

**WEALTH AND HIERARCHY
IN THE INTERMEDIATE AREA**

A Symposium at Dumbarton Oaks
10TH AND 11TH OCTOBER 1987

Frederick W. Lange, *Editor*

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The Search for Elite Personages and Site Hierarchies in Greater Nicoya

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INTRODUCTION

THE ARCHAEOLOGICAL SUBAREA OF MESOAMERICA originally defined as "Greater Nicoya" (Fig. 1) by Norweb (1964) is divided into a "northern sector," which corresponds to Pacific Nicaragua as far north as Managua, and a "southern sector," which generally corresponds to the Nicoya Peninsula in Costa Rica (Lange 1984a). Extensive research in the area has, through the years, resulted in a number of personal biases that should be made explicit at the outset.

1. The mere presence of aesthetically pleasing artifacts does not automatically demonstrate the presence of rank and status, either at the personal or community level.
2. The uneven distribution of natural resources resulted only in very localized advantages based on direct access and kinship and did not lead to strongly defined regional hierarchies.
3. The skillful elaboration of locally available materials can be carried out by related, but functionally independent household craftworkers.
4. A people's humanistic experience is not diminished, and may in fact be enhanced, by a lack of monumental architecture, large population densities, and other accoutrements of complex societies.

In even the most general evolutionary sense, some ranking of individuals and groups is inevitable, based on differences in individual abilities and access to resources. This paper distinguishes between what might be called "active" or "coercive" ranking on the one hand, and "passive" ranking on the other. For purposes of this discussion, passive ranking is viewed as kinship based, where one's position within the social group is defined by abilities such as age, knowledge, hunting prowess, and so forth. Active

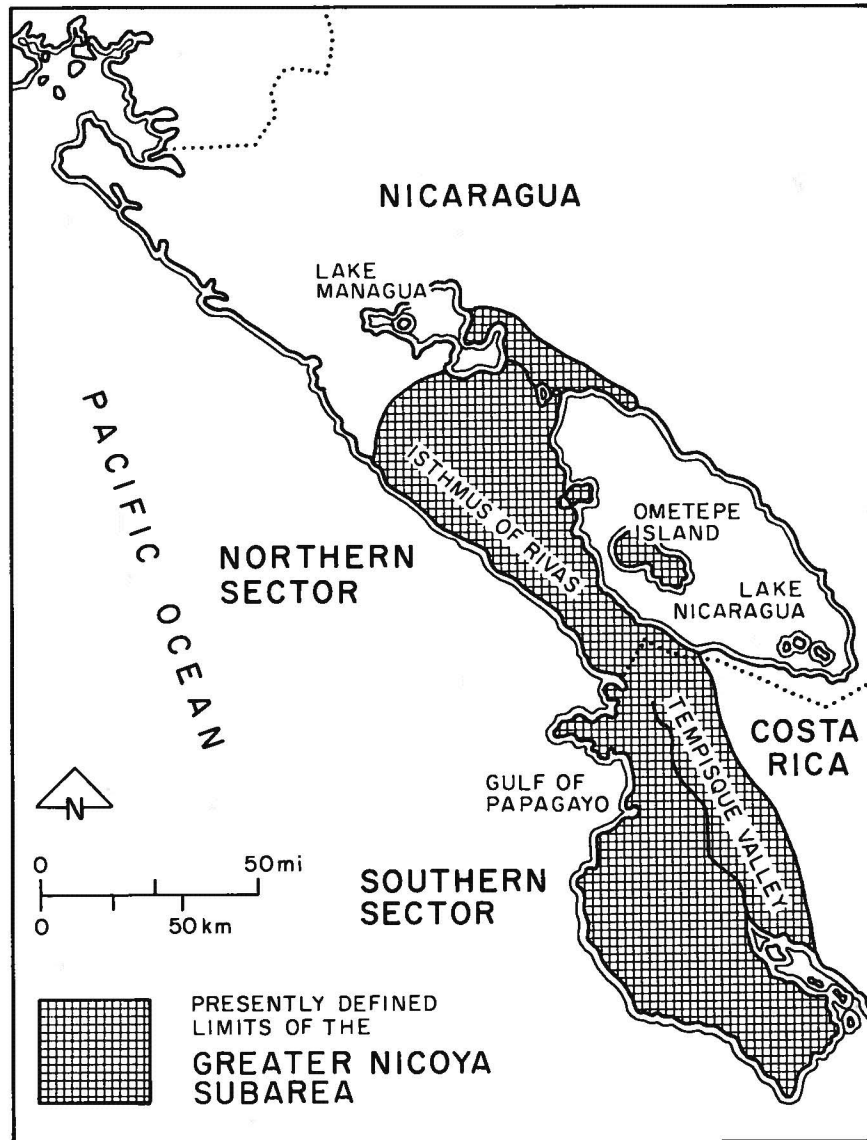


Fig. 1 The Greater Nicoya archaeological subarea.

ranking is viewed as negating the importance of passive criteria in interpersonal relationship through the imposition of externally defined criteria. Passive ranking was the norm in prehistoric Greater Nicoya.

Ecological Setting

Elsewhere (1988: 3), I have briefly summarized the ecology of Greater Nicoya as “naturally dry during half of the year (December to May) . . .” and with an overall lack of surface water, except for the Lakes Nicaragua and Managua, in Nicaragua, and the Tempisque River Valley, in Costa Rica. I have also noted (1988: 5) that:

The Pacific coastline in northwestern Costa Rica is highly irregular . . . and has numerous bays that are favorable for the exploitation of marine resources. The strong correlation between coastline forms and utilization of marine resources is seen in data obtained from the Bay of Salinas, the Santa Elena Peninsula, the Bay of Culebra, and Tamarindo zones of Costa Rica, where prehistoric occupations are represented by coastal habitation sites. These embayments contrast with the comparatively straight coasts of Pacific Nicaragua. . . . No coastal middens have been located in these areas.

The Mesoamerican Paradigm

As noted above, Norweb’s original characterization of a “Greater Nicoya Archaeological Subarea” assumed it to be a subarea of Mesoamerica. We are still laboring under the bias of a “from the north” perspective in research in Greater Nicoya. We need to consider in situ development, as well as evaluating possible southern influences. Ceramic distribution data show that Greater Nicoya had connections with the northern cordillera of Guanacaste, the Central Pacific watershed, the Central Valley, and the Atlantic watershed, principally from A.D. 800 to 1200. The mixture of local development and external influences fluctuated through time, resulting in a complex cultural mosaic. These issues are discussed in more detail in Lange, Sheets, Martínez, and Abel Vidor (n.d.).

