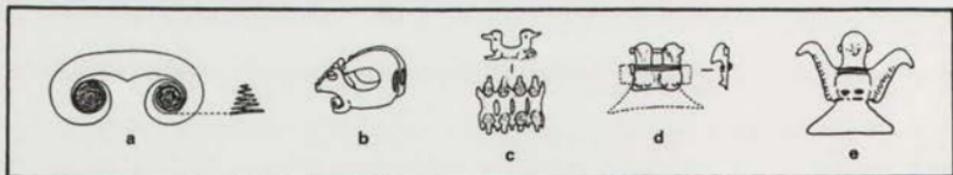
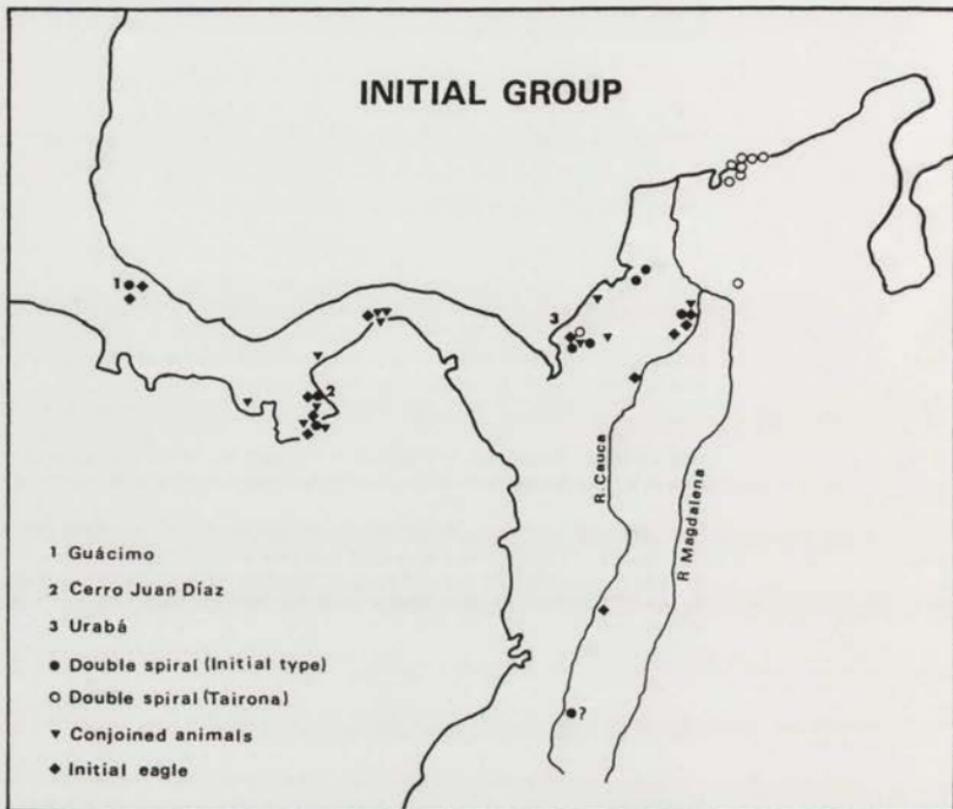


INITIAL GROUP



Metallurgy and anthropology: two studies from prehispanic America

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Abstract: Only raw material and technology differentiate metallurgical objects from other cultural artifacts. Many archaeo-metallurgists usually stress to much technical topics, thus ignoring cultural problems, which are more important. This article examines some "anthropologic" (non-technologic) issues in the study of pre-Columbian metallurgy, on the basis of two cases: the goldwork produced by Chibcha speaking groups of Caribbean Colombia and Central America, and the meaning of guanin (gold-copper alloy) in the Caribbean.

Resumen: Los únicos elementos que diferencian los objetos de metalurgia de otros artefactos culturales son la materia prima y la tecnología de fabricación. Muchos arqueometalurgistas han exagerado el énfasis en los aspectos técnicos ignorando los problemas culturales, que son mayores. Este artículo examina algunas perspectivas "antropológicas" (no tecnológicas) para el estudio de la metalurgia prehispanica.

Acknowledgements: This paper draws on conversations with many colleagues over a period of years. I would especially thank Richard Cooke, Ana María Falchetti, Roberto Lleras, José Oliver, Clemencia Plazas, Fred Lange, Jalil Sued Badillo and María Alicia Uribe. Fig. 6 was drawn by Tessa Rickards. An earlier version of this paper was delivered to the symposium 'Metalurgia Prehispanica de América' at the 49th International Congress of Americanists (Quito), and I am grateful to the Museo del Oro, Bogotá, for making my attendance at this meeting possible.

Fig. 1. Distribution of diagnostic items of the Initial Metal Group and of Early Tairona double spirals. The illustrated pieces are from excavated sites in Panama: a, c, e from El Cafetal; b from Las Huacas; d from La India-1 (see Cooke & Bray 1985).

