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THE SERPENT'S CHILDREN: THE ICONOGRAPHY OF THE LATE FORMATIVE CERAMICS OF COASTAL ECUADOR

by

Elka Weinstein

A thesis submitted in conformity with the requirements for the degree of Ph.D. in Archaeology
Graduate Department of Anthropology
University of Toronto

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The Serpent's Children: the Iconography of Late Formative Ceramics from Coastal Ecuador
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Chorrera ceramics represent the artistic climax of Formative Period Ecuadorian pottery. The creators of the ceramics were strongly innovative in their depiction of naturalistic representations on effigy vessels of human beings, animals and plants. These representations were a Chorrera hallmark before similar styles appeared in Peru and Mesoamerica.

In this thesis I examine the underlying premise of the Chorrera assemblage by drawing on the works of Gerardo Reichel-Dolmatoff and Peter G. Roe. In Andean and Amazonian archaeology, the use of ethnographic analogy to decipher iconographic imagery on artifacts is well-established. This acceptance is based on continuities in cosmology and symbolism which are apparent in the archaeological record through time throughout the region.

The figurative ceramics from the San Isidro and Río Chico areas of Manabí province were probably grave-goods. This study concludes that this function was reflected in the imagery represented on effigy vessels. Some of these vessels may also have served a ritual function before being interred in the graves. Bowls, jars and whistling bottles may have been used by the mourners for a number of these rituals, perhaps in the practice of some form of ancestor cult.

Gourd-shaped (phytomorphic) whistling bottles form a large part of the corpus of these ceramics and these are metaphorically linked to death and rebirth. The zoomorphic ceramics represent most of the animal species which were found in the ecological setting of the Ecuadorian coast during the Late Formative Period, in particular bats, monkeys and birds. These were animals which were mythologically and symbolically related to death and the underworld. The anthropomorphic ceramics have obviously shamanistic
characteristics which may be associated with their function as psychopomps. The appearance of what seem to be universal characters in New World mythology is also rather intriguing.

Chorrera is significant both aesthetically and historically as the antecedent for the great art styles which appeared later in Pre-Columbian prehistory. An interpretation of its iconography is a step towards our understanding of the importance of Chorrera in the context of that narrative.

The ritual processes of life and death in a culture are embodied in its material culture. This study of ancient mortuary ceramics is an important contribution to the archaeology of Northwestern South America. It is also one which has implications for iconographic studies of mortuary furniture in other areas of the world.
This thesis is dedicated to my grandfather, Norman Bresko.

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# TABLE OF CONTENTS

## Ch. 1 Introduction
Organization of the Dissertation 1
Theoretical background 4

## Ch. 2 The Late Formative Period in Ecuador
General description of the coastal cultures of the Late Formative Period 10
Excavation of Late Formative material 11
The chronology of $^{14}C$ dates and regional names for the Late Formative 24
Chronology of the Late Formative in Ecuador 29
Environments and ecology of the coast of Ecuador (recent and prehistoric) 33
Modern environmental setting for the Jama River Valley (San Isidro) and the Rio Chico/Portoviejo River drainage 34
The Paleoenvironment 34
Late Formative burials 42

## Ch. 3 Analysis
The Sub-Assemblage 49
Sampling 49
Method 51
Method for stylistic seriation 57
Primary Vessel Forms 63
Other Artifacts (Not Vessels) 65
Effigy Vessels: Descriptions and Vessel Counts 80
Descriptions of Human Effigy Vessels 85
Descriptions of Animal Effigy Vessels 99
Descriptions of Hollow Fruit Effigy Vessels 118
Descriptions of House Effigy Vessels 122
Design 123
Basic Design Elements 123
Decorative Techniques 125
Distinctive Wares (Temporal and Regional) 130
### Ch. 4 Ethnographic Material

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Use of Analogy</td>
<td>133</td>
</tr>
<tr>
<td>Historical Context of the Iconographic Research</td>
<td>136</td>
</tr>
<tr>
<td>Tropical Forest Cosmology</td>
<td>139</td>
</tr>
<tr>
<td>A General Cosmological Model</td>
<td>143</td>
</tr>
<tr>
<td>Tukano cosmological models</td>
<td>145</td>
</tr>
<tr>
<td>Shamanism</td>
<td>154</td>
</tr>
<tr>
<td>Ethnographic representations of shamanism in material culture</td>
<td>158</td>
</tr>
</tbody>
</table>

### Ch. 5 Iconographic Interpretation

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Effigy Vessels and Figurines</td>
<td>162</td>
</tr>
<tr>
<td>Hats, Horns and Headbands</td>
<td>176</td>
</tr>
<tr>
<td>Animals</td>
<td>181</td>
</tr>
<tr>
<td>Mammals</td>
<td>182</td>
</tr>
<tr>
<td>Birds</td>
<td>207</td>
</tr>
<tr>
<td>Fish</td>
<td>219</td>
</tr>
<tr>
<td>Reptiles and Amphibians</td>
<td>219</td>
</tr>
<tr>
<td>Snakes</td>
<td>223</td>
</tr>
<tr>
<td>Exoskeletons</td>
<td>230</td>
</tr>
<tr>
<td>Segmentation</td>
<td>243</td>
</tr>
<tr>
<td>Conclusions</td>
<td>243</td>
</tr>
<tr>
<td>Hollow Fruit: Gourds, squashes and calabashes</td>
<td>245</td>
</tr>
<tr>
<td>Iconographic Interpretations</td>
<td>254</td>
</tr>
<tr>
<td>The symbolic meanings of <em>Lagenaria</em> gourds</td>
<td>254</td>
</tr>
<tr>
<td>Female and Male or Dualism in Whistling Bottle Iconography</td>
<td>257</td>
</tr>
<tr>
<td>The symbolic meanings of <em>Crescentia</em> calabashes</td>
<td>260</td>
</tr>
<tr>
<td>Dwellings and Temples: House Vessels and Gourds</td>
<td>265</td>
</tr>
<tr>
<td>Gourds, Coca and the Ancestors</td>
<td>266</td>
</tr>
<tr>
<td>Design Categories</td>
<td>273</td>
</tr>
<tr>
<td>Form and Function: Chorrera ritual vessel forms and their significance</td>
<td>283</td>
</tr>
<tr>
<td>Conclusions</td>
<td>290</td>
</tr>
</tbody>
</table>
**Ch. 6 Conclusions**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems with analogy</td>
<td>298</td>
</tr>
<tr>
<td>Chorrera ceramics as a mortuary tradition</td>
<td>298</td>
</tr>
<tr>
<td>Chorrera as a mortuary complex</td>
<td>300</td>
</tr>
<tr>
<td>The Evidence for Shamanism in Late Formative ceramics</td>
<td>302</td>
</tr>
<tr>
<td>Shamanism and the symbols in the assemblage</td>
<td>305</td>
</tr>
<tr>
<td>The multivalency of symbols in the Chorrera assemblage</td>
<td>307</td>
</tr>
</tbody>
</table>

References Cited

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix 1</td>
<td>338</td>
</tr>
<tr>
<td>Appendix 2</td>
<td>339</td>
</tr>
<tr>
<td>Appendix 3</td>
<td>343</td>
</tr>
</tbody>
</table>
LIST OF TABLES

TABLE 1 Radiocarbon Dates for the Late Formative Period in Ecuador 28
TABLE 2 Chronology for the Late Formative 32
TABLE 3 Summary of Artifacts from Collections for Analysis 51
TABLE 4 Form Counts for All Vessels from Collections 61-62
TABLE 5 Figurines 83
TABLE 6 Musical Instruments 83
TABLE 7 Human Effigy Vessel Counts 84
TABLE 8 Animal Effigy Vessel Counts 96-98
TABLE 9 Hollow Fruit Effigy Vessel Counts 117
TABLE 10 Decorated Effigy Vessels in the Collections 124
LIST OF MAPS

MAP 1 Sites, river valleys and provinces mentioned in the text

MAP 2 The confluence of the Chico and Portoviejo rivers showing major towns and some important archaeological sites

MAP 3 Ethnographic groups mentioned in the text

MAP 4 Map of Tukano tribes in the Vaupés Region (after S. Hugh Jones 1979: 20)

MAP 5 Map of North Coast Peru with locations of Vicús and Cupisnique pottery styles (after Donnan 1995: 119)
LIST OF FIGURES

Fig. 1 A comparison of Late Valdivia bottles and Chorrera whistling bottles
Fig. 2 A comparison of Late Valdivia bottles and Chorrera whistling bottles
Fig. 3 Seriation of whistling bottle spouts
Fig. 4 A comparison of Late Valdivia constricted bowl and Chorrera maté jars
Fig. 5 Gourd form lobed maté jars
Fig. 6 A comparison of Machalilla and Chorrera carinated bowl forms
Fig. 7 Quadrupartite Red-on-White bowls
Fig. 8 Gourd-form bowl with compartments and 'Ladder' design
Fig. 9 A comparison of Late Valdivia globular everted bottles and Chorrera flared neck jars
Fig. 10 A comparison of Machalilla and Chorrera flared neck jars
Fig. 11 The General Model for Tropical Forest Cosmology
Fig. 12 Two examples of the Burden Carrier
Fig. 13 Three examples of Burden Carrier limepots
Fig. 14 Two examples of the Water-jug Carrier
Fig. 15 Two examples of the Afflicted Man
Fig. 16 A pair of vessels of the Person Carrying an Implement
Fig. 17 Two examples of the Bound Personage
Fig. 18 A shaman performing "celestial rising to the moon" and a dancer under the influence of yagé
Fig. 19 Two examples of the Acrobat
Fig. 20 Two examples of the Flute Player
Fig. 21 Three examples of Human Effigy neckrests
Fig. 22 Three examples of the Woman with a Small Person in her Lap
Fig. 23 Two examples of Dwarves
Fig. 24 A comparison of snake markings and figurine face-painting or tattoos
Fig. 25 The Twins
Fig. 26 Two examples of the Man in a Reed Boat
Fig. 27 A figurine depicting the Tranced Personage
Fig. 28 A comparison of shamans in trance and human effigy whistling bottles
Fig. 29 Two anthropomorphic Maté Jars
Fig. 30 Two examples of the Man with Tubes to his Ears
Fig. 31 Chief on Platform and Tubular Anthropomorphic jar
Fig. 32 Salaite style vessel
Fig. 33 Male and hermaphroditic figurines
Fig. 34 A figurine representing an Adolescent Female
Fig. 35 A comparison of phosphenes and Desana motifs
Fig. 36 Close-up of the 'Milky Way' design on a figurine
Fig. 37 Comparison of a Long-tongued Bat and a bat bowl
Fig. 38 Flower patterns on bat bowls and a jar
Fig. 39 A bowl with opossums modeled in relief
Fig. 40 Iridescent bowl design (one of a pair)
Fig. 41 Río Chico bat bowls 1
Fig. 42 Río Chico bat bowls
Fig. 43 Bowls with Negative-Resist Decoration
Fig. 44 Identification of a Squirrel Monkey on Chorrera maté vessel
Fig. 45 Woolly Monkeys making an offering
Fig. 46 Woolly Monkeys with amulets
Fig. 47 Identification of a Howler Monkey on a whistling bottle
Fig. 48 A series of monkey bottles with volute design
Fig. 49 Examples of Skeletal monkeys
Fig. 50 Examples of Monkey adorno bottles
Fig. 51 Examples of vessels representing Quails and Ducks
Fig. 52 Examples of vessels representing Curassow and Tinamou
Fig. 53 Examples of vessels representing Storks
Fig. 54 Identification of Sandpiper on a pair of vessels
Fig. 55 Examples of vessels representing Barn owls
Fig. 56 Identification of a Juvenile spectacled owl on two vessels
Fig. 57 A vessel representing the Harpy Eagle and a Crab
Fig. 58 Examples of vessels representing Parrots
Fig. 59 Example of a vessel representing a Woodpecker
Fig. 60 Example of a vessel representing an Agouti
Fig. 61 A pair of vessels representing coati whistling bottles with iridescent paint
Fig. 62 Comparison of a photo of a boa constrictor killing an adult coati and a vessel representing a Coati howling
Fig. 63 Comparisons of Gourd-shaped vessels and vessels with Gourds and Coatis
Fig. 64 Examples of vessels representing Fish
Fig. 65 Examples of vessels representing Dogs and Felines
Fig. 66 Example of a vessel representing Frogs copulating
Fig. 67 The Río Chico Toad vessel compared with a photo of Bufo toad
Fig. 68 Examples of bowls with small Snakes
Fig. 69 A comparison of a Banisteriopsis caapi (yagé) vine and a Snake jar
Fig. 70 Examples of neckrests representing Armadillos
Fig. 71 Examples of vessels representing Turtles
Fig. 72 Examples of vessels representing Crab and Shrimp
Fig. 73 Marine shell species (including Spondylus and Strombus)
Fig. 74 Comparison of vessels representing a Palm Grub and a Lobed Gourd
Fig. 75 Examples of vessels representing Lagenaria siceraria or the bottle gourd
Fig. 76 Gourd-shaped Iridescent slipped bottle
Fig. 77 Smudged and incised series of whistling bottles
Fig. 78 Special whistling bottle design series ('Dragon' design)
Fig. 79 Examples of vessels representing Crescentia cujete or the Tree calabash
Fig. 80 Examples of vessels representing Cucurbita maxima or moschata
Fig. 81 Gourd-shaped ceramic rattles
Fig. 82 Examples of vessels representing Triangle gourds
Fig. 83 Examples of vessels representing Cyclanthera pedata
Fig. 84 A comparison of peduncles of gourds and the spouts of whistling bottles
Fig. 85 Examples of whistling bottles representing a monkey and a man with enlarged phalli
Fig. 86 Examples of vessels representing square House vessels
Fig. 87 Examples of vessels representing round House vessels
Fig. 88 A comparison of the posture on Human and Monkey effigy vessels
Fig. 89 A comparison of two vessels representing a Reclining Man and a Reclining Monkey
Fig. 90 A comparison of a Valdivia Phase 6 Jar and a Kógi lime gourd
Fig. 91 Examples of Double-lobed whistling bottles
Fig. 92 A comparison of a whistling bottle with a Monkey adorno and a whistle representing a small Monkey
Fig. 93 Three snuffing tubes
Fig. 94 Two pairs of snuffing vessels
Fig. 95A pair of Toad-shaped drinking vessels
Fig. 96 Examples of limepots
Fig. 97 A ceramic mirror handle and a crystal necklace
Fig. 98 A comparison of a Kógi gourd trumpet and a whistling bottle depicting a Gourd-trumpet with a Monkey adorno on the bridge handle
Fig. 99 Three pedestal bowls with similar incised lines
Fig. 100 Examples of Square Red-on-White Engraved Vessels
Fig. 101 Examples of Red-on-White Tubular Jars
Fig. 102 Two examples of Desana Yagé Pots
Fig. 103 Specialized Canelos Quichua ceramics
Fig. 104 Bahía Monster
Ch. 1 Introduction

Organization of the Dissertation

The Late Formative Period in Ecuador (ca. 900-100 B.C.) represents an early flowering of the ceramic art of Northern South America. The fine ceramics of the Late Formative depict a rich assortment of animals, plants and humans on effigy vessels, which have been collected by museums and private collectors in Ecuador for the last forty years or so. These effigy vessels (and other vessels which are embellished with special decorative techniques) are the ceramics which are analyzed and examined in this thesis.

Late Formative ceramics from coastal Ecuador are generally considered to represent a cultural complex called 'Chorrera.' This name was originally proposed by Betty Meggers, Clifford Evans and Emilio Estrada (1965) for the ceramics from a site, Hacienda La Chorrera, which they excavated in the Guayas Basin in 1954. The Late Formative ceramics which are found on the coast from the north of Manabí to southern El Oro province apparently exhibit enough stylistic and formal similarities to allow us to classify them together, if not as a 'culture' or a 'horizon,' then certainly as an assemblage of pieces which are stylistically similar enough to be examined together.

Chorrera potters were strongly innovative in their creation of naturalistic figural representations of human beings, animals and plants which are depicted on effigy vessels of various kinds. These representations were a Chorrera hallmark before similar styles appeared in Peru or Mesoamerica, and the Ecuadorian ceramics exhibit certain stylistic attributes and decorative techniques which indicate that they were probably the prototypes for these later styles. Chorrera is aesthetically comparable to the better-known pottery of the Moche culture of Peru, and represents some of the most accomplished pottery of the New World.

In this thesis I analyze the iconography of the ceramics by analogy with a group of Tropical Forest peoples from the Colombian Vaupés area. The ethnographies which examine the culture of the Tukano peoples have
explored their cosmo-logical and mythological beliefs rather comprehensively, and this situation makes their symbolic cosmos accessible for comparison with an ancient iconographic complex. There are precedents for this type of analogy in Andean ceramic analysis, and here I have applied it to a very early assemblage which also merits attention by virtue of its location in northwestern South America.

I also discuss the assemblage with reference to what I believe is an ancient religious system which originated with the earliest Paleo-Indian hunters and gatherers who came to the Americas from Asia. Parts of this ancient cosmology are still traceable in the cosmologies and mythologies of the Tropical Forest Lowland Indians who still live in the Amazon basin. A generalized model of Tropical Forest Cosmology was originally proposed by Peter G. Roe (1982). By using this model for the analysis of the symbols of the ceramic assemblage, I also test its applicability to a ceramic tradition which is from an area outside the Amazon proper, but which still shares in the Tropical Forest worldview.

The representational ceramics in museums are part of a mortuary tradition which was shared by various groups on the coast, and perhaps also in the highlands, of Formative Ecuador. In the final chapter of this thesis I explain why I believe that they fulfilled this function, and how it is reflected in the imagery represented on the effigy vessels. Some of the ceramics may also have served as ritual libation vessels and noisemakers before being interred in graves, and may have been used by the mourners for a number of these rituals, perhaps in the practice of some form of ancestor cult.

The ritual processes of life and death in a culture are embodied in its material culture. This statement is discussed further in the theoretical section, as well as in the analysis of the ceramics themselves. Ceramics have been considered appropriate as grave-goods by a great many cultures (see Freestone and Gaimster 1997 for some examples) and therefore any study of effigy vessels which are grave-goods also has implications for the study of mortuary furniture in other areas of the world. The Late Formative ceramics
of Ecuador seem to be linked in particular to other ceramic mortuary traditions in northern South America such as Vicús and Chavín in Peru, and Ilama in Colombia. Chavín has been shown to share in a similar model, and it may be that other stylistic traditions in South America do as well (Lathrap 1973a, Lathrap 1971, Lathrap 1974, Roe 1974, Roe 1982, Rowe 1962)

In Chapter Two, what we know about the cultural context of the Late Formative Period is discussed. Our current knowledge of site settlement patterns, domestic architecture and subsistence is elucidated, as well as a comparison of the present and prehistoric environmental and ecological setting for the coastal regions where the ceramics are found. That environment obviously influenced the potters’ choices of which animals and plants to portray in their creations.

In Chapter Three, the main analysis of the primary vessel forms and iconographic categories is laid out, as well as a discussion of the problems of sampling inherent in working with museum collections. Seriation of the ceramics is extremely difficult because the assemblage is drawn from a sub-assemblage of virtually unprovenienced ceramics, but a tentative chronological sequence of the Late Formative is suggested, with the proviso that this is not a definitive seriation.

Chapter 4 is a summary of ethnographic material used in the study, and the generalized Tropical Forest Cosmological Model is explained. Tukano cosmology and the most important mythological characters in the Tukano cosmos are presented. The chapter ends with a discussion of shamanism as part of the Tropical Forest worldview, with its material culture correlates.

In Chapter 5 iconographic categories are matched with mythological segments and characters from the corpus of ethnographic literature on the Tukano (and related ethnographic groups) to interpret the ceramics. Humans, Animals and Gourds are interpreted as an interrelated symbolic system which makes sense in terms of a shamanistic worldview and native ideas about death.
In Chapter 6, some conclusions are reached regarding Chorrera as a mortuary tradition or complex which was shared by various groups of people on the coast of Ecuador. Shamanistic visibility in the ceramics and other material remains is also examined. The iconography and symbolism which pertain to specific aspects of the model are discussed, and finally, some recommendations for future research are proposed.

**Theoretical background**

This thesis partially explores a theory of style in Archaeology which goes beyond social interaction and information exchange theory. The theory views artifact production as the creation of the 'field of signifying practices' in which objects are cultural representations and vehicles for symbolic ideation (Conkey and Hastorf 1990, Gillespie 1993, Hodder 1990, Lathrap 1974).

Some authors interpret art as ideology, where the dominant art style portrays the dominant or elite ideology, and art also creates and buttresses this ideology. This interpretation of art has been acceptable to many archaeologists, especially since it addresses the concepts of power, and the social functions of style. Emphasis on power-relations in society is limiting, however, since symbols can be multivalent and ambiguous. This inherent quality of symbols, that is, their ability to be multivalent, is seldom examined in archaeological discussions of material culture. The representational qualities of art objects (or artifacts) and the symbolic meanings that they embody, can exist at a number of different levels. Panofsky distinguishes between iconography and iconology, where iconology is, "...taken up with assessing the underlying cultural premises from out of which the artist's work was drawn, and which he (sic) may quite unconsciously express in what he produces."(Layton 1981: 30-1)

In this thesis I examine the underlying premises of the Chorrera sub-assemblage by drawing upon a tradition of the use of analogy in Andean and Amazonian archaeology, and particularly on the works of Gerardo Reichel-Dolmatoff and Peter G. Roe. In Andean and Amazonian archaeology, the use of ethnographic analogy to decipher iconographic imagery on artifacts is well-
accepted by archaeologists. This acceptance is based on continuities in cosmology and symbolism which are apparent in the archaeological record through time throughout the region.

My work is inevitably informed by the structuralist literature on South American mythology, beginning with Claude Lévi-Strauss. This is because the dominant theoretical position in anthropological exegesis about the myth of South American native peoples is basically structuralist. Peter Roe (1982), Gerardo Reichel-Dolmatoff (1975, etc.), Stephen and Christine Hugh-Jones (1979, 1979), David Guss (1989), and many others in the field also draw on structuralist theory, even if their final analyses do not strictly conform to Lévi-Strauss.

Following some of the other literature on art history and iconography, my theoretical position also draws on the work of Robert Layton, an anthropologist who specializes in Australian Aboriginal art. Layton's explanation of 'orders of representation' after Panofsky's (1955), "Iconography and Iconology" is especially pertinent here. In Panofsky's work, form and subject matter are separate. Beginning with the example of meeting an acquaintance who raises his hat on the street, a purely formal analysis, which is the first stage of any exploration of a corpus of artworks, would describe the form and the lines and colours which make up the image of the person on the street. There are then three stages of the analysis of subject matter: 1. the first stage, which is a little beyond purely formal analysis, identifies the subject as a particular 'thing', for example, a 'gentleman,' 2. the second stage, which identifies the 'meaning' of the gesture as a 'greeting', this refers to a Western culturally accepted and understood idea about the raising of a hat in the street – this is an iconographic interpretation, and 3. the third stage, which identifies the the person's social standing, his national and educational background by his clothes, behaviour and one's memories of him – the iconologic interpretation (Layton 1981: 30).

Thus, for Layton,
"In art, iconography is concerned with the identification of the characteristic motifs employed in particular art traditions: the recognition that certain figures portray the Holy Family, or particular saints, whereas iconology is taken up with assessing the underlying cultural premises from out of which the artist's work was drawn, and which he may quite unconsciously express in what he produces." (Layton 1981: 30-31)

In my attempt to explain Chorrera ceramic art I mainly stay within the parameters of the second stage of Panofsky's iconographic analysis but I sometimes also stray into the third stage of iconologic analysis. In these sections, especially in my exploration of the cosmological significances of particular representations, I try to explore what I think the underlying cultural premises of the Chorrera assemblage were.

Finally, part of my exploration of art and shamanism in Chorrera (see especially the section on Design and Interpretation) is informed by J. D. Lewis-Williams (1988, 1993), who specializes in Australian Aboriginal art (as does Layton) but has also applied his theories about shamanism to Upper Paleolithic cave paintings. Reichel-Dolmatoff also subscribed to ideas about entoptic phenomena in the creation of design on artifacts, and his and Lewis-William's explanations seem to apply equally well to much of the abstract design on Chorrera ceramics. I discuss the decoration on many of the vessels in light of their theories about shamanistic trance-images in rock art.

**Structuralism in South American mythology**

Most of the literature about South American mythology is a structuralist interpretation of the myths, and the native practices surrounding those myths. This is partly because Lévi-Strauss began his exposition of structuralism by analysing South American myths. However, this particular interpretive method also seems to make intuitive sense because of the dualism which seems to be intrinsic to the cultures of the Lowland Tropical Forest, and of South America in general.
Structuralism is based on a concept of systems of symbols which are essentially dual or paired. In structuralism it is the relationships between elements in the system which create meaning. The actors (the people involved in the creation of the system) may 'play' with the meanings of the signs, codes and ultimately with the culture which they are creating as they do so, but there is a basic set of signs -- icons, indexes, and symbols, according to Peirce -- which all of the members of the culture agree 'mean' particular things (Fiske 1982: 42-3).

"In an icon the sign resembles its object in some way, it looks or sounds like it. In an index there is a direct link between a sign and its object, the two are actually connected. In a symbol there is no connection or resemblance between sign and object: a symbol communicates only because people agree that it shall stand for what it does. A photograph is an icon, smoke is an index of fire, and a word is a symbol." (Fiske 1982: 50)

Tabuchila and Río Chico ceramics are therefore icons, indexes and symbols of a mythological system which demonstrate ancient ideas about death through their representations of animals, human beings and fruits.

A key source for mythological exegesis in tropical South America is Claude Lévi-Strauss' Mythologiques, Vols. 1, 2, and 3, especially Volume Two: From Honey to Ashes (Lévi-Strauss 1970, 1973). Lévi-Strauss' structuralism, however, is too wide-ranging, and is, in fact, too 'unstructured' to be used in a constructive way to decipher the Chorrera assemblage. Reading Lévi-Strauss, one is struck by the brilliant connections he makes between symbolic fragments of myths, but the whole is too inchoate to use as a model.

Roe (1982) also argues that although symbols seem to be perceived by traditional structuralists as a sort of 'syntax', the symbols used in Tropical Forest mythology do not have random or arbitrary aspects, and that their own particular intrinsic meaning is important to the people who use them. I believe that this was certainly true for the people of the Late Formative era in
Ecuador. For them, the relationship of certain animals to other beings (spirits and humans), as well as their relationship to the natural environment was extremely significant in deciding which creatures and plants to portray.

**Analogy, Metaphor, and Symbolic Interpretation**

Roe (1982) describes his model as a combination of materialist and structuralist modes of thought. He believes that the native peoples of the Tropical Forest use ethnotaxonomic categories of both flora and fauna which are based on what he calls, 'manifest analogy.' These are, "simple formal similarities based on perceived equivalences of shape, character, behavior or performance." Native categories of thought also employ metaphorical images, such as a dream image of a broken and falling-down house to predict the death of a relative. Because in most of Amazonia it was (and is) the custom to abandon a house or a village upon the death of a relative, this image 'makes sense' as a metaphor (Roe 1982: 33).

Metaphorical equivalencies in native thought are also found in Reichel-Dolmatoff's writings. For instance, in Desana cosmology, the jaguar, the sun and semen are considered to be equivalent because of their yellowness. The Desana then make the analogical linkage between the three to produce a symbol, the fertilizing Jaguar Sun (Roe 1982: 13).

Both analogical and metaphorical images therefore also make up the Chorrera symbolic system. But the symbols in the system are not arbitrary, they are more like what Firth has called 'signs,' where they have some perceived intrinsic or "natural" properties which give them meaning. I follow Roe (1982: 3) then, in his emphasis on the signlike rather than the symbolic aspects of the figures in Chorrera mythology, and I also try to understand and explain their metaphorical meanings within the system.

In the Chorrera ceramic assemblage there seems to be an inherent dualism, however, most of the imagery seems to be biased toward the 'female' end of the spectrum with limited male symbolic characteristics. The central or key cultural metaphors which I have identified for Chorrera -- the serpent and the gourd -- can be either male or female in lowland mythology,
but both are primarily female, and this is appropriate for metaphorical imagery about death.

**Metaphor and Material Culture**

Mythology, ecology and material culture are intertwined in South American Tropical Forest societies, as they are in most primitive societies (Guss 1989, Reichel-Dolmatoff 1985, Roe 1995, Whitten and Whitten 1988). Objects which seem 'mundane' or which are for everyday use are invested with significance in a mythical context, and their manufacture is not separable from the ongoing stories or narratives of the peoples who make them. Learning the mythology is, as Guss has shown, part of the learning of a technical skill such as basketmaking, and as Whitten and Whitten have shown, part of becoming a master potter, "one who knows" or *yachaj* (Guss 1989, Whitten and Whitten 1988). The "mythic environment" which surrounds Tropical Forest groups is therefore so often expressed in their material culture, it seems quite possible for us to trace the basic tenets of ancient cosmologies in artifacts such as ceramics. The difficulty then, is in interpreting the symbols which are presented on these artifacts, and in this process we have only what we can recover or retrieve from people living in similar environments and by similar means. This is what I propose to do in this thesis.
Ch. 2 The Late Formative Period in Ecuador

Chorrera was once called, "the highest technologically developed" culture of the Formative Period in South America by Emilio Estrada, the Ecuadorian archaeologist who first excavated 'Chorrera' materials at a site called Olón in Manabí province (Estrada 1958). Estrada's enthusiasm for the culture, and Betty Meggers and Clifford Evans' excavation of the type-site and their definition of pottery types should have stimulated Ecuadorian archaeologists to further investigation, but Chorrera was overshadowed by efforts to investigate the origins of the Valdivia culture, which was then considered to be one of the oldest ceramic cultures in the New World.

The Late Formative Period in Ecuador

The current lack of information with regard to settlement and subsistence patterns is frustrating, given the size of the territory which is said to have been settled by Late Formative (Chorrera) peoples. Part of the problem is the lack of definition of what exactly the Late Formative is, and which 'cultures' are included in its scope. Chorrera, Tabuchila, Bahía, and Engoroy are said to be some of the cultural manifestations of the Late Formative on the coast, but most of these assemblages are as yet rather poorly defined.

In this thesis the cultures which are considered to be included in the sub-assemblage called "Chorrera" are the fancy mortuary ceramics from the Late Formative Period which have been found at: 1. the Chorrera type-site in the Guayas Basin, 2. Engoroy sites from Santa Elena Peninsula, 3. Bahía I from the central Manabí coast, 4. San Isidro or Tabuchila from the Jama River Valley, 5. other domestic manifestations of the Late Formative Period in Manabí or Guayas and perhaps also, 6. highland sites such as Cerro Narrio.

What then, can be said about Chorrera if one considers that the various manifestations of it are probably, in fact, part of a mortuary complex which was shared by groups of related peoples living next to each other along the coast and in the inland river valleys.
General description of the coastal cultures of the Late Formative Period

The coastal peoples of the Late Formative Period seem to have lived in wattle and daub huts on mounds. These huts were built in small hamlets near a large, central religious settlement which included a large meeting house or 'temple' and a cemetery. Along the coast their subsistence seems to have continued to rely on marine resources (fish, shellfish) which they traded to inland riverine sites where maize, beans and squash or gourds, as well as root crops such as achira, were grown in increasing quantities on extensive tracts of river bottomlands and uplands. They still relied to some extent on hunting, and deer, as well as smaller edible mammals (such as agouti, rabbits, squirrels), and birds were probably taken in the marginal areas on the edges of fields. Like many horticultural peoples living the Amazon today, they also made pets of young captured animals, which were raised by the women and children. These were intended for decoration (parrots) or for the pot (monkeys).

Religious life was increasingly important, but was still concerned with the natural world's supernatural properties, rather than with human beings as the sole proprietors of religious power. Shamans, rather than priests probably presided over rites of passage, and ceremonies centred around these rituals, rather than around power-brokerage and trade. Coca was an important item for religious use, but its use may have become more widespread and secular by this time. Other mind-altering drugs may have also been used by shamans for divination purposes or at major ceremonies.

Evidence for site-settlement patterns

Surveys have been undertaken to try to determine site-settlement patterns in only two coastal river valleys, the Jama Valley (Zeidler and Pearsall 1994) and the Valdivia Valley (Schwarz and Raymond 1996). The settlement patterns in both valleys seem to be rather similar. The Early Engoroy (900-400 BC) in the Valdivia Valley continues the Middle Formative (Machalilla) pattern of nucleated settlements in the central zone of the Valley, with two large sites - Loma Alta and La Ponga - as their main focus.
The Late Engoroy pattern, which Schwarz and Raymond suggest is closer to the settlement pattern found during the Regional Developmental Period (Guangala), is an increase of smaller sites on what may be more marginal lands (still alluvial but away from the main riverbank) still with two much larger settlements as their focus. They believe that Early Machalilla marks an abrupt population growth, perhaps as a result of changes in subsistence practices and techniques, and an intensification of food production (Schwarz and Raymond 1996: 220). Schwarz and Raymond (1996: 220) suggest that intensification of agricultural production, especially of maize, was responsible for these changes.

Schwarz and Raymond (1996: 221) also suggest that the Late Formative nucleated settlement pattern demonstrates, "an end to the Late Valdivia pattern of small dispersed settlements and a return to the Early Valdivia pattern of settlement in nucleated villages," a change which may indicate a local preference for nucleated settlement, and/or an increase in social complexity during the Late Formative.

The earliest colonization of the Jama Valley took place during the late Early Formative Period. This is a Terminal Valdivia occupation (Phase 8) which indicates a late colonization of the Valley from further south in Manabí province (Zeidler and Pearsall 1994: 207). A single main site, San Isidro, was immediately established in the centre of the valley, on the alluvial plain, and appears to have continued to be the focus of the site-settlement pattern in the valley throughout the Formative period. In Chorrera times, smaller sites begin to appear on secondary streams, but the focus is still San Isidro, where mound-building at what seems to be the major ceremonial centre was expanded (Zeidler and Pearsall 1994: 207).

Much of the densest Precolumbian cultural occupation is found in the centre of the town of San Isidro, making it difficult to carry out accurate survey and collection, however the excavations carried out on the top and base of the mound show that some mound-building activity began in Terminal Valdivia. "Construction of the large central platform mound
which exists at the current ground surface may have been initiated during the Late Formative Chorrera occupation (ca. 100 to 355 B.C.)..." (Zeidler 1994: 81).

A similar pattern may be evident at Salango (OMJPLP 141B). We do not know enough about settlement patterns in this region to say that this is unequivocally the case, however Salango seems also to have been a nucleated ceremonial site. Salango exhibits the same kind of mound-building activity as is seen at San Isidro, although mound-building seems to be slightly later at Salango. The ceremonial structures at the site appear to date from the Late Formative Period through to the end of the Regional Development Period. Richard Lunniss' thesis (forthcoming) will treat the sequence of ceremonial structures which were excavated at Salango.

**Domestic contexts**

Very little scientific excavation specifically of domestic contexts in Late Formative sites has been undertaken. Emilio Estrada excavated in Ayangue, Tabuchila, Olón and many other sites, and probably found Late Formative components in all of them but as he only excavated test-pits or cuts in each of these sites, his data were necessarily limited. He suggests, for instance, that the presence of small mounds of less than a metre high in the Chorrera levels indicate separate houses, and that the walls of these houses may have been constructed of wattle and daub (*carrizo forrado de barro*), but he does not indicate exactly where he found the mounds, nor, unfortunately, why he believes that house walls were wattle and daub (Estrada 1958: 77-78).

The Los Cerritos site was essentially excavated for its burials, and, although Zevallos speculated that the folk of Los Cerritos must have lived primarily by agricultural means, since very little material of a maritime origin was found among the burial goods, we cannot rely on his judgement, given the paucity of data in his report.

At Peñón del Río a particularly important find was an occupation site designated as "Structure 1." Structure 1 was reported as a Chorrera house, but unfortunately it was not fully excavated due to the slope produced by the artificial canal beside it. The excavators were unable to establish the
orientation or the entire area of the structure, or to differentiate activity areas within it (Nieves 1983: 28). From all appearances, according to Nieves, the structure seemed to be a small house very similar to the house described by Flannery (1976: 20) from the Early Formative of the Oaxaca Valley. A sequence of floors, pitted with small, regularly spaced posts, were scattered with the remnants of ceramic, lithic and a few other organic remains (Nieves 1983: 31).

Another area of the site, a large pit designated as Feature 1, yielded a large number of fragments of cultural material, including ceramics, lithics, food remains and shell jewelry. The excavation of Feature 1 also encountered problems, however, due to interference on the part of a construction company which was apparently bulldozing the site. Feature 1 was characterized as part of a Household Cluster which included Structure 1 in the preliminary report (1980), but its stratigraphic position with regards to Structure 1 proved to be undeterminable (Nieves 1983: 38).

**Subsistence patterns**

The Late Formative people at inland sites seem to have been fully agricultural, and to have relied mainly on maize as their dietary staple. Formative period macrobotanical remains from La Ponga show that small-kernelled popcorn varieties of maize are more frequent in Middle Formative contexts (Lippi, Bird and Stemper 1984, Pearsall 1988). Stable isotope studies on Late Formative Period human bone from Salango and Loma Alta indicate that maize was being consumed but that there was more consumption of marine foods in Salango, a coastal site (Schwarz and Raymond 1996: 220).

At San Isidro, charred maize (*Zea mays*) kernels and cupules were recovered from Late Formative contexts, as well as maize phytoliths, and phytoliths of achira (*Canna*) and arrowroot (*Marantaceae*) (both tubers), as well as squash or gourd (*Cucurbitaceae*) and sedge (*Cyperaceae*, a kind of grass, possibly edible tubers or used for house-construction). Because there is no intervening Middle period between the Early Formative and the Late Formative Periods in San Isidro, it is interesting to note that charred gourd
(Lagenaria siceraria) was also recovered from Terminal Valdivia (Early Formative) deposits in San Isidro (Pearsall 1994: 151).

Evidence for other kinds of food comes mainly from the ceramics, although Peter Stahl (ms. 1985) has also identified the faunal remains from Loma Alta. Animals such as deer, the 'Mexican hairless' dog (bred for meat), agouti, rabbits and squirrel are readily identifiable. Winter squash (warty squash), and many other kinds of squash and gourd effigy vessels, as well as a pineapple effigy vessel are evidence of cultivated crops. Interestingly, there is no depiction of maize or of manioc, though some vessels may depict the root crop of achira.

Excavation of Late Formative material

Research before 1980

Meggers and Evans' excavation of the type-site of Chorrera(R-B-1), near a town called Babahoyo on the Babahoyo River drainage, Guayas Basin, was carried out in 1954. The site was found on land belonging to a family called Gutiérrez, by Prof. Francisco Huerta Rendón, who sent a collection of sherds to Jacinto Jijón y Caamaño, Ecuador's foremost archaeologist at the time. Jijón (1951) characterized the pottery as 'Chavinoid,' and related it to the Cupisnique style. He called it 'Chaullabamba' and considered it similar to 'Cerro Narrío Antiguo'. Estrada visited the site with Prof. Huerta, where they undertook 'light excavation', and he subsequently invited Meggers and Evans to do intensive excavation (Estrada 1962: 63). The excavation was actually carried out in a partially eroded river-cut site, with subsequent excavations for comparison carried out at two other sites: G-D-8, or Ñaupe, on the river Daule, and G-48, or Ayangue, on the Pacific coast of Guayas province. All of these excavations were carried out using artificial levels of 15-20 cm (Evans 1982: 121-122).

Chorrera pottery was classified by Meggers and Evans (with Estrada's help) using the type-variety method, and consequently few connections were made between surface decorative techniques and vessel forms. The most diagnostic type of decoration - iridescent paint - was also found at the Cerro
Narrío site in the Ecuadorian highlands. This site was excavated by Donald Collier and John Murra in 1941 in the Province of Cañar. The expedition was one of ten archaeological projects in Central and South America sent out by the Institute of Andean Research, with help from the Coordinator of Inter-American Affairs and the Field Museum of Natural History in Chicago (Collier and Murra 1943: 11) Cerro Narrío was excavated in December, along with two other sites in the area. Gold objects had been found in the hill in 1922 and it was consequently dug up by the townspeople and other treasure-hunters in the (mostly vain) hope of finding more. Collier and Murra carried out fairly extensive excavations: sinking 16 trenches and test pits, locating houses in four trenches, and collecting huge quantities of ceramics. The ceramic bowls and sherds named Cañar Polished by Collier and Murra show the greatest resemblance to Chorrera ceramics. Plates 25. and 26. of the report illustrate bowls and sherds which were probably traded from the coast to the highlands, perhaps in exchange for other luxury goods such as worked obsidian and rock-crystal. Plate 25 illustrates two bat bowls which might have come out of Río Chico (illus. 1 & 2), a round bowl with an annular base (illus. 3) also in the Río Chico/Manabí style, a bowl with carinated rim which is a Machalilla/Chorrera transitional style (illus. 4), and a straight-sided bowl with annular base and incised decoration (illus. 5), probably also a bat bowl, which has a shape similar to the pedestal base of a bat bottle in the Norton-Perez collection (Lathrap et al. 1975: 94). Plate 26. shows sherds from bowls with scalloped rims (probably fragments of more bat bowls), an engraved bowl with vertical wall, and various sherds with negative and line-luster designs on their interior surfaces which are probably Guangala ceramics, also from the coast. The sherds illustrated in Nos. 12 and 13 show the heads of little creatures which can be identified as Guangala frogs. The negative designs on several of the sherds show a continuation of iridescent patterns into Guangala-type negative wares.

Chorrera was first identified as a particular pottery tradition by Emilio Estrada at a site called Olón on the coast of Guayas province. On the urging
of Meggers and Evans, Estrada subsequently decided to call the pottery which he had excavated in the lower levels of his cut 'Chorrera', in order to avoid confusing the issue of chronology and cultural distribution by introducing new names. He did the same thing with the Tabuchila pottery from the Jama Valley (Estrada, 1958: 69) Estrada also identified Bahía pottery as the successor to Chorrera on the coast and well inland in Manabí. Chorrera was thereafter described as a pan-Ecuadorian phase which included Ayangue and Tabuchila ceramics.

Meggers and Evans' monograph on Valdivia and Machalilla contains a few illustrations and descriptions of Chorrera sherds and forms (1965: Figure 76, plate 135 j-n, and see descriptions below) but their chronology for the original type-site of Chorrera remains unpublished except in a rather unsatisfying and preliminary form. A subsequent article lists 13 types of diagnostic decorative techniques. Several new types are added to the previous list but in this article they demonstrate 'regional variation' between coastal Guayas and Manabí, and the Guayas Basin sites (Evans and Meggers 1982).

The first systematic excavations of a Chorrera-related site were carried out by Geoffrey Bushnell in the late 1930s, on the Santa Elena Peninsula near La Libertad (Bushnell 1951). The pottery that Bushnell described was mainly from burials and included: narrow-necked jars, wide-necked jars, simple bowls, bowls with feet (annular bases), carinated bowls, miniature bowls, and one spout (probably from a whistling bottle). Bushnell called the Formative ceramics that he found at Santa Elena 'Engoroy'. His original assignation of Engoroy to the post-Guangala era was incorrect but subsequent investigations carried out by Edward Lanning's students from Columbia University have corrected his misinterpretation (Paulsen 1970).

Henning Bischof (1971) undertook excavations in Palmar (another coastal town near Valdivia) in 1960, refining the sequence for the Santa Elena Peninsula and also asserting that there were a number of significant differences between Engoroy materials and Chorrera from the Guayas Basin.
Bischof also proposed that, rather than defining Chorrera as a culture or an 'homogeneous civilization', it should perhaps be called a 'cultural horizon' or a 'series' à la Irving and Rouse (Bischof 1971, Bischof 1975: 138). Engoroy is now acknowledged to be a separate but related group of ceramics from the area of the Santa Elena Peninsula.

A Chorrera cemetery at a site called Los Cerritos was excavated by Carlos Zevallos Menéndez in 1964 (Zevallos 1965). The site is south of the modern village of San Pablo in the Bay of Santa Elena. The materials which were found at the site included a number of burials which were found in the 3 x 4 m pits dug by Zevallos and his aide, Resfa Parducci. A radiocarbon date from the lower level (where the restricted neck vessels were found) was given as $840 \pm 90$, which now seems quite reasonable if the cemetery was actually a Chorrera site.

From looking at the pottery types shown in Zevallos' photos it is very difficult to tell whether we are looking at a south coastal manifestation of 'Chorrera' (usually called 'Engoroy') or whether these are actually the ceramics which Ecuadorian archaeologists recognize as 'Bahía' type vessels. Both of these cultures are rather badly defined for this area in any case and Bahía, although it has been designated as the successor to Chorrera in southern Manabí, might, in fact, replace it sooner than is generally thought. Certainly, the carinated shoulder of one illustrated vessel (Vessel E) is similar to some early forms of this jar and a number of bottles in Río Chico. Because this is the only report which includes photographs of the vessels in situ, as well as descriptions of the actual burials, Cevallos' report is extremely valuable, however incomplete.

Michael Simmons (1971), a Ph.D. student at the University of Arizona, began his analysis of the ceramics from the site of La Carolina on the Santa Elena Peninsula in the late '60s. This collection had been excavated in La Libertad by Edwin N. Ferdon, Jr., his field assistant John M. Corbett in 1940, their wives, and ten Ecuadorian soldiers who were assigned to the project. One stratigraphic trench, in the side of a midden mound, was excavated.
Only rims and decorated fragments were retained for storage in Quito, but even that proportion of the excavated material was large. Simmons' thesis includes all of the 'phases' found at La Carolina from Valdivia through to Guangala, but his analysis of the Engoroy and Chorrera Phase ceramics is one of the most pertinent and usefully descriptive studies of Late Formative ceramics to date. Simmons used a type-variety method.

Excavations were undertaken on the islands of La Plata and Salango in 1978 and '79 in projects jointly directed by Jorge Marcos and Presley Norton (Marcos and Norton 1981). These islands, which were known to have been ceremonial sites from the Formative Period through to Inca times, were investigated because of their supposed importance in the coastal trade between areas of Meso- and South America where similarities in material culture had been speculated upon by various archaeologists. The archaeological project at La Plata resulted in intensive excavations carried out at Drake's Bay, the only safe harbour on the island. Evidence of ceremonial activity was found all over the island but the major concentration of Late Formative material (including a whistling bottle depicting a monkey) was found at OM-PL-11-14, one of two sites behind Drake's Bay. Marcos and Norton wrote,

"Chorrera occupations separated by landslides indicated a preferred ceremonial site, which was destroyed by successive heavy rainfalls, the area was then cleaned and reused over and over again up until Manteño times. Offerings found in Chorrera levels included well-worked stone tablets and carvings which were reminiscent of the Chavin style. Quantities of sacrificed mother-of-pearl fishhooks were also found at this level, and most (nearly 100%) of the ceramics found were decorated with iridescent paint. Cobbles of green stone decorated with monkey faces on their sides identical to those found at Cerro Narriño by Collier and Murra, had been made as trade goods on the Santa Elena Peninsula (Bushnell 1951), and were also found in the cemetery of Los Cerritos." (Marcos and Norton 1981: 146-148, my translation)
There is some indication that much worked *Spondylus* was found in various layers on La Plata, but whether it was found in indisputably Late Formative layers seems unclear from the co-authored article.

At a symposium held in Salinas (on the Santa Elena Peninsula) in 1971 various papers pertaining to the Late Formative were given by Bushnell, Evans and Meggers, Marcos, Bischof, Paulsen, and Robert Braun. The symposium, entitled, "Primer Simposio de Correlaciones Antropológicas Andino-Mesoamericano" was intended to, "...present new evidence of cultural interchange wherever there were signs of pre-Columbian communication, be it by sea or by land, from the Pacific coast of Peru to Mexico." (Stone 1982: 2) It was also intended as a tribute to Carlos Zevallos Menendez. The published volume of papers from the symposium contains some rehashed information, and some intriguing hints of possible correlations and connections between Ecuador, Peru and Mesoamerica. After the symposium, however, in spite of good intentions to continue the meetings, most of the principals became occupied with other projects, especially in Ecuador where the Valdivia sites of Real Alto and Loma Alta were discovered and excavated (with help from various North American universities) by Marcos and Norton respectively.

Another site, Los Morros (described in the Salinas symposium volume), situated on the coast close to Los Cerritos, was excavated by three teams of Ecuadorian archaeologists in the early 1970s. Los Morros was a salvage operation which was dug by Presley Norton, Irma Jarrín and Jorge Marcos in three cuts (A, B, and C) through a mound in the centre of the site. Unfortunately, only the results of cut B (with a few conclusions about the other work) were written up by Marcos, and these seem to be brief notes made for the symposium talk. Both 'Chorrera' and Guangala materials were found in the mound. Marcos postulated that the Guangala people had appeared suddenly at the site and had apparently taken over in a decidedly unpacific manner. This conclusion was based on a sudden change in pottery styles, two
fragments of projectile points and a bone projectile point found in various disparate locations in the site (Marcos 1982).

**Research beginning in the 1980's**

Some Late Formative ceramic material was found at Loma Alta in the summer excavation seasons of 1980 and 1982. Loma Alta is a site located 15 km up the Valdivia River Valley. It includes a U-shaped midden that was occupied principally in the Valdivia and Chorrera phases while smaller occupations took place during the Machalilla and Guangala phases. The Loma Alta Project found 15 sites with evidence of Chorrera occupation and 6 others in the neighboring valleys to the north (Valkenier 1983: 2-4). The Chorrera material was described in a paper by Lisa Valkenier, a student of Scott Raymond, and has been analyzed as part of a study of regional variation and distribution by another of Raymond's students, Laurie Beckwith (1996).

The site of Peñón del Río (OGGqDu-1) on the Babahoyo River near Durán, in the Guayas Basin was a project begun in 1980 by the Escuela Superior Politécnica del Litoral, ESPOL, in Guayaquil. It was intended as a field school for the new archaeology program at the university in order to train professional Ecuadorian archaeologists. The excavations at Peñón del Río were begun partly because of their proximity to ancient raised fields that had been surveyed by Dr. James Parsons in 1974-75. The site of Peñón itself yielded occupation layers beginning in Valdivia times and ranged through Machalilla, Chorrera, various phases of Bahía (designated as Tejar in this region), and an abundance of Milagro-Quevedo remains (Alvarez et al. 1980).

Maria Nieves Zedeño's (1983) report is the first (and only) systematic analysis of Chorrera ceramics from the Guayas Basin. Using modal analysis, Nieves delineates technological, morphological, stylistic and functional variability in the ceramics, along with descriptions of Structure 1, Feature 1, and a comparative evaluation of the ceramics with those from other investigations. Unfortunately, the ceramics which she has analyzed appear to be a mixed lot, and although there are some correspondences between the
forms in Peñón del Río and the ceramics in the museum collections, there are more differences than similarities.

Excavations at Salango (a small village on the coast of Manabi) were begun on the grounds of a small fish-processing plant in 1979. The area was chosen for investigation because of a system of antique terraces which had apparently been constructed between the beach and the sides of a small hill (Punta Piedra Verde) overlooking Salango Bay. By 1984 Trench 141B had already been opened but the authors of the museum catalogue/report issued in that year wrote that, "The Chorrera occupation was extensive but not intensive ... probably indicating that an intensive concentration of Chorrera existed not far from the excavations, perhaps under the factory." (Norton, Lunniss and Nayling 1984: 54, my translation) In November 1983 Trench 3 of 141B was extended. A rectangular structure of the Late Formative Period was identified and its West corner intensively excavated in 1986. A series of postholes, identified as major and minor posts, supported the roof of what may have once been a rectangular, wooden construction. The 'Chorrera/Engoroyl' structure is one of a series of ceremonial structures which were built on top of one another from the Late Formative up until the Regional Development Period and the artifacts and burials support these conclusions. The structure (and the mound overlying it) are currently being analyzed by Richard Lunniss as part of his dissertation research.

The most current excavations of Late Formative material were undertaken in the Jama Valley as the Jama Valley Archaeological/ Paleoethnobotanical Project from 1988 to 1991 by James Zeidler and Deborah Pearsall. The results of the 1988 field season have been published in Volume 1 of a projected series of two reports (Zeidler and Pearsall 1994). Previous research in the Jama Valley had been undertaken by Zeidler in three short field seasons in 1981, 1982, and 1983, and subsequent research was undertaken by Evan Engwall in 1994 (as part of his doctoral research). Most of the excavation was done at the main site of the Valley, San Isidro, but several
smaller sites were also explored, and Engwall has excavated at two sites for comparative purposes.

Exploratory work with the help of students at the Centro de Estudios Arqueológicos y Antropológicos at E.S.P.O.L. (Escuela Superior Politécnica del Litoral, Guayaquil) was carried out by Zeidler at San Isidro itself. San Isidro is a huge archaeological site (the total site area is over 70 ha.) which is basically a large mound which has been built up through cultural deposition, alluvial aggradation, and colluvial slopewash with occasional deposits of tephra from local volcanic eruptions (Zeidler 1994: 71). San Isidro is the primary centre of a complex of 22 sites in the immediate alluvial area, suggesting that this site was the focus of ceremonial activity of a chiefdom in the Jama Valley. Cultural occupation at San Isidro spans 2900 years (approx. 1650 B.C. to A.D. 1250) from the Terminal Valdivia period through to the end of the Jama Coaque period, with no Machalilla material encountered.

The intensive excavation in Sector XII/Area C at San Isidro revealed a profile of deposits beginning with Valdivia 8 which is overlain by a tephra deposit. Valdivia artifacts continue to be found after the ash fallout but disappear after a mud-flow containing large amounts of Valdivia refuse. Four sterile layers appear between the Valdivia deposit and the Tabuchila (the local variant of Chorrera) deposit which is likely an occupation floor. This floor is overlain by a series of fluvially deposited sterile layers, followed by another layer of tephra. After this the long Jama Coaque sequence appears, which has been divided into Jama Coaque I and II (with four subphases) (Zeidler 1994: 85-89).

Deposit 21c in Sector XII/Area C was the Chorrera cultural deposition. A carinated bowl was found in situ in Feature 11 of this floor and is designated as a Tabuchila 2 form. In the 1988 testing at San Isidro, several other Chorrera deposits were excavated, including Deposits 24-35 in Sector V/Unit B1, and two large pit features (Features 22 and 23) in Sector XXXI/A1. One of these features (F22) contained a fragmented but restorable red-on-buff
bowl with a radiocarbon date taken from underneath it of 2845 ± 95 radiocarbon years before present or 895 BC (AA-4140). This form is designated as Tabuchila 1 because of its resemblance to forms found in Coastal Guayas in the Early Engoroy phase (Zeidler 1994: 95, 115).

The chronology of C^{14} dates and regional names for the Late Formative

As was briefly mentioned above, the Late Formative Period in Ecuador has been designated by various different names by archaeologists working in different part of Manabí Province and the Guayas Basin. The two groups of ceramics which are treated in this thesis, and which form the corpus which I have called Chorrera are called Tabuchila, from the Jama Valley, and the cemeteries surrounding the San Isidro site, and Chorrera from Río Chico or Chacras, in the northern part of Manabí province in the Río Chico/Portoviejo Drainage. There are no radiocarbon dates for the Río Chico sites, but in the absence of other dates, we might use the dates given by Emilio Estrada from the La Sequita or Pepa de Huso site (590 B.C. and 575 B.C.) (Megger, Evans and Estrada 1965: 153). La Sequita is close enough to the Portoviejo Drainage to be of some relevance to the Río Chico material, since some of the proveniences given for the Banco del Pacífico material of the same style refer to hamlets in the Portoviejo drainage (e.g. Rocafuerte, Mejía, El Límón, etc.). Estrada called the material from La Sequita 'Bahía-Chorrera.'

The debate over nomenclature cannot be resolved at this juncture, however we can say something about the radiocarbon dates which we do have, and also about the names for the regional variants of the Late Formative which have been assigned to various sites. From northern Manabí province and continuing south to Guayas province this overview begins in the Jama River Valley where a large-scale excavation and site survey was carried out fairly recently at the large ceremonial site of San Isidro.

The Late Formative in Northern Manabí, north of the Bahía de Caráquez and the Río Chone, is known only from San Isidro and the Jama
Valley and is called Tabuchila by Zeidler and Pearsall (and Evan Engwall) (Zeidler and Pearsall 1994). San Isidro has yielded the earliest radiocarbon date for the culture (895 B.C., corrected) and also a possible termination date -- a tephra cap marking a volcanic eruption which took place in either 535 B.C. or 355 B.C. (Zeidler 1994: 105, Table 6.1).

Further south, along the Río Chone, Estrada excavated at the site of Finca Vélez, on the Bahía-Chone highway, we have one early date from this site of 850 B.C. Estrada called the material which he found at Vélez Chorrera (Estrada 1962). Proveniences from the ceramics in the Banco del Pacífico include many towns along along the highway from Bahía de Caráquez on the Río Carrizal drainage which extends into the interior from Calceta (Lathrap et al. 1975).

The Río Chico material, also called Chorrera, reportedly comes from a series of towns and hamlets along the Río Chico river and in the Portoviejo drainage. There are no radiocarbon dates for this region but the ceramics are supposed to have come from as far inland as San Plácido (Lathrap et al. 1975).

Slightly farther south, and again on the coast, the site of Los Esteros, between the towns of Jaramijo and Manta yielded a series of eight radiocarbon dates ranging from 480 B.C. to 100 B.C. with the archaeological culture designated Bahía I and assigned to the Regional Development Period by Meggers, Evans and Estrada (1965: 153). Other sites in this area which were excavated by Estrada included Manta and Jaramijo, but there are no dates for these.

The southernmost sites in Manabí province are at La Plata Island, Machalilla, Puerto Lopez, Salango, and Salango Island. Excavations at La Plata Island have already been described above, and the Late Formative ceramic material there was designated as Chorrera, probably mainly because of the iridescent paint decoration. Marcos and Norton (1981: 147) also mention that one excavated offering contained figurines from the contemporary Bahía, Tolita, Jama-Coaque and Guayaquil (ca. 300 B.C.) cultures. Both Chorrera and Bahía materials have also been found at the
Salango site. We are given five radiocarbon dates for the Late Formative levels from this site by Beckwith (1996: 13) of 815 B.C., 800 B.C., 755 B.C., 700 B.C., and 640 B.C. Richard Lunniss is working on his Ph.D. thesis which examines structures from three periods which he has provisionally called Chorrera, Engoroy and Bahía.

Moving into Guayas province, the site of Olón was the first place where Estrada identified materials which he would later call 'Chorrera.' He, and Evans and Meggers also excavated at Ayangue, where Machalilla or Middle Formative material was identified, as well as Late Formative material. There is still some confusion in the literature as to whether Ayangue Incised (as a type) should be designated as Middle or Late Formative.

Palmar was excavated by Henning Bischof after Estrada's preliminary identification of Late Formative at this site. Bischof called the ceramics at Palmar, 'Engoroy,' based on Bushnell's identification of the culture on the Santa Elena Peninsula. Bischof divided the Engoroy sequence into three phases, Early, Middle and Late, with 6 or 7 discernable periods. Periods 1 and 2 are Early Engoroy, period 4 corresponds to Middle Engoroy, period 5 is transitional, and period 6 is Late Engoroy. Period 7 is either Late Engoroy or Early Guangala (Bischof 1975: 18). Bischof has provided us with two radiocarbon dates from two cuts at Palmar. The date given at Palmar 3 for Engoroy 2-3 is 435 B.C., and at Palmar 2 for Engoroy 4 is 345 B.C.

