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COSTA RICAN MACE HEADS: THEIR SYMBOLIC SIGNIFICANCE
AND ROLE IN INFORMATION EXCHANGE

by

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ABSTRACT

This thesis examines the symbolic significance of Costa Rican mace heads and analyzes their involvement in information exchange. The research fills a void in the literature on mace heads since it approaches their study as channels for symbolic information rather than as utilitarian objects or mortuary grave goods. The justification for such an approach is based upon the assumption which underlie archaeological stylistic analysis. Theoretical discussion draws upon semiological anthropology to establish mace heads as bearers of symbolic information. Within this context, information theory provides the analytical framework by which the communication process can be observed. The data suggest that mace heads served to distinguish social rank within the same settlement, and were also involved in social signalling between settlements and regions.

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CHAPTER III: ANALYSIS

Analysis of the mace heads will clarify their role as a channel for symbolic communication, as well as provide information pertinent to discussion of the efficiency of the code, the effectiveness of communication, and the meaning conveyed. A review of the literature concerning scientific excavation should provide contextual and chronological data, and allow the spatial distribution of the mace heads to be plotted. Stylistic analysis of the study collection will create an inventory of symbolic forms, which can be compared with symbols occurring in other media, e.g., ceramics, stone, gold, and bone. This allows identification of important symbols (e.g., Turner 1968), since it is expected that dominant symbols are repeated in various contexts. The repetition of symbols also has implications for the efficiency of the code, since to have redundancy indicates the presence of interfering noise. The 'noise' may be caused by the use of the symbols at various levels of communication. Plotting the spatial distribution of the study collection allows definition of the area involved in symbolic signaling, and has implications for interaction between units in this area.

In accordance with Rands (1961) and Friedrich (1970),

categorizations of the symbolic content of the mace heads is relatively broad. It is expected that there are certain basic stylistic features which serve to distinguish one symbolic form from another. The categories are broad so that allowance is made for individual creativity.

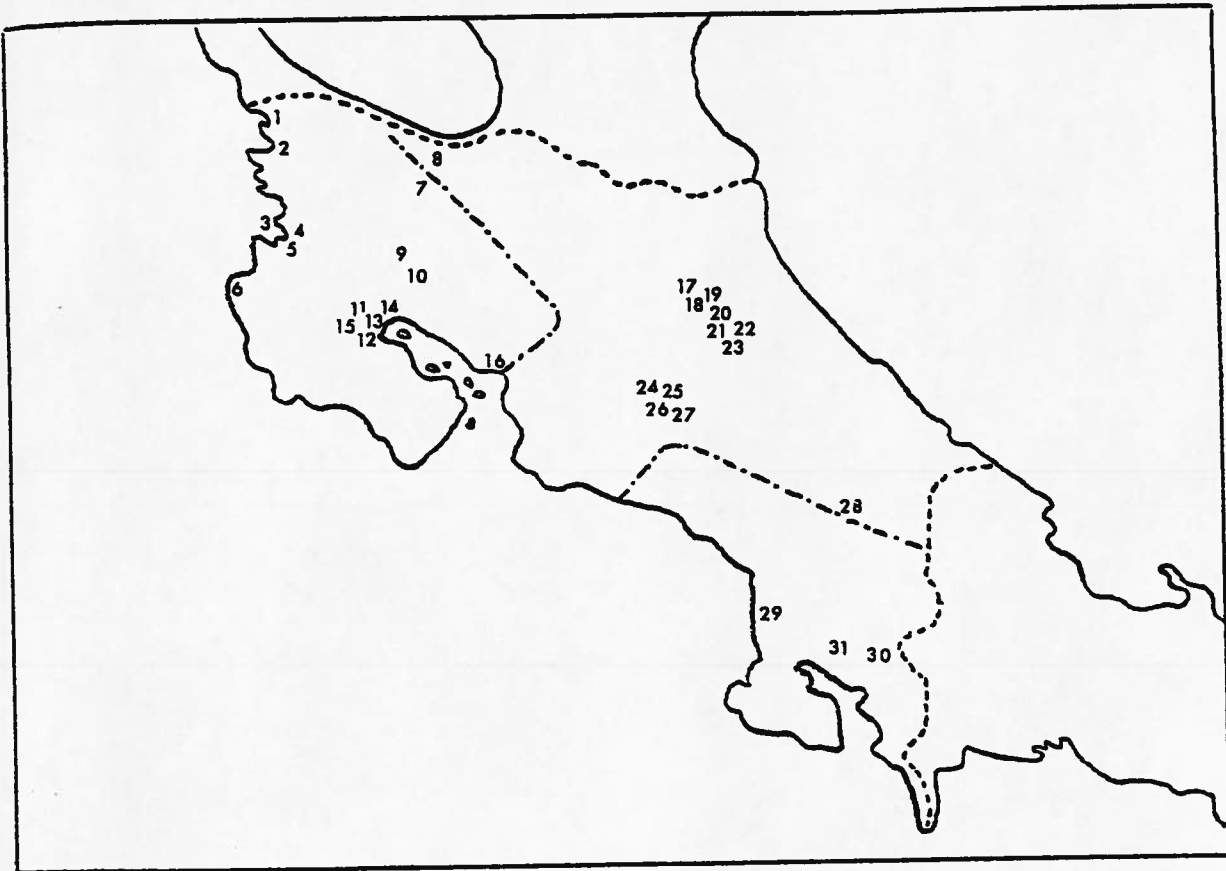
Where societies are ranked, it is expected that symbols will be distributed disproportionately among members of the social group. Symbols, in this instance, would convey qualitative (yes-no) information. Ranking of individuals might be expressed in the mortuary grave goods of those individuals. Where this information is conveyed to other social groups there should be group-specificity of symbols (e.g., Wobst 1977). Such symbols create artificial boundaries and indicate decreasing familiarity or breaks in communication.

Where interaction is intensive, it is expected that there will be a restricted symbol arrangement, so that the predictability of information exchange, i.e., getting the right message across, is increased. Such symbols would be standardized among members. In the presence of interfering noise it is expected that there will be a corresponding amount of redundancy. Configurational variety of symbols would indicate greater familiarity between symboling parties. In such instances of configurational variety, it is expected that there would be little redundancy of symbols since familiarity would reduce the necessity for such signaling.

Scientific Literature

Scientific excavations in Costa Rica have been undertaken since the last decade of the nineteenth century. Hartman (1901, 1907) conducted researches in both the central highlands and the Nicoya Peninsula. Early excavations concentrated principally on burial grounds (Hartman 1901, 1907; Lehman 1908, 1913; Skinner in Lothrop 1926; Lines 1936; Haberland 1957, 1959). More intensive areal surveys with excavation did not occupy a large proportion of the literature until after the 1960s (Coe and Baudez 1961; Coe 1962; Baudez and Coe 1962; Lothrop 1963, 1966; Lange 1971; Snarskis 1974, 1976; Norr 1979; Creamer 1979).

While it is necessary to review all available literature so that the social context of the mace head as a symbolic medium, or channel, can be established, it is not necessary to discuss in detail those sites for which no mace heads have been recovered. The distribution of sites without mace heads, as reported in the scientific literature, is plotted on Map 1. The chronological placement of these sites has been charted by archaeological areas in Figures 2, 3, and 4. In no instances have mace heads been recovered from habitation contexts, e.g., house floors, rubbish heaps, and so forth; nor are mace heads recovered from all cemeteries. The latter fact is significant, specifically concerning cemeteries which date within the time span ca. A. D. 300 to 500, since



Map 1

Distribution of sites without mace heads, derived from the scientific literature.

Northwestern Costa Rica

1. Sapoa River Valley
2. Chahuite Escondido
3. Papagao
4. Zapandi
5. Vidor
6. Tamarindo Area
7. Rio Naranjo-Bijagua Valley
8. Upala Area
9. Hacienda Jericho
10. Guayabo de Bagaces
11. La Guinea
12. Ortega
13. La Bocana
14. Bolson Cemetery
15. Hacienda Mojica
16. Carrizal

Atlantic Watershed and Highlands

17. La Fortuna
18. Costa Rica Farm
19. Anita Grande
20. Finca Numancia
21. Las Mercedes
22. Finca Patricia
23. Severero Ledesma
24. Chircot
25. Los Linones
26. Orosi
27. Santiago
28. Buenos Aires

Diquis Region

29. Farm 4
30. Aguas Buenas
31. Jalaca

| | | | | | | | | | |
|-------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------|
| Bay of Culebra (Lange 1980) | HCHCH HCHCH | CHCHC CHCHC | HCHCH HCHCH | CHCHC CHCHC | HCHCH HCHCH | CHCHC CHCHC | HCHCH HCHCH | CHCHC CHCHC | 1550 A.D. |
| Vidor (Lange 1980) | | | | | | | | | |
| Chahuite Escondido (Coe 1962) | CHCHC | CHCHC | CHCHC | HCHCHC | HCHCHC | HCHCHC | HCHCHC | HCHCHC | 1350 .A.D |
| Sapoa River Valley (Lange 1971)* | CHCHC | CHCHC | CHCHC | HCHCHC | HCHCHC | HCHCHC | HCHCHC | HCHCHC | |
| Rivas (Lange 1980) | CHCHC | CHCHC | CHCHC | HCHCHC | HCHCHC | HCHCHC | HCHCHC | HCHCHC | |
| Rio Naranjo-Bijagua (Norr 1979)* | CHCHC | CHCHC | CHCHC | HCHCHC | HCHCHC | HCHCHC | HCHCHC | HCHCHC | |
| Ortega (coe and Baudez 1962) | CHCHC | CHCHC | CHCHC | HCHCHC | HCHCHC | HCHCHC | HCHCHC | HCHCHC | |
| La Bocana (Coe and Baudez 1962) | XXXXXX | XXXXXX | XXXXXX | XXXXXX | XXXXXX | XXXXXX | XXXXXX | XXXXXX | |
| Hacienda Mojica (Lange 1980) | XXXXXX | XXXXXX | XXXXXX | XXXXXX | XXXXXX | XXXXXX | XXXXXX | XXXXXX | |
| Montecristo (Creamer 1979) | 00 | 000000 | HCHCH | 000000 | 000000 | 000000 | 000000 | 000000 | |
| Tamarindo zone (Coe 1962)* | | | HCH | | | | | | |
| Las Marias (Lange 1980) | | | | | | | | | |
| La Guinea (Coe and Baudez 1962) | | | | | | | | | |
| Zapandi (Lines 1936, Snarskis 1980) | | | | | | | | | |
| Guayabo de Bagaces (Lange 1980) | | | | | | | | | |
| Carrizal (Lange 1980) | | | | | | | | | |
| Bolson (Lange 1980) | | | | | | | | | |
| Jericho (Lange 1980) | | | | | | | | | |
| Upala area (Creamer 1979)* | | | | | | | | | |
| El Moral (Lange 1980) | | | | | | | | | |
| Santa Elena Peninsula (Coe 1962)* | | | | | | | | | |
| | 800 B.C. | 500 B.C. | 300 B.C. | B.C. -A.D. | 300 A.D. | 500 A.D. | 800 A.D. | 1350 .A.D | 1550 A.D. |

