

**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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*Wealth and Hierarchy in the Archaeology
of Eastern and Central Costa Rica*

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INTRODUCTION

THE STUDY OF WEALTH AND HIERARCHY in Pre-Columbian cultures requires a specific framework of analysis, in which the variables to be observed are clearly defined. Such studies must necessarily be comparative, as wealth and hierarchy in human societies are always relative. Archaeological interpretations involve the drawing of inferences from observable remains, such as artifacts, features, and settlement patterns. These inferences frequently have to do with social or political organization, intangible concepts that cannot be directly investigated.

In eastern and central Costa Rica, concrete evidence suggestive of wealth and hierarchy appeared a little more than 2,000 years ago, in contexts indicative of non-egalitarian sociopolitical organization. How should we characterize these societies? Are concepts like chiefdom universally applicable, or are those of Mexico, say, different from those in prehistoric Costa Rica?

Many authors have analyzed the facets of social organization that are present in chiefdoms or rank societies. A question that merits discussion here is whether or not the two terms can be considered synonyms. If not, can we establish and recognize the difference between the two?

In this chapter, I have abstracted some of the attributes used to define rank/chiefdom (R/C) societies, mostly those used by Fried (1967). Those chosen have, to my mind, the best chance of being recognized in Costa Rican archaeological contexts, especially those involving objects. They include:

1. Environment: Most R/C societies occupy rich, varied, or otherwise desirable areas, while egalitarian societies tend to occupy marginal lands.
2. Demography: R/C societies have a much higher rate of population growth and a higher population density than egalitarian societies.

3. Subsistence economy: R/C societies have a more certain, concentrated, usually domesticated food supply. Redistribution of goods is key in maintaining the social order. Individuals carry out different tasks according to their age and sex, or according to the society's special demands (craft specialization). Rank-specific or sumptuary artifacts occur.

4. Settlement patterns: Sedentism predominates. Among R/C societies, a given area has more, larger, and more densely concentrated sites than is the case for egalitarian societies.

5. External relations: Warfare, usually stimulated by competition for resources, is common. Middle- and long-distance exchange may occur.

A structured kinship framework with emphasis on descent relationships is very important in R/C societies, but is more difficult to observe in archaeological sites. It is important to note, as Spencer (1987: 377-378) does, that the development of a cultural matrix supportive of the appearance of wealth and hierarchy is frequently due to multiple factors (not always the same ones) that must blend to produce R/C-type adaptation.

ARCHAEOLOGICAL EVIDENCE FROM EASTERN AND CENTRAL COSTA RICA

1000-300 B.C.

The earliest radiocarbon-dated pottery-making culture, the La Montana Phase in the central Atlantic watershed, was identified in 1977 (Snarskis n.d.; 1984a). Of a sample of 7,000 sherds studied by the author 99 percent were monochrome, showing many modes of decoration and vessel form unique in the Costa Rica ceramic sequence. Especially notable was the predominance of *tecomate*-like forms, and the presence of large, perfectly flat, raised-rim griddles. The latter are known as *budares* in northern South America and are frequently associated with bitter manioc preparation.

Stone artifacts include a distinctive type of flat-faced or beveled *mano*, "cleavers" made on volcanic cobble spalls, and a small amount of chipped tools. No *metates* were found.

Although a 13 by 22 m area was carefully excavated by trowel, no hearths, postholes, or other features were found, possibly because the site was subjected to flooding in prehistoric times. Stone tools and numerous pottery sherds with carbon deposits were often found lying flat in a horizontal plane, suggestive of living surfaces. A small tripod bowl of volcanic rock and a polished slate celt were found together in a possible cache or burial. No bone was preserved, and carbonized avocado pits and unspecified palm kernels (Richard Ford and C. Earle Smith, Jr., personal communications, 1978, 1985) are the only recognized flora to date. Five

radiocarbon dates range from 1500 to 300 B.C., clustering around 600 B.C. (Snarskis 1984a, 1984b).

Later in 1977, the Chaparron Complex, a very well-made pottery assemblage typified by the *tecomate* form and shiny red slip zoned by broad incised lines, was first recognized in the northeastern lowlands of Costa Rica. Fewer than 1,000 sherds have been collected, and there are no radiocarbon dates, although Chaparron ceramics are much like others of the Mesoamerican Middle Pre-Classic Period and also share many modes of form and decoration with the La Montana complex; it is thought that they were basically contemporary.

After the initial definition and dating of La Montana and Chaparron, small quantities of similar sherds began to be recognized at several other multi-component sites in the central Atlantic watershed, the Central Valley or highlands (Barba complex; Snarskis 1981), Guanacaste (Loma B complex; Lange 1980), and the Arenal region (Tronadora complex; Hoopes 1984). (In Panama, sites with La Mula/Sarigua pottery may be similar.)

A very well-made pottery showing considerable vessel size is a better indicator of sedentism than agriculture per se (it is virtually certain that the ceramics just discussed are not the earliest in Costa Rica), but the paucity of direct and indirect evidence for cultigens is notable. Nevertheless, I believe that the period 100-300 B.C. was characterized by small, highly dispersed villages dependent on swidden agriculture, perhaps with root crops as a staple. I say this because of the markedly different *mano* and ceramic vessel forms, but the fact is that not enough evidence is in hand, and such a generalization is highly tentative.

Let us compare the scant data for this period with the diagnostics for R/C societies.

1. Environment: The Costa Rican landscape is so uniformly receptive to human occupation, when compared to other areas of the Americas, that little of significance can be said (although see Findlow, Snarskis, and Martin 1979).

2. Demography: Apparently population growth was slow, and density was relatively low.

3. Subsistence economy: Evidence is lacking or ambiguous as regards agriculture, task specialization, and redistribution. Rank-specific or sumptuary artifacts are not yet known.

4. Settlement patterns: Form and size of houses and villages are unknown; sites are highly dispersed and scarce.

5. External relations: Unknown.

Based on present evidence, it must be concluded that the cultures present in eastern and central Costa Rica between 1000 and 300 B.C. were not R/C societies.

300 B.C.–A.D. 500

On ceramic evidence, there seems to have been a transitional period ca. 500–200 B.C. Stratigraphic data do not exist, however, and this chapter uses 300 B.C. as an arbitrary starting point for the next phase of cultural evolution in Costa Rica. This was also the earliest date proposed by the first scientific stratigraphic excavators in the country (Claude Baudez and Michael Coe, in the 1950s), and one adopted by succeeding investigators for many years after.

