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**ECOLOGY AND THE ARTS IN ANCIENT PANAMA
ON THE DEVELOPMENT OF SOCIAL RANK AND
SYMBOLISM IN THE CENTRAL PROVINCES**

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Frontispiece Hollow pottery figure of a drinking man reclining on a curved seat. Note face and body painting. Conte Polychrome (Period V, A.D. 500-700). Said to come from Montijo Bay, Veraguas province. Private collection, Panama City. Photo by F.M.S.

Ecology and the Arts in Ancient Panama

Introduction

SPLENDID Pre-Columbian objects from the central provinces of Panama have been accumulating in museums all over the world under the label “Coclé culture.” These funerary objects were excavated by American expeditions to Coclé more than thirty years ago (Verrill 1927a, 1927b; Lothrop 1937, 1942; Mason 1940, 1942). Important archaeological work in the adjacent provinces (Veraguas, Herrera, and Los Santos) has taken place since then. Reports of research in the last decades have appeared as specialized monographs (Willey and McGimsey 1954; Ladd 1964; Ichon 1974), or in journals of somewhat restricted circulation. More general textbook discussions (Willey 1971: 327-34; Stone 1972: 156-61) have been understandably concerned with chronology and description rather than with integrated explanations of why art styles develop.

In this essay, I hope to provide a new synthesis of published accounts and some unpublished material, and, even more important, a reinterpretation of “Coclé art” as a product of human adjustments to a fairly distinct environment stretching from Veraguas province, along the eastern part of the Azuero Peninsula, to Coclé province and beyond. On this wide coastal belt, with a dry, seasonal climate and sparse vegetation, numerous societies competed for rich alluvial and coastal land centuries ago. Studies of their art objects (their function, production, and distribution) may afford useful clues to the ecological patterning of social relations in the past.

The subject matter of art styles can be analyzed at

various levels of meaning. At one level, art styles reflect aesthetic preferences; at another, they mirror relevant parts of nature. In addition, the “Coclé styles” may have served as a special code for the expression of differences among societies for which succession to power was at least partly resolved by symbolic means. What at first glance may appear to be mere decoration was probably a rich symbolic system using animal metaphors to extoll aggression in several spheres of political and social life.

A long and complex history of adjustments lies behind the growth of rank and status differences in central Panama. The first hunter-gatherers on the Isthmus are important because they initiated ecological and demographic processes resulting, millennia later, in a riverine, agricultural way of life. In these well-endowed areas, populations expanded through the centuries, and systems of social ranking developed in which important individuals gained some control over scarce resources. Trade was concentrated in a few hands, and warfare became endemic to the land. Glimpses of what high status individuals did, how they lived, how they died, can be obtained from the objects created and decorated to manifest and enhance their prestige.

In what follows, my purpose is twofold: I should like to recount the history of settlement in the central provinces and then describe how Sitio Conte objects were made and subsequently destroyed. Since my thoughts on the aesthetic, ritual, and symbolic functions of the actual motifs and designs hinge on a

particular interpretation of the social history, an appeal is made to the chroniclers of the Conquest to support my interpretations. Thus, avoiding some approaches, combining others, and turning to human

ecology for insights on the development of social patterns in the central provinces, I shall proceed in this study from environment to society and then to art.

The Environment and Early Settlement of the Central Provinces

FOR THOSE who imagine Panama as a uniform tropical forest—a steaming jungle—the variation that exists in the topography and climate of the Isthmus may come as a surprise (see Fig. 1). While it is true that parts of the Atlantic coast receive 4,000 millimeters of rain a year, and some spots in the highlands get half again as much, the flat eastern sector of the Azuero Peninsula (Herrera, Los Santos, and coastal Coclé), around Parita Bay, gets only about 1,800 millimeters of rain, and in some years half that much. Yet, only fifty kilometers to the west or north, in eastern Veraguas and northern Coclé, the climate is as wet as on the Atlantic side or in the province of Darién.

During the pronounced dry months in Parita Bay and southern Coclé—beginning any time in December and lasting to any time in April—the land is parched by desiccating trade winds from the northeast, blowing steadily across the exposed coastal plains. Few years, of course, are completely dry, with less than a meter of rainfall. Downpours lasting for hours are not unusual even in the middle of the dry season in the central provinces. The problem of unpredictability is severe. Fluctuations in yearly rainfall, and frequent droughts, have set constraints upon human and other animal adaptations throughout the history of the Isthmus.

The entrance of man into the Isthmus undoubtedly increased the margin of ecological uncertainty. He first began to modify the environment by the use of fire, possibly to catch small animals or to surround larger game. In all likelihood, this process began in early preagricultural days (Bennett 1968: 26). With

the advent of agriculture, the extent of land-clearing increased, so that by the sixteenth century much of what originally had been a dry tropical forest (Food and Agricultural Organization 1971) became replaced by cultivated fields. Subsequent introduction of cattle by the Spaniards converted the land into savanna. These grasslands, maintained by fire, are covered with endemic low brush and fire-resistant, or drought-resistant, species: chumico (*Curatella americana*), nance (*Byrsonima crassifolia*), malagueto (*Xylopia* sp.), and marañón (*Anacardium occidentale*) (see Fig. 2). More recently, they have been invaded by imported African grasses.

It is important to emphasize that habitat diversity is characteristic of the central provinces (Cooke n.d.a). Marked contrasts in agricultural potential can be found between areas where there are only minor rivers (e.g., from Antón to the Río Coclé del Sur) and riverine areas annually flooded by fertile silts (e.g., the confluence of the Ríos Coclé del Sur, Grande, Caño, and Chico). Even allowing for recent deforestation, which must have increased the silt-load being carried by these rivers, the difference in fertility between alluvial soils and hinterland areas must have been as pronounced as in some parts of Amazonia.

The main biotopes in the central provinces can be visualized by following a hypothetical transect along either the Río Grande or the Río Coclé del Sur (Fig. 3). From coastal edge to mountain edge we would first proceed from a narrow strip along the Pacific shore—desolate, with mangrove vegetation or salt flats (*alvinus*)—through a wide (fifty kilometers) coastal

plain below 100 meters in altitude, traversed by several large rivers. This open, rolling, countryside corresponds to the zone of grasslands mentioned above. Beyond it, to the north, are hilly slopes, followed by the considerably more moist ridges of the Continental Divide at higher altitudes. In this hypothetical transect we have followed a vertical or longitudinal course, for the Panamanian Isthmus lies directly east to west, so that the major rivers, whose headwaters are in the Continental Divide, flow either straight north into the Atlantic Ocean or meander south into the Pacific coastal bays.

The schematic ecological transect just described can be duplicated by following the course of any of the other important rivers that traverse the central provinces: the Ríos Chico, Santa María, Parita, and so forth. These rivers were the main pathways along which the first human inhabitants moved from the highlands to the coast, either seasonally or permanently. Unfortunately, we still know nothing about these groups.

The more specialized Paleo-Indian hunters that followed later on—some 12,000 to 10,000 years ago—chased large game animals, the browsing herbivores, many of them now extinct. The weapons these hunters used were stone projectile points known in North American archaeology as “Clovis” points (see Gorman 1972). In Panama, six complete but isolated points, without other associations, have been found 154 kilometers east of the Río Grande, as the crow flies, on the surface of temporary islets and strand ridges in the midst of an artificial reservoir called Madden Lake, east of the Canal (Fig. 4; Sander 1959; Bird and Cooke n.d.b; Cooke 1976a: 19). According to Bird and Cooke (n.d.b), one of the Madden points looks “Clovis,” while the other should be classified with the “fishtail-stemmed points” distributed in South America from Ecuador to the Magellan Straits. In the latter region, at Fell’s cave, Bird (1946, 1969) found the same types of points, in contexts dated between 10,000 and 11,000 years ago, in association with a megafauna that included the giant ground sloth and the extinct horse. The remains of extinct

herbivores, including the same species (the *Eremotherium* sloth and the horse), plus a number of other animals, such as the giant capybara (the *Noerchus*), and modern species (the white-tailed deer and the Muscovy duck), have been found at Ocú and Pesé in Herrera province (Gazin 1957). But man-made tools were neither recovered, nor indeed looked for, in these same deposits. Although the search for Paleo-Indian remains associated with extinct fauna will continue in Panama, it is to subsequent occupations that we must now turn.

SHORELINE GROUPS OF PARITA BAY

In the eastern bend of the Azuero Peninsula, in the province of Coclé, just north of the Río Santa María which forms the border with Herrera province, lies Cerro Mangote, a preceramic shell-midden used for habitation and burial 7,000 years ago (McGimsey 1956; McGimsey, Collins, and McKern n.d.). Like other middens of later date, Cerro Mangote is located on an ancient shoreline which has since filled in. Between the old and the new coastlines there are eight to ten kilometers of salt flats and offshore bars with mangrove vegetation. This sector of Parita Bay was once covered with brackish water lagoons, but it is now one of the most arid and sterile portions of coastal Panama. However, it is still an extremely rich marine environment due to the dry-season upwelling which brings yearly enrichment of the fish fauna to the entire Panama Gulf (Glynn 1972). The large rivers discharging into the bay also contribute to the formation of “extensive tidal flats, flooded at high water, which are fringed by mud flats that are exposed at low water” (Linares and Cooke n.d.). These factors are “responsible for the large populations of molluscs, crustaceans and fish present today, and to judge from the archaeological record, present for the last 7,000 years” (Ranere and Hansell n.d.).

At the time Cerro Mangote was occupied, about 4800 B.C. (McGimsey 1958: 434), the sea was only one kilometer away, and between it and the site there was probably an active brackish-water tidal lagoon. Hence, there were mud flats to gather shellfish in, a



Fig. 1 Maps of Panama. (above) Topographic. (below) Climatic. Prepared by the Instituto Geográfico Nacional Tommy Guardia, Panama City.



Fig. 2 Panoramic views of the eastern part of the Azuero Peninsula. (above) Grasslands. (below) *Curatella* fields. Photos by O.F.L.

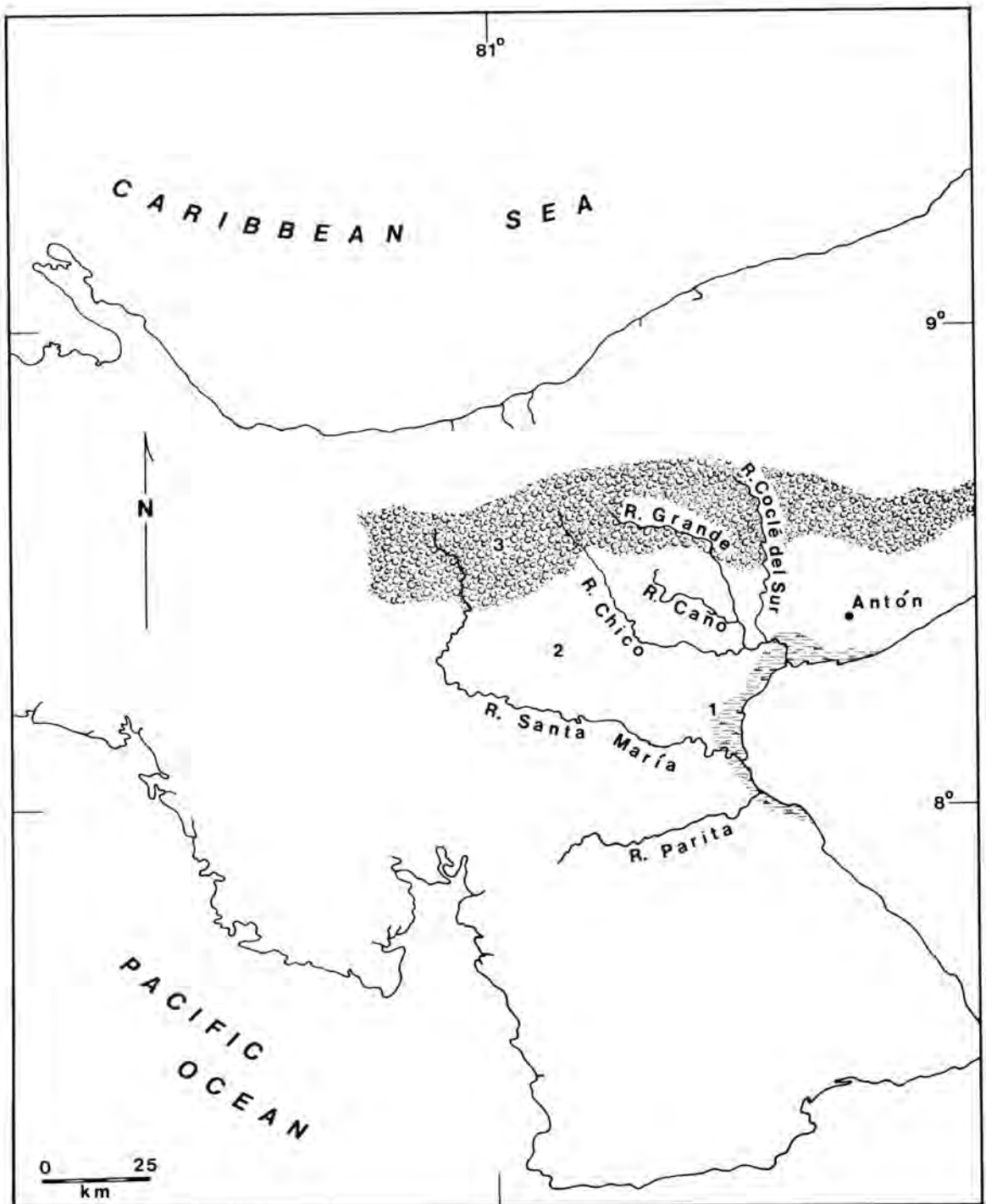


Fig. 3 Map showing the major rivers of the central provinces and the principal biotopes: (1) mangrove and *alvinas*, (2) savanna, (3) montane forest. Drawing by O.F.L.

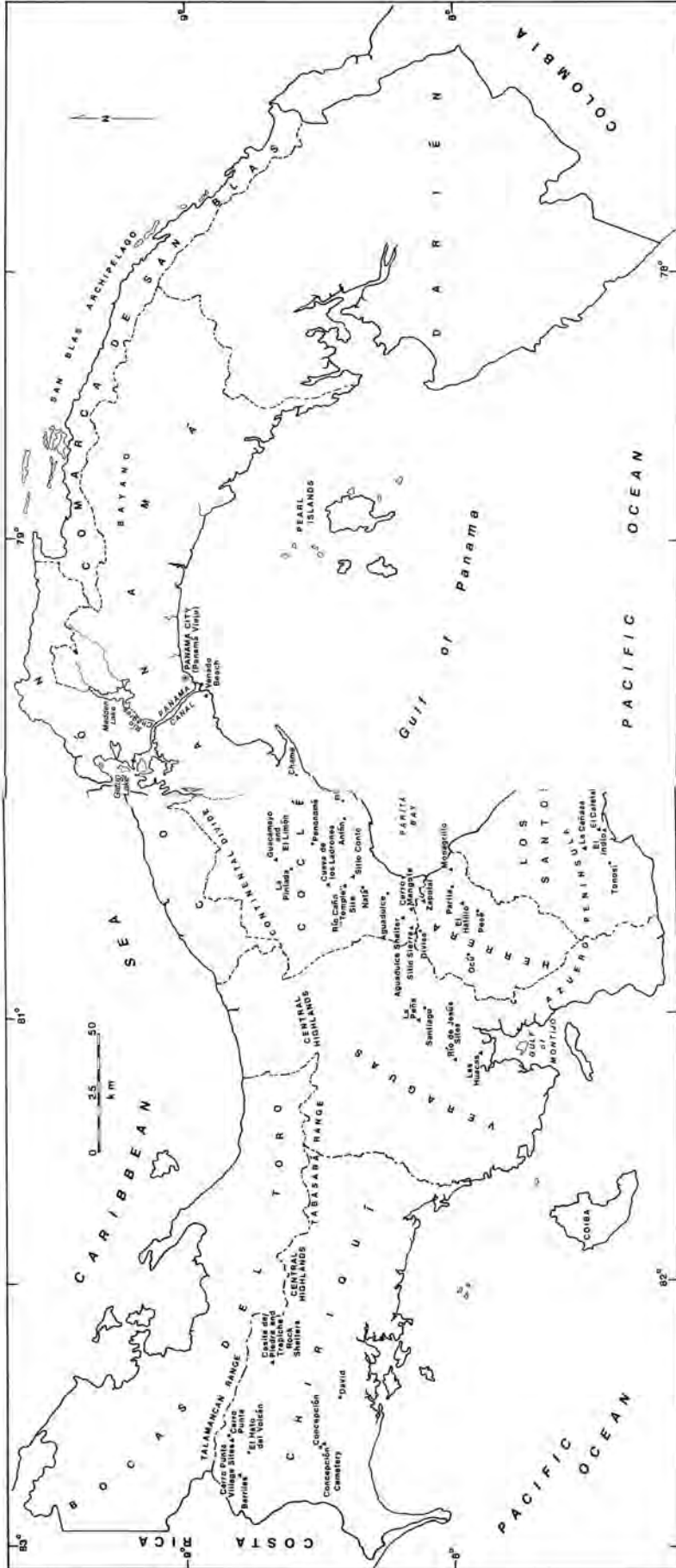


Fig. 4 Map showing the localities and archaeological sites mentioned in the text. Drawing by O.F.L.

river and sea for fishing, and savanna or forest in the back-hills where the inhabitants could hunt. Because of the preservation afforded by the presence of shell, which neutralizes the acids in tropical soils, a total of about 6,000 animal bones was found in the excavations. Only the bones of large mammals like deer (*Odocoileus virginianus*) were probably recovered in anything like representative numbers. Small mammals (e.g., rodents), birds, turtles, crab, and, most especially, fish escaped adequate detection. Undoubtedly, a heavy reliance on aquatic resources, marine as well as riverine, characterized the life of the Cerro Mangote people. They also ground and crushed plant products with the aid of stone tools like edge-ground cobbles (or pebble-grinder-choppers), pebble pounders, boulder milling stones (or boulder *metates*), pebble *manos*, and nutting stones. Although flakes and cores abound at Cerro Mangote, no projectile points were found, a fact that may suggest they did their hunting elsewhere. A few shell ornaments, mostly beads and circular pendants cut from bivalves, accompanied the modest burials.

Concerning the sixty-seven burials found at Cerro Mangote (McGimsey, Collins, and McKern n.d.), these displayed marked differences in burial habit: some were articulated and flexed, others were disarticulated and bundled; some were oriented to one direction, others to another; some were mutilated, others untouched; some grave pits contained single bodies, others several bodies. All this variation may indicate a seasonal use of the site by different groups. Although the possibility that the Cerro Mangote burials belonged to a later period was considered by the excavators, more recent finds of burials at another preceramic site nearby (the Aguadulce shelter, discussed later on) strengthen the association between the Cerro Mangote refuse deposits and the cemetery.

Several millennia passed between the Cerro Mangote people and the pottery-making Monagrillo people whose remains have been found in Herrera province at three sites near the mouth of the Río Parita and at another site, Zapotal, near the mouth of the Río Santa María. All of these sites are on the old shore-

line. The occupations at the Monagrillo mound (Fig. 5) intercalate in a complex chronological scheme with remains found in the other Parita Bay shell-middens (Willey and McGimsey 1954). In the Monagrillo mound itself the earliest phase was dated originally at 2131 ± 70 B.C. (Deevey, Gralenski, and Hoffren 1959: 166-7). A series of eight new radiocarbon dates, including one of 2185 ± 8 B.C. (Si-2844) taken from the wall of Willey and McGimsey's trench, from the same stratigraphic unit as their 2131 B.C. date, confirms the original estimate, thus placing the Monagrillo mound occupation between 2500 and 1200 B.C. (Ranere, personal communication). The most characteristic tools, including edge-ground cobbles, are almost indistinguishable from those of Cerro Mangote.

The life of the Monagrillo people was also intimately related to the formation of a lagoon. Before the lagoon came into existence, the site was on an active shoreline. At that time it was annually flooded, and only a few people lived temporarily on the mound. As the lagoon formed, it teemed with shellfish (mostly *Tivela* bivalves), and the occupation of the mound became most intense. When the lagoon silted up and finally disappeared, so did much of the lagoon fauna. The occupation waned, and the people who visited intermittently again turned to gathering oysters nearby. The small inventory of animal bones recovered by Willey and McGimsey (1954: 151-2) includes white-tailed deer, peccary, and a few other unidentified species. Fish and crab were also present, but, as in Cerro Mangote, they were numerically underrepresented in their excavations. Recent work by Ranere, myself, and others, using fine screening, flotation, etc., showed that fish and crab were by far the most abundant fauna at Monagrillo, even though deer, small mammals, and freshwater turtle were also present (Linares 1976d: 74-5; Ranere and Hansell n.d.).