Figure 2. Chronological placement of sites in northwestern Costa Rica lacking maize heads. Localities denoted with an asterisk (*) are regional chronologies. Habitation sites are denoted by (X), cemeteries (0), and habitation-cemetery sites by (HC).

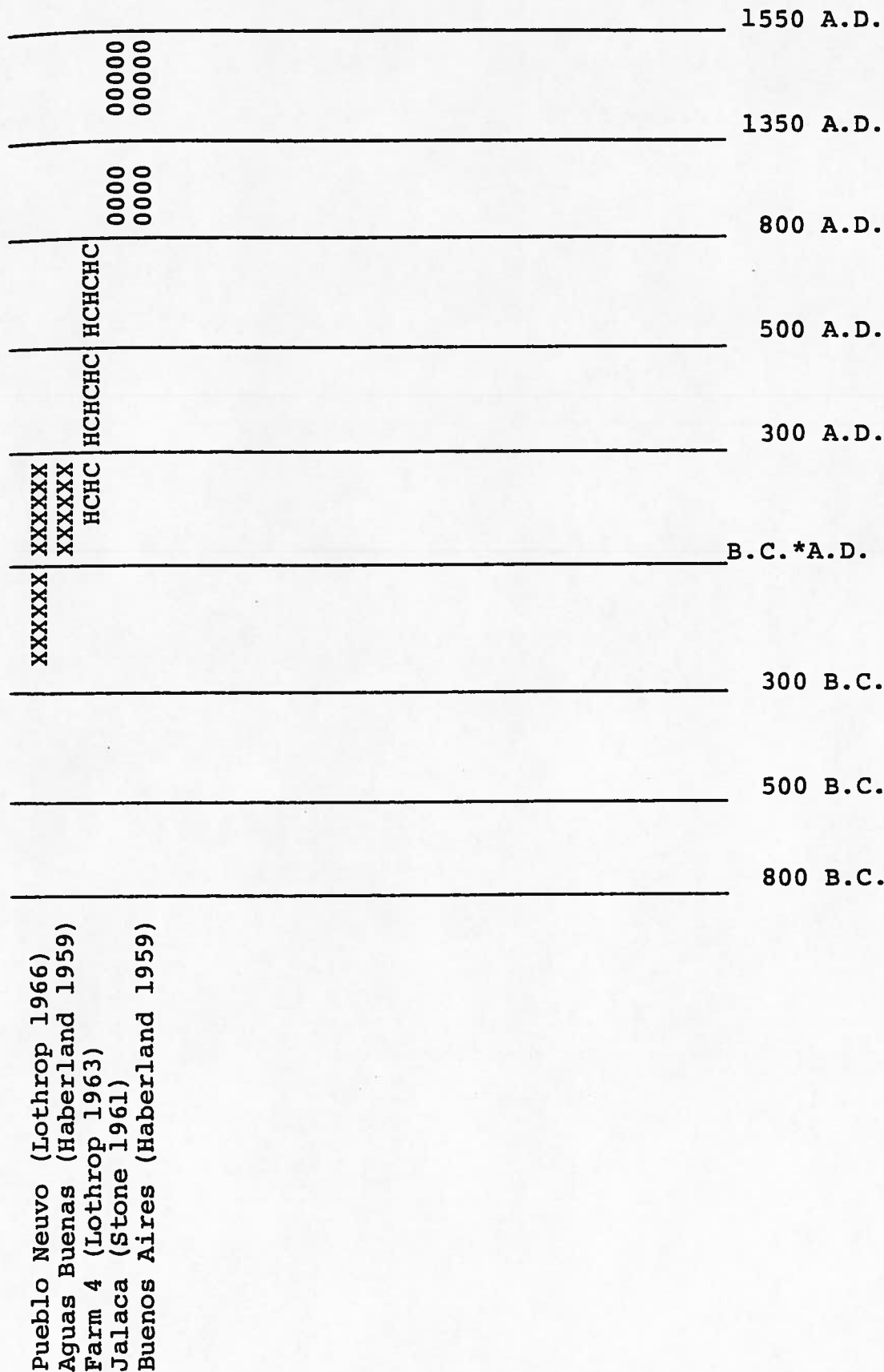


Figure 4. Chronological placement of sites in the Diquis region having no mace heads, as reported in the scientific literature.

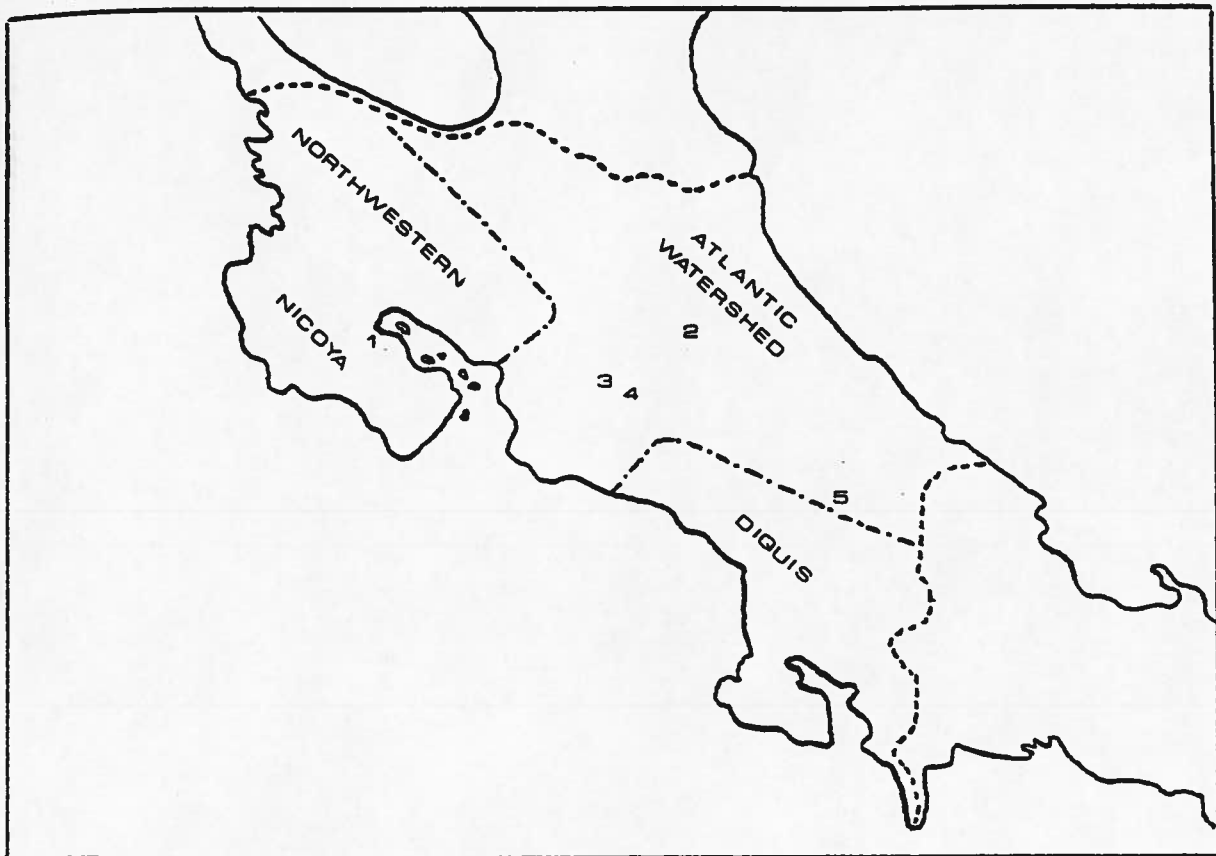
Lange (1980) has suggested this period to represent the chronological placement for the use of mace heads. The data suggest patterns of variation. No mace heads have been recovered from sites dating after the terminal date given by Lange (1980).

Archaeological contexts from which mace heads were recovered will be discussed by traditional archaeological regions, i.e., the northwest, which includes the Nicoya Peninsula and the adjacent mainland west of the cordillera, and mainland Costa Rica, divided into two sections north and south, which includes the Atlantic watershed in the north, and the Diquis region in the south (Mason 1945; Lothrop 1926) (see Map 2).