The several centuries around the time of Christ represent a significant threshold in Costa Rican prehistory. During the El Bosque (central Atlantic watershed; Snarskis n.d., 1984a) and Pavas (Central Highlands; Aguilar 1975, 1976) Phases, there was a dramatic increase in the number and size of sites (as evidenced by artifact scatters), and therefore of population. Many new elite-associated artifacts were found, such as elaborately sculpted ceremonial *metates*, symbolic mace heads, ceramic figurines, ocarinas and rattles, and an extraordinary lapidary corpus executed in jade or similar hard, greenstones (all called *jade* hereafter).

I have proposed a hypothetical model (Snarskis 1981, 1984a) to explain the expansion of population around the time of Christ in Costa Rica. The model suggests that population expansion was the result of a dynamic feedback relationship between (a) the evolution of improved and intensified maize agriculture (probably with better varieties), (b) the budding of new communities and increasing need to obtain and insure land tenure, (c) the ritualization of cyclical agricultural procedures, and (d) the administration of the redistribution of food products and other articles. Warrior, priest, and administrative (*cacique* or chiefly) classes evolved to handle these duties, resulting in a strongly ranked society and creating a market for luxury items that were at the same time badges of office. These badges included the ritual *metates* (apparently a major sculptural vehicle for religious symbolism); the mace heads, which may have been ritual digging stick weights as well as rank symbols; and carved jade pendants, many incorporating the form of a celt, or polished axe. Two things are significant here: ritual symbolism seems to have focused on aspects of agriculture, from the clearing of land (real celts were forest-clearing tools), to planting (possible digging-stick weights), fertility (the Maya hieroglyph for jade was similar to those for water and seed), and processing of food (the *metates*); and the tradition of jade carving in the Americas made its first appearance in the Olmec culture of Mesoamerica around 1000 B.C.

Therefore, I suggest that more intensive maize agriculture and/or better varieties of maize as well as a reverence for carved jade amulets were integral components in a mythical complex or politicoreligious world view that was propagated in the northern half of Costa Rica through an elite-

oriented trade or transfer network that included the heirs of the Gulf Coast Olmec cultural tradition around 600–400 B.C. In that cultural tradition, the symbolism of jade celts and avian effigies (which are precisely the elements combined in the majority of Costa Rican “axe-god” jade pendants) was linked to maize (Drucker 1952: 164; Joralemon 1976: 47–58). Recently, the first excavations of houses dating to A.D. 1–400 in the Atlantic lowlands revealed them to be rectangular, while bell-shaped storage pits of the same period, containing mostly carbonized maize, along with more than ten other kinds of flora, have been found in the Central Highlands (Snarskis 1983). Like the jade, these features clearly echo Mesoamerican cultural patterns of the Pre-Classic Period, although perhaps indigenous traditions of human adaptation to the tropical rain forest formed the real core, over which Mesoamerican mythology, between approximately 300 B.C. and A.D. 500, merely formed a veneer.

At the Severo Ledesma site in the eastern lowlands, the earliest structures known for the region were excavated in 1978–79 (Snarskis 1981, 1983). Guided by very slight mounds, we uncovered two rectangular foundations roughly 4 by 12 m defined by large cobbles standing on edge, with groups of cobbles on the interior. Each of these El Bosque structures had two cobbles with concavities along an interior wall; the concavities were smooth, but of different shapes, and function is uncertain; they are probably mortars. Possible hearths were observed outside the houses, as were several caches or burials. The latter contained numerous artifacts of pottery and stone, but no tomb edifice per se was found.

A large (25 by 15 m) rectangular complex of wall foundations, built of river cobbles, was also excavated at Severo Ledesma. Chocked holes up to 50 cm in diameter were observed where roof-supporting timbers had been along the perimeter and interior walls. There were three main rectangular sections, the center one containing many more cobbles; perhaps it was unroofed. Palm nuts, *mano* and *metate* fragments, and charcoal were scattered within the structure, but no definite hearths could be discerned. Underneath the structure, numerous caches and/or burials were discovered; some of the burials were defined by standing rows of cobbles, and one, in spite of having been partially disturbed by looters, contained twenty-seven pieces of grave furniture, including a jade necklace, the plate of a flying-panel *metate*, fancy ceramic tripods, ocarinas, rattles, roller stamps, and celts. No bones were preserved, but the quantity and quality of the grave goods, the 2-m depth, and the central placement in one of the three rectangular sections of the structure (another burial, less elaborate, was found in a similar location in the opposing section) all point to an obviously special interment (Fig. 1).

We also see that the smaller El Bosque Phase houses, given their roofed areas (roughly 40 m²), probably housed nuclear families; associated tombs



Fig. 1 A prestige burial 2 m beneath a large El Bosque Phase (100 B.C.-A.D. 400) rectangular house. The 27 pieces of grave furniture included elaborate ceramic tripod vessels, flutes, rattles, figurines, a jade disk bead necklace with larger central pendant (found in muddy center area, probably worn by the deceased—no bones were preserved), and a fragmented flying-panel *metate* of the style shown in the insert. All artifacts in Museo Nacional de Costa Rica, San Jose. Tomb photograph by the author; insert by Dirk Bakker, Founders' Society, Detroit Institute of Arts.

were simple affairs dug into the subsoil around the house, and there were no prestige burials or caches placed beneath the floor itself. Nevertheless, a well-defined sociopolitical/religious hierarchy is suggested by the much larger double structure with complex high-status tomb features and offerings both beneath and around it. There are about 100 m between each of these structures at Severo Ledesma, but they do not show a standard orientation; entrances in the smaller versions are not clear, nor do we know the size of the village to which they belong. Modern houses in the locality are spaced 50–300 m from each other, often reflecting extended family groupings.