The impetus for this essay is a conviction that studies of archaeological metalwork can contribute to mainstream anthropology. In this wider context we must look for ways in which the artifacts can be used as a bridge into the minds of the people who made them, and also as a bridge between scientific analysis and anthropological theory.

My contribution presents two studies based on work in progress. The first one takes as its point of departure the belief-systems encoded in metal objects from Colombia and the Isthmus. The second study deals with indigenous attitudes towards metal itself, in this case the gold-copper alloy (guanin) used in the Antilles at the time of European contact.

1. Metalwork and the Macro-Chibchan question

In the 1980s I defined an assemblage of metal objects (the Initial Metal Group) whose distribution stretches all the way from northern Colombia to Costa Rica (Cooke and Bray 1985; Bray 1992, see Fig. 1). These artifacts seem to be the oldest metal specimens in Caribbean Colombia and Central America, and, on present evidence, can be dated mainly to the early centuries after Christ. Most are items of personal jewellery, made of gold or of gold-copper alloy with surface-enrichment, though copper may occasionally be used alone. Among the Initial forms are double-spiral ornaments made of hammered sheet metal, and also a variety of cast items, including spreading bird pendants (both single and double) and sets of conjoined animals with raised tails (Fig. 1). The Early Tairona double-spirals seem closely related to the Initial ones but may be a little later, though they clearly fall within the first millennium A. D. (Falchetti 1987: 5).

By A. D. 600 the Initial Metal Group had evolved, in the same general area, into the International Group (see Fig. 2 for some of the characteristic forms and their distributions). This Group, in turn, disappeared from the archaeological record by about 900-1000. It must be emphasized that the Initial and International Groups constitute a single line of development. The division

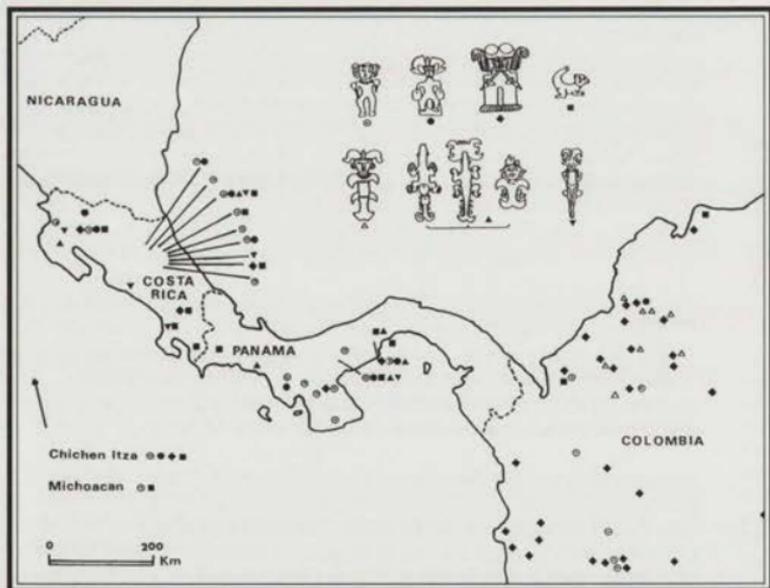


Fig. 2. Distribution selected categories International metalwork

between them, typological and chronological, is an arbitrary one, and the two groups may eventually have to be combined.

The key area for this process of development is Caribbean Colombia, and in particular the eastern shore of the Gulf of Urabá (Fig. 4) where Uribe (1988) has described a mass of jewellery that is early in date and eclectic in style. From the Quimbaya region of central Colombia came the idea of making lime flasks, as well as a liking for human figures with 'dreamy' faces, multi-strand necklaces and forward-pointing crowns. To these were added local Caribbean forms: double spirals, frogs, simple spread-wing birds, single and multiple animals with recurved tails, ornaments made of hammered wire, and embossed plaques made from sheet metal. This blend of influences produced a distinctive Urabá subgroup within the Initial-International tradition as a whole.

Urabá lies at the gateway to the Isthmus, and items in this specific Urabá substyle were carried to Panama and Costa Rica, along with more generalized Caribbean forms such as Darien pendants and human figures with elaborate headdresses. Ceramic associations and radiocarbon dates indicate that metalworking spread from Colombia to the Isthmus during the 4th or 5th century A.D. (Cooke and Bray 1985; Cooke et al. 1994), and by about A. D. 500 gold had begun to replace jade as a prestige material in some areas of Costa Rica. These dates seem to apply throughout the region, from Cerro Juan Díaz in central Panama (with Initial double spirals and fragments of an eagle pendant; R. Cooke, personal communication), to the looted cemetery at Guácimo in Costa Rica, said to have yielded a double-spiral ornament, creatures with recurved tails, and two Urabá items (a frog and a Quimbayoid figure), associated with pottery dated A.D. 400-600 (Stone and Balsler 1965; Snarskis 1985: 28). What is not yet clear from the few available dates is whether this south-to-north diffusion was a rapid process or a more gradual one. By juggling the error margins of the C14 determinations one can argue either way, for a hundred years or so, or for a substantially longer period.