Chronology

The general time frame for the region is from 2000 B.C. (Hoopes n.d.) to the time of the Spanish Conquest. The temporal divisions used in this paper are the following:

The Middle Formative (2000–1000 B.C.) Period is unknown in Greater Nicoya, except for Haberland’s Dinarte Phase materials from

Ometepe Island, Nicaragua. Because of the scarcity of data, we do not include these materials in the present discussion.

Zoned Bichrome Period (1000 B.C.—A.D. 500)

Early Polychrome Period (A.D. 500–800)

Middle Polychrome Period (A.D. 800–1350)

Late Polychrome Period (A.D. 1350—ca. 1530)

The phases comprising the temporal framework of the data base are listed in Appendix A. Coverage of the southern sector is considerably better than that of the northern sector.

POSSIBLE INDICATORS OF ELITE STATUS AND SITE HIERARCHY IN GREATER NICOYA

Site hierarchies are usually defined by differing size and complexity of sites; usually, one central or principal site can be impressionistically distinguished from others by its size. These distinctions are difficult to make unless one is dealing with traditionally defined chiefdom or state-level societies.

Personal status in archaeological contexts has been defined by differential access to wealth (as seen in artifact associations), preferential domestic location, specialized mortuary treatment, or some combination of these factors.

We can seek evidence for individual status and site hierarchy in overall settlement patterns, and in non-portable and portable artifacts. In Greater Nicoya, the potential distinction of site hierarchies through settlement pattern research is limited by the relative lack of systematic regional surveys. However, there are no known large sites such as Teotihuacan (Mexico), Monte Alban (Mexico), or even Quelepa (El Salvador) that would have served as focal points in hierarchical networks. The main categories of non-portable artifacts are architecture and large-scale stone statuary, while portable artifacts include objects of clay, stone, metal, bone, and shell.

In Greater Nicoya, non-domestic architecture is rare, and most objects thought to be indicative of status have been found in both mortuary and domestic contexts. There are no settlement or artifactual indications of concentrations of wealth. Furthermore, while mortuary contexts (mostly looted) are relatively common, the preservation of human remains is less so. Because determinations of rank and status include the variables of age and sex, the inability to make these determinations is a major interpretive impediment.

Quantification of Elite Artifacts

Artifacts that potentially can be used to identify individual ranking comprise only a very small percentage of the Greater Nicoya inventory,

and they seem to occur with less frequency as we move from the beginning to the end of the chronological sequence. In an example from the American Southwest, Frisbee (1985) has pointed out that the lack of artifactual materials cannot always be interpreted as a lack of cultural presence. He demonstrates that even though we have historical records of massive shipments of materials from Mexico to southwestern missions, their archaeological presence is quite minimal. In the Greater Nicoya example, rank differences, to the extent they were mirrored in material culture, declined or at best held level over 2,500 years.

Insights from Instrumental Analyses

Instrumental analyses carried out on jade and ceramics by Bishop (Bishop, Lange, and Lange 1988) and obsidian analyses by Stross, Asaro, and Michel (1992; Sheets et al. 1991) have contributed to our understanding of movement and exchange of exotic materials in Greater Nicoya. Time and space do not permit a thorough review of these data, but a brief overview will complement the discussion that follows.

Jade. Bishop and his colleagues (Bishop, Sayre, and van Zelst 1985) analyzed more than 600 source and artifact samples of Mesoamerican and Costa Rican greenstone artifacts. Of the 130 specimens from Costa Rica, fewer than six showed any potential affinity with the Motagua source area in Guatemala. Bishop also defined a large ($n = 51$) group of Costa Rican jades that did not come from the Motagua source; the remaining specimens were quartz and other materials (Lange and Bishop 1988). With regard to the Costa Rican group, the "criterion of abundance" (Bishop, Rands and Holley 1982: 300–301) strongly suggests another probable source in Costa Rica. The distribution of artifacts, largely looted from Zoned Bichrome Period cemeteries suggests a source in the Nicoya Peninsula area. However, intensive survey of the Santa Elena Peninsula and assessment of the other geological data currently available do not seem to indicate a high potential for a source area. George Harlow (n.d.), speaking at the recent Denver Jade Conference, felt that the Motagua source area is the one and only for Mesoamerica and that all jade found in Costa Rica was imported from there. If that is the case we must explain, and cannot at the moment, the almost total absence of jade and other greenstone artifacts from Nicaragua.

Ceramics. Bishop (Bishop, Lange, and Lange 1988) has also conducted neutron activation analyses of more than 1,200 ceramic samples from Greater Nicoya (the data base is strongest from the southern sector), representing the full 2,500 years of the recorded cultural sequence. At present we can distinguish clearly between northern and southern sector production, and within the southern sector four or five subareas have been delineated. Most types were made in only one production area, and some

were much more widely distributed than others. One interesting pattern hypothesized on the basis of stylistic/distributional data and confirmed by instrumental analysis was that of having one type common to both sectors of Greater Nicoya, but represented in each sector by a distinct variety or varieties.

Obsidian. Payson Sheets and I collected a number of obsidian blade and pebble specimens during a survey trip to Nicaragua in the spring of 1983, and he arranged to have a suite of them analyzed. Stross, Asaro, and Michel (1992) were able to relate some of the blades to known sources in El Salvador and Guatemala, but initially there were a few without provenance. They also analyzed blade fragments from the Vidor site on the Bay of Culebra and small tool fragments from the Sapoa Valley, with the same source associations (or lack thereof) resulting. Subsequently, samples provided to Sheets by Kenneth Hirth from the Guinope source in southern Honduras have matched with the unprovenienced blade materials (Sheets et al. 1991). The southern movement of obsidian into Greater Nicoya appears to have been mainly a post-800 A.D. practice. Instrumental analyses are playing a definite role in clarifying our knowledge of source areas and trade routes in southern Mesoamerica/Lower Central America.

A CHRONOLOGICAL OVERVIEW OF DATA POTENTIALLY REFLECTING SITE HIERARCHIES OR INDIVIDUAL STATUS

Zoned Bichrome Period (1000 B.C.—A.D. 500)

Community Organization. There were small villages with spatially distinct cemeteries (usually at the base of slopes or on tops of nearby hills). In the northern sector, subsistence was based on mixed gathering and collecting, with some freshwater fishing; maize agriculture is inferred (Pohl and Healy 1980), but not conclusively demonstrated. The pattern is the same in the southern sector, with fishing apparently of less importance; even in coastal sites marine resources were apparently not exploited.