It might be said that most “architecture” in prehistoric eastern Costa Rica is found underground. El Bosque Phase cemeteries are extensive, many covering five to twenty acres, the tombs often being fairly elaborate constructions of river cobbles. These cobbles, some of which weigh more



Fig. 2 The principal tomb uncovered during salvage excavations at the Talamanca de Tibas site (ca. A.D. 300). The body of a young adult lay on a bier made of three tripod *metates*, accompanied by two ceremonial mace heads of quartzite and a large jade “axe-god,” all with avian motifs. An Olmec-style jade clamshell lay face down on the other side of the bier and a multi-strand jade necklace of disk beads and three larger beads of different colors was found 50 cm to one side. Museo Nacional de Costa Rica, San Jose. Photograph by the author.

than 100 kg, were carried from river beds anywhere from 50 m to several kilometers distant. El Bosque tomb forms observed to date are 1 by 2 m rectangles of cobbles, ellipses, long corridors up to 12 m, or simply a scooped oval area in the subsoil, with no cobble edifice. Tombs in the larger cemeteries always have walls of cobbles and are usually long rectangles, often ordered neatly in ranks and files, with a space between groups of 15 to 30, if we can judge by one example at Severo Ledesma. There, every one of thirteen adjoining rectangular tombs included a jade pendant among other ceramic and stone grave goods; the pendants were usually found face up on the tomb floor, probably worn around the neck of the deceased. All the tombs in this carefully organized block had additional cobble-defined chambers at each end.

These tomb groups may correspond to clan, lineage, or other social units. Because we have not found a single bone or tooth (acid soil and heavy rainfall make preservation virtually non-existent), I cannot confidently

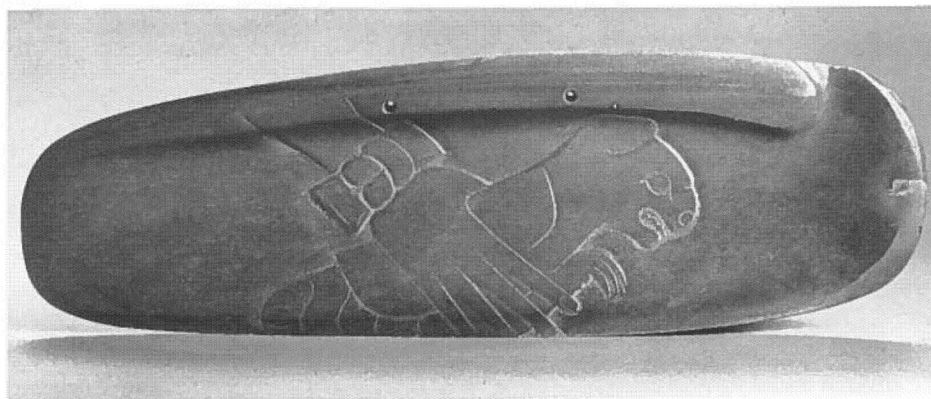


Fig. 3 The large (33 cm) jade clamshell found at Talamanca de Tibas has a complex low relief carving on the interior: a human hand with a bow on the wrist grasps a composite animal, part feline (snarling jaguar), part insect (moth or butterfly with wings folded down by the hand). All these motifs are known from La Venta Phase Olmec sites, and it is thought that the piece was an heirloom, evidence of long-distance trade with Mesoamerica in centuries around the time of Christ. Materials in Museo Nacional de Costa Rica, San Jose. Photograph by Dirk Bakker, Founders' Society, Detroit Institute of Arts.

say that all burials, no matter how humble, are accompanied by grave goods. However, this seems to be the case; ceramics are ubiquitous, often arranged in the typical El Bosque fashion of one pot inverted over the mouth of another, an arrangement probably indicating that they contained foodstuffs. Drug use is also indicated by other articles of this time, for instance pipes and nasal snuffers; they have been found only in special contexts as elite grave goods.

In late 1977 archaeologists under the auspices of the National Museum of Costa Rica excavated part of an elite cemetery in the San Jose suburb of Tibas, in the salvage effort. Among the Tibas graves that were scientifically excavated was an exceptional one containing three Atlantic style tripod *metates* on which the deceased was laid, a broken early Curridabat Phase ceramic vessel, two ceremonial mace heads, an exceptional 22-cm-long jade axe-god of typical Costa Rican style, and an Olmec jade clamshell 33 cm in length with a complex low-relief composition on its interior (Figs. 2, 3). An element-by-element analysis of the piece's design showing why it may be considered as Olmec has been published elsewhere (Snarskis 1979).

The Costa Rican artifacts that accompanied it can be placed between approximately A.D. 100 and 400 through comparative stylistic analysis (there are no radiocarbon dates), so the jade clamshell was an heirloom. Bone preservation was very poor, but the dental eruption pattern that could be

observed for the individual buried in this tomb showed him to be between 18 and 25 years old (David Weaver and Ricardo Vázquez, personal communication, 1978), relatively young to possess or merit such exceptional mortuary goods, and most probably indicative of inherited high status. Looters' tales and some artifacts in Costa Rican collections give further support, albeit unscientific, for the presence in Costa Rica of elite objects deriving from long-distance trade at or before the time of Christ. These objects were almost all from Mesoamerica, and many, perhaps most, were heirlooms.

In another burial in the Tibas cemetery, a ceramic monkey effigy vessel (bridge-and-spout style), of the Rosales Zoned Engraved type of the Zoned Bichrome Period in Guanacaste, was recovered. Two ceremonial mace heads and a single, cylindrical jade bead accompanied it. A total of twenty-five ceremonial mace heads (with mostly avian and two anthropomorphic motifs) were found, some in contexts disturbed by looters. In Tibas, then, we found a definite product of long-distance contact with Mesoamerica and solid evidence of ties to Greater Nicoya in the form of the ceramic monkey and, perhaps, some of the jades and mace heads.

Another artifact type found in Costa Rica that demonstrates the existence of long-distance trade during this period is Usulután pottery. Unfortunately, it has never been excavated by archaeologists in a secure chronological context. Stone (1973) illustrates two Usulután vessels in a private collection that are said to be from El Hacha, Guanacaste. Some years ago, an Izalco-variety Usulután vessel was donated to the Museo Nacional; it had been looted by an acquaintance of a Museum board member from a farm near Chaparrón, San Carlos. The author later saw ten to fifteen other vessels that had been taken from the cemetery, and they were clearly a local variant of the El Bosque complex. F. W. Lange (personal communication, 1978) has also reported finding Usulután sherds in Guanacaste from surface collections.