Northwestern Costa Rica

Excavations at Las Huacas (Map 3), located in the Nicoya Peninsula in northwestern Costa Rica, were undertaken by Hartman (1907) in 1893 and 1903. Portions of the Las Huacas cemetery had been excavated prior to Hartman's first visit in 1893, and Hartman (1907:38) makes reference to large heaps of broken metates scattered around this area.

In the section excavated by Hartman only two mace heads were recovered, and those from an area lacking definable boundaries. One he thinks might be a turkey, the other an owl head with two large tufts and a protruding beak. The remaining forty-eight specimens, which Hartman types on the basis of shape, and which include



Map 2

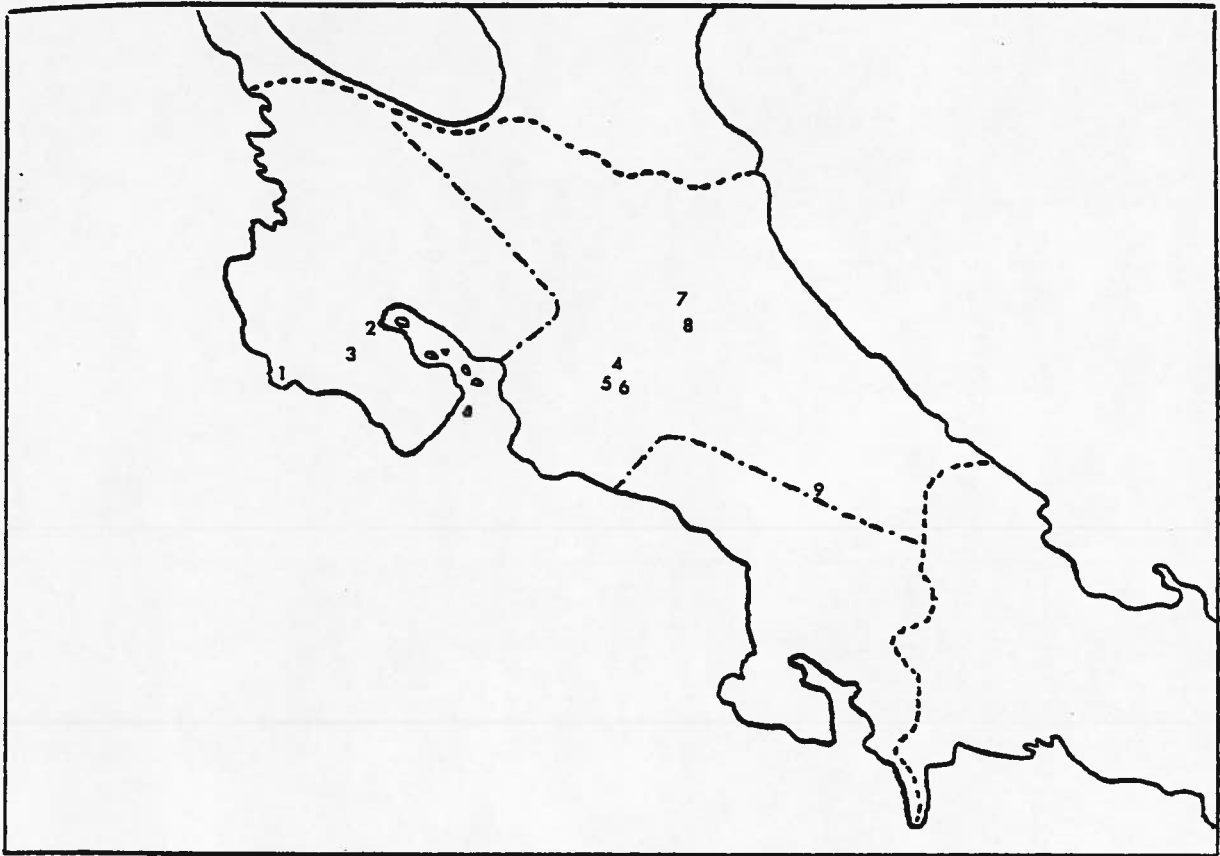
Localities having maceheads as reported in the secondary (interpretive) literature.

Northwestern Region

1. Nicoya
Aguacaliente
Atlantic Watershed
2. Las Mercedes; Lowlands
3. Curridabat; Highlands
4. Cartago; Highlands

Diquis Region

5. Buenos Aires



Map 3

Composite map of localities having mace heads as reported in the scientific and secondary literature.

1. Nosara
2. Nicoya
3. Las Huacas
4. Tibas
5. Curridabat
6. Cartago
7. Guacimo
8. Las Mercedes
9. Buenos Aires

human heads, mammal heads, the heads of birds, birds, two-legged monsters, alligators, and clubs lacking zoomorphic character, belong to the Velasco collections housed at the Carnegie Institute and the National Museum of Costa Rica.

Hartman gives no indication of ground disturbance for the section of cemetery excavated by himself, and, indeed, the mapped region and presence of definable pit boundaries would seem to bear this interpretation out. As mentioned previously, none of the sixteen numbered burials contained mace heads. The disturbed area at the eastern portion of Hartman's mapped region, which produced mace heads, may be part of the cemetery lying on adjacent property, from which Velasco's collection of forty-eight mace heads derived. Assuming that burials excavated by Hartman and those occurring on the adjacent property are contemporaneous, we have sixteen pit burials without, and an unspecified number with, mace heads as grave goods. If the presence or absence of mace heads signals a difference in social rank, it could be posited that at least two social personae are buried at the Las Huacas site. Otherwise, there is little variation in artifact assemblages between the two areas.

Atlantic Watershed

At the site of Guacimo (Map 3) near Las Mercedes, Stone and Balser (1965) mention stone mace heads in

association with incised mirror backs, jade, pendants, flying panel metates, and gold objects. The cemetery had approximately 125 graves. Of the five graves excavated by the authors, two had stone mace heads; these included two knobbed, four plain, and eight long-beaked birds.

Among stone objects previously potted from Guacimo are 60 grinding stones, the majority of which had a flying panel showing the long-beaked bird, and two with jaguar heads (Stone and Balser 1965:318). Mace heads were next in frequency, the majority decorated with the long-beaked birds holding a human head. There were also two mace heads which showed the bat, one owl, and another with raised nubbins.

The burial ground of Tibas (Map 3), located fifteen minutes away from the Museo Nacional, has yielded jade-like mace heads accompanying burials from the period A.D. 100-400 (Snarskis 1980:31). Among the array of 'prestige goods' described are ceramics and metates typical of the Central and Atlantic regions, as well as mace heads, one large "axe-god" pendant, and a zoned engraved monkey effigy vessel which Snarskis posits were probably products of the Zoned Bichrome period (300 B.C. - A.D. 300) in northwest Costa Rica. The "most impressive tomb," according to Snarskis (1980), contained three "Atlantean style" metates, a jade pendant, two effigy mace heads, and a 33 cm Olmec jade clamshell.

Controls and Contingencies

The inclusion of mace heads in a mortuary context, along with metates and jade artifacts, has been recorded in situ at the burial grounds of Tibas and Guacimo. Objects included in the Velasco collection from Las Huacas, and reports on the basis of extensive looting in the Nosara Valley, suggest a similar metate-mace head-jade artifact patterning in a mortuary context. The data conform to the mortuary complex defined by Lange (1980). The complex, furthermore, would appear, on the basis of the review of scientific literature, to have a mortuary context exclusively. No mace heads were reported in the scientific literature as having been recovered from habitation and other-use sites.

Archaeological data from Las Huacas suggest that there was quantitative variation in the manifestation of the metate-mace head-jade mortuary complex. The three artifact classes do not always seem to be found together. The inventory of objects, while similar between the section excavated by Hartman (1907) and the section looted by Velasco, show a lack of mace heads in the controlled excavated area.

Chronological data for the sites are scarce and not up to date, particularly in the Atlantic watershed and southern Costa Rica. Lange (1980) has stated that Las Huacas and Nosara fall within the time span he has defined during which mace heads were typical, i.e., A.D. 300 - 500.

Stone and Balser (1965) gave no date for Guacimo. Tibas burials have been dated between A.D. 100 and 400 (Snarskis 1980). Las Mercedes has been dated by Skinner, in Lothrop (1926), as possibly as early as A.D. 500 through A.D. 1550. Dates for Buenos Aires, taken from Haberland (1959), are ca. 1100 and 1500 A.D. The range of dates, then, span the years from A.D. 100 to 1550. It should be noted that dates are for the entire site, rather than the contextual dates. The problem of chronological control is made worse by the fact that few mace heads have actually been recovered from controlled archaeological contexts. Lange (personal communication) has stated that mace heads known from archaeological contexts probably date no later than A.D. 500. However, if the range of dates is actually as broad as dates given in the scientific literature suggest, even though Oveido's (Ferrero 1977) statement concerning the use of sculpted mace heads at the time of contact is not supported archaeologically, it is possible Oveido correctly recorded the use of sculpted mace heads. Assuming the dates to be correct, it would also indicate a period of great longevity for the use of mace heads as channels for symbolic communication.

The study collection of one hundred ninety three mace heads is derived from photographed collections of the Instituto Nacional de Seguros and Museo Nacional of Costa Rica. I have come across mace heads illustrated in the

scientific literature from collections of the Instituto de Seguros and Museo Nacional that were not included in photographs which constitute the study collection. This has led me to suspect the representativeness of the study collection. Furthermore, descriptions of many of the more unusual forms, e.g., skulls, and alligators, were gleaned from the scientific literature and were not part of the study collection. The Museo Nacional de Costa Rica, as well as American museums such as at Yale University, the United States National Museum, and the American Museum of Natural History, have collections of Costa Rican mace heads. I feel it would be necessary to inspect all of these collections in order to assess the nature of the categories I have formulated, and to more clearly define the role of the mace head in information exchange.