Mortuary Patterns. Some cemeteries have numerous grave offerings, others have relatively few. There is also a great range of internal patterning in cemeteries from the Zoned Bichrome Period: (a) Hartman's (1907) excavations at Las Guacas and the earlier work of Padre Velasco recovered a large number of Low Intensity greenstone pendants and carved stone *metates* (but very few ceramics); (b) however, at the nearby site of Mojica (Ryder n.d., 1986), tombs frequently had ceramics, but no greenstone pendants, and only one *metate*; (c) the Las Guacas tombs had human remains that were not retained, while the Mojica tombs had no surviving skeletal remains. (d) Zoned Bichrome Period cemeteries uncovered by Charles Woram on the Santa Elena Peninsula had principally ceramics and *metates*,

with very little greenstone, and (e) the severely looted Las Pilas cemetery near La Cruz apparently had predominantly greenstone and *metate* tomb artifacts, but very few ceramics (Lange and Scheidenhelm 1972). The presence or absence of greenstone pendants, *metates*, and ceramics clearly appears to be proscribed on a cemetery-by-cemetery, rather than grave-by-grave basis. At the moment these patterns cannot be correlated with age/sex characteristics and the social implications are unclear.

Diagnostic Classes of Artifacts

The overlap of symbolism on jade, carved stone, ceramics, and bone is striking during this period and suggests well-established relationships between individuals and villages. We are also seeing the substitution of artistic/ritual objects for practical tools (celts, *metates*; see Graham, this volume). Part-time specialists were probably responsible for artistic production, and social ranking is reflected in differential distribution of grave goods. Unfortunately, we have recovered no associated physical remains.

The pattern of ceramic types with varieties characteristic of one sector or the other, or of types limited to only one sector, was established during the Zoned Bichrome Period. For example, Bocana Incised is mainly a northern sector type; Rosales Zoned Engraved is found in both sectors, and Guinea Incised is limited almost exclusively to the southern sector. All types and varieties found in mortuary contexts have also been found in habitation contexts (although the reverse is not true).

Usulután Style Ceramics. For many years, the presence of "Usulután style" decoration in both the northern and southern sectors was taken as evidence for southern Mesoamerican influence and even viewed by some as a Late Formative "horizon marker." In both sectors the ceramics with this style decoration occur in both habitation and mortuary contexts. Neutron activation analysis of a limited number of samples from the Isthmus of Rivas and the southern sector demonstrated that the specimens tested were made in Greater Nicoya and not imported from farther north. This supports Demarest and Sharer's (1982) interpretations of Usulután being a style/technique that was widely imitated in both time and space, and not a tightly delimited horizon marker.

Rosales Zoned Engraved Ceramics (Fig. 2). This type occurs in both domestic and mortuary contexts. In a recent paper, Tillett (1988) has analyzed the symbolism on Rosales plates, and if her interpretations are correct, the level of abstraction suggests generally shared knowledge and utilization of specialized ritual objects.

Jadeite and Greenstone (Fig. 3). In the southern sector limited amounts of Motagua Valley jadeite (Lange, Bishop, and van Zelst 1981; Bishop, Sayre, and van Zelst 1985) also began to appear during the latter part of the Zoned

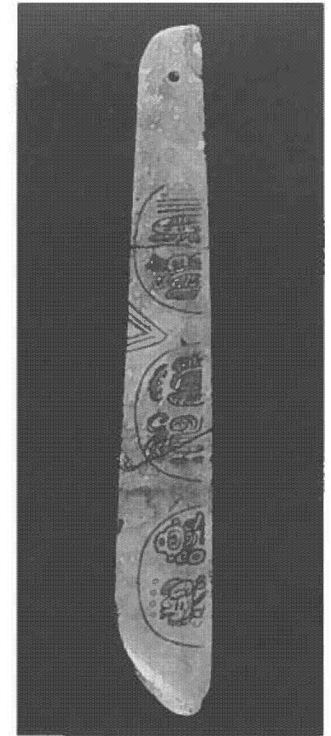


Fig. 2 Rosales Zoned Engraved effigy figure (fish); 300 B.C.-A.D. 300. Collection of Jan and Frederick R. Mayer.



Fig. 3 Jadeite pendant (300 B.C.-A.D. 500). Collection of Jan and Frederick R. Mayer.

Fig. 4 Jadeite pendant with Maya style glyphs, ca. A.D. 600. Collection of Instituto Nacional de Seguros, Costa Rica.



Bichrome Period, in conjunction with a great number of locally produced greenstone artifacts. Cultural-lithic nomenclature is very confusing: not all jade is green, and not all greenstones are jade; *jade artifact* is a term traditionally applied, however loosely and erroneously, to almost any pendant-shaped artifact recovered from mortuary contexts, where all such artifacts, including the well-known Olmec(oid) heirloom from Tibas (Snarskis 1984: 219), have been found. Parsons (n. d.) has recently challenged Snarskis' interpretation that the Tibas clamshell shows Izapan influences, and most of the Olmec, Mayan, and Costa Rican specialists at the recent Denver Jade Conference (1987) seemed to concur with Parsons' assessment.

Analyses of Costa Rican jade artifacts have facilitated the definition of two categories of greenstone artifacts: (a) Low Intensity and (b) High Intensity. There is a direct correlation between softer stone and poorer quality carving (Low Intensity) and better quality stone and finer carving (High Intensity). High Intensity specimens account for about 15 percent of the known corpus of greenstone artifacts, and Low Intensity the rest. A wide range of High Intensity greenstone forms are also found in the Central Valley and on the Atlantic watershed; this more strongly suggests trade or

exchange of these objects, rather than shared knowledge and technology, because the raw materials required for High Intensity production are geologically unknown from the Atlantic coast. The social implications (if any) of the High Intensity/Low Intensity distinction are not presently known, and the interpretive value of the distinction will depend on obtaining solid contextual data.

In the only contextual setting with large quantities of greenstone pendants, the Las Guacas cemetery excavated by Hartman (1907), the vast majority of objects are of the Low Intensity category. Most museum and private collections are, on the other hand, heavily biased toward High Intensity objects, with a resulting misimpression about the overall quality of greenstone objects, the general availability of high quality raw material, and the technical expertise of the artisans.

Jades with Mayan Glyphs (Fig. 4). Most of these artifacts have reportedly come from the area near Bagaces in the southern sector (Balsler 1974, 1980); none are from controlled excavations. At the Denver Jade Conference, Reents-Budet and Fields (n.d.) reviewed a large percentage of the known corpus of these artifacts. They concluded that (a) most of them dated to the Maya Early Classic Period (compatible with the Costa Rican Late Zoned Bichrome Period), and that (b) the manner in which the celts were sectioned indicates that the persons cutting them were unfamiliar with the glyphic system. Nonetheless, status-conscious Costa Ricans may have experienced social self-aggrandizement by possessing these fragments. Interestingly, Reents-Budet and Field (n.d.) reported that more such celts are known from Costa Rican than are known from the Maya area.