During the most intense occupation of the Monagrillo mound, people lived on one of the ridges, disposed of their refuse on the other ridge, and probably buried their dead far from where they lived. Pottery



Fig. 5 Views of the Monagrillo mound, Parita Bay, Herrera province. (above) Panoramic view of the mound. Photo by O.F.L. (below) The 1948 initial excavations, directed by the late Matthew W. Stirling. Photo courtesy of the National Geographic Society, Washington.

consisted mostly of simple bowls and jars without special appendages. A few ceramics were painted with red bands; others were decorated with incisions and deeply cut punctations. In general, the painted motifs are simple and geometric, while the incisions are usually curvilinear and arranged in scrolls, hooks, and hachures.

The succession of occupations of the Parita Bay *alvinas* represents an intriguing series of economic adjustments to a coastal shoreline-riverine existence. Cerro Mangote people fished, gathered shellfish and crab in large quantities, did some hunting, and probably crushed wild (?) seeds to supplement their diet. Where they lived and ate, they also disposed of their rubbish and buried their dead. Monagrillo subsistence activities were just as much oriented toward marine resources (Ranere, work in progress). Of the ill-defined Sarigua occupation which came after Monagrillo, we can say very little except to point out the need for more information.

PRECERAMIC OCCUPATIONS IN THE WESTERN HIGHLANDS AND ON THE COCLÉ PLAINS

Until recently it had been assumed that hunting-gathering occupations were to be found in Panama only along the coast, where marine resources could provide a stable living base. The evidence we now have (Linares and Ranere 1971; Ranere 1972, 1975, 1976, n.d.a) of human occupations in four rock shelters and one open camp site in the Chiriquí highlands, 160 kilometers west of Parita Bay, has drastically changed such assumptions. The forest and the highlands at mid-altitudes (600 to 900 meters) in the canyon of Río Chiriquí were occupied by man as early as the coast.

The Casita de Piedra (Fig. 6a) and Trapiche shelters—only ten kilometers from the Talamanca Range, but forty-five kilometers from the sea—provide us with a cultural sequence spanning the last 6,500-7,000 years. From the beginning of the fifth millennium B.C. to the end of the first millennium B.C., the stone tool inventory displays remarkable continuity. Cobble edge-grinders (or edge-ground cobbles), boul-

der milling stones (or grinding-stone bases), wedges, choppers, and a variety of scrapers were used during this 5,000-year period. Despite this strong continuity, the preceramic occupations of the shelters can be divided into an early and a late phase, primarily on the basis of new tools and stone-working techniques added after 3000 B.C. (Fig. 6b). The most significant additions are ground and polished stone axes and celts. In all probability these were used to clear fields in a typical slash-and-burn system of agriculture. Along with their appearance, the late preceramic phase is characterized by the occurrence of numerous small tabular splitting wedges (which replace the large bifacial wedges of the earlier phase) and the frequent use of materials such as chalcedony, quartz, and obsidian in the manufacture of stone tools.

The majority of the chipped stone tools recovered by Ranere were wood-working implements. It is assumed, on the basis of ethnographic data, that tropical hardwoods like the *chonta* palm were used for making spear points as well as spear shafts. Such tools as drills, knives, awls, and perforators were probably also made of wood or some other perishable material; stone examples were either absent or scarce. The cobble edge-grinders and boulder milling stones were almost certainly employed in processing plant foods, perhaps for mashing or pounding starchy roots.

The acidity of the shelter deposits prevented the preservation of bone, so we have little information on the kinds of animals hunted by the Chiriquí canyon occupants. Of the plant foods utilized in the preceramic phases we have more knowledge. Several hundred carbonized plant remains from the shelters have been preliminarily identified by C. Earle Smith (n.d. and work in progress). Among these are "palm nuts, tree legumes, and nance seeds, but not one maize kernel or cob fragment" (Ranere and Hansell n.d.).

Two recent radiocarbon determinations for the end of the preceramic Boquete phase, and the beginning of the unnamed ceramic phase, are 350 ± 75 B.C. (I-1846) and 940 ± 70 B.C. (SI-844) for the Trapiche and Casita de Piedra shelters, respectively.



Fig. 6 Preceramic evidence from the Chiriquí highlands. *a.* (above) Casita de Piedra rock shelter. Photo by A.J.R. *b.* (left) Stone tools from both phases of the Casita de Piedra occupation: (a,b) celt-like wedges, the index artifact of the Talamancan Phase; (c) scraper-plane, Talamancan Phase; (d) grooved stone axe, Boquete Phase; (e) chisel-bit, Boquete Phase; (f,g) celt fragments, Boquete Phase. Drawings by R.McN.

In short, the Río Chiriquí sequence is thought by Ranere to represent an initial preceramic hunting-gathering adaptation to tropical forests (the Talamanca Phase: ca. 5000-3000 B.C.) which is replaced by a second adaptive pattern based either on the cultivation or protection of root and tree crops (the Boquete Phase: ca. 3000-500 B.C.). The late appearance of pottery in the sequence, ca. 500 B.C., marks the introduction of still a third adaptive pattern, one based on maize agriculture.

The existence of preceramic occupations right on the plains of Coclé, at some distance from the old Parita Bay shoreline, has been confirmed by two sets of excavations. Those by Ranere and McCarty (1976) were in a rock shelter near Aguadulce, right by the side of the Inter-American Highway. The Aguadulce shelter is eighteen kilometers from the present coast and about ten kilometers from the old shoreline, near the middle reaches of the Río Membrillar, which joins the Río Estero Salado to flow into Parita Bay. Its location is thus solidly within the coastal plains of the central provinces, near a major river, but away from the sea and its deltas.

Contemporaneity between the preceramic occupation at the Aguadulce shelter and Cerro Mangote, nine kilometers away, has been inferred from the existence of identical tool types, such as edge-ground cobbles and boulder milling stones, and possibly also from the presence of four burials, discussed later on. Like Cerro Mangote, the Aguadulce shelter includes thousands of flakes and chipped stone tools. Unlike Casita de Piedra, however, few carbonized plant remains, besides many palm nut fragments, were found in the preceramic level, or even in the ceramic Monagrillo-like occupation of the shelter, despite careful screening and water separation techniques. (However, hundreds of kilograms of sediment collected from the site remain to be carefully inspected.) On the fauna we have more details. "Faunal remains were abundant, with white-tailed deer dominating the assemblage followed by significant amounts of turtle (fresh water) and fish, with some remains of large rodents, armadillos and lizards. Modest quanti-

ties of crab and shellfish were also present" (Ranere and Hansell n.d.: 6). In contrast to Monagrillo, then, the inhabitants of the Aguadulce shelter practiced a terrestrial hunting-gathering subsistence pattern with considerable dependence on riverine resources.

Six months after Ranere and McCarty conducted their pioneer excavations, Bird and Cooke (n.d.a) dug another shelter, Cueva de los Ladrones, also in Coclé province, but even farther inland than the Aguadulce shelter. More precisely, the Cueva is situated at an elevation between 400 and 500 meters on the barren and broken slopes of Cerro Guacamayo, near a small perennial stream, but away from any major river. According to the excavators, a scantily represented late preceramic occupation (ca. 3000-2000 B.C.) was followed by a Monagrillo-like occupation.

Without going into too much detail, it is important to point out the absence of edge-ground cobbles and the presence of only a few milling stones in the Cueva deposits, a fact which accords well with the lack of carbonized plant remains. Many of the stone tools associated with wood-working activities at the Chiriquí shelters were also absent—scraper-planes, bifacial or tabular wedges, scrapers, and chisels, for example. Instead, we find at Cueva de los Ladrones twenty stone projectile points. These do not occur in the other Panamanian shelters investigated so far; they are even absent from Monagrillo. A fauna that included white-tailed deer, collared peccary, armadillo, and smaller species was characteristic, while very few shells, and even fewer crabs, were present. The Cueva de los Ladrones was used mainly as a hunting camp, as Bird and Cooke (n.d.a: 34-5) have suggested.

SUMMARY THOUGHTS ON SETTLEMENT AND SUBSISTENCE DURING THE PRECERAMIC AND EARLY CERAMIC PERIODS

Between 5000 B.C. and 1000 B.C., small groups of hunting-fishing and collecting folk in the Isthmus displayed marked differences in subsistence strategies following the exploitation of localized resources. Where an unusually rich estuarine-marine environ-

ment existed, as along the old Parita Bay shoreline, a pattern based on the exploitation of mollusks, fish, and amphibians lasted a long time virtually unchanged—from Cerro Mangote (4800 B.C.) to Monagrillo (2500-1200 B.C.) times. Away from the old shoreline, the protein-procuring system shifted radically to one based on freshwater fishing and hunting, with the former predominating in the Aguadulce shelter, which is near a river, and the latter predominating in Cueva de los Ladrones, which is not. Some crab and fish, albeit in small quantities, occur in the Aguadulce and Ladrones shelters, while some deer and small mammals occur in the Cerro Mangote shell-midden. This and other lines of evidence suggest the possibility that shoreline and interior pre-ceramic peoples in the central provinces were the same. They may have moved up and down from the Parita Bay coast to the hills either seasonally, say at the time of the upwelling, or more continuously, say every few months. The distances involved were very small. A pattern based on nomadism, seasonality, transhumance, or whatever seems to have delayed the evolution or the adoption of settled agriculture, at least among those groups commuting to the shoreline.

Neither the phenomenon of upwelling, nor the existence of large coastal mud flats like those of Parita Bay, occurs off the Chiriquí coast. In this area, there seems to have been little reason for a coastal-interior transhumant pattern to have become established. The rich volcanic soils of the highlands are unusually well endowed, and this area is nearest to the early agricultural hearths in Mesoamerica.

Now, before 3000 B.C., a gathering system involving generally the same plants all over the Isthmus had become established on the coast, on the plains, and in the highlands of the Pacific sector. Among the plant products that were collected, and perhaps even tended, were tree legumes, palms, all sorts of fruiting trees, seeds, and, possibly, even the ancestors of some of the latter-day domesticates. Even in those sites where carbonized plant products are missing (i.e., Cerro Mangote) or scarce (i.e., the Aguadulce shelter), the same basic tool kit (edge-ground cobbles, boulder

milling stones, etc.) associated in the Río Chiriquí shelters with “wild” plants occurs. Then, while this pattern continues virtually unchanged in the pre-ceramic sites of the central provinces, a basic shift took place around 3000 B.C. in the Río Chiriquí area. Agriculture, possibly one based on root crops, gradually replaced or complemented the gathering of wild plants. The same thing probably also occurred along the meandering rivers in the central provinces, which must have seemed ideal for agriculture because of their annually replenishable alluvial soils. The idea that agriculture in the Americas began in river basins has a long history (Sauer 1952: Chap. III).

By way of summary, we should stress again that the work of Ranere, Bird, and Cooke has gone a long way toward confirming our previous suggestion (Ranere 1976; Linares 1976d) that in the Isthmus the transition from plant-gathering to agriculture probably took place in inland contexts, whether at mid-altitudes on the foothills of mountains or nearer the coast on the central plains. The road to agriculture was most likely initiated by highly mobile groups with a generalized plant-gathering, hunting, and riverine fishing economy, not by specialized littoral-dwelling groups living permanently off marine resources. Be that as it may, we should keep in mind the narrowness of the Isthmus and the easy access to markedly different environments. From the very beginning of human settlement, the movement of people between both coasts and the mountains must have been constant.

THE FORMATIVE-PERIOD SPREAD OF AGRICULTURAL VILLAGES (1000-200 B.C.)

Although agriculture was probably as old in the Isthmus as elsewhere in the Intermediate Area between Mexico and Peru, the full dependence of some peoples on seed-cultures (i.e., maize and beans) appears to have been rather late, perhaps as late as 1000 B.C. Cores from Gatún Lake in the Panama Canal Zone contain maize pollen dated to this period (Bartlett *et al.* 1969). Certainly a diversified and prosperous agricultural economy, based on root and seed crops, and on many species of tree crops also, was fully

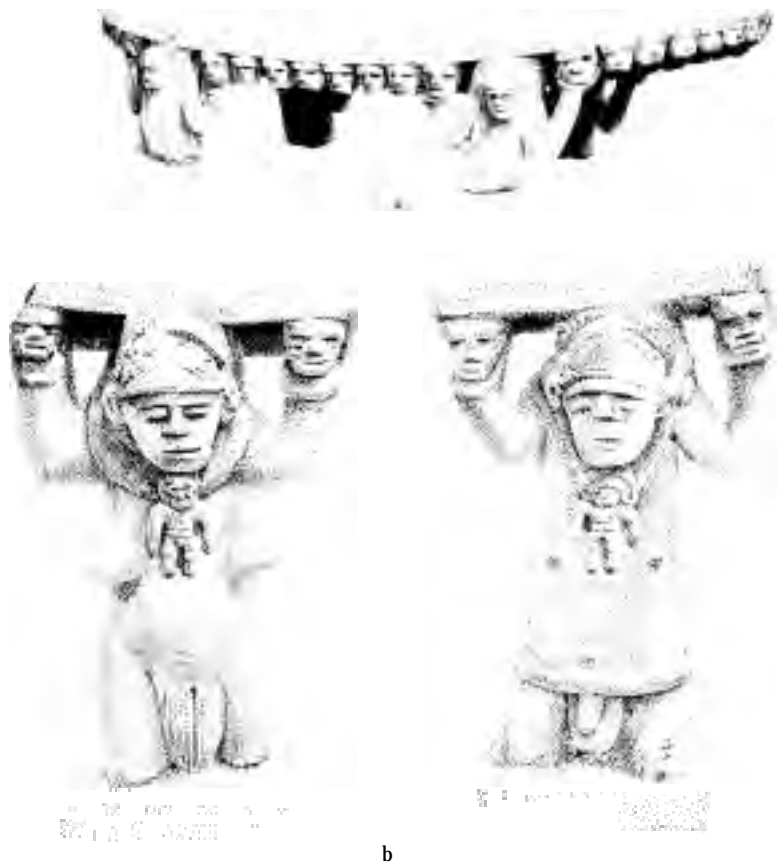


Fig. 7 Stone objects from Barriles in the Volcán Barú area of the Chiriquí highlands. a. Giant *metate* (or ceremonial stool?). Museo Nacional de Panamá Panama City. b. Caryatid figures from an old photograph. Present location unknown. Drawings by R.McN. (first published in Linares *et al.* 1975: Fig. 5).

established the length of the Pacific sector of Panama—including the highlands—by 500 B.C., if not earlier. The evidence consists of numerous ceramic sites in the “Scarified-Concepción-Aguas Buenas” tradition. These are characterized by an overwhelming abundance of ground stone tools associated with maize agriculture (*manos*, *metates*, and so forth) and with clearing the forest (celts, adzes, and other wood-working tools). Sites in this general Formative-Period tradition have received uneven archaeological attention, but they are found from Chiriquí province (both in the highlands and on the coast) all through the central provinces (Linares 1968a, b; Haberland 1969).

In the Chiriquí highlands, cultures of the Formative Period are found up to 2,300 meters, near the limits of the cloud forest. In these valleys, between El Hato and Cerro Punta in the Volcán Barú area, seed agriculture based on maize and beans had an explosive

success in the rich volcanic soils, leading to rapid social and political differentiation between villages a few centuries before and after the Christian era (Linares *et al.* 1975). The largest and most impressive villages are found near El Hato, the southernmost and smallest of the five areas we surveyed. Best known among the El Hato prehistoric occupations is the Barriles site. Here former expeditions unearthed massive “retainer-statues”—giant *metates* with legs in the shape of human beings carrying trophy heads (Fig. 7)—and enigmatic stone drums, whence the name Barriles was derived. The sculpture of this site clearly “associates symbols of rank and warlike attributes with maize agriculture” (*ibid.*: 141). Charred specimens of the common bean (*Phaseolus vulgaris*) and a race of maize representing a cross between the *Chapalote-Nal-Tel* race from Mesoamerica and the *Pollo* race from Colombia (W. Galinat, personal commu-



Fig. 8 Details of two Zoned Bichrome vessels from the Barriles area, Chiriquí highlands. Museo Nacional de Panamá Panama City. Drawings by R.McN. after photos by F.M.S.

nication) were found in hearths and house floors of one of the Cerro Punta village sites excavated. An intriguing ceramic style—with widespread connections inside the Isthmus and beyond—ties all the Volcán villages together. It is full of depictions of local birds and mammals (Fig. 8), strange human beings with pointed hats and staffs held in one hand, and rotund female shapes serving as solid tripod feet for tall vessels. In general, the iconography of the Volcán ceramics duplicates that of the stone carvings.

Local variants of the Volcán style—also known as the Aguas Buenas style from an ill-excavated site in Costa Rica—are known from a wide area in Panama, where they have been tentatively dated to about 200 B.C. (Fig. 9). To mention a few, there are the “Scarified” wares from the Concepción cemetery in coastal Chiriquí, the Limón and Guacamayo wares of Coclé and Veraguas, and the Búcaro Phase materials from Tonosí on the tip of the Azuero Peninsula. Outside of Panama, the closest counterparts to the Volcán cultures are found in Costa Rica, in the Nicoya Peninsula (Coe and Baudez 1961; Lange 1971), and in the central highlands (Aguilar 1972). Tenuous as these resemblances may be, they suggest the spread, probably from the west, of maize-bearing cultures all the way to the central provinces of Panama. However, it is important to note that, while in Chiriquí and adjacent Bocas an incised and modeled ceramic tradition continued to Conquest times, in the central provinces

they did not. Developments in eastern Veraguas, in all of the Azuero Peninsula, and in Coclé followed a different course from those of western Panama.

THE EARLY PAINTED STYLES OF THE CENTRAL PROVINCES (PERIOD IV, 200 B.C. - A.D. 500)

Between roughly 200 B.C. and A.D. 500, the major rivers of central Panama were being settled by peoples of the “Santa María tradition,” named after the important river of that name. Unfortunately, the name is misapplied, since many villages of this period are found on other rivers: the Parita, Caño, and Grande (see Fig. 3). Along the latter, for example, sites of this period are located from the foothills of the Continental Divide to the coastal plains. A recent survey (Cooke n.d.a) has revealed twenty-three sites of this period along four major rivers, and there are probably dozens still to be located.

Excavations by Cooke (n.d.a, n.d.b) at Sitio Sierra, a riverine site on the shores of the Santa María, have confirmed for Period IV the chronology that was suggested by the Sitio Girón excavations (Willey and Stoddard 1954), farther downstream, and by the deposits found in the lower levels of Sitio Conte (Ladd 1957), midway along the Río Grande. The inhabitants of Sitio Sierra exploited a sparse mammalian fauna, as had their predecessors for thousands of years. Among the mammal remains were, in order of importance, deer, nine-banded armadillo, and rabbit

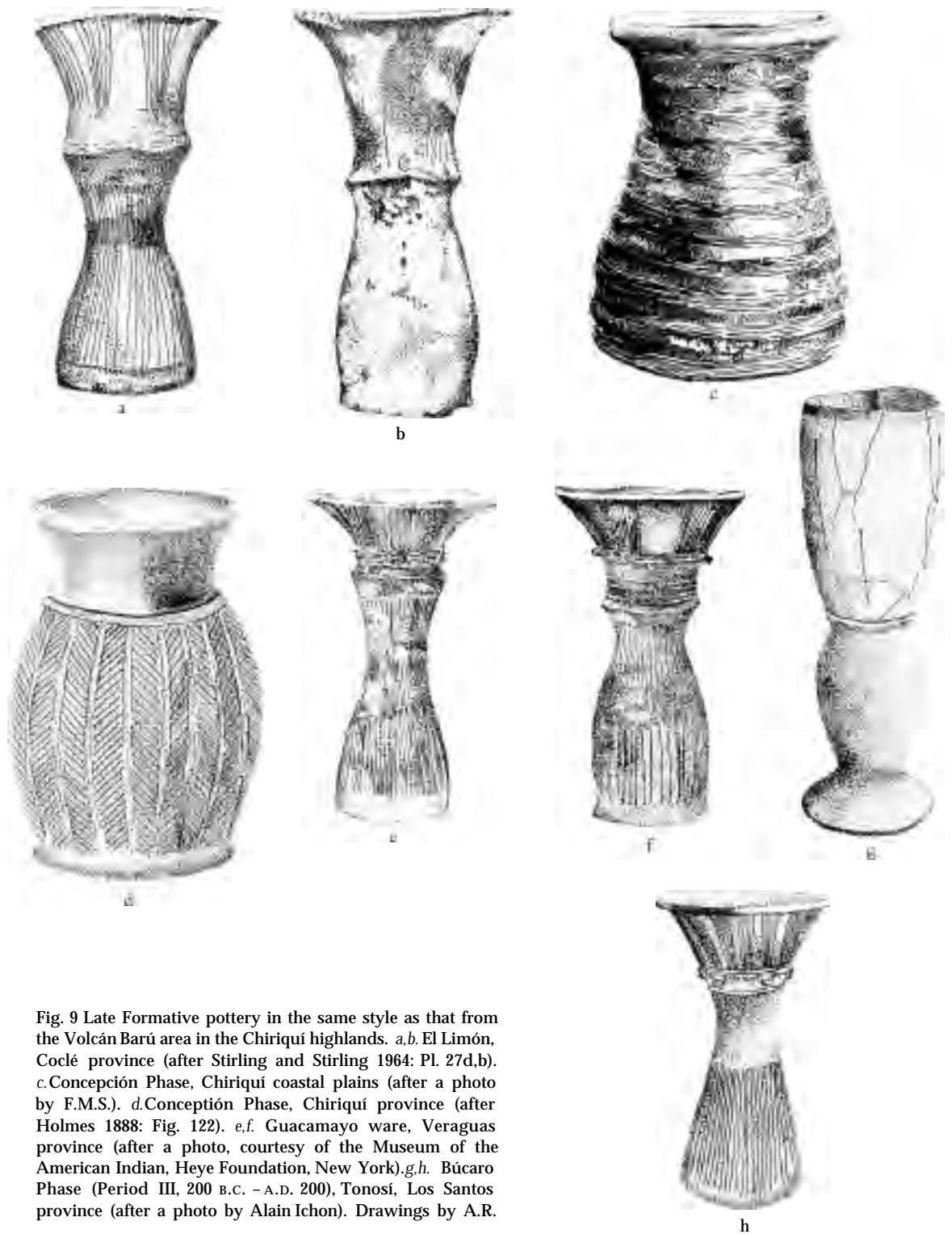


Fig. 9 Late Formative pottery in the same style as that from the Volcán Barú area in the Chiriquí highlands. *a,b*. El Limón, Coclé province (after Stirling and Stirling 1964: Pl. 27d,b). *c*. Concepción Phase, Chiriquí coastal plains (after a photo by F.M.S.). *d*. Concepción Phase, Chiriquí province (after Holmes 1888: Fig. 122). *e,f*. Guacamayo ware, Veraguas province (after a photo, courtesy of the Museum of the American Indian, Heye Foundation, New York). *g,h*. Búcaro Phase (Period III, 200 B.C. - A.D. 200), Tonosí, Los Santos province (after a photo by Alain Ichon). Drawings by A.R.