Mace Head Style Analysis

The mace heads, which are sculpted in both effigy and non-effigy forms, are readily categorized by shape (e.g., Hartman 1907). When Hartman (1907) was working in Costa Rica in 1893 and 1903, mace heads were known only from Las Huacas, Cartago, and Chircot, leading him to postulate trade between the two areas. Hartman's (1907:53) categories tended to be broad: human heads, mammal heads, bird heads, birds, two-legged monsters, alligators, and those without zoomorphic character; categories which are too broad and insufficiently detailed

for use with information theory. Hartman's categories have been further subdivided into finer subgroups so that variability in the system, that is, randomness, is measurable.

Classification tends to result in a loss of information since it rests on description of the central tendencies of the group while downplaying the range of variation present. In order to minimize the amount of information loss a brief discussion of variations observed will be appended to each category. The following groups formulated are for analytical purposes only, and do not necessarily represent a concensus of agreement with Hartman's and my categories, nor with other categorizations (Table I).

Human Heads

Human heads are of two general types, those of northwestern Costa Rica being relatively realistic in manner of portrayal, while those of the Atlantic watershed are highly stylized.

Northwestern human head effigies can be subdivided on the basis of ear and nose treatment. Ears are either realistic in representation, depicting the helix and ahown lying close to the head, or indicated as laterally protruding tab forms. Noses are either broad, flat, or aquiline in shape with well-defined alae and nares. Those with broad, flat noses usually have associated tab-like ears, and those with aquiline noses have realistic ears

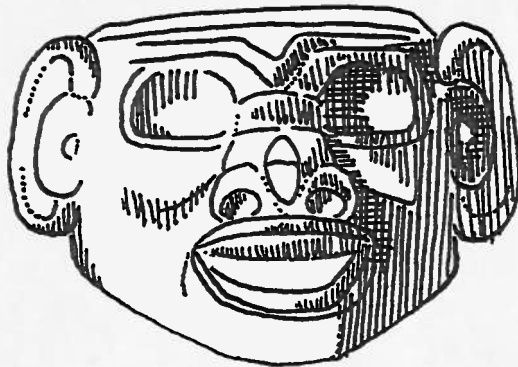
Table 1: The Study Collection

| Mace head type | Northwestern Costa Rica | Atlantic Water- shed | Unknown Prove- nience | Totals |
|-------------------|----------------------------|----------------------------|-----------------------------|-----------|
| Plain (sencilla) | 4 | 0 | 4 | 8 |
| Plain (dona) | 2 | 2 | 0 | 4 |
| Banded | 10 | 0 | 4 | 14 |
| Knobbed | 4 | 3 | 4 | 11 |
| Human heads I | 3 | 0 | 3 | 6 |
| II | 7 | 1 | 2 | 10 |
| III | 0 | 3 | 0 | 3 |
| IV | 0 | 3 | 0 | 3 |
| V | 0 | 0 | 2 | 2 |
| ? | 2 | 0 | 1 | 3 |
| Coyote | 0 | 7 | 0 | 7 |
| Feline I | 2 | 0 | 1 | 3 |
| II | 2 | 1 | 1 | 4 |
| III | 4 | 0 | 0 | 4 |
| ? | 0 | 3 | 1 | 4 |
| Bat I | 3 | 1 | 2 | 6 |
| II | 2 | 0 | 3 | 5 |
| III | 0 | 0 | 3 | 3 |
| Birds | | | | |
| Guacamaya (macaw) | 14 | 1 | 0 | 15 |
| Parrot | 5 | 0 | 2 | 7 |
| Predatory bird | 0 | 1 | 2 | 3 |
| Bird beak | 0 | 4 | 0 | 4 |
| Bird with tail | 1 | 0 | 1 | 2 |
| Turkey | 1 | 0 | 0 | 1 |
| Preforms | 4 | 2 | 5 | 11 |
| Owls I | 2 | 12 | 0 | 14 |
| II | 0 | 1 | 9 | 10 |
| III | 0 | 1 | 3 | 4 |
| IV | 3 | 2 | 1 | 6 |
| ? | 2 | 1 | 0 | 3 |
| Miscellaneous | 6 | 2 | 5 | 13 |
| | | | | <hr/> 193 |

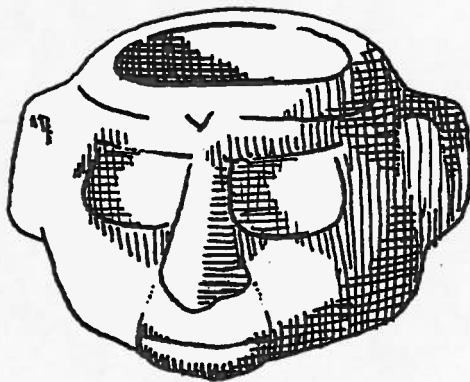
(see figure 5a, b).

There is considerable variation on an individual basis among these heads aside from treatment of the ears and noses. Lange (personal communication) has suggested some represent death masks, based upon ceramic effigies and similarities to Mesoamerican representations. This seems to be a reasonable interpretation, particularly when treatment of the eyes and mouth are taken into consideration. In some instances, the orbs are portrayed as round, shallow depressions; in others as lateral ellipses. Mouths are depicted as closed, lips together or drawn back, exposing the teeth. Lange (personal communication) suggests that round orbs and grimacing mouths represent death masks. Six heads in the study collection conform to this pattern, but cross-cut the two categories defined on the basis of ear and nose treatment. Other human head effigies are portrayed with round orbs and closed mouths, or with elliptical eyes and open, grimacing mouths.

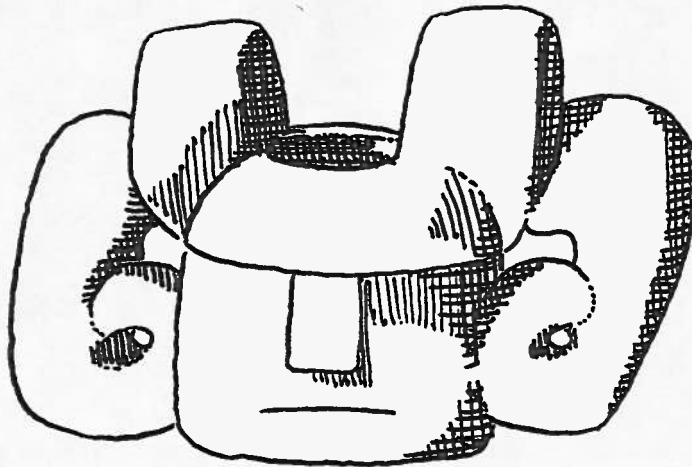
In the Atlantic watershed, heads may be classified according to the presence or absence of head gear. Face treatment is essentially the same in either case; the area beneath the brows and on either side of the nose are excised in such a manner that shadows thus created give the illusion of eyes (see figure 5c). The head gear consists of an oblong projection extending upward from the temples, and bilateral L-shaped projection protruding



A



B



C

Figure 5. Mace Head human head: A. Realistic head, Guanacaste, INS 541, B. Tab-eared, Guanacaste, diorite INS 5091; C. Linea Vieja, tuff INS 6130.

from the lower jaw, which attaches at its top border to the temple projection. These have been characterized as doble ave picos since the "head gear" approximates two stylized bird beaks in general appearance.

The five specimens of tuff from the Atlantic watershed represent a rather cohesive group in manner of manufacture, generally, though there is variation in mouth treatment. In three instances the mouth is represented by a divided, lateral, triangular block; teeth being indicated in one case. In two figures, it appears an effort was made to represent a more realistic mouth with lips pressed closed.

A sixth specimen from the Atlantic watershed more resembles those of the northwest. The oval face has round eyes, a wide nose, and an open mouth which has been drilled at the corners. Ears are represented as laterally protruding circular knobs.

There is a total of twenty-eight human effigy heads in the study collection. Of the Guanacaste specimens, where information was available, three were manufactured from diorite, four from jasper, and two from chalcedony. Five specimens from the Atlantic watershed were manufactured from volcanic tuff, and the sixth is of tomsonite.

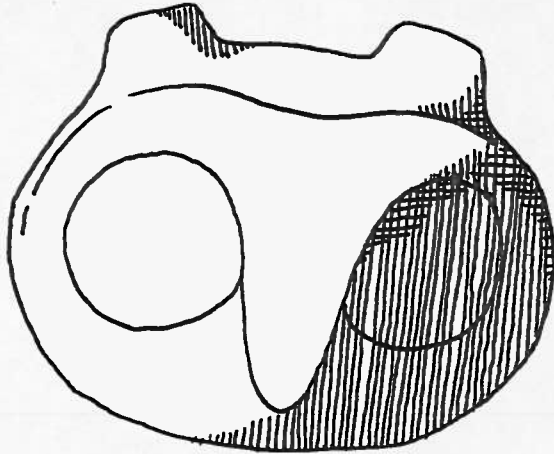
Owls

Owl effigies can be divided into three types on the basis of the presence or absence of tufts, facial discs,

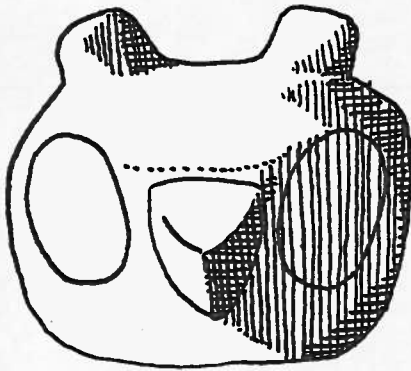
and eye treatment. Generally, the types appear to correspond to owl species whose ranges extend through Central America, e.g., the great horned owl, the short eared owl, the barred and barn owls (Audubon Nature Encyclopedia 1965). Large tufts of feathers, giving the appearance of horns, and a divided facial disc characterize the great horned owl Bubo virginianus. Effigies of this owl exhibit two prominent knobs atop the head and a V-shaped or protruding beak which separates the facial disc. Eyes, if depicted, are often circular concave depressions, sometimes packed, though concentric circles were observed in one instance.