Stone and Balser (1965) illustrate slate mirror backs (some incised with Early Classic Mesoamerican motifs), local jades, and cast-gold objects they consider to be of Colombian style, all associated with El Bosque or La Selva Phase ceramics, from a site near Severo Ledesma. Unfortunately, the critical association depends on the word of a looter.

The figurines and ceramic vessel *adornos* of this period represent a rich array of symbolically costumed persons, not studied systematically to date. The author has observed countless such figurines portraying warriors costumed for battle with feather capes and zoomorphic headdresses, and even personages with chests cut open, carried on litters by four others. Prior to this period, ceramic figurines are virtually unknown (Figs. 4, 5).

Twelve El Bosque sites have been partially excavated (more than 2000 m² exposed), along with many others of the similar Pavas Phase in the central highlands. Pottery of this period (300 B.C.–A.D. 500) is that most frequently

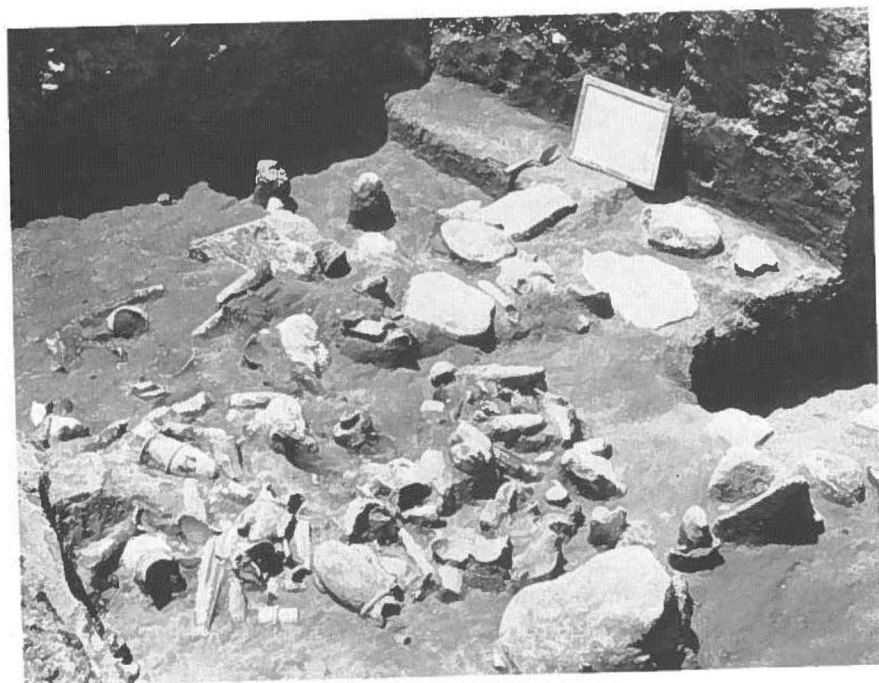


Fig. 4 Broken long-legged ceramic vessels strewn over the top of a Curridabat Phase tomb (A.D. 300-500) at the Pesa Vieja site, in what seems to be an act of conspicuous destruction related to funerary ceremonies. Photograph by the author.

seen in eastern and central Costa Rica. Did R/C societies develop during this time? Let us analyze the information in hand.

1. Environment: El Bosque/Pavas sites are known at elevations from 9,000 feet to sea level, always near rich soils.
2. Demography: Population growth was rapid, and extensive colonizing of new zones is apparent. Density calculations must await further excavations.
3. Subsistence economy: Maize and palm nuts, probably *pejibaye*, are known from El Bosque sites, while Pavas bell-shaped storage pits have yielded thousands of kernels and many cobs of at least three maize varieties, two varieties of common bean palm nuts, *jobo* (*Spondias mombin*), *guapinol* (*Hymenaea courbaril*), *achiote*, Sapotaceae of two kinds, and cotton, as well as other unidentified fruits (Robert McK. Bird, C. Earle Smith, Jr., L. Kaplan, personal communications, 1978-85). A varied agriculture is obvious. Task specialization and elite-associated sumptuary/symbolic artifacts are numerous. Warrior, shaman and fertility motifs abound, as well as *manos*, *metates*, and pestles.



Fig. 5 The same ceramic debris shown in situ in Fig. 4 is shown here washed and displayed; the vessel bodies in foreground had hollow tripod supports, most with clay pellet rattles (background). Artifacts in Archaeology Laboratory, University of Costa Rica, San Pedro. Photograph by the author.

4. Settlement patterns: Semidispersed sedentary agricultural villages of unknown size and complexity; rather labor-intensive, large houses, and obviously rank-differentiated burials.

5. External relations: Important warfare indicated by warrior figures and trophy-head cult; some regional and long-distance trade in elite-oriented symbols of status (jades, slate-backed pyrite mirrors, very small amounts of special pottery).

The relatively large number of ceramic and stone sculptural elements showing persons with elaborate masks, headdresses, and other gear, usually with zoomorphic motifs, indicate a complex religious belief system. Although pan-regional surveys are needed for confirmation, I believe R/C societies began during this period in Costa Rica.

A.D. 500-1500

In the two or three centuries around A.D. 500, striking changes took place in the Pre-Columbian cultures of Atlantic and central Costa Rica. Gold casting replaced lapidary work in jadelike stones as a source of ritually

significant symbols of elite status, ceramic styles changed markedly, stone cist tomb types replaced rectangular or "corridor-shaped" tombs without floor or lid, and circular, rather than rectangular, houses came to be the preferred form; the last is very probably indicative of a significant shift in the dominant Pre-Columbian cosmogony in Costa Rica. All these elements, especially metallurgy and circular houses, have earlier roots in northern South America. The cultural processes behind their eventual domination in most of Costa Rica are still unclear.

The La Selva (Atlantic) and Curridabat (Central Highlands) Phases span this important transitional period, approximately A.D. 300/400 to 700. Few single component sites have been excavated, and more work is needed to refine these phases (Fig. 6).