I have already discussed the Chorrera material from the Los Cerritos site in detail in several other sections of this thesis. I also speculate that, in spite of the early date (840 B.C.) given by Zevallos for this site, the ceramics which he and Parducci excavated appear to be a style which is usually called Bahía by Ecuadorian archaeologists. Bischof also provides a date for what he designates as Engoroy at Los Cerritos, of 590 B.C.

In the Guayas Basin, Aleto examined Late Formative material from the site of Bellavista, on Puná Island. This material was called 'Fase Guayaquil' and Aleto gives us a radiocarbon date of 510 B.C. for Bellavista. Parducci and
Parducci, excavating in San Pedro de Guayaquil, in the suburbs of Guayaquil, found similar material which yielded dates of 340 B.C., 235 B.C., and 225 B.C.

In summary then, the Late Formative Period in Ecuador includes sites with the regional designations of Chorrera, Tabuchila, Engoroy, Fase Guayaquil, and possibly Bahía. The accepted range of radiocarbon dates is from 895 B.C. in the Jama Valley to 100 B.C. at the Esteros site near Manta.
TABLE 1
RADIOCARBON DATES FOR THE LATE FORMATIVE PERIOD OF ECUADOR

<table>
<thead>
<tr>
<th>Site</th>
<th>Provenience</th>
<th>RCY - BP</th>
<th>St. Dev.</th>
<th>Years BC</th>
<th>Reference</th>
<th>Comments</th>
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<tr>
<td>Esteros</td>
<td>Cut A, L 320-340 cm</td>
<td>2050</td>
<td>120</td>
<td>100</td>
<td>Meggers, Evans, Estrada 1965</td>
<td>Bahía 1</td>
</tr>
<tr>
<td>Esteros</td>
<td>Cut A, L 400-420 cm</td>
<td>2110</td>
<td>120</td>
<td>160</td>
<td>Meggers, Evans, Estrada 1965</td>
<td>Bahía 1</td>
</tr>
<tr>
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<td>2120</td>
<td>120</td>
<td>170</td>
<td>Meggers, Evans, Estrada 1965</td>
<td>Bahía 1</td>
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<tr>
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<td>Cut I, L 280-320 cm</td>
<td>2150</td>
<td>240</td>
<td>200</td>
<td>Estrada 1966</td>
<td>Bahía</td>
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<tr>
<td>Tarqui, M-8</td>
<td>Level 250 cm</td>
<td>2170</td>
<td>200</td>
<td>220</td>
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<td>Bahía</td>
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<td>San Pedro de Guayaquil</td>
<td>Cut M, 60 cm</td>
<td>2175</td>
<td>60</td>
<td>225</td>
<td>Parducci and Parducci 1975</td>
<td>Fase Guayaquil</td>
</tr>
<tr>
<td>San Pedro de Guayaquil</td>
<td>Cut G, 80 cm</td>
<td>2185</td>
<td>80</td>
<td>235</td>
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<tr>
<td>Esteros</td>
<td>Cut I, 40-80 cm</td>
<td>2200</td>
<td>240</td>
<td>250</td>
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<tr>
<td>San Pedro de Guayaquil</td>
<td>Cut E, 60 cm</td>
<td>2290</td>
<td>100</td>
<td>340</td>
<td>Parducci and Parducci</td>
<td>Fase Guayaquil</td>
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<tr>
<td>Palmar 2</td>
<td>I 105, Level 5</td>
<td>2250</td>
<td>75</td>
<td>345</td>
<td>Bischof 1975</td>
<td>Enchorroy 2-3</td>
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<tr>
<td>Esteros</td>
<td>Cut A, L 320-340 cm</td>
<td>2300</td>
<td>65</td>
<td>350</td>
<td>Meggers, Evans, Estrada 1965</td>
<td>Bahía 1</td>
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<td>Esteros</td>
<td>Cut A, L 340-360 cm</td>
<td>2350</td>
<td>65</td>
<td>400</td>
<td>Meggers, Evans, Estrada 1965</td>
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<tr>
<td>Palmar 3</td>
<td>C1, Level 3</td>
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<td>80</td>
<td>435</td>
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<td>480</td>
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<td>2460</td>
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<td>Fase Guayaquil</td>
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<td>L. 260-280</td>
<td>2525</td>
<td>105</td>
<td>575</td>
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<td>L. 260-280</td>
<td>2540</td>
<td>125</td>
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<td>Meggers, Evans, Estrada 1965</td>
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<tr>
<td>Loma Alta</td>
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<td>150</td>
<td>755</td>
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<tr>
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<td>Level 5</td>
<td>2750</td>
<td>190</td>
<td>800</td>
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<td>175</td>
<td>815</td>
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<tr>
<td>Los Cerritos</td>
<td></td>
<td>2800</td>
<td>90</td>
<td>840</td>
<td>Zevallos 1966</td>
<td></td>
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<tr>
<td>Véliz</td>
<td>Cut B L 40-60</td>
<td>2800</td>
<td>115</td>
<td>850</td>
<td>Estrada 1962</td>
<td>Chorrera</td>
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<tr>
<td>Los Cerritos</td>
<td></td>
<td></td>
<td>90</td>
<td>890</td>
<td>Bischof 1975</td>
<td>charcoal</td>
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<tr>
<td>San Isidro</td>
<td>Sector XXXI, Unit A1</td>
<td>2845</td>
<td>95</td>
<td>895</td>
<td>Zeidler and Suttif 1994</td>
<td>Tabuchila 1</td>
</tr>
</tbody>
</table>
Chronology of the Late Formative in Ecuador compared with contemporary cultures in Peru and Colombia

Peru

The fancy Chorrera material from the Late Formative Period in Ecuador is very similar, both in its forms and decorative techniques to another poorly-known ancient culture from far northern Peru. Vicús is from a cemetery site in the Piura River Valley. It is probably related to the more famous Moche ceramics and it dates from the period between approximately 200 B.C. to about A.D. 600 or the Early Intermediate Period. A more precise time-period is sometimes given as 400 B.C. to about 100 A.D. (Katz 1983: 27). Vicús is noted for its negative painting, but a second type, which is very much like Moche pottery, is the type which is also most like Chorrera in terms of its iconographic themes and sculptural qualities. Negative style Vicús dates to approximately A.D. 100-700, so the assumption is that this style is later, which fits quite well in its comparison with Guangala pottery. Many of the sculptural themes which are represented on Moche sculptured vessels, especially during Moche III and IV, are also very similar to themes found in Chorrera ceramics. For example, a red-on-cream whistling bottle with two small monkey adornos illustrated in Katz (1983: 326 #40) could be a Chorrera vessel.

Cupisnique ceramics, sometimes referred to as "Coastal Chavín," also have some similarities to Chorrera ceramics, although they are less like them than the Vicús vessels. Cupisnique sites and ceramics are better documented than Vicús, but the actual relationship of Cupisnique to Chavín is still relatively unexplored. Cupisnique derives from the area between the Chicama and the Jequetepeque Valleys, and is also found in the Moche Valley. The most common vessel form is the stirrup-spout bottle, and these are often modeled into animal, human and plant (gourd) forms like the Chorrera vessels.
Colombia

There are several archaeological cultures of Colombia which show affinities to Chorrera but the one which is most similar is Calima from the Cauca River Valley. The earliest phase of Calima, the Llama phase is dated to between 800 and 100 B.C., Yotoco dates from about 100 A.D. and Sonso from about the 8th to the 12th centuries A.D. (Legast 1993: 10). Calima gold artifacts are fairly well-known from the Gold Museum's collections in Bogotá, and the majority of these apparently date from the Yotoco period. Most of the anthropomorphic and zoomorphic representations in pottery date from the Llama period. The Cauca River Valley is in southwestern Colombia, so it makes sense that ceramics from this area should be those most like the Ecuadorian artifacts. There are differences in iconographic emphasis between Calima and Chorrera, but until the publication of Legast's (1993) volume on the iconographic themes in both the gold and the pottery, it was impossible to compare them even superficially with Chorrera. Legast analyzed 159 pieces identified as Llama in various collections. The main difference between Llama and Chorrera appears to be that the Llama ceramics depict were-creatures such as bat-men and snake-men, which represent almost 30 percent of the collections. Ceramic forms are mostly not very similar to Chorrera; these are jars with flaring necks, bowls with pedestals (called *copas* or cups), cylindrical vases, bottles with double-spouted tops, pipes, and whistles. The bottles with double-spouts are somewhat similar to the Chorrera whistling bottles with animals or round platforms below the spout, these are called *alcarrazas* in the literature and the majority of animal forms are depicted on them. They also continue into the Yotoco period. Double-lobed bottles with a bridge handle and spout are also encountered during the Yotoco period (e.g. Legast 1993: 40, Figure 24), as are whistling bottles in the form of birds (e.g. Legast 1993: 57, Figure 48).

Legast has provided us with numbers and percentages for categories of ceramics but not for individual species (these are listed in a series of tables which only indicate presence or absence in the culture phase). Mammals
make up the next largest group of Llama ceramics (after were-creatures) or about 25 percent of the collections, birds (22%), reptiles (8%), amphibians (8%), associations between animals, for example, serpents and amphibians represented on the same bowl (7%), and then unidentifiable animals (3%). Legast (1993: 103) comments that the importance of the nocturnal world can be seen in the fauna represented during the Llama phase. Bats and felines, sometimes in association with snakes, are represented, as well as nocturnal birds such as owls.
TABLE 2
CHRONOLOGY FOR THE LATE FORMATIVE IN ECUADOR, COLOMBIA AND PERU

<table>
<thead>
<tr>
<th>Regional Development Period</th>
<th>Colombia</th>
<th>ECUADOR</th>
<th>Peru</th>
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<tr>
<td></td>
<td>CAUCA</td>
<td>MANABI</td>
<td>MOCHE-</td>
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<td></td>
<td>VALLEY</td>
<td>NORTH</td>
<td>CHICAMA</td>
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<td>SOUTH</td>
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<tr>
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<td>GUAYAS</td>
<td>COAST</td>
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<tr>
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<td>GUAYAS</td>
<td>BASIN</td>
<td></td>
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<tr>
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<tr>
<td>BC-AD</td>
<td>Tabuchila</td>
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<td>500</td>
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<tr>
<td>400</td>
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<tr>
<td>500-100 BC-AD</td>
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<td>Late Formative Period</td>
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Environments and ecology of the coast of Ecuador (recent and prehistoric)

Climate, topography and rainfall patterns combine to make the coast of Ecuador an extremely variable environment. Today, parts of the coast are still heavily forested with secondary vegetation, especially during the rainy season, which begins and ends at slightly different times during the year. This is partly due to the effects of the two ocean currents (described below) which affect the climate of Ecuador.

Ecuador's topography

Ecuador's location (between Lat. 2° N and Lat. 2° S) on the equator and its proximity to the Pacific coast affects its climate, as does its varied topography (Map 1). The country is divided by two main ridges of mountains running parallel to one another, with a series of intermontane basins in between them. These basins are characterized by a mixture of ecozones, ranging from the warm valley bottoms, where maize is grown, to the bleak páramos, the high-altitude prairies. From east to west the topography moves from the tropical lowlands which directly give way to the steep slopes of the Andes. The mountains change to lower ranges of hills on the western slopes, which gradually slope towards the coastal plain and the Pacific Ocean. This western coastal area is approximately 200 km wide in the middle of the country and tapers to about 40 km wide at the northern border in Esmeraldas and to only about 20 km wide at the southern border. A significant change in the topography occurs at about 4° S, where the northern part of the Huancabamba Depression begins (Lynch and Duellman 1997). This is the frontier between Peru and Ecuador, and here, "... the Andes are narrower and lower in altitude than they are at any other point ... and, through several low mountain passes, afford[s] relatively easy travel between the two regions." (Raymond 1988: 281)

The rivers between the Cordillera de la Costa and the Andes flow southward towards the Gulf of Guayaquil and the Pacific Ocean. These
include the Río Daule and the Río Babahoyo, which converge just north of Guayaquil to form the Río Guayas which has a fairly wide alluvial fan. "The western slopes of the Cordillera de la Costa are drained by many small rivers [including the Río Jama] flowing into the Pacific Ocean. The largest of these, Río Calceta and Río Portoviejo, separate the northern and southern parts of the Cordillera de la Costa." (Lynch and Duellman 1997: 9)

**Climate**

The climate of Ecuador as a whole is very diverse, especially from north to south along the coast where the rainfall regimen changes from very wet, with tropical vegetation in Esmeraldas province in the north, to extremely dry with essentially xerophytic vegetation, on the Santa Elena Peninsula in the south. Wetter conditions also prevail as one moves further inland from the coast. Ecuador has a dry season and a wet season, but these vary according to the topography and the area's proximity to the ocean. The Humboldt Current (sometimes also called the Peru current) has a strong effect on the climate. This cold, northward-moving current is replaced by the warm, southward-moving El Niño current every year. There is a trend towards a seven-year cycle when the El Niño pushes the Humboldt down the coast with greater force, killing the cold-water plankton and fish which thrive in the colder waters of the Humboldt. Precipitation increases enormously during these years along the Ecuadorian coast, causing flooding and sometimes great destruction (Ferdon 1981: 620).

**Modern environmental setting for the Jama River Valley (San Isidro) and the Río Chico/Portoviejo River drainage**

The coast of Manabí province is basically tropical but dry, with areas of slightly higher rainfall where low hills trap most of the moisture from heavy precipitation during the rainy season(s). The two regions which are the focus of this thesis: the Jama River Valley and the Río Chico/Portoviejo River Drainage Basin, will be discussed in detail here.

Each region is slightly different topographically, but both are affected by the presence of the range of hills known as the Cordillera de la Costa.
(see Map 1). The hills of the Cordillera Chongon-Colonche block most precipitation before it reaches the Santa Elena Peninsula but because they are closer to the coast further north the effect is less pronounced in this region (Damp 1984: 109).

Bioclimatic regimes or lifezones based on temperature, precipitation and evapotranspiration regimes were originally applied to Ecuador by Cañadas (1983) and have been subsequently adapted and refined for various purposes by several authors (Zeidler and Kennedy 1994, Lynch and Duellman 1997). In general, most of the coast which we are concerned with could be considered a dry tropical zone, with dry subtropical areas occurring in the low hills above 300 masl.

**Jama River Valley**

The Jama River flows into the Pacific Ocean, with its headwaters in the low hills of the coastal range, here called the Cordillera Jama-Marche. It is situated just below the equatorial line (0° 0' 15" S). The maximum elevation of the valley is 600 masl but the majority of the rolling terrain ranges between 200 and 400 masl, with 115 masl at San Isidro and dropping to sea level at the river's mouth. The climate has been classified into two classes in recent studies: 1. a dry, megathermic, tropical climate and, 2. a semi-humid, megathermic, tropical climate. These two climatic regimes are divided at approximately 15 km inland from the river mouth, and coincide with a sharp break in geological, topographical, edaphic, and vegetational conditions (Zeidler and Kennedy 1994: 15).

The Jama Valley is a transitional area between the wet and dry areas of Ecuador and, as such, supports a wide variety of vegetation. It is extremely ecologically diverse, with several distinct biotic zones, these are classified as 4 life-zones: (7) very dry tropical forest, (8) dry pre-montane forest, (11) dry tropical forest, (12) humid pre-montane tropical forest. The area is characteristically a patchwork of these life-zones, depending upon altitude and location within the Valley. The biotic zones also include a small area of mangrove estuary (approx. 30 ha) on the north riverbank which supports a

Modern flora in the biotic zones ranges from cactus and xerophytic vegetation to tropical tree species such as wild papaya and matapalo (strangler fig, Ficus sp.). However, much of the original flora has disappeared in the last 100 years with logging for charcoal burning and the grazing of local livestock by local inhabitants (Zeidler and Kennedy 1994).


**Very Dry Tropical Forest Zone**

The Very Dry Tropical Forest Zone is the most arid and low-lying of the four life zones and extends along the coastal strip between sea level and 300 masl. It has a mean annual temperature of between 23° and 26° degrees Celsius and mean annual precipitation of between 500 and 1000 mm. The rainy season extends from January to April or perhaps the middle of May, while the dry season begins in May and ends in December. The bioclimatic region corresponds to the ecological formation of very dry tropical forest to a transitional zone between very dry tropical forest and dry tropical forest (11).

The region includes Jama, Tosagua, Calceta, Junín, Rocafuerte, Jipijapa, Paján, Olmedo, and Pedro Carbo. All of these towns are also proveniences for vessels in the museum collections.

This is a dry coastal zone where precipitation rises further inland. North of Salinas, as soon as the coastal line curves toward the north or towards the northeast, outside of the principal circulation of the Peruvian current, precipitation rises rapidly to the point where the northern part of Manabí and Esmeraldas are the areas of highest precipitation.

From January to April, the period of heavy rains is due to the influence of the intertropical convergence zone and the Niño Current. During these months, masses of humid air which bring convergent winds, move inland to the cordillera in the part which is closest to the coast, to discharge their humidity as convection or orographic precipitation, so that
the foothills are more humid than the flat areas (plains) of the region. From the end of April till December the zone of intertropical convergence and the Niño current recedes north, and the Humboldt current, when it arrives at Ecuador, deviates toward the west farther away from the coast. Its cool and dry influence is at its maximum in the southwest and west of the coastal region to Cabo Pasado and diminishes towards the interior.

The very dry tropical forest can be characterized as semi-arid with deciduous forest formations and savanna grasslands (Zeidler and Kennedy 1994: 17). Some of these savannas are periodically inundated. On the isolated hills north of Guayaquil grow large ceibos (kapok trees), and on riverbeds in winter or in old riverbeds, one finds Old Man's Beard (Barba salvaje, *Tillandsia usneoides*), hanging from these trees.

**Dry tropical forest**

In this zone the precipitation regime is the same as for Lifezone (7). Dry tropical forest is characterized as subhumid with semi-deciduous forest, or as *transitional* between the markedly deciduous vegetation which characterizes the very dry tropical forest, and the perennial vegetation which characterizes the humid tropical forest. Natural and inundated savannas also exist in this zone.

**Dry Pre-montane forest**

Dry pre-montane forest comprises the areas above 300 masl. Precipitation is between 500 and 1000 mm annually, and it is characterized as semi-humid. Its annual pattern of rainfall is two rainy seasons, a principal rainy season from December to May, and a second humid period of *garúa* (light drizzly rain) in the month of October (Zeidler and Kennedy 1994: 17).

**Humid pre-montane forest**

Higher rainfall (1000 to 2000 mm annually) and slightly cooler temperatures (18 -24⁰) make this zone the wettest of the four life-zones. Due in part to its inaccessibility, there is still much virgin forest in this zone. This forest has an upper storey which is characterized by the presence of palms and other trees such as cedar, strangler fig, and rubber. The middle storey is
characterized by smaller trees, as well as by palms and bamboo. The understorey includes wild cacao, achiote (Bixa orellana), and ferns.

Río Chico/Portoviejo River Drainage Basin

The Río Chico drains into the Pacific Ocean from its headwaters in the Cordillera Chongon-Colonche. It is joined by the Río Portoviejo just south of Rocafuerte at about 0° 54'S. The elevation for the area generally ranges between 0 to 300 masl although some of the higher hills are up to 500 masl, the terrain dropping to sea level at the confluence of the two rivers. The climate has been classified as dry, megathermic, and tropical.

This area is characterized by three life zones: (3) tropical thorn woodland, (7) very dry tropical forest, and (11) dry tropical forest (see descriptions above). (7) and (11) are as described above for the Jama Valley.

Tropical thorn woodland

Tropical thorn woodland is a sub-desert tropical zone which extends over the region which includes the Bahía de Caraquez, Charapotó, Portoviejo, and Montecristi. Mean annual precipitation is more than 200 mm, but less than 500 mm with a mean annual temperature between 24° and 26° C.

The coastal strip of this region is contiguous with water and air masses from the Pacific, and this is a zone of intertropical convergence where the Niño current and the Humboldt current meet. The seasonal displacements of these masses determine the climatic characteristics of the region. During the period from January to April they displace towards the south, causing heavy rains on the external borders of the zone of convergence, this is the origin of the rainy season. When these air masses return to the north the stabilizing and cooling effects of the Humboldt current begin the dry season in May which lasts till December.

Continuous cloud over the area from May till December is caused by the influence of the Peru current, which is also responsible for the relatively
low temperatures in the region (given its latitude) and the virtual absence of rain, but some rainfall does occur in the form of garúa during the dry season.

The landscape is characterized by a mix of creeks or old riverbeds, salt pans and mangroves on the coast. The interior is criss-crossed by hills, and chains and groups of higher peaks, such as the cordillera Chongon-Colonche down whose valleys flow short rivers from east to west.

Vegetation is slightly different in some areas than in others, this is due to geoclimatic factors and soil composition, however, tropical thorn woodland in the province of Manabí is mainly dominated by xerophytic vegetation such as: ceibo (the kapok tree, *Ceiba trichistandra*), algarrobo (*Prosopis juliflora*), and various kinds of thorny fruiting bushes. The primary forest tree species of guayacan and ébano have been intensively exploited for their valuable wood, the other trees are exploited mainly as firewood. These practices, as well as ranching, have essentially destroyed the primary vegetation in the zone to the point where it has become an impenetrable thorny underbrush punctuated by columnar cactus (usually *Cereus* sp.).

More detail is available about the current climate, geography and vegetation for the Jama River Valley than for the Río Chico/Portoviejo region, mainly because the Jama River Valley has been the focus of the Jama Valley Archaeological/Paleoethnobotanical Project. Members of the Jama Valley Project carried out a landscape survey of the region in 1989 and 1990, which included vegetational sampling and surface sediment sampling for modern palynological and phytolith analyses (Zeidler and Pearsall 1994).

**The Paleoenvironment**

**Tropical Forest**

The coast of Ecuador was once much more forested than it is today (Pearsall 1979, 1994) but it has been extremely degraded because of deforestation owing to overgrazing, wood-cutting for fuel, and clearing for agricultural purposes. Parts of the coast today are still classified as "forested neotropical lowlands," but many areas have been sufficiently deforested as to
present a false picture of a xerophytic (desertified) landscape where none existed before modern times.

In spite of the fact that original environmental conditions on the coast have been changed somewhat, due mainly to the denuding of the forested landscape by local inhabitants in the last 100 years or so, the archaeological record attests to the former richness of the biotic communities which were once extant in the coastal valleys with which we are concerned in this study.

According to Pearsall (1994: 203) the San Isidro phytolith assemblages for the Early and the Late Formative periods indicate a forested landscape, with open habitats present. A summary of the principal diagnostic phytolith groups includes: 1. Gramineae, tall grasses which may be bamboo, or other forest grasses which could be used as construction materials, 2. *Zea mays* (maize, cultivated), 3. Cannaceae (*achira*, an edible tuber, possibly cultivated), Marantaceae (arrowroot, possibly wild or cultivated) and Heliconaceae (wild plantain), all families of robust herbs favoring moist settings and possibly indicating forest habitats, 4. Palmae, Ecuadorian palms of various types, indicative of a forested environment, and 5. Chrysobalanaceae, a common tree in the moist forests of coastal Ecuador occurring along the banks of rivers and inland from mangroves. The main diagnostic group also included Cyperaceae (sedge), Compositae (open-habitat plants), and Trichomanes (filmy ferns), all of which may be indicators of a moist forested environment. Other phytoliths which were identified in the samples included Cucurbitaceae (squash and bottle gourds) which are cultigens, as well as Annonaceae, and Burseraceae, which indicate moist forest habitats (Pearsall 1994: 167, Table 12.1).

**Faunal material as evidence for a tropical environment**

Faunal material at excavated sites in the Jama Valley indicate a reliance on wild foods, as well as on marine resources. Stahl's (1994: 185-200, 1995b: 154-180) analyses of the faunal material are based mainly on flotation fraction. Caution is recommended (by Stahl, personal communication 1997) in any
interpretation of the results but the majority of the faunal material indicates a
taxonomically rich assemblage from the forested neotropical lowlands.

Rather unfortunately for us very little identifiable faunal material was
recovered from the Late Formative levels at San Isidro, however Stahl has
identified cottontail rabbit (Sylvilagus sp.), rice rat (Oryzomys), field mouse
(Akodon) and cotton rat (Sigmodon) in his samples. Bones identified as duck
(Anatidae) have been identified, as well as burnt fish vertebrae probably
belonging to the jack family (Carangidae) (Stahl 1984: 191).

Bracketing the Late Formative period, however, animals which were
identified by Stahl for the Late Valdivia context and for the Jama Coaque
context in San Isidro included, in order of size: jaguar (burnt mandible), deer,
tapir, peccary, large monkeys (howlers), sloth, grison (large weasel), and tayra
(large weasel, perro de monte), agouti and paca, porcupine, kinkajou,
armadillo, rabbit, rat, turtle, cotton rat, grass mouse, snake, lizard and land
snail.

Pearsall comments that,

"The faunal remains are best represented in the Terminal Valdivia and
Jama Coaque II lists at San Isidro. The animals represented in these two
widely separated period of time are strikingly similar: sloth, armadillo,
rabbit, two species of agouti, peccary, deer, jaguar, turtle, and various small
rodents are present in both periods."(Zeidler and Pearsall 1994: 211)

Small- and medium-sized mammals, particularly rodents, numerically
dominate the sample of archaeofaunal remains at San Isidro (Stahl 1996: 160).
This makes sense in terms of the overall faunal picture for neotropical
America. The main faunal area which includes Ecuador encompasses
Central America and the Pacific lowlands of Colombia, Ecuador, and
northern Peru. The Central American rainforest fauna is relatively small,
with a number of endemic species that are close relatives of those in
Amazonia, but with few species which are found only in a rainforest
environment (Emmons and Feer 1990: 252). Bats and small to medium-sized
rodents tend to dominate the faunal assemblage in this region and their
habitat, especially for rodents (terrestrial herbivores), is increased in areas where second-growth and mature forest intermesh, such as abandoned gardens and residential clearings (Stahl 1996: 169).

**Late Formative burials**

Although we do not know the precise rituals with which the Chorrera people buried their dead, we can also infer a number of things from the burials which have been excavated and recorded.

There are now approximately 93 burials from 4 sites that have been reported for the Late Formative Period. (There were actually probably more than 23 excavated at Los Cerritos (see below) but since it is not clear exactly how many burials Zevallos excavated, it is impossible to give a definitive number.) Most of these burials have been reported rather superficially, and they are mainly from southern Manabí and the Santa Elena Peninsula, but at least they give us some idea about some possible patterns in Late Formative mortuary practices.

The four excavations include the cemetery at La Libertad, on the Santa Elena Peninsula excavated by Bushnell (1951), the cemetery at Los Cerritos, slightly farther north of the Peninsula, excavated by Zevallos and Parducci (Zevallos 1965), the cemetery at San Pedro de Guayaquil, in the Atarazana district of Guayaquil, excavated by Parduca and Parducci (1975), and the 13 burials at Loma Alta, excavated by Raymond and analysed by Brenda Kennedy (Beckwith 1996: 47). Of all of these cemeteries and burials, only the Los Cerritos site seems to have yielded any figural ceramics. Zevallos illustrates a whistling bottle with an adorno of the head of a small creature (a dog?) on it, which he describes as having come from Burial No. 92. The vessel is decorated with iridescent paint. The vessel comes from a primary burial, and was probably accompanied by an annular-based bowl (Figure 9).

Bushnell (1951: 86-94) excavated 42 Engoroy burials in a cemetery at La Libertad on the Santa Elena Peninsula. Twenty-five of these burials contained no grave goods at all, but almost all of the ceramics which he describes as Engoroy types were complete vessels in these burials (1951: 86).
Bushnell gives a breakdown of the burials with and without grave-goods which include:1. Burials with no associated objects (25), 2. Burials with one pot only (7), 3. Burials with a tool of shell or of polished stone only (3), 4. Burials with one pot and tools of shell or polished stone (2), 5. Burials with two pots (3), 6. Burials with several pots (2).

Bushnell was unable to conserve the bones because they were very badly preserved. This is fairly usual on the coast of Ecuador where wet conditions and acid soils combine to decompose any organic matter rather quickly. One burial, that of a young child, was described in detail. It lay in a reclining position with the head slightly raised and the legs flexed. A hollow whistle figurine was lying face-downwards on the stomach (Bushnell ascribes this figurine to the Guangala culture but it may have been Engoroy - it is not illustrated). Underneath the figurine were two beads, one of flat greenstone and another which was biconical and made of white shell, together with an amulet of pink and white Spondylus shell in the form of a conventionalised human figure. On one side of the skeleton was a footed bowl (sometimes called a 'compotera' by Ecuadorians) covered with an inverted simple bowl. On the other side were a wide-necked jar with a flaring neck, and a bowl with a restricted neck (which I classify as a maté jar).

Bushnell's descriptions of the ceramics from the other burials are fairly clear (with the illustrations), although his labeling of them according to letters assigned to the burials and different ones to the ceramic types is a bit confusing. He has divided them into three types according to wares: Engoroy Gritty Brown, Engoroy Polished Grey, and Engoroy Sandy Grey. The vessel forms here are surprisingly similar to the forms from Rio Chico and San Isidro. Vessel forms a, b, and d are essentially the same as my category of 'flared neck jars', or what some archaeologists might also call globular bottles with everted necks. Vessel form b has a carinated shoulder which is also seen in the Banco del Pacifico collection and seems to be early. Vessel forms c, e, l, and p are wide-necked jars, again with everted rims and necks. P has a double-carination on the shoulder. Bushnell calls l a carinated bowl, which
seems an odd designation, but it has pinkish iridescent stripes and spots on it. Vessel forms \( m \) and \( n \) are miniatures, they are respectively: a wide-mouthed jar, and a wide-mouthed jar with a carinated shoulder and a direct rim. \( M \) has the same iridescent spots on it as \( l \). The bowls which Bushnell illustrates include 2 simple bowls with direct rims \( o \) and covering \( i \), a carinated bowl \( q \), and three pedestal bowls, \( f, g, \) and \( r \). \( F \) is a simple bowl with a rather thick pedestal base, rather like the Río Chico bat bowls with a special pattern on their bases. \( R \) has a carinated bottom with a wide pedestal base like two bowls in the collections. \( G \) is a wide bowl with a direct rim and an annular base. There are no bowls like this in either of the collections which I looked at, but this form is similar to Beckwith's Vessel Forms 2 and 2a, and Nieves Zedeño's Forms 4 and 5b from Peñón del Río.

Some other grave-goods which Bushnell recorded included 4 polished stone celts (or axe-head), one associated with a child's burial, the other two associated with adult burials (one of these included a narrow necked jar \( L \)), it is unclear whether the fourth, a smaller celt associated with a sandstone drill and a bowl with an annular base, was also part of a burial. Shell objects found with burials included a spatula with a round indented bowl (a sniffer?), a set of shell rings which Bushnell interprets as a necklace, and the \textit{Spondylus}-shell amulet (mentioned above) with the child's burial.

The burials excavated at Los Cerritos, a site in the Bahía de Santa Elena, by Carlos Zevallos (1965-66) were found at approximately 1.20 m below the surface of a mound 20-25 m high which had been cut by wave-action on one side. Zevallos and his assistant, Resfa Parducci, began by excavating 23 burials from an area of about 3 x 4 m. Some of these burials contained offerings of ceramics, mainly small, restricted neck, globular jars of reddish-buff clay (much like the jars which I have called 'flared neck jars') but a number did not. These jars were not found in other areas of the excavation. The first cut (Cut A) revealed a skeleton on its knees, with a bowl (?) decorated on its interior with iridescent paint.
Zevallos separated the burials into two phases. In Phase 1 most of the burials were primary. The skeletons were flexed, with the arms around the legs or around the head, and a number of the female crania appeared to be intentionally deformed. One of the skulls had been trephined. In Phase 2 there were 5 primary burials and secondary burials in circular pits, with up to 5 skeletons in each. Ninety percent (90%) of these secondary burials did not include grave goods.

The burial goods found in this cut included tapered bone pendants (presumably of the kind often found in Bahía style burials and on Bahía anthropomorphic ceramics), and worked greenstones (jadeite, sodalite or turquoise). Also included were tiny necklace beads in the form of human or monkey heads, and fragments of red-on-white ceramics.

In Zevallos' second cut of 4 x 4 m further up the hillside, the restricted neck jars yielded to slate-coloured vessels (jars?) and (whistling?) bottles with spouts and strap handles. These bottles also had small anthropomorphic or zoomorphic motifs (adornos) applied as crests on the strap handles and were decorated with iridescent paint (e.g. Zevallos' Figure 8). A cut made for comparative purposes in the middle of the hillside revealed a similar dark-coloured vessel associated with a bottle with iridescent paint on it. Zevallos comments that it is odd that he did not encounter any figurines like the ones found by Evans and Meggers at the type-site in the Guayas Basin. Zevallos notes, finally, that he and Parducci excavated 172 'tombs,' most of which were collective burials (Zevallos 1965-66).

Further research was carried out on the skeletal remains from Los Cerritos nearly 10 years after they were first excavated. This examination showed that the human skulls had a heavy accumulation of tartar on their teeth, in contrast with the light accumulation on the teeth of skulls from the Valdivia or Early Formative period at Real Alto. Klepinger et al. (1977: 506) conclude that the tartar accumulation was the result of heavy habitual and probably secular coca use during the Late Formative Period, and that the coca was obtained through the exchange of mollusc shells with people on the
eastern Andean slopes. Skulls from male adults showed more accumulation than females, suggesting that coca consumption by males was either more frequent or began at an earlier age. This is a consumption pattern which is similar to that found amongst Andean highland peoples today.

At San Pedro de Guayaquil (now a suburban neighborhood of Guayaquil called La Atarazana) 15 burials were excavated from midden contexts. Five of the burials were interred on a bed of broken ceramics, a method called lecho de cerámica by the excavators, Resfa and Ibrahim Parducci (1975: 243). This burial technique is not known on other parts of the coast. However, given the late radiocarbon dates (225 B.C., 235 B.C., 340 B.C.), ceramic forms with multiple feet, as well as the decoration (very little iridescent, much negative resist and many different types of mechanical surface treatments) on the ceramics, these burials may not be Late Formative at all. Figural ceramics are nonexistent, however, there are two anthropomorphic ceramic feet, as well as one solid "Guayaquil" style standing figurine.

At Loma Alta, 13 burials were excavated, five of which contained no grave goods, and one which contained a variety of grave goods (see below). There did not seem to have been a preferred orientation of the bodies, although flexed burial did seem to be a preferred position. The four complete skulls recovered at Loma Alta had some occipital flattening, although there was some question as to whether this flattening was intentional. Calcareous deposits found on the teeth of these skulls may possibly indicate the practice of lime and coca-chewing. Demographics of the 13 Loma Alta burials indicate that 54% were sub-adult, and all the adults were between 18 and 35 years old at death (Beckwith 1996: 47-48). There is no indication in the description given in the published material as to whether there were any figural vessels in the burial materials.

Burial #80-6, located in Levels 3 and 4, 20 to 40 cm below surface, of unit N118 E 115, was a primary interment of an adult male, 25 to 35 years old, in a tightly flexed position on its back with the head facing south-southeast.
This burial may have been associated with three other individuals, an infant, a juvenile and another adult. The grave goods included an almost complete bowl inverted over the feet, a labret, fish-vertebrae earspools, a perforated spondylus shell rim, small shell beads, a piece of worked bone (possibly a spatula), a hollow bone (possibly a snuffing tube), and two lime concretions that may have been the contents of small gourds that have rotted away. These last three items have been suggested to imply the practice of coca chewing and the use of snuff (Beckwith 1996: 83-84, after Raymond 1980 and Kennedy 1984, mss. on file at University of Calgary).

A few burials have also been excavated by Karen Stothert at La Libertad, near the Albarrada de Achallán. The Albarrada de Achallán (OGSE-45, see Beckwith 1996 for the ceramic seriation) is a most impressive reservoir or water-management structure which dates from the Engoroy (Late Formative) period on the Santa Elena Peninsula. The burials are illustrated in a museum handbook (Stothert and Freire 1997) for the site, but the information obtained from their excavation has not yet been published. The handbook states that the Engoroy people interred their dead in cemeteries outside the villages. The dead were buried in a seated position, and were sometimes accompanied by disarticulated bones in secondary burials. Offerings included ornaments and pieces of greenstone, as well as mother-of-pearl shells and pottery used for serving ritual food and drink (Stothert and Freire 1997).

Summary

Burials seem to have occurred in specific areas set apart from living areas, whether in middens or in cemeteries proper. The burial patterns of the Late Formative seem to indicate that there was some form of social ranking system based on birth, since both infants and adults were buried with grave goods (Beckwith 1996: 84, Rivera 1995: 67). Rank society here refers to a level of complexity which is different from either stratified or egalitarian society. For example, Tukano societies are not chiefdoms nor egalitarian bands or tribes and are therefore somewhere in-between (Chernela 1993: 8-9). There do
not seem to be marked differences between the types of grave goods, however, and this indicates there was probably no real social stratification (cf. Carmichael 1995: 162). Among the more common grave goods are finely made ceramics and miniature ceramics (lime-pots?), figurines, shell jewelry (including beads), stone celts, greenstone amulets and beads, earspools.

Coca chewing is directly indicated by the dental calculus study (Klepinger et al. 1977) and indirectly indicated by the small gourds found at Loma Alta (Beckwith 1996). The practice of snuffing is also indicated by the spatula found in Bushnell's Santa Elena burial, and by the hollow bone tube found at Loma Alta (Beckwith 1996).

Secondary burials also show that the dead may have been interred and then exhumed again to be buried communally. This is a fairly common practice amongst South American indigenous peoples today (Redmond 1994) and seems to be associated with ancestor worship among Andean groups who mummify their dead (Carmichael 1995 and Salomon 1995). It is found as well in Moche graves, where secondary burials of lower ranking individuals, (perhaps retainers or valued servants) accompany important individuals (Donnan 1995).
Ch. 3: Analysis

The Sub-Assemblage

Artifacts from the exhibits and in the storage areas of two major collections in Guayaquil, Ecuador: the Museo Arqueológico del Banco del Pacífico and, the Museo Arqueológico del Banco Central del Ecuador, were analysed for this thesis. Both collections include ceramics from the Jama Valley and the Río Chico/Portoviejo Drainage regions, as well as some from surrounding areas. As far as can be determined, most of the ceramics in the Central Bank are from somewhere near the ceremonial site of San Isidro (in the Jama Valley) and most of ceramics in the Pacific Bank are from Río Chico, sometimes called Las Chacras (in the Río Chico Valley) and also from the Río Portoviejo Drainage. This makes the comparison from the two regions a little easier in some respects, in others it makes the task more difficult, inasmuch as the provenience attributions of some of the ceramics are probably incorrect. I have tried as far as possible in these cases to establish the proveniences of the pieces with reference to their similarities to other pieces, and those pieces' proveniences as they were recorded by the museum staff.

In addition to the ceramics (and other artifacts) which were examined in the two main collections, ceramics from the Museo del Banco Central in Quito and the Herbert F. Johnson Museum at Cornell University were also included for comparative purposes. Although the Central Bank in Guayaquil seems to have cornered the market on figural vessels from San Isidro over the years, the Central Bank in Quito also has collections of San Isidro material, although not nearly as many as are housed in Guayaquil. Unfortunately, I was unable to spend as much time as I would have liked in the collections in Quito and therefore could not include the entire collection in my analysis. Some of the pieces which are published in their catalogue and in Valdez and Veintimilla (1992) are therefore included here. The categories and types of figural vessels in the Quito collections are basically the
same as those in the Guayaquil collections with few exceptions. The collections of the Herbert F. Johnson Museum at Cornell has a small collection of Ecuadorian ceramics. I selected 10 of these to include in my analysis, also for comparative purposes.

Table 3 gives a breakdown, by collection, of all of the artifacts which were selected and recorded for analysis in this thesis. The final total of all of the artifacts which were examined and recorded was 839 of which 761 were ceramic vessels. The final total includes limepots, musical instruments, and three crystal necklaces.
<table>
<thead>
<tr>
<th></th>
<th>Banco del Pacífico Collections</th>
<th>Banco Central Collections</th>
<th>Herbert F. Johnson Collections</th>
<th>Total of all Vessels</th>
</tr>
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<td>Vessels</td>
<td>260</td>
<td>491</td>
<td>10</td>
<td>761</td>
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<td>Figurines</td>
<td>15</td>
<td>40</td>
<td>0</td>
<td>55</td>
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<tr>
<td>Other ceramic artifacts (ocarinas, whistles, snuffers, pendants, etc.)</td>
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<td>10</td>
<td>0</td>
<td>30</td>
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<tr>
<td>Crystal Necklace</td>
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<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Total Artifacts</td>
<td>297</td>
<td>542</td>
<td>10</td>
<td>839</td>
</tr>
</tbody>
</table>
Sampling

It must not be forgotten that the archaeological culture known as 'Chorrera' is based on a selection of the most elaborate and beautiful ceramics. Most of the vessels in the museum collections were bought from middlemen dealers who either bought the ceramics from professional tomb-robbers or from local farmers who found them on their lands. The information gathered from these tomb robbers and middlemen who peddle these ceramics indicates that the ceramics are from either burials or tombs. The vessels represent what the museum buyers have purchased and therefore are not a representative selection of all of the vessel forms or decorative types in the assemblage which has been called 'Chorrera.' This is especially true in that this designation originally referred to the ceramics excavated in the Guayas Basin by Meggers and Evans. However, the fine figural ceramics have come to be known as "Chorrera," in Ecuador, and the name has stuck. Some components of Middle and Late Formative regional assemblages have been referred to as chorreroid, a term which implies similarities in form and decoration (see Lippi 1983). This term is rather unsatisfactory, given that most of the ceramics which are being referred to in this context are not figural.

The ceramics in the museum collections are a representative sample of the fine Late Formative ceramics which have been looted. While I certainly do not condone the practice of huaquerismo (tomb-robbing), the collections which I have chosen to study and describe are public collections which are no longer being actively expanded. (The Banco del Pacifico's collection was sold intact to the bank by its collectors and the Museo del Banco Central stopped buying ceramics in about 1986). These collections therefore permit direct access to an important sample of ceramics which must not be ignored as a source of information for the iconography and symbolism of the Late Formative Period of coastal Ecuador.

The vessels which I examined in the museum collections which for the basis for this study were purchased either by a private collector couple,
Presley Norton and Léonor Pérez, or by the former Director of the Museo del Banco Central, Olaf Holm. The two men who shaped the two main collections were both experienced collectors but were really rather old-fashioned antiquarians and not archaeologists. Olaf Holm was professionally trained as a museum curator but Presley Norton began his career as a collector and later turned to archaeology. Both of these men knew each other well and probably often consulted one another on their purchases for 'their' respective collections.

The collection at the Banco del Pacífico (originally the Norton, later the Pérez collection) consists of pieces bought originally by Presley Norton and Léonor Pérez from huaqueros, (local tomb robbers). The collection was acquired by the Banco del Pacífico in its entirety in 1978 by Marcel Laniado de Wind, Executive President of the Banco del Pacífico in Guayaquil. The Banco Central's collections were mainly acquired by the museum's former Director, Olaf Holm. The pieces were bought over a period of approximately 11 years (1977-1988) from huaqueros and middlemen from the coast. In some cases, the person from whom they were bought was recorded on the catalogue forms for the collection. From these I was able to determine that the members of several families of Manabí had carried on a tradition of selling pieces to the Bank for nearly the entire time-period mentioned above. Most of these middlemen/huaqueros probably come from a small hamlet called La Pila, which is located close to the towns of Montecristi and Portoviejo.

The pieces which were selected by these individuals are therefore a biased sample of the fine ceramics which are probably from two particular areas - the Jama River Valley (mainly from the site of San Isidro) and the Portoviejo/Río Chico River drainage.

Pieces were selected for sale by local middlemen, and it also appears that middlemen may have sometimes stockpiled some of the especially fine ceramics for later sale, since some of the objects which are obviously pairs and/or seem to have been made in the same workshop (e.g. a monkey bottle
and a whistle) were either sold to different buyers or sold over a period of a few years to the same buyer.

Although there are many examples of the latter category of finely made non-figural vessels in the Central Bank (Guayaquil) collections, there appear to be few vessels which were made for domestic use, and, unfortunately, these are generally the vessels which are generally found in excavations. Some of the vessels types from sherd assemblages from the archaeological site of Salango have been analyzed by Laurie Beckwith in her thesis (1996) and are also being analyzed by Richard Lunniss in his forthcoming thesis. Some of the types described by Beckwith and Lunniss are probably ceremonial but it is sometimes difficult to match these with the whole vessels in museum collections.

**Proveniences for particular types of decorated vessels**

Vessels with red slip (usually on the lower body) and unslipped areas with incision (usually on the upper body) are given a provenience from both San Isidro and the Portoviejo/Río Chico drainage. Gourd-shaped vessels are from both areas but the majority of these are probably from San Isidro and the Jama Valley. The monkey-effigy whistling bottles probably come from the Jama Valley as well. Coiled snake effigy vessels (precursors of the Bahía Monster vessels) probably come from the Río Chico area sites. There were apparently eight or nine of these striking effigies found at the same time but it is not clear whether they were found in the same grave-lot or in several from the same cemetery (John Staller, personal communication 1997).

The proveniences in the Banco del Pacífico collection are probably fairly reliable, based on their site-specificity and the fact that they are mainly from the Río Chico drainage (this observation is based on the named sites plotted along the drainage on the Instituto Geografico Militar's topographical maps of the area). Presley Norton collected primarily from *huaqueros* working in this particular area, and may have even participated in some of these 'excavations' himself. Proveniences in the Banco Central collection are less reliable, since it looks as though the *huaqueros* or middlemen often
simply gave a general area when asked for provenience, or the cataloguers may have assumed that a piece came from the San Isidro area if there was no provenience provided by the seller. Most of the gourd effigy pots which have proveniences likely do come from San Isidro.

Some proveniences for particular pieces can be determined by the style of the ceramics, i.e. by using effigy type, form, and decoration. An example of this is the identification of monkey effigy whistling bottles which are very similar to each other.

**Proveniences for the gourd vessels**

Provenience is difficult to establish for the vessels from the Banco Central because many of the vessels were given a "San Isidro" designation, even if they were not actually from the Jama River Valley area. An example of this problem is illustrated by a series of seven very fine whistling bottles which are smudged, incised, and polished, and which often have spouts on platforms (see Figure 77). Three of these bottles are given a San Isidro provenience and one is purportedly from Junín. The one in the Banco del Pacífico is designated as being from Charapotó. It seems very unlikely that such a distinctive style of bottle should come from three different sites, although it is very possible that fine ware vessels were traded to other sites from their original sources. The style of this particular type of ceramic is, however, quite similar to other vessels in the Banco del Pacífico collections which are also supposedly from the Portoviejo/Río Chico drainage -- these are finely made, smudged and incised whistling bottles, sometimes with iridescent paint on them which I have described as a type called "Zoned Incised."

**Numerical Counts of the Collections**

In general, all of the numerical counts which are given here should be taken as approximate, since it was often difficult to determine exactly how many pieces there were on the overcrowded shelves of the museum storage facilities. An inventory of the collections was under way at the Central Bank museum while I was undertaking this study, however, as the pieces were
recorded by number and not by attributed culture, my counts of the Late Formative effigy vessels are probably the best ones available at the present moment.

Finally, there are many private collectors in Ecuador who also have impressive collections. Fortunately, most of these collectors have complied with Ecuadorian antiquities laws and their collections remain in Ecuador for study. I have chosen to study and analyze only the publicly accessible collections (for obvious reasons) but the private collections which I saw provided some insights into regional differences which I might not otherwise have had. It must be said, however, that the appearance of a new private collection with different proportions of effigy or figural ceramics could change the percentages significantly, as well as the conclusions which I have drawn from these percentages (cf. Legast 1993: 101).

Categories of Vessels and other artifacts

The main categories of Representational vessels which were chosen for the analysis are: Gourd/Fruit Effigy Vessels, Animal Effigy Vessels, and Human Effigy Vessels. The category called Red on Unslipped Vessels comprises a group of representational vessels of a distinctive decorative type combined with types of vessel forms peculiar to that ware.

The categories of Non-Representational Vessels includes vessels which are decorated but non-representational, as well as a category called Engraved Red-on-White Vessels which comprises a group of vessels of a distinctive decorative type combined with vessel forms peculiar to that type (e.g. square vessels, flaring vases and tubular jars). Three of the Engraved Red-on-White vessels were included in the category of Representational Vessels because they had human effigies on them. Figurines and Musical Instruments (ocarinas, whistles and rattles) were also counted separately.

Other artifacts which were used in the analysis include a variety of ceramics, including 1 snuffing tube, representing a crocodilian; 1 snuffing tube, representing human with overlapping faces; 1 pendant, representing the Lookdown fish (*Selena*); 1 mirror handle, for an obsidian mirror, incised
with yellow and blue postfire paint; and 1 phallus, which is solid, modeled, with red and brown slip. Non-ceramic artifacts include 1 quartz crystal necklace, polished with a T-shaped pendant; 1 quartz crystal necklace with shell spacers between the beads; and 1 quartz crystal necklace with shell spacers between the beads.

Method

My primary classification of the vessels into categories by vessel form is followed by a series of categories based on their iconographic content in three major divisions: Hollow Fruit, Zoomorphs, and Anthropomorphic Figures. Distinctions between the categories of animals and plants were made on the basis of their most immediately obvious natural characteristics (see more detailed descriptions below). Since all of the representational ceramics are either effigy vessels which are naturalistic sculptural representations which clearly put them in their particular category, or they are vessels which have small adornos (sculptured ornaments) or incised decorations on them, this task was less difficult than it might appear at first. Distinctions between the human figures were made on what I saw as the primary activity in which the figure was engaged.

Some of the vessels combine categories of animals and gourds, although the types are usually still distinct enough to be able to say what they are with some certainty. These vessels are usually included in the category which makes them unique in the sub-assemblage. If the vessel is important enough for inclusion in both categories, I have normally cross-referenced it to the other category (in brackets). Animal or human representations are usually given precedence over gourd representations in most cases, because there are many more gourd or gourd-like representations.

An example of a vessel which cross-cuts categories (see Figure 63) depicts an animal, probably a young coati, lying on top of a gourd, which probably represents a bottle gourd (Lagenaria). I have included this vessel in the section on Animals, as an example of a coati, as well as in the section on
Gourds, because there are many more examples of vessels representing bottle gourds than there are of vessels which represent coatis. This vessel's combination of animal and gourd also makes it important in my interpretation of Chorrera iconography in the final analysis (see Conclusions).

For all three categories (Anthropomorphic Figures, Animals, Hollow Fruits) my procedure in this thesis is basically the same. In this section the identifying characteristics of the representational ceramics are presented. Numerical counts of these vessels and figurines are given, and decorative attributes are also described.

In the interpretive section I describe some of the natural characteristics of the plants or animals. For the gourds, their most usual shape, any important characteristics of the plant itself, the environment in which they grow, and sometimes their ethnographic uses are discussed. For the animals, their natural characteristics, habitat and behaviour are first discussed. In the case of the anthropomorph ceramsc, I discuss the trance posture and the other salient criteria which led me to classify the figure in its particular category.

I was unable to make a detailed study of the figurines but have simply classified these according to their decorative attributes. I have also commented on particular types and their possible iconographic and mythological significance, for example, the "Woman holding a Small Figure," which I have included as one of the more important anthropomorphic categories. One particularly distinctive type of incised decoration with punctates is also described for the figurines.

In the interpretation section I also consider the archaeological evidence for other artifacts which are similar to Chorrera vessels (and other artifacts). This may be either organic remains found in archaeological excavations, or it may be with reference to other ceramics which are found in geographically related areas, such as the Moche-Vicús area (Northern Peru) or the Colima/Nayarit/Tlatilco area (West Mexico). Finally, I make my own
interpretations of the iconographic significance of the vessels with reference to the ethnographic material.

**Human figures**

The human effigy vessels were classified in two ways. First, they were classified according to their postures or poses. Secondly, there are figures which are carrying things or are represented in particular ways which indicates a particular function. These are probably mythological figures from Northwestern Amazonian cosmology and are described in greater detail with reference to the ethnology in my interpretations.

**Animals**

This category is the largest one in purely numerical terms, although, as I have indicated, some of the categories overlap with Gourds (e.g. Bat Bowls). The animal ceramics were classified by their naturalistically rendered characteristics, e.g. the monkeys have faces which are obviously not human, sometimes they have tails, and usually they have collars and amulets. I have identified the animals to the species level where possible by comparing them with illustrations in standard reference works (Eisenberg 1989, Emmons and Feer 1990, Nowak and Paradiso 1983) as well in as a number of other, more specialized references (see References Cited). I received some help from Mark Engstrom at the Centre for Biodiversity at the Royal Ontario Museum, Toronto for the identification of the monkey species. Sometimes the identifications had already been made (for example, in Lathrap et al. 1975) but I also checked these identifications, which were sometimes incorrect in my opinion. Where the species identifications were not absolutely clear and unequivocal I have indicated this in the sections where I describe the ceramics. Surprisingly, however, most of the animal identification is fairly straightforward and unambiguous (within my expertise), mainly because the sculptural features of the ceramics are very naturalistic.

**Gourd Vessels**

The gourd vessels are identified as representations of particular species such as *Lagenaria siceraria*, *Cucurbita maxima*, *Cucurbita moschata*,
Cyclanthera pedata, or Crescentia cujete (calabash) according to characteristics which are represented by the naturalistic modeling of the ceramics. It must be kept in mind, however, that gourds are highly variable in form and are more usually and easily identified by the peduncle (stem attachment) which may be depicted as the spouts of some of the Chorrera whistling bottles (see Figure 84). I have identified the gourds by using illustrations from standard reference works and was also greatly aided in my classification of particular species by Dr. Deena Decker-Walters, a botanist and well-known specialist in the Cucurbita.
### TABLE 4
FINAL COUNTS OF FORMS FOR ALL VESSELS FROM COLLECTIONS
BANCO CENTRAL, BANCO DEL PACÍFICO, HERBERT F. JOHNSON MUSEUM

#### REPRESENTATIONAL VESSELS

<table>
<thead>
<tr>
<th></th>
<th>Whistling Bottles</th>
<th>Bottles</th>
<th>Fl Neck Jar</th>
<th>Maté Jars</th>
<th>Tubul Jars</th>
<th>Bowls</th>
<th>Pedestal Bowls</th>
<th>Lime pots</th>
<th>Neck rests</th>
<th>Spoon/Dipper</th>
<th>Square Vessel</th>
<th>Flaring Vase</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GOURD (FRUIT) ANIMAL</strong></td>
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<td>3</td>
<td>17</td>
<td>16</td>
<td>17</td>
<td>2</td>
<td>6</td>
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<td></td>
<td></td>
<td>198</td>
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<td></td>
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<td>20</td>
<td>26</td>
<td>56</td>
<td>37</td>
<td>25</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>278</td>
</tr>
<tr>
<td><strong>HUMAN HOUSE</strong></td>
<td>49</td>
<td>1</td>
<td>6</td>
<td>12</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td>88</td>
</tr>
<tr>
<td><strong>BODY PARTS</strong></td>
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<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>BAHÍA MONSTER</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
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<td>12</td>
<td>49</td>
<td>54</td>
<td>5</td>
<td>83</td>
<td>39</td>
<td>37</td>
<td>11</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>587</td>
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</tbody>
</table>

#### RED-ON-UNSLIPPED VESSELS

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<tr>
<th></th>
<th>Whistling Bottles</th>
<th>Bottles</th>
<th>Fl Neck Jar</th>
<th>Maté Jars</th>
<th>Tubul Jars</th>
<th>Bowls</th>
<th>Pedestal Bowls</th>
<th>Lime pots</th>
<th>Neck rests</th>
<th>Spoon/Dipper</th>
<th>Square Vessel</th>
<th>Flaring Vase</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
<td>77</td>
<td>20</td>
<td></td>
<td>4</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>109</td>
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### NON-REPRESENTATIONAL VESSELS

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<th>Bottles</th>
<th>Fl Neck Jar</th>
<th>Maté Jars</th>
<th>Tubul Jars</th>
<th>Bowls</th>
<th>Pedestal Bowls</th>
<th>Lime pots</th>
<th>Neck rests</th>
<th>Spoon/Dipper</th>
<th>Square Vessel</th>
<th>Flaring Vase</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
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<td>2</td>
<td></td>
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<td>43</td>
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</table>

### ENGRAVED VESSELS

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<th>Maté Jars</th>
<th>Tubul Jars</th>
<th>Bowls</th>
<th>Pedestal Bowls</th>
<th>Lime pots</th>
<th>Neck rests</th>
<th>Spoon/Dipper</th>
<th>Square Vessel</th>
<th>Flaring Vase</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>1</td>
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<td>7</td>
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<td></td>
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</tr>
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</table>
Method for stylistic seriation

The proposed seriations of the ceremonial and funerary wares in Chorrera ceramics from the San Isidro and Río Chico regions are based mainly on stylistic criteria. This is unfortunate but unavoidable, mainly because provenience and time-depth have not been established for the fine ceramics in the sequence. Very little archaeologically and scientifically obtained data has been published, and most of the published data on Late Formative materials (e.g. Beckwith 1996, Bischof 1971, Lippi 1983, Nieves Zedeño 1983, Simmons 1970) deals with a mixed lot of ceramics from middens.

In addition, most of the studies that have been done on Chorrera-type ceramics have focused on the area south of the Bahía de Caraquez. In Manabí province the Loma Alta and La Ponga sites (Raymond 1980, Lippi 1983) have yielded some Chorrera-like material but the main emphasis of the excavations at these sites was on the Early (Valdivia) and Middle (Machalilla) Formative materials and not on the Late Formative. The Engoroy phase on the Santa Elena Peninsula has also been the subject of several investigations (e.g. Bischof 1971, Simmons 1970), as have several sites in Guayas province (Aleto 1988, Meggers, Evans and Estrada 1965). San Isidro and several smaller sites in the Jama Valley have been investigated fairly thoroughly, but as no Late Formative burials have been excavated there we have no context for the mortuary ceramics from the area. No published studies of the Late Formative are available for the Río Portoviejo/Río Chico drainage, nor for the Río Chone/Bahía de Caraquez drainages.

In spite of these data problems however, at least something can be said about our stylistic sequence, given the similarities between the ceramics from the two principal regions of investigation, and the ceramics from the earlier Formative periods of Valdivia and Machalilla, and the later Regional Development Periods of Jama Coaque and Guangala.
The stylistic seriation outlined below is based mainly on what I see as the stylistic continuum from the Early Formative (Valdivia) through to the Late Formative (Chorrera). Machalilla, or what is said to be the Middle Formative in southern Manabí and Guayas, is problematic in both the San Isidro and Río Chico regions. There are obviously attributes (especially for the carinated bowls) in the Late Formative ceramics from both areas which seem to derive from Machalilla, but there seem to be no Machalilla sites in the Jama Valley (Evan Engwall, personal communication 1997). No survey has been undertaken of the Río Chico/Portoviejo region, so that we have no information about a possible Machalilla occupation in that area.

My stylistic seriation is therefore based first on form, and secondly on decorative attributes. Form is the main criteria here because it has been shown in numerous ceramic studies that forms tend to remain constant over longer periods of time (Lathrap 1970, Raymond, DeBoer and Roe 1975, Raymond 1995).