The category called the great horned owl can be further subdivided based on eye treatment of the facial disc and the beak (see figure 6a, b). The first has a V-shaped beak attached to the main body. The facial disc is indicated by a reduction of the surface of the club head; eyes may or may not be indicated. The second type has a distinct facial disc which flares from the main body surface. Hooked beaks protrude from the face and may be portrayed slightly open. Eyes may or may not be depicted.

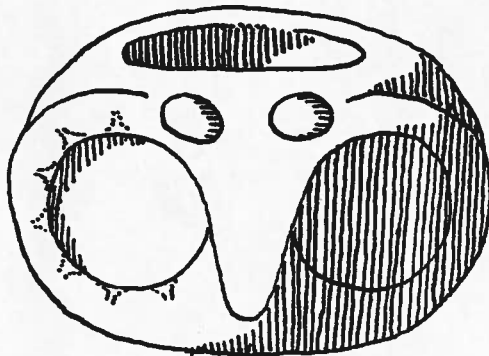
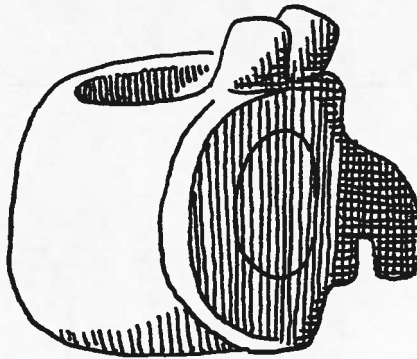
The short eared owl, Asio flammeus, with its short tufts of head feathers, I believe to be depicted in the effigies as having button-like protrusions above the eyes, rather than knobs (Figure 6c). Beaks are depicted as both attached and protruding, and eyes may or may not



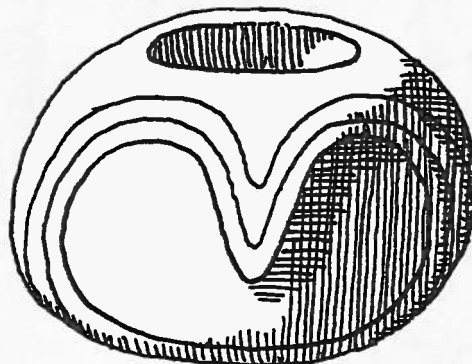
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Figure 6. Mace heads Owl: A. Great Horned Owl, Linea Vieja, calcite INS 6030, B. Great Horned Owl with Facial Disc INS 481; C. Short-eared Owl INS 501; D. Barn Owl, Nosara, conglomerate INS 6045.

be shown.

Finally, there are the effigies lacking tufts of any form (Figure 6d). Two species of owl fitting this general description that range in Central America include the barred owl, Strix varia, and the barn owl, Tyto alba. Any attempt to distinguish these would be extremely difficult. Among the mace heads lacking tufts, attached beaks are common, though two specimens were observed to have protruding beaks. A unique specimen from the Minor C. Keith collection (Mason 1945) has a protruding head. The head is elliptical in shape and has a small beak which protrudes from beneath large round eyes. Owl mace heads in the study collection represent the head alone, and are not shown as full figure depictions.

Mention should be made of the peculiar beak treatment seen on both great horned owl and short eared owl mace heads which have protruding beaks. In four, and possibly five, examples, the beaks when viewed from the front resemble masks of human faces. Lange (personal communication) has suggested these represent the alter-ego motif; a motif known in columnar statues from El Panama in Guanacaste Province (Stone 1972:148), from the islands of Ometepe, Zapatera, and Momotombita in Lake Nicaragua (Stone 1972), and in Columbia and the Yucatan.

Of the forty owl effigies catalogued in the study collection, seventeen come from Linea Vieja, manufactured from chalcedony, serpentine, basalt, jasper, quartz,

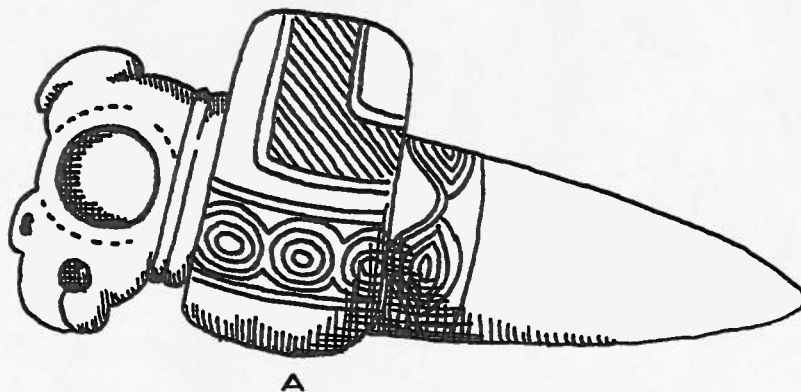
andesite, conglomerate, and black slate. The eight owl mace heads from northwestern Costa Rica are made from green slate, conglomerate, jasper, chalcedony, basalt, and jade.

Other Birds

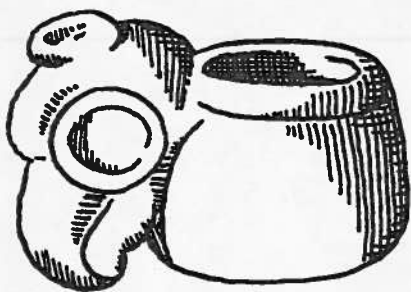
Birds are represented by the macaw (guacamaya), parrot (loro), turkey (chompipe), predatory bird (ave rapaz), and the "bird beak" (ave pico). The "harpy" eagles, common in other artistic media, e.g., gold, jade, do not occur in the form of mace heads.

The macaw (guacamaya) is the more elaborate form, its rectangular wings comprising the main body of the mace head, and having a protruding tail and head (Figure 7a). It is the only bird form to have a protruding tail which is conical in shape. Colonial documents, circa 1697, mention macaws being included with mortuary goods of important persons, or if the deceased had been especially valiant (Ferrero 1977:206). According to indigenous beliefs the macaw was included so that the feathers might serve the deceased in the next life.

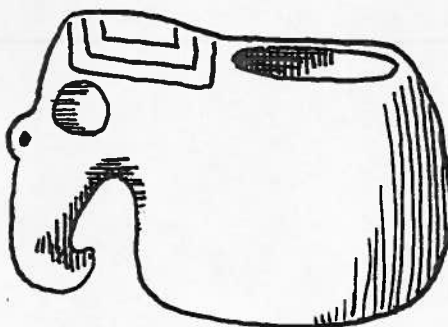
The wings of these forms occasionally bear excised decoration. When they are decorated, designs may consist of intricate curvilinear design, or simple geometric lines. Occasionally, similar bands of designs described above may be seen on bands around the tail. Eyes are circular, sometimes having a central knob. A tuft of feathers is usually portrayed atop the beak, though three specimens



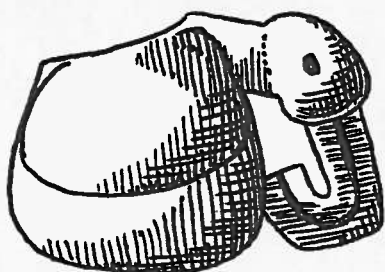
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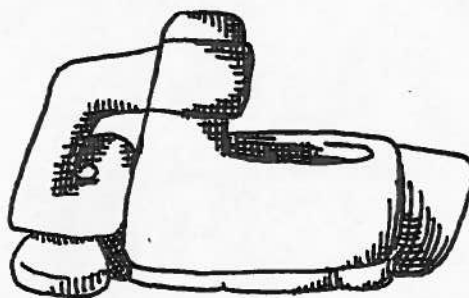
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Figure 7. Bird effigies. A. Macaw, INS 2574; B. Parrot, Guanacaste, chalcedony INS 6074; C. Turkey, INS 6057; D. Predatory bird, Linea Vieja INS 530; E. Bird beak, Linea Vieja, tuff INS 6132.

lack it. One specimen has a mask on the beak, similar to those among the owls.

The parrot (loro) forms have protruding heads, often with tufts of feathers depicted, and resemble guacamaya forms with the exception that they lack tails (Figure 7b). Both the parrot and macaw forms are known principally from the northwest. There does not appear to be one standard form for the parrot group, though as a group, they are distinguishable from other bird forms. Costa Rica supports a variety of parrot species, and it is possible that an ornithologist might be able to distinguish the species apparently represented by the study collection.

The turkey (chompipe) is represented by a single specimen from Guanacaste and is made of jade calcinate (see Figure 7c). The top of its rectangular-shaped head is decorated with concentric rectangles. Eyes are circular depressions above a curving beak. On the front of the beak, below the eyes, is a perforated protrusion which might represent the comb.

Predatory birds (ave rapaz) are best characterized by their rather round, dome-like heads and curving beaks (Figure 7d). Like parrot forms, there is a bit of variation but not so much that they are not distinguishable as a group. Variation seems attributable to competence of the artisan, since representations vary in degree of crudity versus refinement.

From the Linea Vieja region comes forms which have been described as a bird beak with trophy head which I call, simply, beaked bird (ave pico). Generally, the beaked bird may be characterized as a geometric stylization of a bird. The head, with a long beak that curves down and back upon itself, protrudes above the body of the club (see Figure 7e). Beneath the beak is a human head. Ferrero (1974:26) has suggested that the typical figures of the "ave pico" in the Linea Vieja region date to the period from 300-500 A.D., when the new art style in which it became possible to separate the body, arms, and legs, and hollow out spaces thus creating more open sculptures, was developed.

