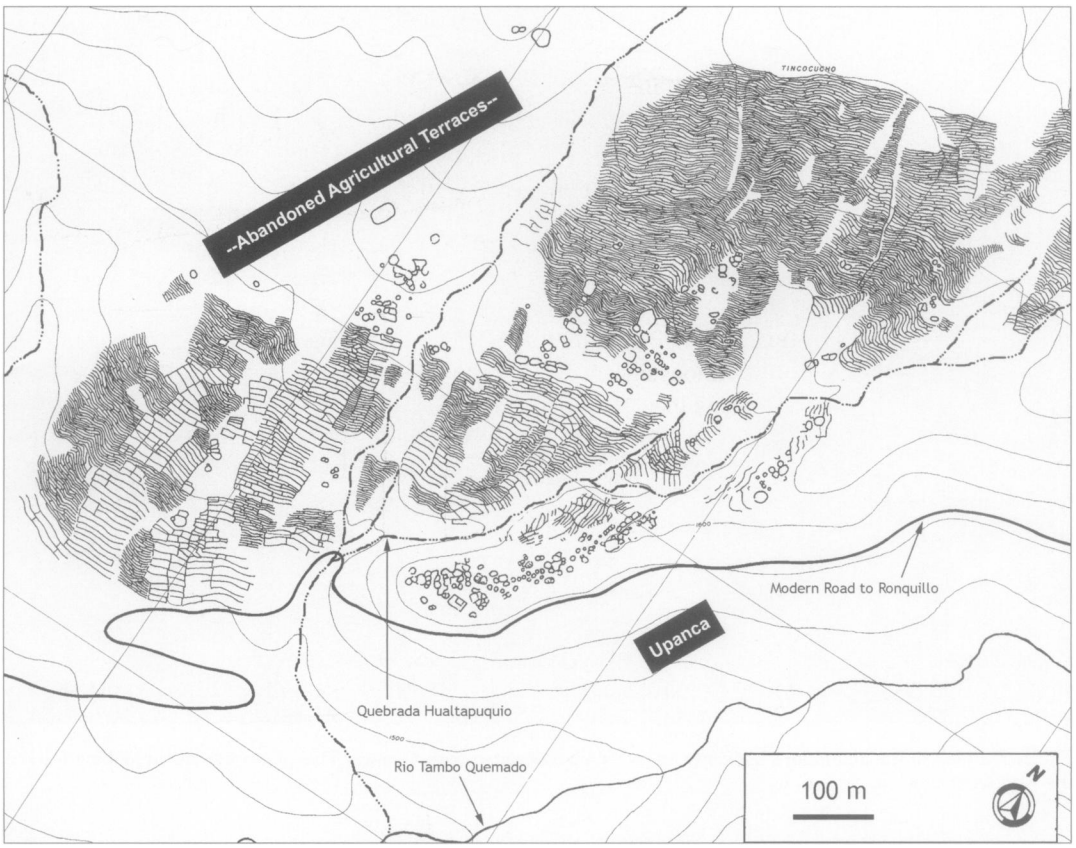

Figure 2. Upanca is located on the top of a knoll in the Tambo Quemado Valley. Note the abandoned agricultural terracing to the west of the site across from the Quebrada Hualtapuquio.

was restricted to rainfall agriculture. Our work at the terraces also revealed habitation structures and Nasca and Middle horizon ceramics, suggesting that the terraces date from the Early Intermediate period through the Middle horizon. Based on surface analysis Schreiber (1999:169) suggests that the terraces were used in Nasca times to grow coca and that the fields were eventually co-opted by the Wari Empire. Though more investigations are needed, based on our work we concur that they date primarily to those time periods. To date, we have not conducted any macrobotanical or pollen analysis, but we hope that additional investigations will eventually reveal what was grown on the terraces.

Based on surface architecture, Upanca was divided into five sectors. Architecturally the site is quite complex and composed of simply constructed circular houses with stone foundations and a few large, irregularly shaped patios (Figure 4). Many of the houses are not attached to other structures, especially in the eastern part of Sector I; some houses are joined together to form a line of clustered structures as in Sector III; and still other groups of structures contain a large central patio surrounded by houses, as in Sector II. In short, the surface architecture of Upanca deviates from the pattern seen at Marcaya of Early Nasca patio groups consisting of houses attached to patios (Vaughn 2005b). Despite this, Early Nasca ceramics are present on the surface of all sectors except for Sector V.

Sectors I–III make up the principal habitation zone and based on surface ceramics date mostly to Early Nasca, though several Nasca 5 sherds were found as well. Sector I is located on the southwestern edge of the site at the top of the hill. Distributed over an area of 160 × 80 m are approximately 60 irregularly shaped domestic structures, some with small lines of rocks delineating internal divisions of space. Sector II is located in the central part of the hill and is com-

Figure 3. Photo of the abandoned agricultural terracing associated with Upanca. This photo was taken looking toward the west from Upanca.

posed of approximately 40 mostly small and isolated structures, presumably houses. A large patio group composed of seven small circular structures surrounding an irregularly shaped patio is located in the center of this sector. Sector III consists mostly of agglutinated houses, some aligned in rows of three or four, cut into artificial terraces into the side of the hill and several large structures at the crest of the hill. Sector IV had few surface ceramics, is separated from Sectors I–III by approximately 150 m of unmodified terrain, and is composed of several isolated structures with a single large patio. Sector V is made up of agricultural terraces on the northern slope of the knoll. Very little occupational