The succeeding La Cabaña and Cartago Phases are much better known. Only a handful of the nucleated villages made up of circular mounds/cobble foundations and cobble-paved causeways have been even partially exposed, although they are relatively easy to find and were the only kinds of sites known for many years in the country. The first was Las Mercedes in the eastern lowlands, found when Minor Keith put the Old Line railroad through the middle of it. Carl Hartman excavated parts of it almost ninety years ago (Hartman 1901) and drew a map showing the main mound 20 m in diameter at the top of its 6-m height, faced with cobbles. On three sides were a series of ridges, also stonefaced. Judging by what is known of sites like Guayabo (Fonseca 1979), this was probably just a small part of Las Mercedes, but apparently it did include the principal mound; today Las Mercedes has been totally destroyed by looters and agriculture. Costa Rica Farm, less than 10 km from Las Mercedes, has two large circular mounds with stairways adjoining a rectangular plaza delimited by stonefaced ridges; a cobble-paved causeway connects it and another similar feature some 300 m away (Lothrop 1926: 462).

Here, La Cabaña, a similar but smaller site excavated by the author while employed by the National Museum, will be used as a descriptive model. It is located between Las Mercedes and Costa Rica Farm (Snarskis and Herra 1980). Only a portion of the La Cabaña site, containing the more prominent main mound and the probable focus of the community, was exposed, as was the case at Las Mercedes. At La Cabaña, Mound 1 was also 20 m across but only 2.5 m high. Adjoining it was a lower, circular mound with a projecting curved porch. Stairways from both mounds led into a square, empty plaza, outlined by cobble-faced ridges that, upon closer inspection, proved to be arms of a double-walled, earth-filled enclosure that contained tiny caches or burials with prestige grave goods. A cobble-paved causeway led into the plaza opposite the stairways of the two main mounds, after skirting a non-mound, circular house foundation of cobbles, some 12 m in diameter. It is significant that the major sites mapped so far for Period VI

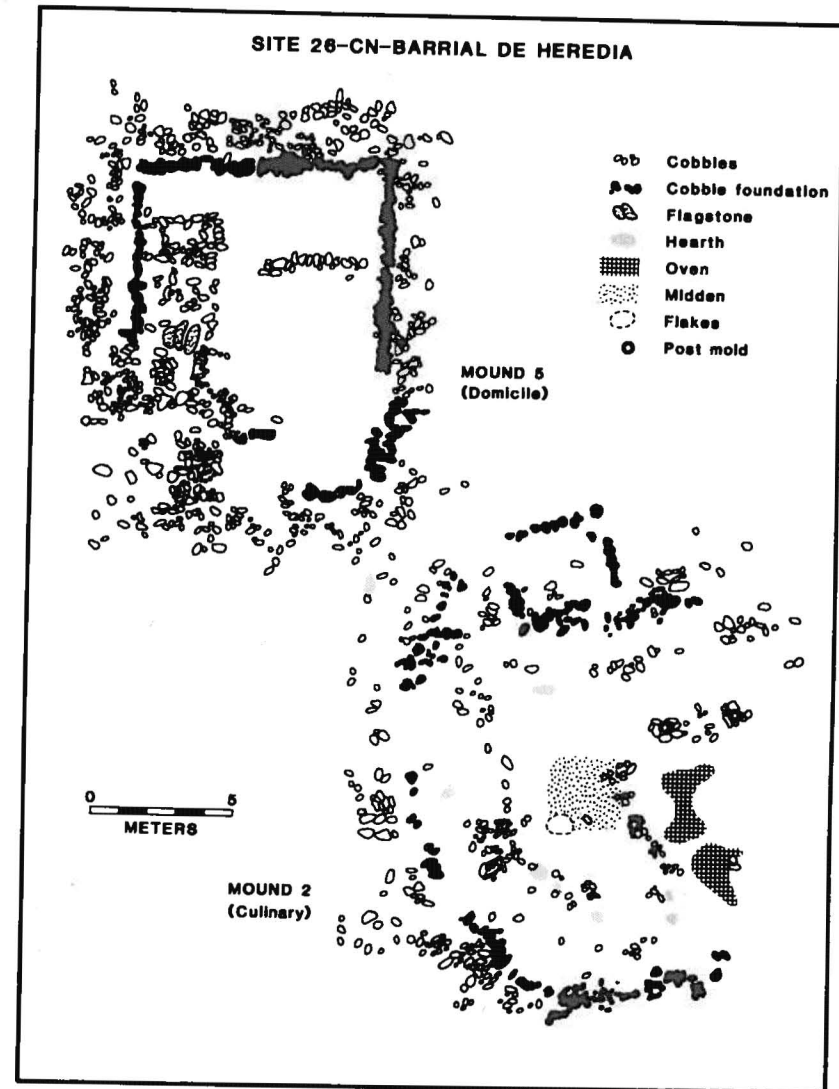


Fig. 6 Plan of contiguous structures at the Barrial de Heredia site (A.D. 700-900). The quadrangular foundation at upper left had very little quotidian domestic refuse, but burials with numerous imported polychrome ceramics from Greater Nicoya and a cast gold avian pendant were found beneath its floor. The lower rounded structure had many hearths, ovens, and quantities of culinary debris (carbonized maize, beans, monochrome pottery, *metate* fragments), but no burials. It is thought that it was involved in the domestic maintenance of the high-ranking inhabitants of the other structure, the largest and best-made of eight found at the site. Museo Nacional de Costa Rica, San Jose. Plan by Aida Blanco.