John Staller's (1994) thesis on the Valdivia ceramics from La Emerenciana in El Oro Province was particularly useful for identifying the Late Valdivia antecedents for the most important forms in the sequence. The argument for the antecedents of the carinated bowls in the sequence is based on Ronald Lippi's (1983) thesis on Machalilla ceramics from La Ponga. Other works which provided useful data on forms are Marcos' (1978) thesis on Real Alto, Simmons' (1970) sequence of Engoroy ceramics from the Santa Elena Peninsula, Bischof's (1971, 1982) treatment of Engoroy ceramics, Nieves Zedeño's (1985) thesis on Chorrera from Peñón del Río in the Guayas Basin, and Aleto's (1988) sequence for the Guayaquil complex (from the Isla Puná in the Gulf of Guayaquil).

Flared neck jars or bottles first appear in the Late Valdivia Phases 7 and 8. (Bottles are classified as similar to flared neck jars but have necks proportionally longer than 1/3 of their total body height. Valdivia includes Phases 1-8). These are illustrated in John Staller's (1994) thesis on the Jefí Phase at the site of La Emerenciana in southern El Oro province. Although
La Emerenciana is very far south of the two sites where most of the museum materials come from, Staller's excavation of Late Valdivia bottles at the site makes his data perhaps more pertinent to my study than others which I have cited. The Chorrera form which I classify as "matés" - bowls with very restricted mouths - are also found first in late Valdivia (e.g. Lathrap et al. 1976: V-6, Cat.#41) but there has been no archaeological classification of these.

Whistling bottles seem to be quite rare in the middens, although they are said to be fairly common in burials (Evan Engwall, personal communication 1996) and there is no seriation of these for any site, although a few examples are illustrated in Lippi's, Nieves Zedeño's and Laurie Beckwith's theses. "Long neck bottles" and "carinated bottles" also appear in the Jelí Phase at La Emerenciana, usually with broad-line incision on them and Staller classifies both forms as "diagnostic of Valdivia Phase 8."

Where forms are difficult to seriate because they are so similar, or because there is no archaeological study to rely upon, I have also used decorative patterns or attributes to provide some idea of where I think the vessel(s) should be in the sequence. Decorative patterns are described below but generally surface decorative techniques fall into two main categories: 1. Slips (red, brown, white/buff/yellow), and 2. Mechanical techniques. Other decorative techniques such as rocker-stamping, or pebble-polishing are used rarely. The most common type of decorative technique is plastic decoration using the clay itself (adornos or sculpted effigy vessels) with a combination of incision and/or slip or paint.

**Primary Vessel Forms**

**Whistling bottle**

This is a globular ceramic vessel with a tall, narrow spout and a bridge or strap handle. Spouts are classified as early, middle, and late (with regional variations). There are three forms: 1. a globular vessel with spout and bridge handle, 2. a donut-shaped vessel, and 3. a double-lobed vessel.

The Chorrera whistling bottle is a spherical jar with a long spout attached to the jar by a strap or bridge handle. All whistling bottles have a
strap-like handle or bridge (these are usually about 6-7 cm long and 1.5-3 cm wide). The bridge is usually non-functional, it cannot be used to lift the bottle that it is attached to, and the whistle holes are often located in the base of the handle where it meets the body of the vessel. The long spout (8-9 cm) tapers either towards the top or towards the bottom and it usually has a rounded or a carinated lip formed by the application of additional clay.

The bridge or strap handle of whistling bottles is a flattened piece of clay attached to the body of the vessel. It is then curved in a half-moon shape and re-attached to the spout near its base, or sometimes approximately halfway up. The holes which give the bottles their distinctive whistles are located in a hollow space located in the area nearest the body of the vessel. Sometimes there is a distinctive feature -- a bulb or a triangular raised area -- presumably to give the whistles their distinctive sound and pitch.

Chorrera whistling bottle forms are representative of different kinds of animals, plants, and humans, and there exist as well a variety of non-representational forms. Representational forms are usually modeled in-the-round but there are also many bottles which have a small animal or human adorno (ornament) on them, usually next to the spout.

Decoration on whistling bottles includes red/brown slip and polishing, red/brown slip, zoned incision and polishing, incised zones with polychrome slips and polishing, red slip on cream/white slip and polishing, iridescent slips and polishing (this may be combined with zoned incision), and negative resist patterning with zoned incision and polishing.

There are actually three kinds of whistles: the first and second are simply a hollow space (sometimes in a raised bulb) on the base of the bridge or strap handle. The air entering through the spout is expelled as a whistle through the hole(s) in the bridge. The third type is actually a modeled hollow ball with a hole in it which is attached to the interior of the vessel with appliqué pieces of rolled clay. The air enters through the spout of the vessel and into the hollow ball through a hole in the body of the vessel, and is then expelled as a whistle from one or more holes - these are usually located in the
head of whatever animal or human is represented by the vessel (Figure 10 in Crespo Toral 1966 shows a monkey, for example).

Most whistling bottles are plain, unslipped and undecorated, though they are usually carefully made and the clay surface is polished. The decorative types of whistling bottle types include: 1. gourds, these are usually modeled effigy vessels, 2. animals, these are also usually modeled effigy vessels but sometimes just the head is modeled as an adorno, 3. bird adornos appear on double-lobed vessels, and anthropomorphic bottles, these are mainly modeled effigy vessels although small adornos of people playing musical instruments appear on double-lobed bottles, and 4. some bottles with geometric decoration only (incised, punctates, painted, negative, negative resist, iridescent or some combination of techniques).

**Double-lobed whistling bottles**

Double-chambered whistling bottles (Figure 91) are composed of two compartments, one which has the spout at the top and the other which has a small adorno, usually in the shape of a bird, or sometimes a human, at the top. The compartments (really two *Lagenaria* gourd-shaped bottles or lobes) are joined by a strap handle and a hollow bridge or tube at the bottom. The adorno has the whistle holes in it. These bottles were made to whistle when they contain liquids, as no sound is produced when air is blown into the spout. Crespo Toral (1966: 11, fig. 11) illustrates the whistling technique with a double-lobed whistling bottle containing liquid, as the vessel is tipped sideways, the liquid forces the air out through the airholes in the adorno causing the whistling sound. As the bottle is tipped the other way, air enters through the spout.

Whistling bottles are found throughout the chronological sequence but seem only to develop iconographic significance in the Middle phase, especially in Río Chico. At this time they are very definitely a ritual form, and they are also the most elaborate vessels in terms of their symbolic weight in the sub-assemblage.
Figures (1) and (2) show the proposed evolution of the forms of Chorrera whistling bottle spouts from Valdivia bottle spouts. Figure 1 shows a comparison of two types of Valdivia long-neck bottles (Staller 1994: 375, Figures 45a. and b) with a Chorrera bottle spout and a whistling bottle spout which both have simple outlines similar to the Valdivia bottles. Both types have a straight neck and slightly flaring lip. Figure 2 compares two Valdivia carinated bottles with a larger example of a Chorrera whistling bottle spout with a carinated lip. Although the actual neck of the Chorrera bottle is much longer, the carinated lip is very similar to the carinations on the Valdivia bottles.

Whistling bottles can be classified temporally by their spouts, which are quite distinctive. There is also some geographic variation in the forms of the spouts so that some are identifiable as coming from either the San Isidro or the Río Chico regions. The chronological sequence is divided here into 3 phases: Early, Middle and Late (Figure 3). The spouts are classified by the rim and lip, and also according to the way in which they taper, either towards the bottom or towards the top.

According to Beckwith (1996: 366), the whistling bottle handles at Salango differed from those at Loma Alta in that they had either one or two holes and modeled raised triangles or large protruding nubs in the area of the holes. Beckwith has suggested that whistling bottles could also be seriated by the number of holes in the whistling handle and by modelling in the area around the holes. This is an interesting idea, since the sub-assemblage (as assessed by Beckwith) at Salango seems to be slightly earlier than most of the Loma Alta material, although there is some overlap. A more refined seriation of whistling bottles should, therefore, include both spout shapes and handles.

The Early bottles from both Río Chico and San Isidro have spouts which taper slightly toward the top and then flare again very slightly at the lip. Many of these bottles have either a saucer-shaped platform, or an incised line-delineated space for the spout and handle.
Middle sequence bottle-spouts from the San Isidro region are extremely phallic. They taper strongly towards the top and have a distinct lip which is carinated. Some of the spouts also have a thickened lip which is slightly flattened at the top, and somewhat mushroom-shaped. San Isidro spouts are very similar to the Río Chico spouts, but they are much wider. The strap handle usually has a raised triangular area or a raised nub on the end of the handle closest to the body of the vessel where the whistle holes are. The whistle bulb usually has one hole in the middle of the bulb.

The body of this type of bottle is sometimes decorated with zoned incised red painted stripes on a buff background which is similar to the decoration on some Machalilla vessels and figurines (Lathrap et al. 1975: 84-85, 34: Figure 35). The design is identified as being fairly early in the sequence by its presence in the deeper levels of the Late Formative cuts in the Salango collection (Beckwith 1996: 218, 222, Figures 5.68 and 5.71). I also classify these bottles as Middle sequence because the spout is situated in the middle of a circular undecorated area. This area is similar to the platforms on the Early bottles but is either slightly raised, or is delineated by an incised line, or is simply a different colour from the rest of the body of the bottle. Middle sequence bottles from the Río Chico region also have this 'platform' but they sometimes have a straight spout with a carinated lip. These bottles have a fine, and rather elaborate incised geometric decoration on them with a high-gloss polish.

Spouts with a cap-like carinated lip with a wider bottom than its top are from the San Isidro area (some of these have monkey adornos on them), as are fine, thin spouts with no rim and a straight, slightly flared lip.

Late spouts are shaped like a rifle-barrel or are cone-shaped. They usually have thicker walls than the earlier spouts. Some of these later bottles also have negative-resist decoration on them. The rifle-barrel spouts sometimes have protruding nubs where the handle meets the body of the vessel. I would also suggest that these vessels are also some of those which have modeled adornos in the same place as the protruding nubs. Vessels
with small monkeys, birds or other creatures have the same type of spouts (e.g. Lathrap et al. 1975: 94, 95 Figures 357 and 372). The vessels with monkey adornos carry through from the earlier Middle sequence vessels.

**Bottle**

This is a globular ceramic vessel with a restricted neck and everted rim. The form is very similar to the Flared Neck Jar but the neck is approximately 1/3 or more of the height of the body of the vessel.

**Flared Neck Jar**

This is a globular ceramic vessel with restricted neck. The neck and rim are everted and neck is very to slightly restricted.

Jars with flaring necks tend not to be illustrated as much in exhibit catalogues because most of them are undecorated. They are always well made, slipped, and polished. Flared neck jars are derived from a Late Valdivia form. Staller illustrates a very similar vessel (Figure 44) which he calls an Everted Neck Bottle. The bottle has broad-line incision on the rim, and punctates on the collar. The rim and neck are slipped red, and pattern burnished, as are the upper body and shoulder of the vessel. The geometric designs on the neck are similar to motifs on the carinated bottles (see discussion below). Staller (1994: 375) comments that,

"everted neck bottles appear to be water-storage vessels. Such vessel forms are unique to the Jelí Phase and only found in the excavations. A portion of a bottle was encountered upside down in pit feature 65 and combines decorative attributes characteristic of both the Valdivia and Machalilla Phase."

Jar forms evidently continue on through Machalilla, especially the wide-mouthed jars which continue to have very similar forms, and which are also derived from Late Valdivia. In Machalilla the form of the rim and neck is basically the same as in Valdivia, with perhaps somewhat more of a curve in the neck. In Chorrera jars the everted rim is more pronounced, with the lip extending outwards and down slightly. In Chorrera too, the decoration is elaborated, with bosses appearing on the shoulder of the vessel,
various lobed body forms, and slipped and incised decoration on the body, rather than slipped red-on-tan (a characteristic of Machalilla vessels). A few jars are very elaborate, such as the snake effigy jars which are probably from Río Chico. The actual form of the rim, neck and globular body do not seem to change at all, either spatially or temporally. (For a comparison of Machalilla and Chorrera jars see Figure 10).

Most of the flared neck jars in the collections are not representational and do not generally depict animals, gourds or human figures. They are primarily decorated either with geometric designs (incised, painted or low relief) or they are left undecorated but are slipped (sometimes self-slipped) and polished. A distinctive group of jars from the Río Chico region has four spots, usually slipped red, equally spaced around the perimeter of the body. These four spots are found on jars with fingernail punctates, with geometric designs around the spots, and also on jars with Bahía Monster-type snakes on them (see jar in Figure 38).

Maté Jar

This is a globular ceramic vessel with a restricted mouth but which has a short rim which is flattened on the inside, or no neck or rim. This form is also sometimes 'shoe' or 'breast'-shaped." Mate jars are also sometimes called restricted neck jars, rimless jars, or neckless ollas. Neckless jars or 'matés' are a category of vessels which are not very numerous in Chorrera pottery (there are only 74 of these vessels in the sub-assemblage) but this form comprises the fewest vessels in the collections and probably has the longest time-span of all the forms in Chorrera.

Almost all of the main categories of animals are represented in this form and a few, like the felines or dogs (Figure 65), seem to be particularly common. Most of the maté jars are either effigy vessels or have decoration of some kind on them, very few are undecorated.

Staller's (1994: 364) reconstructed Vessels of Formal Class 5 (Figure 41a), which he called "constricted bowls" are very similar to the Red-on-Unslipped vessel forms in the museums. Except for the small opossum/monkey/man
figures and the red slipping which is used on the San Isidro vessels, they look like virtually the same vessels. Staller writes,

"...plastic techniques are restricted to the shoulder of the vessel and executed when the clay is still damp. Some sherds have parallel rows of punctations or fingernail impressions bordering carelessly executed broad line incisions set in a zig-zag motif, made up of angular broad incisions set against each other and placed at various angles. The background of the decorated shoulder is always left untreated and the matte finish contrasts with the usually smoothed or burnished lower body. " (Staller 1994: 364)

(For a comparison of the Valdivia vessel form and the vessel forms with the small figures on them see Figure 4). Included in this vessel category are those forms which seem to be transitional from Machalilla, the Red-on-Unslipped vessels. Lippi has noted that, "It is much more difficult to draw a line between late Machalilla carinated bowls and those of early Chorreroid, there is a smooth transition for this particular class of vessels." (Lippi 1983: 248)

These vessels are present in all of the collections of Ecuadorian Pre-Columbian ceramics which I have examined. They include sharply carinated bowls, carinated bowls, 'shoe-shaped' vessels, maté vessels and small flared neck jars. Several of these vessels with an appliqued creature on them also seem to be stylized squash or gourd forms, since they are lobed at the shoulder break. (Figure 5 illustrates some of the lobed maté jar forms).

The bottom half of the vessel is usually slipped red, while the top half is either unslipped or has a wash of cream or white slip. The upper shoulder is decorated with incised patterns which are generally simply a series of parallel or zigzag lines with punctate marks. The incised lines may be either straight or curved. Almost all of these vessels also have one or several small animal or human figures modeled in relief at the shoulder break. On these figures the head is usually rendered as the most prominent part, and this is usually placed on the shoulder point or break as a kind of ornament. Sometimes the body is also portrayed with the front paws, rear legs and tail rendered in relief. On a few vessels the animal is shown with a small indent
(slipped red) next to it, which the creature appears to be holding onto as if the indent were a net or a ball.

The small figure could be interpreted as an opossum (zarigüeya), or a monkey or a human being. I have identified it as an opossum mainly because of the shape of the face, which is rather triangular, with a pointed snout, and also because it has a red stripe down the middle of the face which is a diagnostic trait of woolly opossums (Caluromys spp.). Sometimes it is also depicted with a long tail. Opossums also have mythical connotations (discussed in the section on Animals) which may be significant for their depiction on these ceramics.

The creature which is depicted on these vessels also frequently appears with its front paws pressed to its nose, a gesture which is repeated on Chorrera vessels which represent other small mammals (agoutis or coatimundis but not opossums). Opossums seem not to be depicted on Chorrera vessels.

The human figure is more-or-less identifiably human. Sometimes appearing with a hat, a turban, or topknot on its head, it seems to be 'carrying' the jar, with its arms stretched back and supporting the upper part of the jar.

Two very similar lobed jars of this type can be found in the Lathrap et al. (1975) catalogue where they are identified as a sloth, and as an effigy vessel in the shape of a human (Lathrap et al. 1975: 353, 392). A jar and one of the carinated bowls have Cerro Verde given as their provenience.

Like the red-on-white jars, some of the carinated bowls from San Isidro also have the little modeled opossum/monkey/man's head on them. Very similar bowls, although without the creature's head, are identified either as Machalilla or as Machalilla-transition in the Lathrap et al. catalogue (see Figures 208, 209, 211, 273). These seem to conform fairly well to Lippi's proposed carinated bowl sequence linking late Valdivia and early Chorreroid rim forms through Machalilla at La Ponga. Figure 6 shows a comparison of Machalilla and Chorrera carinated bowl forms.
Tubular Jar

This is a barrel-shaped ceramic vessel with slightly restricted mouth. Tubular jars can be human effigy vessels or they are classified as Engraved Red-on-White Vessels.

Bowl

This is an open ceramic vessel with an unrestricted neck and rim. It may be either a simple or composite vessel of two types: 1. with a convex base, and 2. with an annular base. (Figures 6, 7, 38, 39, 40) The pedestal bowl is an open ceramic vessel with an unrestricted neck and rim of two types: 1. with a small pedestal, and 2. with a large, heavy pedestal.

Bowls are one of the most common types of representational vessels in the collections. Their forms vary between flat bowls with curving sides and an annular base to steep-sided bowls with no base.

Bat Bowls:

A bowl modeled in the shape of a bat with its wings outstretched is the most diagnostic bowl form for the Late Formative era (Figure 37). Many bowls have a small applique figure on them (sometimes this is identifiable as a bat, sometimes it looks more like the opossum/monkey/man figure described above) at a point in the rim where two curves meet. Some bowls have just a modeled head (adorno) at this point, with either modeled hands and feet or nubbins at points in the rim where they would be appropriate. Not all of the bowls which I have identified as bat bowls have bats modeled on them but they are nonetheless representations of bats. I have identified these bowls by their forms, or by similarities of the incised, abstract designs on their interiors. Bat bowls and bowls in the shape of a half-gourd are quite often combined into one bowl form. Usually they also have nubbins to indicate the head and/or claws of the bat, when they do not have nubbins there is an indentation to indicate where the nubbins or head adorno would have normally been placed.

Bowls are difficult to seriate, not least because some of the bowls with either small or large pedestal bases have the same kinds of incised decoration
as bowls with convex bases. There does seem to be some regional variation, for example I have identified one particular type of pedestal-base bowl from the Río Chico area. Sometimes a series of bowls can be identified as coming from the same workshop, and these bowls may have been interred in the same grave-lot or in adjacent grave-lots. I have simply separated the bowls by shape and whether or not they have pedestals, and hope that eventually closer analysis will yield a better seriation.

**Round bat bowls:**

Bowls with carinated rims and with small adorno figures are probably transitional from Machalilla. Bat bowls with small adorno figures on them and a convex base seem to be closely related to these. Many of these bowls are quite elaborate, with 'carved' rims and the adorno figures on them, like the ones on the lobed pots, could be bats, opossums or monkeys. Most of these bowls have convex bases but the rim always imitates the shape of the bat's wings. They have a pair of incised lines (sometimes with incised dots at breaks) around the rim of the bowl and are often either slipped a dark red colour, dark brown or smudged black (Figure 37).

**Square or oblong bat bowls**

Bat bowl shapes may be quite square or oblong and very few of this type have the adorno figures, although sometimes they have a small bat's head which is situated at an indentation at the top. More often they simply have small nubbins to represent the head and feet of the creature. These very fine bowls are still recognizable as bat bowls but they have become essentially abstract renditions of the bats which they are supposed to represent. Many of these seem to come from the Río Chico area and some also have iridescent painting on their interiors. Most of these bowls have convex bases, although a few have annular bases or small pedestals.

A series of bowls of this type from the Banco Central collections which were probably made in the same workshop have the same incised "Ladder" design on their interiors. Three of these four bowls were sold to the museum in the same year (1981). This indicates that they may have been in the same
grave-lot, or they may have been found together in a cemetery. One of these bowls is modeled as a gourd-form with two interior compartments separated by thin wall (Figure 8).

Bowls with small pedestals first appear in the Machalilla sequence, these either have direct rims or flat rims with the interior forming a sharp angle with the interior of the bowl. On the Late Formative bowls the rims are either direct and slightly flaring, or they are flat and form an angle with the interior.

Bowls with a large and heavy pedestal base are probably contemporary with bowls with small pedestals. One heavy-pedestaled bowl with a small adorn on it is a flower-shaped bowl and there are two others which may be related to it: 1. a flower-shaped bowl with nubbins between the petals which has no pedestal base and 2. a small-pedestaled bowl with a flower design incised on its interior (Figure 38).

Some of these bowls retain their "Machalilla" forms, such as two bowls with heavy pedestaled bases which have the characteristic flat lip and rim. The second bowl has nicking along the edge of the rim. These bowls have the same incised design on the pedestal and on the interior respectively, which is also found on the pedestal of a bowl with a tiny snake modeled along the interior of the rim (Figure 68). Another bowl which is presumably from the same series is modeled in the shape of a gourd with a wall separating two interior compartments.

Heart-shaped bat bowls:

Heart-shaped bat bowls may have a convex base or a heavy pedestal. Generally they have a modeled bat's head or a nubbin to indicate the head at the point of two curves on the rim. A few of these bowls are decorated with iridescent slip on their interiors.

Late Phase Bowls

Late Phase Bowls from the San Isidro area are either very shallow bowls with wide flat rims (flanges), or large plates with wide flat rims and a heavy pedestal. Both of these types of bowls seem to be transitional to Jama
Coaque. The bowls still have what is usually considered a 'Chorrera' attribute, in that they are representational and have a shallow bowl with a wide flange or rim attached. This flat rim is modeled to represent a water creature (turtle, ray), a bird, or sometimes a bat.

The second type of bowl is actually a plate with a wide rim and usually has a geometric design on the rim. These seem to be very similar to the bowls identified as Muchique I (Jama Coaque) flat rim polypod bowls in Zeidler and Sutliff (1994: 124, Figure 7.7) but these have a pedestal rather than polypod legs. The vessels identified as compoteras in Zeidler and Sutliff (Figure 7.8) are also similar to these plates. The plates from San Isidro have similarities in their geometric designs to a group of Engraved square and flaring vase vessels. These vessels are identified as later Late Formative ceramics because of the blue-green postfire paint on them, which is similar to the postfire paint on Jama Coaque vessels and figurines.

**Limepot:**

This is a miniature vessel which was probably used as container for mineral lime.

**Neckrest:**

This is a box-shaped oblong or rectangular vessel with a restricted neck, with or without a human effigy on its top.

Vessels which have been identified as head or neck-rests in the Ecuadorian Late Formative seem to have no counterparts in any other ethnographic or archaeological assemblages from the Americas. They were identified as neckrests by Lathrap et al. (1975: 37), where they were compared with Chinese ceramic pillows to which they bear a striking resemblance. The main difference between the Late Formative and the Chinese neckrests seem to be the size of the hole which perforates the vessel. In the Chinese neckrests, the hole is small and usually invisible, and is possibly intended simply as an escape-valve for hot air which is trapped in the body of the hollow vessel while it is being fired. In the Late Formative vessels, the hole
is larger and is usually at the top of the vessel, where it functions as the resting-place for the occipital protuberance at the back of the skull.

There are 12 vessels which can be identified certainly as neckrests and 2 others which may also be neckrests. Vessels which are called 'neckrests' (descansanuques) quite often depict anthropomorphic figures lying on square or oblong platforms. These figures may be depicted lying either on their stomachs or on their backs. All of the figures wear a smooth cap or a turban and earspools. The figures which are depicted lying on their stomachs have their arms drawn up in front of the chest, sometimes with the chin resting on the hands.

Seven vessels portray human figures, five lying on their chests with their legs outstretched and two lying on their backs. (Figure 21) These neckrests also have square-ish or rectangular platform bases, some of which have incised decoration on their sides similar to that found on the torsos of figurines. These vessels portray figures which have the turban headdress which I have described for Chorrera figurines. They also have the characteristic 'coffee-bean' eyes, and all have rather prominent (even 'beaky') noses. Their legs are pushed out from the interior of the vessel and have modeled feet. Hands and arms are indicated on the figures lying on their backs but not necessarily on the figures lying on their chests.

Two vessels are simply rectangular, one has an incised and punctate design on its sides and the other is plain. One neckrest represents a house, with a modeled rectangular support at the apex of the roof to support the head. Two neckrests represent armadillos. One of these has a rectangular support for the head, which it carries on its back (Figure 70).

Because neckrests may have either square or round holes, some of the vessels which I have classified as maté vessels may be neckrests as well. A good candidate for this classification is an effigy vessel identified as a young coati in Lathrap et al. (1975: 93, no. 350, see Figure 63). The coati is shown in a reclining position, with its right hind leg curled over its left hind leg and its front paws to its nose. A similar vessel, although this is a human figure, is
the effigy vessel shown in Valdez and Veintimilla (1992: 48, no. 28 from a private collection), which also depicts its subject as reclining, with its legs in the same configuration as the coati. Both of these vessels are lower and flatter than most matés, and would comfortably support a human head.

**Spoon/Dipper**

This is classified as a simple round vessel with a long handle.

**Square Vessel**

This is a square or oblong box-shaped vessel which may be from the Jama Valley. It is decorated with the Engraved "Vine" pattern, Incised and Punctate design or elaborate incision and negative resist patterns.

**Flaring Vase**

This is a flaring jar with no break between the body and the neck or rim, or with an elongated flaring neck and rim and squat, round body. It is also probably from the Jama Valley.

**Snuff-preparation mortar and snuffing tray**

The vessels illustrated in Figure 94 are paired, which already makes them distinctive, since paired vessels are fairly uncommon. They are slipped a dark reddish colour. The first two vessels are pedestaled plates with an attached bowl. Both plates mimic the bat-wing form of many of the bat bowls, which here is depicted as a pointed wing tip on the lip of the plate. A pedestaled bat bowl with almost exactly the same form on its rim may have been made by the same potter as the pair. These plates have use-wear marks, especially in the middle of the plate where hallucinogenic substances such as portions of dried plants (perhaps yagé vine segments or bark) for preparation in liquid form or as snuffs may have been ground prior to ingestion by participants in the ritual. Interestingly, as is usual with paired vessels, one is very slightly larger than the other, perhaps because perfect symmetry of proportion was not desirable.

The second pair of vessels are pedestaled plates combined with a sort of hollow bridge attached to the rim. They are also slipped a dark reddish brown with fire-clouding. These plates are slightly deeper than those discussed
above (they are more like bowls). They do not seem to have use-wear marks. The lip of the plate is flat and round, and the bridge forms part of the edge of the plate. The hollow bridge is probably a snuffing tablet. It is unclear why the snuffing tablet should have a hole through it but perhaps the hole was meant to accommodate the right hand while the left hand steadied the plate when it was brought up to the face for snuffing.

Other Artifacts (Not Vessels)

Snuffing tube
Snuffing tubes are sometimes difficult to identify in the collections because they may be mislabeled as 'ocarinas' (small clay whistles with one or more holes in them to change the pitch) or as 'pendants.' Figure 93 shows a snuffing tube with a caiman's head and a round bulb-end, as well as another with a series of overlapping faces, each face sharing an eye with the face next to it. Snuffing tubes were probably used for inhaling hallucinogenic snuffs made from the seeds of Anadenanthera peregrina (known from the Orinoco region), or from the bark resin of one of several species of Virola trees (Viho in the Colombian Vaupés region and the Venezuelan Upper Orinoco, and also used by the Yanomamo where it is called epená or ebene) (Schultes and Hoffman 1980: 122-152).

Stool
Shaman's stools have been identified in Valdivia contexts by both Lathrap (1976: 47), and by Stahl (1984: 174-176, illustrated from Meggers et al. 1965: 103). Figure 92 also illustrates a Chorrera snuffing tube made from a human arm-bone which depicts a male personage sitting on a four-legged stool with carved ends depicting an animal, possibly a jaguar. A five-legged ceramic stool is also illustrated in Valdez and Veintimilla (1992: 61, Figure 45), where it is identified as being stylistically transitional from Chorrera to Bahía.

Musical instruments
Several kinds of musical instruments are depicted in Chorrera ceramics. Most of them are wind instruments -- panpipes, flutes, and
trumpets -- and small whistles or ocarinas are also modeled effigies. Two rattles, one with a handle, the other a modeled effigy of a warty gourd, exist in the Banco Central's collections in Guayaquil. Wind instruments and rattles or maracas, while important to most of the rituals and ceremonies of the peoples of the Northwest Amazon, are particularly important as ritual instruments for shamans. (Figures 49, 81, 92, 96)

**Mirror handle and obsidian mirror**

Several examples of ceramic pieces which are probably mirror handles exist in the Banco Central collections, as well as a number of obsidian mirrors without their mountings. The example in Figure 97 seems to be a late version, as it also has blue and yellow postfire paint on it. The handle is very thick and heavy, and the entire piece must have been even more so with the oblong piece of obsidian which would have been mounted in the hollow space in the widest part of the handle. The incised decoration on this handle is quite elaborate and it includes the punctate patterns, spirals, triangles and diamonds which are the hallmarks of the Chorrera decorative tradition for especially significant objects. Of the two other mirror-handles which were recorded, one still has its mirror but its handle is broken, and the other has a very small pointed handle - it may have been mounted in a longer handle or perhaps on a staff, possibly one made of wood or some other perishable substance. The mirrors themselves are oblong pieces of obsidian of approximately 9 to 10 cm in diameter, with a depth of about 3 cm in the middle of the piece. The obsidian is usually a deep black colour. The mirror is polished flat on the front and chipped fairly crudely into a convex shape on the back where it fits into the handle. Mirrors were (and still are) used as power objects by shamans in the Lowlands. The obsidian used to make the mirrors was probably imported from the still-active volcanic highlands.

**Crystal Necklace**

In her excavations at Pirincay in the Paute Valley, Karen Bruhns located one of the possible sources of rock crystal beads which have been found on the coast. Forty-five of these workshops were discovered in
contexts ranging from the initial occupation of the site to the surface (Bruhns in press), and Bruhns suggests that the beads were possibly being traded for other luxury goods from the coast, such as Spondylus shell ornaments. The crystal was probably also traded for specialized coastal-made ceramics during the Late Formative, such as a bowl with iridescent painting and a large carinated plate which are illustrated in the article (Bruhns et al. 1990: 227, 230).

An example of a Chorrera crystal necklace (Figure 97) has a central pendant with a flared end. Crystals such as this one would have been especially sacred for shamans in the past, as they are today for Kógi shamans.

**Vessel types and forms found at both Río Chico and San Isidro**

Vessel types which are probably found at both Río Chico and San Isidro include: bat bowls (pedestal bowls with bat adornos and/or nubbins), monkeys, including whistling bottles with adornos and modeled effigy vessels, gourd-shaped vessels, including modeled effigy vessels and half-gourds. The zoomorphic vessels include: birds: quail, duck, owl, parrot, fish and shrimp, animals: coatis, dogs, felines, snails (marine and land), anthropomorphic types are all represented in both areas, and house vessels.

Vessel forms which are found in both regions include: early lobed bowls (with adornos), bowls (with or without annular bases and pedestals, of the pedestal bowls, all forms except the special Río Chico bat bowls (see Figs. 41 and 42), flared-neck jars, maté jars, whistling bottles, square vases, and donut-shaped whistling bottles.
### Table 5
**Figurines**

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### Table 6
**Musical Instruments**

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Effigy Vessels: Descriptions and Vessel Counts

Descriptions of Human Effigy Vessels

I have created a typology of the Human Effigy Vessels as a beginning towards deciphering some of the meanings which may have been intended by the ancient potters who made the ceramics. Unfortunately, because we do not know which vessels were found together in context we cannot discover what meaning was attached to the configuration of vessels in the burials.

The figures can be separated into categories depicting particular characters which I have named for the activities in which they are engaged or for their distinguishing characteristics. These include: 1) the Burden Carrier 2) the Water-jug Carrier, 3) the Afflicted Man, 4) the Tranced Personage (squatting or reclining) including Neckrests, 5) the Person holding an Implement, 6) the Bound Person, 7) the Acrobat, 8) the Flute-Player, 9) the Dwarf, 10) the Twins, 11) the "Man in the Reed Boat", and 12) the Woman holding a Small Figure. These vessels have parallels in the later and related Regional Development ceramics from the coast of Ecuador, especially in the more elaborate Jama Coaque and Bahía ceramics. Very similar figures are also depicted in both Northern Coastal Peruvian (Katz 1983) and West Mexican ceramics (Benson and de la Fuente 1996, Kan 1989), and their appearance in the ceramics of the Moche-related Vicús culture from the Piura Valley is especially significant (Katz 1983, Makowski et al. 1994).

Many of the figures portrayed are depicted in what I have identified as a "sacred" or ritual body position. They are squatting, often with one hand placed on a knee, or they are seated, with one leg crossed over the other, and on a few vessels they are portrayed lying on their sides (reclining). They are also often shown holding an object such as a flute, a staff, or a vessel.

The 'coffee-bean' eyes which characterize nearly all of the Chorrera anthropomorphic depictions may be intended to portray someone with their eyes affected by the ingestion of hallucinogenic drugs — puffy and swollen to slits or half-closed.
There are a number of vessels which depict human beings as diseased or afflicted in some way. These include a diseased man, two similarly afflicted men reclining on their sides, and a figure with an enormous phallus.

The figures which are not portrayals of "ordinary" human beings are 'special' in some physically unalterable way. These portrayals include dwarves (associated with the underworld in Lowland Amerindian cosmology), and acrobats, perhaps those afflicted with a congenital diseases (see discussion under The Acrobat in the chapter on Iconography). Diseased or deformed people may have been seen as somehow special or "marked" by pre-conquest peoples. Elizabeth Benson(1972: 68) writes, "There was a general tendency in pre-Columbian cultures to think that a certain magic resided in diseased or deformed people,... Among the many types of creatures represented on Mochica pottery are diseased, deformed, or mutilated human beings." These figures indicate that they must have been powerful iconic figures in the cosmology of the region. Contortionists, dwarves, and figures with other afflictions may also portray ritual practices which were widespread in South America.

The Burden Carrier

The Burden Carrier bears her burden -- the entire vessel -- on her back, suspended by a tumpline from her forehead. Although most of these figures do not have the primary or secondary sexual characteristics which are found on some of the other figures, I have characterized this personage as female. I base this assessment partly on ethnographic evidence, since the main burden carriers of most societies native to the Amazon are women, but the figures are actually rather asexual. The figure of the burden carrier is the earliest identifiable character in the pantheon, a point which may also account for her asexuality. As a mediator between the world of the dead and the world of the living, as well as her association with coca (which has an inhibiting effect on the libido), the burden carrier may have been considered to be asexual, and depicted as such.
There are 14 examples of the Burden Carrier in the sub-assemblage. The earliest versions of this personage are depicted on flared-neck jars and on "shoe-shaped" or plain maté jars. These vessels are usually decorated with red slip on an unslipped background but they may also sometimes simply be polished grey clay. One early depiction of this personage is portrayed with the body as the jar. It has a modeled head with a kind of topknot, and the modeled arms are raised to support the tumpline on the head, which encircles the jar at the shoulder. Legs and feet are also modeled. (Figure 12). Three small lime pots (Figure 13) also depict the Burden Carrier. These portray a squatting figure which is modeled in-the-round on jars with slightly restricted mouths.

Later depictions on whistling bottles and jars with restricted necks are slightly more elaborate but depict essentially the same figure. A very finely made whistling bottle in the Banco Central - Quito depicts a person squatting. A tumpline supports an oval-shaped burden which is carried on the figure's lower back. The figure's hands are raised to support the tumpline at the temples. The eyes are slits and the nose beaked, this is reminiscent of the Acrobat, or the Man in the Reed Boat (see below). Hanks of hair, or pieces of textile material hang down behind the ears on either side of the chest. The entire vessel is slipped red, except for the tumpline which is cream-coloured. Both the body of the figure and the tumpline have very faint negative-resist designs on them, these are especially visible around the armpits and between the legs. The negative-resist design between the legs on the lower torso is a spiral motif.

The Water-jug Carrier

The water-jug carrier is identifiably female by her prominent nipples. The figure holds a flare-necked jar on the left shoulder and the right hand is placed on the knee. A whistling bottle has the spout, the jar, and the head and neck (to about the collarbone) slipped red with the rest of the vessel slipped in a cream or buff/yellow colour. Another water-jug carrier figure has no spout, but the rim and neck of the flared neck jar which they carry, the
cap or hair, and half of the body are slipped red, the other half of the body, face and arm are slipped in a buff colour. The earspools and lips are also slipped red. The right arm is rendered in relief on the torso. (Figure 14)

**The Afflicted Man**

The Afflicted Man has a squat, massive and globular (perhaps somewhat bloated) body. He is depicted either squatting or lying on his side and he also appears to be hunchbacked. He is wearing a smooth cap (which sometimes has a flat or rolled brim). He has one ear-lobe which is elongated and which has been torn or cut. His face might be smooth or wrinkled and sometimes he has boils or warts on his forehead. His eyes are deepset, with swollen lids, and they are often set asymmetrically in his face. He has a split lip which might be a hare-lip or is perhaps caused by a disease such as leishmaniasis (*uta*, Lathrap et al. 1975: 98). He often has a skin disease which is indicated by rocker-stamping all over his body, or by punctates, or by incised circles with punctates inside them, which I suggest might indicate open sores or buboes (see also section on Toads in Animal Vessels). He has a clubfoot and "sabre shins" and usually one withered arm (though not always).

There are five (5) vessels which depict the Afflicted Man. Two of these depict the man lying down or reclining. (Figure 89) (There is a very similar representation in the archaeological exhibit of the Casa de la Cultura in Quito in the 'Bahía' section). One example of this type of vessel depicts the man with a spout in the shape of an outsize, erect penis. The affliction depicted here might be elephantiasis. (Figure 15)

A Moche/Vicús figure illustrated in Katz (1983:155) portrays a personage very like the Río Chico afflicted man with slightly different details such as his clothing and the objects which he holds in his hands. Otherwise, however, the figure is very similar. The vessel is described by Clifford (1983: 155).
"This effigy stirrup spout bottle is modeled in the form of a seated man wearing a cape with a collar and a conical roll-brimmed hat. His eyes are deep-set and have heavy brows, his cheeks are wrinkled or scarred. A deep groove in his upper lip represents a hare-lip. In his right hand he holds a dipper and in his left, what probably is a melon or a rolled-up mat. The stirrup spout end connected to the figure’s back is threaded into his sash. Betty Benson describes such vessels as Vicús Moche style. It is an interesting variant of a subject shared between Moche and Vicús wares.” (Clifford 1983: 155)

A Moche IV effigy jar of a dwarf in the same collection also has a hare-lip (Plate XXIX Clifford 1983: 155).

Afflicted personages of the same type also appear in the ceramics of the Colima culture of West Mexico. An effigy vessel representing what appears to be virtually the same figure as the Río Chico afflicted man is in the Proctor Stafford Collection at the Los Angeles County Museum of Art (Kan et al. 1989: 46). The figure has a globular, somewhat bloated body, swollen-shut eyes which are set crookedly in his face, a split earlobe, and a dent in his stomach to represent what may be an umbilical hernia. His legs and feet are also misshapen and may be clubbed. His hair or hat is represented in exactly the same way as the Río Chico man. He holds one hand behind his head and the other in front of his chest with an unidentifiable object in it. He does not, however, have the skin diseases or the warts which are represented on the Río Chico man.

The Tranced Personage

Five vessels and one figurine depict an anthropomorphic figure who is either sitting with crossed legs or squatting on its haunches. (This total does not include the three figurines with crossed legs which I have called, "Woman holding Small Figure" nor does it include the vessels representing the "Afflicted Person," which are also depicted in postures which I believe to be indicative of a figure in trance).

The figurine is seated crosslegged, with the left foot placed on the right calf. The left arm is straight, and the left hand rests on the left inside knee.
The right arm is held with the hand in front of the face just below the chin. The figure wears tube ear-spools and a helmet. (Figure 27)

Two similar examples, possibly a pair, of the Person in Trance are portrayed on whistling bottles. (Figure 28) The figures are depicted squatting, with the arms held in front of the chest. They hold their heads tilted upward. The eyes are slits, the mouth slightly pursed. The first figure is wearing ear-spools and its headdress or hair is simply a cap with an undulating edge over the forehead. The second figure has holes through the ears (perhaps for feather decorations) and a smooth cap with a band and a brim.

Some of these vessels depict the figure sitting cross-legged, with the right leg crossed over the left, or the left leg crossed over the right. Sometimes the head is tilted, with the chin up or down on the chest, and the face is usually composed into a serene expression. The eyes are squeezed shut to slits, or are wide open with the pupils clearly visible. The arms are held clasped in front of the chest, or resting on the knees with the arms akimbo.

**Person holding an Implement**

The Personage holding an Implement is represented on four vessels, two of which are a pair, another which is very similar and probably comes from the same workshop and a fourth which portrays the same figure in a different style. (Figure 16)

All of these figures have bulbous, globular bodies. They wear a helmet or a smooth, flat cap with a small, flat brim and circular ear-spools. These figures have the left hand on the knee, with the right hand holding an axe or a staff which is resting on the shoulder. The faces on three vessels have similar slit eyes, beaky noses and small, pouting mouths. The incised and painted designs on each cheek are the most important part of these depictions. The designs may represent either paint or tattoos, and they are the same on the pair, and are similarly executed but slightly different on the third vessel.

**Bound Personage**
The Bound Personage is modeled with his hands behind his back (around the body of the jar) and his left ankle crossed over his right. He has prominent nipples and his penis is shown as a nub. He wears a flat, smooth cap and ear plugs. On the second vessel the figure has the hands tied together behind the back and the legs stretched out in front of the body with the feet and heels together. He wears a flat, smooth cap with a band around the rim and sectioned ear plugs.

The Bound Personage is represented on two Chorrera vessels, and also on a Jama Coaque vessel which depicts the personage in exactly the same attitude but with more detail in the clay modeling. The Jama Coaque depiction wears a rope around his neck and bands restrain his arms and wrists. He is skeletal. His legs are at odd angles to his body, suggesting that he is either in an extremely uncomfortable ritual posture, or that his legs are broken. (Figure 17)

The Acrobat

The acrobat is depicted in one of two ways. Two vessels portray the figure in a backbend, with the head facing outwards and the the arms and legs splayed. The figure may also have its arms crossed with its head resting on them, the rest of the body is drawn up into a backbend, with the legs bent over the head and the feet touching the top of the head.

The Acrobat is represented on three vessels. The first vessel is quite elaborate. The chin rests on folded arms in front of the figure, with the legs swung up and over and resting on the top of the head. The figure wears a belt and leg bands (essentially a truss) which are incised and slipped a buff colour. The legs are decorated with dark red slip with negative resist diamonds along their length. The hat is a smooth, flat cap with a rolled brim and with circular red baubles hanging off it on the forehead. There is a round, flat applique bauble at the front of the hat and the figure has prominent ears with eartips. The area around the mouth is slipped red, with a thick line extending down the chin and onto the jawline.
The other two vessels represent the acrobat engaged in a backbend. One figure (Lathrap et al. 1975: Figure 84) is depicted on a flared-neck jar. The figure is rather squat and heavy-set. It is shown with its body arched, the feet facing frontwards and the hands facing backwards towards the head. The figure wears a simple truss or belted loincloth, beaded bracelets on the wrists, a beaded necklace or collar, earspools, and a round nose-jewel. (Figure 19)

**The Flute Player**

The flute player has a generally bulbous body, and sometimes looks hunchbacked. The whistle which they play is usually a flute, although there are a few examples where the flute is a set of panpipes instead. The flute is held to the lips or below the chin.

There are five examples of the flute player in the sub-assemblage. Two of these figures wear a distinctive headdress with long flaps hanging down on each side of the head which may mark them as female, like the burden-carrier described above. Female dwarves (see below) also wear this kind of headdress, as do female figurines in the Jama Coaque tradition.

Two of the double-chambered whistling bottles in the collections have an adorno of a small panpipe-playing personage instead of the usual bird on the top of the chamber opposite the spout. (Figure 91)

**Woman holding a Small Figure (see Figurines)**

Three figurines represent a woman holding a smaller human figure in her lap. (Figure 22) Two are seated cross-legged, the third (which is a slightly different style) has her ankles crossed, with one foot on top of the other. All three figurines are shown wearing smooth caps or headdresses and earspools and all three have prominent breasts or nipples. The two similar figurines have incised triangular motifs on their upper torsos. One of these also has the incised decoration on her calves just below her knees. The small figures which are held in the laps of the figurines do not seem to be depictions of babies but rather of adults. The figurines of a woman cradling a small figure in her lap have elicited commentary from Tom Cummins and Olaf Holm (1989: 11) who contend that,"In figurines similar to the Chorrera example
coming from the Regional Development period it is clear that a small male or female adult figure and not a baby is being held in the lap.”

**Dwarves**

Dwarves are depicted standing, sitting cross-legged, or squatting, like the other anthropomorphic vessels. They are usually portrayed as having hunched or humpbacked bodies, with pendulous bellies and breasts. They wear tall, rather globular headdresses, sometimes with the addition of small protruding horns, dangling tassels, or with a flap hanging down from the headdress on each side of the chest. All of them wear earspools, and sometimes they also wear necklaces with a triangular amulet attached. Other anthropomorphic vessels and figurines may also portray dwarfs but only the ones which are easily identifiable as dwarfs because of their disproportionately large heads, as well as the characteristic squat shape of the bodies of congenital dwarfs, are included here. (The approximate head-to-body ratio which I have used to identify dwarf vessels is about 3:1).

Ten (10) vessels portray dwarves, and six of these are identifiably female by their breasts. (There are several more of these dwarf vessels in the Banco Central Museum Reserve in Quito, and in the Casa de la Cultura archaeological exhibit but I do not have accession numbers for these pieces). Two of these vessels depict dwarves seated cross-legged, with the right leg over the left. Both of these vessels show the dwarf wearing a special headdress, with flaps and horns respectively and both are depicted grimacing, with downturned mouths and rather pained facial expressions. (Figure 23)

**The Twins and the Man in the Reed Boat**

The Twins are paired male figures which are depicted together on the same vessel. The "Man in the Canoe" is depicted as a head and face which is part of a canoe-shaped vessel. Although I have examined very few examples of both of these figures I consider them sufficiently important both stylistically and mythologically to include them as categories here.

There are only two vessels (Figure 25) which portray the anthropomorphic figures which I have called the Twins. They are also
depicted in rather different styles. One vessel is a bowl in the shape of a boat, with two nearly identical figures, each carrying a paddle, standing at the prow and stern of the vessel. The second vessel is a whistling bottle on a square platform with an annular base. This vessel depicts two figures squatting back to back, which are joined at the waist. Each figure has a split headdress with pointed ends. Both figures have sharp, beaked noses and wear earplugs. The figures' bodies and heads are slipped red on a background of cream or beige slip.

The "Man in the Reed Boat" is so-called because the figure's face and body seem almost to be merged with the curved shape of the body of the vessel which almost certainly represents a reed boat (caballito del mar) of the type still used today on Lake Titicaca in Highland Peru, which is also depicted on Moche ceramics. The whistling bottle probably represents the same figure as is found on the elongated, pointed "shoe-shaped" jars with a person's face on the lower rim (Figure 26).

**Anthropomorphic hollow maté jars**

These are effigy jars depicting persons lying on their backs, with the head, arms and legs punched out from the interior of the vessel which have the maté jar form (some with small rims, others without rims). Some of these vessels have a stylistic relationship to the very early jars with small modeled heads of opossums on them -- they have an unslipped area with incised and punctate marks below the rim, with the red slipped body of the jar, as well as the red-slipped rim, and the head, arms and legs are the lobes of the jar. All of these figures also have similarly modeled heads and faces, as well as simple collars or necklaces which are represented with incised lines. (Figure 29)

Some of the hollow maté jars and the anthropomorphic neckrests seem to be very similar to each other. The feet and legs on a hollow maté jar (Lathrap et al. 1975: 35, Figure 43) are modeled in the same way as the feet and legs of two neckrests which represent figures lying on their stomachs. Their faces and hair/headdresses are also similar. In addition, the incised and
techniques and is rendered in a similar style as the decoration on the platforms of three of the neckrest figures.

**Tubular Effigy Jars**

Three jars of similar form (taller than wide with a slightly restricted mouth with a direct rim) with similar facial characteristics (long slit eyes, straight mouth, small nose) are also not classifiable in the categories which I have delineated above. The first seems to be a depiction of a coca chewer who also has small horns on his forehead. He holds his hands in front of his chest and his legs are tucked up so that the soles of his feet face each other. The other two figures have crossed arms, wings or horns on their heads, one holds its hands in front of its chest, the other has its arms wrapped around its body. (Figure 31, bottom)

**Chief on his Seat of Power**

These vessels are whistling bottles. Each has a similar adorno of a figure with an elaborate headdress or a turban on them. The figure is seated, with its hands on its knees, either on a small round platform below the vessel's spout, or on a round area which has been delineated by incised lines. One of these vessels (in the Banco Central in Quito) has a monkey seated on the platform instead of the personage. The incised decoration on these vessels varies from hatched triangles to rectangular lines with punctates inside them (usually these are rather sloppily rendered). I have examined four of these vessels but there are five others which are similar in the Banco Central-Guayaquil collections and in the Banco Central-Quito collections. These vessels may actually be of the later Bahía style but are classified as Chorrera in the collections. (Figure 31, top)

**Salaite style vessels**

Lenticular-shaped whistling bottles with a turbaned anthropomorphic head and neck, and with incised decoration just below this adorno on the body of the vessel are said to come from Salaite, Manabí. There is one in the Banco del Pacífico collections which has been compared to bottles from the Paracas period (Lathrap et al., 1976: 57, see photo caption). There are 21 of these vessels in the Banco Central-Quito collections and perhaps a dozen in the Banco Central-Guayaquil collections. (Figure 32)
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Descriptions of Animal Effigy Vessels

Mammals

Agouti

The agouti is described as, "a large ungulatlike rodent with long slender legs, a large rump and a strongly humped back." (Emmons and Feer 1990, 208) (Figure 60). They also have a rounded muzzle and small rounded ears, and sit erect to eat, holding the food in their paws. There are 3 vessels representing agoutis, all are whistling bottles.

Anteater

There is only one vessel which represents an anteater in the collections. The animal on this whistling bottle was correctly identified as *Tamandua* species, or the lesser anteater, in Lathrap et al. (1975: #355) whose "vested coloration" is its identifying characteristic. The animal is also depicted in a characteristic pose, as, "When alarmed they stand upright on their hindlegs, rear up and slash with the foreclaws." (Emmons and Feer 1990: 32)

Armadillo

Armadillos are identified by their small heads with pointed muzzles, and by their bodies which are covered with 8-10 movable bands of bony armour. Only two (2) vessels depict armadillos. One of these is a neck rest (Figure 70) and the other is a maté vessel which might also be a neckrest. The neck rest is decorated with stripes on the body to indicate the overlapping plates of the shell, and with punctates on the flat top of the vessel.

Bat

In Chorrera ceramics bats are represented almost exclusively on fine polished bowls which have a small modeled bat's head (or a head-and-torso) at an indented point on the lip which then curves gracefully out on each side of the head to represent the wings (Figure 37).

In the categories of bat bowls I include four types: 1. Bat bowls with small modeled heads (identifiable as bats), 2. Bat bowls without modeled heads, with nubbins and/or indents where the head should be, 3. Other types of
vessel (not bowls) with modeled or abstract bats on them, and 4. Related bowls, with a small modeled creature on them (possibly an opossum), also sometimes with double figures of a small modeled creature, and also the gourd-bowl types.

One noteworthy characteristic of almost all of these bowls includes the curved incised parallel lines on the everted rim or just below the interior edge of the rim. This is described as the 'double line break' in Lathrap et al. (1975: 82) and is compared to a similar decoration on "...Olmec-associated pottery in Mesoamerica, where the double line break probably represents the mouth of the caiman deity." This design is not dissimilar, however, to the incised parallel lines shown on the bowls in the subsequent photos on the same page, which are described as the "harpy eagle crest design." All except the most abstract of the bat bowls in both collections have these parallel lines - with or without the break - as do the bowls with small modeled animals on the indentation or on the rim (i.e. snakes).

Deep, thin bowls with a flat, everted rim and heavy pedestal bases may have been made slightly later than bowls with small modeled figures on them. One bowl (Figure 38, upper left) which has characteristics of both types depicts an eight-petaled flower form (see discussion below) on a heavy pedestal base with a small creature with a long tail modeled on the rim. These bowls have an incised triple parallel line design on the interior or on the pedestal-base. One of these bowls is divided by a thin wall which separates two half-circle compartments on the interior. Both interior compartments show signs of use-wear.

The divided gourd-shaped bowl has the same form as another double-compartment bowl without the pedestal. This compartmented bowl also has a small cup attached to the top of the dividing edge of the compartments. The cup is extremely eroded (possibly with use). The interior of this bowl is decorated with parallel incised lines which are reminiscent of bats in flight - looping lines with jagged breaks which become double parallel lines with hatchmarks between them. I have called this design the "Ladder" pattern. It
is also found on the interiors of two oblong bowls (possibly a pair) which both have two incised looping parallel lines with jagged points at intervals and hatched lines in-between them, as well as the familiar double-incised line on the interior rim. One of these bowls also has a small, modeled opossum or bat creature on the top indentation at the rim with a hole in its middle, the other bowl has a hole but no modeled animal.

Some bowls have the winged form in abstract. These bowls almost always have a smooth, oblong shape, nubbins at an incurving in the rim at the top and bottom, and almost all have an incised (and sometimes iridescent) design on the interior. All have two parallel incised lines along the inside edge of the rim. The design on the interior is usually based on parallel swirling lines which end the swirl or spiral in the bottom interior of the bowl. A particularly spectacular example of this kind of bowl is a pair of small, very fine bowls in the Banco Central collection with intersecting spirals rendered in iridescent paint on their interiors (Figure 40).

**Río Chico Bat Bowls**

A distinctive series of thin-walled bat bowls may be identified as a pedestal bowl from Río Chico. These bowls are fairly deep, round bowls on a tall pedestal. All have either a small modeled bat with wings modeled on the lip, or nubbins, or both. Nearly all also have a broad line of red slip on the exterior shoulder, and at the base of the pedestal. The interior is usually decorated with iridescent paint in abstract designs, and the paint is usually worn away at the very bottom of the bowl. The exterior pedestal, which is the defining characteristic of these bowls, is decorated with deeply incised sickle-shaped parallel lines and nested triangles or diamonds, and has deeply incised punctates in the areas delineated by the lines. (Figs. 41 and 42)

**Coatis**

There are 13 vessels which depict coatis. Coatis are identified in the ceramics by their long narrow flexible snouts with the tip slightly upturned. They may also have prominent pale spots above, below, and behind the eye. Ears are small and rounded and the tail is long and tapering (not prehensile)
with alternating dark and light bands on it. The forefeet are slightly webbed, with long claws.

A particularly beautiful example of a pair of whistling bottles (Figure 61) emphasizes the importance of this animal in the Chorrera symbolic pantheon. The animals are shown squatting with their front paws on their knees. Both bottles (also illustrated in Valdez and Veintimilla 1992: 46) have zoned iridescent painting in broad V shapes on the chest and back, and iridescent (finger-tip painted) dots on the rest of its body. The vessels are smudged black under the iridescent paint and are polished to a brilliant shine. The iridescent paint is almost invisible on one vessel, probably from erosion since this bottle is also broken.

A whistling bottle depicting a coati (Figure 62) which might possibly have been paired with the howling coati illustrated in Valdez y Veintimilla (1992: 54), depicts the animal posed with its tail curled up in front of and over its left shoulder. The animal has its mouth open, as though it were howling or blowing. The creature is depicted with a striped tail which tapers towards its end, like a coati's. The 'hands' of the creature are clearly depicted with long, rather thin fingers and the characteristic membranes between the fingers are clearly visible (Patzelt 1980). Although coatis do not generally howl, they do make explosive woofs when alarmed (Emmons and Feer 1990: 138).

Another vessel (Figure 63, lower right) also depicts a coatimundi with its tail curled up over its left shoulder. The animal here has been mis-identified as a kinkajou in a museum catalogue but it is clearly a coati (Lathrap et al. 1976). (A kinkajou *Potos flavus*, also of the raccoon family, looks rather cat-like and has a flat face with hardly any snout, and it also has a prehensile tail). The creature depicted here has one paw held to its long, mobile snout, and its other paw on its tail. It also has (uncoloured) iridescent paint in incised zones on its body and tail.

Three vessels, including a vessel in the exhibits of the Museo del Banco Central (Casa de la Cultura) in Quito depict animals which are probably
young coatis lying on top of gourds. All depict a little animal with the mobile upturned snout, rounded ears, and tapering tail of the young coati. The vessel in Quito definitely depicts a coati and it even has the characteristic markings around its eyes (Figure 63, top right).

**Deer**

The deer in Chorrera ceramics are probably white-tailed deer (*Odocoileus virginianus*). Deer are identified in the ceramics by their small, rather triangular heads, well-developed antlers, cloven hoofs and small pointed tails. They may also be identified by their distinct facial markings: the chin is white, muzzle and nose are dark brown bordered by a pale band, and the eye is surrounded by a pale ring (Emmons and Feer 1990: 162-163). There are three representations of deer in the collections.

**Dogs and Felines**

Dogs and Felines (Figure 65) look very similar in Chorrera ceramics but dogs are distinguished from felines by their straight tails, since felines have tails which curl at the tip. Dogs and felines are identified by their short square-ish muzzles and sharp teeth, although dogs may not always have teeth. Felines also seem generally to have a line of red slip painted around their mouths. Both species look very similar in outline and are depicted on the same vessel forms (matés and whistling bottles). There are 3 dogs and 6 felines in the collections.

A rather striking whistling bottle depicts a small dog with distinctive dark-on-light markings which stands with its front paws thrust forward. A very similar effigy is rendered on a maté vessel, although here the modeling and details are very similar, although the maté vessel is simpler in design. These vessels are probably from the same workshop. Another dog vessel (which in fact could be mistaken for a feline since it has fangs incised on its muzzle, although it has a straight tail) is also a maté vessel.

**Guinea pigs**

Guinea pigs are represented on a double-lobed whistling bottle (Fig. 91) and a limepot. Guinea pigs are identified by their small, round heads, paws
and tail. The guinea pigs on the double-lobed bottle are also identified by their colouring, which is white with distinctive red patches all over the body. **Monkeys**

Monkeys form the most numerous group of zoomorphic ceramics, apart from bats (44 total). They are associated most often with bottle gourd-shaped whistling bottles, although they are depicted with other gourd-shapes as well. This group of ceramics can be divided into two main categories: 1. monkeys depicted in-the-round, and 2. monkey adornos perched on top of a bottle shaped like a gourd. Monkeys are also depicted on miniature whistles or ocarinas.

Monkeys are identified by their round heads with slightly protruding muzzles, round eyes, human-like arms and legs and rounded bodies. Sometimes they also have tails. They are often depicted squatting or standing like human beings, but sometimes they are shown in more characteristically monkey-like poses such as climbing trees or grooming themselves. (Figure 50)

Particular species of monkeys are identified by their markings or postures. Squirrel monkeys are identified by the distinctive markings on their faces, which are a mask around the eyes and a black muzzle (see Figure 44). Capuchin monkeys have a wedge-shaped 'cap' of darker fur at the top of the head. Woolly monkeys have very round heads and distinctively protruding muzzles and may stand on their hind legs supported by their tails (see Figure 45 and 46). Howler monkeys have large heads, swollen throats and red gold coats. They are also depicted howling or whistling (Figure 47 and Lathrap et al. 1975: #356).