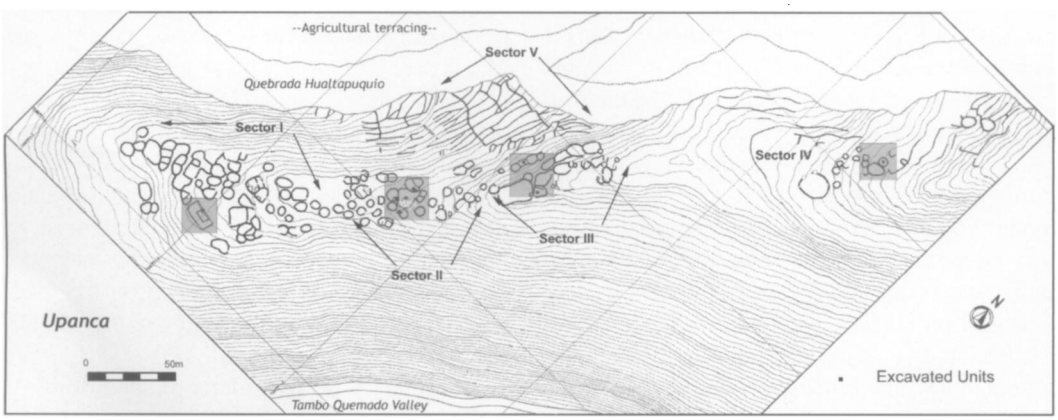

Figure 4. Topographic map of Upanca with the 2 × 2 m excavated units noted. Based on topography and architecture, the site was divided into five sectors.

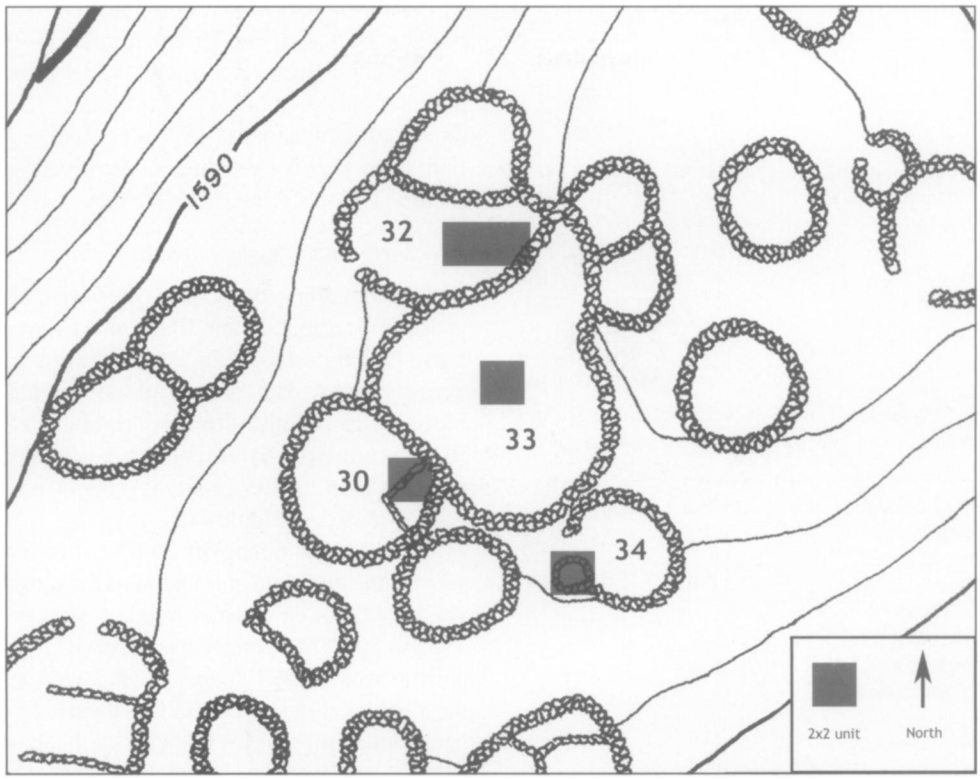

Figure 5. A series of test excavations was undertaken at Upanca. Shown here are excavations in Sector II. Structures with test excavations are numbered.

debris was found on the surface of Sector V, though we did collect several obsidian projectile points.

Excavations at Upanca

We undertook test excavations in four of the site's five sectors (Figure 5) that revealed relatively shallow deposits averaging 60 cm in depth. The materials recovered include ceramics, obsidian and other chipped-stone artifacts, spindle whorls, faunal remains from domesticated and wild species (Table 2), and shellfish remains from the Pacific Ocean (Table 3). Excavations revealed evidence for food processing in the form of grinding stones and food storage in the form of *collomas* (storage features [see Vaughn 2004:71]). Although we confirmed the chronological assessment of the site as principally Early Nasca, we found that the occupation extended earlier than previously thought. We found a very early component dating to the Late Archaic in Sector I, and the site has an extensive Formative component in Sectors II and III. Despite these findings, excavations in Sectors I–III revealed secure Early Nasca components, with "classic" Early Nasca polychrome pottery (Figure 6). These three findings will be discussed in turn.

Archaic and Formative Components at Upanca

Sector I, Structure 29 (I-29) is a large rectilinear compound measuring 6 × 15 m with a unique architectural form at Upanca (Figure 7). The compound has a bench on its north side that leads into what appears to be a very shallow sunken room (Figure 8). Because this form is not at all typical of local architecture, we surmised that it may have been intrusive and excavated there to determine the nature of the structure and its occupation.