(*Sylvilagus*), with fewer specimens of raccoon, paca, felids like jaguarundi, and small mammals. The bird fauna included an assortment of edible species, such as the tree duck, and species that at least today are more valued as pets, such as the parakeet. Turtles, small lizards, iguanas, and frogs or toads made up the reptilian and amphibian remains; the latter two may have been killed for their poison, a good hunting device, rather than for food. In general, the mammalian fauna suggests an open grassland environment with small forest stands nearby; few of the animals of the deep forest—tapir, sloth, brocket, monkeys, and so forth—were, to my knowledge, found by Cooke at Sitio Sierra. The presence of bones of young and adult *Odocoileus* deer—a brush and savanna species par excellence—suggested to Cooke that they were hunted year-round. How hunting was done, however, remains a mystery. Large modified flakes are found in the deposits of this and later periods, but they may have been used as knives rather than as projectile points. Most likely, spears with hardwood tips of the *chonta* palm, snares, and nets were employed. The presence of deer juveniles suggests the widespread tropical-forest practice of tending young animals around the household and then eating them.

The small quantity of mammal bones—other than those of deer—found at this site (Cooke n.d.b) may indicate that much of the forest had disappeared and/or that fish was a readily available alternative. Among the different fish species that Cooke identified were both riverine and marine forms. Some larger fish he found, such as the snook, even now migrate very far inland up rivers like the Grande and Coclé. A few species, like barracuda, were, unquestionably, caught in the open seas. A continuous reliance on seashore resources even during this period is attested by the presence of some shellfish and crab at Sitio Sierra and by large amounts of shellfish at Cerro Girón, near the much more ancient Cerro Mangote midden.

From the description above, it appears as if the Sitio Sierra inhabitants were concerned only with animals. This, of course, is not true. Despite the difficulty of recovering botanical remains in the tropics,

Cooke (1976a: 24-5) found charred maize kernels in house floors and rubbish dumps at this site, dated 240 B.C. - 310 A.D. (I-9704; Cooke 1976d). The presence of *manos* and *metates*, used in the preparation of maize, also suggests that seed agriculture was important. This type of agriculture was probably complemented by tubers, rhizomes, and tree products—both tending and wild—but remains of these plants are difficult to recover.

The ceramic styles represented during the period under discussion—Period IV (200 B.C.- A.D.500) in the present chronology, or the Santa María Phase in previous chronologies—comprise several stylistic variants: for instance, a “geometric” style full of painted lines, triangles, and crosshatched motifs, and a more “sloppy” style with red paint smeared everywhere, irregularly, in blobs, dribbles, and whatever. Both occur in the lower levels at Sitio Conte. The “geometric” style, known as the “Aristide ceramic group” (Fig. 10a-f), is characterized by elements such as scrolls, T-fillers, chevrons, and crosshatched panels. The use of only two colors, namely a black paint on a red slip, makes this style a bichrome rather than a polychrome. In addition, a newly discovered ceramic style (Fig. 10g-j), first defined from the southern tip of the Azuero Peninsula in the Río Tonosí valley by Ichon (1968), shares unmistakable resemblances to the Santa María Phase and the Aristide group.

The Tonosí basin is isolated from the rest of the Azuero Peninsula by fairly high mountains and dense forests. A fourfold sequence of occupations in the valley begins with Ichon’s (1974) Búcaro Phase (200 B.C. - A.D.200). Although scantily represented at only a few sites, Búcaro Phase ceramics form part of the Formative traditions discussed above. Incised and modeled decorations resemble some—though by no means all—of the ceramics of that period in western Panama. The Búcaro ceramics are associated here in Tonosí with a scant lithic industry comprising grinding stones, nutting stones, and hammer stones.

The subsequent period in the Tonosí Valley has been labeled by Ichon as El Indio Phase (Period IV, A.D. 200-500). Abundant ceramics and other materials



Fig. 10 (above) Pottery from Period IV (A.D. 200-500). *a-f*. Girón Banded Lip pottery, Aristide Bichrome group, central Panama. Drawings by R.C. *g-j*. La Bernardina pottery, Tonosí group, tip of the Azuero Peninsula. Drawings by M.L. de J. (after Ichon 1974: Fig. 31, Pl. XVIa).

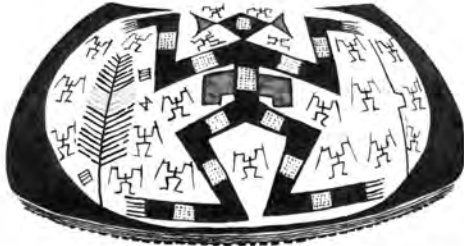
Fig. 11 (opposite) Trichrome vessels, El Indio Phase (Period IV, A.D. 200-500). *a-f*. Tonosí, Los Santos province. *g,h*. Las Huacas, district of Soná, Veraguas province. Museo Nacional de Panamá, Panama City. Photos by F.M.S. Drawings by R.McN.



a



b



c



e



d



f



g



h

from this period were found in twelve sites, all located near the sea. The two most important sites, El Cafetal and El Indio, were used both as cemeteries and living-habitation areas. Skeletons in shallow pits underneath houses were accompanied by a trichrome pottery of rare beauty and novel shapes, employing black and red paint on a white slip. Among the vessels unearthed were two types—the “Bernardina bowl” (Fig. 10g-j) and the big double-bodied vessel (Fig. 11a-f). The first of the two resembles the Girón Banded Lip type from the Santa María Phase; the second type seems unique. Incorporated into El Indio Phase were numerous decorative techniques foreshadowing the “Conte” styles of the central provinces discussed later on: for instance, the use of split representation and the white slip. Outside of Tonosí, El Indio polychromes have been found at Las Huacas on the Montijo Gulf (Fig. 11g, h; Brizuela 1972: 131-4) and at four sites in Coclé province, including Sitio Sierra (Cooke n.d.a). Whether Tonosí polychromes were traded into these other areas or manufactured locally still remains to be determined.

Homogeneity with the rest of the central provinces

was marked in the following LaCañaza Phase, named after the type-site. At this time (A.D. 500-700) the typical designs of the “Conte polychromes” take over (Fig. 12). Although the cultural realities reflected by this phenomenon are far from being understood, the close ties between the Tonosí Valley and the occupations farther north during Period V are undeniable.

To summarize, villages based on intensive agriculture had spread all along the rich alluvial lands of the major rivers by A.D. 500. Basic subsistence techniques were elaborated by peoples located either on the coastal edge, or on the intermediate plains. Some of the groups had spread where they were not before: up the foothills of the Tabasará Range and over the Continental Divide into the headwaters of Río Indio on its Caribbean side. With the spread of these groups came the disappearance of much of the forest and its characteristic fauna. More dependence was placed on agriculture and aquatic protein resources. In the centuries that followed, this riverine pattern was elaborated to the point of competition and cooperation between villages in the rich alluvial areas.

Fig. 12 Vessel of La Cañaza Phase (Period V, A.D. 500-700), Tonosí, Los Santos province. Museo Nacional de Panamá, Panama City. Photo by F.M.S.



The Classic Cultures of the Central Provinces and Their Art:

Developments at Sitio Conte and Related Sites

(Periods V-VII, A.D. 500-1500)

FOLLOWING the initial spread of agricultural villages, numerous settlements proliferated along the major rivers of the central provinces. Although no really comprehensive survey of the entire region exists—the land is either under cultivation or in systematic pasturing—at least forty substantial archaeological habitation and cemetery sites have been reported from western Coclé alone. Twice that number have been located in riverine zones outside of Coclé province, from the Tonosí Valley (Ichon 1974:33), throughout the provinces of Los Santos, Herrera, and Veraguas. Apparently the entire Pacific lowland area of central Panama was at this time participating in a unified cultural system based on the exploitation of similar microenvironments. At the level of artistic style, this unity was expressed in a distinctive polychrome pottery tradition (Fig.13) and in common stylistic conventions in the making of elaborate funerary objects in gold, assorted bone materials, and precious stone.

I find convincing Cooke's recent argument that this homogeneity did not represent trade out of a common Coclé center, as was assumed before. In my opinion, it represented a sphere of common action where historically related groups fought and were allied with each other in the normal processes of fission and fusion so common to tropical-forest cultivators in their expansionist phase (see Vayda 1961). No normal barriers, except rivers and small mountain massifs, impeded the flow of communication and the expression of dissension and hostility between these groups. Especially as population spiraled after A.D. 500, the rivalry for land, and for control of crafts and trade routes, also increased. Status differences were accentuated. The dynamics of warfare and competition were in full force at the time the Spaniards came. The central Panamanian groups became typical rank-

societies, neither completely egalitarian nor markedly stratified (see Fried 1967).

Although we are far from having detailed knowledge of the transition from the more egalitarian groups of the pre-Christian era to the rank-societies of the "Classic" period in central Panama, the processes involved could not have been very different from those proposed by Carneiro (1960), in his physical-circumscription theory, and by Chagnon (1970), who stresses social rather than physical barriers to mobility. Both theories attribute nucleation and alliance formation to the restraints put on simple fissioning and segmentation—moving out and away from crowded situations—by the scarcity of available land or the hostility of surrounding groups. These processes must have been operating in Panama, where we know, for certain, that the largest villages and the most ranked social groups occurred in the driest sector of the country. Here survival, or at least prosperity, depended on the control of riverine tracts for agriculture and trade. Significantly, other parts of the Isthmus, which are wetter and more forested (facilitating the continuous dispersal of human groups), had less impressive cultures.

SITIO CONTE AND THE EXCAVATIONS

Among the lowland plains of Panama, the llanos of Coclé are by far the largest, flattest, and certainly the driest (Fig. 14). Nowadays these extensive grasslands are used for raising cattle or sugarcane. A thousand years ago, and perhaps much earlier, this was one of the most heavily populated areas in the country. Unlike the coastal groups that settled on the shore, those of Coclé preferred to live farther inland, along the alluvial valleys where year-round cultivation without irrigation was possible in this relatively dry area.



Fig. 13 Polychrome pottery designs from Veraguas and Coclé provinces and the Azuero Peninsula, showing stylistic similarities over the entire area between A.D. 500 and 1100. *a.* Tonosí, Los Santos province (after a photo by Alain Ichon). *b.* La Peña, Veraguas province (after Wassén 1960: Fig. 9a). *c.* Tonosí, Los Santos province (after a photo by Alain Ichon). *d.* Sitio Conte, Coclé province (after Lothrop 1942: Fig. 137a). *e.* La Peña, Veraguas province (after Wassén 1960: Fig. 11a'). *f.* Los Santos province (after Lothrop 1942: Fig. 454b). *g.* Sitio Conte, Coclé province (after Lothrop 1942: Pl. IIa). Drawings by A.R.



Fig. 14 Aerial views showing the ecology of river valleys in Coclé province. (above) Arrow indicates the location of Sitio Conte on the Río Grande. (below) Close-up with hachures showing the area covered by Sitio Conte. Photos by Junius B. Bird.

The Río Grande, in Coclé, is one of several rivers flowing from the mountains into Parita Bay (Figs. 3, 14b). Like the others, its flood plain is quite wide. Numerous times in the past the river flooded and changed its course. Sixty years ago, it began to cut a new channel, and on the newly exposed bank the local people found gold and stone ornaments of amazing beauty. Following this event, a small collection of Coclé pottery was shown at the exposition inaugurating the opening of the Panama Canal in 1915. A decade went by before the big floods of 1927 exposed more treasures. Some of these were purchased by the Peabody Museum of Harvard University, which then decided to mount an expedition to this area. Led by Samuel K. Lothrop, the Harvard expedition began its work in Coclé in 1931; it continued it for two more seasons. By private arrangement with two landowners, Miguel and Héctor Conte, they obtained permission to explore a level area measuring no more than four or five acres on the east bank of the Río Grande, on their cattle farm. Previous digging at the sites by one of the Contes had exposed stones, roughly formed, upright, and aligned. These were plain and rather different from the sculptured columns found six years before by Verrill (1927a, 1927b) on the shores of the Río Caño, three miles to the north of Sitio Conte (Fig.15). The "temple" Verrill found had rows of stone columns, some measuring more than twenty feet in height, arranged into a rectangular enclosure. How Verrill derived his ground plan of the "temple" from his excavations remains a mystery to us. Although the site was apparently abandoned as a funerary and/or ceremonial center after A.D. 900, it was lived on, and buried in, until Colonial times. Recently, glass beads and a horse's skeleton were recovered from the mounds (Cooke 1976f).

Whereas the treasures found at Sitio Conte astonish and delight museum visitors the world over, the site itself fails to impress. It covered only eight acres, and, though potsherds were strewn over the whole terrain, substantial architectural remains were nowhere to be seen. Had it not been for the earth-mov-

ing efforts of the Harvard crew, very few of the buried features at the site would have come to light in any form permitting reconstruction. However, their excavation "techniques," as well as those of the University of Pennsylvania Museum expedition of 1940 (see Mason 1941:261-2), left much to be desired.

Three seasons and many months of work were necessary to uncover a total of nearly sixty graves at Sitio Conte, numerous caches or pits with valuables inside, a couple of clay floors that had been purposefully or accidentally hardened by fire, two rows of tall, crudely shaped stones that Lothrop calls "columns" or "altars," and an enigmatic concentration of unshaped river boulders interspersed with fragments of stone slabs shattered by heat. That was all. Signs of disturbance were detected everywhere. Older graves had been cut through or pilfered of their contents for use in later burial; all sorts of objects were broken and many were displaced; some things were burned or purposefully destroyed in other ways. And then there were floods and the decay that is natural in wet, acidic tropical soils.

These difficulties were compounded by others having to do with excavation procedures used in the 1930s. Good stratigraphic control was sacrificed to expediency. Aside from the area surrounding the graves, so restricted an area was exposed by excavation that we are hard put to figure out what sorts of activities took place at the site. In any case, Lothrop was probably right to emphasize its funerary aspects and its spectacular use as a cemetery. The same emphasis on burial sites was kept by subsequent expeditions to this area.

Graves were somewhat arbitrarily divided into three categories by Lothrop. Most spectacular among these were the "large graves." Containing anywhere from three to twenty-two bodies, they averaged ten feet in depth and were basin-shaped, with sloping sides and rounded bottoms. Stone slabs were laid down first—perhaps to form platforms on which to dry the bodies—then the floor of the graves was covered with a layer of broken pottery and lined with cotton or bark cloth (Fig. 16a). The main occupant was



Fig. 15 Río Caño “temple” site, Coclé province. (left) Old photograph of the 1926 excavations of A. Hyatt Verrill. (center and right) Stone figures found at the site. Photos courtesy of the Museum of the American Indian, Heye Foundation, New York.

placed in the middle (Fig. 16b). Originally seated on a wooden stool, long since decayed and disintegrated, he had some sort of makeshift shelter around him for protection and on every side were rows of corpses with heads pressed into the ground and the outstretched bodies generally facing east (see Fig. 16b).

An accurate account of one such large grave was offered by J. Alden Mason who directed, several years later, another short expedition to Sitio Conte to collect materials and information for the University Museum, Philadelphia. Talking about the largest grave they found, he says (Mason 1942: 105):

On the lower level lay three skeletons, on the middle one twelve, and on the upper, eight. Most of them lay parallel, east and west. The lower and middle levels were profusely covered with pottery vessels, mainly broken, those on the middle level being continuous with the pottery lining of the grave sides. The skeletons on these levels were also more lavishly furnished with gold ornaments; one of the eight large gold plaques accompanied one of the skeletons on the lower level. Most of the gold jewelry, however, was found with one skeleton on the middle level, evidently the chief occupant of the grave. . . .

It is not impossible that the grave was filled up after each level and later reopened, but far more likely that all interments on the three levels were made at one time; pos-

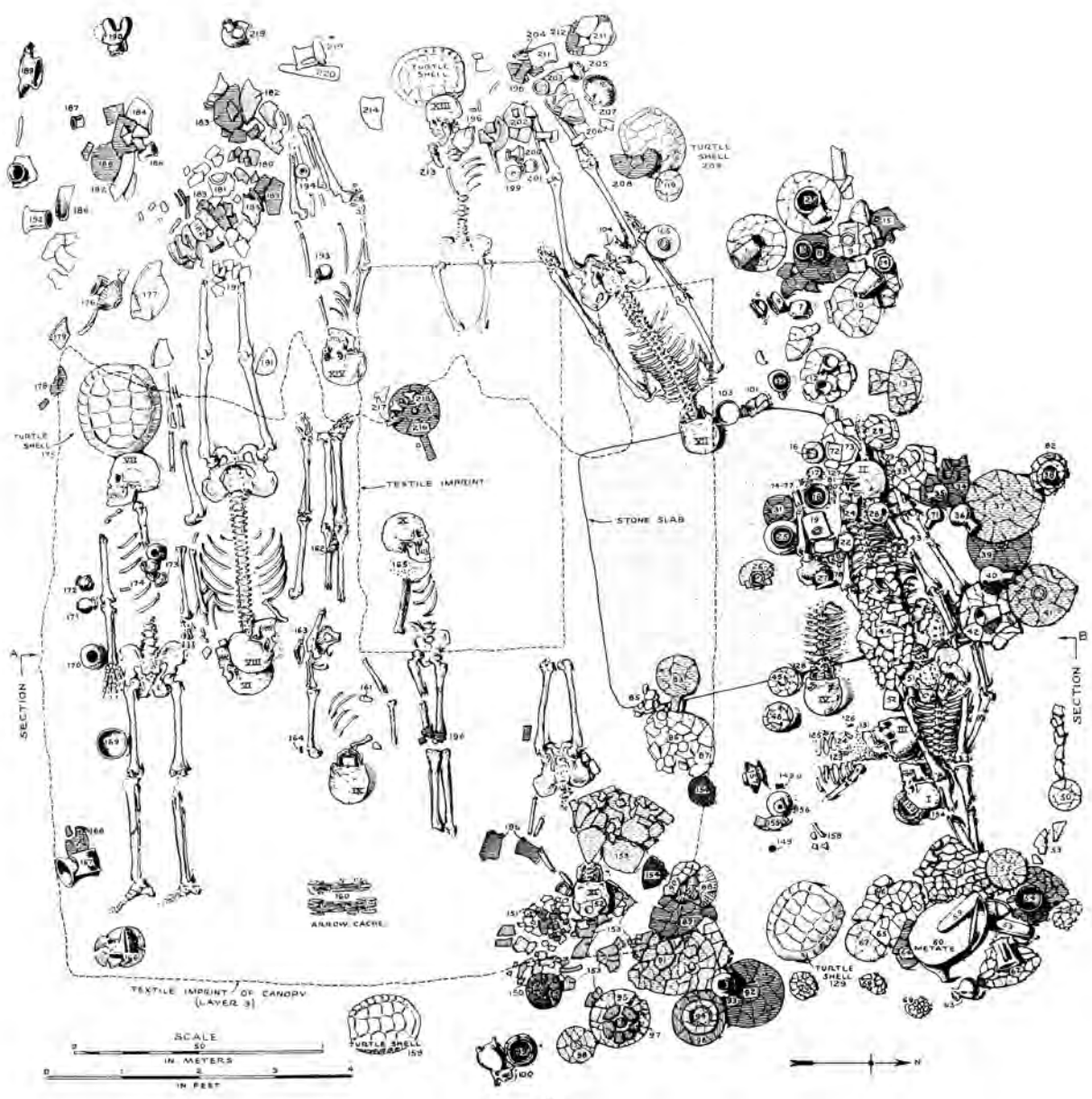


Fig. 16 Drawings of the large graves at Sitio Conte, Coclé province (after Lothrop 1937: Figs. 215, 31, 247). *a.* Grave 5, showing construction. *b.* Grave 26, showing the main occupant. *c.* Deposit XVI, Grave 26, showing the gold objects amongst the other types.



sibly a future study of the pottery and other artifacts will determine this question. The skeletons on the upper level probably were sacrifices, but most of those on the lower levels wore some gold jewelry and other adornment, and three in addition to the principal occupant had great disks of gold, the mark of chiefs. To my mind it is unlikely that subchiefs were sacrificed to accompany their "king," although it may be that, as in México, sacrifice was an honorable death which was welcomed even by men of high rank. But it is more plausible that, in such cases where graves contain bodies of a number of persons of apparently high social position, these were of chiefs and warriors slain in a single battle.