Five whistling bottles depicting woolly monkeys with very similar modeling, paste and slip, and spout forms seem to have been made in the same workshop or household. They might also have been found in the same tomb. (Figure 46) All of these monkeys are shown squatting with their hands and arms on their knees. They wear collars and discs which look like amulets, perhaps to indicate that they were pets or sacred creatures.
A special series of monkey bottles probably illustrate parts of a myth-cycle and may have been made in the same workshop. The incised decorations on all of them are very similar. The incised volute motif on them also seems to be important. (Figure 48) The bottles depict:

1. A monkey’s torso on an amulet-shaped, globular, concave area on the body of the vessel with its right hand, palm outwards, raised, as if in salute, and its left hand, palm inwards, on its chest or stomach. The monkey’s head, arms and torso are modeled in relief. The outside of the amulet-shaped depression is outlined by two parallel, incised lines with four sets of double, incised spirals (two above and two below) extending out from the exterior line. The whistling bottle itself is gourd-shaped (probably *Lagenaria*), with a shortish flaring spout. The handle is rounded and probably represents the monkey’s tail because it curves in on itself where it is attached to the spout. The whistling hole is at the base of the handle just above the monkey’s head. The colour of the entire vessel is dark red;

2. A monkey lying facing outwards and head downwards, arms and legs splayed, with its tail forming the handle of the vessel. The half-circle area on the top half of the pot which surrounds the monkey is enclosed by a fine incised line with both single and double spirals, and incised pairs of parallel lines extending from it. The whistling bottle is gourd-shaped, with a shortish flaring spout. The vessel is dark red;

3. A small modeled monkey (head is missing) seated on a round platform at the top of a globular jar. The tail forms the handle of the vessel and is attached to a shortish straight and slightly flaring spout. The whistle-hole is underneath the monkey’s chin. The area on the shoulder of the vessel is decorated with two parallel incised lines with spirals extending from the lower line all around the shoulder. Below these is an incised scallop design with the triangular spaces between the scallops framing the spirals. The vessel is dark reddish brown and highly polished;

4. A monkey (-man?) with head and body modeled in relief on the side of the bottle, one (incised) hand extends up over his head, the other is grasping the inside of a depression on the side of the bottle. The depression has a hole in it and the same kinds of spirals as on
pot #3 extend from an incised line around its perimeter. The spout has a lip which is carinated at the bottom and the handle is flattish on the top with a slight bulge on the bottom nearest the spout. The whistle-hole is at the base of the handle. There is a similar pot in the Banco Central collection in Quito (Laurie Beckwith, personal communication 1995). The monkey on this vessel is grasping a depression with a hole in it, but a worm emerges from the hole.

**Skeletal Monkeys**

Two vessels and an ocarina depict skeletal monkeys (Figure 49). Hickmann (1986) also comments on the monkey ocarina, which depicts a monkey grimacing, with its hands held to its head at about the level of its ears. It wears a turban which might be made from a gourd. A whistling bottle (also described above) depicts a monkey, perhaps a monkey-sage or shaman dispensing wisdom or counsel. The monkey's head, arms and torso are modeled in low relief on a flat, teardrop-shaped area which is similar to the amulet or collar worn by other depictions of monkeys. The amulet-shaped area is surrounded by incised parallel lines which have two pairs of incised spiral lines on each side of it. The monkey wears a forbidding expression on his face (his eyes are hollow and mouth downturned, he is skeletal), and he holds his right hand upward, with the palm facing out. The left hand is placed upon his stomach. The handle of the vessel is curled to represent the monkey's tail. A wide-mouthed flared neck jar depicts a skeletal-faced monkey with its hands supporting its chin. The head is modeled and the arms and legs depicted in relief merge into the vessel walls.

**Rodent/Mouse**

The rodent on a donut-shaped whistling bottle is unidentifiable except as a rodent for its round eyes, rounded head, and characteristic "hand"-like paws. The mouse is also identified as a rodent for the same characteristics but it also has a long thin tail.

**Peccary**
The peccary is represented only on a limepot, where it is identified by its pig-like snout, fairly large ears and short, stubby legs.

**Squirrel**

The squirrel is identified on a single whistling bottle by its short ears, round head and prominent square teeth, as well as by its characteristic pose of sitting on its hind legs. It also carries its front legs up near its chest, a gesture which is also characteristic of this animal.

**Rabbit**

The rabbit is identified on a single whistling bottle by its long ears, round head and squatting position.

**Birds**

**Ground-dwelling Birds**

Several species of principally ground-dwelling birds are represented in the sub-assemblage. Wood quail are identified by their short, stubby bodies and small, rather blunt beaks. They are also identified by their markings and the short ruff on their heads. Woodquail are represented identifiably on two vessels, and both are decorated with negative painting. Another vessel which may possibly represent a pair of quails may also depict two ducks, since they have flattened beaks. The birds are nestled together on a square platform decorated with a step-fret design. A third vessel which represents the same problem of identification is a maté vessel with an incised design on it. This seems to have been made in the same workshop as vessel #2. (All of these vessels shown in Figure 51)

A curassow (probably *Nothocrax*) (Figure 52) is identified on a vessel which depicts it with a lump on the lower throat, this may be intended to represent a wattle of some kind, though no wattle appears on any of the birds illustrated in Delacour and Amadon (1973). It may be intended to represent the engorgement of the bird's throat when it makes its booming cry. A definitely identifiable representation of a curassow is depicted on a lime-pot from the Chacras site (Rio Chico). Here, the distinctive crest is reproduced, and the colouring of the vessel (black smudging on red slip) is accurate. This
vessel likely represents *Nothocrax* or the Nocturnal Curassow. A third vessel which may represent a curassow is a bottle with slightly crude modeling but with an extra 'piece' above the bill which is probably a representation of the ridge above the beak of Salvin's Curassow (*Crax salvini*) or perhaps the bill knob of the Great Curassow (*Crax rubra*), both of these birds range throughout Ecuador (Delacour and Amadon 1973: 193, 213 Map 15). There are four curassows in the collections.

Tinamous have short, chunky bodies, with relatively long necks and small heads with short, sharp bills. They appear almost tailless (Janzen 1983: 572). (Figure 52) There are two tinamous in the collections.

**Water Birds**

The elegantly modeled whistling bottle which probably represents a Muscovy Duck has a brownish-red head and breast, a buff line on the breast, and gray slip on the wings (Figure 51, E). Ducks are identified mainly by their flat beaks, as well as by their compact bodies, which are represented with smooth plumage. A pair of ducks with their heads facing in opposite directions are also depicted as a whistling bottle on top of a round platform. (Vessels very similar to this one, with the animals depicted facing in opposite directions, are also found in West Mexican ceramics, especially Colima).

**Wading Birds**

Wading birds represented on Chorrera vessels are not easily identifiable to the species level. One bowl, representing a modeled bird as part of the cut-out rim depicts either a stork or a heron. A vessel which might depict a jabiru stork with its sharp, heavy beak and long legs, but which might equally well be a pelican, with its wide, and rather broad, paddle-like feet, is represented on a rather large whistling bottle from the Cucuy-Chone area (Figure 53).

A pair of very fine whistling bottles may depict ibises. These are depicted as incised drawings on either side of the bottles. The birds are identified as ibis by their long, curved beaks and long legs with bulbous joints at the knee. The polished red slip on the bottles also supports this conclusion.
as red ibis have bright red feathers. (These bottles are also part of a special series of ceramics which is discussed in the section on Design). (see also vessels in Figure 78)

Gulls are represented on three whistling bottles in the collections. Gulls are identified by their round heads with sharp, but rather broad beaks and their pointed tailfeathers. One vessel depicts a gull sitting on the back of a creature which seems to be a giant shrimp, perhaps representing the predator-prey relationship between the two species. The other two vessels representing a gull show it sitting on what is probably a tri-lobed gourd (see discussion under Triangle gourd). (Figure 82, B)

Two small but finely made maté vessels which represent a pair of small sandpipers are from the Central Bank collections. (A third identical vessel exists in a private collection in Quito). Sandpipers are identified by their long beaks, which droop slightly at the tip and by their small, compact, relatively tailless bodies (Janzen 1983: 557). In breeding plumage sandpipers' "crown, ear coverts, and scapulars are bright rufous, and the breast is heavily streaked with brown." (Janzen 1983: 557) On these vessels the birds' bills seem to be attached to a round object on their chest, which may perhaps represent a small snail or other marine creature. (Figure 54)

Omen Birds

Barn owls are identified by their white faces with a slight ruff around them. A whistling bottle depicting a Barn Owl shows it perched on top of a lobed gourd (Figure 55). Juvenile Spectacled Owls, identified by the black 'mask' around their eyes and beak, are depicted on a maté vessel and two whistling bottles (Figure 56). Interestingly, another 'masked' bird depicted on a Chorrera vessel is the Laughing Falcon. The single representation of this bird shows only its head clasping a snake in its beak, a characteristic attitude for this raptor (Lathrap et al. 1975: Fig. 74, #375). Spectacled owls differ from the Laughing Falcon in that on the owl the black mask of feathers extends to the area around the beak, whereas on the raptor only the feathers around the eyes are dark.
Identification of the Harpy Eagle is problematic. It is usually identified by its heavy, hooked beak, plumed crest, and tail feathers. Its head does seem to be represented on Chorrera vessels but only as stylized incised drawings and never as the three-dimensional effigies that one would expect as representations of such a powerful symbol. On the whistling bottles upon which it is depicted it is represented oddly, as if the potter had never seen a real one and was illustrating it in imitation of something else. The Harpy Eagle representation is also inverted on one vessel, and its beak is inverted on another (Lathrap et al. 1975: 91, #325).

Birds of the parrot family are not easily identified to the species level. They are mainly identified by their heavy beaks, rounded heads and by their small, round eye surrounded by bare skin. They also have rather heavy bodies and fairly long tails. These birds are depicted on four whistling bottles. Two are probably macaws, and two bottles depict what may be a smaller parrot, and a parakeet perched on a tri-lobed pacae pod (Inga sp.). (Figure 58)

Only one vessel depicts a woodpecker. The bird is identified here by its prominent red head ruff, as well as by its stance - perched with its beak against the spout of the vessel, which represents a tree-trunk. (Figure 59)

Reptiles and Amphibians

Frogs and Toads

There are six Chorrera vessels with toads and frogs on them. Two whistling bottles and a limepot probably depict frogs. Frogs are identified by their smooth bodies, with short front and long back legs. One vessel depicts a pair of frogs which may be copulating. On this vessel, the larger animal (usually the female) forms the body of the vessel with the other perched on top of its lower back. (A very similar Chimú vessel is illustrated in Rafael Larco Hoyle's (1965: 76) treatment of Peruvian 'erotic' art). The spout of the vessel extends out of the top of the larger frog's head, with the strap handle attached to the nose of the smaller frog. (Figure 66) A second vessel depicts a large frog sitting on its haunches. It has a flattened front and chin, which are slipped red. 1975: 463)
*Bufo marinus* toads may be identified by the prominent poison glands located under the skin behind their eyes. A comparison between the toad depicted on a Chorrera bottle and a photo of a live *Bufo* toad (Figure 67) indicates that this identification is probably correct. A pair of modeled bowls are also identified as toads by the folds of skin or glands behind their protruding eyes. (These vessels may also be transitional to Guangala).

**Snakes**

Snakes are identified primarily by their small heads and long sinuous bodies without legs. There are sixteen representations of snakes in the collections, but some of these are simply abstract patterns which may be identified as being derived from the Bushmaster or Fer-de-lance's skin markings (Figure 68). Both species of snakes have rather distinctive dark triangle or diamond-shaped markings on a pale grey, tan, or brown background. Sometimes the triangles also have a blotch in their centres. Bushmaster or Fer-de-lance snakes are represented on a number of flared neck jars from Río Chico (Figure 69) which are rather similar to some jars representing the "Bahía Monster," a fantastic creature with serpentine characteristics. (Figure 104)

Representations of snakes can generally be divided into two categories: 1. an appliqué relief of the whole body just below the rim of a pedestal bowl with a small modeled head, and 2. snakes which are generally modeled in relief on a large flared neck jar. On these jars, the snake has an incised pattern of differently coloured nested diamonds representing the body and a modeled head.

Flared neck jars similar to type 2, with modeled heads as adornos, and polychrome zoned incised decoration on them also sometimes depict creatures besides snakes. These vessels include one with an alligator or lizard's head, another with an unidentifiable animal's head (possibly an opossum) and a third with a depiction of a coati on it.

Four bowls have snakes on them. Two pedestal bowls combine iridescent patterns with modeled snakes which coil around the tops of the
bowls. The bowl from Río Chico exemplifies the type. It is a wide-mouthed, rather heavy bowl with three sets of evenly spaced double nubbins and a small modeled snake’s head which ends the continuous spiral of its body (rendered in low relief) inside the bowl about halfway to the bottom. Each of the nubbin sets and the snake’s head are connected by a graceful horizontal incised line with upwards curving ends to just below the rim. The iridescent paint is applied in an attached diamond pattern, with smaller diamonds in the centre, in the area just above the snake’s body and just below the rim of the bowl. In the bottom of the bowl at the centre, three sets of attached spirals form a swirling pattern which is rendered in negative red slip (this was probably iridescent but is now eroded). The exterior of the bowl, including the base and support, are slipped red as well. The second bowl is smaller and not quite as elaborate, although it too has a modeled snake’s head and its body is rendered in relief just below the rim. It is decorated on its interior with simple iridescent dots. (Figure 68)

Two bowls have small snakes on the rim but do not seem to have iridescent painting. (Iridescent paint, especially the pink type, is rather fugitive and it may simply have disappeared on these vessels). One bowl has a snake rendered in relief which links the interior and the exterior of the vessel on the wide scalloped rim. The snake’s tail curves into the vessel, its’ body forms part of the carinated interior edge of the rim and its’ head peers over the outside of the scalloped rim, which is marked with incised parallel lines. The pedestal base is also marked with a set of curved parallel lines. A second bowl has seven sets of nubbins spaced at equal intervals on the lip. The nubbins are connected by parallel incised lines. The snake in relief on the interior takes the same form as the bowl described above but it has modeled bulging eyes. (Figure 68, A)

Turtles

Turtles are identified by their domed shells, with small heads, feet and tails protruding out from underneath them. Land tortoises have rather
higher domed shells than marine turtles. There are four turtles in the collections, including a representation on a limepot. (Figure 71)

**Crocodilians**

The crocodilians represented here on two limepots are probably meant to be caiman but they are rather stylized. They are identified by their long straight and rather flat heads, with teeth indicated along the length of the head. Crocodilians seem to be represented only on miniature vessels such as limepots, or on snuffers for inhaling powdered hallucinogens (Figure 93, C).

**Lizards**

Lizards and iguanas are identified by their long square snouts and long tapering tails. Iguanas may also be identified by their characteristic ridge of skin along the backbone. There are four vessels in the collections which have appliqué representations of lizards on them.

**Fish**

Fish are identified in general by their tapered body shape, fins, tail fins, and scales. They are the most difficult of all the animals to identify to the species level. Surprisingly, there are actually very few fish in the collections (only 13). There seems to be no particular type of vessel which is intended to represent fish as they appear on both bowls and whistling bottles, and one neckrest is a fish effigy.

Marine species which have been identified are represented by three vessels. The first is a whistling bottle which is a representation of the bumphead wrasse (*Bodianus eglanceri* fam. Labridae)(Figure 64). Wrasse apparently have elaborate pre-spawning displays and sleep at night either buried in the sand or enclosed in a mucous cocoon, which the fish produces (e.g. *Bodianus* species). On this vessel the wrasse seems to be represented as encased in its mucous cocoon.

Another whistling bottle, represents a puffer or burr fish (fam. Tetraodontidae). Pufferfishes may be found in shallow salt water and also in fresh water. When they sense danger they inflate themselves by swallowing either air or water, often doubling their normal size. They are also covered
with a highly poisonous mucous, which can kill any animal which attempts to eat them (Merlen 1988: 17). The fish represented here is decorated with the same polychrome design as the representations of fer-de-lance and bushmaster snakes on flared neck jars. This may indicate that it is intended to depict a poisonous fish -- the puffer. This interpretation is supported by the rounded sides of the vessel as well.

A pedestal bowl might possibly represent another poisonous fish, the scorpionfish, also called "brujo" ('witch,' Scorpaenidae). (Figure 64) The scorpionfish is bottom-dwelling and very difficult to see, thanks to its 'cryptic' colouring. It is covered with spines, and the sharp dorsal spines have venom glands. "A distinctive feature is the bony ridge below the eye and across the cheek." (Merlen 1988: 17, 52) A ridge is depicted on the face of the fish on this bowl.

A whistling bottle in the Banco Central collection represents Discus symphysodon Aequifasciata, a striped freshwater fish which may be important because of its stripes, which make it look like a (coral) snake. Another whistling bottle which represents a pair of cichlid fish and a bottle which may also represent a cichlid are also among the freshwater fish species identified. Cichlids are common freshwater fish and are often the most frequently eaten fish. Patzelt (1980) illustrates two species (Cichlaurus festivus and Aequidens rivalatus) which he says are called 'umasapa' or 'bighead' (cabeza grande) by the Quichua of the Ecuadorian Oriente. (Figure 64)

**Invertebrates**

**Crabs**

Crabs are represented on four vessels. Two vessels are simply the shell of the creature, inverted so as to create an empty container. A whistling bottle in the form of an extremely realistic freshwater crab has the strap handle and whistles ending just over the claws, at the front of the vessel. (Figure 72) A crab is also represented on a flared neck jar which has a depiction of a stylized Harpy Eagle on it. (Figure 57).
Shrimp

Nine vessels in the sub-assemblage depict shrimp. Shrimp are identified by their segmented bodies, which taper to smaller segments at either end. Vessel types are almost equally divided between whistling bottles and maté vessels, except for a bottle in the Banco del Pacifico collection. One vessel depicts a large shrimp with its head raised. Its prominent spiny rostrum (a sort of serrated horn on the top of its head) and its large front claws make it look rather aggressive. (Figure 72) All of these vessels are slipped red except for one, which has a buff-coloured head. One whistling bottle represents a pair of shrimp joined at the abdomen.

Mollusks

Species which can be identified among the modeled effigies of mollusks include both marine and land gastropods. Very few of the mollusks which are depicted in the ceramics are bivalves, one exception being a bowl modeled in the form of a Spondylus shell which might also be construed as a half gourd. Spondylus are important because they are very large oysters with a red or purple band along the inside edge of the shell. Spondylus princeps and calcifer are restricted in their range to north of the Gulf of Guayaquil along the Ecuadorian coast, but were used to make offerings and as jewelry everywhere in the Andes, including highland Peru.

Among the marine snails which have been identified are: Malea ringens, a kind of conch shell, Strombus, another conch, Fasciolaria princeps, a pair of large spiral shells with knobs growing on them, Anadara grandis a lime pot depicting a rather squat shell with a wide top, Nautilus, a bottle depicting a shell with a flat coil, and possibly Polinices a whistling bottle with negative resist spots possibly depicting a marine snail with spots on the shell. The Ecuadorian land snail (Strophocheilus popelairianus) is also a possibility for some of the vessels representing large round shells with spiral ends. (Figure 73)
Spiders

One rather crude grey bowl depicts three spiders with round modeled bodies and their characteristic eight legs.

Grub

Palm grubs are a favourite food of many of the Tropical Forest peoples of South America. This whistling bottle depicts a grub, identified by its body, which is comprised of equally sized segments and rounded ends. (Figure 74)

Unidentified marine creatures

Five bowls may represent stylized turtles or fish or perhaps a combination of the two. These are round bowls with a lip and shoulders extended with applique pieces of clay which have been modeled to resemble horizontal, rather fantastic fins. The 'head' of each bowl has a bulb or spike attached to the top of the flat area. These bowls may be intended simply as metaphors for "aquatic creatures", or even "aquatic creatures with wings" since other bowl of this type possibly represents a ray (with adornos of lizards on two sides).
TABLE 9
GOURDS AND OTHER FRUITS VESSEL COUNTS

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<thead>
<tr>
<th>All Gourds except Limepots</th>
<th>Number</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td><em>Lagenaria siceraria</em></td>
<td>49</td>
<td>25</td>
</tr>
<tr>
<td>Double-lobed bottles</td>
<td>19</td>
<td>9.7</td>
</tr>
<tr>
<td><em>(Lagenaria)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Half-gourds</td>
<td>17</td>
<td>8.7</td>
</tr>
<tr>
<td><em>(Crescentia)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lobed <em>Cucurbita maxima/moschata</em></td>
<td>23</td>
<td>11.7</td>
</tr>
<tr>
<td>Triangle <em>(C. maxima)</em></td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Cyclanthera pedata</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Warty types</td>
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<td>0.5</td>
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<tr>
<td>Unidentifiable gourds</td>
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<tr>
<td>Red-and-white lobed*</td>
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<td>4.1</td>
</tr>
<tr>
<td>Other fruit/nuts (not gourds)</td>
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<td>7.1</td>
</tr>
<tr>
<td>Total</td>
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</tr>
<tr>
<td>Lobed</td>
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<td></td>
</tr>
<tr>
<td>Unid gourds</td>
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</tr>
<tr>
<td>Total</td>
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<td>3.1</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100</td>
</tr>
</tbody>
</table>

*These are not the same as Red-on-Unslipped lobed vessels. They may represent some type of gourd or perhaps a root vegetable such as achira *(Canna)* or manioc *(Manihot esculenta)*.
Descriptions of Hollow Fruit Effigy Vessels

*Lagenaria siceraria* (Bottle Gourd)

*Lagenaria* fruits come in many different sizes and shapes but the two forms which are most characteristic are the form from which the gourd takes its name, the bottle gourd, and the "kettle-race" form which is basically spherical, with no neck. It is also slightly flattened vertically, with dimples in the areas of the blossom and stem scars (Lathrap 1974: 121). Bottle gourds usually have a spherical globular body with a long neck but this form can be altered by mechanical means, such as by tying a rag or a rope around the middle of the gourd (Speck 1941).

Whistling bottles from Rio Chico and San Isidro depict many of the possible shapes of bottle gourds. The most common form is a simple globular bottle, which tapers upwards, with a spout and strap handle. Most of the bottles have one or two whistles and some are extremely finely made with very thin walls. This type of vessel is usually not decorated, although the brown or reddish-brown slip is usually polished. (Figure 75)

Some of the finest and most elaborately decorated whistling bottles have the basic bottle gourd form. Two in particular deserve mention here. First, is a bottle which is decorated with the iridescent paint which characterizes the Chorrera period in Ecuador (Figure 76). It has very thin, hard walls and a finely made spout and strap handle. The design on it is geometric, consisting of an incised band around the top of the bottle, with parallel lines forming four incised triangles below the band. Iridescent paint fills the space between the incised parallel lines and finger spots of the same paint fill the space between the band and the triangles. The whole vessel is smudged black under the iridescent paint and is highly polished to a mirror shine. Secondly, a vessel described as a "Gourd-shaped whistling bottle" (Lathrap et al. 1975: 35, Figure 44, and Figure 63, bottom left) is a slightly elongated bottle gourd with zoned incised parallel lines and triangle decoration and black smudging over iridescence.
About 35% (67 of 195) of the gourd-form vessels are whistling bottles which are representations of *Lagenaria siceraria*. This figure does not, however, include many plain slipped and polished whistling bottles in the Banco Central collections which were not recorded (on my recording forms), or even greater numbers of plain polished flared neck jars which are probably derived from the same imitative forms. Approximate counts for these are: Whistling bottles = 395 vessels and Jars = 571 vessels.

Some of the most distinctively decorated vessels and series of vessels are based on bottle gourd forms, and many of the anthropomorphic and zoomorphic vessels also seem to be essentially *Lagenaria* forms.

Double-chambered or double-lobed whistling bottles also represent *Lagenaria* forms. These bottles are composed of two compartments, one which has the spout at the top and the other which generally has a small *adorno*, usually in the shape of a bird, or sometimes a human, at the top.

The compartments (really two bottles or lobes) are joined by a strap handle and a hollow bridge or tube at the bottom. The *adorno* has the whistle holes in it. These bottles were definitely made to whistle when they contain liquids, as no sound is produced when air is blown into the spout. Crespo Toral (1966: 11, fig. 11) again illustrates the whistling technique with a double-lobed whistling bottle containing liquid, as the vessel is tipped sideways, the liquid forces the air out through the airholes in the *adorno*, thus causing the whistling sound. As the bottle is tipped the other way, air enters through the spout, thus beginning the process all over again. The use of this kind of whistle was demonstrated to me by a well-known Guayaquil society matron and avid collector of pre-Columbian ceramics. Taking one of the double-chambered vessels in her collection, she filled it halfway with water and tipped it back and forth, producing an eerie hooting noise.

A rather amusing example of the double-chambered whistling bottle in one of the museum collections in Guayaquil illustrates how skilled Río Chico potters were in constructing this kind of vessel. The bottle depicts two small guinea pigs dancing face-to face. The little animals are very finely modeled.
and painted with red patches on a creamy beige background. One of the creatures is missing its head but the interior whistle mechanism is still intact. This side of the vessel also had a spout to the right of its head (this is also missing). The other creature's head is an ocarina, with four holes: one on the top of the head, one below the chin and one below each ear. (This vessel is reminiscent of similar vessels from the Colima culture of Mexico which also depict small animals apparently dancing vivaciously face-to-face). (Figure 91)

The bottle described above is the only example that I have come across in which each lobe is modeled as a separate animal. One bottle, from the site of La Horma near Río Chico, has a modeled human figure substituted for one of the lobes of the bottle. The standing figure is wearing a smooth turban or helmet, is playing an ocarina or pan-pipes, and has two whistle holes. All other similar bottles have an adorno of a bird, an anthropomorphic head only, or a little modeled man. There are three examples of bottles with a little modeled man playing the flute or pan-pipes on them from the Río Chico area, and one purportedly from San Isidro, although the style is very similar to those from Río Chico. Double-lobed bottles from the San Isidro area seem to be more variable, and squarer, in the forms of both lobes and spouts. (Figure 91)

*Crescentia cujete* (Calabash)

The fruit of wild Crescentia trees is small, perhaps of six to eight inches in diameter, "but in cultivation the globular, oval or oblong fruits may reach lengths of nearly eighteen inches and be a foot wide." (Heiser 1979: 15)

*Cucurbita maxima* and *Cucurbita moschata*

One of the most characteristic forms of *C. moschata* or *C. maxima* is the lobed or segmented form. Bottles and jars which are sometimes called 'gadrooned' by archaeologists who have described them for other pre-Columbian cultures (Mexico and Peru) probably also represent either species of gourd (Deena Decker-Walters, personal communication 1996), although I am inclined to identify them mostly as *C. moschata*, based on the resemblance of the spouts to the peduncles of this gourds (see Figure 84). I
have called them "lobed bottles" here and discuss aspects of their symbolic significance later. There are 19 examples of multiply-lobed vessels, not including the Red-on-Unslipped lobed vessels (96 examples) which are a particular type of ware. Truly 'gadrooned' vessels as I understand the term are actually not very common but among these are examples of both whistling bottles, maté vessels, as well as limepots. (Figure 74)

Warty maxima or moschata gourds are represented on three ceramic artifacts in the collections. (Figure 63) One of these is a rattle with a whistle. (Figure 81) The gourds represented on these artifacts could be Lagenaria, which also has a warty form (Heiser 1979: illus. p. 78), but the occurrence of archaeologically verifiable botanical remains of C. maxima in Peru strengthens the case for their probable cultivation in Ecuador.

Triangle

Triangle is a type of C. maxima which is an Australian cultivar that may have roots in South America (D. Decker-Walters, personal communication 1996). Triangle's fruit is described as, "unlike any other variety in shape, being trilocular and thicker-fleshed at the base of the lobes." (Tapley et al., 1937: 46).

Triangle gourds are represented on four bottles, two of which depict this gourd-form with a bird, possibly a gull, perched on its top. (Figure 82)

Cyclanthera pedata

A final variety of cucurbit deserves mention here. Cyclanthera pedata, or the squirting cucumber is a fleshy fruit with spines on it which is rounded at one end and tapers to a point at the other. This cucurbit is identified on two pedestal bowls and a maté jar (Figure 83).

Cyclanthera pedata may also be represented in a stylized way on a number of jars in the collections. These vessels were described to me as 'shoe-shaped toasters,' possibly for toasting maize, by the museum staff at the Banco Central museum. This function may be correctly surmised, since some of them show soot-blackening. I counted 82 of these vessels in the collections (some but not all are included in the final count of Red-on-Unslipped
Vessels). Most of them are rather crude, made of a greyish clay and without distinctive decoration. However, they seem to be a form of Red-on-Unslipped vessels since some also have the small modeled zoomorphic or anthropomorphic heads on them which is a characteristic of this group of vessels.

**Descriptions of House Effigy Vessels**

The seven vessels representing dwellings from the collections can be divided into two groups: 1. circular buildings with 'thatched' roofs, and 2. square or rectangular buildings on square platforms. (Figure 86 and Figure 87) The vessels in the first group represent low, circular constructions with overhanging cone-shaped roofs which look very much like the houses and temples built by the Kógi. These vessels also have bulbous additions on their tops which look like small gourd-shaped whistling bottles.

The vessels in the second group may represent temples or meeting houses. They represent imposing rectangular structures, and they are depicted on top of what appear to be square platform mounds.
Design

The basic design elements which were used on Chorrera ceramics are essentially quite simple. They consist of V shapes, diamonds (which are simply attached Vs), parallel lines, scrolls, spirals, and blobby, rather abstract flowers. These basic shapes are combined or repeated, to create all of the patterns found in the incised decoration or in one of the two special slip techniques (iridescent and negative-resist) used on the ceramics. Almost all of the incised decoration is filled in with white pigment to make it stand out against red or black slip.

The design elements which are based on V shapes include: 1) Incised Hatched Triangles, 2) "Zoned Incised" patterns which are incised lines enclosing different coloured slips, and, 3) Incised nested polychrome diamonds (the Polychrome Incised design, discussed below), and 4) Iridescent painting in basically the same patterns as the incised designs: a.) enclosed by incised lines (V shapes and spots) and b.) triangles or attached diamonds with dots.

The design elements which are based on two parallel lines include: 1) two parallel lines, sometimes including a break with a point, on the rims or edges of bowls, 2) pairs of wavy parallel lines, mainly on the bases of pedestal bowls, 3) the "Ladder" pattern, or two incised horizontal parallel lines enclosing vertical parallel lines, on the interior of bowls but also sometimes found on early heavily carinated Machalilla/Chorrera transitional vessels. Designs incorporating sets of curved parallel lines are also found, but rarely, examples of these are, a turtle (Figure 71), and a stone spindle-whorl depicting a snake.

The design elements which are scrolls are sometimes just simple single line scrolls, but these are only found on certain vessels where they are associated with monkeys. Wave-like elements appear on figurines, where they are part of a more complex pattern which I have called the 'Milky Way' design. Abstract incised designs which probably represent flowers on the interiors of bat bowls but are otherwise unclassifiable are the final category.
# TABLE 10
## DECORATED EFFIGY VESSELS IN THE COLLECTIONS

<table>
<thead>
<tr>
<th>DECORATIVE TYPES</th>
<th>Whistling Bottles</th>
<th>Bottles</th>
<th>Flared Neck Jars</th>
<th>Maté Jars</th>
<th>Tubul Jars</th>
<th>Bowls</th>
<th>Pedestal Bowls</th>
<th>Lime pots</th>
<th>Neck rests</th>
<th>Spoon/Dipper</th>
<th>Square Vessel</th>
<th>Flaring Vase</th>
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<tr>
<th>RED AND WHITE SLIP</th>
<th>Wh Bottles</th>
<th>Bottles</th>
<th>Fl Neck Jar</th>
<th>Maté Jars</th>
<th>Tubul Jars</th>
<th>Bowls</th>
<th>Pedestal Bowls</th>
<th>Lime pots</th>
<th>Neck rests</th>
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</table>
Decorative Techniques

Decorative techniques can be divided into two main categories: 1. slips or paints, and 2. mechanical techniques. Only about 6% of the vessels (130 of 759 vessels) in the collections have a distinctive type of decoration on them. These types include special slipping techniques such as Negative Resist or Iridescent slip, or a particular type of incised pattern. Most of the vessels in the collections are decorated with either a red slip or red and white or cream slip. This combination of colours is important iconographically and is discussed further in the section on Design Interpretation in Chapter 5. Only 38 vessels combine both slip and incised patterns in a distinctive pattern. These are 5 vessels which are Zoned Incised with Iridescent slip, and 33 vessels which are described as Polychrome Incised. Some of the effigy vessels which are slipped a single colour also have incision on them, but except for a single type called Rio Chico Bat Bowls, which has a distinctive incised pattern on the pedestal, the incision usually consists of two parallel lines along the rim of the bowl.

Slips or Paints

Slips used to decorate the entire vessel usually range from bright red through to orange, and dark red-browns. All of these slips appear to have the same chemical components, but some types are more readily identifiable as coming from a particular region, such as the vessels from Pinpiguasi in the Rio Chico Valley which are a bright reddish orange colour. Sometimes only the interior or exterior of a bowl or jar is slipped, but effigy vessels and whistling bottles are always slipped over the entire vessel except for perhaps the base.

The second most common types of slips are cream or buff slips which sometimes range into the yellow end of the spectrum. These are usually applied in combination with a red slip, which is applied over the cream slip. There are also a very few vessels which only have cream slip on them.

There are several types of special slip or paint decorations, which also require particular firing techniques. Thirty-six vessels are decorated with
special paints or slips. These include: **Negative Resist**, a form of smudging but one which requires the application of a resist material on the surface of the pot which inhibits the black or grey smudge in certain areas, and, the so-called **Iridescent Paint**, which is also obtained through a smudging technique. Chorrera is sometimes defined by the presence of iridescent "paint" on the vessels (although iridescence is also found on later Bahía and Guangala pottery).

Iridescent "paint" is actually a slip containing iron oxides suspended in a clay matrix. It was applied to Chorrera vessels in dots and lines with the potters' fingertips before firing. The vessel was then fired and smudged in a reducing atmosphere in the kiln, thus producing a (usually) black pot with silver or pinkish iridescent decorations on it (Sonin 1977). Iridescence also appears on red-slipped ceramics at Loma Alta (Valkenier 1983), Salango, and San Isidro, and is thought to be a refinement of the technique of red-slipping on Valdivia vessels (Lathrap et al. 1975). Finally, iridescent pottery was also found at Michael Coe's excavations in La Victoria, Guatemala, leading to much archaeological speculation about communication and trade-routes between Central and South America in the Intermediate Area.

The tradition of negative resist painting in Chorrera is probably a late technique. Although some authors have argued that this should not be used as a boundary marker for the Late Formative Era, in practice (in Ecuador) it often is used to identify late Engoroy and early Guangala ceramics on the Santa Elena Peninsula, for example. The use of black resist on a buff surface seems not to have been used much until the Regional Development Period and became especially important in Guangala. A negative-resist design on the torso of a Chorrera monkey whistling bottle is similar to the design on the back of a personage holding a double-headed snake in their hands.

Bowls decorated with a distinctive negative resist design are found in both the Banco Central and the Banco del Pacífico collections. These have abstract designs on their interiors rendered in a dark brown negative resist. These bowls also show use-wear in the bottom of the bowl. (Figure 43)
Both Negative Resist and Iridescent Slip were applied to vessels in dot, line (horizontal, vertical or curved), triangle, and diamond patterns and seem to have been mutually exclusive as decorative techniques.

The colour of a vessel can also be changed by smudging, which usually requires a second firing at low temperatures (in a reducing atmosphere in the kiln) and a special kind of fuel which burns slowly. The polished black vessels are smudged, and parts of vessels might be smudged as well, for a polychrome effect.

**Mechanical Decorative Techniques**

Mechanical types of decorative techniques include Incision, Incised Punctates (of various types), Rocker-stamping (quite rare), and Pebble Polishing (also fairly rare).

Incision often combines various types of simple lines (vertical, horizontal, curved) and is sometimes part of a design which involves the use of one or more different slips. A particularly distinctive use of incision is the type which I have called Zoned Incised. Zoned incision is also combined with smudging on a series of whistling bottles, and with iridescent slip and smudging on some very important vessels. There are 12 Zoned Incised vessels in the collections. Zoned Incised designs are composed of clear, simple lines which enclose relatively large (1-2 cm) polished areas.

Six distinctively incised whistling bottles, some with small platforms with the bottle spout on them comprise the type which I have called Smudged and Zoned Incised (Figure 77) which are included in the group of Zoned Incised ceramics. This group of Lagenaria gourd-form ceramics has the same spout with a direct rim. The incised designs on the body of pot consist of two parallel lines which form the volutes, and the triangular Vs which are the hallmark of incised designs in Chorrera. The most important and distinguishing characteristic of these vessels is that they are highly polished, very hard, and rendered black through the smudging process. The series includes two vessels with incised designs on them, but without a
platform but instead with a round area below the spout delineated by an incised line.

**Polychrome Incised** ceramics are similar to *Zoned Incised* but combine incision with slips of different colours. There are 33 vessels which fit this description in the collections. Thirteen of these represent snakes, reptiles or Bahía Monsters with the **Polychrome Incised Design** on them, which consists of incised nested polychrome diamonds. This design is found on: the snake jars (Figure 69), a poisonous fish (Figure 64, top), a jar with an incised iguana, on the 4-spot jars with snakes and on the Bahía Monster jars. A similar vessel representing a snake coiled on itself reproduces the Polychrome Incised Design with Negative Resist instead. Six flared neck jars with four red spots on them also have Polychrome Incised Designs on them (there are actually 12 of these vessels). The snake jars and 4-spot jars are very similar. I am inclined to think that this decorated type was made in the Río Chico Valley because 13 of these vessels have proveniences from the region.

**Fine-line Incised** vessels are mainly whistling bottles but there is also a bowl which fits this description. These vessels are probably from the Río Chico area. Fine line Incised vessels have thinner curved or straight lines about a half inch apart which cover the entire vessel. There are 7 of these vessels.

**Incised Punctates** are found within incised lines. Punctates are usually dots, although they may also be short dashed lines or curved fingernail markings. There are 15 of these vessels in the collections. Vessels with incised punctates within incised lines are probably from San Isidro or the Jama Valley but there is insufficient provenience data on these to support this conclusion. Incised punctate designs vary somewhat, and are related to the Milky Way design on figurines (described below).

A special series of whistling bottles combine incised lines, scrolls, and punctates, the **Dragon** design. Five very fine thin-walled whistling bottles (Figure 78) with bottle gourd forms have the same design on their upper shoulder, with minor variations. The design consists of an incised ovoid
which is outlined with double parallel lines from which extend a series of evenly spaced incised volutes. On the interior of the ovoid, a wide section of evenly spaced line-punctates is ended by more double parallel lines, enclosing a space. The design is repeated on the other side of the bottle. Two of these bottles are a pair, and they are essentially the same in every detail except their size. These bottles also have two tall water-birds (possibly ibis) rendered in a slightly raised relief on each side of the vessel's shoulder opposite the design motif. On a mate vessel the combination of incised volutes and line-punctates, while not repeating exactly the same pattern as on the bottles, is sufficiently similar to include it in this group of ceramics.

The Ladder design is found on the interior of four bowls including a pair of oblong bowls with small creatures modeled at their tops, a compartmentalized gourd-bowl and a large bowl with a face modeled on the exterior. The Ladder design consists of incised curving parallel lines with jagged points at intervals. There are also cross-hatched incised lines which sometimes join the parallel lines.

Finally, a particular pattern of incised lines with punctates, the Milky Way design, is found on nine figurines, although variants of the design appear on six others, sometimes in combination with hatched triangles. This design is found on either the upper or lower torso of the figurine. It consists of incised parallel lines enclosing punctates. These curve down on each side to form a symmetrical figure which includes a band, then a volute and then a sort of step motif. Because the designs are symmetrical, the dark space left in between them forms a definite and delineated space. This space is usually delineated by the step motif and is centred either in the middle of the chest or at the genitals, and sometimes at both areas of the body.

A standing female figurine has red-slipped body-painting (or perhaps a shirt) which ends at her waist and upper arms, the lower part of the waist and other uncovered areas are left buff-coloured. The incised decoration on her upper torso is a swath over each shoulder extending into a scroll with a square end ending in the middle over where each breast would be on a
human being. An upside-down V-shaped motif curves upwards to end in a point at her sternum. The lower red slip decoration covers an area like short pants ending just above the knee. This area has incised step-and-scroll motifs on the upper part of each thigh. These are positioned so that the dark area left in between them forms a figure which is stepped so as to leave a space with a wider area at the bottom and a narrower area at the top where the pubis would be. (Figure 36, see also Figure 22, A and B)

**Distinctive Wares (Temporal and Regional)**

**Red-on-White Bowls with Quadripartite Design on Interior**

These bowls have a characteristic red-on-white/buff quadripartite design of narrow red (and sometimes black) bands on their interiors (Figure 7). This type of bowl is described by Zeidler and Sutcliff as,

"... a deep hemispherical bowl with high shoulder and incurved rim. Decoration consists of red-on-buff painting over the entire exterior and interior surfaces in a striking quadripartite design of narrow red bands. Both the interior and exterior rim exhibit a continuous band of red paint."

(Zeidler and Sutliff 1994: 115)

Organic matter under one of these bowls found in situ during excavations at San Isidro was dated to 2845 + 95 BP or 895 BC (Zeidler and Sutliff 1994: 115), a date which correlates well with the Early Engoroy Phase of coastal Guayas province as defined by Bischof (1975), and and also with my own assessment of the temporal placement of these bowls based on their stylistic similarities to Machalilla carinated bowls. This bowl form is designated as Tabuchila 1, a placement which is based on both stratigraphic and radiometric grounds by Zeidler and Sutliff (1994: 115).

The bowl illustrated by Zeidler and Sutliff has a carinated rim, but some of these bowls also have a flat rim which slopes inwards to form an angle with the body of the vessel. The rim is usually slipped red and the exterior body left buff. All of these bowls have a finger-sized indentation on the exterior of the rim which is meant to indicate the stem-scar of the gourd. The decoration of this type of bowl generally fits the description above but the
design may vary somewhat from the simple quadripartite one. Alternating sections of broad and narrow red bands on a buff background on the interior of the vessel are common, and more complex designs such as broad red triangles with the narrow end at the centre of the bowl alternating with narrow red lines, can also be found. Some bowls (e.g. Lathrap et al. 1975: 88 #296) have thinner black lines added as well. Many of the bowls have petal-like red dots (made by dipping fingertips into red slip) on the edge of the interior rim, and sometimes these have alternating thin red curved lines connecting them.

An extremely large example (approx. 35 cm in diameter at its widest point on the interior rim) of this type of bowl showed use-wear on the interior and also mend-holes for laces, others exhibit use-wear marks on their interiors as well. I suggest that these bowls may have been used for serving chicha (native beer made from maize or perhaps manioc), possibly with hallucinogenic additives, at ritual occasions.

The quadripartite red-on-buff decorated bowls are probably contemporary with a number of somewhat smaller (20.0 cm rim diameter) and less elaborately decorated bowls which also have gourd-stem scar indentations (indicated by a depression made in the rim). These bowls are much more similar to real half-gourds, in that they are simply round, with a thinned and direct rim. The decoration of these bowls is usually several large red-slipped areas on the interior, sometimes in a flower-like design, and the exterior of the bowl is also slipped red (Figure 79).

A few larger elongated teardrop-shaped half-gourd bowls should also be mentioned here. These are simple, thin-walled vessels, with a thinned lip. One end of the vessel is wider than the other, which is somewhat pointed, and the wider end has the stem-scar indentation.

**Engraved Red-on-White Ware**

Engraved Red-on-White ceramics are probably from the Jama Valley (San Isidro). All of the vessels of this type are thin-walled light vessels which have white engraved designs on red slip, which seem to have been originally
executed on leather-hard ceramics. The designs are in-filled with white. Particular vessel forms, such as square vessels, flared vases and barrel-shaped tubular jars are associated with this type of design. (Figure 100)

The **Engraved 'Vine' Design** is only found on the exteriors of three square vessels from San Isidro, although these vessels are very similar to a number of others with Engraved Red-on-White designs. Two of these vessels have small figurines on steps on them, as well as postfire blue-green and yellow paint. The Engraved 'Vine' Design consists of a rather complicated series of rectangular spaces slipped red which are enclosed by engraved lines infilled with white. Engraved dots, also infilled with white, are used to fill some of the larger spaces of the design and to mark the interiors of engraved scallops along its edges. (Figure 100)

A flaring vase from San Isidro has an incised punctate design on it with elements similar to a square vase with negative resist design (Lathrap et al. 1975: Fig. 39 #302). The phallic element which is part of both designs is exactly the same. (Figure 100)

My analysis of these vessels indicates that **Engraved Red-on-White** flaring vases and square vessels are probably all from the Jama Valley. They also seem to be rather late in the Chorrera sequence. Blue-green and yellow post-fire paint continues on into Jama Coaque ceramics but is not found in earlier ceramic cultures. Negative-resist also seems to be late (continuing on into Guangala).
Ch. 4 Ethnographic Material

My analysis of the ceramics in the database first presents the general Tropical Forest Cosmological Model which is constructed from an ethnographic sample consisting of contiguous cultures presently occupying an arc around the Amazon Basin. This model is derived from a combination of two generalized models, one constructed by Peter Roe (1982), and the other constructed for the specific purpose of analogy in archaeology by Peter Stahl (1984) for application to an earlier pre-Columbian culture which is related to Chorrera in Ecuador -- the Early Formative Valdivia culture.

Next, the possible range of material culture correlates of the Tropical Forest Cosmological Model which might be visible in the archaeological record are presented. The bias here is toward material remains which appear in mortuary contexts where possible but since descriptions of funerary rites and ceremonies are difficult to locate in the ethnographic literature, other contexts are considered as well. Material culture correlates of the Tropical Forest Cosmological Model which are visible in the archaeological record from northern South America and also parts of Mesoamerica (West Mexico) are included here.

Finally, the ceramics and other materials of the Late Formative Rio Chico and Tabuchila assemblages in the museums of Ecuador are considered. A comparison is made of the imagery and accouterments found in these assemblages with the possible imagery and paraphernalia used by Tropical Forest peoples today.

The Use of Analogy

Analogy in archaeology is a sticky problem. Much has been written about it, and archaeologists still debate its merits, even though it seems to be generally agreed that at least some use of analogy is necessary for an anthropological archaeology (Gould and Watson 1982). Two types of analogy are generally specified in the archaeological literature: the direct historical approach and the general comparative approach. The direct historical
approach is usually considered to be the stronger method, although Wylie has asserted that, "the strength of an analogical argument is indeed increased the more fully it meets criteria of number and detailed nature of similarities in form, and range of occurrence across a variety of archaeological and ethnographic contexts" (Gould and Watson 1982: 359).

Alison Wylie (1985) has argued that there has been a 'reaction against analogy' by New (processual) Archaeologists because analogical reasoning is inductive, and is therefore not conducive to hypothetico-deductive testing. In the same vein she also argues that, "In the archaeological case, however, the interesting hypotheses are precisely those that make claims about past events and processes lying beyond the accessible data." (Wylie 1985: 87) Wylie (1985: 107) also concludes that analogical inference in archaeology needs to be strengthened through considerations of relevance, using different sorts of background knowledge and through systematic testing.

This view is reiterated by Ann Brower Stahl (1993) and by Alex von Gernet (1993), in spite of their otherwise rather different viewpoints. Brower Stahl suggests methods for applying analogical models which are intended to improve our use of these models. She distinguishes between the illustrative analogy, in "which the analogy forms the basis of a narrative that fleshes out the limited material evidence from the archaeological record," and a comparative model, which "can provide useful insights into both points of convergence and dissimilarities between the ethnographic and archaeological contexts." Brower Stahl (1993: 247) stresses that to improve analogy we must critically evaluate the sources of ethnographic analogy. This includes such evaluations as where and when the observations were made, the forms of the observations, the time period of the observations, and the distinction between observed practice and statement of norms (these criteria are taken from Vansina 1989). She also acknowledges the difficulty in assessing these criteria, given the lack of background data in most anthropological sources. Finally, she points out that, "biases in source materials can easily be projected uncritically into the past" (for example, androcentric biases), and that the
units-of-analysis problem is seldom addressed in the literature (anthropological studies are usually based on a community study, and then results are extrapolated to larger units such as tribes or chiefdoms).

Von Gernet (1993) argues for credible analogies drawn from various levels on a "universality -- idiosyncrasy continuum." He believes that the identification of long-term continuities in the ideational sphere can be supported by the identification of more particular cultural continuities in a specific area or region.

My own use of a contemporary ethnographic analogy to interpret Chorrera iconography -- in other words, using 19th and 20th century mythological data collected by Western anthropologists from Amazonian Tropical Forest peoples -- is based on the premise that it is possible to carry out a general direct historical analogy. In other words, although the direct historical approach and the general comparative approach are seen as a dichotomy, I would argue, along with von Gernet (1993: 72) that, "some aspects of culture do not arise sui generis, but are vestiges of a previous heritage carried through long periods of history." Cosmological and religious thought may change more slowly than other aspects of a group's "identity" as a cultural entity. This is what von Gernet (1993: 72-73) calls, "the long-term persistence of superstructural elements (such as myths or rituals) despite significant changes in either ecology or infrastructure." Von Gernet (1993: 74) further argues that the shamanistic elements of religion in the Americas may date back to an original Paleolithic Urkultur when all humans were hunter-gatherers.

The analogy which I use here, therefore, essentially compares the general characteristics of the South American Tropical Forest cosmological model with the complex of symbols in Chorrera ceramics. In other words, I take it as a given that Chorrera or Late Formative Phase cultures, "...participated in a cosmological system analogous to the recent cosmologic present among numerous contiguous cultures in tropical lowland settings to the east of the Andes, on the western side of the Andes, and extending
northward into Mesoamerica and northeastward into the Antilles." (Stahl 1984: 18) It also, however, compares a specific cosmology, from an ethnographic group in Colombia with the complex of symbols in Chorrera ceramics. This second part of the analogy is the more problematic one for many archaeologists, relying as it does on the one-to-one fit between particular characteristics or motifs in the ethnographic literature and in the ceramics.

The intention, however, is not only to demonstrate the similarities between the two groups of symbols or motifs, but also to show the differences between them. As Wylie (1985: 94) points out, "... the premises of an analogical argument to establish a relationship of partial similarity that involves a consideration of differences as well as of similarities."

In addition, for Wylie (1985, 94), "An argument by analogy, proper, involves the claim that, given the similarities and differences specified in the premises, some specific aspects of the neutral analogy may also be assumed to be similar or, to comprise further points of positive analogy." The justification for this assertion relies on the presumption that the source-side analogy is relevant to the subject-side analogy, in that, "there are similarities between source and subject with respect to the causal mechanisms, processes or factors that determine the presence and interrelationships of (at least some of) their manifest properties." (Wylie 1985: 95)

**Historical Context of the Iconographic Research**

The use of Amazonian analogues to interpret archaeological artifacts has a long and distinguished history in South American Archaeology. John Rowe (1962) and many of his students based their interpretations of the iconography of the Peruvian archaeological culture called Chavín on Amazonian imagery. Peter Roe (1974, 1991), Alana Cordy-Collins (1976, 1977), and Donald Lathrap (1973), among others, have demonstrated that Chavín art and religion, in spite of being a highland manifestation, had their cosmological roots in Amazonia. The animals which are the principal motifs for Chavín — cayman, jaguar, and harpy eagle — are all tropical forest animals.
As well, it seems clear that the shamanistic nature of Chavín art is no longer considered to be a matter for debate amongst Andean scholars (Burger 1992).

Other Peruvian scholars have endeavoured to interpret Moche iconography by using ethnographic analogies from the tropical forest. Moche was a coastal civilization, but its iconography has also been interpreted with reference to tropical forest motifs. Elizabeth Benson (1972) and María Dobkin de Ríos (1977) both used these kinds of analogies to illuminate certain aspects of Moche iconography. Moche iconography has also been interpreted through the use of Spanish colonial historic documents by Anne-Marie Hocquenghem, who pointed out the relationships between the Inca yearly cycle and the cycles which could be identified in Moche brush paintings on ceramics. Moche iconography today is interpreted mainly with reference to ethnographic work carried out among shamans on the Peruvian coast by Douglas Sharon (1978, and Donnan 1974). Steve Bourget’s (1990, 1994) iconographic work on the Moche draws on both Sharon and Donnan (1974) and Hocquenghem, but earlier work on Chavín certainly provided much of the impetus for these later investigations.

In Colombia, Reichel-Dolmatoff (1988), Anne Legast’s (1980, 1987, 1993) and Marianne de Cardale Schrimpff’s (1989) various volumes and articles on pre-Columbian goldwork and pottery from the Museo del Oro in Bogotá demonstrate that many of the symbols (especially fauna) which were important for cultures such as the Tairona, the Sinú, and Calima were also important for Formative Ecuadorian cultures. Unfortunately, although these works are as scholarly as possible under the circumstances, the archaeological context for the gold pieces and many of the ceramics (as with Chorrera) is far from evident. In spite of the ongoing program of archaeological work funded by the Banco de República, cultural sequences for many key areas and regions of Colombia have yet to be defined precisely.

During the Formative Period and perhaps for some time afterwards, the peoples living on the coast of Ecuador seem to have been more closely allied, both culturally and ritually, with the peoples of the Colombian
Amazon than they were during later times. A number of authors (Valdez, Villalba, etc.) have pointed out that the iconography of the La Tolita culture in Ecuador and of the Tumaco culture in Colombia are very similar, and that Jama Coaque is obviously related to these cultures as well. Jama Coaque is the archaeological culture that follows Tabuchila (the northern variant of Chorrera) in the Jama River Valley.

Although Ecuador is often characterized as an Andean nation, its coastal ecology is actually closer to that found along the coast of Colombia and farther north, rather than that of northern coastal Peru which is desertified. Although much of the Ecuadorian coast is today deforested and supports only xerophytic vegetation (shrubby bushes and cacti), in the not-so-distant past it was forested with semi-tropical vegetation and supported populations of neotropical animals (see also the section on Coastal Ecology, pp.33-41). Certainly, there is ample evidence to support the idea that the coastal environment could, and did, support a variety of habitats for tropical mammals, birds and reptiles.

Amazonian or Tropical Forest culture has been a rich source of inspiration for the interpretation of Valdivia, or Early Formative iconography. Jonathan Damp (1982), Peter Stahl (1985a, 1985b), and James Zeidler (1988, 1998) have all included tropical forest animal imagery, shamanistic manifestations or symbols, and their material culture correlates as features of these interpretations. Very little iconographic work has been done for other archaeological cultures in Ecuador, perhaps because preservation of artifacts other than ceramics is very poor, and also perhaps because Ecuadorian archaeologists have focused on survey and excavation. Francisco Valdez (1993) has published a short article about the iconography of the La Tolita culture, and Tom Cummins (1992, 1994, Cummins and Holm 1991) has written three articles about the iconography of the Chorrera and Jama Coaque cultures, but the exploration of representation has not been a priority for Ecuadorianists.
Tropical Forest Cosmology

*Tropical Forest* Cosmology is the title of Peter Stahl's (1984) thesis on the Valdivia, or Early Formative Period artifacts from the Loma Alta site in the Valdivia Valley. Stahl begins with the premise that Valdivia was a Tropical Forest Culture, as this term was used by Donald Lathrap (Lathrap 1963, 1970, 1971, 1973, 1974). Lathrap's use of the concept was mainly in reaction to the then widely held view (supported by Betty Meggers) that the tropical forest, "generally limited cultural development ... to a simple farmer-fisher/hunter-gatherer stage and discouraged settlement, conquest or intensive exploitation of the area." (Raymond 1988: 279) Lathrap (1970: 45-67) defined Tropical Forest Culture in the same sense as it was originally defined by Lowie (1948), as a product of the floodplains of the major South American river systems. For Lowie (1948: 1) the basic diagnostic characteristics of Tropical Forest Culture are the cultivation of tropical root crops, especially bitter manioc, effective river craft, the use of hammocks as beds, and the manufacture of pottery.

Lathrap (1970: 47) emphasized the presence of shared cultural elements, and a reliance on intensive root crop agriculture. Aquatic resources are maximally exploited, whereas land-based resources are much less important. Tropical Forest Culture was described by Lathrap as a level of culture which he believed was closer to that of the Circum-Caribbean level of culture than had been previously acknowledged by anthropologists and archaeologists. There also seemed to have been major differences between the peoples of the fluvial and interfluvial areas, such that the riverine peoples had a far more complex level of culture than those descendants of the interfluvial uplands.

Lathrap (1970) also contended that the archaeological record of the Upper Amazon demonstrated a gradual expansion of tropical riverine peoples out of the Amazon Basin (Raymond 1988: 293). Close connections (through trade, intermarriage, and warfare, etc.) seem to have been maintained between the jungle (*montaña*, the cloud forest on the eastern
slopes of the Andes), the highlands and the coast over thousands of years in both Ecuador and in far northern Peru. Over time, these interconnections may have become weaker, as groups pursued their own cultural trajectories in their separate environments. The logical extension of Lathrap's argument is that horticulturalists of the Amazon Basin expanded outwards along the river valleys through the lowest parts of the Andes (possibly, for example, the Huancabamba Depression of northern Peru) to settle in areas of Ecuador such as the Guayas Basin, where floodplain agriculture would have flourished.

"The Valdivia complex was considered to represent the remains of early Tropical Forest agriculturalists expanding along the major riverine systems of tropical South America in areas affording readily exploitable agricultural lands combined with the maximum utilization of riparian resources." (Stahl 1984: 9)

Lathrap (1974) has also argued that the early ceramic complexes found in Colombia, Peru and Ecuador (Puerto Hormiga, Yarinacocha and Valdivia) were part of a major cultural development in Northern South America which initiated both of the Central and South American "mother" cultures of Olmec and Chavín.

No one has really examined the idea of Tropical Forest Culture particularly critically. The most problematic aspect of it is the term "forest," although clearly the peoples who participated in this broad category of culture were mainly horticulturalists who lived along the rivers of the montaña. Nevertheless, Lathrap's students (including Peter Roe, Scott Raymond, Warren DeBoer, James Zeidler and Peter Stahl, among others) have used the notion of Tropical Forest Culture to broadly characterize the majority of the cultures which are still extant within and around the rim of the Amazon Basin. The concept has therefore become accepted through use and this is the way in which I use it in this thesis.

It also seems clear from the research which has been carried out on the Valdivia culture that the coast of Ecuador was essentially part of the defined
Tropical Forest Culture Area for most of prehistory. Whether the people who inhabited it originally came from further up the coast or from inland, their subsequent settlement in the riverine valleys and along the Ecuadorian litoral ensured the continuity of a worldview which reflected this.