A unit was placed in the northwestern corner of the internal room in Structure 29. The first three arbitrary levels contained fragments of mostly Early Nasca ceramics with a few Nasca 5 sherds, obsidian, and faunal remains. The lowest two levels, beginning at 60 cm below the surface, revealed dark, organic, oily sediments typical of middens. These two natural strata continued until sterile soil

Table 2. Faunal Remains from Upanca.

Fauna	Number of Identified Specimens	%
Rodent (undiff.)	15	25.9
Camelid (undiff.)	15	25.9
Large mammal (undiff.)	13	22.4
Small mammal (undiff.)	3	5.2
Mammal (undiff.)	1	1.7
Cavia porcellus	6	10.3
Cervid (undiff.)	1	1.7
Bird (undiff.)	4	6.9
Total	58	100.0

Table 3. Minimum Number of Individual (MNI) Shellfish Remains from Upanca Listed in Order of Abundance.

Genus Species	MNI	%
Choromytilus chorus	24	18.2
Aulacomya ater	19	14.4
Mesodesma donacium	11	8.3
Agropecten spp.	7	5.3
Fam Ampullaridae	6	4.5
Prunum spp.	5	3.8
Protothaca thaca	3	2.3
Scutalus spp.	3	2.3
Argopecten purpuratus	3	2.3
Turritela spp.	2	1.5
Perumytilus spp.	2	1.5
Semele solida	2	1.5
Mactra spp.	2	1.5
Tegula atra	1	0.8
Trachycardium spp.	1	0.8
Erizo del mar	1	0.8
Littorina peruviana	1	0.8
Unidentified bivalve	37	28.0
Unidentified land snail	2	1.5
Total	132	100.0

was reached, 1.6 m below the surface (Figure 9). Artifacts in these strata were limited to lithic debitage and faunal remains. A bulk sediment sample associated with cultural materials from the lowest stratum was collected for radiocarbon dating. The date is surprisingly early, at 2475–2135 cal B.C. (2-sigma), placing this unit chronologically within the Late Archaic (ca. 3000–1800 B.C.) occupation of Nasca (Table 4). Additionally, from this lower stratum, obsidian flakes were sampled using laser ablation–inductively coupled plasma–mass spectrometry. The results indicate that the obsidian from this component is from the Quispisisa source located in Ayacucho over 100 km away (Vaughn, Glascock, and Neff 2005).

Earlier-than-expected components were also found in Sectors II and III. We found a Formative component in Sector II, Structures 33 and 34 composed of Nasca 1 blackwares (Figure 10). In Sector III, Structures 6 and 10, excavations revealed Formative sherds in addition to several Nasca 2 sherds.

The Early Nasca Component at Upanca

Despite the earlier components, the principal occupation in Sectors I, II, and III appears to have been Early Nasca based on the ceramics recovered in excavations. A charcoal sample associated with Early Nasca ceramics from excavations in Sector III, Structure 6 (III-6) resulted in a radiocarbon date of cal A.D. 120–435 (2-sigma), confirming this Early Nasca date (Table 4).

Using nonconjoining rim sherds as a proxy measure for the minimum number of individual (MNI) vessels (the same measure used at Marcaya; see Vaughn 2004:74), pottery from Early Nasca components was divided into painted polychromes and unpainted plainware. Table 5 lists the results of the count and demonstrates that even at this high elevation away from the ceremonial core of Nasca, polychromes were consumed at a very high rate, on the order of 60 percent to 40 percent. Previously defined high-status wares such as headjars and cup bowls were found in very limited contexts at Upanca associated with households that may have been higher status based on their size. Indeed, two headjars and the very fragmentary remains of one cup bowl were found in Structures 33 and 34 in Sector II, both part of the suspected high-status household.

In addition to the high rate of polychrome consumption, some ephemeral evidence for pottery production was found in Sector II excavations. The evidence for pottery production includes several fragments of what appear to be potter's plates (Figure 11). No contexts for firing ceramics were found, however, in any of the excavations.

Sequence of Occupation at Upanca

The excavations indicate that the site was first occupied in Sector I by the Late Archaic and then grew accretionally from there. Evidence for Formative occupation is present throughout the site, from ephemeral evidence in Sector I, to extensive evidence in Sectors II and III, to one Formative