The Initial and early International material represents a rather heterogeneous 'horizon style', with nothing particularly 'Chibchan' in either its distribution or its iconography. The next episode of the story is one of fragmentation. In the Isthmus, during the centuries between A.D. 600 and 900, the International Style broke up into the series of local styles known as Conte (Cocle), Veraguas, Chiriquí, Diquís, etc. (Fig. 4). In these areas, too, the old technology of enclosed casting over a core was largely replaced by open-back casting. A similar process of breakup took place in northern Colombia, where the International metalwork gave way to the mature Sinú and Tairona styles (Fig. 4). It is at this stage of evolution that the metallurgical data become relevant to the Gran Chibcha question.

Once established in the Isthmus, the new metallurgical technology was soon employed to satisfy local tastes, and we begin to see significant changes. The simple, and ideologically neutral, iconography of the International Metal

Group was replaced by the culture-specific imagery of each local region, elements of which were already present in other media before the arrival of metals. Within each of these regional cultures the same images tend to occur in all materials (metal, pottery, stone, shell, etc.). I am calling these sets of regional images *Iconographic Clusters*, and each of them has its own internal history and stylistic development. I am also assuming that the imagery is not merely decorative, but incorporates statements on matters social and religious, in the broadest sense of those words (see, for example, Linares de Sapir 1976, 1977). To put it another way, each regional Iconographic Cluster is a visual manifestation of the local world-view or belief-system.

In a large part of northern Colombia and Central America, languages of the Chibchan family were spoken at the time of European contact (Fig. 3). This linguistic distribution prompts the question: Is there a distinctive pan-Chibchan world-view behind all the regional diversity, and can we recognize it in the imagery of the metalwork?

Archaeologists have always been concerned with style, most often as a tool for classification, but if we look instead at subject matter (at what is being represented, rather than how it is depicted), a different kind of picture comes



Fig. 3. Distribution of languages belonging to the Chibchan family (based on Costenla 1991).

into focus. What begins to show up is a basic repertoire of shared themes throughout most of the study area. From approximately A.D. 600 (or soon afterwards) the metalwork of Caribbean Colombia and the Isthmus has a very characteristic range of subjects, including all sorts of spread-wing birds (the 'aguilas' of hispanic documents; see Cooke 1986), frogs and toads, jaguars, saurians of various kinds, human figures, and a range of chimeras made up from parts of several different creatures. These main figures often have secondary figures attached to them, or have zoomorphic appendages. North and south of our region, these images are absent or uncommon.

Since an image as basic as, say, a jaguar or a frog may mean different things in different cultures, before making comparisons we should take one further step, and move from the icons themselves to a consideration of their symbolic values. To test the idea of a pan-Chibchan belief-system, we ideally need to know the 'meanings' behind the images, and their significance to the people who wore the jewellery. For prehistoric cultures this hope is unrealistic. We still lack good data on the mythologies and non-material cultures of many of the Chibcha-speaking groups, and in practice the traditional 'look and guess' approach to interpretation has proved to be a dead end.

Existing studies merely emphasize the lack of consensus. In Colombia Reichel-Dolmatoff (1988) interprets almost every icon in terms of shamanic flights and transformations, though it is not clear how he distinguishes between an everyday creature and a 'shamanic' one, nor does he explain why so many people would want to wear shamanic emblems. There are similar problems in the Isthmus, where modern ethnography has been called in to interpret the prehispanic past (e.g. Snarskis 1985). The Chibcha-speaking Bribri people of Costa Rica, for example, are organized into a system of twelve clans, each named after, and symbolized by, a particular animal. The Bribri recall that in past times they had three warrior classes (the jaguars, the red monkeys, and the 'two-headed ones'), and that their chiefs were chosen from the jaguar and monkey clans. Monkeys, jaguars and two-headed humans are all represented in the prehispanic metalwork of Costa Rica, but perhaps we should not jump to simplistic conclusions. To the historic Bribri the jaguar was a 'hunter, killer, warrior, clansman, uncle, brother-in-law, a symbol of power and the equivalent of the eagles above and the crocodiles in the water' (Bozzoli 1975: 180). Does a jaguar pendant express just one of these meanings, or all of them simultaneously? Do the subsidiary figures and motifs that sometimes accompany the jaguar act as qualifiers, indicating which personification of the jaguar is intended? We simply do not know.