In Stahl's thesis, Tropical Forest Cosmography is defined as the strongly anthropocentric view of the universe, with human beings as the centre of a worldview which combines both observable and hidden reality. This cognitive 'map' of the world includes an *axis mundi* (the house post), the village, the forest and the river, as well as the hidden worlds. Tropical Forest Cosmogony describes the origin of the cosmos and the creation of the world through the actions of mythic events and persons. Myth is an ongoing process which transforms the cosmos and is accessed through ritual. Tropical Forest Cosmology describes the interaction of human beings with the cosmos. The hidden world of mythic time co-exists with the observable world, and their interaction is interpreted, maintained and understood primarily by the shaman. The shaman performs this maintenance through ritual, which is performed at significant life-events. (Stahl 1984: 32-44)

"The community in the observable world is constantly being displaced from its articulation with creation and mythic time in the hidden world. the continuous succession of human generations is compared by the Barasana of northwestern Amazonia to an accumulation of leaves on the forest floor, ever in danger of losing contact with the original layer. Ritual squashes the pile of leaves, bringing initiates of the outer layers into contact with the original layer (S. Hugh-Jones 1979: 139)." (Stahl 1984: 44)

Although the peoples whose myths are drawn on for the model are not hunter-gatherers, they do interact heavily with the tropical forest environment, and have done so for centuries. Reichel-Dolmatoff (1976) has argued that the Tukano Indians maintain an equilibrium with their environment through mythic practice. The shaman (ritual practitioner) acts as the arbiter of that ecological equilibrium, and (consciously or unconsciously) performs much of his or her ritual in order to maintain a
balance between culture and nature. In the tropical forest, then, the shaman's task is to maintain the cycle of life and death through cosmology and epistemology. As in most indigenous epistemologies, there is no split between the natural and the supernatural (e.g. hallucinogens are important in the experiencing of the supernatural but are also seen as part of learning how to be in the world). A mythic narration provides an explanation for the energy-cycle which is part of the local ecology and perhaps a sort of "native cybernetic" or systems analysis of the ecological balance in the environment (Reichel-Dolmatoff 1976: 318).

In this thesis, I chose to use a slightly modified version of the Tropical Forest Cosmological Model to examine a sub-assemblage of Chorrera fine ceramics from museum collections. The coast of Ecuador, where these ceramics originate, was once a much more tropical forest environment and has been degraded because of deforestation. The Late Formative peoples who made the ceramics seem to have participated in Tropical Forest Culture (as defined above) even though they were likely fully agricultural. During the Late Formative, the cosmology seems to have been modified somewhat to suit the coastal and riverine environments, and further restricted to animals which often inhabit marginal areas near human habitats, but it is still recognizably one in which the symbolic attributes of Amazonian Lowland creatures are evident. In the iconographic treatment of local fauna (bats, monkeys, coatis, birds, etc.), attributes and motifs which were a Tropical Lowland ritual focus seem to persist.

Terrestrial, nocturnal and scansorial animals seem to be favoured over other possibilities (scansorial means animals which occupy more than one biotic niche, e.g. opossums are scansorial, they are both arboreal and terrestrial creatures). In the Conclusions I explore some of the reasons why Tropical Forest Cosmology may have still been necessary for the Late Formative peoples of Ecuador, and how it may have helped them cope with death.
A General Cosmological Model

Roe (1982) has described a specific cultural cosmological model (of the Shipibo of the Peruvian Montaña) and its articulation with a generalized model which he constructs by drawing on as many recorded South American myths as possible.

"Geographically the model centers on the lowlands of the Amazon basin, surrounded in the north by the Guianas, Venezuela, the Sierra Nevada de Santa Marta region of northwest Colombia, and the Panamanian isthmus. ... The real disjunction occurs between this broad circular lowland region within the model and the Andean highlands to the west and southwest outside of it. There a different but obviously cognate model holds sway..." (Roe 1982: 21-22)

In the section which follows, I explain the general cosmological model in broad terms, with particular reference to Roe's (1982) discussion of the model's lowest level which is the underworld.

The General Model

An important thing to remember about the model is that it is dynamic. The periodicities of the system are not apparent in the diagram (Figure 11), which thus represents a piece of the model, rather than the whole thing. Tropical Forest Lowland cosmologies begin usually with a flood and a fire (e.g. the story of Tinamou, see below), or a series of floods and fires which destroy the earth and its denizens which are then replaced by human beings and animals who gradually come to resemble the human beings and animals now living on earth. That series of catastrophes is then linked to the yearly periodicity of the seasons -- wet and dry -- which are so important to the peoples of the Tropical Forest. Linked to this periodicity is the monthly periodicity of women, and finally, the daily alternation of day and night (Roe 1982: 129).

The diagram of the generalized cosmological model consists of three layers or worlds: the Celestial World, the Observable World, and the Underworld. (A number of tropical forest groups have cosmological models which have more or fewer than three layers, however, Roe (1982) has demonstrated convincingly that, in fact, three essential layers or worlds are
the basic building-blocks of the model). The three layers exist in both present time, and mythic time which is sometimes divided into the time of the ancestors and spirit time. The Celestial World and the Underworld, upper and lower, are usually equated with good and evil respectively, and are invisible to most humans except shamans and those who partake of shamanic ritual power. The three layers are united by the World Tree or Axis Mundi, the (usually) hollow pillar which contains water, and which provided the world's edible plants to human beings. In the Observable World the axis mundi is also the central pillar of the communal dwelling-place (sometimes called a maloca) which may also be a temple dedicated to the worship of the ancestors and ancestral spirits. The house, or temple, is usually considered to be feminine, it represents the womb or the belly, where people reproduce themselves. (Some groups also envision the house with its central pillar as a womb with a penetrating phallus). The house is in the centre, and this centre is where ritual activity takes place: the spirits 'talk' to men, the shaman does his or her curing, and this is where dances and other communal social activities take place. It is the area which is 'safe' because it is tamed or civilized.

Outside of the centre or tame place is the forest, the haunt of good and evil spirits, and of wild animals. The forest is the source of good things (meat, wild fruits and useful plants) but there is always danger lurking, either in the form of the animals themselves (jaguar, or wild pig) or Forest Ogres and spirits which are not necessarily malevolent but which might be if not propitiated properly. These evil spirits emerge from the Underworld or from pools and deep water. Stahl's (1984: 46) comments about ecological maintenance are pertinent here because restrictions on certain types of food at particular times or periods in the life-cycle lessens the pressure on particular forest resources which might not support over-use, over-hunting of certain species, for example).

Houses are usually built close to rivers and these are particularly important because they are the source of life (in both social and economic
senses) but they are also potentially dangerous (through flooding, and the animals and spirits which live in the river). Rivers also connect present and mythic time. Other bodies of water such as lakes, pools, and deep springs connect the Observable World to the Underworld.

The known or observable world contains the space inhabited by true men -- the settlements of the tribe or related kin groups and, on a smaller scale, the maloca or communal houses with their axis mundi or central pillars. It includes the house garden and the paths which lead to the river. Men and women interact in the world to ensure the continuation of the community. This is done through everyday acts and occasional ceremonies which restore harmony between the people and the forest, which is also part of the observable world but which is inhabited by animals and spirits which are only accessible to people (usually shamans but sometimes others) who make connections with them ritually.

The underworld is a dark and earthy place inhabited by dead souls or evil spirits, and is associated with females. The Earth is a womb, albeit a cold one, which contains the dead and all that is decaying. Burrowing creatures such as earthworms (and maggots) and armadillos are associated with the underworld as well. The underworld can also be a watery place, inhabited by water spirits and fish. The anaconda, and the cayman live here (avatars of what Peter Roe calls "the Dragon"), as does the Black Jaguar, which is associated with thunder and whose children (the Thunder Jaguars, which are malevolent dwarves) live in deep lakes (Roe 1982: 127-263, Stahl 1984: 32-50).

**Tukano cosmological models**

In this section I discuss and summarize the cosmological models of the Tukano groups in the Colombian Vaupés region. I have relied principally on ethnographies and texts by three authors: Gerardo Reichel-Dolmatoff (1971, 1975, 1988, 1989, 1996), Stephen Hugh-Jones (1979) and Irving Goldman (1963), although I have also employed other ethnographies by Christine Hugh-Jones (1979), Janet Chernela (1993) and Philippe Correa (1996) to a lesser extent.
Thorough accounts of mythology from the Tropical Forest Lowlands have been written specifically about the Colombian Lowlands by Gerardo Reichel-Dolmatoff. Reichel-Dolmatoff was both an anthropologist and archaeologist, and one of those renaissance men in the profession who seemed to be interested in everything. Reichel-Dolmatoff became interested in mythology and its corollary, shamanism, early in his career, and proceeded to document shamanistic ideas and practices for various groups of Indians living in the Sierra Nevada de Santa Marta (the Kógi and Páez), and the Vaupés River area (the Desana and other Tukano groups). I have relied heavily on Reichel-Dolmatoff in this study, not simply because his anthropological and archaeological observations are particularly concerned with shamanism, but also because I believe that Tukanoan cosmologies in particular are closest to the ideas which seem to be expressed in the Chorrera assemblage.

Stephen Hugh-Jones, and his wife, Christine Hugh-Jones, both went to the Vaupés region to study the Barasana in the late 60s. Stephen Hugh-Jones (1979) studied the ancestor and fertility cults called *yurupary* which were widespread in the region, and his contribution to the knowledge which we have about these cults is extremely important. Christine Hugh-Jones' (1979) study of daily life is also extremely useful for its presentation of the relationship between certain crucial origin myths and both sacred (coca and yagé) and profane (manioc) substances.

Irving Goldman's ethnography of the Cubeo Indians, first published in 1963, was a groundbreaking study of a culture with a funerary cult which was apparently a mixture of the various customs which had existed amongst different groups in the Vaupés region. The Cubeo are considered to be somewhat anomalous by several ethnographers working in the region. They are Carib speakers, the group which originally inhabited the Vaupés area, and they are referred to as the "Tapir" people by the Eastern Tukanoans, but Goldman's study is still very useful for its descriptions of aspects of important
ritual which are not described elsewhere (Correa 1996: 12; Reichel-Dolmatoff 1996).

**Tukano peoples of the Vaupés Region**

The Tukano are a group of 'tribes' speaking languages of the Eastern Tukanoan language family. Eastern Tukanoans include the Bará, the Barasana, the Karapana, the Cubeo (Kubeo), the Desana, the Makuna, the Tatuyo (Pamoa), the Pirá-Tapuyo, the Siriano, the Taiwano, the Tanimuka, the Tatuyo, the Tukano proper, the Tuyuca (Tuyuka), the Wanano (Uanana) and others, which are linguistically differentiated, although sometimes with rather minor dialectical differences. The Tukano have been described as, "exogamous patrilineal descent groups, internally subdivided into a number of hierarchically ranked sibs whose members speak a common language or dialect." (S. Hugh-Jones 1979: 23)

The Tukano live in the northwestern Amazon region, along the Vaupés River and its tributaries. This region lies within the southeastern portion of Colombia and the northwestern portion of Brazil. The whole northwestern Amazon region is often referred to as a single culture area, comprising members of the Eastern Tucanoan, Arawakan, Tupi-Guaranian, and other language families. Despite linguistic differences, all these groups share a common tropical forest type of culture, and nearly all practice yurupary rites in some form (S. Hugh-Jones 1979, Swanson 1995).

The Tukano are basically horticulturalists who practice slash-and-burn cultivation but hunting is valued much more highly than horticulture, fishing or other subsistence activities (Reichel-Dolmatoff 1971: 11, Reichel-Dolmatoff 1976: 158). Bitter manioc (cassava), cultivated by women, is the most important crop and is the dietary staple of the Tukano. Other plants cultivated by women in the garden plots include plantain, banana, yams, sweet potato, pineapple and chili peppers. Maize is also cultivated but has very little importance. Other edible semi-cultivated plants which are available from the forest include the peach palm (*Guillemia speciosa*), the avocado pear, the papaya, the custard apple, three species of guama (*Inga* sp.),
other edible palm fruits (*Euterpe oleracea, Iriartea exomhiza*) and the fruit of the rubber tree (*Hevea pauciflora*). Cultivated non-edible plants include cotton, the fish poison *barbasco* (*Lonchocarpus*), and barkcloth trees (Reichel-Dolmatoff 1971, 1975).

Men are the exclusive cultivators and consumers of coca, tobacco, and hallucinogens. The Tukano are known for their use of these hallucinogens which include *yagé* (*Lagenaria caapi* and *rusbyana*) and *viho* (*Virola sp.*) (Reichel-Dolmatoff 1975).

Communities range in size from 20 to 100 people and the whole community is housed within a single, multifamily dwelling called a maloca. The community is typically made up of all the members of a patrilineal sib.

**The Desana cosmological model**

I have used Tukano cosmological models, and particularly Desana cosmology, to explain and describe many of the important motifs in the Late Formative Ecuadorian ceramics. The Desana Creation Myth is elaborated by Reichel-Dolmatoff (1971). Here I summarize Reichel-Dolmatoff, and delineate the basic Desana cosmological model and its elements.

The Sun and Moon were twin brothers. The Sun had a daughter and he lived with her as if she were his wife. The Moon became jealous and tried to make love to his brother's wife, for which he was punished by the Sun. This is why they now appear separately in the sky. The Sun created the universe with his yellow light and for this reason he is called Sun Father.

The World, 'our level,' is a red disk or a round plate which is the colour of blood. Men and animals live in this world. The Jaguar is the Earth animal, the most powerful being on the earth and his voice is the thunder. He is the protector (and procreator) of men. The rivers run through the world and they connect it with the lower level in the east, or *Ahpikondia* (House of Milk) which is the Desana paradise. *Ahpikondia* is bathed in a yellowish-green light, the colour of young coca leaves. In *Ahpikondia* there is a large lake and the rivers pour into this lake.
"The Milky Way emerges as a large foaming current from Ahpikondía and runs from east to west. Strong winds rush through the Milky Way and it is blue in color. It is the intermediate region between the yellow power of the Sun and the red color of the earth. For this reason it is a dangerous region because it is there that people establish contact with the invisible world and with the spirits." The good/evil Eagles and Viho-mahsë, Master of Viho, who is also both good and evil, dwell here (Reichel-Dolmatoff 1971: 25).

The Milky Way runs towards the west (where the sun sets), which is also Ahpikondía, or the Dark Region. This is the region of night and is an evil place. The Night People, who practice witchcraft and sorcery, dwell in this Dark Region (Reichel-Dolmatoff 1971: 24-25, 1975).

The Desana also recognize a variety of Beings who have particular functions and who live on the different levels of the model (Appendix 2). All of these beings may be contacted by the shaman (ye’e) through the mediation of either viho (a hallucinogenic snuff) or yagé (a hallucinogenic beverage).

The Barasana cosmological model

The Barasana cosmological model seems to be rather similar to Desana model. It differs slightly, however, and some of the differences are important for my interpretations of Chorrera cosmology. The Barasana, for instance, seem to put an important symbolic emphasis on a gourd (Crescentia cujete) filled with beeswax, and coca. This gourd is hidden inside the shaman’s enclosure at the most important initiation ceremonies which are called yurupary. I base my summary of the Barasana cosmological model on Stephen Hugh-Jones (1979) descriptions of the main myths and his explanations of them.

In the Barasana origin myth, Yeba Haku (the Primal Sun) gave birth to the three anaconda ancestors of the Barasana, the Bará, and the Tatuyo: Yeba Meni (Earth Jaguar) Anaconda, the ancestor of the Barasana, Fish Anaconda, the ancestor of the Bará, and Sky Anaconda (Eagle Jaguar/Giant Eagle), the
ancestor of the Tatuyo. Earth Anaconda travelled up the Amazon to the Pira-
parana (the home of the Barasana) and there gave birth (by mouth) to the
Barasana sibs — Koamona, Rasegana, Meni Masa, Darea, and Wabea. The sibs
are associated with specialist ritual occupations (chiefs, chanters/dancers,
warriors, shamans, and servants) and the *He* instruments, which are played
for the yurupary ceremonies (see below for description).

*Romi Kumu*, Woman Shaman, is the mother of the *He* instruments.
(The *He* are also the ancestors of each of the five sibs). Another Barasana
origin myth tells how Romi Kumu created the world, and the *He* people.

Romi Kumu took some clay and made a cassava griddle with three
pot-supports. The supports were mountains holding up the griddle, the sky.
She lived on top of the griddle. Romi Kumu lit a fire under the griddle and it
became so hot that it cracked and the griddle fell down on the earth below,
creating the Underworld, the griddle became the earth itself. Romi Kumu
made another griddle which is the sky. A flood came and all the possessions
in the house became alive. They became different animals which preyed on
the people. Everyone drowned except those in a canoe. Then the earth got so
hot that it caught on fire and the griddle cracked and fell down again (S.

Romi Kumu created the *He* people inside her womb. They had no
father. Romi Kumu was a shaman, she was like a man. She tuned the *He*
People into beings like women, they were like women in that they
menstruated. Romi Kumu was going to give the people shamanised
substances from the gourd of beeswax (coca) but they refused it because they
were savages. She kept the gourd between her legs and took out another
gourd and offered it to them. The first gourd was eaten from by poisonous
creatures (snakes and spiders) and was then taken away by white people who
can change their skins, this is why the Barasana are mortal and die (S. Hugh-

The myth of the Sun's incest with his daughter (and the birth of yagé
child) is not told by the Barasana, and does not form part of any Yurupary
myth from elsewhere in the Vaupés region. However, the Desana myth of the Sun's incest forms part of a longer myth, the rest of which is a variant of the Barasana myth of the Sun and Moon, and the Barasana also have a myth about incest between the Moon and his sister Meneriyo (S. Hugh-Jones 1979: 245). Here, we should note that Yawira's (an avatara of Romi Kumu and Meneriyo) invention of coca also involves incest (Stephen Hugh-Jones 1979: Myth 7.D). Yawira seduces her husband's younger brother, who becomes coca bushes in the garden. Yawira's husband, Yebo (Jaguar) is an alter ego of the Sun. The basic myth seems to me to be the same if one understands that the Sun and Moon are simply 'doubles' or mirror images of one another. The incest committed by the Sun with his daughter takes place in the House of the Waters. Since water is usually on the lowest level (the Underworld) the Sun, on this level, is probably really his incestuous brother, the Moon.

The Yurupary Complex

As I have emphasized above, the Chorrera assemblage seems to 'fit' best to a cosmological model of the native groups of the Colombian Amazon. In tracing the model's components I have noted that ethnographic accounts from specific groups in this region refer to a religious ritual complex called yurupari. These rituals have been described principally by Stephen Hugh-Jones (1979), Gerardo Reichel-Dolmatoff (1971, 1975, 1978a, etc.) and Irving Goldman (1963) in their ethnographies of the Eastern Tukanoan groups of the Vaupés Region, but other ethnographers have also included brief descriptions of these and very similar rituals in their accounts (e.g. Nimuendaju 1952, Silva 1962). Yurupary (also sometimes Urufriri) is a ritual complex involving the use of bark flutes and trumpets which is found all over the Northwestern Amazon and the Guianas and may once have been even more widespread than it is today. Various groups, including the Eastern Tukanoan tribes (the Desana, the Barasana, the Bará, the Tukano, and the Cubeo), the Kuripako or Baniwa, a Tupi-speaking group called the Tikuna, and some Carib groups -- the Waiwai and the Akawaio -- practice these rites (Butt-Colson 1977, Fock 1963, Fulop 1954, Fulop 1956, Goldman

The most important musical instruments for the rituals associated with the ritual complex which are themselves called *yurupary* are rolled bark trumpets and flutes, which have mythically significant ancestral names and roles—usually of animals. Yurupary flutes are primarily phallic symbols which are taboo to women, who may die (or be killed) as a result of having seen them. The yurupary flutes or trumpets are used by the Barasana to celebrate a young men's initiation rite, and by the Cubeo as part of initiation and mourning ceremony (*ôyne*) rites, and by other groups for similar rites of passage, but they have also been associated with plant fertility. Goldman has suggested that this may have been the oldest association (Roe 1989: 43, after Goldman 1963: 192). The yurupary complex has also been described as an ancestor cult by Goldman (1963) and by Stephen Hugh-Jones (1979: 150).

The most thorough description of the Barasana yurupary rituals is by Stephen Hugh-Jones (1979). The yurupary rituals here, called *He* House, generally centre on a myth about role-reversal which involves a group of musical instruments (flutes and trumpets) that are said to have once belonged to the women, who stole them from the men. As a result of this theft, the women became very powerful and the men became like women, cultivating manioc, menstruating and giving birth to children. Eventually the women were tricked into giving up the flutes by the men and ever since then the instruments have been taboo to women, who must not be present when they are being played. When they are not in use the instruments are stored underwater near the riverbank.

Yurupary is also a culture hero, described in myths as a benevolent being or spirit who gives human beings socially useful gifts. His life cycle is presented as a continuous myth by the Barasana, but he may also be a kind of monster—the Dragon or Feathered and/or Hairy Serpent who is also the Anaconda Person. Stephen Hugh-Jones (1979: 145) especially associates monkeys and sloths (chief of the monkeys) with the climax of ritual at *He*
House and Yurupary himself is 'like a monkey' in that he is hairy, noisy and wild.

Other animals which are associated with the yurupary myth among other northwestern Amazonian groups (and which may or may not appear in Tukano versions) are: 1. the Opossum Man who is given a magic rattle for hunting by Urufiri in the Waiwai myth (see also section on Opossum), 2. the turtle, 3. the Celestial Birds, which are coloured by Urufiri's blood in the Makiritare myth, and, 4. the Ipo fish (the armour-headed catfish, Canthopomus sp., Hypostomotina,) an ugly bumpy-faced little fish (Roe 1989).

The He instruments represent the ancestors of the Barasana who were jaguars, and as jaguars they are also shamans. They are also the anacondas which live in the rivers, the first ancestors of the Tukano peoples. Hugh-Jones argues that shamans and jaguars, which are identified as the same thing by all Tukano peoples, are mediators, and that the He instruments are also mediators for the role which they play in initiation rites (S. Hugh-Jones 1979: 150-151, 157ff). Jean Jackson (1983: 190) has suggested that the yurupary rites are an expropriation of female procreative power by men. Male initiates are compared to menstruating women, and ritually imitate the loss of menstrual blood, dying and being reborn. Hugh-Jones agrees with this interpretation to a certain point, but he also stresses that this interpretation is too simplistic.

"Yurupary has been interpreted variously as an ancestor cult, as growth magic, as a warning against the sin of incest, as a fertility rite, as a means where men dominate women, as the commemoration of Yurupary the culture hero, etc. But none of these interpretations taken on their own, whether right or wrong, provides a satisfactory explanation of the supreme importance of the cult in the religious life of Vaupés Indians." (S. Hugh-Jones 1979: 246-247)

The Desana and Barasana mythologies

The imagery in Desana and Barasana cosmology seems to be closest to the imagery on the Late Formative Chorrera ceramics from Ecuador which
are discussed in this thesis. There are also, naturally, some rather important differences between the Desana mythical elements and Chorrera imagery, but generally the mythological structure and particularly individual characters in the myths appear to coincide closely enough to make the comparison between them a fruitful one for analysis. Tukano mythology is based on a shamanistic worldview and this aspect will be discussed next. (For a summary of Desana and Barasana mythical personages see Appendix 2)

**Shamanism**

Mircea Eliade (1964) has shown that the basic elements of shamanism are essentially the same in different parts of the world. For the purposes of this thesis the focus is on the South American experience, since it is most pertinent here, however the similarities between Asian (Japanese, Siberian) and all New World forms of shamanism are quite remarkable.

"The term shaman comes from the Tungusic word used to describe the ritual specialists whose activities are marked by ecstasy, ritual flight, death, rebirth, journeys to the underworld and heavens, alliances with animals, curing and other magical feats (Langdon 1992: 495)."

The primary activity of the shaman is mediation. He or she mediates between "other" worlds and this world, and this often includes the worlds outside their immediate community, as well as the world of the spirits or the ancestors. In this mediating capacity the shaman also presides over the major life-cycles: birth, the initiation of young men and women, marriage, and death.

Shamanism is a practice of curing. Curing, as I use the term here, means not only relieving the symptoms of disease and illness, but also the symptoms of 'dysfunctional' psychological states of individuals, families and communities. The other side of curing or healing is, of course, harming and as the shaman may be doctor, priest, or sorceror, he or she is both respected and feared. Shamans can be "black" (evil) or "white" (good) or may be both at different stages of their careers. The most powerful shamans protect the community while battling other shamans who may attack the people in it.
The battle may entail both 'blowing' and 'sucking', activities which are characteristic of shamanic curing and evildoing. The shaman may blow tobacco smoke over their patient or may send malevolent spirits or 'darts' to enemies in the same way. Illness or evil spirits (or spirit darts) may be sucked out of the patient's body and displayed as proof of the shaman's success.

The shaman begins his or her career by being 'called' to the profession - usually through illness, through frightening dreams, or through a traumatic experience of some kind. They then find a practicing shaman with whom they apprentice for a time. They learn the various aspects of the practice and go through the various stages necessary to becoming fully-fledged shamans, including an initiation which may involve another traumatic experience (or a series of them) which 'open them up' to the supernatural world.

Reichel-Dolmatoff (1979:30) and others emphasize that the overarching theme of, "shamanistic initiation is, fundamentally, a process of death and subsequent rebirth." Death and rebirth are often accomplished through a process of transformation -- into another being, or to another level of the world, or another world altogether. The transformation is accomplished often through the use of hallucinogenic drugs, but sometimes is performed simply through self-induced trancing aided perhaps by the use of tobacco, fasting, music, and dance. The idea of this transformation from an ordinary human being to a powerful supernatural religious specialist through bodily agony is a commonplace in many of the world’s religions, but in shamanism the initiate's death (and sometimes dismemberment) is undertaken by an outside agency which commonly assumes the form of a 'supernatural' being. In South America the supernatural being is often an animal and usually a very powerful one, such as a jaguar or an anaconda.

The shaman's first initiation is, naturally, the most important transformation and, according to Reichel-Dolmatoff (1979: 30), "Sometimes the process of initiation is compared by the Desana to a man's life-span, condensed into an abbreviated time-dimension. The 'death' of the initiate is marked by his skeletonization and his falling into a deep trance."
In addition to the skeletonization of the apprentice, another part of the initiation of shamans which is characteristic of the ritual is the dismemberment and reconstitution of the apprentice's body by a tutelary spirit. Through the ordeal the apprentice gains the supernatural powers which he or she will need to become a fully-fledged shaman. Supernatural familiars or tutelary spirits may include animals or were-animals, (mythical) ancestors or deceased parents, or even the spirits of human beings from other ethnic groups.

The initiate may also learn or obtain his or her own special chants or songs through their initiation. Singing and chanting are very important to most curing ceremonies performed by shamans, and these are often accompanied by musical instruments such as drums, wind instruments (flutes), and rattles. The rattles are usually made from a calabash (maracas) but can also be a bunch of leaves which make a rattling noise when they are shaken during rituals.

Part of the shamanic repertoire includes visits to the other worlds. These include celestial ascents and descents to the nether world. Celestial ascents are made in the company of birds, or the shaman may transform him or herself into a bird. Sometimes the ascent or descent is made on the back of an animal, most commonly a deer or a horse.

The shaman as psychopomp or mediator for the dead is a common theme in mythological tales throughout the Americas (and Asia). He or she guides the souls of the dead to the underworld. The shaman also makes journeys to the underworld in order to cure illnesses where the cure involves bringing back the soul of the person who has lost it. The shaman is often also constantly engaged in protecting the souls of his living constituents by battling evil spirits and other shamans who wish to use those souls for their own ends.

The shaman as "ungendered"

In many of the Northwest Amazonian (and other) groups discussed in our text, shamanic power is not restricted to men (or women) who are
shamans. Anyone can become a shaman, and everyone has some shamanic powers, although some may choose to develop them more than others and they can sometimes be lost through the intervention of malevolent spirits or people. The obtaining of shamanic power usually entails the taking of one or more hallucinogenic drugs at ceremonials which are part of the yearly round, or at curing rituals which are carried out by particular individuals who are acknowledged to be expert, and who have great powers.

Women shamans seem to be uncommon among contemporary Tropical Forest Lowland peoples but they may have been more common in the past. Several sources mention that powerful women shamans were known among the Warao (Wilbert 1970), the Sikuani (Wilbert and Simoneau 1992), the Cuiva (Wilbert and Simoneau 1991), and the Siona-Secoya (Langdon 1989). (All of these groups are from the Orinoco delta and plains, and from southern Colombia/northeastern Ecuador). Stahl (1984:52) also gives a list of references which treat the subject of female shamans. Among the Guajiro, 80 percent of shamans are women (Perrin 1992: 103).

Ambiguous or excessive sexuality, and shamanic manifestation seem to be interrelated. The Siona associate shamanism with virility, and women make accusations of sorcery based on that assumption (Langdon 1989: 17). The Desana shaman is said to turn into a jaguar, and jaguars are sexually voracious (eating and sex are often equated in the Amazonian lowlands) (Reichel-Dolmatoff 1975: 127). The Barasana see shamans as sexually ambiguous. They should remain celibate and unmarried, and they are likened to menstruating women, perhaps because the first shaman was Romi Kumu (Woman Shaman) who is said to be 'like a man'(S. Hugh-Jones 1979: 125). Shamans, like menstruating women, are 'opened up' by the hallucinogens which they imbibe, and they are also confined to special enclosures at initiation rites like menstruating women. Young men initiates are also said to be like menstruating women, and they too are 'opened up' at initiation (S. Hugh-Jones 1979: 126).
Ethnographic representations of shamanism in material culture

In the ethnographic descriptions of shamanism from the Northwest Amazon the artifacts which are associated with shamanism are related to specific activities carried out by the shaman in his or her curing trances. These objects are fairly distinctive, although in societies where everyone participates in ritual activity their use may not be confined to the shaman. Some objects, however, such as rattles (maracas), drums, and crystals are more likely to be used only by shamans and their presence in a household (or a burial) are more indicative of shamanic power.

Snuff paraphernalia

Snuff paraphernalia, such as snuffing tubes and tablets, and mortars, are used to take and prepare various plants such as *Anadenanthera* and *Virola* sp. Snuff inhaling tubes made from bone, clay or wood are known from various time-periods and areas (Stahl 1984: 99), and Wassén (Schultes and Hoffman 1980) has documented the prehistoric and historic use of snuff from the West Indies to southern South America but suggested that its centre of origin lay in Amazonia.

Special Ceramics

Other evidence for the use of hallucinogens or mood-altering drugs is seen in special ceramic pots -- the yage pot of the Desana, or the *ayahuasca manga* of the Canelos Quichua (Figures 102 and 103), which may be made in a particular shape or decorated with particular patterns which symbolize the mythological associations of the drugs. Limepots are also important, because they are used to hold the mineralized catalytic agent for chewing coca leaves.

Shaman's stool or bench

The shaman's stool or bench is considered to be indispensable to his mediation with other worlds. The stool is the focus and centre of power for all men, but is especially so for the shaman and the chief. The stool is given to every man at initiation but shamans have specially decorated stools which, in the Amazon, are created in the shape of an animal, usually a jaguar, a turtle or a caiman. Stahl (1984: 90) points out that, "Seated posture and the
stool are essential for cosmological mediation and interpretation. They represent the loci of protection, curing, birth, vision, and ecological maintenance as the shaman mediates with the hidden world." Among the Canelos Quichua, the shaman himself may become a bancu or 'living stool' for certain spirits (Whitten 1976: 149).

**Musical Instruments**

Musical instruments are an important part of the shaman's paraphernalia. A musical instrument which is particularly associated with shamanic activity is the gourd rattle or maraca, which is usually made from a stick attached to a gourd with small pebbles or seeds inside it and is shaken rhythmically. The wood handle is usually made from a special kind of wood, and the gourd may be either Lagenaria or Crescentia cujete. The gourd usually has special designs carved on it and often has feathers attached to its top. The gourd rattle is found ethnographically all over South America (Izikowitz 1934: 126), and in places where it is not used it seems to be replaced by a leaf fan which makes loud rustling and rattling noises (Whitten 1976).

The stick rattle is also sometimes used -- this instrument is usually a long pole with rattling objects, usually fruit pits, attached at its top. This instrument is one of the three most important ritual objects owned by Desana shamans (the others are a large box containing his feather ornaments, crystals and other paraphernalia, and the yagé pot in which he prepares his hallucinogenic potions). The stick rattle is used in a ritual display of objects and is also the Sun Father's penis which he uses to fertilize the earth (Reichel-Dolmatoff 1971: 113, 1979: 124).

Various kinds of flutes and whistles are played by the shaman or by men to seduce animals or women. Flutes seem to have sexual connotations in many areas of the Americas, partly perhaps because of their phallic shape. Panpipes, flutes and larger trumpets are all used in shamanic rituals.

Drums are also shamanic instruments found all throughout the Americas. Drums are important in many kinds of ritual and religious ceremonies and seem to focus the listeners' concentration in trance. Siberian
shamans use a skin drum, and Mapuche women shamans use a wooden drum.

**Mirrors**

Mirrors (made from obsidian or metals) and crystals are used for seeing into other worlds. They also have to do with what Stahl (1984: 92) calls, 'cosmological luminescence.' Cosmological luminescence may be embodied in stones or crystals which are focal elements of shamanic equipment. Reichel-Dolmatoff (1979) describes the hexagonal quartz crystals which are used by Desana shamans as among the shamans' most treasured possessions. "These crystals are the principal power objects of shamanistic practice and are surrounded by a complex body of lore." All quartz crystals are hexagonal, and anything hexagonal in nature is seen as having powerful generative forces for the Desana. In fact, many important aspects of Desana culture can be explained with reference to the hexagonal shape of the crystal. The shell plates of the land tortoise (*Geochelone denticulata*), honeycombs, wasp's nests, spider webs, and even pineapples are seen as having these generative properties. The crystal is the Sun Father's penis (contains semen), but in some contexts it is also female and is a womb or clitoris. The crystal thus combines both male and female in the unification of chromatic energies which are focused in the crystal under sunlight (see also Colour Symbolism). Crystals are used by the shaman to focus his own energies in trance and/or in combat with other shamans.

**Stone Axes**

Stone objects which are also associated with shamanism are stone axes or celts. The Canelos Quichua shamans may place their soul in a polished stone axehead (the eared type, which is found archaeologically all over the Amazon and is a frequent surface find at Valdivia sites). On the death of a shaman who has an ancient acquired soul, the shaman's ancient and acquired soul enters the body of an owl or harpy eagle and when this creature dies the soul is transformed into another kind special polished shaman's stone, shaped like an eared axe-head with a narrow waist. Shamans who
acquire such a stone put it on top of the eared axe-head so that it transfers its powers to the axe, and through the axe, to the shaman himself (Whitten 1976: 148).
Ch. 5 Iconographic Interpretation

This chapter combines the information in Chapters 3 and 4 to interpret the effigy vessels and other artifacts in the museum collections in light of the ethnographic information taken mainly from texts on the Tukano and the Kógi, as well as other groups in the Northwest Amazon. The interpretations classify the ceramics into sets of related vessels and artifacts: Human Effigy Vessels, Animal Effigy Vessels, Gourd Effigy Vessels, and House Vessels, but I also treat the sub-assemblage as a whole. In the last section of this chapter (Gourds, Coca and the Ancestors) and in the Conclusions (Chapter 6) the relationships between all of the sets of effigy vessels is discussed.

Human Effigy Vessels and Figurines

The names which I have given to the anthropomorphic figures portrayed in the ceramic assemblage are not intended to recall Jungian archetypes or any other psychologically significant figures. In any religious pantheon there are always, however, elements of the psychological realm and, although no in-depth discussion of these elements is possible here, the reader should remember that the figures were part of an ancient ritual cosmos. The designations for the figures which I use here are simply labels, to be used as mnemonic devices which make them easier to remember. The figures are, I believe, representative of parts of a myth cycle which persists in Northwestern Amazonian cosmology. Some of these mythical figures also seem to be part of the cosmology of Native peoples in the rest of the Americas, and these appear in various indigenous art forms, from pictographs to ceramic sculptures (Benson 1972, Furst 1977, etc.)

The anthropomorphic vessels and figurines in Chorrera should be seen as part of a complex of figures that expressed religious and ritual ideas about supernaturals and humans in a mortuary context. Anthropomorphic figures are depicted mainly on whistling bottles, but they are also sometimes shown on jars and bowls. They primarily depict sexless figures, but male and female figures are identifiable -- and these are usually identified by their
primary or secondary sexual organs, although I also make some cautious assumptions about gender based on dress and pose. The figurines mainly represent females, but depict male, hermaphroditic, and sexless figures as well.

The Burden Carrier

The burden-carrier appears on some of the earliest red-on-buff vessels and seems to be the earliest of the anthropomorphic vessels to have a definite persona. The burden carrier may represent a supernatural entity like the Kógi 'gourd woman'-- in real life the poporo or lime gourd which every Kógi man is given when he reaches manhood and without which he cannot be married. She is the companion, spiritual consoler and guide of every deceased Kógi man in the world of the dead. The 'gourd woman' is the vessel which contains the lime (semen) which activates the coca alkaloids needed to reach the trance-state which every man desires, and which links him with the ancestors. There are, in fact, three lime-pots which portray the burden-carrier. The burden-carrier may thus represent the little gourd-woman mediator who accompanies her husband to the Underworld.

Another vessel which may link the burden-carrier to shamanic flight portrays a small figure with a modeled head, and with arms and feet in low relief on the body of the jar. The figure wears a turban with a nubbin on either side and has one hand on his stomach and the other hand held up to his cheek or eye. The figure is very similar to those portrayed on the burden carrier vessels but s/he does not have a tumpline. Finally, wings are incised on the vessel, as though the figure is flying, in the same way as shamans are said to do in trance.

The Water-Jug Carrier

Fetching and carrying water from the river is typically a feminine activity in the Amazon and the water is often fetched, or at least drawn, in gourds. A similar figure appears in both Northern Peruvian and West Mexican ceramics. Paul Clifford's discussion of two Moche I stirrup spout
vessels which depict a water-jug carrier is relevant here. According to Clifford,

"the water-jug carrier, "holds a cup in his right hand and resting on his shoulder, and his body is decorated with the same punctate marking or circular depressions on his hair and the hair on the figure here. An almost identical vessel form is in a private collection in Florida. The latter depicts the same figure but with his head slightly more forward, the cup raised onto his left shoulder and with a rope around his neck, indicating a prisoner. Apparently a similar mold, perhaps standard for a particular potter, was used for the latter two forms and the figure here."

Clifford also notes that several other Moche and Vicús vessels are very similar,

"cf. Donnan 1978, nos. 12-13, for other figures with the same face but seated in a cross-legged position and with bodies in more sculptured form rather than retaining the essential form of a vessel as in Number 28 here, in Donnan’s catalogue no. 12 has the same parted hair form but with parallel lines, rather than depressed circles, indicating hair, see also Larco Hoyle 1965a, fig. 39, for another Moche I effigy vessel almost identical to no. 12 in Donnan and fig. 40, for a Moche I figure in the same body form as the figure here.... Alan Sawyer included a similar vessel from Vicús in the 1968 Guggenheim exhibition (no. 91) from the Domingo Seminario collection.”(Clifford, in Katz 1983: 149)

The vessel illustrated in the Katz volume (1983 Plate XIX and App. no. 25) which is described by Clifford seems to combine and conflate the characteristics of several different Chorrera vessels. The water-jug carrier is fairly straightforward, but the body is decorated all over with punctate markings, like the afflicted man vessel with rocker-stamping, or with circular depressions with punctate markings inside them (Figure 15) or the reclining afflicted men. The Moche-Vicús figures also have split headdresses like the Twins vessel from Río Chico.

The Afflicted Man

The afflicted man may have been a representation used to aid in shamanic healing but he may also have been a mythological character. Diseased, afflicted or deformed figures do appear from time to time in
Northwestern Amazonian mythology such as in the Desana myth fragment called "The Disguised Husband." Here, the male protagonist (whose kinsmen are woodpeckers) goes to gather patabá (palm) fruits for the women. When he comes back with the fruits his sister-in-law is forced to choose him from among other men but she has some difficulty because he was covered with sores and boils and now is normal, like the others (Reichel-Dolmatoff 1989: 497-506).

**Personage Carrying an Implement**

This figure is represented with an object which looks like an axe, a hoe or a staff on his shoulder. The axe might represent prowess in war, but might equally represent garden-clearing, house-building or canoe-making, the primary economic activities, besides hunting, which are undertaken by men among Amazonian swidden agriculturalists.

The Desana forest ogre, a figure who seem to be the dark side of the Master of Forest Animals (Vaï-mahsë) typically carries an adze or a hoe on his shoulder. The *boráro* or spirit of the forest is called the "chief of the animals" by the Desana. He lives with Vaï-mahsë inside hills and is associated especially with peccary, toucan, deer, monkeys, and bats. Foul smelling and hairy, he appears boneless, with fangs and a huge phallus. He also attacks women in the forest (Reichel-Dolmatoff 1971, 1975).

Face-painting is very common among all the Tropical Forest peoples and is usually executed with one of two substances: the red paint is usually *Bixa orellana* (onoto, achiote, urucu) and the black paint is usually *Genipa* (huiduj) The designs on the Chorrera figures' faces are rendered in black or dark brown. They look like the serpentine designs described by Roe (1989: 18), which are composed of:

"... diagonal band symmetry using nested, or diamond-like "curling" step-fret motifs, or curling "serpentine" layouts." Designs which are attributed to the great Anaconda or the Dragon of both the Waiwai and of the Shipibo are painted on the face with the black facepaint. These "serpent"
designs are said to be painted by the shaman on his face in order to seduce his female spirit lovers."

Face-painting is also used by shamans to ward off evil spirits, and the shaman may paint her own face or another person's for this purpose. Face-painting is also important in a particular mythological tale which has a number of variants and seems to be part of the mythological repertoire of many Amazonian peoples (Reichel-Dolmatoff 1971: 60, Whitten 1976: 51, Civrieux 1980: 49-50). It is also told by Native peoples in North America (e.g. D'Anglure 1988: 74). The tale involves the Moon's (or sometimes the Sun's) incestuous union with his sister/daughter.

The Moon desired his sister and lay with her at night, so that she would not know who had been with her. One night she marked his face with her blood (in some tales with genipa or a black substance used for face-painting) so that she would know who had lain with her. The blood now stains the face of the Moon, in reminder that incest is prohibited, and also that menstruating women are polluting (my summary).

**Bound Personage**

These vessels, which are usually interpreted as representing 'prisoners', may in fact be depictions of shamans engaged in the performance of a ritual. This interpretation of the pose was first suggested by Peter Furst for the bound figures which are also found in West Mexican pottery. A photograph of the kind of ritual to which Furst is referring is illustrated in an article about Inuit shamans by Bernard Saladin D'Anglure. Here, the shaman, his feet and legs, arms and torso, and neck bound together with what looks like a rawhide rope, performs the "montée celeste dans la lune" (pavungaqtuq, celestial ascent to the moon). This ritual is performed to obtain a son or for success in the hunt from Brother Moon (D'Anglure 1986: 97) (Figure 18) The photograph's caption reads, "Shamanic ritual of pavungaqtuq during which the shaman, half-naked and tightly bound, must release himself from his bonds and rise to the beyond." (D'Anglure 1986: 98, my
translation). Although the Inuit context is not related to the Tropical Forest, this does illustrate one of the common themes in New World shamanism.

The Acrobat

The acrobat in Figure 19, A is probably actually a contortionist, and may be a person with a medically recognized congenital condition in which the bones and skin become extremely plastic. Ehler-Danlos syndrome or Marfan are both possibilities. The vessel depicts a person who seems boneless, with their body contorted into a position which mimics a snake about to strike. The belt and leg bands, which are buff-coloured, contrast with the red-slipped body to depict a banded snake-like body, and the diamond-shaped negative-resist patterns on the legs (rather like fish-net stockings) are obviously a reference to the diamond pattern on the backs of the fer-de-lance and the bushmaster. The red face-painting is probably meant to imitate a snake's scaled mouth and flickering tongue.

A whistling bottle portrays a very similar figure to the acrobat, but this figure who holds a two-headed serpent in his hands may be another version of the same personage. The two incised curved 'tails' filled with dot-punctates which emerge on his back probably represent the continuations of the modeled snakes' bodies which are emerging from his body. The person has, in essence, become the snakes and absorbs and contains their power.

Carlos Elera (1993: 243-245, Figure 6) illustrates an acrobat ('el contorsionista') from Puémape (Classic Cupisnique style) which is depicted in the same position as the acrobat described above, with his legs touching his head. (The stirrup spout is placed in the same position as on the Chorrera vessel as well). The acrobat of Puémape holds a serpent in the left hand, rather unfortunately the right hand is missing so that we cannot know whether it was holding a serpent as well.

Significantly, an almost identical figure has been found in West Mexico. Known only as "the Acrobat," this effigy figure was recovered from the 1967 excavations at Tlatilco. (It was part of the tomb contents of an adult male with tabula-erect cranial deformation). Other offerings in the tomb
included clay pieces that may have represented clay mushrooms or phalli, and some small *tezontle metates* (metates are flat stones used for grinding grains, usually maize), which are said to be used to prepare hallucinogenic mushrooms for ingestion by shamans. The contorted position depicted in this version of the acrobat is commonly portrayed in various examples of the figure which is rendered in solid and hollow clay figures, as well as in jade from the Gulf Coast or the Valley of Mexico and on a relief sculpture from Veracruz (Ochoa, in Benson and de la Fuente 1996).

The arched position of the other examples of Chorrera acrobats suggests the strained contortions of a person under the influence of *yajé*. (Figure 19, B) Reichel-Dolmatoff (1975: 120) writes, "To become a jaguar (shaman) they turn their bellies upward....Their backs turn to where the stomach is."

**The Flute Player**

Playing flutes or pan-pipes, singing, whistling and rattling maracas (gourd rattles) are all characteristic noises which are made during shamanistic performances throughout Northwest Amazonia. The sounds are often made under the influence of hallucinogens and because of their repetitive nature they tend to reinforce the trance-state. For the Desana, the sound of sustained whistling (for example, the sound made by flutes) has connotations of sexual invitation, it incites humans to commit a prohibited or dangerous act. Deer and rodents whistle to incite the hunter, as do birds of prey that symbolize female sexuality (Reichel-Dolmatoff 1971: 115-116). Whistling is one of the noises associated with shamanistic seances in the Peruvian Amazon (Katz and Dobkin de Rios 1971) and Furst (1965:46) also asserts that "...whistling [for lost souls, to disperse demons, etc.] is a shamanic trait which survives today in both Mesoamerica and in Asia." Flute-players are found in the mythology of many Native peoples of the Americas, for example, Kokopelli, the hunchbacked flute-player of the Anasazi, is portrayed on pictographs in the Southwestern United States. (Compare Figure 18 lower photograph with vessels in Figure 20)
**Dwarves**

Dwarves are supernatural Underworld figures. Three of the vessels depicting dwarves show these small beings with horns. One vessel depicts a dwarf-woman in a helmet with horns, and also with flaps which hang down on either shoulder. (Figure 23, B) Flaps hanging from a turban or head-covering seem to denote female-ness in Chorrera ceramics.

Dwarves in Desana mythology are the forest spirits called *uahti* who seem to be related to the *boráro*. The *uahti* are hairy, with a large belly, and have feet without toes. They are accompanied by bats (Reichel-Dolmatoff 1971: 89). *Uahti* can be either male or female. Reichel-Dolmatoff suggests, however, that because their bat companions symbolize the vagina, and they are described as potbellied, they can be considered feminine. The *uahti* are also the Night People. They are associated in particular with *vihó* (Virola) snuff (Reichel-Dolmatoff 1975: 98).

In his examination of the iconography of Valdivia or Early Formative Ecuadorian material culture, Peter Stahl (1985: 119) discusses the imagery of later stage drug intoxication. According to Stahl, "A recurring theme in complex later stage hallucination is the appearance of small people (e.g. Langdon 1979: 71, La Barre 1975: 13, Siegel and Jarvik 1975: 111, 115, Reichel-Dolmatoff 1970: 33)." Hallucinations involving visions of big and little people (possibly related to the drug-induced visual conditions of macropsia and micropsia) have been documented in studies of cocaine, *Lagenaria* and *Datura* use, and many South American native groups see little spirits or people under the influence of hallucinogens (Stahl 1986: 136, 137: Table I).

In the Desana mythological pantheon, one of the most important characters is the Master of Animals or *Vai-mahsë*. Vai-mahsë appears as a small red dwarf. He is the owner of animals and fish, and as a phallic being he is also the procreator. He lives in the forest inside special hill houses, like malocas, where he takes care of all the animals hunted by the Desana. Vai-mahsë’s evil counterpart is the *boráro* who is a Forest Ogre. The *boráro* is ugly, hairy and monkey-like, and is accompanied by bats and blue Morpho
butterflies. A figurine in the Lathrap et al. 1975 catalogue could be a representation of Vai-mahsë or a figure very much like him. This figurine portrays a man (possibly a dwarf), standing with his head tilted up and his arms by his sides. He is 'dressed' in red, and has a black headdress with a red cutaway stripe on its left side. His face-markings (tattoos or body-paint) are similar to those on the heads of fer-de-lance or bushmaster snakes. He also wears two pairs of earspools (on the upper and lower earlobes), and a segmented necklace. (Figure 24)

The Twins

The early depictions of mythical figures in the Río Chico and Tabuchila ceramics show double-headed humans or monkeys on jars, or maté type jars. These double-headed human/monkeys might represent the Hero Twins or the Magical Twins, a pair of mythological shamans who appear throughout the Americas in various guises, and are often associated with the Pleiades (and Orion). The Hero Twins are often Older Brother and Younger Brother, or Sun and Moon, whose misadventures often result in the weaker and younger brother’s loss of a limb, or even of his life. The Twins are stolen from their real human mother and raised by the Old Frog Woman/Old Black Jaguar's Mother (Woman Shaman). When the Twins discover the truth about their real origins they kill their foster mother, stealing fire from her and giving it to humankind (Roe 1982: 154-6, 314 n.8, 241). (Figure 25)

The Man in the Reed Boat

This depiction of the Man in the Reed Boat's facial characteristics are rather similar to those of the Acrobat, the Double-Serpent Figure (not illustrated), and the Afflicted Man with a large phallus (Figure 26, A, Figure 19, Figure 85). Here the figure is depicted riding in, or as part of a vessel which looks like a reed boat ('caballito del mar' cf. Lathrap et al. 1975: 25). Although the boat is similar to boats used along the coast of Peru, on this vessel there are also bands which are slipped different colours in a kind of step-fret design on the prow and stern of the boat. The Desana Snake-Canoe which carries the ancestors is associated with the Rainbow. The body of the
vessel is slipped red, white, and yellow, repeating the designs that adorned the mythical Snake-Canoe (Reichel-Dolmatoff 1971: 172).

Figure 26, B also looks a bit like a larva with a human face. Larvae, maggots and earthworms are often identified with snakes (Roe 1982: 174-175, Rueda 1987: 205-208) and they usually evoke dislike and disgust, even though some are also edible and highly prized for their high fat content.

**Human Effigy Neckrests**

Chinese neckrests (ceramic pillows) from the 9th century Late Tang and 11th to 12th century Northern Song dynasty were used by the living but they were also placed in tombs. Some were made to imitate the wooden or bamboo headrests which were used every day. Effigy neckrests also exist and many seem to have been made in the shapes of animals, especially tigers, which have a special significance in Chinese mythology. Effigy neckrests in the form of humans generally take the form of children or babies. These are modeled in-the-round depictions of children on their stomachs, with a flat head-support on the back (Boyin 1993: 230).

The portrayal of reclining personages on neckrests and other vessels supports my inference that the neckrests were meant to support the neck and head of the persons who were buried with them. As part of the grave furniture with which they were provided, shamans or religious practitioners were given an effigy which provided a "seat" for the skull -- one of the most important parts of the body. I would compare this to the 'yajé stool' which all (Desana) shamans must acquire as part of their ritual paraphernalia (Reichel-Dolmatoff 1975: 81). Most of the neckrests are human effigies which are portrayed on their backs or their stomachs, with hands and feet outstretched. They may also be intended to be a manifestation of the shaman's spirit, which flies or swims through the air to the upper or lower worlds.

Whether the neckrests are representations of people in trance, sleeping or dead may be an important question in this context, given my emphasis on body posture in the previous section. I would argue, however, that in fact it is not very important whether the figures portrayed are in any of these states
of being in particular because, according to Tukano (and other South American Tropical Forest groups') perceptions of them, they are essentially interchangeable conditions.

Desana participants in rituals speak of the yagé experience as dying or as an anticipation of death (Reichel-Dolmatoff 1971: 174). Sleep deprivation, and the resulting trance-state which it produces, is also used as a way to see visions by Tukano initiates (1975: 87, 201). Sleep itself is a kind of liminal experience in which one dreams. It is not quite death, but almost.

**Woman holding a Small Figure (Figurines)**

Saamano (1842-95) refers to figurines like these being used as a kind of religious icon in a temple on an island just off the coast. He also suggests that shaman-priests during this time-period may have guarded these icons upon which their rituals centered.

With their arms by their sides and their extended legs, the small figures in the women's laps appear to be either dead (in a state of *rigor mortis*) or in a trance-state. The small figures held on the laps of the figurines may represent a shaman-initiate who is being suckled at the breasts of Yagé Woman or Jaguar Woman, the Mother of Hallucinogens and Woman Shaman.

For the Desana, Yagé Woman is also the Daughter of the Sun who was impregnated through the eye in an incestuous union with her father. As the first woman of Creation, she gave birth to Yagé Child, the narcotic vine which causes hallucinations. Yagé Child was brought by his mother to the House of the Waters where the first Desana were sitting, where he proceeded to 'drown them in visions.' (Reichel-Dolmatoff 1978a: 4-6) The sensations which Desana participants in a yagé-taking ceremony feel are also described as a 'little death' (Reichel-Dolmatoff 1971: 174).

The root word for both coca and yagé in the Desana language *ahp* is also the root word for human breast milk, *ahpink*. Ahpinkondiá, the "River of Milk," is described as a "uterine paradise" inhabited by the souls of the dead. It is also the same tender green colour as young coca leaves.
The equivalent mythical female character to Yagé Woman among the Barasana is Romi Kumu or Woman Shaman. Romi Kumu is the Sky Mother, and the creatress, and is identified with the wax gourd filled with beeswax and coca. She is said to be "like a man" and is the mistress of hallucinogenic substances and poisons. Although Romi Kumu is not directly associated with yagé, coca and yagé are also identified by the same term by the Barasana (S. Hugh-Jones 1979: 182). "...yagé is also described as milk (Romi Kumu's milk), and [thus] yagé and manioc juice are paired directly as ancestral milk for the 'dead' and ordinary female milk for the living." (C. Hugh-Jones 1979: 231)

Yagé Woman is also sometimes called Jaguar Mother among other Lowland Tropical Forest societies, for example the Siona, the Sibundoy, the Canelos Quichua, and possibly the Campa. She is the First Shaman and the initiator of apprentice-shamans.

"Before she accepts the novice as her son, she also tests him as to his strength and fearlessness by reinforcing the fear of death. She cries and tells him that he will die. As his 'grandmother' she sings the Siona mourning chants as she points to his coffin and personal effects. According to Siona myth, the mourning chants practiced by the Siona were originally learned from her.

When the novice sucks her breasts, we can see another aspect that is necessary to gain knowledge. Not only does the novice have to be strong, but the mystical death also symbolizes a return to a state of innocence and dependence upon the Jaguar Mother. Shamans transform into jaguars when they drink yagé, and the Jaguar Mother becomes their mother when they become shamans. Thus, this vision is a symbol of mystical death in which the apprentice leaves this world through death and is reborn as a child of the Jaguar Mother. His dependency and infant status are symbolized by drinking from her breasts." (Langdon 1979: 71)

All of the figure types which are described above seem to portray mythological personages or personages who have mythological connotations. The effigy vessels and figurines which were placed in tombs may have been related to the deceased's level of adeptness in shamanic ritual, or have been
related to the reason for the person's death. The ceramic figure's mediating capacity was likely important as well. Those shamanic aspects which were intended to protect and perhaps guide the 'soul' of the deceased to the underworld -- the psychopomp function -- were probably most important. The figures which are portrayed also might be depictions of the shaman at different stages of a hallucinogenic drug experience or aspects of the 'journey to the Underworld.'

The Tranced Personage

The vessels which represent the "Tranced Personage," are depicted in positions which I interpret simply as a person under the influence of psychoactive drugs. This interpretation is based mainly on the figure's body position as the vessels portray people in what appear to be ritualized positions which are identified as sitting with crossed legs, squatting or reclining.

Cross-legged position

Sitting cross-legged is a characteristic position of many of the anthropomorphic figures which are depicted as whistling bottles and as figurines. The cross-legged pose is a tantric position (for Buddhists and Hindus) and may have been intended to represent a connection to the divine or the supernatural. One of the whistling bottles depicting a dwarf is shown with crossed legs, and the acrobat is represented with its arms crossed, supporting the body on the ground, while the legs are bent over upwards to touch the head.

All three of the figurines which depict a female holding a small figure in her lap have crossed legs (see discussion of Yagé Woman), although these have their legs crossed left over right. Two figurines from Atahualpa, and the "prisoner" also have their legs crossed left over right. It is possible that the right or left leg crossed-over position also has significance -- perhaps that of female [vanquished enemy] vs. male.
Reichel-Dolmatoff's (1975: 162, 164) descriptions of his own and others' body positions while engaged in taking yajé are also relevant in this context. At the beginning of the yagé session,

"He (Muhipu) had drawn up his legs so that his chin was almost resting on his knees. He was looking before him with half-closed eyes, his lips moving rapidly while he slowly stretched out his right arm, palm downward." ... "I let my head fall on my chest and stretched my crossed legs out before me, just like the others." (Reichel-Dolmatoff 1975: 162, 164, my emphasis)

Squatting position

Effigy vessels representing humans (e.g. Figure 15), monkeys (Figure 46), coatis (Figure 61), and other animals depict the effigy in a squatting position. Two examples of human effigies (Figure 28) compared with a photo (Figure 28, originally illustrated in Schultes and Raffauf 1992: 82-83) illustrate the similarities in posture between the figures and the shamans in trance. The animal vessels are also significant because they represent some of the animals which I have identified as iconographically important in the sub-assemblage. Depicting them in a similar posture to humans (one which is physically possible for animals, as sitting with crossed legs is not) emphasizes the supernatural relationship between these animals and humans.

Reclining position

The vessels portraying reclining personages or animals are also likely to be representations of a personage in trance. Two vessels portraying the "Afflicted Man" show the person reclining, with one hand under his head. (Figure 89) Five vessels depict monkeys, coatis, and a dog in similar reclining postures and often with crossed legs.

Body position seems to be important for entering the trance state which is brought on by the ingestion of hallucinogens. Jonathan D. Hill (1992: 195-198) has discussed body postures and actions of ritual healers among the Wakuénai (Baniwa, a Northern Arawakan group who are neighbours of the Tukano in Venezuela) with regard to the performance of
two different types of curing songs. Body position and movements vary according to which kind of song is being performed (curing witchcraft or shamanic) by the healer, and the whole performance is strictly ritualized.

**Hats, Horns, and Headbands: Figurines and Anthropomorphic figures and their further identification as shamans**

Many of the anthropomorphic vessels and figurines from the Río Chico and San Isidro areas wear a particular headdress or hat which is composed of a smooth helmet-like cap which might have a flat or rolled brim. These "helmets" are distinctive and were remarked upon by Lathrap (Figure 17) because they were so similarly represented in Ecuadorian, Colombian and Olmec prehistoric human effigies (Lathrap et al. 1975). Some of these helmets, especially on the figurines, look like cut gourds and, as such, may represent real headwear, but they also may represent more than one metaphorical concept.

If gourds were one of the central metaphors for Chorrera society then their representation as head-coverings is clearly symbolically important. Heads and wombs are equivalent in much of Amazonian mythological thought, and the covering of the head with a gourd (or half a gourd) reiterates its cosmological ramifications.