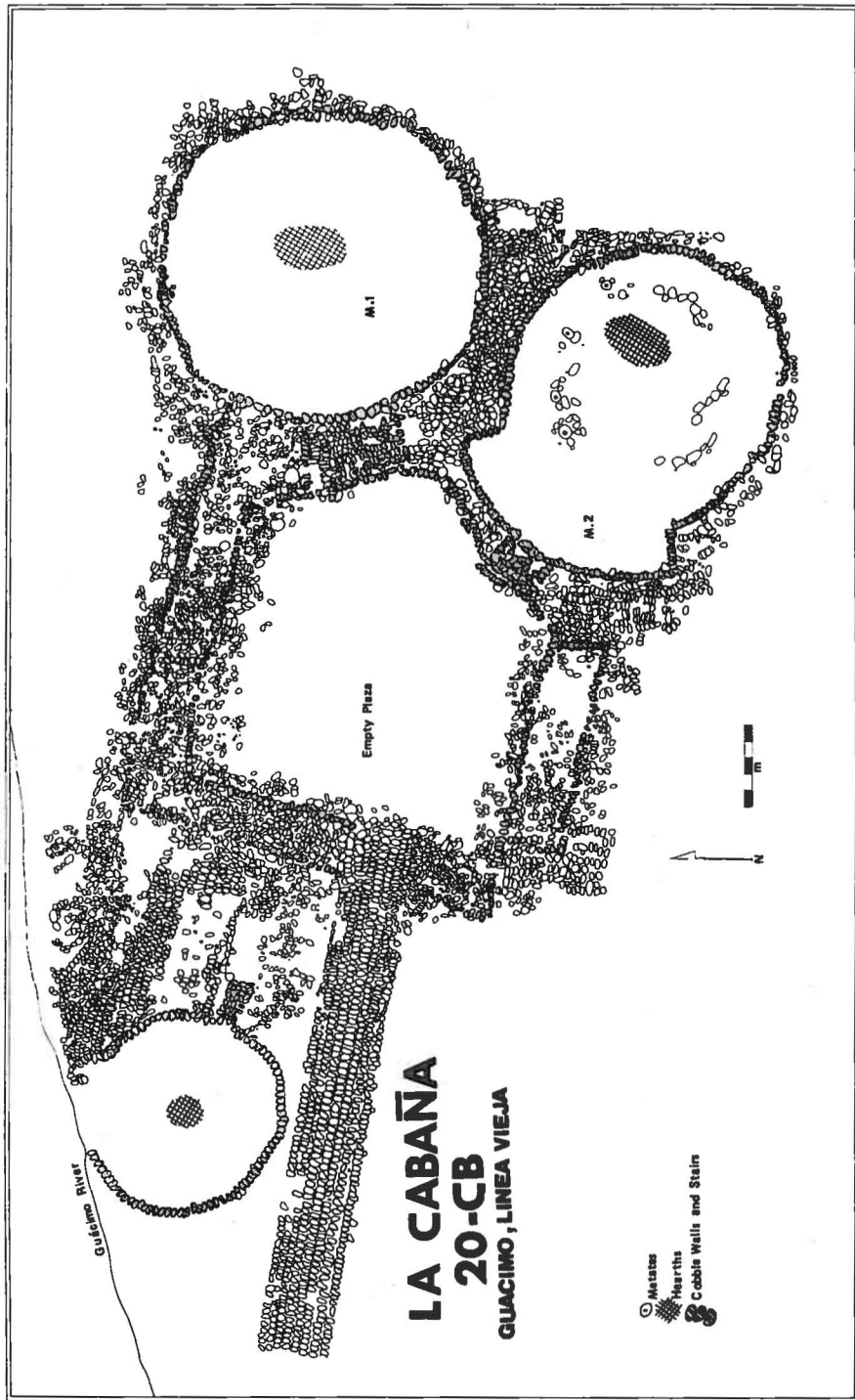


Fig. 7 (opposite) Partial plan of the La Cabaña site, eastern lowlands of Costa Rica (A.D. 1000-1300). Mound 1 was 1/2 m higher and contained five times more imported polychrome and local decorated pottery than Mound 2, which showed *metates* still in place; a division of space and tasks by sex is inferred. Stairways off both larger house foundations enter a quadrangular empty plaza opposite a cobble-paved causeway. The plaza was surrounded by a double-walled cobble enclosure that contained prestige burials or caches. Museo Nacional de Costa Rica, San Jose. Plan by Marcella Crump and C. Enrique Herra; photograph by the author.



Fig. 8 The La Cabaña site during excavation. Museo Nacional de Costa Rica, San Jose. Photograph by the author.

in eastern Costa Rica—La Cabaña, Costa Rica Farm, Las Mercedes, and Guayabo—have a quadrangular plaza formed by raised ridges associated with the principal mounds. This suggests a ritual or civic use, perhaps as the focus of ceremonial encounters between the ruling group and the rest of the population, or for the redistribution of goods (Figs. 7, 8).

Careful troweling of the house floors at La Cabaña revealed that, although all three circular structures uncovered had central hearths, only Mound 2 (the large, eccentrically shaped structure next to Mound 1) had definite domestic activity foci, composed of large, flat, river stones with marked grinding wear, some with other stones as seats and *manos* still associated. This evidence for functional difference between the two main structures suggests that the inhabitants of Mound 2 had to do with the maintenance of the Mound 1 residents. This interpretation is strengthened by a document sent to the Spanish king by Fray Agustin de Cevallos in 1610, in which he describes several customs of the people then living in eastern Costa Rica: "They live in *palenques*, which are forts built in the native fashion . . . the chiefs have the women that they desire—all in the same house—and the common people generally have one" (Lothrop 1926: 446, emphasis added).

Of further note is the strikingly higher proportion of imported Greater Nicoya polychromes and other local decorated ceramics—painted and incised/applique—associated with the principal Mound 1, most seeming to have been swept off it in cleaning activities. Mound 1 had five times as much decorated pottery as the other excavated features of La Cabaña.

Tombs for this period in the eastern and central regions of Costa Rica are usually of the well-known stone cist type, which can be circular, ellipsoidal, or rectangular. The excellent ethnographic work of Stone (1962) and Bozzoli de Wille (n.d.) has allowed archaeologists to make feasible analogies between prehistoric material culture and historic data of many kinds, but has been especially valuable for funerary contexts. Thus, it is known that in this late period the stone floors and lids frequently encountered in stone cist tombs probably were the result of taboos against the deceased's body touching earth, even in the tomb; in historic times wooden, not stone, slabs served this purpose. Tombs are still found both under and around houses and in separate cemeteries. Spanish artifacts have been found in stone cist tombs by Hartman (1901) at Las Mercedes and Orosi, and by Stone (1977: 167) at Tuis, Chirripo.

In the Turrialba valley, many architectural sites of this period exist. Kennedy (n.d., 1975) describes mounds, cobble pavements, and an unusual circular plaza (ridge-outlined) with several entrances at Najera. Originally excavated by Carlos Aguilar (1972), the national park site of Guayabo de Turrialba has been reinvestigated in recent years by teams from the University of Costa Rica. Always impressive, Guayabo had a paved entrance. This causeway passes through a gate and stair guarded by two square mounds

half a kilometer from the center of the site. A mound with nine stone sculptures around it was excavated, and an architectural classification of site sectors and features has been devised which seems to have a functional significance (Fonseca 1979). Guayabo covers up to 1 km², including more than fifty mounds and circular house foundations, roadways, stairs, and even a complex underground water-control system composed of flagstone-paved ducts. Cobble roads lead from it to other smaller sites many kilometers distant.