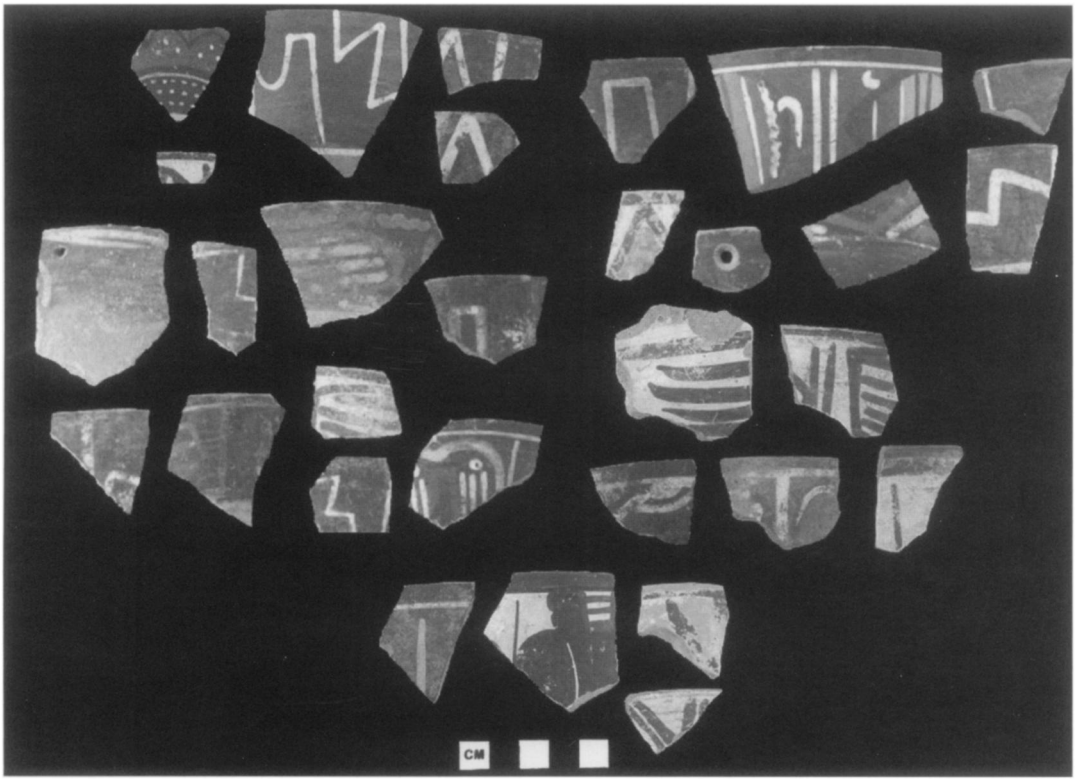

Figure 6. Composite photo of Early Nasca ceramics found at Upanca. The majority of the ceramics found at the site date to Early Nasca, confirming that this was the principal component of the site.

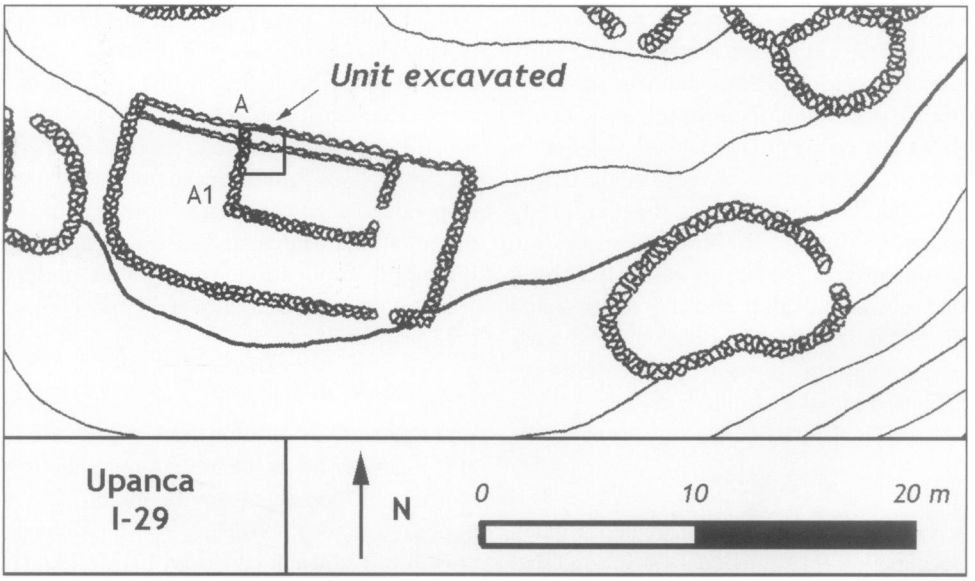

Figure 7. Structure 29 in Sector I is unique among the structures recorded at Upanca. Excavations revealed a deposit that was over 4,000 years old, dating to the Late Archaic.

Figure 8. Structure 29 in Sector I from the east.

ceramic fragment in Sector IV. Although we did not find Formative ceramics on the surface of Sector V, we believe that the terracing constituting Sector V was first used in the Formative because of its proximity to the Formative habitation at Upanca. Following the Formative occupation, the entire site continued to be occupied in Early Nasca. Early Nasca ceramics are found throughout the site's surface, and we also found them in test excavations throughout the site. Perhaps because of demographic growth, residents also extended the terracing found in Sector V across the Quebrada Hualtapuquio, where Early Nasca ceramics are found on the surface. The site appears to have been abandoned some time after Nasca 5, as we found no artifacts dating to post–Nasca 5 phases; however, the terracing across from Upanca appears to have been used into the Middle horizon.

Discussion

In sum, excavations at Upanca revealed a much longer occupation than previously suspected that lasted from the Late Archaic to Nasca 5—some 3,000 years of occupation. Excavations revealed evidence for lithic and textile production and food processing and consumption. The site's inhabitants were focused on a mixed economy of wild and domesticated terrestrial animal resources, shellfish, and probably agricultural domesticates as well (although the evidence for this is indirect). Although there was a long sequence of occupation at Upanca, the primary component of the site is Early Nasca. This is despite the fact that the surface architecture differs from what has been described as Early Nasca architecture. Furthermore, the Early Nasca component vessel assemblage corresponds to what has been described at the lower-elevation site Marcaya. These conclusions have important implications for how we understand Nasca prehistory generally and Early Nasca society specifically.