Variations in the collection include a form having three facial knobs and a tail with incised longitudinal lines, a predatory bird with tufts similar to owl forms, and a humanoid macaw form from Linea Vieja which has large circular orbs.

Fifteen specimens have been identified as macaw forms; all from the Guanacaste area with the exception of the single variant form from Linea Vieja discussed above. Five parrot forms derive from the northwest, with two unprovenanced forms; four predatory bird types come from Linea Vieja, two from Guanacaste, and one is unprovenanced. Of the forty-seven bird forms in the study collection, eleven have been classified as preforms. Preforms, for lack of a better term, include what appear

to be unfinished owl and parrot forms. They are distinguishable as owl and bird forms from the protrusions for beaks, or the protruding knobs which resemble parrot heads. The preforms appear to lack only the final excisions and embellishments.

Coyote

The coyote effigy, of which there are seven specimens, all come from the Linea Vieja region of the Atlantic watershed (see Figure 8). The coyote has a long snout with open jaws, connected at the tips where fangs are depicted. Ears are rectangular and protrude upward. All specimens are made of tuff. In terms of the overall impression of these objects, there is a high degree of standardization evident, even though on an individual basis slight differences are discernible.

Felines

There are three feline effigies represented in the study collection, by no means distinguishable and classifiable into any of the three species known to exist in the area, i.e., jaguar, ocelot, or puma. In the literature it is common to refer to feline figures collectively as jaguars. The first major group (see Figure 9a), which is divisible into two subgroups, has a protruding feline head. The tongue protrudes from a snarling mouth and curls beneath the chin. Holes have been drilled on either side of the tongue and at each corner of the mouth.

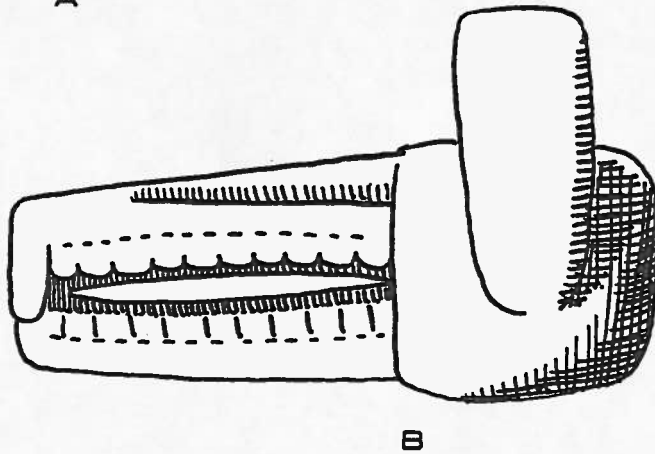
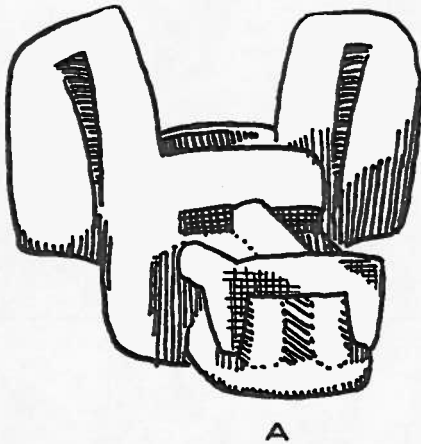
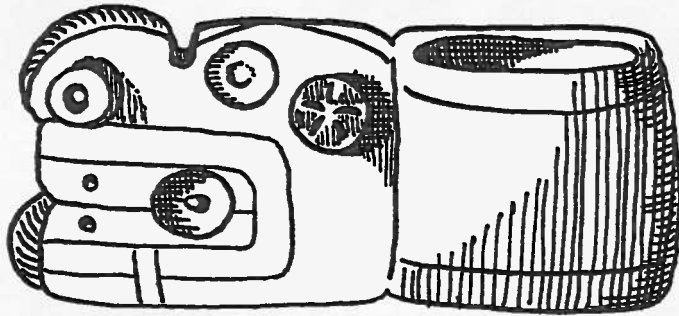
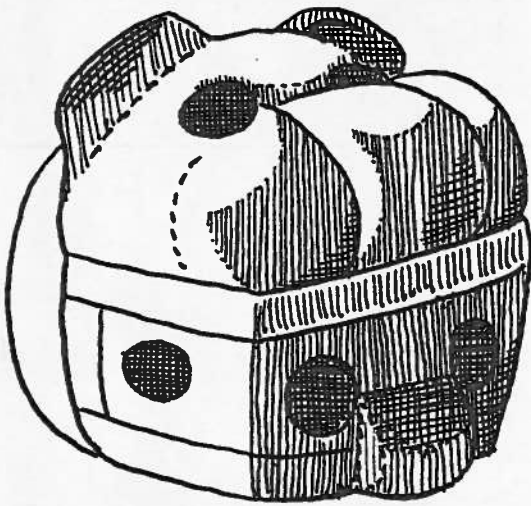


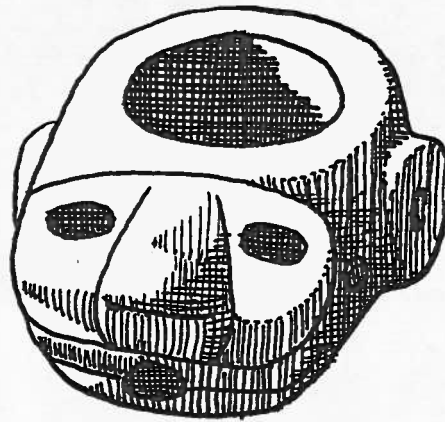
Figure 8. Mace heads coyote: A. Linea Vieja, tuff INS 6140;
B. Linea Vieja, tuff INS-6137.



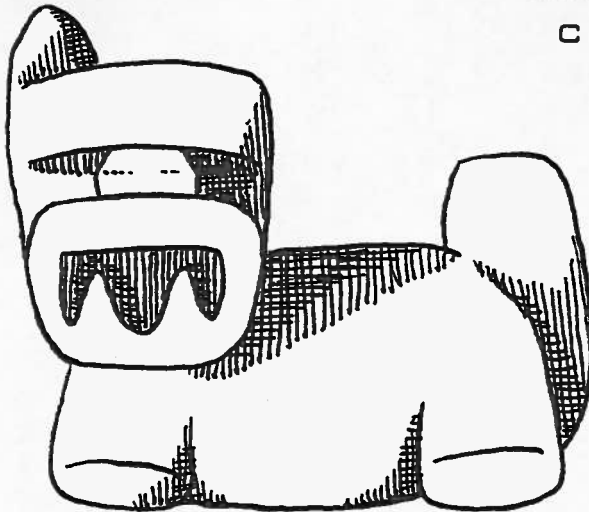
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Figure 9. Mace heads feline: A. Snarling feline, Guanacaste INS 6051; B. Snarling feline with tab ears Guanacaste, chalcedony INS 6058; C. Miniature tiger, Buenavista, feldspar INS 6158; D. Linea Vieja, feline, tuff INS 6134.

One group has protruding circular knobs at either side of the nasal area, as well as circular knobs placed laterally behind the eyes. This latter may represent ears which are otherwise missing. The second group lacks at either of the previously mentioned places, and has tab-like ears (see Figure 9b).

A second major category is the miniature tiger (tigre miniatura) which appears to be a full tiger figure (Figure 9c). The upper facial region is well-defined, much like a mask. Circular depressions serve as eyes, and circular lateral protrusions complete the face. The posterior portion of the club head has a segmentation and probably represents the hind quarters and tail.

The third type is based on stylistic similarity rather than general form, by which I defined the first two categories. Known from the Linea Vieja region, the head and full-figure forms exhibit identical facial treatment (see Figure 9d). Excision of stone beneath the brows and from either side of the nose creates shadows which give the illusion of eyes when viewed from the front. A rectangular shaped snarling mouth shows bared fangs. The feline head, classified as a humanized feline, has lateral tab-like protrusions on the head, much like ears depicted on human head effigies from the northwestern area. The figure of the jaguar is a stout body which comprises the shaft, with legs and tail depicted, and a head turned to look over the left shoulder.

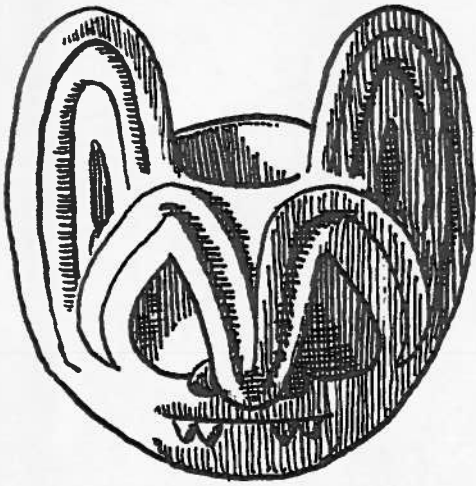
A variant from Linea Vieja has a protruding snout with a snarling mouth, indicated in rectilinear design. The circular eyes bulge from the main body of the club. Ears, incised with vertical lines, extend the entire length of the club exterior.

Northwestern specimens, of which there are nine snarling feline heads and three miniature tigers, are manufactured from feldspar and chalcedony. Of the three Linea Vieja objects, two are of volcanic tuff, while the variant is manufactured from chalcedony.