The 'aguilas' exemplify the same problem. The principal deity of the Bribri was called Sibü, or Sibö. He was the creator of all things; he brought the seeds from which the first human beings sprouted; he taught the people to dance, selected the clans from which shamans were drawn, and he distributed all the different kinds of jobs. And he took the form of a large-beaked bird. In the words of a Bribri song (Stone 1962: 64):

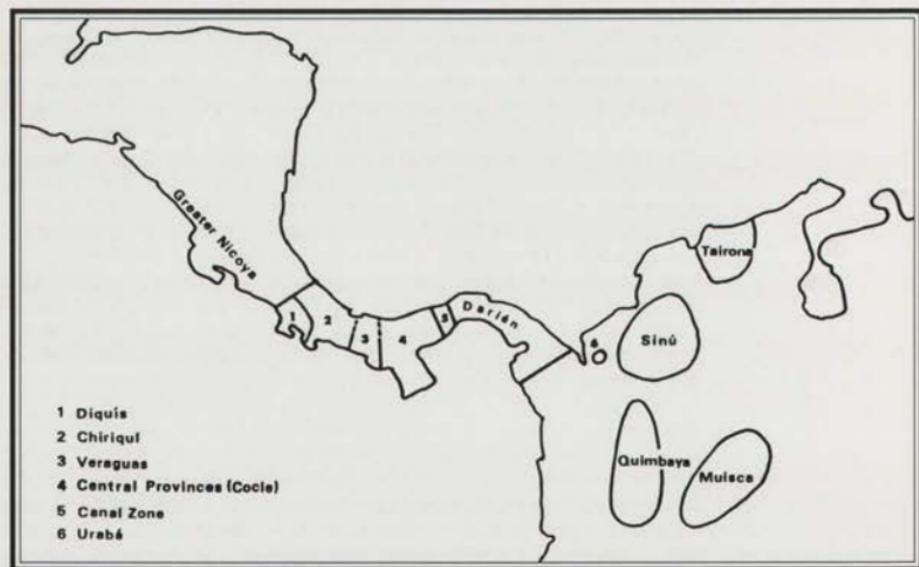
*Sibu came in the form of a buzzard
dressed as a man,
collar on his neck
The collar reflected.
He came with the collar.*

So, do the bird-men and collared aguilas of the Veraguas-Gran Chiriquí style represent Sibu, or are they transformed shamans, or clan badges, or symbols of rank - or are they something entirely different and completely unpredictable?

My point is that interpretations of this kind, however plausible, are no more than guesses based on selective use of ethnographic analogies. They are therefore unprovable, and are archaeologically untestable.

There are, however, ways of manipulating symbolic data that do not depend on knowing the meanings of the icons. Fig. 5 gives a preliminary list of the forms of chimeras recorded in the subregions under discussion. The Muiscas and their neighbours on the Colombian altiplano pose special problems (see below), but elsewhere the prediction of a pan-Chibchan belief-system seems to be confirmed. Many icons occur in several of the regional columns, including the one for the Taironas of northeastern Colombia. Significantly, there is one Caribbean subregion which does not fit the pattern and which cannot be included in the chart. This is the Sinú zone (Fig. 4), which lacks most of the typical forms (in particular the composites) and has a tradition

Fig. 4. Archaeological zones of Colombia and Central America.



of naturalism, with lifelike animals and human genre scenes, found nowhere else (Falchetti 1995).

The macro-region defined on the basis of its shared iconographic system also defines itself in other ways. In all the relevant Isthmian-Caribbean subregions except one (and again the Sinú is the exception) languages of the Chibchan family were spoken at the time of Spanish conquest (Fig. 3). The map gives the present day (residual) distribution of the Isthmian languages, restores Cuna to its 15th century homeland, and adds extinct languages which have disappeared during the centuries after European contact.

I do not believe this correspondence is accidental. The most economical explanation is that we have a widespread cultural tradition (reminiscent of the culture-areas fashionable in anthropology at the turn of the century) defined by Chibchan languages and by a distinct system of beliefs and icons. This would not be surprising. Archaeological evidence, together with linguistic and genetic studies of the Chibchan groups in the Isthmus, indicate that there have been no large-scale migrations into or out of that area (Barrantes et al. 1990). The Chibcha-speaking communities of Panama and Costa Rica seem to have lived close together for a long time, and we would therefore expect to find many shared cultural traits (Bray 1984: 308), but - at a more speculative level - we might also keep in mind the debate about how (or whether) the structure of a language influences cognition and expression on the part of those who speak it.

For the Isthmus and the Caribbean littoral the evidence looks promising, but the table in Fig. 5 reveals one major anomaly that is hard to explain. On the high altiplano in the interior of Colombia the Muisca and their neighbours spoke Chibchan languages and also maintained links with the (Chibchan) Taironas of the coast (Falchetti 1987: 15). In spite of these connections, the Muisca iconographic repertoire seems to include no chimeras, except for a few birds with bodies in the form of faces, and one or two 'eagles' surmounted by human figures (perhaps copied from Tairona prototypes). This impression may be a false one. Some of the votive figures (tunjos) in the shape of serpents have ambiguous faces provided with mammalian noses and wire-like whiskers, and they may represent snakes with feline, or even human, heads. Other tunjos are not strictly chimeras, but depict double, or 'twinned', human figures. The emphasis on special-purpose votive figurines sets the Muisca apart from the rest of the Chibchan world, and in certain technical respects the Muisca metallurgical tradition is unlike any other (Lleras-Pérez 1997).