Up to one hundred pottery vessels were piled several layers high inside the large graves found by the Harvard expedition. They also contained large gold luxury items, such as helmets and breastplates (Fig. 16c) and possible regalia in the form of textiles, gourds, featherwork, and wooden objects, which have long since disappeared. Here and there were small deposits containing a few celts and some blades and arrowheads. Everything was trampled or unceremoniously swept aside and looted when new bodies had to be put into the graves.

Graves placed in the intermediate-size category by Lothrop were modest by comparison. Only seven feet deep, they contained one, or at most two, skeletons, always extended; one of them was always male. Funeral offerings were essentially the same as those found in the large graves, but no castings of animals, no helmets, breastplates, or cuffs, accompanied these dead. The small graves usually contained only one body in flexed position on a very small floor area that was often sprinkled with sand. On the average, six objects were all the funerary array found with these bodies, and not one of these objects was made of gold.

When Lothrop published his report, radiocarbon dating was not in existence and he had no way of telling the "absolute age" of Sitio Conte. He cautiously dated the burials A.D. 1300 to 1500, adding that the finds here corresponded so exactly with what the Spaniards reported in the early sixteenth century that a wide separation in time was impossible. (Incidentally, he arrived at this figure of 200 years rather ingeniously: by identifying the number of unique ce-

ramic styles attributable to single potters and multiplying this number by the estimated lifespan of the makers. Since the graves containing the individual styles were found in stratified series, the potters did not live at the same time. Therefore the 200-year estimate represents the minimum for the total period, assuming that the potters lived in immediate succession.)

AN INVENTORY OF FUNERARY OBJECTS AT SITIO CONTE

A glance at the two large volumes produced by the Peabody Museum describing the finds at Coclé (Lothrop 1937, 1942) shows that this is not a "typical" refuse assemblage—not the everyday household objects of ordinary use, but a very special kind of funerary array. Although the quantity of objects is vast, the categories to which they belong are actually few and distinct: tools and weapons, textiles, ornaments and jewelry of all kinds, and, finally, pottery—hundreds, actually thousands, of vessels of all shapes, sizes, and motifs.

For tools, first, we have the "celts" of hornstone or chert, shaped crudely by first chipping and then polishing to get a cutting edge (Fig. 17a,b). What are often thought of as spear points may have been blades (or knives) for wood-working and/or skinning game (Fig. 17c,d). The inventory of implements also included chisels, drills, awls, and perforators, made up of every type of material—bone, stone, and even metal—whetstones used for sharpening, and small pebbles employed in smoothing vessel walls.

Most tools and implements were found in bundles piled here and there inside the graves. Some objects appear to have been made hurriedly and carelessly, probably for use in connection with periodic activities that took place at the site itself: hunting and butchering animals to feed the crowds, digging the graves, making the wooden panoplies that covered the skeletons. Equally unpretentious were the *metates* and handstones used at the site for grinding maize. Crudely shaped by pecking, and later polished through use, their shapes were undistinguished and they were relatively scarce,

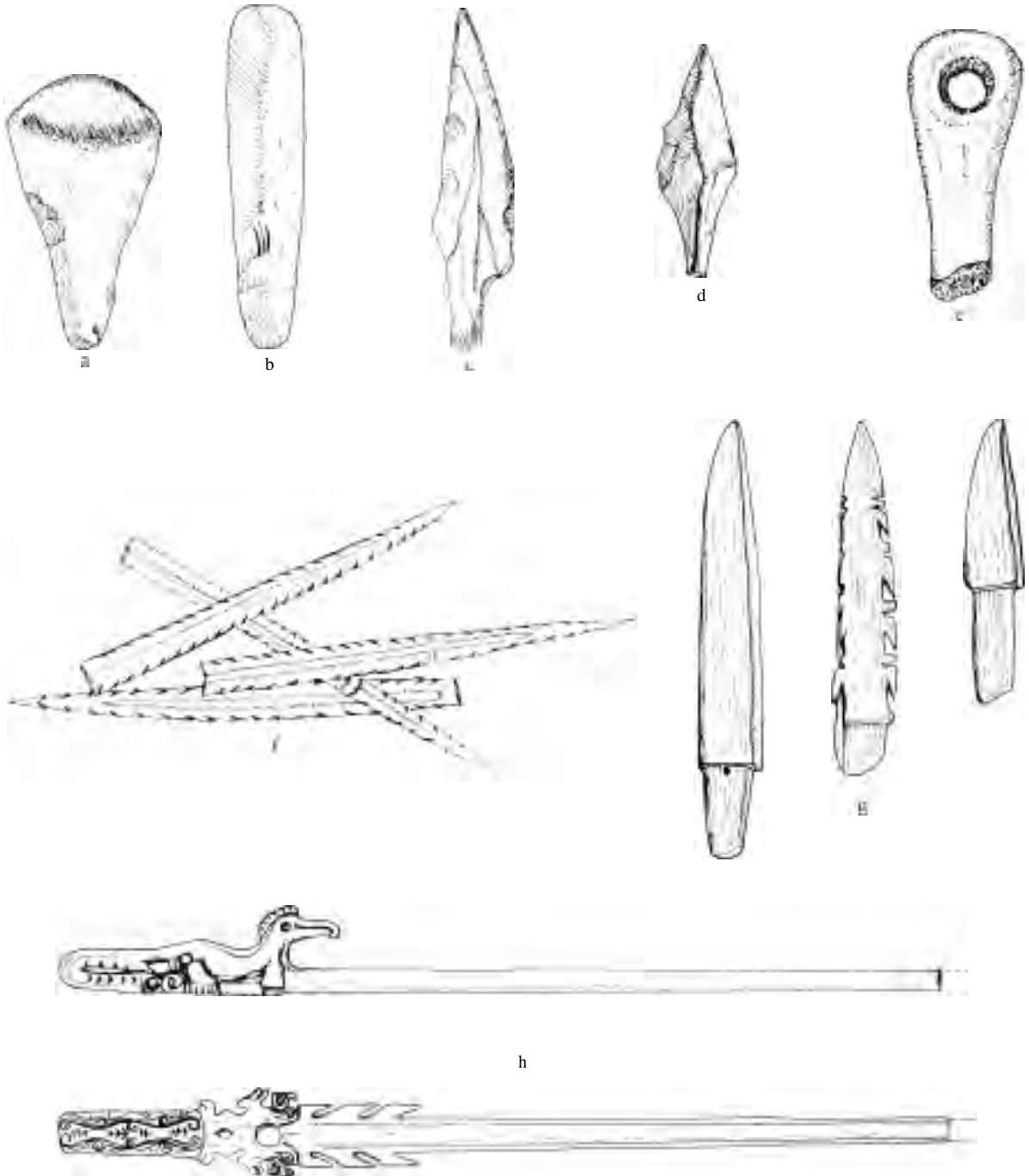


Fig. 17 Stone (a-e) and bone (f-h) tools and weapons found in the graves of Sitio Conte, Coclé province. a. Celt. b. Chisel. c,d. Blades and/or projectile points. e. Arrow-shaft straightener. f. Stingray spines used for spear points. g. Spear points cut from the rostral spikes of the sawfish. h. Speargrows (*atlatl*), lengths 48 and 58 cm. Drawings by O.F.L. (all except f after Lothrop 1937: Figs. 54b, 54e, 64i, 60c, 63a, 65b-d, 66).

existing in nothing like the numbers that could be expected had they been regularly used in everyday village activities.

The thousands of weapons were mostly for hunting or, more likely, for waging war: projectile points, arrowheads and spearheads of stone, and many bundles of stingray spines (Fig. 17f). The latter were particularly effective because of their barbs and the poison they contained. Other products used for points consisted of the teeth of sharks and the rostral spikes of sawfish (Fig. 17g). There were beautifully carved spearthrowers, effectively designed to increase the length of the arm and hence the propelling force behind the spear (Fig. 17h). Arrow- or spear-straighteners, made of stone, were long Y-shaped objects, with a hole through the widest part for the bent shaft of a weapon to be forced through and repaired (Fig. 17e). As with the celts, most of the weapons were placed in piles inside the graves. In one case, a cache of over one hundred arrowheads was found lodged inside the stomach wall of an individual.

Given the waterlogged condition of the graves, it is surprising that some textile impressions remained as “negative” patterns on the soil or on the surface of some copper plaques. Bark cloth, cotton robes or blankets, woven bags, and coiled baskets occurred in profusion, as did feathers (probably sewn into head-dresses). Of the actual techniques employed in the manufacture of these most perishable of products, very little is known. But from the chroniclers’ descriptions, and from other tangential evidence, we know that cotton robes of different colors were worn by high-status people. Gold plaques or bird-bone tubes were often sewn on them for ornament. Some items, such as “aprons,” were made from leather, on which were sewn the split molar teeth of dogs (Fig. 19a).

A complete list of ornaments found at Sitio Conte reads like a very elegant catalogue from Tiffany’s or Cartier’s. Every conceivable sort of object had been fashioned for every protrusion of the human body (Lothrop 1937: 112-190). So enigmatic do they seem to us that we can figure out their use only from their



Fig. 18 Figure of a warrior wearing many of the ornaments found in the Sitio Conte graves: helmet, ear rods, nose ornament, necklaces, breastplate, pendant, arm and leg cuffs. Drawing by M.H.M.

position on or near some section of the buried skeletons. Also, of course, we can count on the descriptions of the Spaniards whose eyes were sharply set on everything that glittered. There were headbands, helmets, crests, and feather headdresses, rods and spools for the ears, and rings of varied shapes for the nose. Necklaces were made from every material conceivable—metal, stone, vegetable, or animal. Breastplates of gold, large flat pendants, and mirrors made of pyrite flakes were worn around the neck. Bracelets were fashioned of bone and precious stone; there were golden cuffs for the arms and legs, and rings for the fingers and possibly the toes; there were belts and breechclouts. Not a single spot on the body was left unadorned (Fig. 18). Metal plaques were made to be attached to shirts and other items of clothing. Did anyone actually attempt to move about with all this armor? We know from Oviedo's account that up to sixty pounds of jewelry was worn at one time. But personal vanity alone cannot explain all this production. What we have at Sitio Conte is a collection of skeletons used as "hatracks" for social display.

A few other objects were used as musical instruments. These were mostly whistles, and were made, not of pottery, but of gold. There were also two kinds of rattle bells: one to be suspended by a loop, and the other with a handle to be shaken back and forth like regular gourd-rattles.

The most common material used was gold, probably obtained by panning in the rivers, possibly by mining, though no pre-Hispanic mines are actually on record, myths by the Spaniards concerning their abundance notwithstanding. Gold was often combined with copper in an alloy known as *tumbaga*. The combination has a considerably lower melting point than gold alone—200° C (when copper is found in proportions between 15 and 40 percent) versus 1063° C (for pure gold). Yet, molded objects of pure gold have been found at Sitio Conte, proof that this temperature could be achieved.

How did the smiths manage this? Crucibles and blowpipes must have been part of their essential gear.

Although not found at Sitio Conte—or perhaps not recognized as such—these implements have been reported from other sites in the general area. Be that as it may, smiths managed to melt their product, then proceeded to use all sorts of techniques for shaping it into objects. First there was hollow casting in the round by the *cire perdue* method, in which a core of fine clay, mixed with charcoal, was carved roughly to the desired shape. On it was put a covering of wax carved delicately into the model of a figurine. A mold of clay was placed around the object, and the molten metal was poured through a small vent. As the wax ran out, the gold moved in to occupy its space, leaving the figurine free when the mold was cut open. Another common method for working gold, far simpler, but much less versatile, was hammering gold and *tumbaga* nuggets on a piece of leather to produce flat objects, usually plaques. If sections of these metal "sheets" were subsequently pressed with a flat awl on the same leather backing, designs in high relief could be achieved. Embossing, as this technique is known, produced some of the most complicated and forceful designs in Sitio Conte history.

Pure golden tonalities were achieved by removing surface copper with urine or plant juices containing oxalic acid (Lothrop and Bergsøe 1960: 108). A rudimentary form of gilding was achieved by applying gold leaf. In addition, hammering was used to weld metal pieces together with the aid of heat. It has also been suggested (*ibid.*: 107) that soldering, possibly with an amalgam of gold and mercury(?), existed at the time. A few of the gold objects had precious or semiprecious stones inlaid in them.

Metals were by no means the primary material used in the manufacture of ornaments. Aprons, necklaces, and pendants were made from other things (Fig. 19): the teeth of dogs, peccaries, and sharks; the tubular long bones of birds; the ribs of the manatee and the lower jaw of the sperm whale; semiprecious stones such as agate, serpentine, and sandstone; and possibly nuts and wood, which have long since disappeared. The most unusual and charming Sitio Conte ornaments are the small group of thirty carved animal



a



b



c



Fig .19 Bone clothing and ornaments from Sitio Conte. a. Apron of split dog molars. b. Peccary (?) tusk necklaces. c. Bone pendants. d. Carved vertebra. Photos courtesy of the Peabody Museum, Harvard University, Cambridge.

figurines in ivory, copal (resin), and bone found in Grave II by the University of Pennsylvania Museum's expedition of the 1940s (Mason 1940). Ivory came from the teeth of the lower jaw of the female sperm whale, the resin from one or more trees of unknown name, and the bone from the ribs of the manatee or from the vertebrae of deer. Two, or perhaps three, inches high, these figurines were carved from such materials and then decorated with additions of gold sheathing. The latter was simply thin sheets of gold lightly pounded into shape on the objects themselves to add further details: wings or tails, eyes or feet, claws and fingers, headdresses and crests. Like almost everything else in the graves, these had suspension holes on top.

Sitio Conte tools were found in such large numbers as to suggest collective activities. Explained away by Lothrop (1937) under the convenient label of "caches," they may, in fact, represent the implements (*metates*, meat cleavers, etc.) used for procuring and processing the food consumed by the crowds participating in the funerary rites. Weapons, especially those lodged inside the skeletons themselves—or placed by their bodies—require little explanation, especially if we subscribe to the theory, first proposed by Mason and seconded in this paper, that these were warrior graves and not the graves of chiefs. The ornaments may also have been the property of warriors. Ethno-historical accounts confirm the fact that no self-respecting "soldier" went into battle without carrying full display regalia.

As for the raw materials represented in the graves, these were either indigenous (bird feathers and animal bones) or imported (emeralds from Colombia or manatee bones from the Caribbean coast). More will be said later about trade, especially on the idea proposed by Sauer (1966: 276-7) that Coclé gold was imported from Colombia.

FORMAL AND AESTHETIC PRINCIPLES IN THE POLYCHROME POTTERY

In the variety of its shapes and the charm of its polychrome designs, the pottery from Sitio Conte

and related sites is distinctive. But it is more than just unusual; it is one of the better collections made anywhere, at any time. Seven years were spent restoring, cataloguing, and describing thousands of vessels in Harvard's Peabody Museum. Lothrop's eye for details was unsurpassed. It is a tribute to his painstaking effort to reconstruct every burial and to describe its contents in minute details that this material has been used to prove him wrong concerning the chronology and function of this site.

There are several ways of describing Sitio Conte ceramics. Here we have chosen to begin with the methods used in the manufacture and the decoration of the vessels, for these give us a brief glimpse into the artists' mastery over the available medium. Then we will move on to the organizing principles reflected in the style and to the motifs that predominate. A section on the evolution of the style follows, and, to conclude, there is a speculative section on the social functions and the underlying symbolism of this most intriguing of "animal" arts.

Sitio Conte ceramics were grouped by Lothrop in three classes. The first was a monochrome or unpainted class relying for decoration primarily on "plastic" techniques—mostly incising, punctuation, appliqué, or bas-relief. Of this pottery Lothrop remarks that it was found largely in the "refuse deposit" of nearby sites (Loma de los Muertos and Héctor Conte). But later he points out that several vessels of this class have turned up in Sitio Conte graves also. Apparently, then, **some** of these wares looked foreign to him, more typical of other sites in the area, and others had an "early" look to them. In this study we have arbitrarily dismissed the monochrome pottery for lack of information; yet we should point out that the Formative ceramics, like the "scarified wares" previously discussed, show up at Sitio Conte also. These suggest that the site was used prior to becoming an important burial ground. The so-called monochrome foreign wares of Lothrop occur all over the central provinces and are of late date.

The second class of vessels at Sitio Conte was represented by incense burners and large storage jars. The

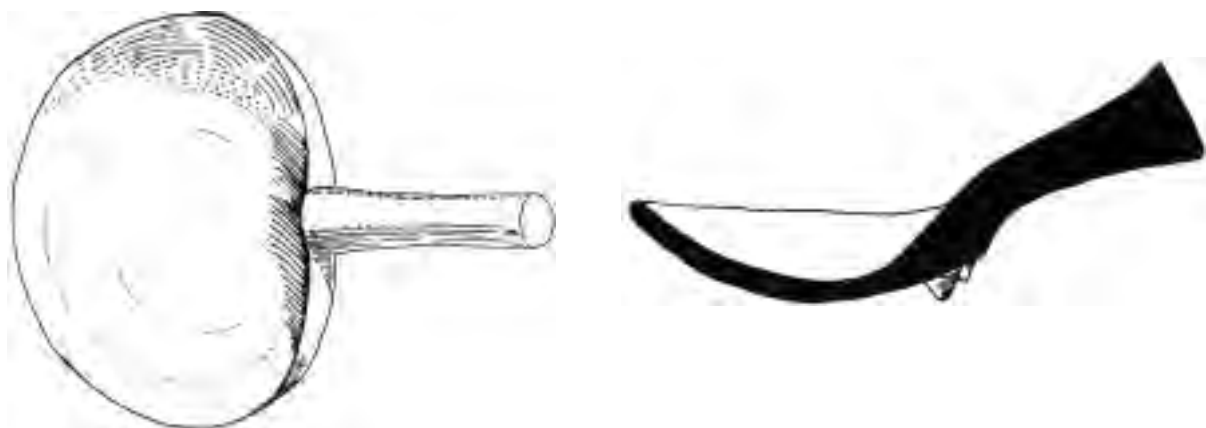


Fig. 20 Incense burners found at Sitio Conte. Drawings by O.F.L. (after Lothrop 1942: Fig. 353b, c).

first are shallow bowls or plates with handles attached in the manner of a frying pan, and two conical feet on the underside for added support (Fig. 20). Traces of carbon inside, and comparison with similar vessels in surrounding areas, leave little doubt as to their use. Storage jars were not well described in the Peabody report—mostly because they occurred in refuse heaps—but presumably they were generally plain, except for the addition of handles. In size and capacity, they were suitable for the preparation and fermentation of maize beer (*chicha*), the basic “social” drink of tropical America. Found mainly in caches distributed randomly in the graves, these jars, like the incense burners and the “utilitarian” objects described previously, were probably discarded after being used in funerary rites. To assume, as Lothrop does, that they were “secondary offerings” to the dead explains very little.

In this study we will be mostly concerned with the third class of vessels—the polychromes. “We define Sitio Conte Polychrome ware as an assemblage of vessels adorned with color-filled patterns painted in two or more pigments on a light background” (Lothrop 1942: 11). Produced both for everyday consumption and for inclusion with the dead as funerary array, the pottery found in the graves served the same display functions as the jewelry. Whole vessels show no signs of wear; their bases are intact; traces of charcoal that would suggest domestic functions are

nowhere to be detected. Polychrome sherds are regularly encountered in refuse heaps at Sitio Conte, as well as in the “domestic” trash of most other sites of the epoch. Lothrop’s careful study does show, however, that the vessels placed in the graves were hurriedly and sometimes carelessly made “within a period of a few weeks or even days.”

Manufacturing techniques were simple: the walls of vessels were built up by the progressive addition of coils worked one into the next. Sometimes they were merely pressed into shape. Pots with composite forms were made in parts and then fused together. Careful smoothing and polishing of the vessel surface followed, and was probably done in stages. Lothrop suggests that in the original “rubbing over” a corncob was used, but that in the final polishing of the exterior surface a small river stone commonly known as a “pebble polisher” was the tool employed. Hundreds of these pebbles, if we recall correctly, were found in the graves.