The Archaic in Nasca

The radiocarbon date for the Archaic occupation at Upanca, as far as we are aware, is the second-oldest published date from the region. The oldest published radiocarbon date is from an Archaic component of Cahuachi called La Esmeralda. Here a temporary summer encampment where local residents foraged along the coast and *lomas* environment revealed a date of 6355 B.P. ±130 (1σ,

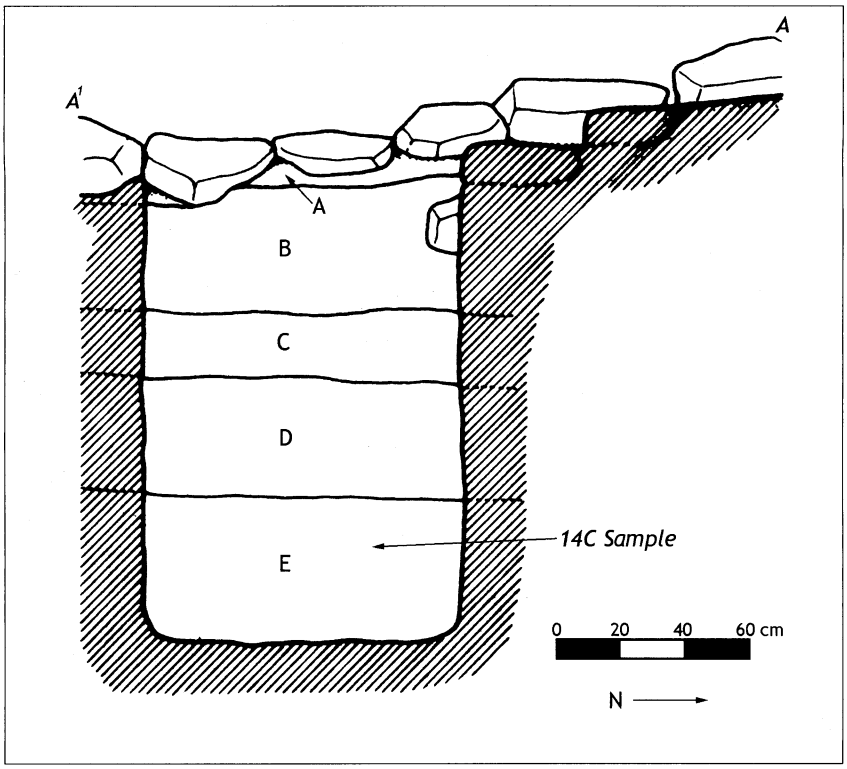

Figure 9. Profile of the test unit excavated in Structure I-29. The Archaic component begins in Level D.

uncalibrated [Isla Cuadrado 1990]). The presence of what appears to be Quispisisa obsidian at La Esmeralda further supports that La Esmeralda's residents were engaged in seasonal transhumance (Isla Cuadrado 1990; Strong 1957).

The Archaic occupation at Upanca is intriguing not just for its early age but also for its location. As an ecological zone, the chaupiyunga is transitional between the highlands and the coast (Marcus and Silva 1988) and was a "frontier" between coastal and highland polities throughout prehistory (Dillehay 1979) and into the modern era (Rostworowski 1988:53). For example, at the site of Huancayo Alto, a 2,000-year occupation beginning at 800 B.C. suggests utilization of the Chillón Valley chaupiyunga by mobile groups from the highlands to obtain access to local and coastal resources such as maize, shellfish, and coca (Dillehay 1979:25).

Archaeological knowledge of Archaic settlement in the Central Andes is primarily limited to (1) the highlands where mobile foragers and eventually pastoralists adapted to the puna and to highland valleys (Aldenderfer 1998; Rick 1988), (2) the far south coast where very early settlements have been documented (e.g., Sandweiss et al. 1998; Wise 1999), and (3) the north coast where settled life led to precocious developments in sociopolitical complexity (Shady Solis et al. 2001). The Archaic occupation at Upanca reveals activity in this transitional zone, making it one of the few Archaic sites where this transition can be documented, even though the chaupiyunga is known to be a key zone geographically, economically, and sociopolitically in the Andes (Marcus and Silva 1988:2).

Generally, the Archaic adaptation in this region is not as well known as those in the far south coast or the Peruvian north coast. To place our findings at Upanca into context, however, a summary of what is known is warranted. In general, Archaic adaptation in this region, characterized by a diverse, broad-based foraging economy, lasted much longer than elsewhere in the Andes. At some coastal sites, however, people turned to specialized maritime economies. For example, San Nicolás III is an Archaic site located on the San Nicolás Bay approximately 70 km southeast of Nasca. The site is com-