Mace Heads (Fig. 5). Another class of artifacts that has significance for analyzing elite behavior are "mace heads." Previously referred to as "war clubs" by many students of Costa Rican prehistory, analysis by de la Cruz (n.d., 1988) supports the contention that they are symbols of rank and status, and contain elements of symbolic communication. Again, all known samples of mace heads are said to be from mortuary contexts and very few are from controlled excavations.

Carved Stone. Carved stone appears in the northern sector in the form of large stone columns on islands in Lake Nicaragua (Haberland 1966, 1986; Bruhns 1982; Baker and Smith n.d.). There are extensive domestic remains on the islands as well as the statuary locations, and most of the ceramics seem to be more closely related to the Chontales area of the eastern shore of Lake Nicaragua than to the Greater Nicoya ceramics of the Isthmus of Rivas.

Some of these columns share forms and motifs with the much smaller jade axe-god pendants found in the southern sector. Similar but smaller statues occur around the Bay of Culebra (primarily in the area around the site of Nacascolo) in the southern sector. Smaller carved stone objects also



Fig. 5 Stone mace heads, A.D. 1-500. Collection of Jan and Frederick R. Mayer.

appear in mortuary contexts during the latter part of the Zoned Bichrome Period, in the form of three-legged and four-legged *metates* or "ceremonial stools." Ceramic figures, which are usually female, are often shown seated on such "stools," many of which have symbolism similar to the Mayan mat symbol.

In some cases mace heads, greenstone pendants, and carved stone *metates* all are found together, while in others only two of the three components are present in a funerary complex (de la Cruz 1988) that occurs both on the Pacific coast and in the Central Highlands. The objects in this assemblage often share the same iconography, indicating control of the symbolism appearing in the different media. As de la Cruz (1988: 125) noted, jaguar, bat, monkey, horned owl, bird, human, and other forms occurring in mace heads also occur on painted ceramics and in jade; most also occur in incised and modeled ceramics.

Early Polychrome Period (A.D. 500-800)

Chronological Framework. There are differences between the northern and southern sectors in the chronological framework for this period. In the northern sector, the final phase of the Zoned Bichrome Period (A.D. 300-500) was considered by Healy (1980: 306) to be the beginning of the Early Polychrome Period (around A.D. 300/400). This chronological difference may have as yet unknown significant interpretive implications, since it

correlates with the presence and absence of jade and of specific ceramic types in the two sectors, as well as important settlement pattern differences.

Community Patterns. This is the least-known of the Greater Nicoya temporal periods in both the northern and southern sectors. No single component sites have been excavated.

Mortuary Patterns. At least some cemeteries are now within the village proper. At the Vidor site on the southern side of the Bay of Culebra, excavated burials represented complete or partial remains of 192 individuals. Of these individuals, 159 (83 percent) were characterized by Vazquez and Weaver (1980) as being less than 14 years of age at the time of death; only 30 percent of the sample could be sexed, and both males and females were represented. Despite the quantity of human remains, chronological placement is in some cases speculative because of general lack of associated artifacts. In contrast, at Nacascolo, on the north side of the Bay of Culebra, the UCLA-MNCR project excavated an adult cemetery on the beach that was spatially distinct from any domestic areas, and many tombs had numerous polychrome vessels. The few Early Polychrome remains found at La Ceiba, in the Tempisque Valley (Guerrero and Blanco n.d.), also had associated ceramics.

Diagnostic Classes of Artifacts

Data on diagnostic classes of artifacts from this period come almost exclusively from alleged mortuary contexts, and very few samples from specialized classes of artifacts such as ceramic effigy heads and standing female Galo Polychrome figurines have been recovered from controlled contexts.

There is a scarcity of material from controlled excavations and no single component Early Polychrome Period sites have been excavated. The effigy heads and female figures, both known exclusively from acontextual collections, suggest either a long-functioning fake factory or a very tightly regulated mortuary tradition. As in the preceding period, the decorated ceramics appear to have been produced by part-time craftworkers.

Effigy Heads (Fig. 6). This is a class of artifacts known only from purported mortuary contexts; to the best of my knowledge, no life-size examples have ever been recovered from a controlled excavation. Leibsohn (n.d.; 1988) has traced the parallel evolution of Pacific and Atlantic coastal traditions from more realistic/individualistic to more abstract representations. In the realistic tradition (Early Polychrome Period, A.D. 500–800) deceased individuals are frequently portrayed, while the abstract forms (Middle Polychrome Period, A.D. 800–1530) are thought to portray deities, perhaps Tlaloc-like derivatives.

Female Figurines (Fig. 7). These figures also are little known, if at all,



Fig. 6 Ceramic effigy head, Galo Polychrome, A.D. 500–800. Collection of Jan and Frederick R. Mayer.

from controlled contexts and are also presumably mortuary in nature. As with the Early Polychrome Period effigy heads, they are assumed to represent real persons, as each of the known examples is different; some are holding infants.

Maya Slate-Back Mirrors. A limited number of these artifacts have been found in southern Greater Nicoya (Stone and Balsler 1965), some with Mayan glyphic inscriptions on the back.

Jade Plaques with Maya Glyphs. This class of artifacts, already discussed under the Late Zoned Bichrome section, continue to be found during the Early Polychrome Period, but again only in apparent mortuary contexts.

Ulúa Marble Vases. A fragment of one Ulúa marble vase was found in excavations at the Vidor site but was appropriated and hidden by an enterprising *ardilla*. A number of whole vessels have reportedly been found in northwestern Costa Rica, mostly around the Bay of Culebra.