The author has also mapped part of a large architectural complex, including a paved causeway 9 m wide, at the site of La Zoila (5-ZT) near Turrialba; this means that large centers like Guayabo, Najera, and La Zoila (and Las Mercedes, La Cabaña, and Costa Rica Farm in the lowland plain) all lie within a 10-km circle. It remains to be seen if they were part of a contemporaneously occupied site network (they all have similar ceramics for this period) or were constructed sequentially in response to changing cultural frontiers. Similar sites have been reported from the Cartago Valley by Hartman (1901), Stone (1977), and Carlos Aguilar (personal communication), and the National Museum of Costa Rica has recently excavated sections of large stone cist cemeteries there, much like those described by Hartman at Chircot and Orosi. The Aguacaliente site, just outside Cartago, seems to be almost as large and complex as Guayabo (Vázquez 1985).

Metates and *manos* actually sculpted for quotidian use declined sharply in this period; instead, unmodified large, flat, river stones were used for grinding and appropriate cobbles were used as *manos*. Decoratively carved ceremonial mortars, trays, and *metates*, especially the tetrapod jaguar effigy *metate*, are also diagnostic of this period, as are circular Atlantean and annular-based forms. There is an increase in stone sculpture portraying human beings, from seated *sukia* (shaman) figures and what look like individual portrait (or trophy?) heads, to stylized poses of warriors holding an axe and a shrunken trophy head, and females holding up their breasts. In previous periods, representative stone sculpture was confined to ceremonial *metates*.

Along with Patricia Obando and Floryzul Cruz, University of Costa Rica *licenciatura* students, the author supervised the excavation of more than twenty stone cist tombs at the Rodriguez site, only 5 km from the summit of the Irazu volcano, in 1985–86. The site had been surface collected by Carlos Aguilar more than twenty years previously and was extensively looted by civil defense teams working in the zone after the Irazu eruptions of 1963–64.

In spite of these depredations, the Rodriguez site provided remarkable evidence in support of elite trade in exotic goods after approximately A.D. 1000. Like virtually all late (post-A.D. 700) sites in eastern and central Costa Rica, considerable quantities of Greater Nicoya polychrome pottery were found on the surface (Snarskis and Blanco 1978; Snarskis 1984a: 222;



Fig. 9 View of other well-made stone cist tombs at the Rodriguez site. All artifacts in Archaeology Laboratory, University of Costa Rica. Photograph by the author.

Snarskis and Ibarra 1985). Stone cist tomb structures, while mostly looted, showed careful and unusual construction techniques, in which volcanic flagstones were stacked horizontally like crackers to provide solid, if labor-intensive edifices (Fig. 9).

A surprise came in the find of two or three tombs (excavations were not continued for lack of funds) with worked-stone slabs measuring 1.30 by 1.50 by 0.20 m placed as lids (Fig. 10). These stones, weighing an estimated 700 kg, had to be removed with jeep and cable. One may speculate on the effort involved in bringing them to the site from lava flow-bearing valleys hundreds of feet below. The tombs that they covered were found to be looted; however, in one case, the flagstone floor was seen to be basically intact. Knowing that some stone cist tombs contain more than one level, we took up the floor and found an undisturbed earlier burial beneath. As would be expected, the human skeletal material was in anatomical position, although more eroded than the casual scatter of human bones returned to the superior tomb by (probably) superstitious looters.

Of greater interest were the grave goods: they included a small broken jar of the type Cartago Red Line; a human portrait head, free-standing, sculpted in andesite; and a tooth of the sperm whale (*Physeter catodon*) (identified by J. Mead, Marine Mammal Program, Smithsonian Institution, Washington,

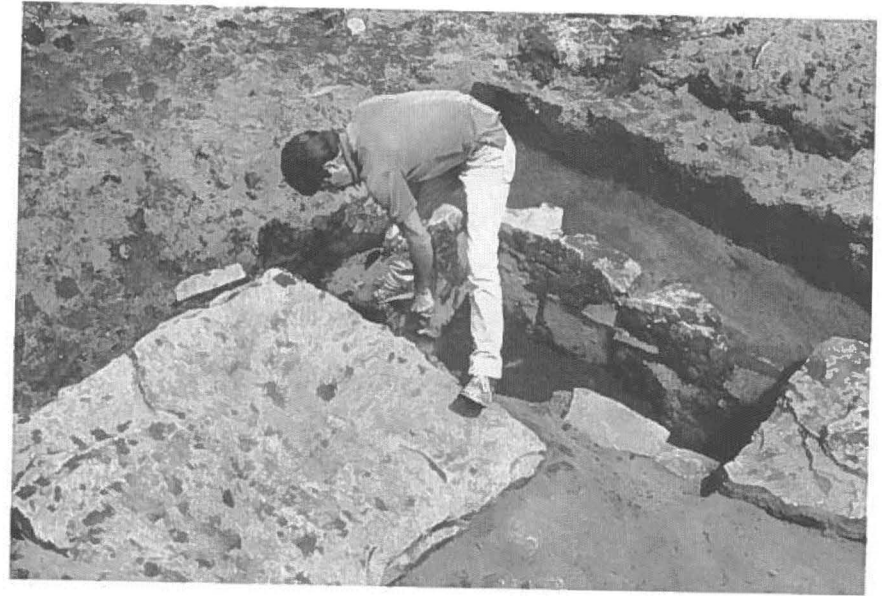


Fig. 10 Stone cist tomb (ca. A.D. 1000) with squared-off stone slab lid weighing well over a ton, at the Rodriguez site, near the top of the Irazu volcano.