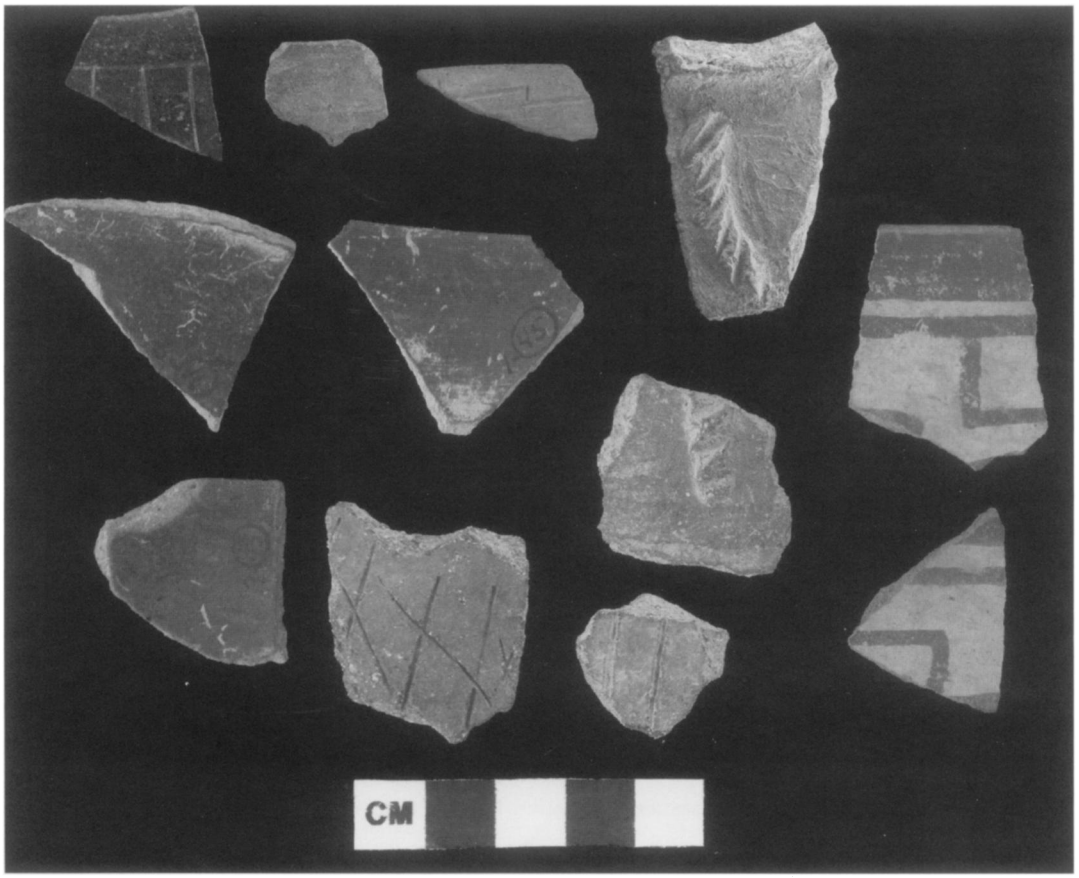

Figure 10. Formative sherds from Sectors II and III. Also shown on the right are two Nasca 2 sherds from Structure III-6.

posed of five small shell mounds consisting of mussel, clam, sea urchin, limpet, and scallop shells, with evidence for cooking and food processing (Strong 1957:8). Although elsewhere in the Andes during the Late Archaic domesticated species were used extensively, the evidence for domesticated plants is minimal at San Nicolás and comprises only one gourd fragment (Strong 1957:8).

A series of sites investigated by Engel (1981) makes up the other evidence for Archaic occupation along the south coast, including El Abrigo, a rock shelter located on the coast north of Ica dating to 6800 B.P. (uncalibrated), and Paracas 96 and 514, both located near the Paracas Peninsula. Paracas 96 is a temporary campsite, whereas Paracas 514 is a small village near the Pampa de Santa Domingo occupied between 6000 and 4000 B.P. that has revealed much information regarding regional Archaic adaptation. Archaeological remains there include middens filled with land and sea mammal remains, bird bones, and domesticated gourd, jicama, *camote*, and cotton (Engel 1981:38).

Aside from these sites, there is little evidence

Table 4. ^{14}C Dates from Upanca Obtained from Beta Analytic, Inc.

Sample #	Uncalibrated Date	$\delta^{13}C$	Date Cal 2σ[a]	Context	Material Dated
Beta-170660	3850±60 B.P.	–25.0‰	2475–2135 B.C.	I-29E	Organic sediment
Beta-170661	1740±70 B.P.	–25.0‰	A.D. 120–435	III-6B	Charcoal

[a]Stuiver et al. 1998.