Galo/Ulúa Polychrome (Fig. 8). This class of vessels appeared to resemble Ulúa Valley ceramics so closely in both form and decoration that it had been thought that some (if not all) were either imported from Honduras

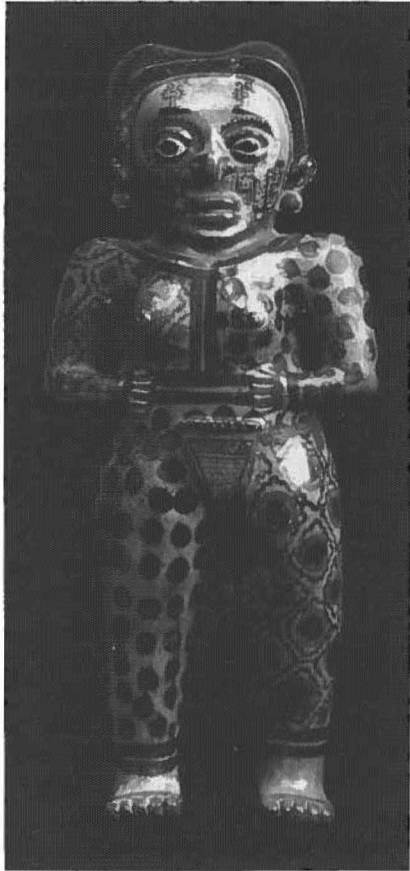


Fig. 7 Female figurine, Galo Polychrome, A.D. 500-800. Collection of Jan and Frederick R. Mayer.

or made in Costa Rica by (a) foreign artisans or (b) artisans specifically trained in the Honduran stylistic tradition. Neutron activation analysis has shown that none of the Galo samples tested thus far can be attributed to a source outside of Greater Nicoya; the technique of surface treatment also is distinctly local. Ideas for forms and symbols were imitated, but we are uncertain about the process of information transfer. Galo is found in both domestic and mortuary contexts, albeit infrequently.

Potosi Appliqué (Fig. 9). This distinctive class of ceramics has both northern and southern varieties and has been found in both domestic and mortuary contexts. The largest concentration was reported by Schimdt (1966) from El Respiradero on Ometepe Island, where a dense concentration of this ceramic, and none other, was found near a fumarolic vent. At the Vidor site on the Bay of Culebra a large number of fragments were also found clustered in one location. These vessels are generally interpreted as ceremonial incense burners.



Fig. 8 Galo Polychrome vase, A.D. 500-800. Collection of Jan and Frederick R. Mayer.

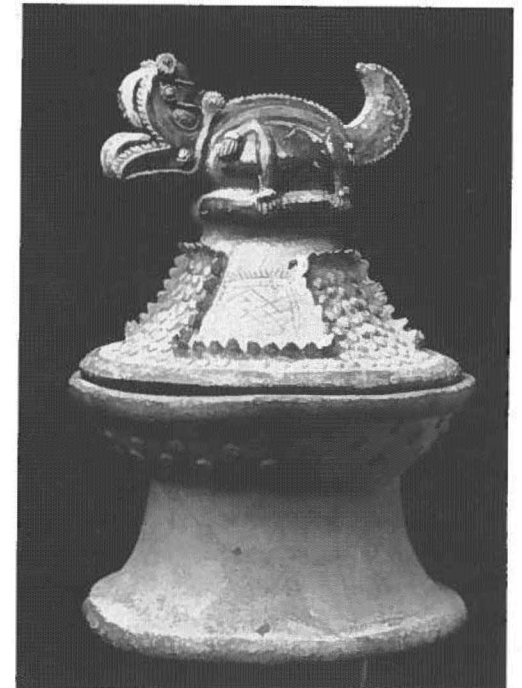


Fig. 9 Potosi Appliqué *incensario*, A.D. 500-1000. Collection of Jan and Frederick R. Mayer.

Community Patterning. Settlement density has shifted to the coast in the southern sector, and shell middens (many with stratigraphically definable living surfaces, and some loosely arranged around amorphous "plazas") become the main features of the archaeological landscape; there was an increased emphasis on marine resources in the southern sector, and in the northern sector occupation continues to focus on the lakeshores.

Mortuary Behavior. Some individuals were interred within the habitation areas (for example, at La Guinea), while at La Ceiba in the Tempisque River Valley, archaeologists from the National Museum of Costa Rica excavated an extensive cemetery area adjacent to, but apart from, the domestic locus. The vast majority of the 104 individuals found in eighty burials at La Ceiba dated to this period. More than half of the seventy-eight individuals for whom determinations could be made were between the ages of twenty-one and thirty-five at the time of death; only a single individual under the age of twelve was identified. Sex was somewhat difficult to determine, but nine females and eight males were identified. An additional twenty-three women and seventeen men were classified on the basis of both osteological and associated artifactual data (grinding stones occurring with women and arrow and spear points with men; these correlations were also observed in the osteologically "certain" sample of seventeen individuals).

Multiple Burials. Multiple burials (a central articulated figure surrounded by disarticulated remains of other individuals and mortuary offerings; Fig. 10) have been found at Nacascolo (Wallace and Accola 1980), El Moral de San Blas (Stone 1977), La Guinea (Baudex 1967), La Ceiba (Guerrero and Blanco n.d.), on Ometepe Island (Haberland 1992), and at other sites. The "packing" of post-cranial elements in these interments was interpreted at Nacascolo as a form of "retainer" burial (Wallace and Accola 1980). At La Ceiba, Guerrero and Blanco (n.d.) interpreted similar interments as repeated use of the same burial area by a family or clan, with the primary articulated individual being the most recent interment and the other osseous materials representing previous burials. The social interpretation to be derived from the respective points of view is quite different, and therefore the validity of the observations of the archaeological context are quite significant. None of the other multiple burials (or "combined" burials as Guerrero and Blanco [n. d.] would call them) were recorded in sufficient detail to attempt to interpret them in this manner, nor is it by any means certain that all of the similarly appearing burials, multiple and/or combined, are functionally the same.

Although the Nacascolo burial (Wallace and Accola 1980) was accompanied almost exclusively by polychrome vessels, most of the burials at La

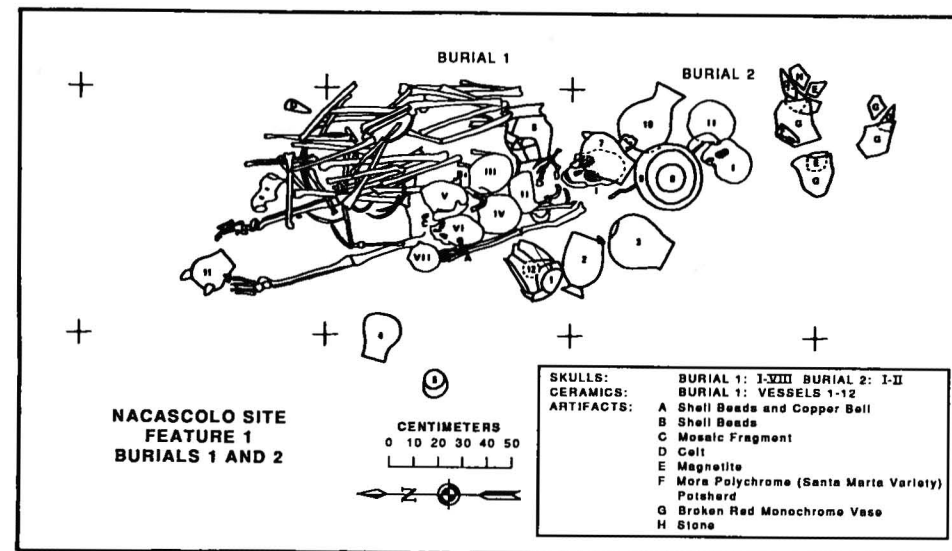


Fig. 10 Multiple interment, Nacascolo, ca. A.D. 1200-1350 (redrawn courtesy of Ricardo Vázquez and David Weaver).