The shapes of Sitio Conte vessels are fairly varied and interesting (Fig. 21). Most popular among these are shallow, flat trays, usually square, resting on low ring-stands; round, slightly curved plates, also resting on low stands; deeper bowls with open mouths and ring-stands; jars with globular or angled bodies and tall necks, called carafes by Lothrop; spouted jars with flat lips on which spouts are attached; and globular



Fig. 21 Common shapes in the Sitio Conte Polychrome vessels. *a.* Tray. *b.* Plate. *c.* Flaring bowl. *d.* Out-sloping bowl. *e.* Pedestal plate. *f.* Spouted jar. *g.* Carafe. *h.* Bottle. *i.* Effigy vessel. Drawings by O.F.L. (after Lothrop 1942: Figs. 7, 261a, 9, 99, 144, 197a, 10a, 118a, 122).

bottles. All of these forms have one thing in common: they are extremely impractical. They are either too flat to hold anything, or they lack handles, or have bodies too small in relation to the neck to store or serve liquids, or their orifices are so awkwardly placed that drinking would be impossible without dribbling. Yet looked at from another perspective, these shapes are just right. For in their very simplicity, in their flatness, or in the uncluttered broadness of their exposed surfaces, they are admirably suited for ease of decoration and for maximum enhancement of any painted design.

Sitio Conte vessels were normally decorated with pigments on a light background. The background was achieved by applying a coat of clay which depended for its effectiveness as a decorative element on whether it was "dense" (a slip) or very light (a wash). Lustrous surfaces that make one think of some form of varnish were achieved by a coating of some kind. The usual colors used in decoration were black and brick red, with purple or occasionally brown or a darker red used to fill in spaces. All of the coloring materials came from inorganic substances, largely from earth materials. White came from a clay (probably kaolin), black from manganese ore, and the brick red, violet, and brown colors from hydrated oxides of iron found naturally in earth as ochres or hematites. Lothrop (1942:14) gives us a good description of the manner in which the area to be decorated was prepared:

Painted decoration on plates is the most intricate and varied to be found on any type of vessel from the Sitio Conte. The normal field of decoration is the upper surface, but the lips often carry a painted band and sometimes the entire lower surface is also embellished. In all cases, the area to be decorated is coated with a slip or wash which varies in color from a dirty white to gray, beige or buff. The undecorated areas, except the interior of the ring base which exposes the body clay, received a slip or wash of brick red. From this it follows that Polychrome plates, with the few exceptions adorned on both sides, have two distinct slips or washes: red on the bottom and light on the upper surface.

When it came to the actual construction and application of the pattern or design, the Sitio Conte potter

proceeded with assurance and unusual skill. A close study of the vessels by Lothrop revealed that the overall design was applied first, with any of a number of possible instruments, in the filler color, and only afterwards was the design outlined or secondarily embellished, using black. In this manner mistakes could be corrected and "evenness" of design more easily achieved. Symmetrical division of the decorative field was often done prior to the application of the design. This resulted in having small vertical or horizontal panels, or quarters, or circular or semicircular areas to decorate, reducing further the problem of fit between design and shape (Fig. 22). From this procedure we can also gather that many of the designs were actually chosen or "constructed" to fulfill the requirements of a particular space.

How did the Coclé artists actually go about the complicated process of creating a design? What can we say about their technique and the manner in which they rendered their aesthetic ideals? Perhaps we can start by discussing two simple patterns (one angular, the other sinuous), both of which served as basic "building blocks" in the construction of more elaborate motifs. Again, let us use Lothrop's own words (1942:15):

The basic, although not the most frequently seen element of geometric design from the Sitio Conte is shaped like the letter V [Fig. 23a] and also its affiliates with curved outlines which may be symbolized by the letters U or C. If a tail is added to V, it produces the letter Y. Curl the tail of the Y to the right and you produce a form which may be symbolized by the letters YC. Joining two C's together with one inverted below the other forms the letter S. Joining two V's together with one inverted forms the letter X.

In actual practice, the procedure here described for making the YC scroll was reversed. The artist probably started, as Lothrop suggests, by drawing a sinuous baseline, to which were appended curled-over spirals facing in opposite directions (Fig. 23b). Then the top and bottom of these were "sketched in" and subsequently filled with black. This procedure may have been facilitated by turning the vessel around. The result was the YC scroll, which could then be



a



b



c



d

Fig. 22 Drawings of Sitio Conte Polychrome plates showing different modes of dividing the decorative field (after Lothrop 1942: Figs. 37, 44b, 60b, 64). a. Panelling. b. Quartering. c. Halving. d. Centering.

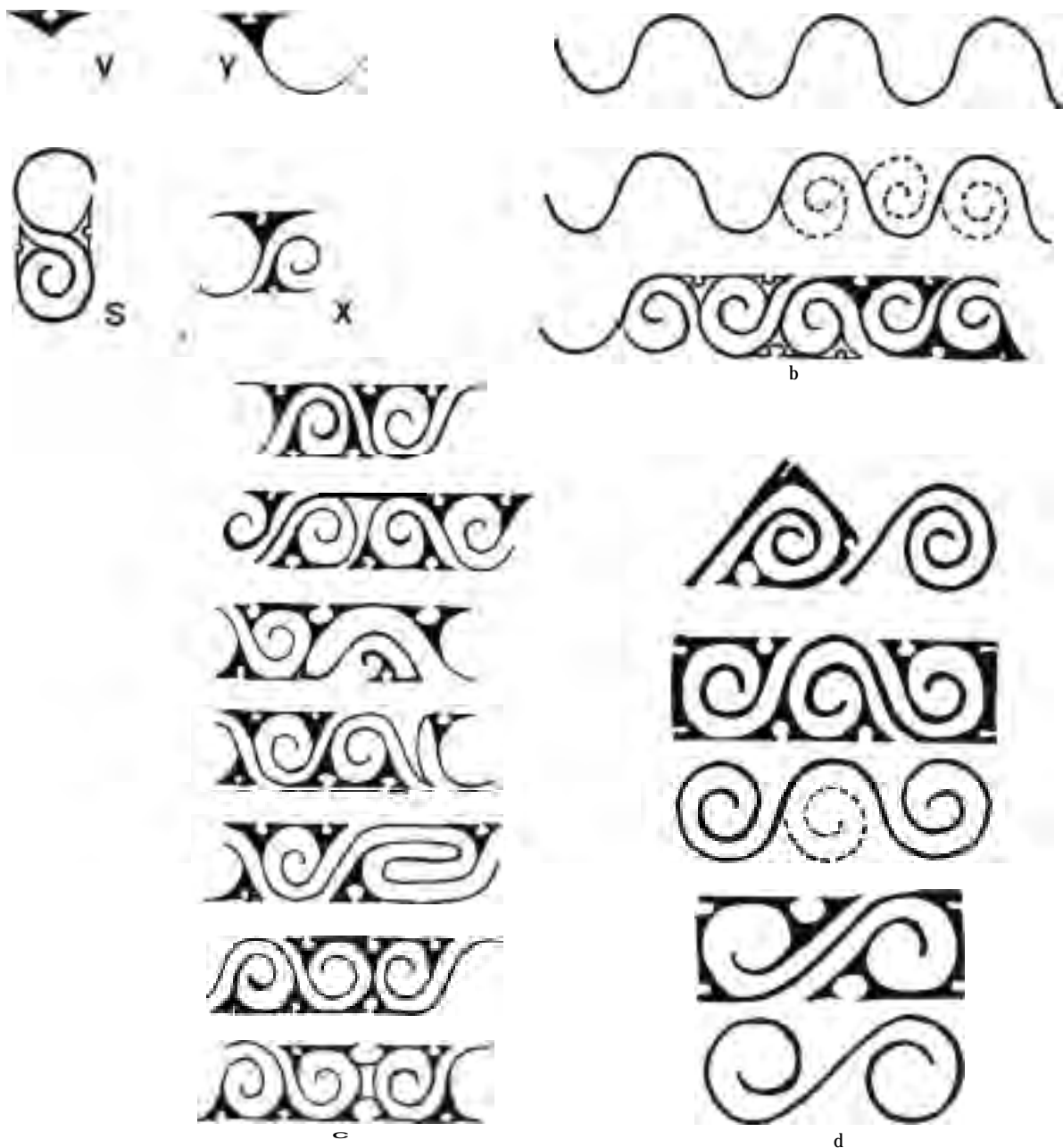
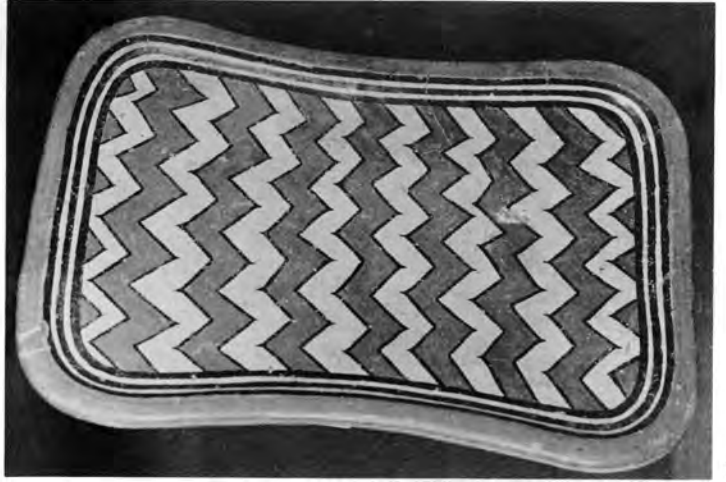


Fig. 23 (above) Techniques for creating designs on Conte-style Polychrome vessels. *a*. Basic elements. *b*. Constructing the double YC scroll. *c*. Correcting mistakes. *d*. Modifications of the YC scroll to fit a reduced field. Drawings by O.F.L. (after Lothrop 1942: Figs. 19, 113, 24).

Fig. 24 (opposite) Conte-style Polychrome vessels from several provinces showing the use of V and scroll motifs. *a, b*. Herringbone or zigzag pattern, depending on angle of view. *c*. Double scroll. *d*. Triple scroll. *e*. Quadruple scroll. *f*. Face scroll. Vessels *a-d, f* in the Museo Nacional de Panamá, Panama City. Photos by F.M.S. Vessel *e* in the Peabody Museum, Harvard University, Cambridge. Photo by O.F.L.



a



b



c



d



e



f

replicated, modified, elaborated, and transformed in multiple ways. These will be discussed presently, but we should point out that, in spite of the obvious skill displayed by Sitio Conte artists, they made mistakes. How they went about correcting and disguising these errors tells a great deal about their idea of perfection and the emphasis placed on symmetry and on the overall harmony of design. Most of these “mistakes” were committed in the final juncture of a whole series of YC scrolls (Fig. 23c). If the space to be filled at the end was too small, it could be left empty or, more commonly, filled in with an extra small spiral, or an extra Y motif, or a narrow V, or even extra concentric lines could be added. Something was always done to “smooth things over.”

Permutations and combinations of single elements could also produce a wealth of different geometric patterns (Fig. 24). If the V motif is nested, we have a herringbone; if V's are placed side by side, a zigzag pattern; if they are put with their bases together, we have a diamond; if their corners are rounded off, arches result. Scrolls were also combined in an infinite variety of forms: doubled, tripled, or even quadrupled, depending on the number of YC units they contained. Sometimes the Y elements were not linked on both sides, but were left “hanging.” Sometimes the Y element is missing and we have alternate-facing scrolls that are linked so as to form an S shape. These, in turn, were combined or interlocked in different ways. From all these descriptions one thing is clear: the scroll motif is extremely versatile, for it can be widened, stretched, or foreshortened, depending on the shape to be decorated. If it is a panel, the YC scrolls can be evenly spaced and “squared off” at the ends by the addition of two Y elements (Fig. 23d). If the space to be filled is a semicircle, the middle scroll is simply made larger. Finally, one of the cleverest ways of creating additional effects using YC scrolls was to join them at the bottom, then place them on either side of a central axis, curling them either inwardly or outwardly. The result was a generalized “face” impression, with the essential elements—eyes, nose, mouth, and chin—all present (Fig. 24f). Many

versions of the “face scrolls” were found in Conte art.

Turning our attention now to the designs that Lothrop labeled as “zoomorphic,” we can see that these were constructed by the permutations of simple formal elements. Scrolls became heads, tongues, antlers; wavy lines became the bodies of animals; concentric circles became eyes or bellybuttons. Even the movements involved in creating these designs emphasized sinuosity on the one hand or sharp angles on the other. Perhaps this point can best be demonstrated using the bird patterns. In both bird motifs, those that “look forward” and those that “look back,” a sinuous base line was drawn first, then doubled over to render the body in an off-center, teardrop effect (Fig. 25). The tail or beak was then simply suggested by an “unfurled” scroll, and the face by a scroll, perhaps, or even a Y motif punctuated by a circle. The legs were no more than nested V's, a bit fattened at the “thigh” end. Claws, feathers, or a crest on the head were rendered by “commas,” or T or L motifs, or simply wavy lines appended to the main elements.

The tendency to build up composite motifs suggesting animal forms out of a small repertoire of basic formal elements that could be recombined indefinitely runs all through Coclé art. Not only the sinuous line or scroll, but also ovals (alone or nested), diamonds (made from two V elements), squares with pointed ends, and rectangles with curving sides were all used to emphasize the main body areas, usually the belly or the head. As vessel shapes became more anthropomorphic or zoomorphic, these formal elements were painted on portions of the vessel in addition to a low-relief or three-dimensional rendition of arms, legs, and so forth (Fig. 26). A corollary of this “formalizing” tendency is the dislocation of motif elements so that composite forms emerge: “monstrous” animals combining the features of several forms. Baffled by these, Lothrop and those who came after him simply hyphenated their names or added “god” at the end, ending up with an even more monstrous nomenclature: “crocodile-headed bird pattern with antlers,” “turtle-god,” “crocodile god,” and so forth (Fig. 27).



Fig. 25 Conte-style Polychrome plates showing motifs of birds looking both forward and back. (left) Peabody Museum, Harvard University, Cambridge. Drawing by R.McN. (after Lothrop 1942: Fig. 44a). (right) Private collection, U.S.A. Drawing by R.McN. after a photo by O.F.L.

From all this, we can gather that stylistic conventions emphasizing formal structuring and aesthetic patterning of the design often override more literal renditions of the animal world. This point is crucial to understanding the symbolism and meaning of Conte art. I should like to give what I think are the general “rules” governing the formal organization of design. To begin with, there is a loose association between motif elements and overall vessel form. Some motifs, such as the scroll, occur on all sorts of flat surfaces (trays, plates, etc.), as well as on rounded surfaces (carafes, bottles, etc.). Others, such as the human body, almost never appear depicted on flat surfaces; instead, the whole vessel is made into a human form (i.e., “effigy vessels”; Fig. 21i). In addition, some vessel shapes are decorated with only one class of motifs. Bottles and carafes, for example, carry primarily geometric designs (bands, scrolls, nested V’s, etc.), never zoomorphic ones (with the exception of a few cases belonging to the late style, discussed later). Other kinds of vessels, like the plates, run the whole gamut of designs. The point is this: some motifs are more versatile than others, some shapes are more “receptive” than others. The general rule is that the more flat and open the surface, the larger the repertoire of motif elements.

A second important feature of the polychrome style is the emphasis on balance, usually achieved through design symmetry. In a geometric or static arrangement, the field to be decorated is divided up

and the motif placed in the center, or centers, of the banded areas (Fig. 28); sometimes one motif only can appear on the center. A more dynamic or easy flowing symmetry was achieved by the rhythmic repetition of the same design element, around and around, or by simply having one motif that unfurls. More interesting ways of achieving overall balance are by duplication of the same general motif face down or on the other side, or by alternation of one motif with another, so that motifs facing each other in a kind of radial symmetry are generally the same (Fig. 29). But—and this is important—they are never identical, never mirror images of each other. The variety is immense, the imagination always fertile. This kind of “duplication” shows up first at Tonosí in Period IV (Fig. 30a). Known also as “split representation” (Lévi-Strauss 1963: Chap. XIII), this technique produces some interesting effects. The same design, when looked at from different angles, can represent different animals. Other designs are split so they can be looked at frontally or sideways (Fig. 30b,c).

At the level of the motif itself, balance is achieved by opposing elements. The tail on a bird gets balanced by adding a crest on the head, facing the other way. Symmetry in the motif is also achieved by having a central vertical line as an organizing principle and placing on each side of it circles, scrolls, or plain “blobs,” resulting in such designs as the “face scroll.” Many elements also come in two’s: claws, antennae, legs, and arms. This is all “natural,” of course, but



Fig. 26 Vessels combining painting with relief decoration. a. Sitio Conte, Coclé province. Peabody Museum, Harvard University, Cambridge. Photo by O.F.L. b. Sitio Girón (?), Parita Bay, Herrera province. Museo Nacional de Panamá, Panama City. Photo by F.M.S. c. Río de Jesús, Veraguas province. Museo Nacional de Panamá, Panama City. Photo by F.M.S.



Fig. 27 Sitio Conte Polychrome plates showing unidentifiable animals which Lothrop labels as variants of the "crocodile-headed-god" motif. Drawings by A.R. (after Lothrop 1942: Figs. 60b, 53b).

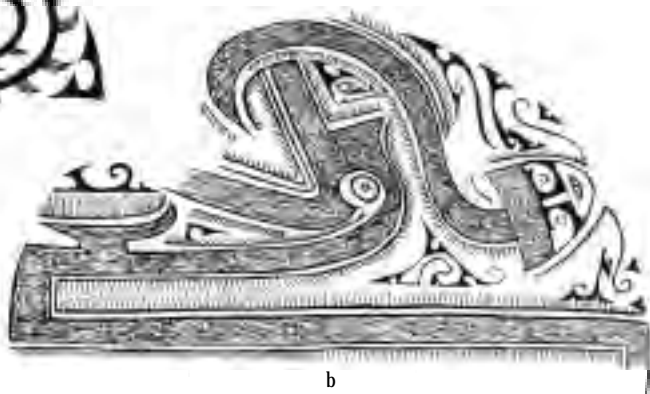


Fig. 28 Sitio Conte Polychrome plates showing the two kinds of design symmetry used to create visual balance. *a, b* Static. *c* Dynamic. Peabody Museum, Harvard University, Cambridge. Drawings by R.McN. after photos by O.F.L.



Fig. 29 Polychrome plates showing designs with facing symmetries. (left) Sitio Conte, Coclé province. Peabody Museum, Harvard University, Cambridge. Photo by O.F.L. (right) Coclé province. Museo Nacional de Panamá, Panama City. Photo by F.M.S.

quite often we see two heads on the same body or at either end of a serpentine motif. In addition, a third foot or an additional arm often appears to fill an empty space. This brings up another characteristic of this polychrome art: the dislike of empty space. Every corner receives some decoration, and, as time goes on, designs become more and more busy—flamboyant, in fact—with lots of filler elements or nested shapes everywhere.

The central Panamanian style is characterized by extreme abstraction and dislocation of elements, with an emphasis on balanced rendering of the designs. Symmetry is achieved by duplication, by a central axis, and by split representation. The urge to enclose spaces (i.e., to make panels) and to fill them up is very strong. Angularity is successfully combined with pronounced sinuosity, and both types of patterns tend to be concentric. The choice of motifs is not large, and this is very significant when we come to an interpretation of their meaning. But, first, let us turn to the problem of chronology.

THE CHRONOLOGY OF SITIO CONTE AND SUBSEQUENT POLYCHROME DEVELOPMENTS

The polychrome style, like all art forms, evolved through time. In his report, Lothrop divides the Sitio Conte graves into two lots, Early and Late, and lists six polychrome styles, identified with individual potters or family groups, belonging to the Early Period. He does the same for the Late Period, but I will not reiterate his criteria. Furthermore, his grave sequence is suspect, and the identification of styles with particular potters, or with their families, though a nice try, is certainly mistaken. A simple glance does show, however, that vessel shapes are simpler and their designs less cluttered (they have more empty space around them) in the Early Style. A more recent museum reinterpretation of the stylistic differences between the Early and Late polychromes, based on a reordering of the Sitio Conte grave sequence (Griffis and Pozorski n.d.), concludes that certain motifs are restricted to, or more common in, one style than in the other as the result of a shift from flat or con-

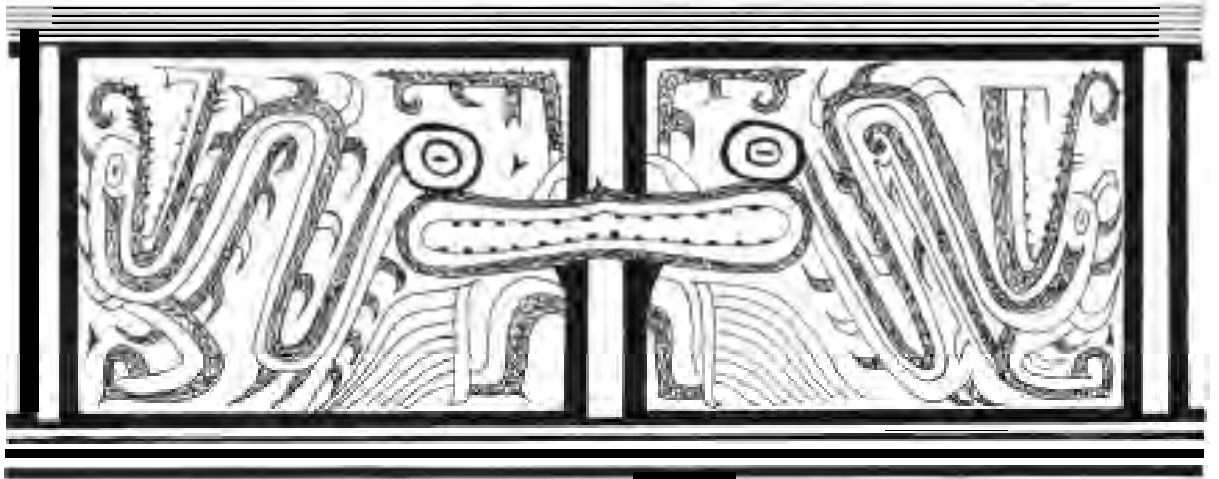


Fig. 30 Designs from Polychrome vessels illustrating techniques of split representation. a. Detail from a double vessel (Period IV, A.D. 200-500), Tonosí, Los Santos province. Museo Nacional de Panamá, Panama City. Drawing by R.McN. after a photo by F.M.S. b. Detail of a vessel (Period V, A.D. 500-700), Sitio Conte, Coclé province. Drawing by A.R. (after Lothrop 1942: Fig. 193a). c. Round vessel, La Peña, Veraguas province (Period VI, A.D. 700-1100). Drawing by A.R. (after Wassén 1960: Fig. 14).