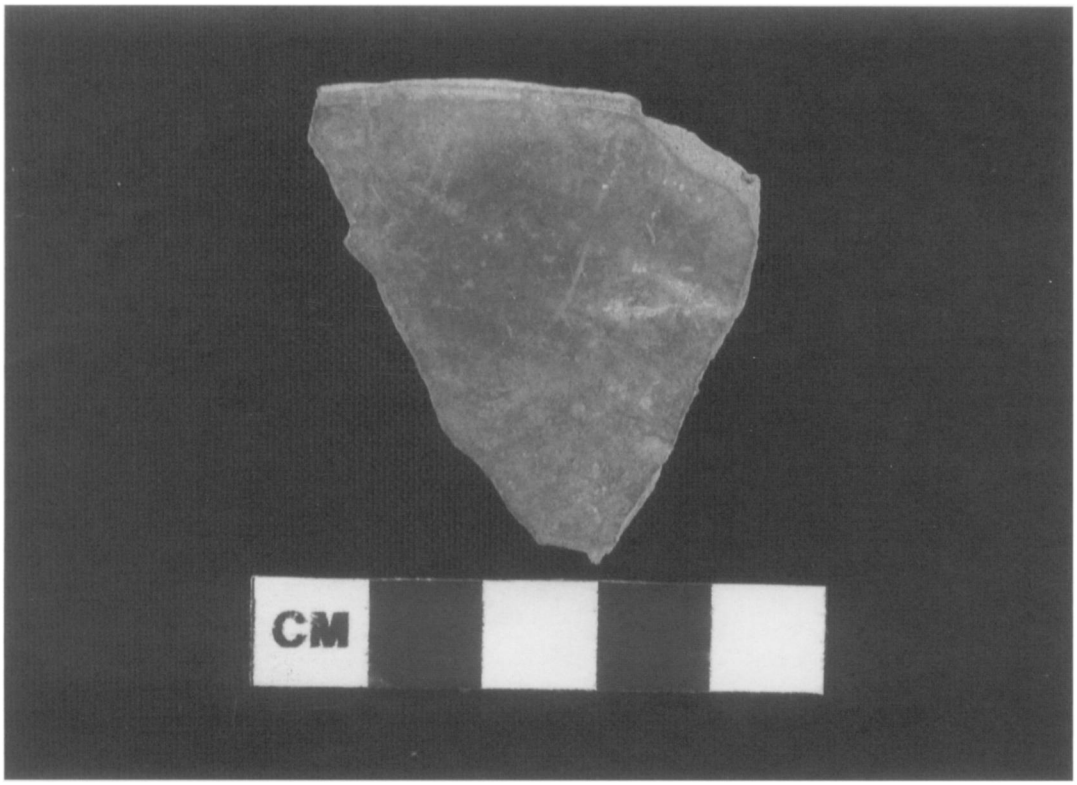

Figure 11. Fragment of a potter's plate from Sector II, Structure 33 excavations.

for an Archaic presence in the Nasca region, let alone the SNR. Some have suggested that the lack of Archaic sites on the south coast and the continuity of Archaic patterns into later prehistory are a result of the spotty nature of resource distribution in the south when compared with that in the north (Quilter 1991). Indeed, resource zones on the south coast are relatively "patchy." Lacking the resource density of other regions of the Central Andes, people are likely to have followed a shifting settlement pattern, in effect limiting sedentary occupation and development of the sociopolitical complexity that is found on the contemporaneous north coast. Given the depth of the Archaic occupation at Upanca, we surmise that the paucity of Archaic sites recorded in this region may also be a function of their lack of surface visibility.

All of these sites, with the exception of La Esmeralda, are found on the coast. Evidence for contact with the highlands is found at these coastal sites primarily in the form of obsidian. Quispisisa obsidian is found at San Nicolás (Burger and Asaro 1979:297). Obsidian is also found at Paracas 514, along with tufts of preserved camelid hair (Engel 1981:38). Although the source of the obsidian at the Paracas sites has not been verified, the extensive use of Quispisisa obsidian at San Nicolás, and presumably at La Esmeralda as well, demonstrates Archaic ties to the highlands.

Unfortunately, because excavations were lim-

Table 5. Comparison of Vessel Assemblages among Upanca, Marcaya, and Cahuachi.

	Upanca		Marcaya		Cahuachi[a]	
Rim Category	No.	%	No.	%	No.	%
Plainware Rims	203	40	170	44	140	29
Fineware Rims	306	60	217	56	339	71

[a]Data from Silverman 1993:228.

Figure 12. View from Sector I at Upanca with a commanding view of the valley and the region's *apu*, Cerro Blanco.

ited, little can be said about the Archaic adaptation at Upanca. In the lowest stratum no faunal remains were found; thus it is difficult to ascertain the Archaic subsistence economy. Quispisisa obsidian was found in abundance, however, and its very presence suggests that even in the Late Archaic, there was already contact between the highlands and this region indicating some type of exchange.

The Archaic occupation at Upanca as we have defined it so far was situated in an auspicious location. Standing anywhere on the southwestern portion of Upanca (where Structure 29 is located) provides one with a commanding view down the Tambo Quemado Valley (Figure 12). This view could have been used strategically to monitor who entered the valley as well as to monitor the presence of fauna. Furthermore, Cerro Blanco, the region's *apu*, or mountain god, in historical times, is easily seen from this vantage point. Although we are in no position to suggest that Cerro Blanco was an important apu during the Archaic, there are few places in the valley with as good a view of the sand mountain. What we do not know is how much of Structure 29 was used in Archaic times. The compound and the "sunken room," as they were originally designated, may very well have been structures overlying an older, Archaic occupation. Though we only excavated one unit, the Late Archaic component at Upanca appears to be fairly ephemeral, as it was not found in other areas.

Extensive occupation at the site began in the Formative, with a substantial component present in Sectors II and III. Based on our excavations, the Formative component appears to be quite extensive, as Formative ceramics were found in all units in Sectors II and III, and one small fragment was found in both Sectors I and IV excavations as well. Given that the site seems to have been occupied extensively during this time, the architecture that remains on the surface today may well represent a Formative pattern rather than the Early Nasca architecture described by Vaughn (2004, 2005b). Indeed, certain structure clusters such as the agglutinated structures in Sector III are very reminiscent of For-

mative house terraces described by Van Gijseghem (2004).

The Early Nasca Component at Upanca

The second major component at the site is Early Nasca. The Early Nasca occupation appears to have been extensive, for Early Nasca ceramics litter the surface and were found in all units. Based on our work, the Early Nasca occupation is similar to Marcaya's, as the data suggest a mixed agropastoral economy with ties to the Pacific Ocean and to the highlands. Quispisisa obsidian is also found in Early Nasca components; two of the seven flakes tested in the previously mentioned study were from Sector III, Structure 6 excavations, revealing a substantial Early Nasca component. Thus, it is clear that the ties to the highlands endured through prehistory and that Upanca played an intermediate role between the coast and the highlands from at least the Late Archaic through Early Nasca. Throughout this time, Quispisisa obsidian was used to the complete exclusion of other sources.