Gourds were used as women's caps among the Cayapas Indians of Ecuador during the 1920s. Barrett (1925: 172) has commented that,

"The *maté* has still another special use - that of a woman's cap. With it is worn a piece of lightweight black cloth or a double bandana handkerchief, which passes over the head and shoulders and hangs down the back as protection from the sun. Usually this cap is decorated with incised lines and figures, and occasionally it is used as a drinking cup in traveling, but it is never put to any of the ordinary uses in which common *matés* are employed." (Barrett 1925: 172)

The link between gourd head-coverings and shamanistic activity is clear in Reichel-Dolmatoff (1975). Jaguar transformation is achieved by the *payé* under the influence of *vihó* (*Virola snuff*) and Reichel-Dolmatoff refers to several fragmentary tales which describe the taking of the snuff and its
subsequent effects. Texts Nos. 30, 99 and 140 describe the behaviour of the men after they have taken vihô:

Text 30: “To become a jaguar they turn their bellies up. They do this to hide their hearts. Part of the face is like a gourd bowl. In this way, if someone should shoot at them they won’t die.”

Text 99: “Clad in their jaguar garments they turn up their faces. Their backs turn downwards to where the stomach is. ... This is what they say when talking. *His head is a gourd bowl, the forehead has the shape of a gourd bowl.*” and,

Text 140: “And this is how they disguise themselves: they turn their undersides up to where the back is. *Their faces they cover with a gourd bowl.* ‘Otherwise they might kill me...’ they say, and so they protect themselves.”

(Reichel-Dolmatoff 1975: 110-114, my emphasis)

Reichel-Dolmatoff (1975: 120) offers an explanation of the twisting of the ‘jaguar-men’s’ bodies as, “the convulsive posture adopted by a person under the influence of narcotic snuff.” Jaguars have been observed chewing on yagé vines, and Reichel’s conclusion is that these instances were interpreted by Desana observers as the transformations of payés into jaguars through the use of hallucinatory drugs. The covering of the face or the head with a gourd bowl is not commented upon by Reichel but it fits with the equivalence made between gourds and heads from other cultures, specifically in Colombia and Venezuela (cf. Lévi-Strauss). Additionally, a kind of jaguar named by the Desana is called “gourd-bowl-leaf-jaguar” (*koâpu ye’e*) “because it has the color of this fruit when it is dry.” (Reichel-Dolmatoff 1971: 212).

Gourd bowls are also, of course, used to serve yagé to the men at festivals.

Head coverings other than these half-gourd-shaped "helmets" are often cloths which are wrapped like turbans, and which have long flaps which hang down on either side of the ‘turban’ (sometimes there is just one flap). These are usually found on vessels which portray personages playing musical instruments, but they are also shown on dwarves, and on small, deformed half-humans or creatures. Many of the Chorrera-Bahía or Chorrera-Jama Coaque transitional-style female figurines which are ocarinas
also have these long flaps on their headdress, and some ‘shamanic’ figures in Jama Coaque also have them. Other figures have small ‘horns’ emerging from the headdress.

Horns, and a wrapped headband or turban are symbols of shamanism in many cultures from the Old World and the New. Furst (1965) argues that the horned figures in these archaeological cultures of Colima, Nayarit and Jalisco of Pacific Coastal Mexico represent shaman figures who are usually called "warriors" in the literature, because they are often portrayed grasping other figures by their hair or wielding clubs in an aggressive posture. Horned figures are also often portrayed on miniature whistling figurines (ocarinas). Furst’s survey of horned shamans, priests and gods extends to China and northern and northeastern Asia and he demonstrates that, “Horns as the symbol of priestly or shamanic status are, ... the most striking common feature,” (Furst 1965: 47) Horned animals, especially deer, are sacred to many indigenous groups in the Americas. Not only are they often the most prized game animals, but they are also associated with the moon and with fertility rites in particular.

Furst’s discussion of shamanic headgear also encompasses headbands, which seem to be an extension of, or perhaps a replacement for, horns. Huichol shamans cannot exercise their power without their headbands (or sometimes hats) and Yurak-Samoyed and other Asian shamans demonstrate their shamanic performances for strangers without their hats or headbands so that their rituals are ineffective. “The Samoyed and other shamans not only wore a special costume but also a special shamanic headdress made of strips of cloth of different colors wound around the head,"(Furst 1965: 55) Closer to our area of focus in Northwestern South America, Furst (1965: 56) also notes that Warao shamans wrapped scarves around their head, as did shamans among the Carib and Arawak tribes north of the Orinoco river.

**Shamans and the “third sex”**

Many of the anthropomorphic figures in the assemblage have no sexual characteristics at all -- they are “gender neutral”. These figures include
the Burden Carrier, the Flute Player, the Person in Trance, and the figures on the neckrests.

Hermaphrodites depicted in Chorrera ceramics are rare but there are two figurines (actually a figurine and a figurine mold) which unmistakeably depict a man/woman, with breasts as well as a penis and testicles (Figure 33). Other figurines (Figure 34) depict persons with female genitalia or wearing a skirt but without breasts. These might be representations of young female apprentice shamans who have not yet developed breasts, but I also suggest that these might also be representations of the ideal shaman, the liminal figure who has both male and female attributes.

The idea of a "third sex" in shamanism was first proposed by Bernard Saladin D’Anglure for Inuit shamans. There are both male and female Inuit shamans, although, as in most Native American cultures, men tend to be the more numerous and (usually) more powerful shamans. D’Anglure (1988: 25) proposes, “a gender triangle, with a ‘third sex’ permitting a redefinition of cultural transsexualism, transvestism and shamanism,...” Transsexualism at birth (the foetus changes sex), and transvestism during childhood and adolescence seem to be important factors in the creation of shamans in Inuit culture. Infants named after deceased opposite-sex grandparents or other relatives tend to be transgendered, and treated as if they were the opposite sex until they reach puberty and sometimes after puberty as well. Names seem to be the most important determinant of sex, for each child has a biological sex, a social sex, and the choice of a sex with each of his/her names (D’Anglure 1988: 62). People who become shamans are often those who were ‘transgendered’ early in life.

The ‘neuter’ or ‘third sex’ in Inuit life is found among shamans who can change gender at will. M.A. Czaplicka (an ethnologist working among the Inuit at the turn of the century) wrote,

“Socially, the shaman does not belong to the class of men nor that of women, but to a third class, that of shamans (...) they have particular taboos, made up of traits which are at the same time masculine and
feminine. The same thing can be said of their costume, which combines characteristics proper to the clothes of both sexes.” (Czaplika, in D'Anglure 1988: 253)

D'Anglure (1988:80) explains that shamans are the ‘third sex’ by virtue of the spirits which possess them. The shaman is ‘possessed’ or ‘occupied’ by a spirit while in trance, and it is this spirit who actually has the power to cure, or to perform the tasks required of the shaman. Shamans always have at least one ‘auxiliary’ spirit of the opposite sex and the animal spirits which possess them often have either male or female attributes. Other ‘supernatural familiars’ may include animals or were-animals, (mythical) ancestors or deceased parents, or even the spirits of human beings from other ethnic groups.

This pattern, that of the spirit of the opposite sex who ‘possesses’ the shaman in order to carry out the supernatural tasks which the shaman must do, is also found in South American shamanism. Michel Perrin (1988), writing about Guajiro women shamans, believes that the powers of the shaman (as the ‘vehicle’ for spirits from the ‘other world’) are manifested in a very literal way -- through the body. Women who become shamans exhibit particular and stereotyped patterns of behaviour with regard to food (phobias) and sexuality. Older women past childbearing age seem to be more inclined to become shamans, perhaps because the cessation of women's reproductive functions, such as menstruation and childbirth, which are brought about by menopause leaves them free to use their bodies in other ways.

Sexuality and shamanic manifestation also seem to be interrelated. Sexual metaphors are used for the imbibing of tobacco -- the catalyst for shamanic powers -- and both male and female shamans are said to engage in sexual excess with their ‘spirit partner’ from the ‘other world.’ Shamans are generally very libidinous persons in mythology (see section on shamans and sexuality), however, they are often said to be restricted in their actual sexuality because of their intercourse (both literal and figurative) with the
spirits. Stephen Hugh-Jones similarly comments on the role of the Barasana shaman:

"In addition to being a mediator who combines opposed qualities, there is a sense in which shamans are also conceived of as sexually ambiguous. First, there is an ideal that they should remain celibate and unmarried as contact with women diminishes their powers. Secondly, whilst today all shamans are men, Romi Kumu, Woman Shaman, the female creatress identified with the sky (M.1), was the first shaman and it is from her that all shamans derive their powers. She herself is also sexually ambiguous and described as being like a man." (S. Hugh-Jones 1979: 125)

And finally, a direct link is made by Ramírez de Jara and Pinzón Castaño (1992: 296-297) between the evil shaman, death, femininity and the Jaguar Mother:

"Female categories can be applied to a man, such as a sorcerer who represents disorder and death. His rituals involve the use of odd numbers and distribution on the left side. During the hallucinogenic ritual, the shaman is able to establish a transformative dialectic from that of masculinity and spirit to that of femininity and animality. Such occurs when he changes into the Jaguar Mother, establishing mediation and synthesis between such opposites." (Ramírez de Jara and Pinzón Castaño 1992: 296-297)

**Animals**

The animals in this section are classified mainly according to scientific classifications, although I make some points here about relationships which seem to have been created by the potters themselves, such as the similarities between dogs and felines. The identifiable species of mammals include agouti, anteater, armadillo, bat, coati, deer, dog, feline, monkeys (spider, capuchin, cebus, woolly), opossum, peccary, rodent, mouse, squirrel, and rabbit. Birds include wood quail, curassow, tinamou, falcon, duck, gull, stork/pelican, sandpiper, Harpy Eagle, owl (two species), parrot, and woodpecker. Reptiles and amphibians include fer-de-lance, bushmaster, anaconda, iguana, turtle, crocodilian, lizard, toad, and frog. Fish include puffer, wrasse cichlid, Discus, and Jack. A special category which I have called
"Exoskeletons" includes shrimp, crab and also mollusks, which include land snails, marine snails, Spondylus, Strombus, etc.

Interestingly, there do not seem to be many representations of insects, (one exception is the palm grub) or of fantastical animals, although the Bahía Monster may qualify as an imaginary snake-like creature.

Mammals

Bat Bowls and Related Vessels

The natural characteristics of bats (Chiroptera) lend themselves very well to Underworld mythological associations. They are truly liminal creatures - flying at night, roosting upside-down in caves and trees, and sometimes crawling on the ground (Vampire bats) to find their prey. Bats are the only flying mammal, they have both fur and leathery wings, and they give birth to live young, which they suckle at each breast, like humans. Some bats also have very obvious fangs, which may make them seem like jaguars or other felines.

In these collections bats are represented almost exclusively on beautifully made polished bowls which have a small modeled bat's head (or a head-and-torso) at an indented point on the lip which then curves gracefully out on each side of the head to represent the wings (Figure 37).

Bat-shaped bowls were probably used as containers and serving vessels for hallucinogenic drugs, including snuffs. The bowls may have been used at mortuary ceremonies but possibly not exclusively, since pieces of them are also found in middens all over Manabí (Evan Engwall, personal communication 1996). Similar bowls were also found at the highland site of Cerro Narrío (Collier and Murra 1943: Plate 25, Figs. 1-5, and Plate 26, Figs. 1-3). The deeper bowls were likely used for serving or taking liquids, and the shallower bowls and tablets may have been snuffing-tablets. Many of these vessels have signs of intensive use-wear on their interiors, where the paint or slip is worn away. Many of them (with or without bats molded on the rim) also have small holes bored in the rim (usually in the middle of the animal's stomach) which may have been used to hang them by a string from
the rafters of the house when they were not in use. It is possible that they were also used as house-decoration, perhaps in order to ward off evil spirits. The iridescent or negative resist patterns on their interiors probably focused the shaman's visions while they were in hallucinatory trance.

Archaeological evidence for Bats

In Ecuador, Stahl (1994: 193) has found remains in Integration Period Taxa (Jama Coaque II) that were, "Chiropteran mandibular and dental elements ... from San Isidro in flotation heavy fraction. Most of this material was probably derived from a large Phyllostomid bat like Artibeus spp."

Artibeus is a Tropical Fruit Bat commonly found from Mexico to Argentina.

Zeidler, Stahl and Sutliff (1998) found the mandible and teeth of a bat (Artibeus sp.) in the abdominal region of a young woman in a Terminal Valdivia burial. The authors suggest that the entire bat head was buried with the body of a person who they believe may have been a young (apprentice?) woman shaman. The rostral elements of a small feline, probably an ocelot, were found in the same grave (Zeidler et al. 1998). Given the continuities especially between Terminal Valdivia and Chorrera, one may venture to guess that bats were symbols of shamanism from very early on in Chorrera.

Evidence of bat symbolism from related archaeological cultures

Elizabeth Benson (1987: 167) comments that, "The north coast of Peru is one of the regions where bat iconography is particularly prominent." She describes a number of Moche vessels which depict bats as sacrificers, and also bats associated with squashes. Moche III and IV vessels show a bat presenting squash (Lehmann 1924: plate 60), a bat-deity resting on a squash (Purin 1978: Pl. LVIII), and a squash with the head of a bat (Katz 1983: no. 55) (Benson 1987: 169). Steve Bourget (1995) associates bats unequivocally with women, menstruation, sacrifice and fertility rituals on Moche vessels. He interprets a depiction of a bat and a woman copulating on one such vessel as the metaphorical demonstration of blood sacrifice as a fertility rite.
Symbolism of bats

Bats are a symbol of night and the underworld in Amazonian mythology, as they often are in our own. Bats are 'hairy' and 'open' creatures, associated with death, night, and decay by the Barasana. They are night creatures, and are also associated with the moon, menstruation, women and forest ogres (Roe 1982: 79, 161, 226). They are therefore exemplary of all of the symbolic aspects which we have discussed for the ceramics in general.

Bats are associated with the vagina, with blood and with dysentery by the Desana. Their habit of hanging upside-down is compared to the embryo in utero, and bats are transformed birds which must defecate from their mouths in the 'Daughter of Aracú' myth. Bats are also the companions of the evil and hairy forest spirits the Ulahtí (Reichel-Dolmatoff 1971: 31, 89, 101) and of the boráro, the hairy Forest Ogre of the Desana who is related to Vaímahsê, Master of Animals.

Bats are also associated with (menstrual) blood by the Kógi. The Kógi máma (shaman) hangs a small woven wood and vine cross at the apex of the ceremonial house which is called nyuiji (bat) and which represents the vagina, this object is sewa and is intended to guarantee regular women's menstruations without discomfort (Reichel-Dolmatoff 1950-51: 116). The Kógi euphemism for a girl's first menstrual period is being "bitten by a bat", "Has the bat bitten you yet? ask the Kógi women, meaning, "Are you now menstruating?" Gaulchovang, the Great Mother of the Kógi also appears as a bat. "As this animal, she feeds on the menstrual blood and is related to the first menses of young girls. The principal offering for the Mother is the first drop of blood, and with it the Mother is 'paid.'"(Reichel-Dolmatoff 1950-51:190, 276)

The association of bats with shamanism is clear in Furst's (1994: 8) description of the initiation of the Yanomamo shaman-novice.
"In his initiatory trance, triggered by a hefty dose of intoxicating Virola snuff, the novice penetrates deep into the forest. Here he encounters Omáokóhe, a giant bipedal supernatural jaguar, who is Master of All Felines. Omáokóhe strips the flesh from his bones and replaces it with that of a bat - hence the designation of this class of shaman as héwiawan, literally, "Bat Person". ... He also rips out the candidate's internal organs and replaces them with magical ones." (Furst 1994:8)

**Bat bowls and Hallucinogens**

The association of bats, fertility, and shamanism, as well as the links with snakes through some of the incised imagery and modeled snakes on some of the bowls makes it clear that these vessels must have also been involved in the shamanic hallucinogenic complex which I have explored for the other ceramics in this assemblage. The drug associated with at least some of the bat bowls was probably a type of *Brugmansia* (once considered a species of the genus *Datura*). The reasons for this association are threefold. First, because the bat bowls are such a distinctive vessel form, they seem likely to be associated with a drug which is not yagé or coca. Vessel forms other than bowls which we have seen which depict bats are rare. Secondly, some of the bowls which we have identified as being bat bowls or related vessels are flower-forms or have flowers incised on them which look very like *Brugmansia* flowers (see descriptions below).

Similar bowls with small snakes on them seem to relate these vessels to one of the native names for a species of *Brugmansia* (*Methysticodendron amesianum* R.E. Schultes, also, *Datura candida* (Pers) Safford). The native name for the plant is "Culebra," ('snake' in Spanish), and the native shamans of Colombia who cultivate this tree in their gardens use it sparingly (if at all) because of its fearful effects, and because they 'see snakes' when they take it (Bristol 1969: 192). One of these bowls with a small snake on it, when viewed from above, looks very much like a large flower with ragged petals (Figure 68, A).

Schultes and Hoffman (1980: 264-266) describe *Brugmansia* as,
"... a genus of five or six species of shrubs and small trees, all native to South America,... Aboriginal societies in South America, ... have long utilized Brugmansia medicinally and as hallucinogens (Safford 1920). It may be that all of the species are cultigens, no longer found in a truly wild state - a condition that bespeaks long association with man and his agricultural practices because of their medicinal and narcotic properties. Brugmansia's active ingredient is scopolamine, an alkaloid. The drug is taken in the form of pulverized seeds in fermented drinks, or as an infusion of leaves and twigs.

Intoxication is characterized usually by initial effects so violent that physical restraint must be practiced until the partaker passes into the stage of a deep sleep, during which hallucinations occur."(Schultes and Hoffman 1980: 271)

B. versicolor, a shrub with large, trumpet-shaped flowers which turn apricot or peach-colored, is native to lowland areas along the Pacific coast of Ecuador (Schultes and Hoffman 1980: 267). The flowers are described as, "... very large and conspicuous, usually pendulous, 20 cm long or longer, usually trumpet-shaped, white or yellow, with pronounced musk-like aroma, especially after sundown." (Schultes and Hoffman 1980: 277).

Methylisodendron amesianum ('culebra borrachero') trees, "...are the 'property' of certain practitioners of the Kamsá and Ingano tribes (from the Sibundoy Valley of Colombia) who employ the hallucinogen in exceptionally difficult cases of diagnosis of disease, divination, prophecy or witchcraft."(Schultes and Hoffman 1979: 301) Methylisodendron flowers are up to 28 cm long, about 10-13 cm in diameter and are very strongly sweet-scented at sundown (Schultes and Hoffman 1979: 301). In Alwyn Gentry's description of calabash flowers, he mentions that flowers pollinated by bats often produce a distinct musky aroma not unlike the smell of the bats themselves. Although the manner of pollination of Brugmansia species is not described in the literature, given the shape and characteristics of the plant's flowers, a reasonable assumption is that they are intended to be pollinated by bats. Calabash trees are known to be visited by bats, and it is likely that bats feeding on nectar from flowering trees were observed by PreColumbian potters. Some of the bats which are represented on the bat
bowls are probably members of the genus *Glossophaga*, also called the Long-tongued bat (Figure 37). These little bats are common throughout Central and South America and are especially important as tree pollinators (Emmons and Feer 1990: 44, 62).

The link which I have made between bats and the flowers of these hallucinogenic plants is relevant to the decoration on several vessels (Figure 38). The first of these is actually a flared neck jar which is one of a series of jars with four red spots on them. In addition to the red spots and line-punctates covering the upper body, it also has incised decoration on the shoulder representing four stylized bat's wings. Three of the bat wings have an incised line on the interior and punctates, the fourth is simply painted red. The incised wings also curve three times each to form the upper part of four six-petaled flowers, each of which has a red spot as its centre. A bowl which represents an eight-petaled flower is the second vessel. There are nubbins at the joint of each petal which identify it as a bat bowl. The incised designs on the interior of the bowl probably depict a somewhat stylized representation of the flowers, which are elongated, with many petals (Figure 38, middle photo and drawing). A pedestal bowl has an incised design in its interior centre which represents an eight-petaled flower with four long tendrils extending from its petals, each of which has an additional half-flower attached to it (Figure 38 top right). Another pedestal bowl has an incised design on its wide flange which looks very much like the flowers on the other bowls. The double-line patterns are also very bat-wing-like, and are very similar to the flower designs on the jar.

*Brugmansia* is utilized as a narcotic and hallucinogen by many tribes in the Amazon and the Andes and sometimes as an admixture for *Banisteriopsis* (yagé) (Schultes and Hoffman 1980: 270). Schultes and Hoffman (1980: 270) list the Chibchas, Chocós, Ingaros, Kamsás, Sionas and Kofáns of Colombia and Ecuador, the Quechuas of Bolivia, Ecuador and Peru, the Mapuche-Huiliches of Chile, and the Canelos, Piojos, Omaguas, Jávaros,
and Zaparos of eastern Ecuador as just some of the peoples who employ these plants as shamanistic aids.

The associations of the Brugmansias for native peoples are very interesting, especially in the context of our examination of mortuary vessels. The principal name for these plants is 'borrachero,' which can be translated simply as 'the intoxicator'. Communication with the ancestors seems to be the most common use for the drug (Jívaro, Quechua), but it is also said that the Chibchas of pre-conquest Colombia gave chicha infused with Brugmansia to the slaves and wives of dead warriors before they were buried alive with their master. *Brugmansias* seem to be commonly planted beside houses and also in cemeteries. Finally, Schultes and Hoffman (1980: 271) describe a small Peruvian town where the people still believe that the plant will reveal treasures in ancient graves or *huacas*, hence the name, *huacacahu* or "grave plant." Another possible translation of *huacacahu* is 'messenger of the gods,' or 'sacred messenger.' (Stuart Rockefeller, personal communication 1996). I suggest that *huacacahu* denotes a plant which gives access to the world of the ancestors (the Underworld), and that the bats seen drinking nectar from the flowers on these trees thus became one of the important symbols of that world.

**Small Mammals: Coatis, Agoutis, Opossums**

In this section I deal with small, furry mammals other than bats, dogs, felines and monkeys which are described and interpreted separately. (Armadillos are described in the section entitled *Exoskeletons*). Small mammals are depicted mainly on whistling bottles, although a few are depicted on maté vessels. They are most often depicted squatting in the same position as monkeys (and as the anthropomorphic vessels which I have described as shamans in various stages of trance). The animals which I have identified as coatis (*Nasua nasua*), agoutis (*Dasypodta punctata*) and opossums (*Caluromys* sp.) might have been seen as related to one another by Chorrera people. The creatures often have their paws raised to grasp their
snouts and, in some cases, their paws are clearly wrapped around the elongated part of the muzzle (Figures 60 and 63).

All of these animals have relatively agile fingers and hands which they use for eating and grooming. Agoutis do sit erect to eat fruit with their paws (Nowak and Paradiso 1992), but the action which is depicted on the ceramics does not seem to be either eating or grooming. (Figure 60) The purpose of this action is therefore somewhat perplexing. One possibility is that the animal is meant to be playing its nose like a flute. Armadillos play their noses in myths told by the Shipibo (Roe 1991: 56 n. 32), and flutes are made from armadillo skulls (Izikowitz 1934) but the animals depicted here are clearly coatis or agoutis. Although somewhat similar in appearance, coati mundis, agoutis and opossums have quite distinct habits and lifestyles.

**Coati**

I have described the characteristics of all of the small mammals which are depicted on the effigy vessels. Most of these vessels depict coatis. The surprising thing is that coatis are not featured as particularly significant animals in most of the mythology of Lowland Tropical Forest Indians. Stories, tales or myths about coatis are rare and when they do appear the animal is not a major figure.

For the Desana (one of whose sibs is called, "Children of the Coati") the coati is an exemplar of sexual discretion, and has high social status, because it has a very small penis and is therefore sexually restrained (Reichel-Dolmatoff 1971: 101, 199). The coati is described as both male and female, along with deer, tapir, peccary, rodents, monkeys and snakes (Reichel-Dolmatoff 1971: 209). These animals (the principal prey of Desana hunters, except for snakes) are said to have been created directly by the Sun Father when he made the world, and they can be used by Vai-mahsë to cause harm to people (Reichel-Dolmatoff 1971: 203). It may also be significant that the coati and agouti are called by related words: coati ismihpi, and agouti, mihpinga in Desana.

In a tale told by the Waiwai, humans are turned into coatis by an evil Harpy Eagle after they greedily (and unknowingly) eat him and his son and
do not leave any food for their 'nephew.' They are killed by the Harpy Eagle and then (when they are dead) turn into coati mundis which run away into the bush. Roe (1991), who collected this tale, explains that coatis are thought of as the "peccaries" of the forest canopy by the Waiwai. They are noisy and greedy, and they root around in the forest floor and canopy. They also smell bad (like peccaries and opossums).

**Agouti**

Agoutis (*Dasyprocta punctata*) also seem to be fairly undistinguished as mythological creatures. Significantly, however, they do appear in one of the two most important origin myths which are told by the Barasana. In a myth called, "Live Woman in the Underworld," Live Woman goes to the Underworld with her small son to accompany her husband, who she does not realize is dead. While in the Underworld, she is tormented by Spirit Woman (her 'mother-in-law'). Live Woman escapes her mother-in-law by swimming downstream with the floating burial goods of the dead. She arrives at the house of Agouti Woman, which is halfway between this world and the Underworld a season later. Agouti Woman helps Live Woman to escape from the Underworld by showing her the path to the manioc garden.

"This myth shows why women recover from severe illness while men die, and also why women outlive men." (C. Hugh-Jones 1979: 111-112).

The oppositions between Live Woman's point of view and that of the Spirit Woman demonstrate that the Underworld is a reversal of life on earth: a continuous surface is full of holes (the spirit's pot), food for living people is worms that consume dead bodies (the spirit's sweet potatoes) and this food is roasted in a manner associated with the burrowing of worms into parts of the body which are 'semi-orifices' (the spirit's armpits etc.). The opposition between the points of view of Live Woman and Agouti Woman is both weaker and more favourable to Live Woman, and this is consistent with the position of the Agouti house, midway between the world of the dead and the living. (C. Hugh-Jones : 110-112, my emphasis)

**Opossums**
The animals which I have identified as opossums were only depicted on Red-on-Unslipped vessels which I have listed as a separate category because they are such a distinctive type of ceramic ware.

Opossums are ambiguous creatures. They are vicious and they stink but they are good mothers (they keep their young in a pouch, or carry them on their backs until they are weaned). They also "come back to life" after playing dead if they are threatened. They have forked or bifurcated penises and vaginas, and a long, bare, and sometimes prehensile tail.

The opossum is an important animal in many South American mythological narratives, and the animal has been discussed by Claude Lévi-Strauss at length in several of his volumes of the Mythologiques. In a passage entitled, "The Opossum's Cantata" he gives several versions of a myth about the origins of agriculture. Here, Lévi-Strauss (1969: 183) theorizes that the opossum is associated with the origins of agriculture because of its stink, where, "decay was (sic) the diametrical opposite of cultivated plants."

Lévi-Strauss also discusses the opossum in the second volume of the Mythologiques, "From Honey to Ashes" but here he makes the connection between the Pleiades and opossum (Star Woman). Steven Hugh-Jones (1979: 169-176) also makes the connection between the Pleiades and the opossum (using Lévi-Strauss' as well as his own data) through one of the primary women figures of Barasana myth - Romi Kumu(Poison Anaconda's daughter, the Fish/Snake Woman and First Shaman of the Barasana). (The others are: Meneriyo, and Yawira who are considered to be the same person as Romi Kumu by Hugh-Jones, and who both have sexual relations with Opossum). Meneriyo is Ingá Woman. Inga dulcis is a tree with large edible pods filled with a sweet, fluffy substance much desired by South American children. The two fruiting seasons of the ingá coincide with the rising and setting of the Pleiades, or the wet and dry seasons (S. Hugh-Jones 1979: 171). Yawira is a greedy opossum woman who devours honey, she is also a frog associated with Romi Kumu (S. Hugh-Jones 1979: 173).
Romi Kumu, the (sexually ambiguous, old/young) Woman Shaman of the Barasana, is linked with the opossum through her stench and also through giving birth to many children at once, like the opossum. Romi Kumu is the mother of the Sky (her menstrual blood is rain), the keeper of the gourd of wax (from which coca is eaten), and the creator of the rainbow, she is also the Pleiades (Nyokoaro S. Hugh-Jones 1979: 167-8).

The gourd of wax (Crescentia) is linked to a great many things in Barasana mythology, including the lower half of Manioc-Stick Anaconda's head, and also his liver. The most important associations, however, are the mythical connections of the wax gourd to poisonous biting creatures and poison (fish poison and curare). The Barasana also consider menstrual blood to be poisonous (S. Hugh-Jones 1979: 180-1).

"Pleiades = Opossum: The Baniwa sib Siusi (Siisi = Pleiades in Lingua Geral), call themselves Oaliperi-dakeni (Koch-Grünberg 1906: 168, 1909-10, vol. I: 54), oaliperi means Pleiades and dakeni menas 'descendants of' (Galvão 1959: 40). The Barasana call these people Star Opossum (People) (Nyokoaro Oa), providing a direct link between the opossum and the Pleiades in Barasana thought. The Tatuyo sib called Opossum Tatuyo (Oa Suna) by the Barasana and Big Stars (Nyokoaro Pakara) by the Tatuyo, have the ritual role of shamans in the sib hierarchy and are 'the people who blow over the wax gourd' (werea koa baseri masa). This provides a similar but less direct link between the Pleiades and the opossum, in that a group called Opossum are intimately linked with the wax gourd which is in turn identified with the Pleiades. Finally, when in M.7.K, Opossum is killed by Tinamou, he falls to the ground from a tree and it immediately starts to rain." (S. Hugh-Jones 1979: 169-70)

The Pleiades are associated with the rainy season when they set on the western horizon at dusk (S. Hugh-Jones 1979: 170). Thus the opossum 'is' the Pleiades, and, like the Pleiades, it is linked to the rainy season/dry season cycle in the Tropical Forest Lowlands.

Opossums also seem to associated with incest (much like the Anaconda Woman). The opossum is therefore, "... a dirty, foul-smelling and lecherous animal which symbolizes pollution. For example, the expression
oa saberí, lit., 'opossum, to mix,' refers to a polluting sexual relationship." (Reichel-Dolmatoff 1989: 136) In a Barasana myth, Yawira makes a tryst with Tinamou but Opossum overhears them and tricks Yawira into coming to his house instead, where she is forced to have sex with him. She escapes from his house by swimming downstream to Tinamou's house, where Tinamou refuses to accept her at first because she stinks of the Opossum. Tinamou kills Opossum in a quarrel and it starts to rain (blood) (S. Hugh-Jones 1979: 300, M.7.K).

A very similar tale entitled, "Tinamou and Opossum" is told by the Desana. The women were locked up in a box (a house?) by their father but they cried so much to see the men that their father let them peek out and they discovered that the men were handsome. When they saw Tinamou they liked him and he told them that he would leave a red feather on his trail for them. Opossum tricked them by switching the red feather to his trail instead and so they went to his house by mistake, where they were forced to lie with him. Tinamou played his drum, and the women wanted to go to his house to get away from Opossum but Kingfisher would not take them. Duckling did take them and they went to Tinamou's to paint him with genipa. Opossum came to visit and slept with the women but they threw him out of the maloca and the drops of blood rained down on his grandmother. (The myth goes on here to describe the grandmother's taking revenge for her grandson's death through the Harpy Eagles, which are associated with disease, coca and the Milky Way, but the conclusion is somewhat confusing and the author notes that, "The entire episode of the Harpy Eagles seems to belong to another story (Reichel-Dolmatoff 1989: 467, another version of this myth is also given in Reichel-Dolmatoff 1971: 269)."

Finally, the opossum is linked to two other very important concepts for the Tukano. Among the Desana, "... the term koa, 'gourd, gourd vessel,' stands [here] for both women (wombs) and the ritual gourd cups from which yajé is drunk." (Reichel-Dolmatoff 1989: 172) These associations make sense because Ahpikondia is the origin place (womb) where shamans go when they
take yagé, and gourds are everyday women's vessels as well as sacred containers. "It may (also) be significant that the Barasana word koa, gourd, is phonetically close to ngoa, bone [skull], and also to oa, opossum." (S. Hugh-Jones 1979: 165 n.3) The Barasana words for gourd are: tuga koa the men's gourd (Crescentia), and koa the women's gourd (Lagenaria).

In yet another Desana mythological context, Opossum is referred to as 'Opossum bone-person,' who is also a son of bone-person (bone is 'raw material' or 'primal matter,' a phallic principle). Opossum is thus, "an evil phallic manifestation of the life principle." (Reichel-Dolmatoff 1989: 119-149) and again, "This marsupial is dirty and foul-smelling, its lair is full of buzzing flies and all kinds of insect pests. In the present text Opossum represents another tribe and is referred to as vahtipé, lit., "spirit man," a term one might translate as "devilish, rogueish, wicked." (Reichel-Dolmatoff 1989: 468)

Finally, the Bribris of Costa Rica also associate the opossum with death, decay and pollution. The maraca (rattle) of the of singer at funerals is called opossum, and this animal is 'pollution' which can only be touched by official buriers. (zorro pelón, título del orador que transmitía los mensajes del /useköl/. En los funerales, el zorro es la maraca del cantor. Este animal es /ña/, lo tocan solamente los enterradores. Bozzoli de Wille 1979: 224)

If the Opossum is associated with bone (the skull) it is also associated with death. Roe (1992: 69 n.21) notes that there is an, "... implicit equation of the human skull with a 'bony womb,' specifically the 'masculine womb' of one's vanquished enemy." In a Shipibo myth, a young man who has killed his father-in-law (a cannibal ogre) revisits his skull and inadvertently releases the mosquitoes attached to the inside of it. These mosquitoes return to plague humans ever after. Hollow objects are wombs and women are not necessary for procreation and gestation.

Opossums are therefore associated with the gourds, which are metaphorical wombs. The Opossum, a nocturnal creature which stinks of decay, yet which gives birth to many children at once, is thus associated with
both life and death simultaneously. Its depiction on ceramic gourds in the Chorrera mortuary assemblage is therefore entirely appropriate, according to its mythological and linguistic associations in the northern South American Lowlands.

**Guinea pigs**

Guinea pigs are small rodents which are kept in people's houses for food, rather like chickens. Like most rodents, they are nocturnal. Reichel-Dolmatoff (1971: 165) mentions that, for the Desana,

"In the dance called bohsó bayári(from bohsó/guinea pig), the movements of this small rodent are imitated. The bohsó is described as a restless little animal that jumps around here and there in a most unexpected manner. The dancers, in pairs, imitate these rapid jumps, changing from group to group, then walk zigzag, suddenly changing partners or running between the lines of the others."

The guinea-pig symbolizes agility and cunning and is also a trickster. It may also represent licentious behaviour (Reichel-Dolmatoff 1971: 101)

**Deer**

White-tailed deer (*Odocoileus virginianus*) are not rainforest animals but ancient pictographs portraying them are found in densely forested areas. One of their most significant characteristics is their pheromonal marking of territory (Reichel-Dolmatoff 1996: 202, n.48). Deer live in open and secondary habitats bordering rainforests, but also forage in fields around human habitats (Emmons and Feer 1990: 162-163).

The deer acts as the shaman's celestial mount and is associated with shamanism all over the Americas and Asia (Eliade 1964: 101, 105, 156 and passim). For the Desana, the deer is the most important game animal. It has human qualities because it can speak, and because the male is always accompanied by the same female, like a married couple. The deer is a 'pure' animal which symbolizes cleanliness (Reichel-Dolmatoff 1971: 100, 205).
Monkeys

New World Monkeys (Platyrrhini) have short muzzles and flat, naked faces, forward-facing eyes, small ears, short necks and torsos, long hindlimbs, prehensile digits, and long tails. All are primarily arboreal and will descend to the ground only to cross an open space (Emmons and Feer 1990: 95) All of the monkeys which are depicted in Chorrera ceramics belong to the family Cebidae. These include squirrel monkeys (Saimiri sciureus), capuchin monkeys (Cebus capucinus/albifrons), spider monkeys (Ateles paniscus), woolly monkeys (Lagothrix lagotricha) and howler monkeys (Alouatta). These monkeys are arboreal, and all species eat fruit, though many also eat insects and leaves.

Monkeys with collars and amulets, sitting in a squatting position, are common in the figurative pottery of both the Río Chico and San Isidro site-areas (8 bottles). Monkeys were probably kept as pets, and also eaten, by the coastal peoples of Ecuador, but they also had ritual significance. This is not unusual in South American mythology, and there are a number of stories about monkeys in contemporary folktales. Monkeys are very like humans but they are also unlike humans, they are our closest relatives among the animals. Monkeys are hairy, libidinous creatures who cause problems for humans but who can also be helpful.

According to Roe, spider monkeys and howler monkeys are particularly significant in the mythology of many Amazonian peoples. Most of the monkeys depicted in the ceramics seem to be woolly monkeys, but there are also identifiable capuchin, spider, and howler monkeys. The majority of the monkeys depicted on the adornos are unidentifiable, though most of them have naked or white faces with a noticeable break between face and fur, a description which applies to all Cebus species (capuchin monkeys), Lagothrix (woolly monkeys) and Alouatta (howlers).

Woolly monkeys may have been depicted in the ceramics because they walk in a peculiarly human way. The woolly monkey is, "... diurnal and arboreal, but often comes to the ground, where it walks upright on the hind
legs, using its arms to help maintain balance. When standing on the hind legs it sometimes uses the tail as a brace (Nowak and Paradiso 1983: 404). This stance is clearly depicted on two bottles. Figure 45, A. shows a monkey with bulbous eyes and snout tilted up, holding up its arms as if to present a toast or make an offering. The joined hands form the spout of the bottle, and the bottle itself is a tripod, with the tail as the third 'leg' bracing the other two. Figure 45, B. is also depicted with bulbous eyes and its face tilted up, with its arms up. The joined hands form the spout of the bottle. This bottle is not strictly a tripod (the tail is not flattened as in the San Isidro bottle) but its tail is at right angles to the body and appears to be a brace for the legs.

Archaeological Evidence for Monkeys

An excellent example of a Vicús Moche monkey vessel which is skeletal, and very similar to the woolly monkey vessels described above (Figure 46) is illustrated in Katz. Here the vessel is described as an,

"Effigy vessel in seated monkey (?) or male skeletal form as Death. This stirrup spout effigy vessel is in the form of a seated Death deity wearing a triple necklace. The arms with elbows akimbo, are separated from the body. The upper lip is outlined to represent the lack of skin covering over the mouth, giving the figure a skeletal appearance. "(Katz 1983: 154, Figure no. 32)

The illustrated Vicús Moche monkey is wearing a necklace and a conical hat, and is squatting in the same position as the Chorrera monkeys. The bottle's stirrup spout is also placed in the same position on its back as the Chorrera bridge-handles and spouts.

Symbolism of Monkeys

"Not only is the monkey, as a kind of Forest Ogre, hairy, humanoid, clever and oversexed, but he is also dirty, cannibalistic, noisy, laughable, and of underworld (forest) affiliation."(Roe 1982: 234)

In Amazonian mythology monkeys seem to be male-associated, although they also have feminine associations which have to do with hairiness, untamed libido and wildness. For the Desana, the word for
'monkey' is a synonym for 'penis.' Monkeys are described as creatures of ill omen, they are immoral, promiscuous, and "adulterers," and their cries are wails of disaster and evil. The cries of nocturnal monkeys predict death. Reichel-Dolmatoff 1971: 165, 213) "The Cashibo place monkeys in a similar underworld position by having them serve as guides during the last stages of the voyage of the dead." (Roe 1982: 232-234)

Monkeys are also noisy, and several Chorrera vessels illustrate this graphically, such as a screaming spider monkey and a howler monkey raising its snout as if to begin its dawn chorus (Valdez y Veintimilla 1992). Another bottle from the Museo del Banco Central in Quito (Valdez y Veintimilla 1992: 58) illustrates the triple theme of monkey-gourd-noise by depicting a small monkey adorno with an amulet around its neck, on top of a gourd-trumpet shaped bottle with a straight spout.

*Callicebus* (titi) monkeys are associated with one of the most important rolled bark *He* instruments by the Barasana. This instrument, called Old Callicebus monkey, is associated with the monkeys because both (monkeys and trumpets) 'howl' at dawn and dusk. *Callicebus* is a 'combinatory variant' of the howler monkey according to Hugh-Jones. *Callicebus* monkeys seem not to be depicted in Chorrera pottery but the general mythological associations seem to hold true for monkeys across the South American continent.

*Forest ogres* or *Baráros*

In the Cubeo óyne or funerary rites, among the most important masked dancers are the *Abúhuwa*, who are forest demons which look like monkeys, in that they are hairy and man-like. These have a calabash head with a painted face (Goldman 1963: 250). Goldman writes,

"The story is told of an old woman alone in the maloca with two young children. Abuhuwa entered the house and the children were able to escape by climbing up to the house beams. But the old woman was caught. An *abuhuku* rolled her between his palms until she became all soft and he sucked her out from the top of the head in the
way a Cubeo child eats a banana. He hung her skin over the branch within.” (Goldman 1963: 256)

The forest ogre of the Desana, called the *boráro*, is also described as monkey-like. The *uahti*, small hairy dwarf-spirits, are similar. His other name in *Lengua Geral* is *kurupirá*. Reichel-Dolmatoff (1975: 187) also mentions that when the boráro is angry he makes a noise like a yurupary flute. Although he is not specifically related to the monkeys, he is the "chief of the animals." Reichel-Dolmatoff's description of the *boráro* is as follows:

"The *boráro* is imagined as a monstrous manlike being, covered with shaggy black hair, with huge pointed fangs protruding from his mouth. He has big pointed ears and a large penis. ... At night, the bats are the boráro's companions, but during the day he is often accompanied by huge blue Morpho butterflies, and by that colorful bird typical of the Vaupés forests, the cock of the rock." (Reichel-Dolmatoff 1975: 182-3)

The *boráro* or Wax-ti of the Tukano peoples of Brazil is also accompanied by blue morpho butterflies. In addition to all of this, the *boráro* is described as having glowing red eyes, and backwards-pointing feet. He carries a stone hoe over one shoulder. He smells bad, and is associated with pungent-smelling animals such as the peccary. He is also associated with small, dark birds (his "lice"), the toucan, and (like Vai-mahsê) with lizards. (*Uracentron werneri*, the spiny-tailed lizard, and *Plica plica* L. a long-tailed lizard. Reichel-Dolmatoff 1975: 84, 241 n. 18, 19).

The boráro is said to roar like an enraged jaguar, and his favourite food is crabs, though he also eats *barbasco* (fish poison) fruits. Like *Yurupary*, the *boráro* is associated with forest fruits of various types, including *caimo* (*Chrysophyllum caimito*) and *vahsú* (*Hevea pauciflora* or rubber-tree fruit). The *boráro* is sexually aggressive and kidnaps women in the forest. Hunters who see him in the forest can be killed with his urine, which is poisonous. His other method of killing is to crush the person to a pulp, and then to suck out the mass of flesh and blood through the top of the skull, leaving a skin covering the skeleton, which he then fills with air. Many of the stories told
by the Desana about the *boráro* involve people catching sight of the monster and falling ill. The symptoms of the illness are severe headaches, fever and a general malaise, but these can be cured by a shaman (Reichel-Dolmatoff 1971: 86-89, 1975: 182-190)

Several similar demons are found in the Northwest Amazon lowlands. Furst (1994: 7-8) notes that,

"This element of dismemberment by an initiatory demon is found in many places, from Siberia and Central Asia to the Canadian Arctic and southward through the tropical forests of Amazonia to Tierra del Fuego. This process recurs among many Amazonian groups initiations for shamans, for example, (Paez) Shamans are said to be able to turn into jaguars, and to accomplish this transformation they are said to consume a plant called *yutse*. Now, an herb with a very similar name - *echyutse chime* - is masticated by shamans during curing rituals, and a plant that, in all probability, is the same is mentioned in the following tale: A Pijao killed a Páez man, flayed him, and ate his flesh. He then filled the skin again with the bones, added *iutse* plants, and so restored the dead man to life, sending him back to his people. The revival, however, was effective only as long as no-one spoke to the victim."

The Sanéma (a Yanomamó group) have a myth about a forest ogre which is a jaguar (Omaokohe). Omaokohe devours a man (an initiate) leaving his bones intact. The man remains alive and asks the Great Jaguar to give him other flesh. Omaokohe complies but tells the man that henceforth he must be He'wi, the Bat. The *he'wiawan* are a special type of shaman (bat priests) who sing 'wasamo' songs, presumably for curing. Johannes Wilbert (1963: 97-98) notes that "We have the impression that the *hikulad* (the spherical spirit-soul) of the priest contains the 'souls' of the ancestors who were destined by Omao to live there and help the priest. ... Our informant explained to us that the ancestors (hikula dib), the people of the hikulad of the priest, are the ones who cure the fever when the priest brings the hikulad out of his chest and deposits it for a time on the body of the patient."

According to Whitten (1976: 41) the Canelos Quichua believe that the *Juri Juri* (the monkey spirit people (also: *allpa supai* or *urcu supai*: earth
demon/hill demon) are dangerous small brown furry people which have two androgy nous faces: the front one to eat monkeys and the back one to eat humans. Monkeys themselves are Machin Runa or human, with human souls, and any man who marries into Canelos society has an ancient monkey soul. The Juri Juri, and monkeys, are associated with strangers.

The Shuar of the Ecuadorian Oriente have a similar sort of forest demon which they call Iwia. The Iwia looks like a monkey, he is black, hairy and has long nails and his character is stupid, greedy and libidinous. Iwia also lives in caves, rather like a troll. Iwianch (the plural of Iwia) feature in stories about their greed and licentiousness. In one Shuar story the entrance of the Iwia into a widow's hut is presaged by the hooting of an owl. (The owl is also considered a devil by the Shuar and, in this story is a sort of familiar to the Iwia). The Iwia tries to eat the widow's children but has ashes thrown into its eyes instead, killing the owl and routing the Iwia. The Iwia is then invited to a fiesta by the Shuar who kill it by burning it, and a kind of calabash (yumi, used for carrying water, prob. Crescentia ) is born from its ashes (Tankamash 1987: 226-8).

**Skeletonized monkeys and shamanism**

Skeletal monkeys probably represent shamans, or shaman-ancestors perhaps as part of the Chorrera myth cycle represented on the special series of bottles which I have described above. According to Eliade (1964: 63),

"In the, "spiritual horizon of hunters and herdsmen, ... bone represents the very source of life, both human and animal. To reduce oneself to the skeleton condition is equivalent to re-entering the womb of this primordial life, that is, to a complete renewal, a mystical rebirth."

Skeletonized animals or skeletal markings on special clothing seem to mark the shaman's magical abilities to transform him or herself from flesh to bones and back again. A Desana myth, collected by Reichel-Dolmatoff (1988: 30) recounts the tale of a hunter who comes face to face with Vâi-mahsê, Master of Animals and the great supernatural shaman. The hunter, feeling
guilty for having killed the Master's animals, fires a shot and flees. Long afterwards he returns to the spot and finds the skeleton of the shaman. He hits him hard on the jaw to try to remove one of his teeth, and the shaman rises up to become the hunter's protector from then on.

**Felines and dogs**

**Jaguars**

Jaguars are the most feared beast in the Amazon and indeed in most of South America within their range. Their size, ferocity, and impressive armature of fangs and claws makes them the top predator in the forest (except for humans) and they do occasionally attack human beings. Jaguars are generally distinguished by their bright golden coat covered with dark brown rosettes but jaguars with a black coat also occur. They hunt many of the larger species of herbivores (deer, peccary, pacas) but also eat birds, small rodents, caiman, lizards, snakes, and fish. They are at home in the water. (Patzelt 1980) Because jaguars are what Roe calls a "species paragon," they are the creature the hunter most wishes to emulate. As the largest, most powerful and fiercest creatures of the forest, they are obviously the most successful hunters, apart from man.

Much has been written about jaguars (and felines in general) in both the Central and South American archaeological literature, mainly because this creature is depicted so often in various guises in the iconography of Pre-Columbian cultures. Most pertinent to our discussion here is their depiction in South American (especially Peruvian) iconography since, as one nexus of the triumvirate that seems to be ubiquitous in South American iconography (jaguar, harpy eagle, caiman) jaguars might be expected to be one of the most important iconographic symbols in Chorrera as well.

Surprisingly, however, jaguars do not seem to figure in the Chorrera pantheon. This seems rather odd, given that they are also the animal most associated with shamanism and curing in the Lowlands (shamans transform themselves into jaguars among the Desana and other groups), but they are simply not depicted on any vessel that we have examined in the collections.
There are depictions of felines (6), but they are unconvincing (indeed, almost caricatures) and they seem to depict small cats rather than jaguars. Only one (a limepot) has either spots or rosettes on its coat, and the others are slipped beige or brown with red detail. Curiously, they also have prominent noses, which stick out from their muzzles. In fact, they look like depictions of felines made by people who rarely see a large spotted feline. (There are some representations of spotted felines in the Banco Central collections in Quito but these are small, crudely modeled jars with a head and tail. They are similar to a rather crude representation of a Bahía Monster in the Banco del Pacífico collection. These vessels may possibly represent ocelots.)

There are several possible explanations for the non-depiction of jaguars in the Chorrera assemblage. It is possible that these animals were were not part of the symbolic mythical pantheon. Although Stahl does indicate that, "A large, burnt mandibular fragment [identified as Panthera spp.], without teeth, along with two separate incisors were recovered from contexts near the central platform mound at San Isidro." in Terminal Valdivia levels (Stahl 1994, in Pearsall and Zeidler: 189), it is possible that jaguar jawbones were imported or traded to the coast for use in magical curing or as hunting talismans, and that the beast itself was not a familiar animal to Chorrera potters.

The jaguarundi, a small feline with a beige or brown coat, or perhaps the coatimundi as a kind of 'cat'(a carnivorous, furry quadruped with tearing teeth and a long striped tail) might have been substituted for the jaguar in what Roe calls, "mythic substitution" where a different (usually smaller and lesser species) which is found in the ecological area under discussion, is substituted for the "species paragon" which is not (Roe 1991: 60 n.4, 1993).

Another possibility is that jaguars were considered to be too sacred and important to be represented on pottery. The depiction of jaguarundis, on the other hand, as lesser creatures, might have been allowed. Felines were depicted on small stone mortars which were probably used for grinding hallucinogenic snuff (or perhaps tobacco) in Valdivia times, and perhaps in
Chorrera times as well, and thus their depiction in pottery may have been secondary or even unnecessary (Zeidler 1988).

Finally, there is the possibility that spotted jaguars were not associated with death, and therefore were not represented in the Chorrera ceramics because these were primarily mortuary furniture. Here, Roe’s discussion of black jaguars and pumas is relevant, in that animals associated with death often have dark or “dull” coats. The animals which are represented in Chorrera could be jaguarundis or pumas, in which case their beige or brown colour is a naturalistic rendering. (In the highlands, pumas are associated with the sun, and with the Inca, they are also linked with the earth, and with the dead. Bas-relief carvings of pumas are also found over the doorways of chullpas [Highland Andean burial chambers] Roe 1991: 59 n.1).

Roe (1991: 77 n.53) also points out that Reichel-Dolmatoff’s arguments about Tukano colour terminology apply here. The Tukano Indians (Desana, Barasana, etc.) classify colours according to both hue and chroma, that is, if a colour is “bright” (reflective) it is considered to be “light” and if it is “dull” it is considered to be “dark.” “Thus a matte light brown clay color would be classified as a “dark” color even if we would regard it as a “light” hue.” The pumas or jaguarundis in Chorrera pottery are beige or brown, essentially a clay color (as are dogs). Although ‘brownish’ animals are considered to be inoffensive, and yellow symbolizes procreation and fertility in Desana terminology, pale (or dull) colours are negative energies associated with the moon and with death (Reichel-Dolmatoff 1978: 258).

Dogs

Dogs are chthonic or underworld creatures (Benson 1989). They are associated with the dead in many cultures (worldwide) as companions and as psychopomps. Often, a body of water must be crossed in order for the human’s spirit to enter the land of the dead, and the dog acts as a guide (or a guard, like Cerberus) to enable his/her master’s soul to cross the water. Benson’s (1989: 99) description of the dog’s natural characteristics outlines its eminent eligibility for its Underworld connections. It is a liminal creature, in
the sense that it is a hunting companion (and a pet) but it is also wild. It can see, hear and smell extremely well, and it can see in the dark. The dog is a creature of the earth, it digs in the earth and sniffs out small prey, it also buries bones and digs them up. Finally, the dog (like the armadillo and the opossum) eats carrion, and rolls in it, thus it also stinks of decaying matter, like dead things.

Intentional burials of dogs, as well as dog effigy vessels, are fairly common in burials from Central and South America and the Caribbean. A dog skeleton and a dog effigy vessel were found close together at Salango in an Engoroy context (Richard Lunniss, personal communication 1994). Urn burials from later coastal cultures on the coast of Ecuador also contain dogs (Holm 1975). Other archaeological contexts in the northern and central Andes include: Bingham's (1948: 19,191) find of a dog skeleton in the tomb of the Acclahuasi at Macchu Picchu, at Sípan, where the skeleton of a dog was found at the side of one of the men flanking the ruler (Alva 1988: 524-5, 529, Alva and Donnan 1993: 123), in a Moche IV burial at the pyramids of Moche (Donnan and Mackey 1978: 144), and at Pacatnamu dogs were buried separately, with a ceramic sherd in their mouths (Benson 1989: 98). Dogs were buried also in the earliest levels of the Saladoid tradition of the Caribbean (ca. 500 B.C.).

Dog effigy vessels are found in Moche (Alva and Donnan 1993: 137), as well as in Chimú in northern Peru. They are also found in the Caribbean, in Ostionan Ostionid and Chican Ostionan times, where both hollow effigy vessels and small modeled dog adornos feature as mortuary offerings (Roe 1995: 157).

**Symbolism of Dogs**

As in Old World mythology, dogs in New World mythology often act as psychopomps, messengers for the souls of the dead or as guards for the gate to the Underworld. The Kógi soul must cross three rivers (the River of Death, the River of Tears, and the River of the Sun) to reach its destination (the nine villages of death). At the first river, a dog must be given the
person's jawbone. When it receives the bone, the dog carries the soul across the river (Reichel-Dolmatoff 1984: 66).

Olivia Harris mentions that in the Andean highlands, among the Bolivian Laymi, the land of the dead (called Tacna) which is across the sea, must be reached by crossing on the ear or the nose of a black dog. The people of the altiplano associate black dogs with humans, and white dogs with devils, thus, in their journey to the land of the dead, dogs are associated with 'human' ghosts. "The deceased person's dog - if it is black, brown, or spotted - carries the soul across the Yawar Mayu. ... Black dogs are guides to the afterlife and they have the ability to move between the worlds of the dead and the living." (Allen 1988: 61, 159)

A particular dog vessel (Figure 65, top left and Colour Plate # ) illustrates some important aspects of colour symbolism in the ceramics. The sides of its body are actually symmetrical. Similar patterns - a winglike patch on the shoulder and a large spot near the tail - with an incised line around them on a white background, are slipped red and brown on one side, and brown and red on the other. The darker colour (dark brown) is used on the dog's left shoulder (and also covers the left side of its head and ear) and on the right spot near the tail. The same areas on the right side are slipped red, as are the spout, the band around the tail, and all four paws. The dog's back legs have cream bands, and the front legs have dark brown bands above the paws, which are extended forwards as if it is about to pounce. This distribution of colours over the dog's body makes sense if we refer to the dualistic cosmological schema which associates the left side with darkness. This dualism is very common in the tropical forest lowlands (Roe 1982: 141, 169) as well as in the Andean highlands. The bright red slip is painted on the winglike marking on the right side at the front of the dog's body, on the rectangular patch near the tail, on the face and ear, and on the paws because it is a protective colour, the colour of procreation. The dark brown colour, associated with the underworld and death, is a dangerous colour, and thus is
painted on the left side of the dog, but only in patches, because the dog is really white (a ghostly colour).

A similar Moche dog effigy from Tomb 1 (the Tomb of the Warrior-Priest) at Sipan also has bands on its front paws but these are cream on a red background. It also has distinctive spots and markings on its body, however, which correspond quite well to the Chorrera dog's markings, such as the dark patches over its eyes and ears and a white neck. (See Fig. 151 on p. 137 in Alva and Donnan 1995.)

Birds

Introduction

Representations of birds in the Chorrera assemblage conform to the general parameters which we have discussed above for the other animals, in other words, they are water- or earth-associated (ground-dwelling) species and/or they are liminal in some particular way (Spirit or Omen birds). Very few birds which are represented in the ceramics are strong, high flyers, the exceptions being the Laughing Falcon (one vessel), and the Harpy Eagle, which is only represented as an incised stylized pattern. Some of the birds are difficult to identify positively as one species, this is partly because their representations are stylized to some extent, and also partly because many of the possible species look alike.

Of the ground-dwelling species the wood quail represents a bird of ill-omen, as does the curassow, which has a booming call (heard at night in the nocturnal species, Nothocrax). The owl is likewise considered an evil omen and is associated with cemeteries and darkness. The duck is a liminal bird, its ability to fly in the air and to float on the water, and its habit of diving to feed make it a creature of three worlds. Similarly, the gull inhabits both sea and shore, as well as flying above the waves to spot the fish which are its main diet. The wading birds seem to inhabit both land and water at the same time. These are the main categories of birds that appear in the assemblage, although there are a few representations of other birds which will be discussed below.
It is interesting to note that, of the birds represented, none of them have a whistling call, and many of them have either a distinctively loud or harsh call or a cry which can be heard from far away which makes them easily recognizable. The wood quail's call, which is distinctively repetitive, makes it a bird of ill omen, or of ridicule and dislike among two native groups (the Yekuana and the Desana). The Nocturnal Curassow (as well as two other species) produces a booming call for courtship displays in the early morning and evening (Delacour and Amadon 1973: 66). Owls hoot at night to alarm or to flush their prey, and the falcon's cry serves the same purpose. Gulls scream or scold noisily and macaws are noisy birds as well, screeching and quarrelling (like all members of the parrot species) over the fruit in the trees where they feed. Ducks quack and splash noisily when they are disturbed. Two herons (Boat-billed and Night Herons) have a distinctive 'stentorous roar' which is their night call, and most of the other herons have a croaking call (Ortiz Crespo and Carrión 1991: 61).

Ground-dwelling birds

Wood Quail

The wood quail is one of the more significant birds for the peoples of the Vaupés area. The Desana name for the wood quail is sibi, which is also an euphemism for clitoris. It also signifies the female flute and "...women imitate the cry of the sibi, whose song is of evil augury for the hunter (Reichel-Dolmatoff 1971: 170)." Reichel-Dolmatoff also explains that the hunter is a man who seduces and is seduced by his prey and thus the hunting of animals is seen as a sexual act (Reichel-Dolmatoff 1971: 170). The quail is also symbolically seen as the guardian of tapir, deer and peccaries, and, "The hunter must also listen to the voices of the birds because they predict the success or failure of the hunt. When the hunter approaches his quarry, the sibiá (quail) jumps and dances, announcing good luck, but if this bird runs on the ground, which is its custom, the luck will be bad and it is advisable to return to the maloca (Reichel-Dolmatoff 1971: 211, 224)." The quail is
therefore an omen bird (more about this below) and is also associated with sexuality. One of the Desana sibs is called,

"Sibia-pora (Sons of the Quail) The progenitor of this sib is described as "mischievous, drunk, crazy about women and lazy." He did not know how to dance or sing and so could not fulfill his functions during the gatherings of his relatives. He is compared with a quail, a bird that "does not dance either" because it only runs on the ground without any fixed direction and as if disoriented. The members of this sib are said to have the same characteristics and, mockingly, it is pointed out that their only song is sibí-sibí-sibí or sené-senené. ... The progenitor of this sib is called sibí-ye-e, a term derived from the name of the quail and from the verb ye'eri/to cohabit. The quail is called sibí, but this is also a synonym for clitoris. Moreover, the terms, "mischievous" and "drunk" are often used in Desana to express states of sexual excitation." (Reichel-Dolmatoff 1971:196)

To the Yekuana the quail is also an omen bird, and, moreover, one that is associated with the Yododai, forest ogres whose activity resembles that of coatis or peccaries which noisily forage on the ground in large groups. The Yododai are the spirits from whom the two kinds of cane for making "painted" baskets are obtained by the Yekuana, and they must be propitiated with the proper gifts before one is allowed to cut cane. Painted' baskets have particularly significant 'poisonous' designs on them and are made by male specialists among the Yekuana. (For more on this aspect of Yekuana society see Guss 1989).