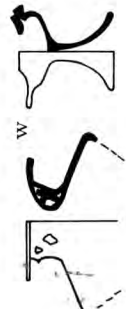
—A.D. 1500—

PERIOD VIII
El Hatillo
Phase



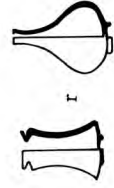
—A.D. 1300—

PERIOD VIIA
Parita
Phase



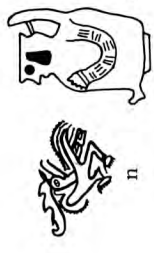
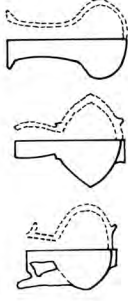
—A.D. 1100—

PERIOD VI
Macaracas
(Late Coclé)
Phase



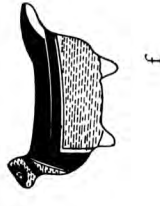
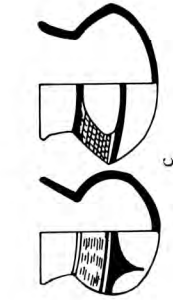
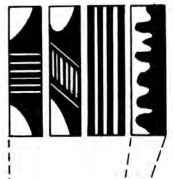
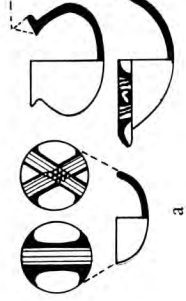
—A.D. 700—

PERIOD V
Conte (Early Coclé) Phase
La Cañaza Phase



—A.D. 500—

PERIOD IV
Santa Marta Phase
El Indio Phase



—A.D. 200—

Fig. 31 Diagram showing the evolution of the painted pottery of the central provinces. *a.* Cocobó pottery, Aristide group. *b.* Girón Banded Lip pottery, Aristide group. *c.* Escotá pottery, Aristide group. *d.* Double vase, Tonosí group. *e.* La Bernardina bowl, Tonosí group. *f.* Zoomorphic bowl, Tonosí group. *g.* Snail motif, Montevideo group. *h.* Spouted jar, Montevideo group. *i.* Bowls with decorated lips or shoulders, Montevideo group. *j.* Bowl with annular base and drooping lip, Conte (Early Coclé) group. *k.* Volutes, Conte group. *l.* Jars of different shapes, Conte group. *m.* Panelling, Conte group. *n.* Outlining in black, Conte group. *o.* Effigy vessel, Conte group. *p.* Tall pedestal vase with lip panelled in different colors, Macaracas (Late Coclé) group. *q.* Claw motif, Macaracas group. *r.* Bottles, Macaracas group. *s.* Crocodile motif with filler elements, Macaracas group. *t.* Vase with pedestal taller than that of *p*, Parita group. *u.* "Greek key" motif, Parita group. *v.* Very elaborate volutes, Parita group. *w.* Polychrome urn and zoomorphic vessels (including pedestal vase), Parita group. *x.* Pedestal vase, El Hatillo group. *y.* Decoration in concentric areas, El Hatillo group. *z.* Stylized crocodile motif, El Hatillo group. Drawings by M.L. de J. (after Cooke 1976c: Fig. 2).

tinuous surfaces (predominantly plates and flaring bowls) in the Early Style to more complicated or three-dimensional shapes (such as out-sloping bowls and effigy representations) in the Late Style. This is well illustrated by the “turtle motif,” which is painted in the Early Style but rendered three-dimensionally in the Late Style. Griffis and Pozorski (*ibid.*) also list the following motifs for the Early Style: spiral patterns, face scrolls, turtle and turtle-god motifs, double-spiral-snail fillers, clover leaves, T-rims, rectangular claws, whole human effigy jars, and small plain carafes. For the Late Style the following traits are most characteristic: pinwheels, geometric claws, scorpions, coral rims, effigy representations as heads only, turtle-effigy vessels, and a few carafes with decoration on the neck that is less varied, but on the bottom much more varied, than on the earlier ones.

Stylistic changes at Sitio Conte, based on stratigraphic divisions within a trench that Lothrop had dug at the site, but left unanalyzed, were discussed by Ladd (1957). More recently, Cooke’s careful excavations at neighboring sites (1976c, f; n.d.a) have added new field data to previous museum studies. Ichon (1968, 1974) has contributed information from the Tonosí Valley on the tip of the Azuero Peninsula, where polychromes resembling those of Sitio Conte appear in the La Cañaza Phase. Brizuela (1972) and others have excavated Sitio Conte-related sites in Veraguas province. Their information can be arranged into periods, all of which are represented at Sitio Conte, though not always in its cemetery. A modified version of Cooke’s latest chronological scheme (1976d), and of his most recent terminology (1976e), is given below (see Fig. 31):

Period	Dates	Phase	Ceramic Group
VII B	A.D. 1300-1500	El Hatillo	El Hatillo polychrome
VII A	A.D. 1100-1300	Parita	Parita polychrome
VI	A.D. 700-1100	Macaracas (same as “Late Coclé”)	Macaracas polychrome
V	A.D. 500-700	Conte (same as “Early Coclé”) La Cañaza	Conte polychrome Montevideo polychrome

It may be worthwhile here to offer some clarifications on Period V and VI ceramics from Herrera province discussed by Ladd (1964). There was some confusion in his mind between the “Late Coclé” ceramics at Sitio Conte (what Lothrop called Foreign Style A, or the Fine Line Style) and the ceramics which he himself defined from the same period at El Hatillo, near the Río Parita in Herrera province. Despite close similarities between them, Ladd made a separate category, which he called the Azuero ceramic group, and in it he placed the Macaracas style from Parita Bay. Understandably enough, Ladd had some trouble separating Late Coclé and Macaracas: “Differentiation of the curvilinear style as expressed in Macaracas type design elements from the Late Coclé style is difficult and not always possible in sherds” (Ladd 1964: 50). For that reason “a residual category of ‘Coclé-like’ was established for sorting purposes in the study of El Hatillo material” (*ibid.*: 51). Now, this typological hair-splitting may be largely academic. More important than minute stylistic differences that may exist between local styles are their overwhelming similarities, which occur over a large area and are more or less contemporaneous. For purposes of clarification and simplification, Cooke has renamed the “Early Coclé” category of Lothrop as the Conte Polychromes, and the “Late Coclé” styles as Macaracas, following Ladd’s nomenclature. The list of traits separating both phases given by Cooke (1976c, e) overlaps a great deal with Griffis and Pozorski’s classification (n.d.), lending validity to both schemes, as they were done totally independently. I shall not reiterate Cooke’s criteria; however, I will quote here some of his passages (my translations), as they summarize well the stylistic differences between Periods V (Conte Phase) and VI (Macaracas Phase).

In general terms the arrangement of designs in the Conte ceramics (Phase V) is simpler than that of Macaracas: the painted animal motif is usually placed in the center of the plate and the background is not so filled-in; further, the animal’s pose is more naturalistic. The slip found in Phase V tends to be white, because of the color of the paste. (Cooke 1976c: 325)

Of the following Period VI style he has this to say:

In general, the Macaracas ceramics are more baroque; the animal motifs are more broken-up, and they are frequently missing parts of their anatomy; the surface of the plates is divided into several geometric areas, into which are compressed the design elements. (*ibid.*: 326)

Insofar as the post-Sitio Conte Period VIIA and VIIB (A.D. 1100-1500) chronology may also be confusing, I will attempt again to summarize the evidence presented by my colleagues. In his museum study of materials from El Hatillo, Ladd (1964: 223-4) proposes the Herrera Phase, characterized by a number of ceramic varieties subsumed under two larger "wares," Parita and El Hatillo. Once more he isolates the Herrera region when he adds: "Few, if any, vessels [of this period] have come to light east of the region adjacent to the Parita River" (*ibid.*: 224). This statement has again been shown by Cooke's studies to be mistaken. At least thirty-five sites which he and others surveyed in Coclé province, to the east of Ladd's region, have habitation refuse containing unmistakable Period VII ceramics. Among these sites is Sitio Conte, whose occupation lasts until this period, even though the main burial activities had ceased by A.D. 900 (see below). Although Ladd (1964) considers the Parita and El Hatillo ceramic groups to be probably contemporaneous, new radiocarbon determinations (Cooke 1976d) suggest that Parita was the antecedent. Of these two groups, El Hatillo is the more abstract. Despite this abstractness, however, I am of the opinion that El Hatillo motifs are recognizable versions of the more "naturalistic" animal motifs of former periods even though they are simpler and more angular. This is especially obvious in the Parita ceramic types that Ladd called *Ortiga* and *Yampí*.

At Sitio Conte, the main burials are considered to date A.D. 500-900. "In the main tombs were not found vessels pertaining to the latest variety of the Macaracas group (*Cuipo*), nor to the subsequent groups, namely

Parita and *El Hatillo*" (Cooke 1976d, author's translation). But, as we have observed, the presence of some Period III to VIIA ceramics in the other areas of the site indicates a much longer occupational—if not funerary—chronology: A.D. 200 to A.D. 1300. During this time, the kinds of activities associated with Sitio Conte obviously changed. During Periods III and IV the site was used, though not intensively, for habitation; this was also true of the Parita Phase occupation in Period VIIA. The main funerary-ceremonial use of the site was apparently restricted to Period V and the first part of Period VI, which date the contents of the principal graves unearthed by Lothrop and Mason.

Given the time-span represented, are we justified in considering the iconography a unified expression of certain social values? I think the answer is unquestionably yes, at the general level of meaning with which we are dealing. The polychrome styles of the central provinces all through their evolution are unlike any style from elsewhere in Panama. Although they may have changed—reflecting certain social and ecological changes—their unity is definitely the expression of common values and a common way of life over the entire area where they occur. While the focus of these developments was the central provinces, the polychrome style extended much farther: to Venado Beach (Lothrop 1954) and Panamá Viejo (Biese 1964), across the Gulf of Panama to the Pearl Islands, and over the mountains to the Atlantic coast of Veraguas. I am in full agreement with Cooke in rejecting Lothrop's idea that all of these ceramics were spread by trade from Coclé province. Since local manufacture is undeniable in most cases, an economical explanation would be to suggest foreign enclaves—groups of immigrants from the central provinces. Given the constant state of warfare in the homeland, this explanation seems plausible, but unsubstantiated.

Meaning and Function in the Arts of the Central Provinces

UNLIKE OTHER interpretations of extinct art forms (e.g., Rowe 1962), this one does not set out to see the central Panamanian art style “as its makers intended it to be seen” (*ibid.*: 4). It seems to me (Linares 1976a) that archaeological motifs and designs are best interpreted as collective representations—unconscious projections of past social systems—rather than as rationalistic modes of thinking. Undoubtedly, a complicated system of myths and religious beliefs underlay this animal-centered iconography, but this is no longer available to us. The Spaniards did not collect verbal accounts of their myths and rituals, Indian societies disappeared from most of the central provinces shortly after the Conquest, and the modern peasant population of the region has little to do with the Indian past.

Even when there are fewer practical problems, it is risky to use modern myths to explain the meaning of past iconographies. Attempts to do so result in misplaced concreteness, as when Laude (1973) picks out an element of Dogon myth at random to explain a particular feature in Dogon sculpture. Or they may dissolve in vague intuition, as when Lévi-Strauss (1963: Chap. XIV) appeals to myths from central Brazil to explain a motif in ancient Nazca art from coastal Peru. The use of such material is valid only when it is associated with a coherent system of symbols, complex enough to suggest that a single story, or series of connecting events, is being communicated. An excellent case is made by Lathrap (1973b): using myth elements from tropical-forest tribes of Amazonian South America he concludes that the main event portrayed in the principal Chavín stela (the Tello Obelisk) from northern Peru is the introduction of important tropical cultivars. As a further precaution against over-interpretation, we may also take a close look at ethnographic studies of contemporary “primitive” arts. In one such study—perhaps the best to date—Munn (1973) shows how elaborate is the sociocultural code embedded in the myths, ritual, and

graphic iconography of the Walbiri, a central Australian tribe. Whatever meaning we may derive from our archaeological designs by using context and association, it is bound to be a pale reflection of ancient realities.

An interpretation of the meaning of Sitio Conte and related polychrome designs is facilitated by the limited range of subjects that were portrayed. Plants and their products seldom appear, at least in recognizable form. Perhaps plants only acquire symbolic importance in areas where they are scarce, as in the Southwest of the United States or on the Peruvian coast, or in contexts where important cultivars are associated with a graphic iconography (Lathrap 1973b). However, in the humid tropics where the plant cover is abundant, and important cultivars have been around for a long time, animals were often the most valued goods. Not only were they essential to survival, but many species were economically important as the source for raw materials to produce implements and luxury goods. Among a multitude of graphic possibilities, *Coclé* artists elected to portray only a segment of the animal world. Either the human figure was commonly portrayed or, later on, as roles proliferated and competition for leadership became more acute, a metaphorical language was evolved using certain animals as symbols to communicate cultural values.

An idea of how this symbolic system functioned can be gathered from a careful examination of the fauna that was depicted and the traits that it shared. Among primitive societies in tropical America, the visual arts are only one of several symbolic languages using animal motifs as metaphors for the quality of human interactions. In the field of ritual and myth, Lévi-Strauss (1969) has documented the extensive use of animal symbolism among South American societies. This concern with animal behavior in the tropics is understandable. Species diversity in these habitats tends to be great—much greater, in fact, than in

temperate zones. In these close quarters, all sorts of animals have evolved very complex forms of inter- and intraspecific interactions, involving several types of mimicry, commensalism, and elaborate signaling systems (Moynihan 1971: 373). Thus, in many ways, animal behavior in the tropics mirrors the complexity of social behavior with ease, facilitating the whole symbolic process.

However, animal depiction in central Panamanian art was never of nature straight and undisguised. If anything distinguishes the Conte and Macaracas styles, it is the altogether skillful way in which artists chose to portray certain animals, in certain postures, and with certain traits emphasized. In spite of extreme stylization and the common practice of combining attributes from several species, it is possible to identify to a surprising degree these “fantastic” motifs. To do this it is essential to separate purely aesthetic devices from more symbolic ones, a task that is by no means an easy one.

In a long and detailed book written many years ago, Franz Boas (1927) argues a rather “modern” point of view: namely, that, in the arts of “primitive peoples,” technical excellence alone produces aesthetic pleasure, especially as it is felt by the artist himself. His comments on this subject are pertinent here, because whatever may have been the symbolic or social value of Panamanian art, one thing seems obvious—the polychrome designs on their vessels were done in a highly sophisticated style chosen by potters for aesthetic reasons of their own. A strong “formal element” characterized their work in the patterning of their painted designs as well as in the motifs that they chose. In order to realize their aesthetic ideals, these artists corrected their mistakes, varied designs so that no two would be identical, duplicated the same vessel when it was pleasing to their eyes, and “distorted nature” to gain certain effects. We have here a type of society whose highly specialized craft production exhibited a certain feeling for perfection and provided for the artist great pleasure in the expert manipulation of a style.

Does it follow, then, that the main force behind

their art was largely aesthetic? Difficult as it may be to discuss motivation in the arts of contemporary “primitive peoples,” this problem is compounded when we are dealing with art forms that existed a thousand years ago, among people whose belief systems are unknown to us, of whose lifeways we have only the most general knowledge. Yet we need not stop where Lothrop did, with their art as “a world of never recorded and long forgotten myths” (Lothrop 1942: 28). Other interpretations of the function and meaning of Sitio Conte art, and of related styles at the time, are possible, if we are willing to look at them long enough and hard enough, and if we place these styles in a broad historical and social context, gaining an added perspective from recent studies of the symbolism and social uses of ethnographic art.

It is doubtful if aesthetic reasons alone can account for “primitive art”—or, for that matter, any art. This problem has been debated long and hard for many years, and we have nothing definitive to add here, except to note again that some Sitio Conte vessels appear to have been manufactured hurriedly, possibly for use in funerary rites. The sections of Sitio Conte vessels that were invisible (the underside, for instance) were seldom decorated and sometimes not even slipped. The flat shapes and flamboyant designs in central Panamanian art suggest that, regardless of their certain usage in everyday life, vessels were manufactured to be looked at by others, often from above, and hence to serve as objects of display. Therefore, it is not difficult to imagine crowds of people gathered at the edge of a large and luxurious grave, admiring its contents, and, by a very common form of reasoning, equating the status and rank of the grave’s occupants with the quality and abundance of their funerary gear.

But this admiration was not simply contemplative and for enjoyment alone. Deliberate destruction of art objects by burning and trampling prior to burial, and stealing from one grave to fill another, suggest to us that something else was going on, that “fighting over property” may have been part and parcel of validating status and of establishing prestige in this

society. A common enough phenomenon the world over, this form of competition has been splendidly documented among the Northwest Coast tribes of the United States. If subsequent interpretations of ethnohistorical sources closer to home are correct, we can see why social status and political prestige had to be affirmed again and again. For, unlike other “more developed” chiefdoms the world over, a prominent feature of ancient Panamanian rank-societies—or, for that matter, of tropical tribes organized under chiefs in many areas of the New World—was the fact that social and political power was usually achieved, and rarely passed down without a hassle, from family to family in accordance with principles of aristocratic succession. Especially after the death of an elder or high-ranking person, or after loss of leaders in war, the scramble for new leaders, the balancing of status that went on within and between groups, became expressed in these competitive displays.

The concern with social status may have been expressed in this art in more subtle ways than meet the eye at first. We know that, at the time of the Conquest, painted motifs and tattooed patterns applied directly to a person’s body were considered to be badges of rank. Painted motifs on the body were also used as political insignia; warriors fighting under a single chief were painted in a special manner before going off to war. Quite conceivably then, some of the motifs on Sitio Conte objects carried connotations of rank, especially the geometric designs on effigy vessels (Figs. 32, 33). Certain motifs on the face or arm and leg portions of these vessels suggest that such motifs were more than simply decorative, and that they served to classify people and to mark their social roles. The expression of social differences through the medium of body painting and tattooing has been noticed in other societies similarly organized along hierarchical lines (Lévi-Strauss 1963: 257). Moreover, even those designs found on golden breastplates, bracelets, and the like, may have served a dual function: to confer prestige because of their intrinsic worth and to mark status through the association of motif element with social position.

If we pursue further this problem of social symbolism, we can see that many of the designs may have had other sorts of meaning as well. But we must begin by assuming with Leach (1954:105) “that the designs of primitive peoples are seldom abstract in any genuine sense.” This seems to be a basic tenet in Conte art, where even as abstract an element as the scroll was turned into a face. So let us begin with a discussion of some animal motifs found at Sitio Conte—and at related Coclé Veraguas, and Azuero sites—that belong to more or less identifiable classes of animals. Commonly portrayed are birds, dogs, sting-rays, hammer-headed sharks, deer with antlers, turtles, crabs, and animals with crocodilian features. In Sitio Conte graves the animals depicted on the pottery and gold jewelry are the source of raw materials used in manufacturing other funerary items. The long bones of birds were fashioned into bracelets and necklaces, their feathers into headdresses and aprons. Sting-ray spines and shark teeth were made into projectile points, found in innumerable caches. The teeth of dogs and other animals were strung into necklaces and bracelets. Turtle carapaces, found in great profusion in the graves, were probably, from ethnographic descriptions, used as a sounding board. It seems quite possible, then, that at the level of the iconography itself, and by a sort of logical extension, the animals portrayed in central Panamanian art were highly valued as the source of the paraphernalia used to establish status and rank.