The abandoned terraces are the only such features we are aware of associated with a Nasca site. Although preliminary analysis suggests that they date to the Nasca period, future work will be needed to determine how early they were established and, perhaps more importantly, why. In particular, it is essential to determine what was grown on the terraces. At this point we cannot say what the terraces were used for (though Schreiber's hypothesis that they were used for coca production remains intriguing); however, if all of the terraces were used simultaneously, the amount grown on them would have greatly exceeded that needed by the local population. Whether this presumable surplus production indicates exchange with villages downriver, or perhaps people in the sierra, is unknown. We do know, however, that some residents of Upanca were occasionally in the lower valleys based on the high consumption of Early Nasca polychromes. That is, residents of Upanca obtained most of their polychrome pottery elsewhere—our data suggest from Cahuachi.

Early Nasca Polychromes. The percentage of Early Nasca polychromes making up the vessel assemblage is consistent with what was found in excavations at Marcaya, with a very high frequency (60 percent) of polychrome consumption at Upanca. Recently, a neutron activation analysis (NAA) of a regional sample of pottery from the SNR revealed a homogeneous paste for polychromes and a heterogeneous paste for plainwares (Vaughn et al. 2006). This regional sample included nine polychrome sherds collected from the surface of Upanca in 1996 (Vaughn et al. 2006:Figure 5). The results of the NAA revealed that all nine sherds from Upanca match the Nasca polychrome group. As we discussed previously, the source of this polychrome group has recently been traced to Cahuachi itself (Vaughn and Neff 2004), demonstrating that Cahuachi was a source for polychrome pottery distributed not only to residents of Upanca but widely throughout the SNR.

The data presented here confirm that the Early Nasca craft economy was extensive. Polychromes as a source of sociopolitical power for Early Nasca elites were distributed widely and consumed in far-reaching locations. Upanca is approximately 60 km from Cahuachi, and even so our data suggest that inhabitants were participants in the activities taking place there.

Although there is some ephemeral evidence for pottery production at Upanca, it is very unlikely that polychromes were actually produced there. Because compositionally the polychromes from Upanca match the main polychrome group sourced to Cahuachi, we argue that the evidence found for pottery production in excavations must be related to the production of plain utilitarian vessels, which includes cooking pots and storage jars at Upanca. Plainwares in the NAA study were compositionally heterogeneous and have not yet been matched to local clay sources (though local clays have been collected).

Concluding Remarks

Although our results may be considered somewhat preliminary because excavations were limited, our work reveals some significant findings. First, Upanca is important for understanding the region's prehistory because its occupation spanned the Late Archaic through Early Nasca periods, including a Formative component. With test excavations, it was difficult to determine the full extent and nature of each of these occupations; however, they did produce the second-earliest radiocarbon date from the region. Future work determining the extent of this occupation will reveal the nature of Archaic lifeways in this transitional zone between the highlands

and lowlands, which is still poorly understood despite the zone's importance.

Second, excavations within the Early Nasca component confirm previous assessments of the Early Nasca craft economy. That is, even though polychromes were not produced at Upanca, they were used extensively—on the order of 60 percent of the entire vessel assemblage. Furthermore, NAA of a sample of sherds from Upanca combined with recent clay and additional compositional data indicate that the polychromes employed at the site were produced somewhere near the ceremonial center Cahuachi.

These new data reinforce recent reconstructions of Early Nasca society proposed by Vaughn (2005a). Specifically, we see Early Nasca society as one composed of villages with mixed agropastoral economies scattered across the foothills of the Andes that were integrated through group ritual at the ceremonial/pilgrimage center Cahuachi. We believe that there was an elite residence and caretaker population at Cahuachi, with elites primarily focused on leading group ceremonies and feasting. The specific activities that they were involved in are difficult to reconstruct. However, we believe that they involved activities that focused on the themes of water, propagation, and agricultural fertility, all concepts that would have had enormous importance in the dry desert that makes up the SNR. These ritual activities served to reinforce Nasca ideology and the elite's access to this supernatural realm.

This Nasca ideology was materialized through painted polychrome vessels, artifacts that were produced at or near Cahuachi, were used in feasting ceremonies, and appear to have been distributed to residents of the region making pilgrimages to the site and participating in the feasts sponsored by Nasca elites. Although further work at other sites—especially those located in the upper valleys of the region—will help clarify the relationship between Cahuachi and residential villages, and we have begun to undertake investigations at some of these other sites as part of the goals of the ENCE project, the data presented here suggest that elites were successful in their endeavors, because even at a site quite distant from Cahuachi, polychromes formed an integral part of the vessel assemblage.[5]

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Notes

1. We follow Schreiber and Lancho Rojas (2003), who use "Upper Valley" to describe that part of the Southern Nasca Region above approximately 1,200 m in elevation where there is permanent water flow in the river valleys. We recognize that generally in the Andes this region can be referred to as "Midvalley" to highlight its location between the coast and the highlands (see, e.g., Dillehay 1979; Marcus and Silva 1988). In Nasca, however, "Dry Middle Valley" is

generally used to describe that portion of the region that is devoid of surface water except during times of flooding (Schreiber and Lancho Rojas 1995:231).

2. Unless otherwise noted, all dates presented are calendar dates.

3. In Spanish we have referred to this project as Proyecto Nasca Temprano.

4. About 4 km downstream, this valley becomes the Tierras Blancas.

5. See Vaughn 2005a for a discussion of an additional Early Nasca site called Uchuchuma located in the Upper Aja Valley that has a similar vessel assemblage to those of Upanca and Marcaya.

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