Classical Muisca pottery is also very different from Isthmian-Caribbean wares, and is characterized by red geometric designs over a light background. This red-on-buff pottery first appears on the altiplano at about A.D. 600-800, as does the characteristic Muisca metalwork, and there is clear continuity from that time until the Spanish conquest. Linguistic data show that the languages of the altiplano were the last ones to split off from the Colom-

<u>Main Figure</u>	Diquis	Chiriqui	Veraguas	Central Provs.	Canal Zone	Tairona	Muisca
Deer-man	*						
Jaguar-man	*	*	*			*	
Bat-man	*	*	?			*	
'Eagle'-man	*	*	*	*		*	?
'Alligator'-man	?	*	?	*		(in wood)	
'Alligator'-man with wings			*				
Crab-man		*					
'Crocodile god'	*	*	*	*	*		
'Eagle' with feline head	*	*					
'Eagle' with bat head	?		*				
'Eagle' with ? alligator head	?						
Frog with jaguar head	*						
Double-ended (same animal)	*			*		*	
Double-ended (different animals)	*			*		*	
<u>Appendages</u>							
Curly-snouted, crested 'dragon'	*	*	*	*	*		
Serpents with triangular heads	*	*	*	*	*		
Felines	*	*					
Fish				*			
Big-beaked birds	*	*		*		*	*
Curly-nosed crested quadrupeds						*	
Bats						*	
'Serpent heads', split tongues						*	

bian branch of the Macro-Chibchan family. It is tempting to link the archaeological events of A.D. 600 with this process of fission from the parent stock but, in the absence of a reliable linguistic chronology, this is no more than a hypothesis for future testing. All we can say at the moment is that, for almost a thousand years before the Conquest, the peoples of the Colombian altiplano were geographically and culturally peripheral to the main developments in the Greater-Chibchan world of the Isthmus.

Returning now to this Isthmian-Caribbean heartland, the evidence from linguistics, genetics, archaeology and ethnohistory has demonstrated that the Chibcha-speaking groups are biologically and culturally related at various levels (Costenla 1991; Barrantes 1993; Barrantes et al. 1990), and these studies make me wonder - again - whether models derived from biological and linguistic taxonomy can also be applied to archaeological data (Bray 1973).

Linguists and geneticists make use of statistical methods for measuring the degree of relatedness between the sub-populations of any particular stock. Because the rates of differentiation are known, the degree of divergence (or 'distance measurement') between members of a linguistic or genetic lineage gives some idea of how long ago the separations took place, and allows the evolution to be expressed as a tree-diagram linked to chronology.

If we accept the existence of a Gran Chibcha cultural family, then it should be possible to construct tree-diagrams for its component assemblages (such as metalwork), or for entire archaeological units, that could then be compared with the linguistic and genetic trees. This has not yet been achieved, but there is a feeling among some scholars working in the Intermediate Area that we are on the brink of a synthesis that will pull together the linguistic, genetic and cultural histories of the Macro-Chibchans. The early signs are that the archaeological tree-diagram (or, at least, the metallurgical part of it) will be broadly similar to the other two, but before we can go any further we need more accurate chronologies and an agreed way of measuring the degree of similarity/difference between archaeological cultures. There is still a long way to go, but these problems should not be insuperable.

2. Guanín in the Caribbean

My second case study brings together metallurgy, archaeology, ethnohistory and mythology, and it focusses on the Caribbean islands with the adjacent parts of mainland South America. Only a handful of prehispanic metal artifacts have been recorded from the islands but, in compensation, we have an excellent series of written documents from the early Colonial period.

The first Spanish chroniclers to write about the Antilles describe two quite different categories of golden items.

Fig. 5. Chimeras and composite forms in the metalwork of Colombia and the Isthmus.