Ceiba contained a high percentage (ca. 22 percent) of monochrome vessels in addition to polychrome ceramics. Some lithic tools, especially chipped stone axes, were also present.

Haberland (1992) reported fifty-nine primary burials from this period from the Los Angeles cemetery on Ometepe Island. He noted a high percentage of cranial deformation and one case of dental mutilation (also present in one skeleton from Nacascolo). He also reported that associated artifacts were very rare in these graves, and that some of the interments probably dated to the Early Polychrome Period. It is also worth noting that he reported urn burials of infants/newborns similar (except that the Ometepe occurrences were in *zapatero*-shaped forms) to those at Vidor; in neither case were there associated grave goods. It would seem that these urns date somewhat later at Los Angeles than at Vidor, but with the long-term use of the former cemetery, some temporal overlap is certainly possible.

Diagnostic Classes of Artifacts

White-slipped ceramics became a prominent part of the ceramic assemblage. Neutron activation analyses (Bishop, Lange, and Lange 1988) have demonstrated that the white-slipped ceramics found in the southern sector were manufactured in the northern sector. Some types, such as Pataky



Fig. 11 Pataky Polychrome tripod jaguar, A.D. 1000-1350. Collection of Jan and Frederick R. Mayer.

Polychrome (Fig. 11), appear to be almost exclusively mortuary, while most varieties of Papagayo Polychrome occur with great frequency in both domestic and mortuary contexts.

Obsidian blades from El Salvador and Guatemala have been identified from the Isthmus of Rivas, in the northern sector; similar blades, as well as one blade fragment from Honduras, have also been recovered from Vidor and other sites in the southern sector, although in smaller quantities. Cores and other evidence of blade manufacture have been found only in the northern sector.

Plumbate. A very limited number of Tohil Plumbate vessels and sherds have been found in Greater Nicoya.

Summary

Throughout Greater Nicoya, there are a number of significant shifts that coincide with the beginning of the Middle Polychrome Period: (a) although both tan- and orangish-slipped ceramics continued to be made, there was a distinct shift to a predominance of white-slipped ceramics; (b) jade is no longer part of the cultural assemblage; (c) humanistic representations in art become more abstract and less individualistic; (d) obsidian becomes a limited part of the lithic assemblage; (e) most ceramic types and varieties are



Fig. 12 Jicote Polychrome human portrait head, ca. A.D. 1350.

subregionally distributed and have a high degree of artistic consistency in form and decoration, and (f) most ceramic types and varieties are found both in domestic (usually as sherds) and mortuary (usually as whole vessels or as large vessel fragments) contexts.

During this period, polychrome ceramics from Greater Nicoya occur with increased frequency in the Central Valley and on the Atlantic watershed. Relatively fewer tan-slipped ceramics found their way from the southern sector into these adjacent regions; white-slipped ceramics from the northern sector occur with much less frequency. There has been some debate over the mechanism for distribution of the white-slipped ceramics outside Greater Nicoya. Some (Snarskis and Blanco 1978) favor a "trade" explanation, while I (1984b) have suggested looking at a more restricted exchange model between social elites, extended families, or clans. Gradually accumulating data from the Central Valley and Central Pacific watershed suggest a more extensive presence of Greater Nicoya polychromes than previously known, but the overall quantities are still relatively small, and still appear to be non-randomly distributed.

Part-time craftworkers appear again to have been responsible for artistic production. A basic shift in socioreligious patterning and behavior is reflected in the transition from individualistic/realistic portrayals to more highly abstracted/standardized renditions of human portrait heads (Fig. 12).

Frederick W. Lange

Late Polychrome Period (A.D. 1350-1530)

Community Patterning. There was continuity from preceding patterns. Subsistence continued to be mixed and marine-oriented in the southern sector, while farming, orchards, and freshwater fishing are reported for the northern sector. Bone collagen analysis from the southern sector, from both the Bay of Culebra and the Arenal area, has shown that maize may not have contributed more than 15 percent to 20 percent of the diet.

Mortuary Patterning. In the southern sector, there appears to be a decline in the use of formal cemeteries, and both single and multiple interments were found in household middens at Las Marias on the Bay of Salinas (Lange 1971). Some were without artifacts, while two others had a single vessel associated. On Ometepe Island, Haberland (1992) describes shoe-shaped urn burials as characteristic of this period.

Diagnostic Classes of Artifacts

The production of white-slipped portrait-head vessels continued in the northern sector. In the southern sector, a local type (Jicote Polychrome) was manufactured in the Tempisque River Valley. Again, stylistic inference was supported by instrumental analysis. For the sake of discussion, there have been distinctions made between the white-slipped northern vessels and their southern "copies." Given the stylistically formulated and chemically supported conclusions regarding the locus of production of the white-slipped ceramics, it is interesting to note that not all northern types were "copied," and in some cases more of the white-slipped varieties have been found in the south than in the north. Canouts and Guerrero (1988) have begun to analyze these distinctions in more detail. There also are many examples of similarities between incised and polychrome ceramics that require further detailed study.

"Luna Ware." This polychrome type (Fig. 13) is distinctive of the northern sector and is found infrequently in the southern sector. It is recovered mostly from mortuary contexts, and stylistic speculation has related it to sources as distantly separated as the Mixteca-Puebla and the Amazon. This type appears to be without local antecedents; whoever "introduced" this new ceramic style does not appear to have altered the social structure.

Copper Artifacts. A small number of copper artifacts have been found in Greater Nicoya, mostly in the southern sector and usually in the form of ear spoons. No evidence of manufacture has been reported.

Gold Artifacts. Day (1988) has recently reviewed the evidence for gold in Greater Nicoya; she notes that very little has been found archaeologically and that certain motifs on some white-slipped and Jicote ceramics may have been substituted for the real thing. A small gold frog and a mold for a similar pendant (Fig. 14) were found at two different sites near the Bay of



Fig. 13 Luna Polychrome tripod bowl, A.D. 1350-1520. Collection of Jan and Frederick R. Mayer.