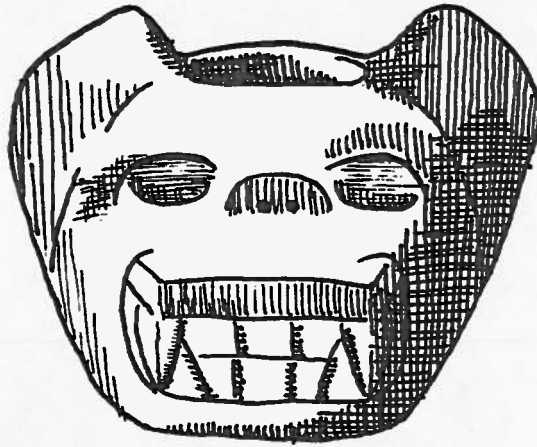
Bats

There are three variants among bats (murcielago) effigies. By far the most aesthetically pleasing group has well-proportioned figures, with rounded ears, and excised in curvilinear design (see Figure 10a). A second, cruder, group has a minimal amount of straight line excised design (Figure 10b). Finally, there is the long-eared group, with excised geometric design (Figure 10c). This latter group has circular drilled holes on either side of a protruding tongue and at the corners of the mouth, similar to jaguars discussed above. The long-eared forms also have a rectangular protruding tail, similar in concept to the guacamaya (macaw) forms.

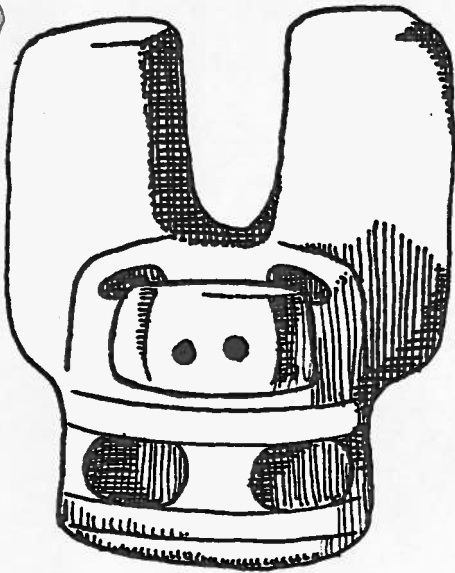
The long-eared bats resemble the two-legged monsters described by Hartman (1907), and would, if inverted, look like Hartman's two-legged monsters. Hartman has suggested that the two-legged monsters represent reworked macaw



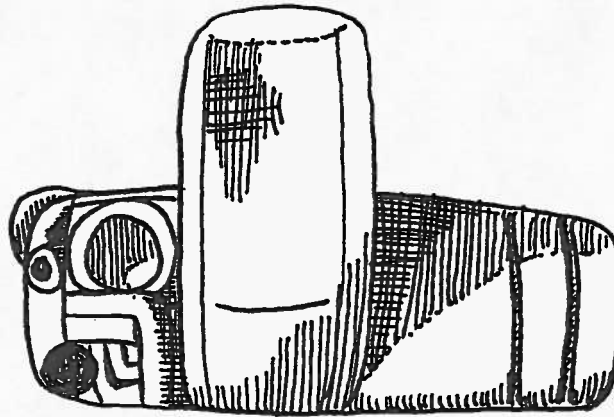
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D

Figure 10. Mace heads Bat: A. Round-eared bats, INS 3085; B. Tab-eared bats, INS 3318; C. Long-eared bats, INS 3317, frontal; INS 487, lateral.

forms. Yet the proportions of the front and rear ends, as well as the massive ears of the bats, tend to discount this interpretation.

Bats with round ears and excised curvilinear design number six in the study collection. Four can be categorized as belonging to the second, cruder, group, and three have been assigned to the long-eared bat category.

Plain

The non-effigy mace heads have been classified as either sencilla or dona; both are devoid of embellishment (see Figure 11a). Sencilla and dona forms appear to differ little in profile; the sencilla seemingly are more round in profile, the dona perhaps more elliptical. Among provenienced objects, sencilla forms are described for Guanacaste Province in the northwest, while dona forms are described for the Linea Vieja region of the Atlantic watershed, though dona forms were reported for Nicoya as well.

Thirteen mace heads have been classified as plain types; two sencilla forms from Guanacaste, one of andesite, the other of granite; two dona forms from Nicoya, both of andesite; and two lava dona forms from Linea Vieja. The unadorned ring form recovered from the Chircot cemetery, by Hartman (1907), possibly belongs in this category. The remaining six mace heads have neither provenience nor material of manufacture.

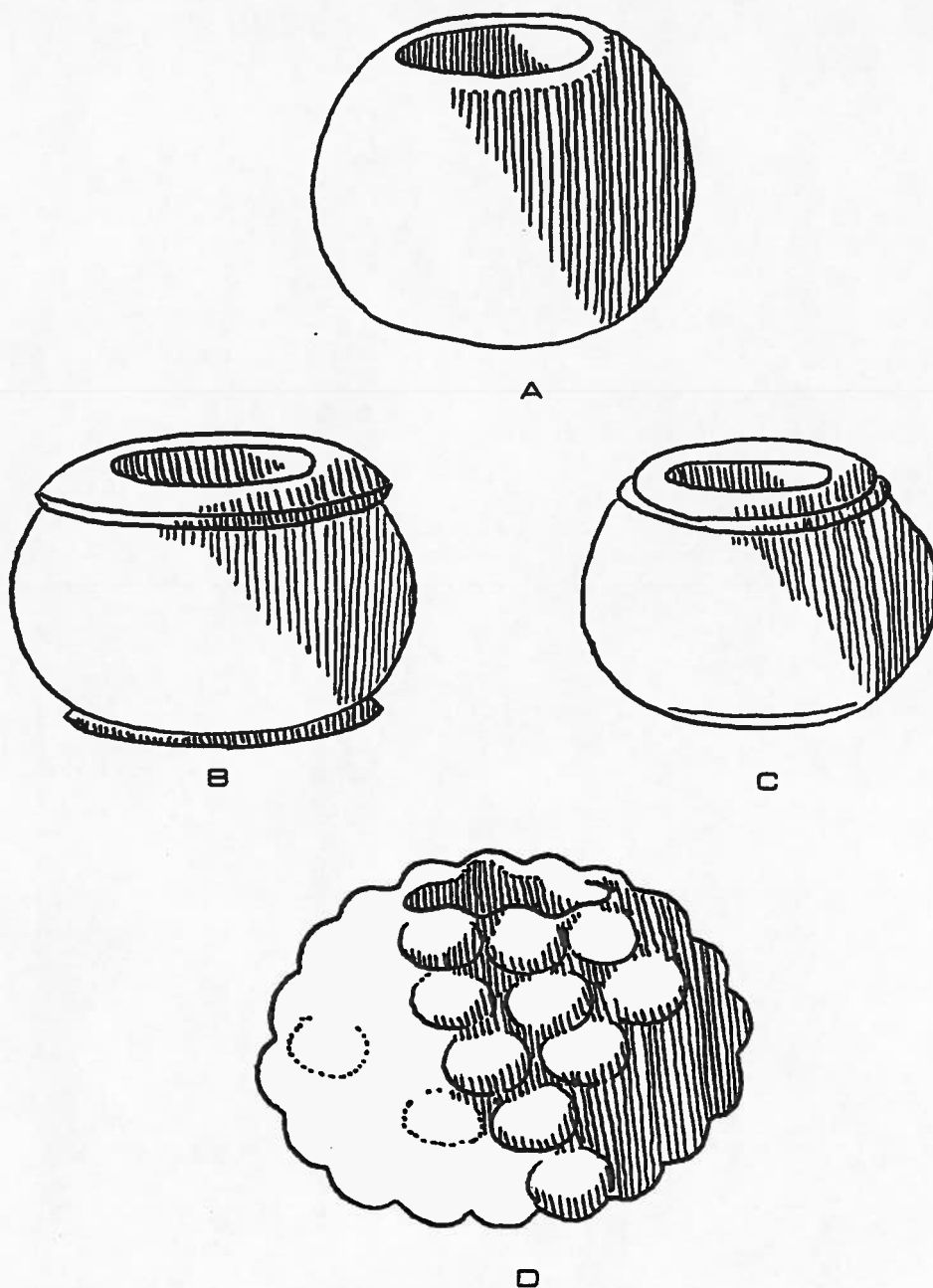


Figure 11. Mace heads: Plain, banded, and knobbed. A. Plain, Guanacaste, granite INS 6111; B. Banded, collared Guanacaste, diorite INS 6101; C. Banded, uncollared, Guanacaste, diorite INS 6103; D. Knobbed, INS 504.

Banded

Banded (bandeada) forms are generally of two types: a collared variety with excised design around the rim of the shaft, and an uncollared variety with excised banding around the central shaft (Figure 11b). Banded forms have been reported only for the northern area of Costa Rica, e.g., at Las Huacas and in Guanacaste Province. Fourteen banded mace heads are included in the study collection: five of diorite, one of serpentine, and one of jasper have been described. The remaining nine banded forms lacked information concerning the material of manufacture.

Knobbed

Knobbed mace heads are ascribed to a single category (Figure 11c). With the exception of two specimens, the knobbed mace heads have two rows of knobs. Of the ten specimens, three come from Guanacaste and are made of andesite, and three come from Linea Vieja, manufactured from lava. Mason (1945:275) mentions the knob type as one of the typical forms found at highland sites of Cartago and Curridabat.

Resin-Coated Mace Heads

There are six mace heads in the study collection which have been coated with resin: two bats, two macaws, one short-eared owl, and one snarling tiger. Neither of the bat heads, INS 487 and INS 1103, had provenience or information concerning the material of manufacture.

INS 487 is a long-eared bat with a rectangular tail, while INS 1103 is a round-eared bat excised in curvilinear design. The two macaws, INS 518 and INS 2574, have been assigned to the northwestern area, and differ from one another in the wing decoration; INS 518 has simple geometric straight line design, while INS 2574 has intricate curvilinear design. The difference in the complexity of design on the wings suggests the two mace heads were not made by the same person. The short-eared owl, INS 145, and the snarling tiger, INS 490, like the other mace heads, lacked information on provenience and material of manufacture.