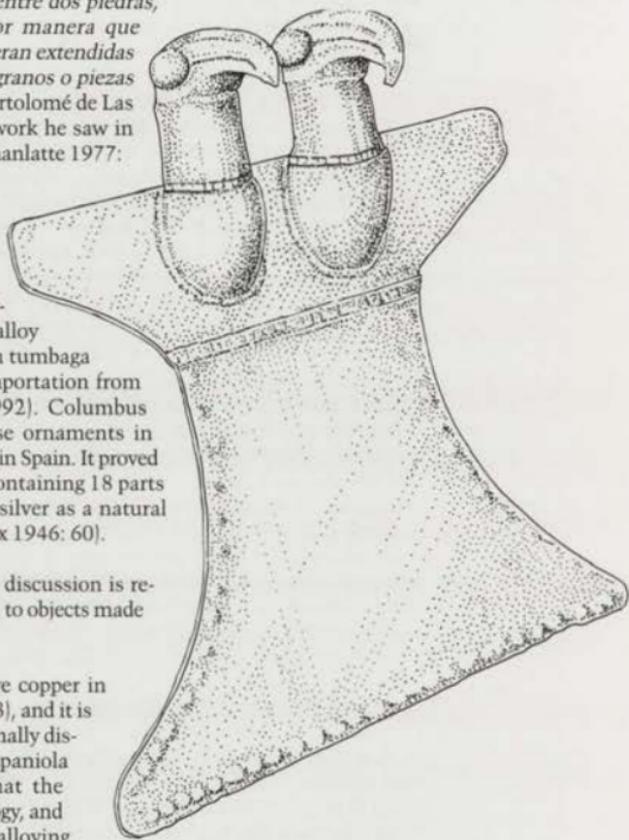
The first group consists exclusively of hammered ornaments, including inlays and overlays for composite objects. Items of this kind have been found archaeologically (Chanlatte 1977; Vega 1979). The raw material was locally available gold, which the Indians called *caona*, and the cronistas are emphatic that the Tainos had no knowledge of casting:

Estas plastas de oro no eran fundidas ni hechas de muchos granos, porque los indios desta isla no tenían industria de fundir, sino los granos de oro que hallaban, majábanlos entre dos piedras, y así los ensanchaban por manera que siendo grandes las plastas, eran extendidas y ensanchadas de grandes granos o piezas que en los ríos hallaban [Bartolomé de Las Casas, describing the goldwork he saw in Santo Domingo, cited in Chanlatte 1977: 29].

The second category of metalwork consisted of cast, three-dimensional, figurative items, and some hammered artifacts, made of a gold-copper alloy locally called *guanín* (the term *tumbaga* for this alloy is a hispanic importation from southeast Asia, see Blust 1992). Columbus himself collected one of these ornaments in Hispaniola and had it analysed in Spain. It proved to be made of a *guanín* alloy containing 18 parts of gold, 8 of copper, and 6 of silver as a natural impurity (Rivet and Arsandaux 1946: 60).

From this point onwards, my discussion is restricted to this second category, to objects made from *guanín*.

Although there is some native copper in eastern Cuba (Lovén 1935: 473), and it is reported that Columbus personally discovered a vein of copper in Hispaniola (Vega 1979: 27), the fact that the Tainos had no casting technology, and presumably no knowledge of alloying either, suggests that all *guanín* objects in the islands were imported. The immediate source was probably Guyana, where the earliest European travellers reported lost-wax casting in gold and in gold-copper alloys, and also collected eagle pendants, 'images of men and diverse birds', and sheet gold plates from the tribes of the interior (Bray 1972: 25; Rivet and Arsandaux 1946: 59-65; Whitehead 1996).



There is circumstantial evidence, based on ethnohistorical sources, for a 'guanín trail' leading back from the islands to Guyana and the Orinoco, and then upriver to the interior of Venezuela, and perhaps even to Colombia (Whitehead 1990, 1996). But, so far, the only archaeological corroboration for this is a single eagle pendant, cast in 12 carat guanín, and pure Colombian in style, which was dredged from the Mazaruni river in Guyana (Fig. 6a; compare Reichel-Dolmatoff 1988: 88). It is a casual find, with no context, and the date of its arrival in Guyana is therefore unknown. I shall return later to questions of chronology, but first we must examine aboriginal attitudes towards guanín in the Antilles.

In Columbus's treasure lists from Hispaniola the word guanín refers simply to 'oro de baja ley', an inferior metal with a low gold content (Szaszdi 1982: 15), but in the Taíno system of values guanín occupied a very different, and much more prestigious, position (Chanlatte 1977). Although guanín offers certain technical advantages as a jewellery metal (hardness, relatively low melting point, ease of casting, and the ability to reproduce fine detail), these do not account for its attraction. In the Taíno world it was the symbolic 'essence' of the alloy that gave guanín its special role.

Daban también por precio ciertas hojas de guanín, que era cierta especie de oro bajo que ellos olían y tenían por joyas preciosas, para ponerse colgadas de las orejas....y en tanto grado era estimado este guanín, la última luenga, destas gentes, por el olor que en él sentían, o por alguna virtud que haber en él creían, que acaeció valer aquellas hojas, que no pesaban sino lo que digo, entre los mismos españoles, para dallas a la hija de algún cacique y señor de aquéllos, porque el señor les diese a ellos lo que pretendían, ciento y más castellanos. Llamaban en su lengua a estas hojas y joyas de las orejas 'taguaguas' (Las Casas 1967, Lib. III, Cap. CXCLX, p. 318).

Elsewhere the same author describes 'cierta especie de oro bajo que llamaban guanín, que es algo morado, el cual cognocen por el olor, y estimanlo en mucho' (Las Casas 1965, II: 240). All the early Spanish sources agree on four points: that guanín was a gold-copper alloy, had a distinctive smell, was reddish or dark in colour, and was highly prized.