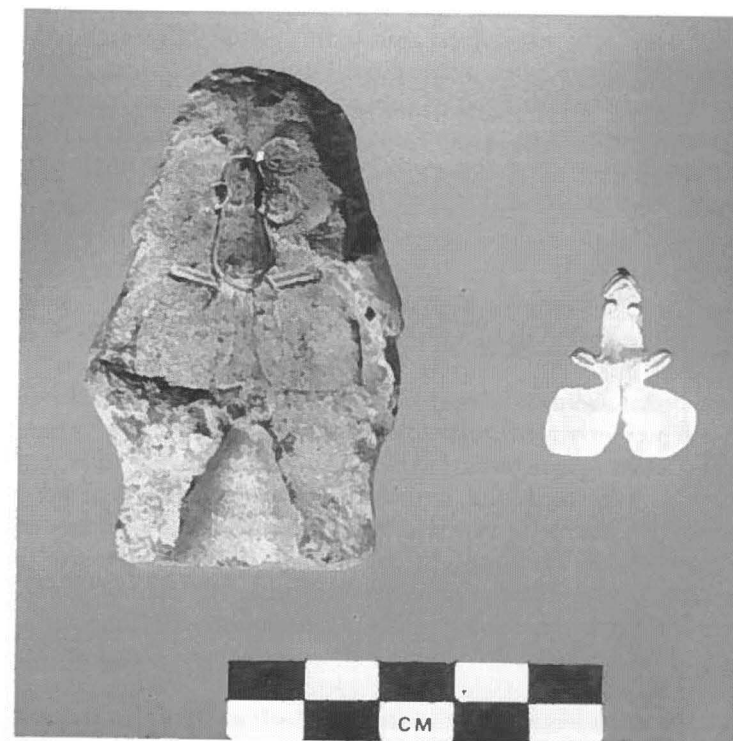


Fig. 14 Gold frog and lost-wax gold mold, A.D. 1350-1520. Photograph by the Museo Nacional de Costa Rica.

Culebra, indicating that some gold objects were locally made (Lange and Accola 1979). Gold ore was locally available near Arenal and Bagaces in the southern sector or could have been brought in from either Nueva Segovia in Nicaragua or the Panamanian border area of Costa Rica.

At the end of the Late Polychrome Period, Native American development was truncated, and the ethnohistoric period was ushered in by the arrival of the Spanish. With the exception of Leon Viejo in Nicaragua, no Contact Period sites have been excavated in either the southern or the northern sectors. Historical documentation is generally scarce, although it is stronger for the north than the south; usually it is lacking in the locational specificity needed to locate Contact Period sites. For example, from 1977-78, we surveyed systematically, and without success, to define the placement of Bagaces Viejo in Guanacaste Province, Costa Rica.

Summary

The trend toward secularization of society seems to have continued, as there are very few exclusively mortuary goods. Ceramic production and metalwork were once again done by part-time artisans. The large populations recorded for Pacific Nicaragua in the historical documents are not thus far reflected in the archaeological data base. There seem to be more clearly defined distinctions between the northern and southern sectors in settlement, subsistence, and artifact assemblages.

CONCLUSIONS

Architectural and Settlement Patterns

From a broad perspective, architectural and settlement data from Greater Nicoya are presently inadequate for definitively assessing wealth, status, or hierarchy. The only conclusions that can be drawn are that (a) any presence of internal organization and differentiation between civic and domestic architecture is a distinct exception and is known only in very limited cases in the northern sector, and (b) the only four systematic site surveys conducted in Greater Nicoya (Lange 1971; Lange, Accola, and Ryder 1980) indicate that within one 200-km² area (the Bay of Culebra), and one 98-km² area (Bay of Salinas), and two of approximately 50-km² each (the Valleys of Nosara and Guacamaya) identified no sites with a clear-cut "central place" or hierarchical status.

The major shifts in settlement pattern occurred around A.D. 500, with a move from the highlands to the coast in the southern sector, and again around A.D. 1200 with a shift from the southern sector to the lakeshores of Pacific Nicaragua. Referring back to the figures Sheets (this volume)

presented on the length of periodicity in Greater Nicoya, the number of periods is somewhat misleading, because the regional sequence is based almost exclusively on changes in the decorated ceramic assemblage. If we examine other characteristics, such as settlement pattern, subsistence, and even the monochrome ceramic assemblage, the rate of change is much slower and there are but two, or at most three, periods.

Certain regions, such as the shores of lakes Nicaragua and Managua, the Bay of Salinas, the Bay of Culebra, and the Tempisque Valley appear to have had the largest concentrations of populations, a characteristic attributable to availability of fresh water and other basic resources; however, within these regions no site seems to have been dominant. Although I might quibble with the examples they picked, I would basically agree with Creamer and Haas (1985) that chiefdom-level development was very limited in Greater Nicoya; as we grope for evidence of social complexity, what appear to be chiefdoms may simply be the strongest of the tribal organizations.

Portable Artifact Distribution and Context

If we examine the distribution of different ceramic production areas and assemblages in terms of the presence or absence of specific ceramic types and varieties, the resulting patterns show relatively restricted areal extensions. Though there are some general characteristics that allow us to define the broader "Greater Nicoya Archaeological Subarea," at a lower level the pattern is one of small-scale fragmentation, of local "spheres." In Pacific Nicaragua, Sheets, Martínez, and I (Lange, Sheets, and Martínez 1986; Lange, Sheets, Martínez, and Abel-Vidor 1992) defined four lithic and four ceramic zones (which are not precisely coextensive) for the northern sector, and a similar number or more can be defined for the southern sector. These spheres can be viewed fundamentally as self-sufficient units.

The ethnohistoric data for both sectors (Abel-Vidor 1980) also strongly suggest that as the Spanish passed from one village to another, they also passed from one zone of control to another; there does not appear to have been any overarching political or religious authority. In the southern sector, even minimal population densities appear to have been relatively scarce, and the Spaniards marched almost uninterrupted from Nicoya to the lakes region of the northern sector.

There are but a few classes of artifacts (the jade-mace-head/ceremonial-stool mortuary complex in the Late Zoned Bichrome Period; effigy heads, alligator *incensarios* in the early Middle Polychrome Period, and Pataky Polychrome in the Late Middle Polychrome Period), and no class of artifacts (with the possible exception of small gold pendants for the Late Polychrome Period) that do not have a strong domestic, as well as mortuary, presence.

Artistic expression, technical expertise, and skillful utilization of a multiplicity of media seem to have peaked during the latter part of the Zoned Bichrome Period and either leveled out or declined thereafter. I have discussed the absence of strong integrative forces in Greater Nicoya society elsewhere and will here only summarize my findings: lack of widespread hydraulic resources, lack of influence from more complex external cultural sources to provide imitative or forced models, lack of large fertile areas to stimulate population concentrations, and lack of high density concentrations of desired raw materials. To the extent that external contacts, primarily Mesoamerican, are represented in the decorative iconography, the decorative symbols are filtered by time and distance and do not reflect forces that fueled social change in the direction of complexity.