There was no reference in the interpretive or scientific literature of resin-coated mace heads, so that it is difficult to know whether additional forms were also resin-coated. Other than noting their occurrence, little can be said about this group of resin-coated figures. It can be said that resin-coats were not applied exclusively to a single form of mace head, but whether it was restricted to the four forms mentioned, i.e., bats, macaws, snarling tigers, and short-eared owls, is not known at present. And even within these categories not all of the mace heads were resin-coated. The application of resin suggests an extra function, beyond the symbolic information the uncoated mace head would carry.

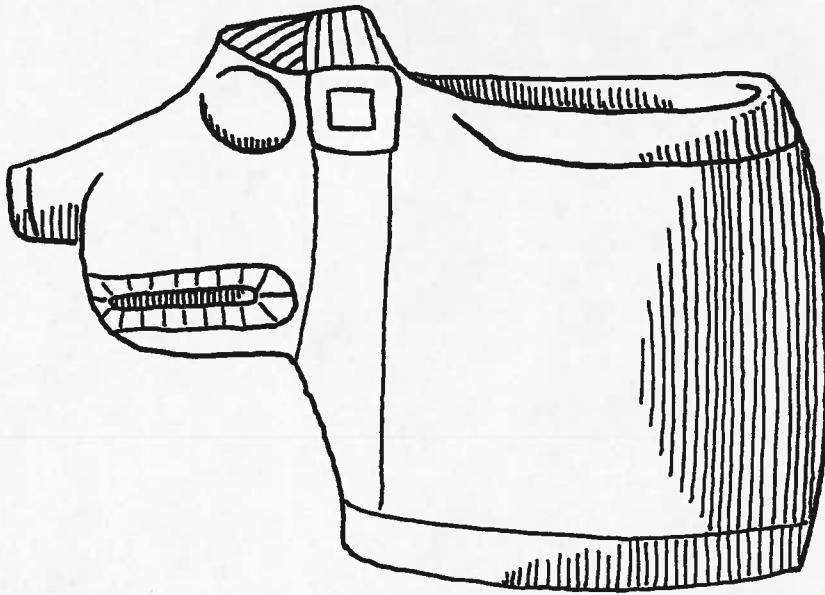
Miscellaneous

The study collection included effigy heads of a

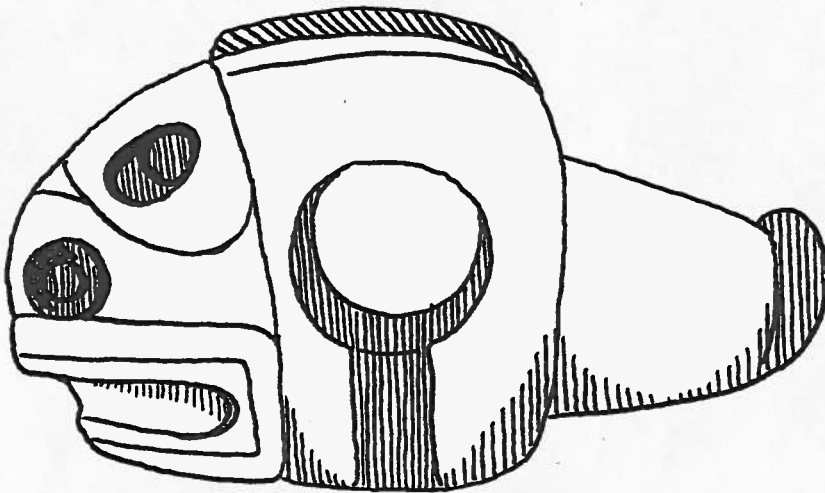
canine, a fish, a zoomorphic figure with vertical body grooves, a "monkey with lateral knobs," two anthropomorphic heads, a "monkey head," a "monster" which might represent a snarling feline, and an indescribable double zoomorphic figure (Figure 12a-g). Occasionally, illustrations in the scientific and interpretive literature showed forms not represented in the study collection. Since one of the aims of this thesis is to determine the degree of randomness, or variability, existing in the hypothesized communication system, mace head forms from the literature shall be included.

Hartman (1907) has illustrated a human head with a parrot atop it, wings spread, which probably represents an alter-ego motif. Hartman has also illustrated alligator/crocodiles. Neither of these forms were represented in the study collection (Figure 13a, b). Ferrero (1977) illustrated mace heads in the form of a human skull from the collection of the Museo Nacional de Costa Rica (Figure 13c, d). The "monkey head" of the study collection is similar to "death's heads" illustrated by Hartman, and skulls illustrated by Ferrero. Variations of the human head were provided by Mason (1945; Figure 13e, f).

Non-effigy forms in the study collection include an oddly knobbed mace head which might represent a human head (Figure 13g), a faceted club head (Figure 14a), an ayote, a banded form with criss-cross bands on the body, and a mace head with eight symmetrically placed knobs (Figure 14b-d).

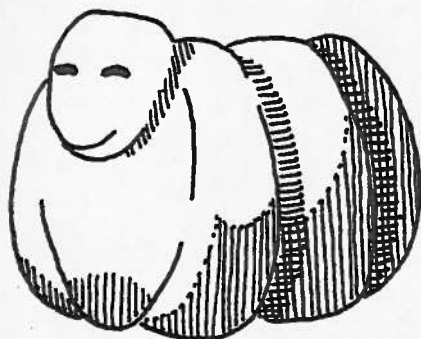


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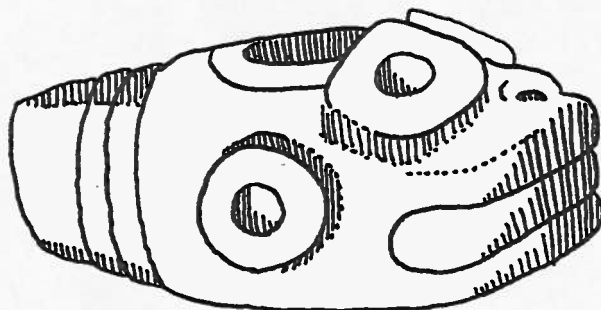


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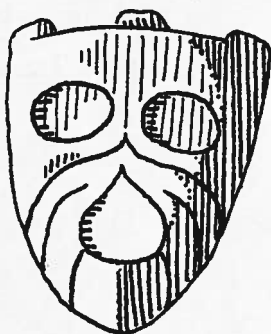
Figure 12. Mace heads: Miscellaneous zoomorphic forms from the study collection: A. Canine, INS 514; B. Fish, Filadelfia, adesite, INS 6056.



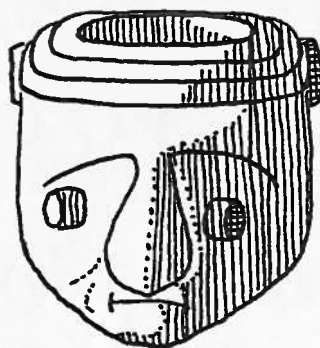
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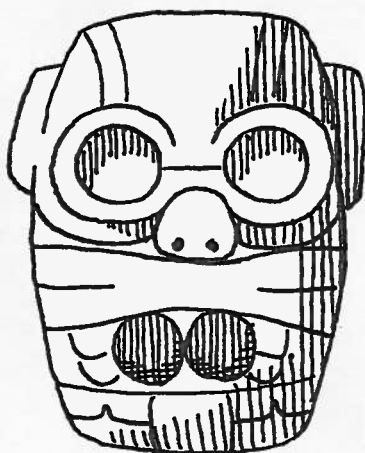
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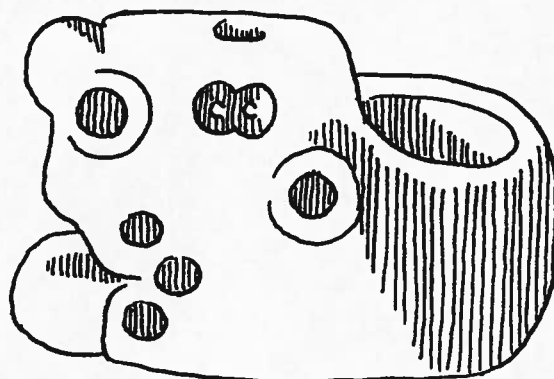
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G



H

Figure 12. Mace heads: miscellaneous zoomorphic forms in the study collection: C. Zoomorphic figure with vertical body grooves, INS 6126; D. Monkey with lateral knobs, INS 6054; E. Anthropomorph, Guanacaste, basalt, INS 6063, F. Anthropomorph, INS 6411; G. Monkey head, INS 6416, H. Monster, Guanacaste, calcite, INS 6127.

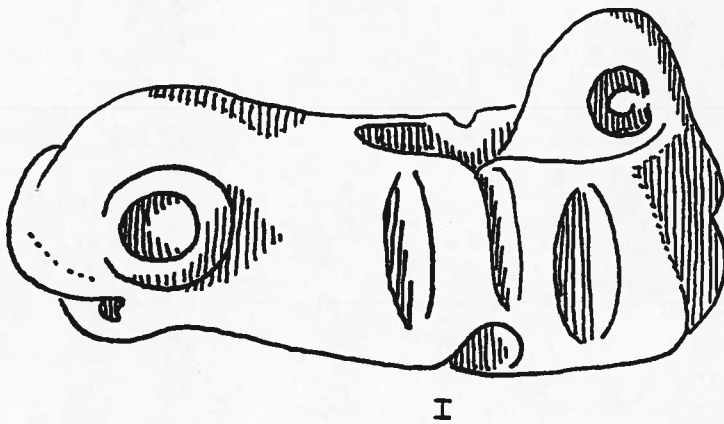


Figure 12. Mace head: Miscellaneous zoomorphic form in the study collection. I. Double zoomorphic figure, Linea Vieja, chalcedony, INS 6053.