If we probe even more deeply, we see that a kind of symbolic extrapolation may also have been taking place. Certain animals, such as the “birds that look forward” and “those that look back,” are portrayed strutting about with big trailing feathers or recurved crests on their heads. These representations may have been semirealistic: there are in Panama large gallinaeous birds, such as guans and curassows, which have crests of this kind. (These are large, notoriously ill-tempered birds who fight furiously among themselves.) Nor can we dismiss the possibility that a crest was a stylistic device to balance the tail. Nonetheless, I suspect that feathers used in making headdresses to



Fig. 32 (above) Drawings of Sitio Conte Polychrome effigy jar covers. Note the face painting in the manner described by the chroniclers (after Lothrop 1942: Fig. 206).

Fig. 33 (below) Effigy vessels in the Conte style showing face and body painting. (left) Coclé province. Museo Nacional de Panamá, Panamá City. (right) The only vessel from Sitio Conte now in the Museo Nacional de Panamá, Panamá City. Photos by F.M.S.



be worn by important individuals became “symbolically condensed” (see V. Turner 1969: 52) into motifs of birds strutting about like important people, most likely warriors. Far-fetched as these extrapolations may seem at first, we are reminded by the work of ethnographers such as Fischer (1961: 80) “that, regardless of the overt content of visual art, whether a landscape, a natural object, or merely a geometrical pattern, there is always or nearly always at the same time the expression of some fantasied social situation which will bear a definite relation to the real and desired social situations of the artist and his society.”

Following this point of view even further, we should ask not only “What is in the environment?” but also “Why do these people notice items A and B and ignore items C and D in the environment?” (*ibid.*). All sorts of possibilities are suggested once we ask such questions regarding the fauna depicted in central Panamanian art. A word of caution, however, is appropriate. Volumes have been written before on the subject of “naturalistic” versus “abstract” art or of “formal” versus “representational” art. We are reminded by Mills (1957: 5) of how misleading this dichotomy can be when he discusses the “infinity of ways and degrees in which style may depart from reality as it is known in everyday life.” The same words of caution apply to central Panamanian art, which runs the gamut from distinct animal forms to bizarre designs combining attributes from several animals.

Among the more realistically portrayed animals appearing in the polychrome designs are crustaceans (mainly crabs), which are usually rendered by emphasizing just those parts of the animal that are diagnostic: the rostrum down the middle, the pincers, and the stalked eyes. In some designs, the desire to “identify” is so strong that crabs are portrayed with the bottom of their abdomen pulled out to remind us that in females of the species this part is folded over as an

egg-storage device (Fig. 34). In a similarly realistic fashion, effigy vessels portraying turtles have distinct carapaces, highly placed nostrils to facilitate breathing in the water, and eyes placed high on the head (Fig. 26a). There are a few motifs with deer designs where the antlers are emphasized, and portraits of owls with distinctive tufts on their heads. Other easily identifiable motifs are those of snakes, marine worms (i.e., fire worms of the class *Polychaeta*), cormorants or other marine birds, ticks or spiders, and scorpions (Fig. 35).

With the hammer-headed shark and the stingray, we have animal motifs occurring singly or in combination. The attributes of each species are carefully rendered. Sharks have lateral and back fins and also gill slits, like rays. Rays have rows of teeth used to grind mollusks, olfactory pits highly placed on the head, and special male organs, or “claspers,” to facilitate copulation. Designs combining the attributes of hammer-headed sharks and rays are common in Parita Polychrome styles (Figs. 36, 37). This is interesting because, in nature, hammer-headed sharks actually feed on stingrays. There is a description in the zoological literature of a shark with more than fifty “stings” (the serrated tail spines of the stingray) em-



Fig. 34 Sitio Conte Polychrome plate depicting a crab with claws, stalked eyes, and egg-storage device. Peabody Museum, Harvard University, Cambridge. Photo by O.F.L.



Fig. 35 Various animal motifs used on Sitio Conte Polychromes. a. Boa constrictor (?) (after Lothrop 1942: Fig. 147a). b. Marine worm (after Trujillo 1972: 42, center). c. Ticks (after Lothrop 1942: Fig. 69). d. Marine bird (after Trujillo 1972: 16, bottom; and Lothrop 1942: Fig. 167a). e. Scorpion (after Trujillo 1972: 38, top left). f. Crab (after Trujillo 1972: 29, bottom). g. Deer head (after Lothrop 1942: Fig. 280). Drawings by O.F.L.

bedded in its anatomy (Norman 1963: 106). This suggests to me that, by catching sharks, ancient groups obtained the spines of rays to be used as spearheads. Composite scenes involving other potential predators and their prey are not especially common, but they do occur: between marine birds and crabs, or between frogs and insects, for example.

If we focus attention on the behavioral qualities of the animals that are portrayed, the shared features become immediately apparent. The animals are repellent (poisonous frogs, snakes, toxic marine worms) they are dangerous (sharks, stingrays, needle fish; Fig. 38); they have hard body parts (turtles, crustaceans, armadillos); they “charge” (curassows); they have



Fig. 36 (above) Plates of the Macaracas Polychrome group with animal motifs combining attributes of the hammer-headed shark and the stingray. (left) Parita Bay, Herrera province. (right) Veraguas province. Museo Nacional de Panamá, Panama City. Photos by F.M.S.

Fig. 37 (below) Detail of a design from a large round vessel of the Macaracas Polychrome group (?). Two animals, possibly an alligator or turtle and a sawfish, chase each other. Museo Nacional de Panamá, Panama City. Drawing by A.R.



Fig. 38 Designs from Sitio Conte Polychrome vessels depicting needlefish. Drawings by A.R. (after Lothrop 1942: Figs. 381, 344).

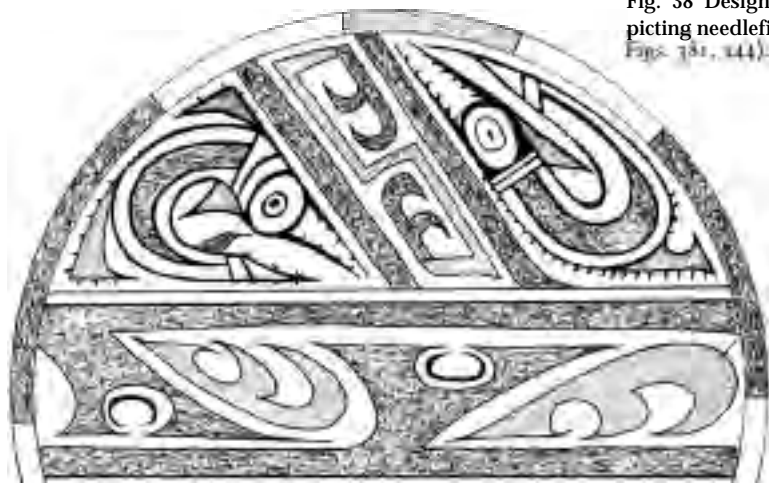


Fig. 39 Plate depicting a squid. La Cañaza Phase (Period V, A.D. 500-700), Tonosí, Los Santos province. Museo Nacional de Panamá Panama City. Photo by F.M.S.



a “pinch” or “sting” (crabs, scorpions, ticks); they are cryptic (squid; Fig. 39); they eat people (crocodiles, felines); or they are predatory (man-of-war birds, hawks).

Conversely, if we pay attention to the animals that were *not* portrayed in the art, other common qualities emerge. Animals that do not appear or are un-

common in the art have soft body parts or are vulnerable: deer, agouti, paca, raccoons, rabbits, sloths, monkeys, opossums, and so forth. The general rule seems to have been that common, everyday animals which were eaten were not portrayed: fish, for example, or lizards like iguana, or rodents and the mammals with soft body parts just mentioned. In the



Fig. 40 Polychrome vessel depicting predatory birds. a. Owl. Parita Bay, Herrera province (Periods VI, A.D. 700-1100, or VII, A.D. 1100-1500). b. Pedestal bird effigy vessel with sting-ray motif painted on the back. Macaracas group (Period VI, A.D. 700-1100), Parita Bay (?), Herrera province. c. Pedestal vase with cormorant (?) motif. Macaracas group (Period VI, A.D. 700-1100), exact provenience unknown (either Parita Bay or Veraguas province). Museo Nacional de Panamá Panama City. Photos by F.M.S.



a



b



d

Fig. 41 Polychrome plates with unidentifiable animal designs. *a.b.* Sitio Conte, Coclé province. Peabody Museum, Harvard University, Cambridge. Photos by O.F.L. *c.* Los Santos province. Museo Nacional de Panamá, Panama City. Photo by F.M.S. *d.* Coclé province. Museo Nacional de Panamá, Panama City. Photo by F.M.S.



b



d



e



f



g



h



i



j

Fig. 42 Drawings of painted designs on pottery showing body parts and sensing organs from animals. Parita Bay, Herrera province. a. "Crocodile" with prominent teeth and claws. Macaracas Polychrome, Higo variety. b. Claws. Macaracas Polychrome, Higo variety. c. Feathers (?). Macaracas Polychrome, Higo variety. d. Feathers (?). El Hatillo Polychrome, El Hatillo variety. e. Alligator tail (?). El Hatillo Polychrome, El Hatillo variety. f. Face. Calabaza Polychrome, Calabaza variety. g. Eye. Macaracas Polychrome, Pica-pica variety. h. Eye. Macaracas Polychrome, Higo variety. i. Stingray barbs and reproductive parts (?). Parita Polychrome, Caimito variety. j. Stingray barbs (?). Macaracas Polychrome, Higo variety. Courtesy of the Smithsonian Institution, Washington (first published in Ladd 1964: Figs. 42c, 40h, 40m, 40i, 11d, 9d, 48c, 40a, 40f, 23b, 40l).

art, song birds are replaced by predatory birds (Fig. 40); colorful butterflies are neglected in favor of stinging insects.

Furthermore, even those motifs that are “abstract,” defying identification, have features emphasized which are far from random (Fig. 41): extremities (legs, barbs, spines, claws, wings), special features of the head or face (mouths with prominent teeth, curved beaks), the region around the eyes (including sensing organs such as antennae). The organs emphasized are those employed for running, grabbing, seeing, feeling, stinging, or pricking—precisely those organs involved in predatory and defensive activities (Fig. 42).

To conclude, the central Panamanian art style was centered on a rich symbolic system using animal motifs metaphorically to express the qualities of aggression and hostility that characterized the social and political life of this and later periods in the central provinces. The iconography also centers on a marine and riverine way of life, but these people were not just portraying common animals or nature as they saw it, since the most common fish and mammal species found in their trash remains are not found in their iconography. It seems to me that they were emphasizing certain values, most especially those that would be held by warriors.

Trade and Power in the Central Provinces: The Chronicles of the Sixteenth Century

DEFINING THE SCOPE of political power and the nature of social differences in societies known as “chiefdoms” (*cacicazgos*) presents a problem for anthropologists. In sub-Andean Colombia, for example, chiefly societies have been defined as “small, class-structured village federations, politically organized under territorial chiefs” (Reichel-Dolmatoff 1961: 83). This description fits the sixteenth-century Indian groups encountered in central Panama at the time of the Conquest. However, the impressive ceremonial centers of the lowland Maya have also been considered as prototypical “chiefdoms” (Sanders and Price 1968: 142-4). Obviously, we must abandon our cultural typologies and attempt to define in more precise terms the conditions under which political power gets concentrated in a few individuals. And we should also clarify the nature of this power and the basis for it. For Lewis (1968: 105), “Chieftainship involves control over a social group by one man; but chiefs lack the regular and institutionalized administrative staffs typical of states.” What, then, was the

nature of this control in ancient Panama and how did it arise?

In this study, I have argued that crowding into rich alluvial lands, competition for coastal strips, and control over trade and war were probably important factors in the rise of rank differences in the central provinces. However, this argument has been advanced more on theoretical than on factual grounds. The archaeological picture is sketchy indeed. All we really know is that, during the 7,000 years of prehistory, small-scale societies, based on hunting, fishing, and gathering, were transformed first into fully agricultural villages, and eventually into rank-societies with rich funerary customs. This transformation took place mainly along river systems and was accompanied by population increase. A handful of Formative Period sites was followed by a respectable number of settlements in Period IV, and by many more in Periods V and VI. Not only the number of settlements, but also their size and contents, changed. We can thus suggest that crowding along the riverine areas

led to increased warfare and competition, expressed through the manufacture of craft goods and their trade. So let us turn to the archaeological evidence—such as it is—for the presence of trade and warfare in Pre-Columbian times.

The existence of a wide and active network of trading activities in the central provinces in pre-Spanish days can be deduced from the content of the Sitio Conte graves alone. In tropical-forest contexts (see Lathrap 1973a; Rathje 1971), trade took on several forms: internal or long-distance, for raw materials or for manufactured goods, for luxury items or for subsistence, based mostly on exports or on imports. In the central provinces, we have little archaeological record of internal trade in food products (salt, fish, game), mainly because this kind of trade leaves few traces. Nonetheless, we assume that it existed because trade in staples was going on actively at the time of the Conquest. Internal trade in raw materials, on the other hand, is easier to determine archaeologically. At Sitio Conte, for example, there are numerous everyday objects (celts, wood-working tools) and some weapons (projectile points) made of stones (basalts, quartzites, etc.) which must have been imported from the nearby highlands or at least secured some distance away. This was certainly the case with luxury objects made of exotic materials. The carved manatee bones, for example, must have come from the Atlantic since manatees live only on that coast. Some bark cloth may have been imported from Darien or the Atlantic sector. Many other materials—feathers, bones of wild animals, etc.—must have been traded into the central provinces from more forested interior lands of the Isthmus.

From farther away—largely Colombia—came precious stones, like emeralds. It has been claimed (Sauer 1966: 276-7) that all “Coclé” gold objects were manufactured in Colombia, not in Panama. His argument rests on the fact that the Spaniards do not describe gold-working techniques in the Isthmus, that they did not find the rich gold sources they expected, and that smiths’ tools have not been found in any site of this and subsequent periods. However, the small

chisel-shaped objects found in the Conte graves may have been used in gold-working, and recent claims to the effect that a complete goldsmith’s kit was found in a grave have also been advanced. Furthermore, on stylistic grounds alone, it is hard to see real differences in the motifs and designs employed in Sitio Conte goldwork and in the polychrome pottery (compare Lothrop 1937: Fig. 85—the “crocodile” motif on a breastplate—with Lothrop 1942: Fig. 193—the same motif on a vase). Unless the Panamanian groups were sending their “specifications” to the Quimbaya craftsmen, such close stylistic similarity must be explained by local manufacture. We simply cannot argue that all polychrome vessels also came from Colombia. In short, some of the gold may have been imported—perhaps some of the Conte smiths were of Colombian origin—but the style was in many ways Panamanian, though Colombian influences were present. At least until the late 1930’s, there were prospectors who made an adequate living from panning alluvial gold in the rivers of Panama.

Besides importing, the central Panamanian groups were also exporting things in pre-Hispanic days. From the chroniclers’ accounts later on, we deduce that some export involved staples and assorted foodstuffs. The evidence we have for Coclé export practices, however, consists of the finding of their polychrome pottery in graves some distance away—in Chiriquí, for example (MacCurdy 1911; Linares 1968a, 1968b). Also, Late Coclé (i.e., Macaracas) polychromes have been reported from Cupica, in Colombia (Reichel-Dolmatoff and Reichel-Dolmatoff 1961: 312-13).

Most of the polychrome vessels found nearer to the central provinces—at Venado Beach, the Pearl Islands, Panamá Viejo, northern Veraguas—may not represent trade at all but actual migrants from the central provinces who settled in these areas. They should be considered part of the maximal extension of central province cultures, groups who moved into these areas and somehow established symbiotic relations with the local cultures. The bulk of the ceramics found at Venado Beach and Panamá Viejo have motifs identical to those of the Coclé area, but are exe-

cuted in "plastic" techniques (low-relief, modeling, stamping, and incising). If sharing a common iconography implies sharing a common culture, then more than simple trade must be involved in these cases.

We also have some archaeological proof that war was common in the Isthmus. At Venado Beach, a total of 369 bodies was recovered (Lothrop 1954), most of which bore some mark of mutilation—decapitation, removal of skull and teeth, and butchering. Although Lothrop implies that they were sacrificial victims, I would go further and suggest they were either war captives or actual members of a group killed in a raid. I have no proof of this, of course, but it makes more sense than Lothrop's theory of the immolation of close kin and servants at the death of a chief. Moreover, the war-captive idea receives better confirmation from sixteenth-century Spanish observations.

ON ETHNOHISTORIC PARALLELS:

A CAUTIONARY NOTE

In the following section I have made use of Spanish sixteenth-century accounts to substantiate prehistoric events as reconstructed for Sitio Conte and other related sites. This is justified on the basis of a general analogy, and not on any claim to a direct historical overlap. Sitio Conte was not functioning at the time of the Conquest, at least not the parts excavated by Lothrop and Mason. Chiefs mentioned in the chronicles—Natá Parita, and others—could not have used either Conte or Macaracas ceramics. The ceramic style in use during the centuries immediately pre- and post-dating the Conquest was El Hatillo ware. A tendency to forget these facts is shown by every report from Lothrop's to the present time.

The relevance of ethnohistoric accounts is nevertheless undeniable, not only because of the general cultural continuity existing in the central provinces until the time of the Spanish *entradas*, but also because of a stylistic continuity in the crafts. Rather than being in a totally different style, El Hatillo and related pottery represent the recognizable end product of a long tradition. More important, the same social and

political processes seem to have been operating. In fact, if substantial population densities had been reached in the central provinces by A.D. 400 or 500, as Cooke believes, then the conditions described below for the sixteenth century must have been even more pronounced then.

THE CHRONICLERS' ACCOUNTS

The first accounts of the Panamanian Indians by eye witnesses of the Conquest date from the first few years of the sixteenth century. Some of the societies that existed in ancient times were still functioning in the late periods before the Conquest, including one at Sitio Conte, which was then a regular habitation site. Centers like Natá which Cooke (n.d.a) has investigated, were huge Pre-Columbian Indian villages lasting until the Conquest.

There has been a tendency to take Spanish accounts at their face value, but I agree with Howe (1974: 12) in finding "little in their ethnocentric, shallow, and mutually inconsistent accounts to justify the seeming confidence with which recent scholars have used them to build detailed reconstructions of native society." Hence, they have to be used with care. The earliest accounts we have are those of the Gonzalo Badajoz expedition of 1515 and the three Gaspar de Espinosa *entradas* into the central provinces, in 1516, 1519, and 1520. These have been recounted or reprinted in several well-known collections (Andagoya 1945; Espinosa 1864, 1873; Las Casas 1951). In addition, there are composite accounts of life in the New World during the sixteenth century by G. Fernández de Oviedo y Valdés (1944-5). In the last decades, a number of persons have attempted to summarize these accounts and to interpret them (see, for instance, Lothrop 1937, 1950; Gasteazoro 1956; Stone 1966; Sauer 1966; Castellero 1971; Linares 1971; Cooke n.d.a; Torres de Araúz 1972; Helms 1976). In the following section, I have relied on the first-hand sources with all their drawbacks, rather than the recent interpretations, and have attempted to put together a synthesis of sixteenth-century society that is in harmony with archaeological realities.

We can be certain that the Spaniards found the riverine areas of central Panama to be densely populated; it was one of the reasons why they advanced by land: "because the river . . . was totally populated" (author's translation from Espinosa 1873: 18). They also found sizable villages. One of these, called Natá after the chief of that name, was located two leagues from the sea, on the shore of what is now Río Chico. The town consisted of forty-five to fifty homes (Oviedo 1944-5, VIII:9), but its population was estimated by Espinosa (1873:41-2) at fifteen hundred. House construction was varied, perhaps a suggestion of functional or status differences. The round houses were very large and had many interior compartments, like multi-family single-kin group dwellings in the Amazon today (called *malocas*). The square dwellings were smaller and may have served any function, from living quarters to kitchen or storage space. This is never clarified by the early accounts. Recently Cooke (n.d.a) investigated the settlement of ancient Natá. He came to the conclusion that the town was larger than it is now. According to Cooke, it covered at least four square kilometers. Accepting Espinosa's estimate of fifteen hundred with caution, this implies population densities within the town of several hundred persons per square kilometer. Given the fertility of annually replenished alluvial soils and the likelihood that more intensive forms of land-use (including ridging and terracing) once existed in this area, these estimates do not seem exaggerated. They compare favorably with estimates for population densities in rural, let alone urban, areas surrounding some ancient Maya ceremonial centers (B. Turner 1974).

From the chroniclers we can surmise that Natá may have served as an exchange center of some kind. Meat and maize were regularly stored in the village. Espinosa mentions encountering 300 or more dried and salted deer and an unspecified quantity of dried fish in the village, probably stored in individual households. Apparently Indians from the surrounding villages also came to Natá with fish and crabs to trade for maize. To this scanty data is added Oviedo's remark (1944-5,

VIII: 23) that, when the Indians of this area were not at war, they put all their efforts into trading. This trade was carried on by water (in large, seaworthy canoes) or by land (on the back of "slaves"). It was mostly for scarce resources, "for they esteem most what they lack" (author's translation). Among the trading items Oviedo mentions are salt, maize, blankets, hammocks, spun and unspun cotton, salted fish, and gold.