"Known as Yododai, these spirits move through the forest in large bands of up to forty. Invisible to all but shamans and those they wish to see them, the presence of Yododai can nevertheless be perceived by the distinctive song and smell. For as they march through the forest, ... they emit short cries similar to those of a wood quail. In fact, it is this song -- "yo, yoda, yoda, yoda...yo, yoda, yoda"-- which gives them their name. It is the same song as their reputed bird double, Kudokado, the wood quail (Odontophorus sp.), as well as the origin of the name of their chief, Hodehodeyena, a name that literally means "full of ho, ho, ho." (Guss 1989: 128)"
Tinamou

Tinamou is a Desana culture hero, and is considered to be a 'yellow' or solar creature like macaws, squirrels, and the cock-of-the-rock. It has "pure" flesh which is never taboo for nursing mothers and which is also given to sick people. Tinamou is saved by his shelter in a gourd in a Desana myth, and is also a protagonist in a myth about seduction in both Desana and Barasana mythology. The myth involves Yawira (the mother of gourds and coca) who is seduced first by Opossum (who stinks), then by Tinamou (who is a clean person). She then marries the Chief of the Vultures but finally Yeba (Jaguar, First Man) catches up with her and drowns her in honey.

Water birds

The ducks represented in this group are possibly the Muscovy Duck or the Cinnamon Teal. Wading birds are storks, herons and ibis (Families Ardeidae, Ciconiidae, Threskiornithidae). These birds generally inhabit swamps and the edges of rivers and lakes, where they catch small prey such as frogs, fish and crustaceans. Most of the herons are diurnal, but three species which are found in coastal Ecuador are possible candidates: 1. the Black-crowned Night Heron (*Nycticorax nycticorax*), 2. the Green Heron (*Bulbulcus striatus*), and 3. the Cocoi Heron (*Ardea cocoi*) (Butler 1979).

Gulls are represented on Chorrera vessels, and the most common gull in coastal Ecuador is probably the Gray Gull (*Larus modestus*), although the Gray-hooded Gull (*Larus cirrocephalus*) is also a possible candidate.

Of the marine-shore birds, only the sandpiper seems to be represented.

Archaeological evidence

We know that ducks were found in Ecuador during the Late Formative. The distal ulnar portion of a duck (Fam. Anatidae) was found at San Isidro (Stahl 1994: 191) and possible Muscovy Duck remains were found at Salango as well (Stahl and Norton 1987).

Ducks

Ducks are associated with water, curing shamanism and female sexuality by the Desana. According to Reichel-Dolmatoff (1971: 102), "...when
it swims, the duck floats on the water like a sick person must "float" in order to be cured. A certain duck with a red head symbolizes the vagina." Diákara., is a mythical woman who,

"... enjoyed swimming in the river and rose early, together with the men, to dive into the waters. She also drank a lot at feasts, but the drink did not hurt her because "she floated on the chicha," an expression used for people who drink a great deal but can control themselves. A third interpretation, however, introduces the sexual theme again: the duck has a red spot on its head that is compared to the vagina." (Reichel-Dolmatoff 1971: 191)

Several Desana myths in Reichel-Dolmatoff's books (1971: 265-66, 1989: 466) feature ducks in various roles. In one myth, the duck and the woodpecker (a mischievous character identified with the vagina at that time) had a contest to see who could walk best in the forest. The woodpecker won and it obtained its red crest as the result of the contest. The woodpecker then became the penis and the duck the vagina.

In another mythical context, ducks inhabit lagoons where they are the 'lice' of a very large snake that lives there. If a pregnant woman bathes there the ducks become very angry and 'sing' with rage. The lagoon rises, there is lightning, and the snake comes to attack her. If she defends herself the ducks disappear and a loud noise like a huge gate closing is heard. In, "Tinamou and Opossum" the duck is the only bird that takes pity on the girls and heeds their pleas to take them across the river to Tinamou's house. Ducks are thus associated with women through various identifications including water, the vagina, pregnancy and sexuality.

Wading Birds

Ibis

Wading birds are obviously associated with water and the water creatures which are their prey. Wood Ibises and other ibises feature in a Barasana myth about the acquisition of various kind of poison (S. Hugh-Jones 1979: 279: M.4.F.). The ibises are bringing packets of ants to give as a ceremonial exchange of food with Romi Kumu. Warimi (the Barasana
culture-hero, Father of the Sky) asks them to take them with him. They give Warimi feathers and he learns to fly and overcomes various obstacles (a manioc-fire, a strong wind, and two mountains clashing together) along the way to Romi Kumu's house where he foils Pouncing Jaguar's depredations of the birds. He also obtains fish poison from Romi Kumu's pubic hair, and arrow poison/curare from her father's (Poison Anaconda) gall bladder. This myth also explains the origin of the biting, stinging insects (scorpions, snakes, spiders, centipedes, etc.) which drank from the poison pot while Warimi was unconscious from the fumes of the boiling pot.

Gulls

Gulls are featured in Desana mythology as birds involved in curing shamanism. The tijereto's ("scissortail,"*Colymbus* sp.) rapid diving and emergence from the water is compared to the sick person's emergence from the waters of illness (Reichel-Dolmatoff 1971: 102). Gulls are also said to be the representatives of the huge 'gray-headed snake' created by the Sun who 'devoured the first son of the Desana.' (Reichel-Dolmatoff 1971: 32-33).

Spirit or Omen birds

Although a number of the birds described above might also be included in this category, I have included here only those birds which have been identified by other iconographers as significant symbols in pre-Columbian artistic representations. Birds which carry a lot of symbolic weight because of their natural behaviour or characteristics are spirit or omen birds. Owls, in particular, as nocturnal predators with an eerie cry, have a malevolent significance worldwide and so it is not surprising that they might also appear in pre-Columbian imagery with 'dark' connotations.

The Harpy Eagle is a large and most impressive raptor. Described as, "One of the greatest and mightiest eagles in the world" (de Schauensee and Phelps 1978: 45) it eats monkeys, sloths and other arboreal animals. Its white down is a prime element in men's ritual attire all over the Amazon, as well as a symbol of shamanic power. The Harpy Eagle is thus a "species paragon"
and was represented as one of the powerful triumvirate of symbols of the Chavín religious cult) (Roe 1990: 107).

Macaws and other parrots of various kinds are large, colourful birds whose noisy flocking behaviour makes them very noticeable. Macaws are treated with tapiragé, a poisonous exudate obtained from the toad (Bufo marinus), to change the colour of their feathers. The original feathers are plucked, then the areas of skin which are exposed are rubbed with the exudate. The feathers then grow back in a different colour. They are kept as pets and for their feathers by nearly all of the Tropical Forest groups, and apparently have been for centuries, judging from their appearance on many pre-Columbian artifacts (Ortiz Crespo and Carrión 1991: 120). Their multicoloured feathers have been used in making headdresses and feather capes for centuries by the Native populations of the Amazon and the Andes. (For example, feathered capes or mantles and headdresses which belonged to Inca lords are exhibited in most major museums in the United States). Inca costumes are generally from around the time of Conquest (1532) but earlier similar uses for feathers have been reconstructed for Moche grave-goods (Alva and Donnan 1993).

The owls which are depicted on Chorrera vessels are either Barn Owls (Tyto alba, common worldwide), or juvenile Spectacled Owls (Pulsatrix perspicillata) both of which nest in hollow tree-trunks and hunt by night.

The defining characteristic of a woodpecker is, of course, that it pecks holes in (hollow) trees in search of the insect larvae which are its food, and while it does so it makes a loud drumming sound. Ortiz Crespo and Carrión (1991: 154) comment that, although woodpeckers have strong voices, the majority also communicate by hammering with their beaks.

Owl

The Desana view the owl as the guardian of graves and cemeteries, and, as such, it symbolizes death and evil omens. It is associated with thunder (buhpú) because of its voice, and it is also considered a female animal. (Reichel-Dolmatoff 1971: 52-3, 102, 209). Owls do not, however,
feature as principal characters in Desana myths but the *Apapa* (owl or Harpy Eagle), is tangible proof of shamanic power for the Canelos Quichua). Whitten 1985: 116, 1976: 305)

"On the death of a shaman with an acquired second shaman's soul, the deceased places his own soul in a stone, and the ancient acquired soul is released. Such a released soul, still a powerful ancient shaman, enters the body of an owl or harpy eagle, *apapa*. All owls and eagles are ancient souls." (Whitten 1976: 148)

This belief is also very similar to the concept of spirit/soul attributed to macaws by the Waiwai (see discussion below).

Owls are also considered to be demons (*iwich*) by both the Jívaro and Shuar (see Harner 1972: 150). In a Shuar tale, an owl calls and, soon afterwards, a demon - the spirit of a dead husband who is carrying his own bones - arrives to torment his widow and her children. The clever woman gives her newly born child to the demon but saves the other child by having a pole repeat, "the child is defecating, the child is defecating" over and over again. The woman then runs away to a house where there is a fiesta going on. The demon follows her and she throws ashes in its eyes, whereupon it runs away screaming. The next day a dead owl is found in the patio. The second half of this tale also explains the origin of *yumi*, a type of calabash which is used to carry water. The calabash grows where the ashes of the *Iwich*' burned by the Shuar at the fiesta house have fallen). Vinicio Rueda 1987: 226-229)

**Harpy Eagle**

The Harpy Eagle design may have been transmitted to Chorrera from the Peruvian coast, but, if so, it may have been something that was considered acceptable for representation on the ceramics only as a powerful abstract idea or motif.

The Harpy Eagle's crest and claw are supposedly represented on three early whistling bottles from the Chacras area (Lathrap et al. 1975: 87). I suggest that this pattern is not the crest and claw, but is actually an abstract
representation of the body of the Fish-Serpent (cf. Lévi-Strauss 1963: Ch.14). Hatched triangles seem to be representative of the serpent on Valdivia ceramics, and it makes sense that there would be continued use of this motif on early Chorrera vessels. The harpy eagle crest design is mentioned once again as the incised motif on the pedestal of a bat bowl, here the motif is possibly an abstract representation of the bat's claws (Lathrap et al. 1975: 91).

Parrots

Macaws (Ara spp.) are very important in Amazonian mythology, and the short discussion which follows does not do justice to all of their potential and actual significance in Tropical Forest cosmologies. I have chosen here to concentrate on their possible significance as related to their depiction as mortuary symbols, precisely because they do seem to carry so much symbolic weight in many different contexts.

Macaws are considered to be mostly solar birds by the Desana because of their bright red and orange colours (Reichel-Dolmatoff 1971: 102) but Reichel-Dolmatoff (1975: 111) also notes that,

"The role of the macaw is not wholly clear, because of its yellow and red plumage this bird is often associated with shamanistic practices, both as a helper and bearer of fertilizing colors, and also as a spy, a messenger who may overhear an enemy's conversation or warn a payé of approaching danger."

In an important Barasana myth, Manioc-Stick Anaconda's younger brother Macaw steals his wife and tricks him into entering the Underworld (dying). Sitting by the river in the Underworld, Manioc-Stick Anaconda meets the Sun, who gives him a ride in his canoe. Then follows a contest whereby Manioc-Stick Anaconda must prove that he is Sun's 'mother's son' (his co-husband) by withstanding 'hot' (hallucinogenic) snuff-blowing and by beating the Sun at his own game with the snuff he has stolen from the Sun. Steven Hugh-Jones (1979: 228-234, M.6.A) identifies Manioc-Stick Anaconda as the Moon and Macaw as the Sun in this myth, although, interestingly, their positions then become reversed in the second half of the myth. When
Manioc-Stick Anaconda returns for his revenge, Macaw tries to trick him once again by turning into an anaconda himself, but Manioc-Stick Anaconda turns him back into a macaw. In the end, Manioc-Stick Anaconda burns up Macaw, his stolen wife (Jaguar), and their children with the Sun's snuff. Macaw and the wife become Yurupary instruments, the children become birds. This myth is paired with the myth of Live Woman in the Underworld according to Christine Hugh-Jones (1979: 88-90, 270-71) because together they demonstrate, "The opposition between the mortal life of the body and the immortal life of the soul" for the Barasana. In the myth Old Macaw and his wife 'become' the Yurupary long flutes which are the fierce and dangerous He spirits and which are also the living dead ancestors (S. Hugh-Jones 1979: 143-4, 162).

For the Waiwai of British Guiana all of the spirits are different kinds of kworokjam. Kworo means the big red macaw, jam means group or majority. There are two kinds of kworokjam. Kakenau-kworokjam are of the air, these are heavenly spirits (including birds and evil forest spirits), and ekatînho-kwokjam are of the earth, and include animals created from the souls of the dead).Fock 1963: 17) "Kworokjam can most simply be used in connection with the soul of a living animal, thus just as a human body has an ekatî, so an animal has a kworokjam."(Fock 1963: 20) Animals, such as the deer, opossum, and anaconda, which possess an ekatînho-kworokjam can also transform themselves into human beings.

The direct association of macaws with the dead comes from the margins of our subject area. Squier described the burial of a young girl at Pachacamac, in northern Peru, in which the dried body of a parrot was found among the offerings (Paul 1990: 83).

Ethnographic information on macaws directly associated with death and burial comes from Costa Rica, and here macaws are associated with secondary burial rites. An important figure in the funerary rites of the Bribri peoples of southern Costa Rica, "macaw man" is the name of a specialist "burier" who assists at the funerals of important people. Related Bribri words
are used to describe the macaw, which is *kuka* (*la lapo o guacamaya Ara macao L.*, la más grande, con rojo, azul y verde), *o'kom* which means burier("enterrador") and finally, *kuka'o'kom*, who is the actual ritual specialist. The description reads,

"... at funerals of very important personages he was in charge of bringing and sacrificing a macaw, and of creating a dance while carrying in his hand the plumes of the macaw" 
(en los funerales de personas importantes, este era el encargado de llevar y sacrificar una guacamaya, y de hacer una danza llevando en la mano las plumas de la guacamaya " (Bozzoli de Wille 1979: 228-230).  

*Kuka* means macaw. The word *ókōm* literally means 'one who touches or manipulates ó, and ó is essentially contaminating (menstrual) blood. The *óköpa* (plural of *ókōm*, these are often shamans as well) are the official BriBri buriers of the dead. At the official second burial (Feast of the Dead) which is traditionally held a year after death among the BriBri, the buriers prepare the bones of the corpse. The *kuku'o'kom* dances at the funeral with his feathered baton, plays the drum, and also plays a resonating musical instrument called the *siaköL*. Only the death of a chief necessitates a live macaw, which the *kuka'o'kom* places in the grave along with the bones.

For the Desana parakeets symbolize uterine protection. Small parakeets which nest in hollow tree trunks and are raised in the *malocas* exemplify the good care and protection that ought to be given to small children. (Reichel-Dolmatoff 1971: 187) The whistling bottle with a small parakeet that appears on a tri-lobed Ingá fruit may therefore symbolize the womb's protection, and perhaps also the beginning of both the dry and the rainy seasons, when the Ingá tree fruits. For the Canelos Quichua, parakeets are mediators between the worlds,  

"Parakeets, *ucupachama manda huichu*, (essentially 'parakeets of the Underworld', N. Whitten, personal communication 1997) come and go between earth, sky and underworld, carrying songs and mediating between the souls of spirits and souls of humans. Women, mediators between soil and water, are able to send human and spirit songs upward through the fog or by parakeets to the sky rivers, and
along these rivers to their destinations. Such songs are sung to absentee men to give them comfort or do them harm." (Whitten 1976: 44)

**Woodpecker**

The Chorrera whistling bottle which depicts a woodpecker is anomalous, in that it represents a bird which is neither ground-dwelling nor a waterbird, and it is not 'sacred' in the same sense as the birds discussed above as Omen or Spirit birds. The woodpecker does, however, feature in myths having to do with symbols of 'femaleness', and for this reason it may have been appropriate to represent it on a whistling bottle. It also nests in hollow trees.

Besides the Desana myth of the woodpecker and the duck, Roe (1982: 157-59) has identified two myths which involve the creation of the Woman Tree/Fish Woman's vagina by the woodpecker. Here, "the sun's...companion, the woodpecker, must peck out the needed organ with his long phallic beak (Pané 1498?/1974: 27-28, on the Taíno)." or, "...the culture hero Yar (the sun) has a woodpecker make the sex organ of his prospective bride who had been carved out of a tree...(Roth 1915: 130-31, on the Warao)." In one rendition of this myth the woodpecker gets his red crest from the flood of blood which results from his creation of the Fish Woman's vagina. Roe reads this myth as a version of the origin of the birds' colours from the Anaconda's blood (Roe 1982: 184).

The Woman Tree and the Fish Woman/Anaconda are the same (according to Roe) because they both have 'inoperative vaginas' which must be made 'safe' for sex with men. The Fish Woman's vagina is full of piranhas (or snakes), whose teeth must be blunted before she can have sexual relations with human men. (This myth is essentially the same one told by the Makiritare which involves the egret, Ahisha, giving Coati an iron needle so that he and Paca can deflower the Fish Woman for Wanadi). The woodpecker is therefore primarily a phallic bird, but is linked with the
Anaconda through its connection with hollow trees, as well as its role in creating Woman.

**Fish**

Fish seem not to have been very important symbols for Chorrera potters although they are usually associated with anacondas in Amazonian mythology. Because they are water creatures they are considered to be the 'children' of the anaconda (cf. Lévi-Strauss 1963: Ch. 14). In the Chorrera vessels, both freshwater and saltwater species are represented, but not in any great abundance - there are only 13 representations which are identifiable as fish, and 5 more that seem to be combinations of watery creatures. The fish are very difficult to identify but those that are identifiable have womb-like characteristics (the wrasse), are poisonous (the pufferfish), or they have snake-like markings (*Discus*).

Vertebrae attributed to fish of the jack family are among the few faunal remains identified from the Late Formative context at San Isidro (Stahl 1994: 191) The Carangidae (Jacks) are generally schooling fish with wedge-shaped bodies and slender tails. Most jacks also live in shallow tropical waters. A fish of the jack family, the lookdown, is depicted on a pendant (Lathrap et al. 1975: #485)

**Reptiles and Amphibians**

**Toads and Frogs**

Toads and frogs have a special significance in much of the mythology of the Lowland Tropical Forest and, indeed, in the mythology of the New World in general. As amphibians which spend time both in and out of the water, the batrachia are naturally liminal animals. They also undergo metamorphosis during their development, making a transformation from wholly aquatic beings with tails into amphibious creatures with limbs (Patzelt 1980). They also have distinctive mating calls which they often make before rain, or which signal the beginning or the end of the rainy season. Batrachians have dozens of skin glands which maintain humidity, and many of species have glands which secrete defensive poisonous substances as well.
These substances have been exploited by the Amazonian Indians in the form of arrow and blowgun dart poisons, and as tapirage, a venom which is used to change the colour of parrot plumage (Furst 1974: 95, S. Hugh-Jones 1979: 301).

A whistling bottle (Figure 67) which is described as a "Fantastic animal with head of toad" is described as follows: "The head of the creature depicted is plainly a toad rearing back and presenting threatening claw-like limbs. On closer inspection these limbs seem to be the head of raptorial birds." (Lathrap et al.. 1975: 48) The same authors then comment that the heads probably more likely represent sea-lions (Lathrap et al. 1975: 94).

Two other vessels exist which are very similar to this one. One is identified as a Maya toad vessel from Mexico or Guatemala (illustrated in Favrot Peterson 1990: #28). This flaring neck jar depicts the head of a toad which is tilted upwards (like the Chorrera toad). The venomous parotid glands are depicted as round raised areas with punctates on them on the neck of the jar. The really striking similarity between the vessels however is in the attitude of the toad's arms, which on this vessel are human-like appendages in relief on the body of the jar, ending in modeled outstretched hands which are placed together in a 'praying' position at the front of the vessel beneath the head, in a very similar pose to the one depicted on the Río Chico vessel.

The second vessel is a Colima jar (also with a flaring neck) with the head of a toad, warty skin, and massive, pointed rear and front feet reminiscent of the 'sea-lions.' It seems peculiar that three vessels from such distant cultures should be so similar but if the toad was as mythologically and ritually important in the Americas as Furst believes, this may explain their similarity (see below for more discussion).

Whether the creatures depicted on the vessel are meant to be toad or feline, sea-lions or raptorial birds, this is clearly one of the few composite creatures which is depicted in the Chorrera assemblage as we know it, and is important for this reason. Toad or frog venoms may be used as hallucinogens, although evidence for their efficacy in humans is slight (DeSmet and Rivier 1985: 99-100). Bufotenine (5-OH-DMT, named after the
genus *Bufo* or toad) has been identified as an indole alkaloid in *Anadenanthera* and *Virola* species - the seeds and bark of these trees are often used as hallucinogenic snuffs - as well as in *Banisteriopsis rusbyana* which is usually an additive in yagé preparations (Schultes and Hoffman 1980: 147, 149, 175).

**Symbolism of Toads and Frogs**

Composite creatures are often associated with drug-induced hallucinations and the venomous toad *Bufo marinus* has possibly been used as an hallucinogen (sometimes steeped in fermenting chicha) or in purging/purification rituals by various South American groups including the Amahuaca and the Cashinahua of the Peruvian montaña, as well as Guianan groups. Furst (1974: 96) comments that Guianan Indian shamans used toads and frogs in ritual curing, rubbing the body of the creature over the body of the patient, and in highland Guatemala the toad is passed over the body of the patient without touching it. The same sort of ritual is still practiced in Ecuador today.

Two points of interest which are related to this particular vessel should be discussed here. First, on toads of the *Bufo* genus the venomous parotid glands are quite prominent. These look like raised areas of skin behind the eyes with spots or warts on them. These are clearly identifiable on the Chorrera vessel and also on a toad vessel from the prehistoric Colombian Ilama culture illustrated by Cardale Schrimpff (1989: Figure 3.2). Cardale Schrimpff suggests that toad-skin markings are also identifiable on the head of a *canastero* from the same culture (Figure 3.9c). The interesting thing about this particular canastero from our point of view is that it looks rather like some depictions of the Afflicted Man (one of our anthropomorphic vessel categories). It is shown as squatting, with its arms on its knees, and it looks hunchbacked. One eye is squinted shut as well. Its head is smooth with punctates all over it (like toad-skin), and it also has a crosshatched band down the middle of the head and on its arms (which is possibly meant to depict snakeskin). In our discussion of the Afflicted Man I speculated on the
meaning of the incised circles with punctates inside them and suggested that they were either open sores or perhaps representations of power which emanated from the body of the shaman. These circular areas are depicted on the bodies of all of the examples of this personage except for the whistling bottle depicting an afflicted man (Lathrap et al. 1975: 42: Figure 55) which has rocker-stamping all over the body instead. All of these personages have buboes or warts on their bodies as well.

Paul Clifford (in Katz 1983: 149) also speculates on the meaning of the circular depressions with punctates in them on the heads of two Moche I stirrup spout vessels which depict a water-jug carrier (Plate XIX) and a squatting man with his hands on his knees (no. 28). Both of these Moche figures have the hair parted and, "...decorated in zones of circular depressions [with punctates] suggesting a sexual symbolism." The water-jug carrier figure also has punctates all over the body and the punctates on its head look very like the toad-skin on the Ilama canastero personage's head.

So many of these personages are depicted in similar attitudes with these circular areas with punctates inside them that it indicates a particular significance for these decorations. I suggest therefore that these represent the venomous parotid glands of Bufo toads, and that all of these anthropomorphic depictions represent the 'toad shaman' in a state of ritual hallucination caused by the ingestion of bufotenine.

The cunauaru frog (Phyllomedusa bicolor) lives in hollow trees and makes brood cells from tree resin, its poisonous exudates are also used as tapiragé. For the Barasana, the cunauaru is Yawira (a variant of Romi Kumu or Woman Shaman). In a Barasana myth after being seduced by both Opossum and Tinamou, she marries Vulture. Yeba (First Man, and Yawira's first husband) pursues her and takes her back, but along the way they meet Tayra sitting in a tree drinking honey. Yeba and Tayra drink the honey together but when Yawira is allowed to drink honey too she gulps it instead of drinking it slowly and Yeba drowns her in it to teach her a lesson. Yawira
became the cunauaru frog who is also He mother (like Romi Kumu). (Hugh-Jones 1979: 173, 300-301)

A very similar story is found in Desana texts. In the tale of "The Faithlessness of Vine Woman," a man is taught how to cut vines for hallucinogens by a woman who is a shamaness. After living with him for a time, she leaves him and goes to live with another shaman. A year passes and the man finds his wife again with the help of the swallow-tailed kites who take him along as their servant. The man asks his wife to come back to him and she does, after breaking all the plates and pots and cooking vessels in the shaman's house. Unfortunately, a gourd vessel which is left over betrays her to the shaman, who changes into a woodpecker.

Later, when the woman arrives at the tree where the Woodpecker People are gathering honey she asks for some, and likes it so much that she is persuaded to climb up into the tree to get more. When she begins to drink greedily she is pushed down into the hollow tree to be drowned in honey. (Reichel-Dolmatoff 1989: 505-6)

Reichel-Dolmatoff's (1989: 505-6) comment on this tale is that,"... the gathering of honey has an erotic meaning. The Desana word for honey is momé, a common synonym for semen, and both substances are said to have the same odor. The woman's thirst for honey represents her sexual promiscuity which, in the end, is punished by the men."

The poisonous frog or toad is shamanistic, and, like the anaconda, is also associated with excessive or adulterous sexuality. Yawira is also identified as a variant of Lévi-Strauss' 'Girl Mad About Honey' by Hugh-Jones (1979: 173)

According to Roe (1982: 152-157), both toads and tree frogs are really the wrinkled Old Woman, who is also associated with fire (and, in some myths, important cultigens) which she must be tricked into giving to human beings. She is also a devouring creature of excessive sexuality and greed.

Snakes
The potential for creation and destruction is contained within the most powerful and androgynous creature of the pantheon of animals which is represented in Chorrera ceramics. The Great World Serpent or Anaconda is the multivalent symbol of transformation, because it sheds its skin and is therefore immortal. Its patterned hide and coiled body are said to be the source of many of the designs found on ceramics, basketry and body-painting on contemporary Amazonian peoples (e.g. Guss 1993, Roe 1989). The ceramics themselves can be linked to the Serpent through their method of manufacture - coiling - and their transformation from wet clay to fired pots is accomplished through firing, a cultural application of the creative energy of the cosmos.

Mary Helms cites Lévi-Strauss' (1969: 322-3, see Appendix ) version of a Tukuna myth which could be an origin myth for Chorrera ceramics as well. In the myth, an unskilled young woman learns how to make beautiful polychrome pottery from an old woman who becomes a snake. The rainbow is, however, depicted very rarely on Chorrera pottery but according to Tastevin the Tukuna also believe that Boyusu (the Great Serpent), "appears during the day in the form of the rainbow and at night as a black spot in the Milky Way."(Lévi-Strauss 1969: 247) The dark, or nighttime aspect of the rainbow can be linked also to the dark time of the rainy season, although the rainbow in either aspect is linked to disease and death (Lévi-Strauss 1969: 246).

The Great Serpent in its dark or underworld aspect is used as an abstract symbol in most of the geometric designs on Chorrera ceramics, although there are also modeled snake effigy vessels and bowls with small snakes in modeled relief on them. (Figures 68 and 69) The Serpent has many different connotations in Amazonian thought but in the Chorrera assemblage it seems to be connected particularly to two interrelated complexes of ideas:
1. the hallucinatory visions given by the yagé vine (Banisteriopsis), and
2. the gourd vine (*Lagenaria*) which yields the fruit used as containers for the powdered lime usually taken with coca (*Erythroxylon coca*).

The *yagé* vine is any one of several species of *Banisteriopsis* (*caapi*, *inebrians*, etc.) which are used by many groups of Lowland Tropical Forest peoples to achieve trance states in which they see culturally influenced visions of mythological beings.

*Banisteriopsis caapi* (Spruce ex. Griseb) Morton, is used in the western half of the Amazon and by isolated tribes on the Pacific slopes of the Colombian and Ecuadorian Andes. It is usually drunk in religious ceremonies, such as in the Tukanoan Yurupari ceremony in Colombia (an adolescent initiation for boys). The Jívaro believe that Ayahuasca makes possible communication with ancestors and that, under its influence, a man's soul may leave the body and wander free. The bark, prepared in cold or boiling water, may be taken alone or with additives - especially the leaves of *B. rusbyana* and of *Psamazonia viridis* - which alter the effects. The bark can also be chewed. Recent evidence from the northwestern Amazon suggests that the plants are also used in the form of a snuff. The hallucinogenic activity is primarily due to harmine, the major β-carboline alkaloid in the plants. Effects from taking the bitter and nauseating drink range from pleasant intoxication with no hangover to violent reactions with sickening after-effects. Usually, visual hallucinations in color occur. The intoxication ends with a deep sleep and dreams (Schultes and Hofmann 1979: 66-67).

*Banisteriopsis* is also called *ayahuasca* in Ecuador, and *caapi* or *gahpi* in the Vaupés area of Colombia, also *nishi*, *nátema*, *pindé*, or *pildé*. *Yagé* is the Lengua Geral word which is used all over the northwest Amazon (Reichel-Dolmatoff 1971: 172). Frequently, the first hallucinations which are seen when this psychoactive brew is drunk are mythological snakes (usually anacondas or boas) which twine around the house poles, or around the imbibers themselves, or which sometimes take the participants on journeys to other worlds on their backs (Reichel-Dolmatoff 1975, Matteson Langdon 1979, 1992).

"The serpentine climbing vine called *ayahuasca*, soul vine, provides special linkages between human beings and spirits through their mutual souls. The Canelos Quichua use a brew made from this soul
vine to enter forest soil, water, sky, and to some extent, underworld domains, and to bring the spirits of known and unknown domains to them." (Whitten 1976: 40)

Shamans literally are snakes because they are transformed and they transform others. People who take yagé also see sparkling points of light which are called phosphenes (Reichel-Dolmatoff 1975: 173 ff.) and these are often described mythologically as the stars in the Milky Way, which is also one of the Celestial Serpents. (When taking ayahuasca Canelos Quichua shamans call their spirit helpers which take the form of bees, butterflies, fireflies and sparks. Whitten 1979: 156)

The identifiable snakes portrayed on Chorrera ceramics are extremely poisonous — the bushmaster and the fer-de-lance. I suggest that because of their ability to kill simply by injecting venom into human beings or animals, these snakes were associated with yagé (or possibly another type of hallucinogen, such as Datura, Brugmansia, or Anadenanthera, all found on the coast of Ecuador) which is also a substance which works internally and which can literally be poisonous.

Yagé is female. In a Desana myth the spirit of yagé was the First Woman of Creation who appeared in the middle of a maloca (communal house) to the ancestors. Her presence brought nausea and visions, and her child was the first yagé, which was taken from his umbilical cord and parts of his body (Reichel-Dolmatoff 1975: 135-136).

Gourd vines are snake-like and some gourds are as well. For Kógi māmas (shamans) the metaphor of the gourd vine describes the genealogy of the Kógi, and the growth and spread of the people over the landscape (Reichel-Dolmatoff 1950-51: 82). Kógi ideas about gourds which are used as lime containers for chewing coca are extremely important here, because they provide some of the mythological underpinnings of this part of the cosmological model. Briefly, lime containers (Lagenaria gourds) are women, the metaphorical wives of Kógi men, who sustain them during life, and who take care of them after death. The Universal Mother is "container of the
seed" or a gourd, she is also the trunk of the genealogical gourd vine, and one of her names, Shivilyubang, can be related to one of the names of the Father of the Snakes, Shiváldo-kukue in that shi means thread (Reichel-Dolmatoff 1950-51: 82, 88, 89).

Yagé is usually served in gourds (Reichel-Dolmatoff 1975: 153). In many of the myths which we have surveyed for this thesis, gourds are specifically mentioned as containers for darkness, biting insects, poison, contraceptive preparations, curing elixirs, a black face- and body-painting liquid (genipa), and magical water (sometimes containing fish).

The Barasana mythical Fish Anaconda Woman (Yawira) created both coca and gourds from the body of Nyake, Yeba's younger brother. (Yeba was the first man, his mother was Jaguar Woman and his father was the Sun). In the myth, Yawira made love to Nyake so violently that he died and his body became coca bushes. Yawira then had a child by Nyake (a son, whose descendants are one of the Barasana sibs, Nyake Hino Ria, Nyake Anaconda Children) and his umbilical cord, planted in the ground by Yawira, became a gourd vine. Another Barasana sib, Koamona, is descended from this gourd vine (C. Hugh-Jones 1979: 212, S. Hugh-Jones 1979: 297).

"The Barasana call coca and yagé by the same term kahi (when relevant, a distinction is made by adding the prefixes bare - to eat, and idire - to drink)." (S. Hugh-Jones 1979: 182) The root word for yagé and coca among the Desana is the same -- ahp. Ahpi means coca, and gahpi is the narcotic jungle vine (Reichel-Dolmatoff 1976: 200).

Christine Hugh-Jones (1979: 229-230) records that, for the Barasana, coca is identified with male descent lines. Yagé is also related to descent-group structure because the varieties of yagé which are owned by a lineage are said to originate from inside the Yurupary instruments of the lineage.

She writes,

"The vine itself is described as 'men's life path' (kana ma), and as such is opposed to manioc which is 'women's life path.'...We may therefore hypothesise that coca and yagé represent separate but related aspects of
descent-group structure. and we may also suggest that coca represents the fixed structure of the descent group in its spiritual or incorporeal aspect. ... The function of yagé is to transport people into an ancestral state, this, and its ability to flow along descent lines, suggest that it connects past and present and thus enables travel into the ancestral past. Thus, if coca represents descent-group structure built up over the generations, yagé represents the ability to go back to the beginning and repeat the process today. Thus, the more sacred the ritual occasion, the stronger the yagé required, the closer the contact with the original ancestors and the greater the potential danger to participants.

To translate the coca-yagé relationship into concrete terms, we might say that if coca is the structure of the path, yagé is the vehicle, or, for a river-conscious people, if coca is the structure of the river beds, yagé is the water or the canoe which travels over them. Indians do actually say that the river system of the earth is a yagé vine connecting longhouse communities to the ancestral east in the same way as an umbilical cord: they say that when the vine is cut for use, the scar this leaves is a navel. Besides this, yagé is identified with an anaconda - the supreme self-propelling water vehicle. Its liquidity, as compared to the solidity of coca, is also consistent with its transporting power."

(C. Hugh-Jones 1979: 229-230)

Thus these two very important vines which mimic and recall the
Great Serpent are metaphorically related to its sinuous body in everyday and in ritual contexts.

For both the Desana and the Barasana, the Anaconda was the ancestral vehicle which brought the first peoples to live along the Orinoco (Correa R. 1996, C. Hugh-Jones 1979, S. Hugh-Jones 1979, G. Reichel-Dolmatoff 1971, 1975, 1989). Celestially, the Great Serpent is manifested in the Milky Way (which is also often associated with semen and fertility) at night, and in the Rainbow during the day. Snakes are important in highland and lowland South America where they are related to both the celestial and underworld cosmological levels so that, in a sense, they are the great mediators and transformers, and therefore perfect symbols for shamanic ideas. Whitten (1976: 62) comments that, "In general, snake symbolism pervades much of the shamanistic paraphernalia, although these ideas are usually submerged in other aspects of ceremony. A snake is regarded, at times, as a supai huasca,
spirit vine, and the tips of the leaves in the bundle shaken by the shaman are, under the influence of ayahuasca, viewed as snakes tongues.”

The anaconda boa in particular is an androgynous (and anomalous) symbol in most of the mythology of the South American Lowland Tropical Forest. Its phallic symbolism is familiar to most Westerners, but its uterine symbolism comes from its ability to shed its skin, in the same way as women ‘shed’ their ‘internal skins’ every month by menstruating (Reichel-Dolmatoff 1978b: 278). In another Barasana myth, Romi Kumu (Woman Shaman) changed her skin with the help of a beeswax gourd (filled with a combination of beeswax and coca). Anacondas and snakes came to eat from the gourd rejected by the warriors (the people created by Romi Kumu), and finally the white people came and took it away to use it for changing their skins (S. Hugh-Jones 1979: 264-265).

Peter Roe’s discussion of the Anaconda relates the snake to a mythical being which he calls the Dragon in his cosmological model. The Anaconda, the Cayman, the Toad/Frog, and various other animals with snakelike characteristics (turtle, giant anteater, armadillo, etc., are all ‘avatars’ of the Dragon, which can be either Aquatic (anaconda, cayman, turtle), or Celestial, in its manifestation as the Moon or the Rainbow. For Roe (1989: 9) the Celestial Anaconda (Dragon) is really a composite being, or monster, based on the Upper Worldly Harpy Eagle and Jaguar, as well as Anaconda elements. All of these creatures are ‘paragons’, that is, they are the largest and most powerful animals of their class. Roe discusses other aspects of the Dragon with relation to structural "codes" operating on various levels — culinary, positional, element, and colour. The Dragon is gluttonous and excessively oral, its' domain is primarily the Lower World and Water, although it has aspects of the Heavens and of the Earth in its makeup. The colours of the Dragon/Anaconda’s skin are dull (dark green and black) when they are associated with the Lower World (and become the designs that people paint on their skins with black paint) but they are also brilliant (scales) when they are associated with the Celestial World. The Celestial Dragon, because of his
bright colours (which feature in a number of myths about the origins of the colouring of bird feathers), becomes the Rainbow, the iridescent banded sky serpent which appears most often in the rainy season (Roe 1989: 10-16). The Milky Way is the other Celestial Dragon, but it is also, "the celestial analogue of the subterranean river of death, and, via death, of rebirth as well (Roe 1982: 136). The Subaquatic Dragon/Anaconda is always a creature of the Lower World. It is the mediator, the transformer, and the "ladder" to communicate with the other worlds, but it remains chthonic.

"Central to contemporary Shipibo-Conibo design perception is the symbolic complex of the cosmic anaconda, Ronin. Being the mythical donor of the designs, this world snake combines all conceivable designs in its skin pattern." (Gebhart-Sayer 1985: 149)

In Shipibo-Conibo lore, pots have *ronin-rau* or shamanic therapeutic songs/fragrances/patterns stored in them which are, "...imagined as... the aromatic gas fizzing from fermenting yucca beer." (Gebhart-Sayer 1985: 172)

"Another perceptual level recognizes Ronin in the very structure of the vessels: the winding ropes of the construction technique resemble the coiled posture of the sleeping World Boa who with its spiral body encircles the cosmos. Being the fermentation container of the masato beer and of the 'steaming breath of ferment' which hisssingly and fragrantly escapes when the leaf lid is lifted, the chomo is also considered a reservoir of the *shama*, the accumulated world energy, the ultimate principle of the Shipibo-Conibo belief system." (Gebhart-Sayer 1984: 10)

**Exoskeletons**

Animals which have a shell or exoskeleton are especially important in the assemblage because they represent a fairly high proportion of the species represented (about 14 percent). They are also very like gourds in that they have soft fleshy interiors enclosed within a hard 'rind' or shell. These creatures often appear in myths associated with gourds or with gourd-like properties, or they have a uterine symbolism. They also have shamanistic associations, especially to do with transformation. Two of the larger animals
which have shells are the armadillo and the turtle, others which represent
the smaller animals are those depicting shrimp, crabs, both marine and fresh-
water (also called jaiba in Ecuador), snails, both land and marine types, and
finally, Malea ringens, Spondylus and Strombus, and Nautilus represent
the identifiable mollusks. A few fish may also fit this category, these include
the puffer, which sleeps buried in the sand (Merlen 1988: 17, 52) and the
bumphead wrasse, which builds a mucous cocoon or buries itself in the sand
at night (Merlen 1988: 15).

Most of these animals have earth and/or watery connotations,
identifying them with femaleness and darkness, the womb-like properties of
the shell being doubly signified, as it were. Whitten and Whitten (1988: 34)
suggest a possible explanation for the depiction of animals with exoskeletons
by Canelos Quichua women potters:

"Destructive force is linked to Sungui as torrential rains promoting
flood, erosion, and landslide. Within his water world live many
denizens from which human powers are descended. These are the
yacu apawais, or ancient water dwellings (sic). All have external
skeletons, ancient signs of the Asiatic-New World shamanic complex
(Furst 1977). Something of human flesh is enclosed in these skeletal
dwellings of living hard-shell beings, including armored catfish,
shrimp, crabs, and helgrammites. Their powerful, evocative imagery
is controlled by women, who draw images of them on ceramic bowls
and make effigy bowls in their forms. These feminine representations
of early shamanic power are controlled, to some extent, by male
shamans."

Additionally, women potters say that the images are "from water
grandmother" and also that, "The yacu apahuais are ... regarded as spirit darts
and as "our flesh." ... They are feminine forms of early shamanic power
coming from the global water container into the lives of humans today, yet
they are made of, or contain, human flesh." (Whitten 1985: 125) Note also
that the Kógi describe Lagenaria gourds as, 'house(s) of flesh.'

**Armadillos**
Nine-banded armadillos (*mulita* in Ecuador) are common on the Ecuadorian coast and are prized for their delicious meat which is sometimes an important food source (Emmons and Feer 1990: 42). Besides having an armored shell, which links them to the gourd, they are naturally associated with the earth by most indigenous groups, digging in the ground for their own food, which includes insects, small animals and carrion, and sleeping and raising their young in burrows (Emmons and Feer 1990: 39).

For the Tukano, the Armadillo is linked with death, especially at lunar eclipses, when the moon is said to come down to earth in the form of an armadillo which digs up and eats the bones of the dead (S. Hugh-Jones 1982: 190).

The Desana say that the Armadillo is a uterine animal because of its shell. It also symbolizes astuteness by hiding itself and making itself 'invisible', its shell is compared with the protection a maloca gives." (Reichel-Dolmatoff 1971: 101) The Armadillo also escaped the world fire (along with Tinamou) (Reichel-Dolmatoff 1971: 34). "The Kógi look upon pigs and armadillos as feminine animals, because they root about in the earth as if they were doing agricultural work." (Lévi-Strauss 1973: 343)

Peter Roe makes an extended discussion of the mythological role of the Armadillo as a liminal earth-associated reptilian beast. The armadillo, which is associated through various codes (aural, culinary, element, kinetic, positional, moral, olfactory, morphological, sexual, social and temporal) primarily with Woman, then with earth, dark, night, and hollowness, is also related to Gourd Mother, or the Fruit Mother of other lowland peoples' mythologies (Roe 1991: 34). Roe draws his conclusions based on three myths recorded among the Shipibo Indians of the central Ucayali, and then shows their affinities to other lowland mythological systems based on a model of dualism (DTD) which he has evolved to deal with this mythology (Roe 1991: 21).

The Armadillo links the Sky and the Earth through its burrowing to the other world in the first version of the myth. In the second myth, women
carrying burden baskets are changed into armadillos when they fall to earth after climbing up an arrow-ladder created by the Magical Twins. In the third myth, a flute-playing armadillo (playing his own nose) tries to fly with the vultures, but his feathers melt in the sun, plummeting him to earth where he narrowly escapes being eaten by Jaguar. In this third tale the Armadillo is a trickster who fools the tapir who saves him, the vultures who help him, and the jaguar who wants to eat him.

**Turtles**

The most noticeable characteristic of turtles is their hard shell or carapace made up of hexagonal bony plates, into which they may withdraw their head and legs if they feel threatened. Ecuador is home to the famous giant land, or Galapagos Tortoise, but other species indigenous to the mainland include the snapping turtle (*Chelydra mordedora*), the Matamata (*Chelys fimbriata*), the Taparrabo (*Kinosternon spurelli*), the land tortoise (*Geochelone denticulata*), the charapa (*Podocnemis expansa*), common in the Amazonian region, and the Brown turtle (*Rhinoclemys annulata*), which is common in the western part of the country (Patzelt 1979). Marine turtles are also commonly seen along the coast of Ecuador. They have a slightly flatter shell, and large flippers which they use to propel themselves along in the water. They lay eggs on the beaches, and grow to more than a metre long (Patzelt 1979). Both land and sea turtles are edible, and some Amazonian groups rely on the annual egg-laying cycle which is vital to their economy (Descola 1994).

Among the Canelos Quichua and other Lowland groups the turtle is the shaman's seat of power, and the geometric pattern of its shell is a basic design used by women to decorate pottery (Whitten and Whitten 1988: 21,36,41). Turtles are uterine symbols for many groups, as illustrated by the Waiwai connotations of the word.
"Wayamnu in Waiwai is a reciprocal address term meaning "potential affine = spouse, lover." Since "wayam" is the name of a turtle, it might best be paraphrased as an endearment, "my little turtle". While both men and women may be so addressed, the yamo dance quotation affirms that it is a feminine symbol of sexual receptivity. This is because in the "form code" of the lowlands in general, and the Waiwai and other Cariban Guiana Indians in particular, round, closed, and hollow containers such as gourds, pots, and turtle shells are regarded as vaginal = uterine symbols, symbols of sexual ingress into the "open" bodies of women."(Roe 1989: 47 n. 23)

Crabs

Freshwater crabs or jaiba are described by Patzelt (1979) as having posterior legs like the blade of an oar, and as being fast swimmers which can live in salt or fresh water. The crabs depicted on the Chorrera vessels probably represent both riverine and marine species.

For the Desana, the crab is a symbol of transformation and shamanic healing. Not only does it shed its shell as it grows, but it also changes colour from gray to red when it is cooked. Pottery clay is called 'crab clay' because it also changes colour when it is fired. Reichel-Dolmatoff (1979: 39, on shamanistic initiation) notes that,

"The small clay platter on which the narcotic snuff is being prepared is, of course, a product of this transformation and in Desana logic, thus enhances the transformative power of the narcotic." Crabs are also invoked by the shaman (kumü) in curing rituals. The crab is said to be a good guide for the sick person because of its slow and careful steps (Reichel-Dolmatoff 1971: 103, 185).

The river crab is also said to be the boraro's (forest ogre's) favourite food. The feminine and sexual connotations of the creature in this context probably have to do with its transformational qualities again. The crab is usually identified with semen by the Desana, but as the boráro's food, a large reddish crab is a metaphor for 'large vagina' and refers to the boráro's insatiable sexual appetites.
The condition of male initiates during He House is compared to that of the crab or other animals that have just molted or shed their skins. For the Barasana, the metamorphosis is necessary for the initiates to become men, but while they are in this vulnerable state they, and the shaman conducting the rites, are in danger from mystical attack from enemy shamans and from the spirit world (S. Hugh-Jones 1979: 120).

A Chorrera flared neck jar has a crab modeled on the top just below the neck and a polychrome design of a harpy eagle incised on the body of the pot (Figure 57). Here, the red crab is probably the feminine element; it is 'cooked' or transformed. The Harpy Eagle, however, is represented only as a stylized representation in black and red on a white background. The crab rests on top of the gourd-shaped vessel with his claws and legs extended protectively to the front and rear. In Lathrap et al. (1975: 57) the authors suggested that the stylized Harpy Eagle design came directly from Chavín influences in Northern Peru. On this Chorrera vessel the crab might be a shaman-healer, perhaps engaged in curing an illness brought by the (foreign) Harpy Eagle, in its guise as an ogre or disease-bearing monster (see Reichel-Dolmatoff 1971: 29 and Roe 1991: 94-95 and passim).

**Shrimp**

Shrimp, like crabs, are crustaceans with 'paddlelike' legs, but are distinguished from lobsters and crayfish by their thin, fragile shells or exoskeletons. Shrimp can be either marine or riverine species, but the ones which are depicted here seem to be the large freshwater shrimp (genus *Macrobrachium*) which are important as food in most tropical countries (Encyclopedia Britannica 1952: 586, Plate 1).

Reichel Dolmatoff (1978b: 270, 1989: 200) comments that, "The expression 'to gather shrimp' has the connotation of uterine gestation for the Desana. According to the Indians, shrimps look like human embryos, and the fact that shrimps turn red when being cooked demonstrates an important transformational principle in terms of 'ripeness' and 'edibility'." Shrimp are also important as astronomical entities for the Desana:
"One constellation called "shrimp" (*nahsí kámë*) is designated as the Master of the Rainy Season, because it announces the impending arrival of the rains. Another constellation named "cut shrimp" (*nahsí kámë türü*) is the Master of the Dry Season and appears on the horizon a little before the rains stop. When these two constellations appear, the huge anacondas rise up vertically in the water to watch the firmament and assure themselves of the change of the seasons."

(Reichel-Dolmatoff 1971: 73-74)

**Mollusks**

The shells of both marine and land snails are quite common among the animal effigy vessels. Snails are probably symbolic of a complex of symbols which refer to coca use, and also possibly to the use of hallucinogenic snuffs. Burnt and crushed snail shells are combined with the seeds of *Anadenanthera peregrina* or *yopo* to make a hallucinogenic snuff (Schultes and Hofmann 1979: 119) and they are also used as containers for this snuff (Reichel-Dolmatoff 1975: Figure 10, Schultes and Raffauf 1992: 39). Yopo has a similar effect to yagé, which also has β-carbolines as its active chemical component. The shells are used to make the lime which is a chemical releaser of the alkaloids in these drugs.

Snails are also water(y) creatures which either live in water (marine snails) or which appear in abundance at the beginning of the rainy season (land snails). In an iconographic study of land snails (*Scutalus* sp.) represented on Moche vessels, Bourget (1990) suggests a possible connection between snails and hallucinogens. At the beginning of the rainy season the snails congregate on San Pedro (*Trichocereus pachanoi*), an hallucinogenic cactus. In Northern Peru, these snails are eaten, with similar psychotropic effects as the drinking of the hallucinogenic beverage made from the actual cactus. Sometimes they are first "cleaned" by keeping them alive in a vat of corn in order to lessen their psychotropic properties. San Pedro grows equally well on the coast of Ecuador, and it is quite possible that the psychotropic qualities of the snails were known to coastal peoples there as well.
The shell encloses the creature within them, making them both soft and hard at the same time. If we follow structuralist logic, this makes them hermaphroditic (both male and female) which, in fact, many snails are (Evans 1972: 118, Parkinson 1987). Snails are soft-bodied, like worms, but, because they have a hard shell which contains their (edible) flesh they can probably be considered to have been metaphorical synonyms for gourds which have similar characteristics. Snails thus refer to a variety of metaphors related to the system of symbols of the Chorrera assemblage, and are therefore ideal subjects for effigy vessels.

**Snails: Natural characteristics and ethnographic uses**

Ecuadorian land snails are one of the largest species and can grow to up to 18 cm. long (Patzelt 1979). These are edible, and their shells, burnt and ground to a fine powder, provide the lime which is used as a catalyst for coca chewing. *Churus*, as they are called by the Canelos Quichua, are associated with the growth of gourds, and are hung on gourd trees (probably *Crescentia*) by women when the gourds begin to mature (Karsten 1979: 142). Land snails are associated with women's genitals by the Shuar of the Ecuadorian Oriente in a myth involving the violation of a woman by an *lwianch* (a forest demon) (Vinicio Rueda 1987: 219).

The marine shells *Spondylus princeps* (a bivalve) and *Strombus galeatus* (the conch shell, a mollusc), or *Malea ringens* (a mollusc) are significant because they are very important elements of Chavín art and are usually represented together. "Neither of these species occurs naturally along the coast south of the Gulf of Guayaquil. Both are difficult to obtain, and large specimens of Spondylus, in particular, can be obtained only by diving to reefs at depths of 50 ft. or more (Lathrap et al. 1975: 59)."

*Spondylus* and *Strombus* have been interpreted as gendered symbols - held by a fanged deity with snaky hair at Chavín de Huántar, where the gastropod is held in the right hand and the bivalve in the left hand. "Lathrap has pointed out that the attitude of this god is similar to that of the Kógi shaman in a ceremony described by Reichel-Dolmatoff (1949-51) in which the
shaman holds a conch (male symbol) in the right hand, and a bivalve (female symbol) in the left (Marcos 1977: 112). The shells are also paired on modeled Tembladera vessels (Lathrap et al. 1975: 59) and on Teotihuacán and Maya temples. Strombus shells are still used as trumpets (as they were in Maya times) among the Warao Indians of Venezuela (Furst 1965).

Much has been made of the role of Spondylus in the development of trade in Formative Ecuador because of its importance in sacred ceremonies in Peru dating at least from Chavín times (ca. approx. 800 B.C., see Paulsen 1974 and Marcos 1977).

"The thorny oyster Spondylus (Linnaeus 1758) is one of the most spectacular bivalves in the world. It is large and spiny with a characteristic ball-and-socket hinge and central ligament. Its coloration ranges from white, to purple, orange or red (along the rim). The interior of the shell cavity is white and porcelaneous, often with a wide, strongly coloured marginal band." (Marcos 1977: 101)

Spondylus is mentioned by Spanish chroniclers and conquistadores in Peru, and the pilot Bartolomé Ruiz met a raft that was sailing north to trade for the shell. The raft was captured by Ruiz and the Indian sailors on it claimed to be from Çałangone (Salango) (Saamano y Jérez 1527). The Inca used Spondylus in their ritual mumification ceremonies, where the red rim of the shell was carved into amulets and used as inlay for other shells and special jewelry.

**Spiral shells**

Fourteen of the sixteen shells represented on Chorrera vessels are gastropods with spiral shells. These vessels which represent turret shells, freshwater molluscs, and land snails might have been phallic symbols, as Reichel-Dolmatoff (1974: 298-299) surmises in his explanation for the inclusion of small marine shells in Kogi burials. Interestingly however, rather than phallic shapes, several of these are rather breast-like depictions of the shell, with the natural opening as the mouth of the vessel and the point
tilted upwards like a nipple. Two of these representations are multiple depictions of this type of shell.

The symbolism relating shells to shamanism and yajé in Desana cosmology is made quite explicit in Reichel-Dolmatoff's various treatments of Desana and Tukano cosmological ideas. Coca and yajé are related through having the same root — *ahp* — but many other words also become part of the symbolic logic through the same root. The concept *ahp* is therefore related not only to sexuality and reproductive bodily functions, but also to protection, separation, creation, life-stages (birth, nursing, death) and the stages of hallucinatory trance (ecstasy and hallucination). "As used in Desana myth and ritual, the word *ahpikon* means human breast milk. The word also encodes another meaning, however, one related to semen." (Reichel-Dolmatoff 1976: 200) "*Ahpikondiá*, the River of Milk (the Desana Paradise), is entirely surrounded by a shell, a protective cover called the *ahpikon-vif*, House of Milk. ... Our informants pointed out repeatedly that this is the 'place of coca', where 'no hunger is felt' (Reichel-Dolmatoff 1975: 145, 245-6 n.24)."

Desana men also follow the Milky Way to the Ahpikondiá when taking yagé. Ahpikondiá is reached by taking yagé and other hallucinogens such as *vihó* (snuff), or tobacco. Ahpikondiá is the uterine world, which the shaman penetrates to gain knowledge and to contact the spiritual powers that sustain him. Each time the shaman takes yagé he 'dies', and the trip to Ahpikondiá is seen as the anticipation of death (Reichel-Dolmatoff 1971: 173-174). Taking yagé is a sexual act for the Desana, just as chewing coca is for the Kógi.

Glowing threads are seen by the Desana shaman when taking yajé. During a shamanistic initiation the 'threads' are anointed with milk. According to Reichel-Dolmatoff, here a sexual impregnation is being enacted and the anointing with milk (human breast milk, *ahpikon*) and the sap of the *tooka* plant, both seminal elements, is an essential part of this procedure." (Reichel-Dolmatoff 1979: 40, 1975: 94). In addition, "For the Desana any insemination has the character of a pathogenic contagion, the sexual act is dangerous in any circumstance." (Reichel-Dolmatoff 1971: 45 n.4)
The uterine shell that the shaman enters is at once protection and separation from the world, and through it he is reborn with more knowledge each time he re-enters the real world. Reichel-Dolmatoff explains the complexities of the "shell" in a long passage that relates yagé, the Snake Canoe (Anaconda), and Ahpikondiá, in terms of both the passive and active means of reaching the knowledge and power desired by the shaman:

"The word gahpi that is used to designate the hallucinogenic plant yajé (Banisteriopsis caapi) expresses a metonymy in that its effect is exchanged for the cause, gahpi is not a plant or a drink but is the effect that these produce. This effect implies passage over a threshold. According to our informant: "... here is a wall, a shell that separates the natural world from Ahpikondia. In order to see it, they must drink yajé." But at the same time using a metonymical formula, the informant says that "gahpi is the shell", he compares it with a "wall that divides," "something that protects," "something that is something else." Referring to the word gahsíru (pamuri-gahsíru, the Snake Canoe), he says: "The canoe is a foreign thing in the water. It is not of water, if it were outside the water it would not float. It is another thing. It is a protecting shell..." (Reichel-Dolmatoff 1971: 150-151)

The Vortex

We know that one of the stages of experience of a hallucinogen-induced trance is the vortex, a long spiraling tunnel through which the shaman-initiate or participant must pass to reach the other world(s) which s/he wishes to visit (Lewis-Williams and Dowson 1988: 204, Lewis-Williams 1995: 15-17). In the words of a participant in an ayahuasca (yagé) ceremony, "Suddenly the panorama of darkness becomes a vast moving spiral. One is thrust, flying, into this spiral, a terrifying experience..."(Ayala Flores and Lewis 1978: 154). For the Tukano, a spiral symbolizes incest and pollution, probably because the first yagé was created through an incestuous act. The design element is said to be derived from the lower end of a yurupary trumpet (a piece of bark twisted in a spiral), and the analogy given is a snail shell (Reichel-Dolmatoff 1978a: 5-6, 31).

The "Horn-shaped" object
An unusual object which may be related to the representations of spiral molluscs is found on a whistling bottle. The object consists of a spiral "horn," joined by a bulbous area to an arm with a flat cupped piece. This is the only Chorrera stirrup-spout vessel which I have seen in the collections and it may, in fact, have been incorrectly restored. I have identified the piece as Chorrera because it has a characteristic rectangular platform (in this case, double-tiered) slipped with the red and cream slips found on similar vessels (e.g. Lathrap et al. 1975: 95, #368).

The spiral "horn-shaped" object is important because it links Chorrera iconography with Jama Coaque iconography. The same object appears multiply on the headdresses of Jama Coaque anthropomorphic effigy vessels and sometimes small modeled clay birds are substituted for the objects. The 'horns' may be intended as power-focusing objects (see Furst 1977), and in their bird guise they may also refer to shamanic powers of flight. The Jama vessels seem to depict shamans engaged in particular rituals, such as playing rattles, holding coca limepots and dipping sticks, or playing an enormous set of panpipes (e.g. Valdez y Veintimilla 1992: 116, #85). The illustrated vessel from the Banco Central collections depicts a shaman wearing a large headdress with long elaborate tassels and six of these objects on it. He is portrayed sitting on a stool, with a stick in his right hand and a lime-gourd with a top on it in his left hand. He has a long pointed nose, a medallion hanging from his lip (this might be a goatee beard), and three necklaces, one of strings of small beads, one of large beads and one necklace with two small curved 'tusks' with anthropomorphlc heads suspended from it.