The vocabulary of these documents carries the discussion to new levels. In the islands today, Tagua-tagua is a plant (*Passiflora foetida*) with an unpleasant smell. In Cuba, Guanina (*Cassia occidentalis*) is a plant that produces golden flowers; in Puerto Rico its local name is Hedionda (stinking) (Szaszdi 1982: 17). Pietro Martire d'Anghiera (1964: 193) provides another linguistic connection when he refers to 'ciertas conchas de amarillentos reflejos como el latón, denominados *guaninos*. Con ellos hicieron collares que los reyes tienen por sagrados hasta el día de hoy.' In another version of the same statement, he refers to 'ciertas laminitas amarillas de latón, que llaman *guaninos*' (Chanlatte 1977: 28). Spanish latón (brass) shares with guanín the characteristics of acidic smell and foreign origin, and both alloys were

Fig. 6(a). Metal items from Guyana and Cuba. Pendant from the Mazaruni river, Guyana, size unrecorded. Redrawn from Whitehead 1990.

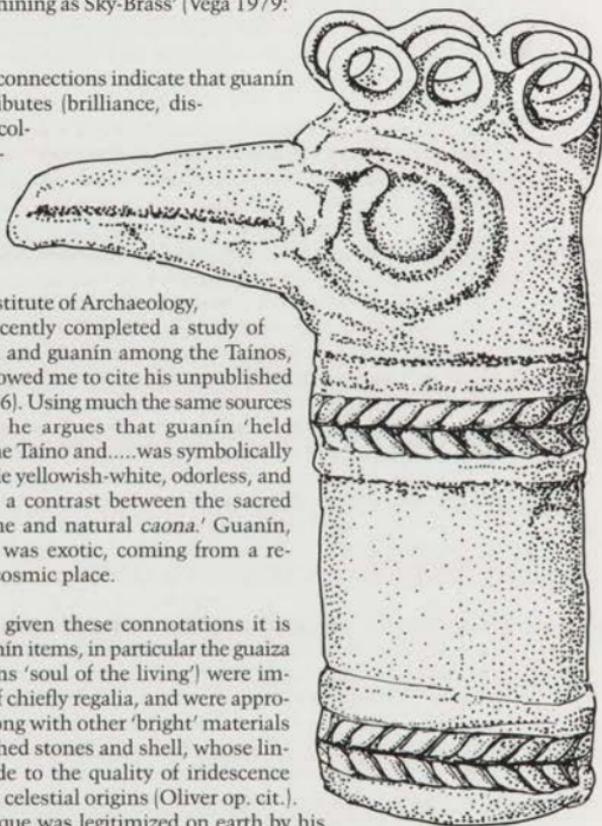
valued more highly than gold. The Tainos called the new, hispanic, metal 'turey, cuassi venido del cielo, porque al cielo llamabanlo tureyro; hallan en él [latón] no sé que color que a ellos mucho agrada' (Las Casas 1965, II: 240). A similar connection between alloys, brilliance, and heavenly origin appears in the honorific name given to Bohechío, the paramount cacique of Xaragua in Hispaniola, whose title *Turei-ga Hobin* (or *Tureywa Hobin*) translates as 'Shining as Sky-Brass' (Vega 1979: 25; Oliver 1996).

These linguistic cross-connections indicate that guanín had a number of attributes (brilliance, distinctive smell, reddish colour, remote and celestial origin) with connotations of both cacique status and supernatural power.

My colleague at the Institute of Archaeology, Dr José Oliver, has recently completed a study of the symbolism of gold and guanín among the Tainos, and has generously allowed me to cite his unpublished manuscript (Oliver 1996). Using much the same sources as I have employed, he argues that guanín 'held luminous power for the Taino and....was symbolically contrasted with the pale yellowish-white, odorless, and pure *caona* gold. It is a contrast between the sacred *guanín* and the profane and natural *caona*.' Guanín, unlike the local gold, was exotic, coming from a remote and celestial or cosmic place.

As Oliver points out, given these connotations it is not surprising that guanín items, in particular the *guaiza* masks (the word means 'soul of the living') were important components of chiefly regalia, and were appropriated by the elite, along with other 'bright' materials such as feathers, polished stones and shell, whose linguistic correlates allude to the quality of iridescence linked with divine and celestial origins (Oliver op. cit.). The power of the cacique was legitimized on earth by his role as mediator with the supernatural.