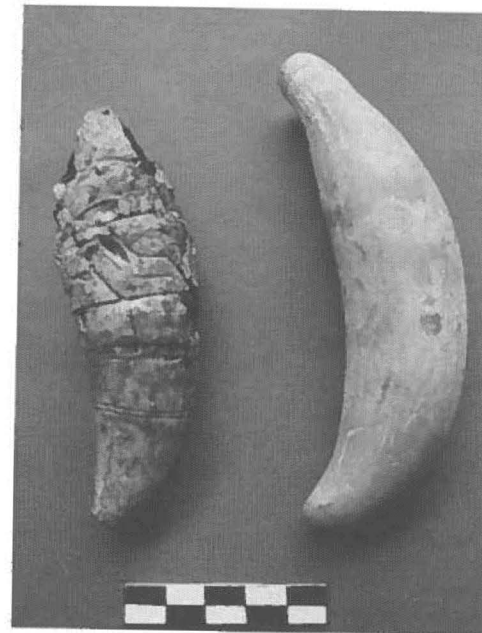


Fig. 11 Beneath the floor of the tomb shown in Fig. 7 were found a free-standing portrait head of a male, in andesite, and a sperm whale tooth incised and perforated; it was probably a flute. It is shown here alongside a modern sperm whale tooth (scale is 5 cm; teeth identified by J. Mead, Marine Mammal Program, Smithsonian Institution). Photograph by the author.

D.C.) perforated to form an ocarina, or flute (Fig. 11). The artifact probably had a flutelike mouth-piece of wood, now lost. The incised motifs on the bone flute recall those seen on the ceramic type Tayutic Incised, defined by Aguilar (1972) for central and eastern Costa Rica. Among the fill of this two-level tomb were also found sherds, most forming one vessel, of the Greater Chiriqui ceramic type Tarrago Bisquit (Linares de Sapir 1968). Since many Greater Nicoya polychrome ceramics were found in the fill of the same tomb, we are looking at obviously southern and northern trade goods, in the form of ceramics, combined with what can only be described as a special purpose exotic item that made its way to an isolated cemetery near the top of Costa Rica's highest volcano.

The last one hundred years of Costa Rican prehistory seem to show a kind of "Balkanization," with political attitudes augmenting at the expense of theocracy. Sites, some looking like "city-states," are strategically located for defense, almost certainly a reaction to increasing population pressure and competition for resources. These were definitely R/C societies.

1. Environment: Site location determined by sociopolitical boundaries and defense, as well as agricultural needs.
2. Demography: Continued population growth and competition. Most striking is the agglomeration or density in some sites. There were apparently fewer, but larger sites (some with a population of several thousands).
3. Subsistence economy: Less evidence at hand, but apparently similar to previous period. Probably more trade of commodities, definitely strong redistributive systems. Clear task specialization and many elite sumptuary goods.
4. Settlement patterns: Nucleated sites of various sizes arranged in a fluctuating hierarchy. Probably mass use of *corvée* labor, labor-intensive complex constructions of earth fill with stone facing. Burials strongly rank-differentiated.
5. External relations: Regional trade (commerce?) in more functional items, as well as elite badges of status. Confederations of R/C societies.

SUMMARY

In summation, there seems to be considerable evidence, in the form of special artifacts and distinctive features, indicating wealth and hierarchy in Pre-Columbian eastern and central Costa Rica beginning about 2,000 years ago. Sophisticated works in the lapidary and stone sculptural media (we can probably infer similar skilled production in woodworking and feather-work) imply the presence of at least part-time specialists in these crafts. Later, when metallurgy replaced carved greenstone, a similarly high level of technology was maintained in the manufacture of elite-associated sumptuary goods (Fig.



Fig. 12 Complex cast-gold pendant showing two male figures playing conch shell trumpets (post-A.D. 1000). Banco Central de Costa Rica, San Jose. Photograph by Dirk Bakker, Founders' Society, Detroit Institute of Arts.

12). Access to non-local materials, like the polychrome pottery of Greater Nicoya and other exotic objects, seems to have increased through time, although apparently dropping off in Proto-Conquest times.

Drug use apparently played an important role in ritual activities from at least several centuries before Christ; associated paraphernalia appeared during the time that sites and population were expanding rapidly, and, one assumes, sociopolitical organization was becoming more complex (A.D. 100 to 500).

The relative lack of large, complex architecture in this part of Central America probably reflects the fact that such sites were not appropriate adaptive responses to the tropical rain forest environment and were too costly to maintain.

As postulated, I believe that there was a non-accidental relationship between maize and associated elite symbolic materials and artifacts (jade-like stone, lapidary work emphasizing the "axe-god" or celt form, mace heads/digging stick weights, and elaborated ceremonial *metates*) and the earliest manifestation of wealth and hierarchy in the archaeological cultures of eastern and central Costa Rica (ca. 300 B.C.—A.D. 100). As maize was certainly known much earlier, its significance in the centuries around the time of Christ may have had to do with the appearance of better varieties or its role

in new ritual contexts. To confirm this hypothesis, future research will have to document changes in types of cultigens and/or their frequency of occurrence, through the recovery of stratigraphically appropriate samples of floral remains.

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Art-Tools and the Language of Power in the Early Art of the Atlantic Watershed of Costa Rica

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ART-TOOLS IN THE ATLANTIC WATERSHED REGION OF COSTA RICA

The metate, the milling stone upon which so many of the agricultural peoples of aboriginal America ground their maize, has failed to receive its just share of the attention of archaeologists. Metates, as a rule, do not make attractive museum exhibitions. (Stromsvik 1931: 143)

HOW IRONIC THAT GUSTAV STROMSVIK, participating in perhaps the greatest historically oriented research program in the history of Middle American studies—the Carnegie Institution of Washington's project at Chichen Itza, Yucatan, Mexico—calls for more attention to *metates* and yet does not acknowledge the famous carved *metates* of Lower Central America. Even before Stromsvik wrote, some Middle Americanist archaeologists were puzzled by the importance and elaboration of *metates* and other tool forms in regions from Honduras to Panama, and especially in Costa Rica (Hartman 1901, 1907; Lothrop 1926). Carved *metates* have long been displayed in natural history museums, and more recently have even been featured in such "blockbuster" art exhibitions as *Before Cortes: Sculpture of Middle America* (Easby and Scott 1970) and *Between Continents/Between Seas: Precolumbian Art of Costa Rica* (Benson 1981).

More than any other region of the Intermediate Area, the Atlantic watershed region of Costa Rica maintained such a distinctive hybrid notion of art-tools, or tool-symbols, in which figural images were integrated with still-functional instrumental forms such as blades, staff heads, grinding stones and seats (see map, Fig. 1).¹ The Atlantic watershed is the climax

¹ I want to stress that, in the main, these elaborate tools still retained some functional potential. Some of the most elaborate *metates* have wear marks, and axe blades are often chipped. Pre-Columbian art generally has a much stronger functional component than we are