There is little doubt that, in terms of relative access to available resources, Greater Nicoya communities were ranked, however slightly, as were the people who inhabited them. Individual or family importance was, however, probably based more on age, tradition, and other subtle variables, rather than any use of coercion or dominant control of resources. There is no evidence of warfare (iconographically, artifactually, or skeletally) or any other structured form of competition.

Clays of adequate quality for ceramic manufacture were widely available; gold was available, albeit in small quantities, in both sectors; and greenstone sources were more plentiful in the southern sector. The northern sector has extensive flint/jasper sources on the east side of Lake Nicaragua, and there are extensive quarry sites; however, neither the greenstone of the south nor the flint sources of the north seem to have formed the basis for any regional exchange system or dynamic local development near the quarry sites.

It is obviously critical to determine how much of the jadeite found in Costa Rica was in fact obtained from the Motagua Valley. The easiest geological explanation (the single Motagua source) presents significant challenges in cultural explanation, while the Costa Rican jade source possibly will require considerable additional field survey.

Quantification and Status Production

As noted before, people in Greater Nicoya were obviously ranked, however casually. Differential inclusion of mortuary goods, to say nothing of formal versus informal interment, indicates consideration and recognition of personal differences. However, the consistency of artistic media, techniques, and symbolism shows a communality of knowledge and use that is reinforced by the occurrence of almost all categories of artifacts in both domestic and mortuary contexts.

The simple presence of grave goods does not automatically imply marked status differentiation (nor does the absence of grave goods imply a lack of

differentiation). The fact that major differences in mortuary artifact presence or absence are observed among different cemeteries rather than within one cemetery suggests that principal distinctions were on a community-by-community or subregional basis. We do not have sufficient data to be certain. Chronological control is still sufficiently loose that we are also probably seeing both temporal and geographical variability.

The sum total of effigy-head vessels, jade pendants, stone sculptures, gold pendants, and other exotic artifacts are but a small percentage of the total artifact assemblage for Greater Nicoya over 2,500 years. At only two times in this long sequence did a small percentage of the artistic products of Greater Nicoya find a distribution outside that area: (a) to some extent or to a limited extent in the Late Zoned Bichrome Period, and (b) more distinctly in the Middle Polychrome Period. As noted, the mechanisms (trade, elite exchange, etc.) for this expansion of distribution have yet to be explained.

It was feasible for the prehistoric population of Greater Nicoya to produce high-quality aesthetic objects as part-time craftworkers. The high quality cultural materials were more likely made for the self-satisfaction and service of the artisan and local consumer than to satisfy any internally or externally imposed elite demand. Ranking, such as existed, was "passive" and dependent on kinship, rather than centralized ties.

APPENDIX A

TEMPORAL FRAMEWORK FOR GREATER NICOYA

- Formative Period (2000–1000 B.C.)
- Dinarte Phase (Ometepe Island)
- Early Zoned Bichrome Period (1000–300 B.C.)
- Angeles Phase (Ometepe Island) (500–200 B.C.)
- Loma B Phase (Bay of Salinas)
- Middle Zoned Bichrome Period (300 B.C.–300 A.D.)
- Sinacapa Phase (Ometepe Island) (200 B.C.–1 A.D.)
- San Jorge Phase (Isthmus of Rivas) (400 B.C.–1 A.D.)
- Aviles Phase (Isthmus of Rivas) (1–300 A.D.)
- Chombo Phase (Santa Elena Peninsula)
- Orso Phase (Bay of Culebra)
- Catalina Phase (Tempisque Valley)
- Monte Fresco Phase (Tamarindo, Matapalo, Nosara)
- Salitre Phase (Bay of Salinas)
- Late Zoned Bichrome Period (300–500 A.D.)
- Manantiel Phase (Ometepe Island) (1–500 A.D.)
- San Roque Phase (Isthmus of Rivas) (300–500 A.D.)
- (first phase of Early Polychrome Period in Pacific Nicaragua)
- Murcielagos Phase (Santa Elena Peninsula)
- Mata de Uva Phase (Bay of Culebra)
- Ciruelas Phase (Tempisque Valley)
- also Baudez' Linear Decorated Period (1967)
- Las Minas Phase (Tamarindo, Matapalo, Nosara)
- Las Marias Phase (Bay of Salinas)
- Early Polychrome Period (500–800 A.D.)
- San Roque Phase (Ometepe Island) (500–950 A.D.)
- Palos Negros Phase (Isthmus of Rivas)
- Santa Elena Phase (Santa Elena Peninsula)
- Culebra Phase (Bay of Culebra)
- San Bosco Phase (Tempisque Valley)
- Matapalo Phase (Tamarindo, Matapalo, Nosara)
- El Jobo Phase (Bay of Salinas)
- Early Middle Polychrome Period (800–1000 A.D.)
- Apompua Phase (Ometepe Island)
- Doscientos Phase (Santa Elena Peninsula)
- Panama Phase (Bay of Culebra)
- Palo Blanco A Phase (Tempisque Valley)
- Tamarindo Phase (Tamarindo, Matapalo, Nosara)
- Soley Phase (Bay of Salinas)

- Middle Middle Polychrome Period (1000–1200 A.D.)
- Gato Phase (Ometepe Island)
- La Virgen Phase (Isthmus of Rivas)
- Doscientos Phase (Santa Elena Peninsula)
- Monte del Barco Phase (Bay of Culebra)
- Palo Blanco B Phase (Tempisque Valley)
- Tamarindo Phase (Tamarindo, Matapalo, Nosara)
- Alan Phase (Bay of Salinas)
- Late Middle Polychrome Period (1200–1350 A.D.)
- La Paloma Phase (Ometepe Island) (1100–1300 A.D.)
- Las Lajas Phase (Isthmus of Rivas)
- La Cruz A Phase (Santa Elena Peninsula)
- Iguanita Phase (Bay of Culebra)
- Bebedero Phase (Tempisque Valley)
- Morice Phase (Bay of Salinas)
- Late Polychrome Period (1350–1520 A.D.)
- San Lazaro Phase (Ometepe Island) (1300–1400 A.D.)
- Santa Ana Phase (Ometepe Island) (1400–1550 A.D.)
- Alta Gracia Phase (Isthmus of Rivas)
- La Cruz B Phase (Santa Elena Peninsula)
- Ruiz Phase (Bay of Culebra)
- Bebedero B Phase (Tempisque Valley)
- Salinas Phase (Bay of Salinas)

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