It is unclear from the Spanish sources just what kind of unit was ruled by Chief Natá. We know that it was more than a mere town; Espinosa talks about it as a small but well-populated province with fertile lands, abundant fisheries, and four leagues of shore front. He also mentions the extensive saltworks producing, we would assume, more salt than was needed for the town's consumption. In all likelihood, salt was one of the most important export commodities (Philip D. Young, personal communication). In order to hunt, the people went inland to the forests of the *tierra alta*, where they could presumably obtain game freely. All these remarks imply that, as a territorial unit, Natá controlled or had access to several micro-environments yielding products essential for survival. (This may have also been true of another important *provincia* to the south, ruled by the chief called Parita.) Hence, the traders that came to the town of Natá could have been exploiting ecological differences within the province, exchanging products from several zones in this redistributive center.

However, trading outside the territory under the control of one chief may have been possible only within the network of villages that formed some sort of alliance or federation. The nature of these alliances is another difficult point to determine from the Spanish accounts. We gather that Chief Natá had at least ten subchiefs under his control, and Chief Parita had as many, if not more. Although these two chiefs were at peace with each other—I think because they controlled environmental zones having generally the same resource distribution—they were waging constant war with the provinces of Chirú and Escoria. The latter two were located farther inland, at either end of the central provinces. Given Oviedo's (1944-5,

vii: 305) passing remark that the best cause for war, which induced these people to quarrel and battle, was who will have more land and property, it is likely that the pressures exerted by Chiefs Escoria and Chirú were attempts to gain alluvial lands near the coastal deltas, naturally the most valuable of all the territories. In the face of an unequal distribution of resources within a province, the alternatives would have been either to fight and grab the lands of other villages, or to make peace and form alliances to permit free access to the desired resources. In short, what I am suggesting here, is that an alliance system can facilitate trade as well as war. However, in an area of ever-present hostilities and shifting alliances between neighboring groups, the easiest form of trade is long-distance trade, probably by sea. In my opinion, much of the trade with Colombia and far-off areas like Chiriquí was of this nature (see Lothrop 1932). Herein lies the importance of the fact that luxury items from Coclé appeared in far-off lands in the prehistoric past.

Having said something about trade, let us turn to the nature of warfare and alliance formation. Even allowing for exaggeration and fear, the history of the Spanish *entradas* into the central provinces tells a fairly clear story. West of Panama City, the fighting was intense and protracted. In 1515, Chief Parita (Paris) with three to four thousand Indians (Las Casas 1951, iii: 67) forced the Spaniards to retreat. A series of expeditions headed by the best of the Spanish captains, even Pedrarias himself, set out to subjugate the Indians. Sometimes the Spaniards won; sometimes they were forced to retreat. The famous Chief Urraca, who dwelt in the mountains north of the Azuero Peninsula, allied himself with Chiefs Chiriquí, Veracías (Veraguas?), and Burica, and drove the Spaniards from the southwestern corner of Panama. In 1531, Urraca died in his home unconquered.

The heavy fighting endured by the Spaniards on the western front, despite artillery and horses, can only be explained by the presence of large federated chiefdoms.

Oviedo (1944-5, vii: 305-6) also emphasizes that there was little fighting among the people belonging to a single *provincia*. War was directed outward, to people outside the alliance system, and was led by a

special group of warriors (*cabras*), who received as compensation for their efforts special grants of land and additional wives from the ruler (*queví*). The *cabras* were compared by Oviedo to *caballeros* or *hidalgos*, set apart from the common people, not only by their status but by the fact that they owned land and places. They took with them to war their subordinate captains and also their henchmen. The latter were in charge of executing people. Interestingly enough, warriors went into war painted with special insignia, called *devisas* or *librea* by the Spanish. These painted motifs and designs designated all the persons fighting under a single *queví*. "They paint their faces more in war," Oviedo (1944-5, viii: 20) adds, "for a man is not a soldier unless he does so" (author's translation). At the time a son took over his father's power, adds Oviedo (*ibid.*: 21), he had the choice of keeping his father's *devisa* for himself and his followers, or of getting a different set of motifs to denote who served his father and who served him. The sons who declined to change the father's *devisa* were loved by their fathers; those who did were hated. What Oviedo is touching on here is the problem of succession that we will discuss subsequently. Body painting was thus an important way of signaling "corporate" activities in war-making. It was probably essential in order to distinguish who was fighting on whose side during a large war involving two or more large alliances. As mentioned before, body painting was also used to distinguish social status; some painting was done to brand slaves or to denote captives—from the mouth up to the forehead it was a symbol of captiveness, while from the mouth below, around the ears, it signified a free man (*ibid.*: 20-1). In addition to being painted with corporate designs, the central Panamanian warriors went to war loaded with jewelry and ornaments. In this respect they could not have looked very different from the fully armored Spaniards. Finally, there seems to have been little prestige gained by coming out of war unhurt. The rewards were doled out to those who really fought, a suggestion implying there were many who did not.

Captives were taken in these wars and they were either turned into "slaves" or were sacrificed. In fact,

no less than twenty Indians from Chirú and Escoria were found by the Spaniards with nooses around their necks, to be sacrificed at the burial of Chief Parita.

Turning now to the problem of leadership and succession, we must move with caution, since the Spanish accounts are so contradictory on these points. It is by no means clear how powerful the chiefs were, or how this power was legitimized. Oviedo (1944-5, VIII: 10-11) talks about the *señor principal* always sharing food, which was cooked either by his wives or by special servants. In the same place, he mentions that the chief had special people to plant his maize and manioc for him, others to hunt and fish for him, but that on many occasions he did all these tasks for himself, for his own pleasure. In my opinion, Oviedo is simply talking about the widespread phenomenon of chiefs pooling the labor resources of the village when special ceremonies and corporate occasions demanded it. His function, then, was probably more akin to that of a headman in charge of redistribution than that of a despotic ruler commanding absolute loyalty. (See Goldman 1963 for a good description of a modern Cubeo chief.)

Insofar as the description of marriage and succession to power within the “chiefly” group is also confusing, we can only remark that the chiefs usually had several wives, while lesser-ranking men had only two, or at most three (Oviedo 1944-5, VIII: 11). On the same page in which he describes this custom, Oviedo goes on to say that there was some emphasis on primogeniture and patrilineal succession in the chiefly line, but that, in reality, it was ability that determined succession. In view of all the preceding remarks, the likely explanation for all this contradictory material is that at the death of an important leader, his sons, and perhaps other highly regarded young men, scrambled for the position. This was a time of confusion and tension. If we recall, the sons of a big man were more likely than not to be warrior-chiefs themselves. Succession probably triggered off a great deal of competition and infighting within the alliance system.

It is clear that symbols of rank and status were present everywhere: important persons were carried

in hammocks; they wore special regalia; they painted themselves with unique designs; they could at times command others to fight, cultivate, and procure wild game for them. Special roles were also assigned transvestites and “women of loose morals” (*yachras*). There was widespread slavery, and special status was accorded to captives. Even with all these social distinctions, however, I still think it is mistaken to attribute “social classes,” “castes,” and other features of more developed societies to the central Panamanian groups, as most other writers from Lothrop on have tended to do. It seems to me that the most important feature of rank-societies is their flexible nature. People occupying the same roles and positions formed corporate groups only under special circumstances. Physical mobility, differential inheritance of wealth, status acquired in war, in the hunt, and probably in many roles not even mentioned by the Spanish (like that of medicine men, or shamans)—all must have been operating to keep a dynamic system of role ascription going. Hence, I would see these systems as more open-ended and competitive than ethnographers before me have interpreted them to be. In addition, I suspect such flexibility is the best available explanation for the great emphasis placed on fighting and property.

SITIO CONTE IN RETROSPECT

In Lothrop’s opinion, Sitio Conte was a small village settlement belonging to a line of chiefs who lived there with their wives, retainers, and slaves. He suggested that it was used as a “summer residence” by approximately two hundred persons for approximately two hundred years. He then went on to assign the large graves to members of “the chiefly class,” known at the time of the Conquest as *queví*. The next group of graves he ascribed to the *cabras*, or “warrior class,” and the smallest graves to commoners and the like. Extra bodies found in graves were thought by him to have belonged to retainers or slaves, and the skeletons of females to wives forced by loyalty—or more likely coercion—to follow their husbands in their fate. Lothrop put together this picture of burial customs in ancient Panama by juxtaposing what we

know now were separate events: the Sitio Conte burials and the practices of the sixteenth century. So long as this is understood, we are justified in using ethnohistorical accounts to draw analogies.

Espinosa actually interrupted the initial preparations for a composite burial of three individuals among whom was Chief Parita. Parita's body and those of two others, also called "chiefs" by the Spaniards, who applied the term indiscriminately to any person of high status, were bundled up for burial. They had previously been desiccated by smoking. They were placed in a hammock, wrapped up in many layers of fine cloth painted in all sorts of colors. In their greed and disrespect, Espinosa and his men tore the clothing off the chief, and saw Parita laid out in his finest array,

. . . on his head a great basin of gold like a casque, and at his throat four or five necklaces made like gorgets, and on his arms casings of gold like cylindrical tubes. . . and on his breast and shoulders many plates and other pieces like coins, and a belt of gold, all surrounded with gold bells, and on his legs also the same golden armor [as on the arms]; in such a way that the body of the cacique was armored, he seemed to be in a coat of mail or suit of armor....(author's translation from Espinosa 1873: 24)

As for the other two individuals, they were likewise bundled up, but their funerary array was less splendid. Of them Espinosa (*ibid.*: 24-5) says: ". . . in the two other bundles were two other caciques, of whom it was said that they had succeeded him [Parita], and who had also died" (author's translation). Additional bodies in the house consisted of two finely arrayed women—the first at the feet, the second at the head—of Parita. Finally, there were a number of captive warriors and a woman from the enemy villages of Escoria and Chirú, with cords tied around their necks, ready to be sacrificed the next day.

Another view of burial customs was provided by Oviedo (1944-5, VIII: 51), but he did not attribute them to any specific region. He mentions large rectangular pits being dug into the ground. At the bottom was the deceased, seated on a wooden stool, spectacularly arrayed in gold. His "wives" came to sit by him, inside the grave itself. After much *chicha*-drinking and

much festivity of one sort or another, the dead and the live ones were buried under a pile of dirt.

Now, going back to Lothrop's report, what are we to make of his interpretations? Do they seem plausible to us? Status differences were clearly reflected in the Sitio Conte grave, as he and the chroniclers suggest, but having three types of graves and three social classes seems far too simple an explanation of social and political realities at that or subsequent times.

Ethnohistorical sources have clearly shown us that the chiefdoms of the central provinces were loose political alliances, in which different village groups, at different points in time, cooperated for particular purposes: to make war, to control trade routes, to obtain additional women, and to enhance prestige. Labeled as a *contingent* political system, there were no permanent centers of power to coordinate economic, social, and religious activities, as there are in the *continuous* political systems of state societies (Easton 1959). To look, then, for the symbols of permanency in manifestations such as social classes, ruling families, and monumental architecture, as people have done at Sitio Conte with little success, is to misunderstand the nature of these systems. Rather than a stage in the evolution of New World societies, the chiefdoms of Panama were typical of an area where status and power are based mainly on impermanent occupation of shifting positions.

While an outstanding leader held power or was still alive, his village may have become paramount. When he died or was killed in battle, or when his fortunes waned, other persons and even other villages in the alliance network competed for his power. Looked at from this perspective, another function for Sitio Conte is suggested. Rather than the permanent seat of a well-heeled chiefly family, the site may have served for several centuries as a special kind of high-status burial ground, a place where a whole host of villages—sometimes allied to each other, sometimes at war with each other—buried dead with pomp and ceremony. These were men of status, individuals who had gained distinction in war (the *cabras*). Taller than

average (some of the skeletons at Sitio Conte belonged to men who were almost six feet) and splendidly arrayed, they were often buried together in composite graves. Of these Lothrop (1937: 61) remarked that “successive burials in a given group may represent a single family,” presumably a chiefly family. But since most of the large graves contained the bodies of several adult males, buried all at once, Mason’s suggestion (1942: 105) that “these were of chiefs and warriors slain in a single battle” makes more sense, especially because obvious signs of aggression were to be seen everywhere at the site: decapitated skulls (trophy heads?), disarticulated bones, shallow inconsequential graves (war captives?), and everywhere caches of stingray spines that had been used as arrowheads and stone projectile points, significantly lodged inside the stomach cavity of skeletons. The women that they raided—or perhaps their own wives—were buried in their midst; but there were practically no children, as there would be in a regular cemetery. All around, there was a spectacular display and the conspicuous sign of competition and frenzy in the mass burning of luxury goods, in the huge amounts of “killed” (purposefully broken) pottery, and in the looting of one grave to steal its goods and place it in the next.

This concern with property was part of a fluid and mobile, yet highly status- and rank-conscious, society. Following this argument, we also hope to have shown that the animal-centered art of the central provinces was a kind of symbolic projection, or at least reflection, of values that glorified the qualities and attributes of aggressive individuals. Sitio Conte was not a gentle, quiet place, not a peaceful village settled by farmers, but the center of other kinds of activities, much less appealing perhaps, but part and parcel of everyday realities in these warring chiefdoms.

The site seems to have been used in certain seasons of the year only, and it was probably abandoned at

times. We can surmise this from the sterile bands seen in the stratigraphic columns, and from the fact that now the site is waterlogged during the rains, and undoubtedly was in aboriginal times also. Incidentally, the possibility of periodic abandonment was recognized by Lothrop, so it is difficult to see how he could justify his 200-year chronology. This aside, we may have here the reason why inhumation was practiced, and why the bodies of the dead were dessicated by fire, for, so preserved, they could be maintained until the dry season. Such may also explain why two burial patterns were reported by the chroniclers, if dessication and interment were simply stages in the same burial process. In seasonally rainy climates, burial is an affair known to extend over a long period. After the harvest, at the height of the dry season, leisure time is available. There is time to notify the crowds, hunt for game, procure the food, and prepare the drink. Activities of this kind are preliminary to any proper “reception,” especially one where high-status persons were involved.

To summarize, then, we have argued here that Sitio Conte was used mainly as a cemetery in the years A.D. 500 to 900. At this time, the site was a kind of pilgrimage burial center, where groups of important individuals from several villages were buried with their regalia when bad luck struck after a raid or war. In addition, some commoners may have also found their final resting place here. For many centuries the site preserved its appeal. In fact, it seems that it was so important to be buried at Sitio Conte that a group of competing villages may have used the place, looting the graves of others, using the same “facilities”—the shrines and the plazas of rough-hewn columns that were found at the site. The one group that may have been settled there was possibly the craftsmen who came to the site to produce—on command, and during only some months of the year—the high-status goods, mostly pottery, to be placed in the graves.

The Aftermath: Coclé Culture and the Cuna, a Mistaken Association

IN A PAPER presented several years ago (Linares 1971, n.d.), I brought up the fact that some statements that appeared in a widely circulated textbook, in a section entitled "The Cuna and their neighbors" (Steward and Faron 1959: 224-31), were clearly mistaken and, furthermore, misleading. Since they bear directly on the contents of this paper, it may be worthwhile to repeat their words and offer criticisms.

While the archaeology of Coclé is unquestionably representative of native Cuna culture, we cannot be sure that Lothrop's principal site, Sitio Conte, or other sites in the region were definitely Cuna sites. (*ibid*: 224)

The ambiguity of this statement is, of course, apparent. How can "Coclé culture" represent Cuna culture, if the main site (or sites) of this tradition does not? The reasons for these equivocations go back further, however. Beginning with Lothrop's (1937) ethnohistoric summary, every scholar has tended to lump the Indians of the Isthmus in one class, more or less the same in social and political organization, and in other respects as well. Considering the difficulties presented by the confusing accounts of the sixteenth century, such an approach is understandable, if indefensible. Further, the Coclé-Cuna linkage also fitted the theory, in vogue during the 1940s, and advocated in the Steward and Faron book, of post-Conquest deculturation of the "circum-Caribbean" area. Simply stated this theory holds that multi-village federations, with some measure of political centralization and social classes, were characteristic of this area (which included Panama) before the Conquest. As reconstructed by Lothrop, Sitio Conte fitted this theory well. After the Conquest these "chiefdoms" were said to be reduced to modest villages and homogeneous (?) cultures like those found in the South American tropical forest now.

It became clear that the Cuna Indians, who are the modern descendants of the Indians buried at Coclé had been so broken by the Spanish Conquest that their native chiefdoms were destroyed, their social classes eliminated, and their

skills in producing art goods in textiles, ceramics, and metallurgy were lost. (Steward and Faron 1959: 176)

The absurdity of considering the modern San Blas Cuna as being "deculturated," when they represent one of the most successful and integrated of New World groups (cf. Howe 1974), goes without saying. The groups that lived in the central provinces at the time of the Conquest did not "deculturate" either: they were wiped out. If any modern group is descended from them, it is the Guaymí of Veraguas, Chiriquí, and Bocas, but even this attribution has been put in question (Young 1971b). Be that as it may, the "Coclé culture area" stretched from eastern Veraguas to the Azuero Peninsula and to Coclé, perhaps as far east as Chame in the province of Panama (Cooke 1976c); I favor Chirú as the frontier, for reasons that are too long to go into here. Although the exact location of the Cuna at the time of the Conquest is uncertain, all indications are that they were nowhere near the central provinces. Their territory was somewhere in the Bayano area and Darién province. Although most of the Cuna moved off to the San Blas Islands starting about a century ago, substantial remnant groups are found today in the Bayano area.

Regarding archaeological knowledge of the Darién area, it is almost nonexistent at present. According to Linné (1929), most of Darién is characterized by a monochrome pottery tradition which he described as simple, unpainted pottery. Among the shapes were braziers, and globular and pedestal bases, all decorated by appliqué, punctation, and excision. These techniques contrast in every way with the polychrome tradition of the central provinces.

These impressions have been recently confirmed by Cooke's excavations (1976f) in the Bayano region. "The evidence we have, even though fragmentary and sometimes very badly excavated and badly catalogued, indicates without doubt that this region differed culturally from the central provinces, at least from the time of Christ to the present" (author's

translation). Interestingly enough, one of the graves excavated by Cooke duplicates burial practices among the modern Cuna. Other parallels have also been indicated (Linares n.d.: 7). The Spaniards in the sixteenth century mentioned the Cueva-Coiba practice of urn burial; urn burials were found in Darién (and for that matter almost everywhere in the Isthmus as well). Until recently the Cuna made braziers or *incensarios*, which they called *sianalas* (from the word *sia*, meaning cacao; James Howe, personal communication). These are virtually identical to the ones found by Linné in Darién. Although some parallels suggest that the Cueva-Coiba mentioned by the Spaniards were the ancestors of the Cuna, this connection is also open to doubt (Howe 1974: 13-16). Be that as it may, subtle differences between the Darién chiefdoms and those of the western provinces seem to have been reflected in the nature and amount of resistance they put up against the Spaniards. The conquest of Darién presented some initial problems for the Spanish, but a few months after Santa María was settled, in 1514, Balboa had made friends with the surrounding chiefs and even married the daughter of Chief Careta. It was not until later, when Pedrarias embarked on his politics of exploitation, that the Darién natives took up arms more or less permanently. In contrast, from the very beginning, warfare in the central provinces was intense. One may argue that this was a simple reflection of Colonial policies. I think not. Behind the warring success of the central Panamanian Indian societies lay social and political facts. Although hard to specify, these societies seem to have been more nucleated, better organized, larger, and more warlike than those of Darién, which by way of contrast appear somewhat smaller and more dispersed. These differences were unquestionably of degree, not of kind. But it is imperative that we recognize and document

them in the future. At this point we can refer to our ecological argument for causal explanations of why this may have occurred—why differential adaptations may have furthered social and political differences among the chiefdoms of Panama. In addition, we must remember that by the time of the Conquest, the Darién groups were cut off from the more “developed” rank-societies of Colombia (the Tairona and the Chibcha, for example) by warlike groups (possibly the **Chocó**; see Gordon 1957). The peoples of western Panama, however, were in contact with Mesoamerica. Andagoya (1945: 404), talking about the battle he witnessed between Chiefs Escoria and Paris, had this to say:

Where the battle took place we found a great street entirely paved with the heads of the dead, and at the end of it a *tower of heads* which was such that a man on horseback could not be seen from the other side. (author's translation and italics)

Bearing in mind Andagoya's remark about the polished warriors of Escoria, and recalling the well-known Mexican custom of racking skulls, it seems quite likely that the battle Andagoya witnessed was fought by people who kept up contact with groups from Mesoamerica. If we recall, peoples of Mesoamerican speech occupied the nearby Nicoya Peninsula in Costa Rica and the coastal Pacific sector of Nicaragua (Coe 1962).

To conclude, there are many reasons why we should dismiss the hasty connections made by Steward and Faron (1959: 22&31) between post-Conquest groups in the central provinces and the modern Cuna Indians. Such statements belittle modern Cuna culture, they misrepresent both the ethnohistory and the archaeology, and they mask important differences in the ecology and cultural evolution of different regions within the Isthmus of Panama.

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