Many of these themes and attitudes are brought together in a much-discussed cycle of myths, recorded by Father Ramón Pané in Hispaniola in 1493-4 and referring to the journeys of Guayahona, the primordial cacique. Szaszdi (1982) and Whitehead (1990, 1996) have analysed these myths from an economic point of view, suggesting that the whole cycle represents 'the ideological underpinning of an elite trade' involving the exchange of halluci-



natory drugs, sea shells, gold, greenstones, women and children (Whitehead 1996: 130). The analysis by Oliver also emphasizes ideological legitimization, but with a more supernatural basis. In spite of their different emphases, which complement rather than contradict each other, all three authors agree in seeing a relationship between the ideology of power and the acquisition of exotic goods. The early date of Pané's observations, and the fact that guanín is so deeply embedded in Taíno mythology, suggest that the alloy was reaching the Antilles well before the Spanish conquest, even though none has yet been found in a secure pre-Spanish context.

Reduced to its essentials, the Guayahona story tells how the culture-hero leaves the cave of Jagua, in Hispaniola, and eventually journeys westwards to the mythical island of Guanín. In one episode along the way, Guayahona rescues his magical sister from the bottom of the ocean and takes her back to Caonao ('the place of gold'), also located somewhere in Hispaniola. The two have an incestuous sexual affair, after which the hero is ritually cleansed and receives from the woman the insignia of chieftainship - guanín earspools and stone beads. His tasks accomplished, Guayahona is transformed one last time, 'caught by the sun', and changed into a celestial body of guanín.

Oliver has been able to fill some of the gaps in the story by referring to other versions of the same myth recorded in the lesser Antilles. These sources say that when the culture-hero ascended he was given a new name, Hiaguanaili, which translates as 'The One Who Had Turned Brilliant, Guanín Star', almost certainly the Sun. And he was taken up to the sky (*Turey*) by that most metallic of creatures, the Hummingbird, itself still called *guaní* in Cuba.

This selective dip into the Guayahona myth in no way does justice to Oliver's fine-grained analysis, but is enough to support his conclusion that multicoloured iridescence, brilliance, reddish-purple colour, remote and celestial origins, maleness, the westerly direction, chiefly status and supernatural power 'are all parts of a semantic cluster implicit in the broader concept of guanín.'

I must emphasize that none of these connections could have been made from archaeological evidence alone, or from metallographic studies of the artifacts. Nevertheless, archaeological evidence does have a part to play in the story of guanín.

Commercial documents of the Colonial period repeatedly state that the Taíno (for reasons already discussed) valued both guanín and brass above pure gold, and were willing to trade at what - in hispanic terms - were inflated prices. In the early years of contact the exchange rate reached 200:1 in favour of guanín over gold (Szaszdi 1982: 17). European brass items are easily identifiable and are not uncommon on Colonial Taíno sites (Vega 1979), but the status of the few guanín objects from the islands is more difficult to assess.

Fig. 6(b). Metal items from Guyana and Cuba. Bird head from Chorro de Maíta, Cuba; height 2.3 cms. Redrawn from Dacál Moure and Rivero de la Calle 1996.



Fig. 6(c). Metal items from Guyana and Cuba. Figure-pendant from Yaguajay, Cuba; height 4.8 cms. Redrawn from Alonso 1950.

Given the unequal exchange rate, the Spanish found it worthwhile to import native guanín objects from the mainland and from the Venezuelan islands to barter for Taíno gold in Hispaniola and Cuba (Rivet and Arsendaux 1946: 64; Vega 1979: 28). Documents in the Casa de Contratación, in Seville, describe eagles and frogs of guanín, and explain that these items were accumulated in storehouses in Santo Domingo to be exchanged with the Indians for gold dust and nuggets (J. Sued Badillo, personal communication). Since we know that the Spanish term *oro de rescate* referred to artifacts taken from looted archaeological cemeteries as well as from living Indians (Bray 1978: 12-13), it is likely that the guanín objects brought to the Antilles had diverse origins and were of many different styles and ages.

The problems are exemplified by two metal items from Cuba. They are not in the local Taíno style, and must have been manufactured outside the islands. The cast figurine (Fig. 6c), made of 10 carat gold (guanín), is a surface find from Yaguajay in eastern Cuba (Alonso 1950), and belongs to a category well-known from Caribbean Colombia (compare Falchetti 1995, fig. 45). The

second item is a Taíno necklace, with metal plaques and a cast bird head, from the cemetery of Chorro de Maíta (Fig. 6b). From the colour photograph published by Dacál Moure and Rivero de la Calle (1996: 70) the bird seems to be made of guanín and it, too, is Colombian in style. The cemetery, which yielded one European skull as well as numerous indigenous skeletons, probably belongs to the initial period of contact between Taínos and Spanish.

What are we to make of these items? Are they, and the Mazaruni pectoral, indicators of a poorly documented prehispanic trade route along which the Taíno obtained guanín jewellery from Colombia by way of Venezuela and Guyana (Szazdi 1982; Whitehead 1996)? Or are these artifacts hispanic imports into Cuba, perhaps by sea from Cartagena to La Habana, designed to take advantage of the difference between European and native American value systems? We have no way of knowing. In spite of my remarks about the limitations of archaeological evidence, what we need if we are to answer questions of this kind is more precise archaeological and contextual information.

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