A rather similar object is depicted in stone in Tairona burial goods from Colombia. These are described by Legast (1987: 75, Figure 78) where she calls them stone pendants representing realistic or stylized marine snails (colgantes de piedra representan de manera realistica o muy estilizada caracoles marinos). These 'marine snails' are ascribed to the family Fasciolaridae (they might also be Turritella species) but Legast also says that the thickest part of the snail generally is hollow and could serve as a small
Her Figure #79 also illustrates a 'stylized shell' in gold, which is very similar to the Chorrera object, with the same spirals on the long end joined to a square-ish short end by a globular 'bulb' (Legast (1987: 75). Legast mentions that the globular area (the 'bulb') is also hollow. Finally her Figure #91 illustrates a gold pendant which depicts a gastropod with reptilian features which is rather phallic and appears to be essentially the same shape as the piece illustrated in Figure 79.

"The head, attached behind the globular part of the gastropod, does not have a forked tongue, but is recognizable by the nose in relief and the spiral ornament above the head. The two masculine symbols for the Kógi, the serpent and the gastropod, are brought together on this piece." (Legast 1987: 83, my translation)

The fact that the vessel has a stirrup-spout rather than a strap handle, and the spiral object is displayed on a double-tiered square platform makes it unique and important. The only other vessel which resembles it at all in the Chorrera assemblage is a lobed squash-form effigy vessel in the Banco del Pacifico. This vessel also has a flat cup-shaped object extending out of the bottom of the squash (opposite where the stem would normally be), which is shown lying on its side. The spout has been restored in the form of a strap-handle on this vessel, so that it is impossible to tell whether it was originally a strap-handled or a stirrup-spouted bottle.

The two Chorrera vessels with cup-shaped arms and segmented bodies are mysterious. Their segmentation is obviously important, and their shapes are obviously gendered - masculine (the horn-shaped phallic object) and feminine (the gourd). And they are slipped red-and-white, which denotes two kinds of sacred power in combination. The continuation of the horned object's use as a marker of shamanistic power on Jama Coaque ceramics, and its resemblance to the Tairona grave-goods makes these two vessels even more intriguing.

One possibility for interpretation is that the vessels were meant to be representations of trumpets. Izikowitz (1934: 240) mentions that both Roth
and Koch-Grünberg made the connection between the gourd trumpets in the Guianas and the Yurupary instruments in the Orinoco region. There is ethnographic evidence for the use of gourd trumpets as funerary instruments among the Cubeo (Goldman 1979), the Saliva of the border between Colombia/Venezuela, the Caribs and Akawai of the Guianas (Izikowitz: 240), and also among the Bororo of Central Brazil, where the poari aroe (‘gourd soul -whistle’) is a material representation of the deceased (Colbacchini and Albisetti 1942: 202, 270-271). These instruments usually have a reed or a bamboo flute as the mouthpiece and a gourd (or several attached gourds) as the resonating chamber.

**Segmentation**

Segmentation seems to have been important for Chorrera potters. Multiply-lobed squash, spiral shells, and shrimp are represented on many of the whistling bottles, maté vessels and jars, and on several rather striking individual vessels, such as a representation of a bushmaster on a jar, and a palm larva (Figures 69 and 74). Segmentation is an odd phenomenon, it implies the growth of the creature in parts and an augmentation by incremental stages. Moreover, the segmented parts represented on all of the Chorrera vessels are circular (tubular). It is possible that these representations were meant to indicate cyclical regeneration, with each segment representing a life-stage. The lobed gourds are also segmented, they are made up of parts which are connected, in the same way as palm trees are segmented, and the body parts of lobed creatures such as shrimp and palm larva are segmented. These perceived equivalencies might have represented the 'connectedness' of parts of the social body, and thus the ongoing connection to the ancestors as this was represented in ceramics which were buried with the dead.

**Conclusions**

The animals and plants which are depicted on Chorrera effigy vessels are found in a variety of natural environments but all are from the coastal or riverine habitats of Ecuador east of the Andes. The most important animals depicted on the vessels, judging by the frequency of their appearance on
them, are bats and monkeys, denizens of the neotropical gallery forests and the now nearly extinct rainforests in the western lowlands, and montaña valleys. Animals and birds which are depicted less often but which form a substantial part of the corpus of species which are represented - coati, agouti, feline, quail, parrot, owl - are also forest-dwelling. Other animals which are frequently depicted, such as fish, shrimp, crabs and shore birds, inhabit the coastal and riverine areas, and the mangrove swamps which are also characteristic of the environment of western Ecuador.

Coati, opossum, mice and deer often inhabit the disturbed areas around human habitations such as housegardens and fallow fields. Finally, a few species represented on the ceramics depict birds and animals which are mostly found in the dry coastal areas such as snakes, lizards, and the raptorial birds which prey on them. Thus, small animals which were economically useful or domesticable, or which benefited from the environments inhabited and disturbed by humans seem to have been depicted on the ceramics, rather than larger animals which inhabited the deep forest or other environments which were less accessible to native hunters or less familiar to the potters who made these vessels. A few of these larger species, such as peccary and caiman, which are less likely to be found in the immediate vicinity of human habitation are also depicted, but only on miniature vessels such as lime-containers or ceramic snuffers.

The animals which are represented in the Chorrera sub-assemblage are mainly small creatures, none of which are particularly threatening to human beings with the exception of the snakes and possibly the felines (of which there are very few identifiable representations). There are possibly four (interrelated) reasons for depicting these particular animals on the ceramics. These are: 1) the great majority of the animals which inhabited the Ecuadorian coast during Late Formative times were small creatures, as they are today in most neotropical faunal assemblages (Stahl 1992). Many are bats and monkeys, this aspect of the local ecology is depicted accurately on the ceramics, 2) the animals which were considered sacred or 'species paragons'
in the Amazonian Lowlands (Jaguar, Caiman, Harpy Eagle) were not considered particularly suitable for depiction on mortuary pottery, although a few examples of these creatures do appear. Felines are depicted on a few vessels but those that are portrayed seem not to be jaguars. A Harpy Eagle may be depicted in a stylized manner on three vessels, and a crocodilian is depicted on a snuffing tube (which may not originally have been grave-furniture), 3) the ceramics were made by women potters who rarely saw the larger denizens of the jungle and who were more familiar with the animals brought into the village either as domesticates, as a source of decoration, or for the pot, and 4) the animals depicted were considered suitable for mortuary pottery because they are earth or water creatures, and were therefore appropriately portrayed on ceramics.

Most of these animals live in caves, sleep or nest in holes in trees or hollow trees, and some make burrows in the ground. They are also liminal creatures -- living or foraging between the forest canopy and the earth, between the river and the bank or between saltwater and freshwater. Many of these animals are nocturnal creatures, and a few are poisonous.

**Hollow Fruit: Gourds, squashes and calabashes**

It seems odd that there is so very little archaeological commentary on gourd-form ceramics, given that many of the vessel forms from both Mesoamerica and South America might be derived from gourds. Gourds and squashes obviously had a special place in the pantheon of earliest crops grown by the semi-nomadic peoples who first lived in these areas, and their depiction in some of the earliest ceramics may have come about as pottery supplanted many of the functions of gourds in daily life.

In this section I decipher some of the meanings that gourds had in the Chorrera assemblage. My discussion is intended to draw out the possible iconographic and metaphorical meanings of these fruits for these people who depicted them so carefully and lovingly in their ceramics. For the preceramic and ceramic cultures of both Central and South America, gourds and squashes were likely among the first cultivars, and for this reason alone must
have been very important. Certainly, as Lathrap (1977: 718-9) pointed out in, "Our Father the Cayman, Our Mother the Gourd," the gourd's importance in creation myths from many areas of the Americas, and its identification with female sexuality and fertility, indicates that its fruits were metaphorically the universal womb. What I will also argue, however, is that although this was probably the primary metaphor, it is not the only signification to be found in the Chorrera ceramic gourd forms.

Gourds have had a bewildering variety of uses, including: as containers for water or food storage, and as lime pots, as fish-net floats, and as plates, cups, dippers, and spoons. Gourds have also been used as food, most archaeologists and botanists tend to believe that the seeds were the first utilized part of the fruit, rather than the flesh, which is often bitter. With cultivation, and the selection of non-bitter fruits, gourds may have been a basic staple in the diets of early inhabitants of the more arid areas of the coast where they flourish, and it appears that the maize-beans-squash complex familiar to Mesoamericanists may have been fully developed in Ecuador by Valdivia times (Engwall, personal communication 1996) and was certainly present in Panama by 300 B.C. (McClung de Tapia 1992: 154). Gourds have also been used as musical instruments, in the New World as rattles and scrapers, and in the Old World as thumb pianos and stringed instruments. Another use for gourds is as penis sheaths, this particular custom being found among South American, southwest Pacific, and African peoples.

Bailey's (1937: 14) definition of a gourd - "... a hard-shelled, durable fruit grown for ornament, utensils and general interest" covers nearly all the gourds, most of which belong to the family Cucurbitaceae. There is, however, one other type of plant which also meets this definition, that of the tree calabash or Crescentia cujete (in Mexico: jicaro, from an Aztec word xicalli; in Ecuador: mate, pilche, pilchimate from the Quechua, in Colombia: totumo) which is not a cucurbit but a member of the family Bignoniaceae.

Cucurbits were among the first cultivars of New World peoples, and as many of these cultivars are grown today in Ecuador, and have been grown in
South America for nearly 10,000 years, it is perhaps not surprising that we should find them depicted in the pottery made by Late Formative peoples. Gourds, pumpkins and squashes are all beautifully shown in detail on these vessels. It seems clear that gourd-pots (and probably, by extension, gourds) were very important mortuary offerings and libation vessels. Gourd and squash *skeuomorphs* or gourd-shaped ceramic bowls and bottles are one of the most common and also one of the earliest types of vessel to be found in the museum collections. Both bowls and bottles are very lifelike, and even lifesize, representations of gourds, with stems and stem scars and small growth flaws.

The varieties of gourd represented in Chorrera vessels have both ecological and iconographic significance. In this next section, the natural characteristics of the gourd species are first discussed, and then the archaeological evidence for them -- in terms of both material remains, and their representation in other archaeological cultures. I then discuss the Chorrera vessels which represent the particular species. In the final section I present modern mythological evidence for my interpretation of both types of gourds (*Lagenaria* and *Crescentia*) as integral parts of Chorrera cosmology. The other species are discussed in various other sections of this thesis in relation to the ceramic forms. *Cucurbita maxima* and *moschata*, for instance, are depicted as lobed or segmented and are also discussed in the section on *Exoskeletons* which describes and explains these forms.

**Natural characteristics of species of gourds**

*Lagenaria siceraria* is the bottle gourd. The genus name is derived from the Greek *lagen*, meaning 'bottle', and the species name from *sicera*, meaning "drinking vessel." *Lagenaria* grows on a vine which sometimes attains fifty feet or more in length. The showy white flowers, from one to six inches in diameter, open at dusk and close early the following morning, except on cloudy or overcast days (Heiser 1979: 72). Heiser also observes that his gourd plants seem to be pollinated mainly by cucumber beetles, but that night-blooming flowers are usually pollinated by moths. He comments that
gourds may be pollinated by moths in the tropics and that information on pollination might provide some clues as to the origin of the gourd (Heiser 1979: 73-74, see also discussion on origins below). (Figure 75)

*Crescentia cujete* or the calabash tree as it is sometimes called, is a small tree with the green, pumpkin like fruits suspended underneath its branches. The tree grows naturally in hot, somewhat arid regions, although it can be cultivated in the wet tropics (Heiser 1979: 15-16). "Few house gardens from southern Mesoamerica to the southern border of the Amazon Basin are without this tree, and it would be very difficult to guess what the original prehuman distribution was." (Lathrap 1973: 732) These trees are found growing all over coastal Ecuador today, and it is said that up until about 40 years ago tree gourds reportedly grew much larger up to more than two feet in diameter, and they were used for all kinds of storage and transporting goods (often water) in the drier regions of the coast (Evan Engwall, personal communication 1995). *Crescentia* calabashes are used for many of the same purposes as *Lagenaria* fruits but because they have thicker rinds they are more durable. (Figure 79)

*Crescentia* has its flowers fertilized by small bats, probably of the Glossophaginae or Long-tongued type. "This subfamily includes bats that feed on flower nectar. ... These little bats are important or essential pollinators of many plants on whose nectar they feed. Bat-pollinated plants include balsa trees, ceiba (silk cotton) trees, and jícaro (calabash)..."(Emmons and Feer 1989: 62).

Gentry (1980: 37) comments that in the New World, *Crescentia*-type or "bat flowers" have evolved only in the tribe Crescentieae. The New World "bat flowers" have a white or greenish-white corolla which usually has a transverse fold, behind which is formed a nectar-storing bulge. These flowers have a characteristic musty odor, reminiscent of the bats themselves, which has often been remarked as typical of the bat pollination syndrome.

*Cucurbita maxima*, and *C. moschata* include a great variety of pumpkins, squashes and gourds of different forms, colours and types and it is
often very difficult to tell the difference between the species, especially if one only has the fruit (Deena Decker-Walters, personal communication 1996). (Figure 80)

I believe that the diversity represented in the ceramics themselves indicates that gourds and squashes were fully domesticated, since most of these plants only yield round, melon-like fruits unless they are specially selected and cultivated.

Archaeological evidence

The Cucurbitaceae are comprised of one hundred genera and about 900 species worldwide. The most important genera for our purposes in this discussion are Cucurbita and Lagenaria. All species of Cucurbita are native to the Americas. The oldest archaeological specimens of cucurbits from Mexico (their probable centre of origin) date to about 7,000 B.C. for C. pepo from Infiernillo in S.W. Tamaulipas, and were also found at the El Riego site in the Tehuacan valley from about 5,200 B.C. More recently, the archeobotanical remains from Guílá Naquitz in the Valley of Oaxaca yielded cucurbits from about 8,000 B.C. (McClung de Tapia 1992: 149).

In Ecuador, the earliest species of gourd to be identified is Lagenaria siceraria in a (preceramic) Las Vegas context from the Santa Elena peninsula. The outline of a bottle gourd was identified in a stratum dating to ca. 9,000 B.C. (Stothert 1985: 620).

Pearsall (1994: 151) has identified rinds of Lagenaria siceraria among the botanical remains from the San Isidro site in Manabi province, Ecuador. The Cucurbitaceae in San Isidro were in both Terminal Valdivia and Chorrera contexts, according to Pearsall, though they are identified in the Chorrera/Tabuchila context by phytoliths only (Pearsall 1994: 164-5). Although Coastal Ecuador is much wetter than North Coastal Peru it does support xerophytic vegetation, and many of these cultivars actually do much better in more tropical environments.

The data on cultivated plants from both Coastal and Highland Peru show Lagenaria occurring in archaeological sites from about 5700 B.C., along with Cucurbita ficifolia remains (Pearsall 1992: 183). Information from the
North Coast of Peru indicates that *Lagenaria*, various species of Cucurbitaceae (spp.: *maxima, ficifolia, moschata*) and *Cyclanthera pedata*. (Figure 83, a fleshy, elongated fruit with soft spines on it) were all present earlier or at around the same time-period as Chorrera

*Lagenaria siceraria* (Bottle gourd)

*Lagenaria* has been found in archaeological sites everywhere in the Americas within its range (Mexico to Argentina) and is one of the best-known of the cucurbits. Its possible origins in Africa became a topic of debate for a time among archaeologists and botanists alike, mainly because of a hypothesis promoted by Donald Lathrap, who discussed the possibilities of its having been introduced to the Americas from Africa by drift or by human agency (Lathrap 1973, 1974, 1977). *Lagenaria*'s wild ancestor has never been found in the Americas and it occurs in both the Old and the New Worlds without significant difference between the species (Heiser 1979, ).

Aside from Lathrap's conjectures as to the origins of the bottle gourd in South America, another theory proposed by him merits perhaps more serious attention on the part of archaeologists, and botanists as well. The bottle gourd was one of the most important, and widely distributed plants during the pre-ceramic era of both South and North America and continues to be found at earlier and earlier time-depths. "Since this gourd is one of the very first cultivated plants to appear in the New World archaeological record, many researchers suspect that it may have been the first plant domesticated there (Flannery 1986: 6)."

Lathrap's contention that the bottle gourd provided the impetus for the beginnings of agriculture in the Americas, was based on a hypothesis first advanced by Carl Sauer (1952). Lathrap contends that the earliest cultigens, such as the gourd, cotton, and fish poisons, were items which made early nomadic peoples' lives easier. Rather than population pressure forcing early peoples to experiment with growing food crops, these earliest technologically useful plants grew without direct manipulation by humans, and probably flourished in environments which had been disturbed or affected by human
habitation. The bottle gourd fits this description admirably. Used as a water-bottle, as a net-float, and possibly as a rattle, it could have spread throughout the Americas without deliberate intent, as nomadic peoples moved farther North or South along the coastlines or through river valleys.

Heiser's (1979: 15) commentary on the propagation of gourds as weeds around human habitations also advances the case for the earliest plants growing as 'camp-followers' rather than as true cultigens, eventually achieving a kind of symbiotic relationship with humans. Cucurbit seeds thrown on organic garbage heaps grow quickly, and sometimes even take over the rest of the garden if they are undisturbed.

*Lagenaria* has been found in most of the archaeological sites in South America from very early times (Pearsall 1992, Cutler and Whitaker 1961). For Ecuadorian archaeologists one of the most important finds was Junius Bird's Valdivia-type carved gourds (as well as net-floats made from bottle gourds) at the Huaca Prieta site in North Coastal Peru dating from 2125 B.C. (Bird 1985). The gourds which Bird found were buried in a special cloth pouch beside the skeleton of an aged female who Bird dubbed 'the lady of the gourds' (Bird and Hyslop 1985: 60, 72). After the gourds were sufficiently preserved to decipher the carvings on them, Miguel Covarrubias drew them, revealing rectangular goggle-eyed faces which (according to Lathrap) greatly resembled a number of bowls in the Valdivia 3 and 4 styles (see extended discussion in Conclusions). Lathrap's (1974: 121-6) argument for the resemblance of the gourds to the Valdivia bowls is compelling, and both he and Bird believed that the gourds had been imported to Huaca Prieta from the Ecuadorian coast. A similar gourd, from the site of Puemapé (in the Cupisnique Valley) with representations of linked felines like those found on the stone Cupisnique vases at Limoncarro (Jequetepeque Valley) was documented by the 1989 Puemapé Project (Elera 1993: 243).

*Crescentia cujete* (*Tree calabash/tree gourd*)

Some of the very earliest imitations of gourds in clay in Chorrera probably represent tree calabashes. Most of these are large bowls (some are
huge) which have use-wear on their interiors at the bottom, probably from continual scraping with a smaller ceramic maté or perhaps a real gourd, like the ones that are used today for serving chicha in many areas of the Andes. Machalilla/Chorrera transitional bowls are red-on-cream with variations of this distinctive striped pattern and there are a great many of them in museum and private collections. One or two of these vessels have mendholes for laces, perhaps indicating that they were re-used over a period of time. (Figure 7)

Modern bowls which are similar to these archaeological bowls called mucawas, are made today by the Canelos Quichua peoples who live in the Ecuadorian Oriente (Figure 103). These bowls are used for serving chicha made from manioc or other types of alcoholic beverage at special occasions, probably including funerals (Whitten and Whitten 1988). The transitional Middle-to-Late Formative red-on-white bowls were likely used for this purpose and many of them have use-wear marks on their interiors.

Crescentia (also called tree gourds) might not be considered a candidate for identifying the species of gourds represented in Chorrera pottery, apart from their size, but for the fact that bat bowls demonstrate a relationship between gourds and bats. A number of bowls combine the shape of a half-gourd with a small adorno or modeled clay ornament in the shape of a bat on the rim of the bowl. Other bowls represent bats by their shape, which imitates the bat's outspread wings, with nubbins in the place of head, hands and feet. Some of these vessels resemble Canelos Quichua vessels called callana, which are used for serving cooked food (Whitten and Whitten 1988: 21). The flatter, more rectangular bowls may have been used as vessels for shamanic rituals involving the ingestion of hallucinogenic drugs such as Brugmansia. The more brilliantly decorated ones painted with iridescent patterns may have reflected visions seen while under the influence of these substances.

*Cucurbita maxima* and *Cucurbita moschata*

*Cucurbita maxima* is believed to have originated in South America (probably in Chile or Peru) and was cultivated on the Peruvian coast from
2,000 B.C. through A.D. 1500 (Whitaker 1983: 579). Archaeological remains of identifiable C. *maxima* gourds (seeds) appear in the Casma Valley on the North Coast in 2000 B.C., along with C. *ficifolia* and *Lagenaria sicaria*, and slightly later on the North Central Coast at the Las Haldas site (Whitaker 1983: 580, Pozorski & Pozorski 1987). Whitaker (1983: 579) also comments that C. *moschata* seems to replace C. *maxima* from about A.D. 600 on the coast perhaps because of a climatic shift from cooler to warmer temperatures.

*Cucurbita moschata* seeds and warty rinds were identified at Huaca Prieta (2700 B.C.-300 B.C.) and are reported as having been common in the preceramic and ceramic layers. The warty rinds of a cultivar of C. *moschata* are associated with the Guañape and Cupisnique occupations (Whitaker 1983: 578, after Whitaker and Bird 1949). Both C. *maxima* and C. *moschata* remains (mainly seeds) were also found in the Virú Valley, just south of the area occupied by the Cupisnique culture (Whitaker 1983: 579). (This is significant because Cupisnique has been identified by Peruvianists as a coastal variant of Chavín).

Cupisnique stirrup-spout bottles greatly resemble some bottles in the Chorrera assemblage and they are from approximately the same time period (approx. 1000-500 B.C.). Warty gourds are represented in the Cupisnique assemblage, and also in later Moche and Chimú vessels. A number of these are illustrated in Yacovleff and Herrera (1934-5: 302, Figure 26, unfortunately only described as 'por el alfarero del Norte') and in Towle (1961: Plate VI, A and B). Maxima is also called 'winter squash' in some places, and both the warted variety and the turbaniform varieties seem to be represented in the Chorrera corpus. The earliest representative or figurative Chorrera ceramics, with small modeled heads of an (sometimes anthropomorphized) 'opossum' on them are probably stylized representations of a type of turbaniform C. *maxima*.

**Shoe-shaped vessels and Cyclanthera pedata**

*Cyclanthéra pedata* has been found in archaeological sites on the coast of Peru, for example at Asia and Chilca I, in South Central Peru at ca. 3700-
2400 B.C., and in the Moche Valley, on the North Coast at about A.D. 1000-1500 (Pearsall 1994: 182-183, Tables 9.5 and 9.6). Vessels of this shape are made today in Oaxaca, Mexico. The earliest known forms begin during Formative times, about 1000 B.C., in the Valley of Oaxaca. Known as duck-, shoe-, or boot-shaped pottery, these vessels are still being produced by the Mixe, a highland group related to the Valley Zapotec. Zapatos, as they are called, have two functions:

"1. The toe end is placed in the coals of a fire, allowing the contents of the vessel to be kept warm, and permitting them to be stirred or ladled out without the cook getting singed knuckles.
2. Three vessels used in a group provide support over the coals for a comal, the flat ceramic griddle for cooking tortillas. This function accounts for the knobs or ridges on the toe-end of many Oaxaca shoe-forms, which were specifically designed to serve as comal rests."

(Varner 1974: 617)

As there is no evidence that ancient Ecuadorians used comals or griddles, the first type of use seems a more likely one for these vessels. What is particularly interesting here is the remarkably close resemblance that the Chorrera (and Oaxaca) vessels have to a ritual vessel which is made and used by Colombian Kógi māmas (shamans). These are described by the Kógi as 'breast-shaped' and are used solely to prepare beans and other ritual foods (Reichel-Dolmatoff 1990: 30). The Kógi do not make very much pottery, and it is striking that this shape of vessel should be made for this particular purpose by shamans.

**Iconographic Interpretations**

The symbolic meanings of *Lagenaria* gourds

As I explained earlier, most of the iconographic imagery on Chorrera ceramics seems to be close to Tukano mythical symbols. However, the imagery related specifically to lime containers, is not found in Tukano mythology, because the Tukano do not chew coca mixed with lime. The best ethnographic information which we have about *Lagenaria* gourds used as lime-containers which is relevant to our interpretation of the Chorrera
vessels derives from Reichel-Dolmatoff’s classic ethnographic exposition of the Kógi people of Colombia’s Sierra Nevada de Santa Marta region. The Kógi are a Chibcha-speaking highland tribe which is probably descended from the Tairona chiefdoms. These chiefdoms, from the lowlands between the north and west slopes of the Sierra Nevada, made extremely accomplished zoomorphic gold jewelry and adornments. Gold popóros, or lime-containers in the shapes of gourds and anthropomorphic or zoomorphic beings, as well as gold lime-dipping sticks, all meant perhaps for ritual use, are also found in the Central Cordillera of Colombia (much closer to Ecuador) and these indicate a long-standing tradition of the use of lime for coca chewing in the area.

According to Reichel-Dolmatoff (1974: 290) Kógi religious leaders (the mánas, who are essentially an elite group of shaman-priests) preserve the religious ideas of the Tairona in their practices and are consulted by related groups of Indians in the area for their specialist knowledge. The Kógi have an elaborate coca complex which is expressed in special religious ceremony as well as in everyday life. Central to this complex are Lagenaria gourds, which are used as containers for the lime which acts as the catalyst for the analgesic effects of coca. The ritual and religious significance of the lime gourd for the Kógi is extremely interesting in this regard, because of its implications for possible metaphorical interpretations of both Valdivia and Chorrera gourd-form ceramics.

Lime gourds are associated with both procreation and death, and always with the feminine. During young men’s initiation rituals they are given their first lime-gourd, which is the most important ‘sewa’ for marriage and symbolizes the vagina. The lime gourd is pierced by the initiate using a stick (20-30 cm. long) which symbolizes the penis. This stick is made of a special type of wood which indicates the patriline of the young man. The young man then performs a ceremonial coitus with an old woman to ‘pay’ for the little gourd (Reichel-Dolmatoff 1950-51: 234-5).
This ritual defloration is repeated during the marriage ceremony where the máma gives the bridegroom a gourd, with these words: "Now I give you a lime gourd, I give you a woman." He then hands the bridegroom the lime stick and orders him to perforate with it the gourd at its upper end, thus symbolising the act of deflowering the bride. The bride and groom then retire to a very small beehive-shaped hut, symbolically a womb, while the priest sits outside and giving precise instructions for their first sexual encounter, while the lime gourd must be placed in certain ritual positions on the floor, the stick pointing successively in different directions. During his entire life a man will cherish his lime gourd as his 'wife', ... A cracked lime gourd, in dream or in reality, foretells a wife's death. A man generally has two gourds and lime sticks, one pair for daily use and another for ritual occasions (Reichel-Dolmatoff 1990: 18).

The lime gourd's symbolic properties involve even more complex metaphors than those of initiation, procreation and after death rituals. An extended quote taken from Reichel-Dolmatoff (1990: 19) illustrates the multiple symbols that the lime-gourd has for the Kógi:

"In macrocosmic perspective, a lime gourd is a model of the universe, the stick, when inserted, becomes a world axis, and knowledgeable men will be able to talk at great length, explaining the structure of the universe by pointing out levels or bulges, rims or directions, while holding in their hands these little containers. In another image the container is a cosmic womb, it is 'the sun's kitchen', an alembic in which 'food' is being prepared and an embryo is being formed. The lower, rounded half of the gourd is said to be 'naked' while the upper part, which is covered with a crust of lime, is 'dressed' with a shirt 'woven' by the continuous movements of the stick. The naked bulge of this 'house of flesh' are the buttocks, and at their lowest part is an only slightly marked 'anus' right opposite the 'mouth' or 'vagina' which is located at the 'head'. The lime stick is 'the Sun's staff', 'the Sun's arrow', or 'the Sun's phallus'. On another scale, the gourd can be compared to the Sierra Nevada, the lime-spattered upper part are the snowpeaks, and the stick is the world axis. Certain mountain peaks, crowned with white, rocky cliffs, are the Sun's lime containers, and so are all temples and all houses. On a microcosmic level, the gourd represents a scrotum and a phallus, the powdered lime
that fills it being semen. On the crackled 'dressed' part of the gourd one can make out the 'pathways of the souls' or a river drainage, arteries and veins, or the dendritic patterns of mosses, or of the mythical squash plant that spreads, branch by branch, all over the Sierra Nevada. Indeed, even the smallest detail on a lime gourd can be interpreted in some way as representing a significant anatomical, geographical or abstract feature."

I would argue that many concepts which are expressed in the Kógi cosmological view of lime-gourds, were espoused in a similar way by the Late Formative peoples of Ecuador, especially those buried in the Jama Valley who had mainly gourd-form ceramics as their grave-goods.

Female and Male or Dualism in Whistling Bottle Iconography: The Cosmic Womb and the World Axis/Phallus

The conjunction of female and male symbolism was not unique to Chorrera in pre columbian coastal Ecuador. Tom Cummins and Olaf Holm (see also Marcos and Manrique 1988) have commented on the masculine and feminine sexual characteristics combined in Valdivia figurines, and, "...the formal and iconographic connections between the figurines' facial features and the rim decoration of some Valdivia vessels [which resemble gourds]..." (Cummins and Holm 1989: 5, 6) Valdivia figurines depict women with breasts and clearly demarcated sexes, but they also often have elaborate hairdos which also resemble the glans of a penis. They thus combine the most obvious sexual (genital) characteristics of both sexes in one figurine. Whistling bottles may not necessarily have served the same function(s) as figurines, but they may have had the same symbolic meanings embodied in their forms.

In the macrocosmic perspective, the Kógi see the gourd as a 'model of the universe,' and the dipping stick as a 'world axis.' Chorrera whistling bottles can also be interpreted as a conjunction of female and male symbolism - the womb-like container combined with the phallic spout. The most immediately noticeable characteristic of the whistling bottles is the spout and the phallic nature of the spouts on many of these bottles is very apparent. In
natural gourds, the actual fruit stem or peduncle of a squash or gourd (especially that of \textit{C. maxima}) also looks like a phallus (Figure 84). The Chorrera people were obviously observing their gourd plants very closely.

Whistling bottle spouts have an inherently phallic form, especially with the commonly added lip which imitates the glans. Sometimes the bridge also has a bump at the base where the whistle holes are generally located and this might be interpreted as the scrotum. Three bottles in particular illustrate the connection between spouts and penes graphically. The first is a bottle depicting a monkey squatting with its head turned sideways, its erect penis between its legs forms the spout of the vessel, which is attached to its neck by a hollow bridge. The second bottle also has a monkey on it but in the form of a small adorno perched on a gourd form. The little monkey is standing facing the spout, with its penis forming the bridge to the spout (it might be urinating), its tail is clearly visible hanging down behind it. The third bottle depicts a seated man with an enormous phallus which forms the bottle's spout. The man is probably diseased, he has nodules or warts on his head and body and his right arm is nonexistent, the other arm is incised, with stick fingers. (Figure 85)

Actual representations of phalli on their own are few in Chorrera, but there are two 'vessels' which represent a phallus. One is a bowl attached to a modeled ceramic representing an erect penis and testicles with red slip (illustrated in Valdez and Veintimilla 1992: 48 #27). The other is simply a depiction of a large penis. There do not seem to be lime-pots which represent phalli but there are lime-pots which are modeled turret shells which may symbolically refer to the same idea.

If the spouts are phallic and represent the male, however, the bottles themselves represent the female, as containers or as substitute wombs. Donald Lathrap commented on the importance of bottle gourds in early South American cultures in his exploration of the imagery on the Chavin period Obelisk Tello in a seminal article entitled,"Our Father the Cayman, Our Mother the Gourd"(1977). In many contemporary Amazonian and
Andean cultures the gourd symbolizes the womb in mythological and ritual contexts. All of these myths are concerned with transformations of the gourd as vagina, as womb, and as container. Among the Barasana and Taiwano Indians of the Vaupés, a gourd cup is used as an intermediary by the Hero Twins, who ejaculate into it and then give it to Woman Shaman to drink so as to impregnate her. A Shipibo myth involves a gourd (unspecified type) being used as a substitute vagina and womb by a man who copulates repeatedly with the gourd, which then gives birth to the Miraculous Twins. In an Akawaio myth, the gourd actually becomes a woman. The First Man copulates with a drinking gourd, which then gives birth to a people named the Drinking-Cup People because they make gurgling noises (Roe 1982: 146-47).

One part of the Waiwai myth cycle, Watunna, combines stories about animals and people originating from gourds, including the Hero Twins. This tale tells how Huiio (the Great Serpent and Water Mistress) gave birth to the first people:

The sister of the Moon (Frimene) stole Huehanna (a container described as: 'a great ball, huge and hollow, with a thick, heavy shell as hard as stone and beautiful, like a tinamou egg') which was filled with people. She hid Huehanna in her stomach and ran away, scattering gourds (two of which turned into the duck and the anhinga, both water birds) and baskets in her wake. Then she turned into Huiio, the Great Snake and Water Mistress and hid in the bottom of the river (the Orinoco). Wanadi (the creator) was pursuing her to get back his creation, Huehanna. Wanadi and Müdo (the great potoo) searched for Huiio but when they found her she was a feathered serpent. They decided to kill her and put Dede (the bat) in charge of catching Huehanna when she was killed. Ficha (the cuckoo) pushed Dede out of the way, and thus lost Huehanna when the snake died. Huehanna burst and fish eggs came out, and turned into fish and crocodiles, caimans and anacondas, all the animals that live in the river. Huiio turned into the rainbow, symbol of eternal life. The hunters ate the remains of Huiio, and the jaguar took the first bite. The earth flooded and everyone ran away. When the floods subsided Manuwa, the jaguar, and his wife were left. The jaguar's wife found two fish eggs that had not yet hatched and she looked after them until they hatched.
into two boys, Huiio's children, brothers of the fish people. (Civrieux 1980: 51-54, my summary)

A myth fragment which is probably related to the Waiwai myth is cited by Reichel-Dolmatoff (1978b: 280) as an explanation of the transformation of substances in order to make them "ready to consume," whether this refers to eating, sex, marriage or birth. The myth refers to the Great World Fire at the beginning of time, which was caused by the Sun Father after the Great Flood with which he fertilized the world. Tinamou hid in a gourd vessel (the vagina/womb of the Daughter of the Sun), and after the fire was over he emerged singing, "I am cooked, I am done, or I am saved." Tinamou is said to have saved the colour energies (the rainbow?) from destruction through his own salvation, and now lays brilliantly coloured eggs as a testament to this. In another version of this myth, Armadillo -- another animal with a hard shell -- is also said to have survived this World Fire, except for his tail, which was burned to the small stub it is now (Reichel-Dolmatoff 1971: 34).

The symbolic meanings of *Crescentia* calabashes

*Crescentia* calabashes are the receptacle for beeswax and coca which are used in the important Yurupary rituals of the Barasana in the Vaupés region of Colombia (on the Orinoco River) and are associated with the most important mythological character (*Romi Kumu*) of the myths involved in this complex. Hugh-Jones' description indicates how important these calabashes are, and, following Lévi-Strauss, he interprets them as opposed to (and associated with) the *He* instruments (flutes and trumpets) which are taboo for women, as is the 'gourd of wax' (actually a calabash which contains the mixture of beeswax and coca). The calabash is actually more powerful and dangerous than the *He* instruments and causes wasting-away illness (Hugh-Jones 1979: 165).

"When not in use, the gourd of beeswax (*werea koa*) is kept in the family compartment of the shaman - only the most powerful and knowledgeable shamans have these objects under their control. At all times it is kept wrapped in a brown bark cloth. During *He* House,
lumps of wax are placed inside the gourd together with coca powder. Throughout the rite the gourd is kept inside the shaman's enclosure on top of an hourglass-shaped stand. At one point only, after the acting-out of spearing that follows the burning of beeswax, the gourd is placed between posts 1 and 2 so that the participants can eat pinches of the coca. ... Gourds of this kind, called tuga koa, are grown by men and are their exclusive property. They are used as containers for coca, snuff, and beeswax, and to make the maracas used in dancing. These gourds are opposed to those made from the fruit of the Lagenaria vine, called koa, which are the property of women and are used in the preparation and consumption of food and drink, both secular activities." (S. Hugh-Jones 1979: 164, my emphasis)

The gourd of wax is a symbol of mediation between opposites, according to Hugh-Jones (1979: 190). Used in the most important initiation ritual of the Barasana, it mediates between childhood and adulthood, life and death, human and spirit worlds, fire and water, and between the three basic divisions of the Barasana cosmos. It is associated with shamans, the human mediators of Barasana society, and thus with life and death and creation and destruction. The gourd is primarily feminine but also has male elements and, because it is used by men in their rituals, it is taboo for women. The wax gourd is also associated with the opossum and the Pleiades, with stinging bees and their nests, and with the viscera, Romi Kumu (Sky Mother/Woman Shaman)'s womb, and the head by the Barasana. Both the tobacco (snuff) gourd and the werea (wax) gourd are identified with parts of the skull - upper and lower respectively (Hugh-Jones 1979: 170).

In the crackled lines on the lime-covered top of the gourd the Kógi say that one can make out the 'pathways of the souls'. These lines also represent the 'mythical squash plant' that is the Kógi people themselves, spreading out over the Sierra Nevada (Reichel-Dolmatoff 1950-51: 82). The gourd representations in Chorrera graves may therefore have been created to accompany or to represent the souls of the deceased along these pathways - the rivers which resemble the meandering of a gourd vine.
According to Lévi-Strauss (1973: 447),

"Several South American languages form the two words [gourd-rattle and the human head] from the same root: *iwi*da- in Arawak-Maipuré, - *Kalapi* in Oayana (Goeje, p.35). In Cubeo masks, the skull is represented by half a gourd (Goldman, p. 222) and Whiffen was no doubt echoing the native way of thinking when he compared (p.122) the 'bare skulls' gleaming white like so many gourds on a string'."

In fact, Lévi-Strauss' use of the word 'gourd' in his discussion of rattles, etc. is misleading. Cubeo masks are made from *Crescentia* calabashes, not gourds, and are extremely important in the mourning ceremony (óyne). The óyne takes place as much as a year after death, and is divided into two parts - a three-day ceremony with a one-day ceremony about a month after it. (Calabashes are also used as mortuary masks to cover the head of the deceased by the Cubeo). "During the first part, masked dancers impersonate many of the familiar beasts, birds, insects, and fish, as well as the mischievous spirits of the Cubeo world. These spirit beings come to mourn, but mainly to turn the people from grief." (Goldman 1979: 219)

The calabashes used in óyne are painted brown or black and represent the skull-top, or they have a face painted on them and are thus a representation of the face of the spirit (Goldman 1979: 222). The gourds used as the heads of dance costumes might also be similar to the head-coverings on Chorrera figurines which look like cut gourds.

The Barasana and Desana word for gourd is *koa*, which is phonetically related to *oa* (opossum) and *ngoa* (bone). "The true wax gourd, ... is said to have been created together with the universe itself. As bone (a skull) it is associated with the qualities of hardness, permanence and durability, it is said to be made of stone." (S. Hugh-Jones 1979: 165) The Desana supreme deity, the Sun Father, is referred to as *go'á-mée* (Reichel-Dolmatoff 1971: 48). This divinity is a "bone," the skeleton that sustains the human bone, but it is a
hollow bone, or a tube through which flows the solar semen which fertilizes the primal uterus (or *Ahpikondia*).

*Lagenaria* gourds have also been strongly associated with the human head, and perhaps with trophy-head taking in the areas where this practice survived the Spanish conquest. Part of the association might have been due to the similarities between the practice of skull deformation with pad-and-bandage binding which was widespread throughout the Americas and the deliberate re-forming of gourds during their growth for various purposes. Speck (1941:22) comments that for Indians in the southeastern United States, a method of controlling the shapes of gourds during growth was to bind a rag or a cord around the body of the gourd to constrict its growth so that it could be used as a net-float. Reichel-Dolmatoff (1950: 66) writes that, among the Kógi, gourds are sometimes double-bodied; this is caused by a cord which is tied around the middle or 'waist' of the body of the gourd. "Bi-lobed" pad-and-bandage skull deformation in Chorrera skeletal remains was described by Carlos Zevallos Menéndez for several female burials from the cemetery dug by him in 1964 in the Bahía de Santa Elena (Zevallos 1965-66: 22).

Roe (1990: 69, n. 21) explains the connection between skulls and (bony) wombs in his discussion of Shipibo tales with evidence from other lowland groups. He discusses the lowland equation of hollow objects with wombs, and also the common idea that children are formed of the father's sperm. (The Desana, for example, say that the man's semen 'bundle' is 'cooked' in the woman's womb). The Shipibo tale is about the origin of mosquitoes. Here, a son-in-law is pursued by a cannibal ogre father-in-law who he kills, leaving the head to rot. When he comes back to view the skull he sees huge mosquitoes inside its vault, and, after several visits, when he picks it up, he releases them into the air to plague humans forever after.

**Rattles**

It is mainly *Crescentia* calabashes which are used as rattles by shamans. Tree calabashes are used as sacred rattles (*maracas*) by the Warao shamans of Venezuela (Wilbert 1977). A large, perfectly ellipsoidal fruit of *Crescentia* is
made into the special "rattle of the ruffled feathers" by the shaman. It is decorated with a bunch of red parrot feathers (plucked from the live bird) at the top and has slits carved in it which represent mouths. It is also decorated with symbols representing humans, animals and the Sun. Quartz crystals are placed inside the calabash to create the rattle. The quartz crystals represent the shaman's 'family'. Among the Desana, who have the same kind of rattle, the quartz crystals represent semen. When the rattle is shaken the fire (sparks and smoke), caused by the friction of the crystals against the rattle, that emerges from the slits is an act of 'uterine creation' if performed in a curing ritual when the rattle is being used.

The shaman then inserts a handle, made of a special kind of wood, into the calabash. "The handle is called the rattle's 'leg,' but this act is actually a symbolic union of male and female symbols. And this, in turn, is related to the fertilizing power believed to adhere to the completed instrument (Wilbert 1977: 59)." Reichel-Dolmatoff (1979: 34) also mentions that,"The handle of a shaman's rattle penetrates the entire body of the hollow gourd and is thus likened to a phallus."

Tree calabashes were very important in Maya mythology, according to the Popul Vuh (the Sacred Book of the Quiche Maya). Johannes Wilbert (1974: 58) writes that, "...the Crescentia cujete tree bore no fruit until the Lords of Xibalba, the Maya underworld, cut off the head of Hun-Hunahpu, the Hunter, one of the two supernatural hero brothers whom they had defeated (in the first of the testing places of the Underworld: Dark House)...and placed it in its branches. At once the tree was covered with round calabashes, among them the dead hero's head."

In the Popul Vuh it is not only the first Hunahpu who is associated with gourds, however. As the tale continues, Hunahpu's head/calabash impregnates Blood Woman by depositing spittle (in her right hand) and she consequently gives birth to the second set of Sacred Twins - Hunahpu and Xbalanque. Hunahpu also has a calabash substituted for his head, after having been decapitated by a bat in Bat House (the sixth test-house in this
case), and regains his head by tricking the lords of the Underworld into giving it back to him during a ballgame (Tedlock 1996).

A Chorrera ceramic rattle (Figure 81) probably represents a very similar type of rattle as the ones made by Warao and Desana shamans. The rattle (small pellets inside it actually make a rattling noise when it is shaken) is polished black ware, with a fairly thick, squarish handle which extends beyond the 'head' of the rattle and ends in a square, flat piece. The ellipsoidal 'head' is clearly demarcated from the handle. There are also indentations on either side of the top of the handle which might be where feathers were attached, or perhaps a cord to string it up. The rattle is about 20 cm long and 6 cm in diameter at the widest part of the head.

Dwellings and Temples: House Vessels and Gourds

The Kógi describe the gourd as a "house of flesh" and associate it with temples and ordinary houses. The Kógi, the Warao, and other Lowland groups also see the house as a womb and its central pillar as the penetrating phallus (Reichel-Dolmatoff 1950-51, Wilbert 1981). "The Barasana maloca is a microcosm of the universe itself: the roof is the sky, the house posts are the mountains that support the sky, and the floor-space is the earth." (S. Hugh-Jones 1979:151) Gourds and houses seem also to be associated in Chorrera ceramics. Two very similar whistling bottles from San Isidro depict a house and a gourd respectively.

House vessels which represent round houses with thatched roofs have additions on their roofs which look like gourd-shaped pots. (Figure 87) The Kógi (and, incidentally, indigenous Quechua-speaking groups in the Bolivian Highlands) place ceramic vessels on the roof-poles of their houses and temples. Reichel-Dolmatoff's (1990: 24, Plate IV) description of Kógi houses details the construction of these imposing structures:

"The circular wall consists of wattle-and-daub, and the conical roof is thatched with mountain grass. The roof apex consists of a vertical rod wrapped in grass, and topped by an inverted cooking vessel. All apexes of ordinary houses consist of sticks, sometimes
combined with one or more perforated pottery vessels. Inside the roof these sticks are combined with a simple but significant structure called *maukuiz guíla* /'toad's arms.' The multireferential symbolism of these roof apexes refers among others, to the house owners' intellectual and religious status, and the number of vertical rods or vessels may signify concepts such as 'continued effort', 'wisdom', 'completeness'. The vessels are sometimes associated with the lords of the universe, with lineage founders, or with the age of the owner. However, there is little consensus concerning the exact significance of certain combinations. Since the status of a person might change in the course of time, an apex will be modified accordingly, together with the orientation of the door." (Reichel-Dolmatoff 1990: 24, Plate IV)

Rectangular buildings, which are also represented in Chorrera vessels, seem to be similar to a large structure which was found in the excavations at the site of Salango (Lunniss and Mudd n.d.).

The oval platform of the house in Figure 86, D. could also be a half-gourd. In *lengua general* the large communal houses of extended families and moieties are called *malocas*. A mythological illustration of this representation is illustrated by the Desana invocation, "the Sun covers a man in his maloca as if he were under a gourd cup." (Reichel-Dolmatoff 1971:108)

Reichel-Dolmatoff mentions this invocation as one which is frequently repeated against sickness, and explains it as an expression of the protective quality of the maloca.

**Gourds, Coca and the Ancestors**

In several previous sections I have made reference to the links between coca, gourds, and the various manifestations of what I see as evidence for Chorrera cosmological ideas about death. I also suggested that the Chorrera people may have practiced death rituals involving the relationship between the living and the ancestors.

In the Chorrera assemblage limepots are obviously important. Lime use (as a catalyst for the analgesic and hallucinogenic alkaloids in coca) is supported by the chemical analysis of the whitish powder from five Chorrera lime pots which proved to be fine-grained calcium carbonate which was probably burned shell (see Lathrap et al. 1975: 51 n.3). There are at least 30
(and probably more) in the Banco del Pacífico collections, and (although I did not, unfortunately, make a point of examining limepots in these collections) at least as many in the Banco Central collections. Limepots depict nearly all of the same figures as the larger ceramics, and also depict figures which are not found among the full-sized vessels. They depict people, gourds, snakes, and animals, especially snakes and snails. Interestingly however, they do not seem to depict the most commonly represented animals in the larger assemblage — bats and monkeys.

I suggested that representations of bats (mainly bowls) were linked to the pollinization of the flowers on *Crescentia* or calabash trees, and the flowers on *Brugmansia* or *Datura* plants. I also suggested that the representations of monkeys were part of an origin myth linked to an ancestor cult which had to do with coca, and perhaps also yagé (*Banisteriopsis*). Snakes are also important, but perhaps more implicitly as incised geometric designs which are linked to the consumption of hallucinogens in general, and to yagé in particular.

We begin with the whistling bottle effigy vessels which depict monkeys. Among these bottles, some of the most striking are the ones which depict monkeys squatting on their haunches with their hands resting on their knees in a rather contemplative pose. Most of these monkeys also wear a collar and a round amulet, and they have no visible tails. Some of the vessels depicting monkeys as adornos also show the monkey in this posture, but often these have a tail.

There are also vessels which depict human beings in the same pose. They squat, with their hands on their knees. Sometimes they are represented as being afflicted. In addition, coatis, agoutis, and a squirrel are all depicted in the same posture. The bodies of all of these vessels are extremely globular, too much so to be simply a strictly naturalistic portrayal of a human being or an animal. The bodies of the humans, especially, make them look bloated, or hunchbacked, and the animals rounded backs make them unnaturally plump. (Figure 88)
Animals are linked with gourds in the ceramics in another way. The few whistling bottles which combine categories depict: monkeys sitting on gourds (Figure 92), coatis lying on gourds (Figure 63), a mouse on a gourd, a gull on a gourd (Figure 82, B.), a fish on a gourd, and a pair of vessels with ibis depicted in low relief on them on bottles which have an obviously bottle gourd form (Figure 78).

Monkeys are linked with coca in Moche ceramics as well. Elizabeth Benson (1992: 306) has briefly mentioned Moche and Vicús monkeys with coca bags, earrings and espingo seed rattles. She relates monkeys who wear or hold a coca bag, hold a gourd and stick or a shell trumpet and/or wear pendant disk ear ornaments to coca chewing. Sometimes the monkeys are twins, a pattern which is also seen in human coca vessels. Pictures of these vessels appear in a number of publications (Donnan 1978, Kutscher 1950, Larco Hoyle 1966, Wasserman-San Blas 1938 and others). The coca monkeys do not appear in scenes with humans, and are not found on fineline vessels (Elizabeth Benson, personal communication 1997). She writes,

"Monkey remains on the coast of Peru suggest that monkeys were kept there as pets or for use in ritual events. ... A number of the Moche pots show a monkey or twin monkeys, with a coca bag around the neck, sometimes holding a lime gourd and wearing the pendant-disk ear ornaments seen on human participants [in the coca rituals]. Monkeys and coca came originally from the same region, the moist forests of the Amazon basin on the other side of the Andes. There was probably an origin myth that linked monkeys and coca." (Benson 1997: 63-64)

Coca is the substance around which ideas about ancestral ties revolve in two cultures in particular. The Barasana and the Kógi both have elaborate cosmological ideas about coca, and about the gourd container in which they keep the mixture of wax and coca which is consumed, or the lime which is the catalyst for the active alkaloids in the coca. The Barasana specifically link coca to descent-group structure built up over the generations (C. Hugh-Jones 1979: 230) and to Romi Kumu (the ancestral Sky Mother). I also made the
point that in both cultures these important coca-related containers are gourds which are strongly associated with women or at least with female spiritual guides or mediators.

Although gourds are mentioned in myths, usually as containers of some sort, they are infrequently the central object of a myth. Origin myths involving gourds, or similar containers such as eggs, baskets, or ceramic vessels, can be found, however, and usually the gourd serves as a substitute womb. However, the gourd seems to be substituted for a real womb in cases where there is something unnatural or supernatural about the thing(s) which it gives birth to — poisonous creatures (mosquitoes in the Yaruro tale, wasps in the Guajiro tale), fish (Sikuani), the Hero Twins (Roe 1982), the Creator's (Kúwei's) son (Sikuani), and the gurgling water-jug people (Roe 1982). Broken gourds also give rise to floods (Cuiva and Sikuani tales) or darkness (Barasana and Yekuana tales).

The association between monkeys or monkey-like creatures and gourds also often seems to be one of descent. Monkey-like ogres, and gourds are associated in the mythology of the Barasana by the relationship between the yurupary (He) instruments (two of the most important are Old Callicebus Monkey and his wife) and Romi Kumu, the Sky Mother who is also the sacred gourd filled with coca and wax (S. Hugh-Jones 1979: 166-167, 225). The yurupary instruments are considered to be the 'children' and 'grandchildren' of Romi Kumu. Yurupary himself (the Tukano culture hero), is also considered to be 'like a monkey,' in that he is covered with hair and has the body of a monkey but the head, hands and feet of a man (S. Hugh-Jones 1979: 194 n.3) Yurupary is the original ancestor of the Barasana people, since, in the myth, he must die to give birth to the palm tree from which the He (yurupary) instruments are made. The He instruments are also the ancestors of the Barasana themselves, since young men must be initiated (die and be reborn) as men in the ceremonies of He House. Yurupary, in his role as Manioc-Stick Anaconda, has a skull made from a tree gourd or calabash. The
lower half of his skull is the gourd of wax (containing coca), and the upper half is the tobacco gourd (S. Hugh-Jones 1979: 210).

The Cubeo believe that there exist monkey-like demons called the abúhuwa and the Desana also have a similar creature called the boráro. The boráro is not associated with gourds, but he can be calmed or 'tamed' by the shamans with several kinds of coca and tobacco. The types of coca which are conjured in the spell used to make the boráro stay in his house and go to sleep are caimo coca, tree-coca, and fish-coca. The tobacco used in the spell is associated with three kinds of fish: mojarra (Cichlidae), sardines (unidentified river fish), and the dormilón (another unidentified but slow-moving fish) (Reichel-Dolmatoff 1975: 189).

Monkeys, or savage monkey-like creatures, are perceived as important demon or ogre-spirits in the Northwestern Amazon. Coca is an analgesic and has a calming and suppressant effect on the processes of the human body. It is also an anaphrodisiac. Coca (or its catalyst) is taken from gourds and it is natural that these should be associated with its effects by the peoples who use coca. The monkeys portrayed in the Chorrera ceramics are sculptured gourd-shaped whistling bottles, or they are portrayed on top of gourd-shaped bottles. Thus their association with gourds can be seen as an actual demonstration of symbolic ideas about their mythical relationship.

It seems probable that Yurupary, the Abúhuwa and the boráro (kurupirá) are the same spirit-beings with different names, at least for the Tukano tribes of the Vaupés. Having related monkey-like ogres, gourds, and coca in the Vaupés area, we should now determine whether there are any similar relationships in Northwestern Amazonian mythology.

Monkey-like forest ogres (the yododai) are associated with baskets by the Yekuana, they are the guardians of the plants which are used to make the baskets. The Yododai roam through the forest in large groups, making a loud noise that sounds like the song of the wood quail (to the Yekuana), and, which, incidentally, is very much like the sounds of monkeys in the trees. They smell like perfume or flowers, and this smell comes from the face and
body paints which they use to decorate themselves. They can appear and disappear at will, and if they are seen by a hunter, he will become very ill, and may even die if not treated by a shaman. Interestingly, the symptoms of the illness are almost exactly the same as those brought by the boráro – a fever, accompanied by headaches, nausea and loss of appetite. Yododai must be propitiated by the basket-maker, primarily by painting the three kinds of human face paint on the cane beside the one which is to be cut, and sometimes with other small gifts, such as beads (Guss 1989: 127-132).

For the Yekuana, basket-making is a marker of identity. Baskets are manufactured by men and are mainly used to process poisonous manioc into edible cassava. Specially made bichromatic plaited baskets, called waja tommnato, or painted waja, are serving trays for cassava but they are also considered to be 'poisonous' or dangerous shamanic weapons. "The importance of basketry in every aspect of Yekuana life makes it a natural yardstick with which to measure the maturity and character of a developing male." (Guss 1989: 79) The myth of the origin of waja tommnato involves a powerful shaman called Waña Kasuwai, the "master" or chief of the spider monkeys (Warishidi) who is a huge, muscular, fierce cannibal creature, enormous and hairy, with blood gushing from his mouth and two shaman's pouches (telescoping baskets called kungwa) slung across his chest. In the myth, Waña Kasuwai (also called Odosha, the evil son of Wanadi the Creator) is killed by the Yekuana men, who then open his pouches to find waja tommnato inside them. The Yekuana then learn how to make these baskets from the "master" of the painted waja, Woroto Sakedi, whose face paint (skin) is the template for the designs (Guss 1989: 96-103). Guss (1989: 102-103) writes, "Woroto Sakedi literally means, "The Devil's Face Paint."...The designs woven into the "painted" waja are therefore the actual symbols the Devil paints himself with, ... As such, Woroto Sakedi might also be translated as "The Mask of Death." Guss (1989: 107-109) traces the Woroto Sakedi basketry designs to poisonous snakes (especially the venomous coral snake Awidi) and their relationship to Odosha, and Wiyu (Huiio), the
Giant Anaconda, for the Yekuana. He also relates them to the snake-demon called "Oroperi" of the Guianian Caribs, and to the Uruperi of the Waiwai (Fock 1963; Guss 1989: 109).

How, then, can this imagery be related to our original premise -- that the ceramics are primarily mortuary artifacts, and therefore images and symbols of death?
Hugh-Jones writes,

"The origin myths of Yurupary are also myths of the origin of death: because Yurupary, the first ancestor, died, so all men must die,...But the myth of Yurupary and the rite of He House also concern immortality. The myths suggest that death is not final and that through death immortality is achieved: the He ancestors live on in another world. At He House, the ancestors are brought back to life and come to adopt the living." (S. Hugh-Jones 1979: 250)

Death and darkness certainly seem to be linked with gourds. A particular kind of gourd (yumi) is created when a monkey-like demon, the Iwia, is invited to a fiesta by the Shuar who kill it by burning it (Tankamash 1987: 226-8), just as the ashes of Yurupary give rise to the paxiuba palm whose bark is used to make the Yurupary instruments (flutes and trumpets). Yawira kills Nyake by raping him to make his body into coca bushes, and her son by that union's umbilical cord becomes the gourd vine (S. Hugh-Jones 1979: 297, M.7.D.).

In the origin myth of the Yekuana, darkness is let out of a basket into the world by a monkey ( iaraku, the father of the capuchin monkeys). The myth involves the death and bringing back to life of Kumariawa (the Earth Mother) by Wanadi (the Creator). Wanadi leaves iarakaru (his nephew), a monkey (or a hairy dwarf, Ududi), to watch over the body of Kumariawa whose rejuvenation will signal the birth of the first people out of Huehanna (a great hollow ball with a hard thick shell). Wanadi forgets his chakara (shaman's basket) which also contains the night. Odosha tempts Iarakaru to open the chakara just as Kumariawa rises, and the world goes dark. The third repetition of the tale involves Odosha giving his urine to Makako, a lizard, in
a gourd. The lizard throws the urine from the gourd on Kumariawa and it is so poisonous that it disintegrates her. The parallels here with the characteristics of the boráro are obvious.

Finally, then, we have come full-circle back to the origin of painted designs taken from the skin of the Jaguar Anaconda, which is really what (or who) Yurupary seems to be. The relationship between monkeys, snakes, and bats, as the three primary symbols of the Chorrera sub-assemblage, is made apparent through its analysis with reference to the mythology of the Tukano, and clarified through the mythology of other groups in the Northwestern Amazon.

**Design Categories**

**Phosphenes**

My interpretation of the main design elements or motifs on Chorrera anthropomorphic vessels, figurines and many of the fancy non-representational vessels is that they are snake designs which were probably derived from entoptic images. ('Entoptic' meaning 'within the optic system.' Lewis-Williams 1995: 6) These elements and patterns were likely those which were seen in trances induced by hallucinogens and rendered on the ceramics by Chorrera potters.

Entoptic images are also sometimes called hallucinatory form constants and phosphenes. They are illuminated geometric shapes which seem to 'float' in front of the viewer's gaze. Entoptic phenomena are generally visual images seen in altered states of consciousness, in laboratory situations they are induced by electrical currents or by hallucinogens such as LSD (Horowitz 1964). They seem to be common to all human beings in states of trance, although they can also be generated in 'normal' states which are emotionally charged, such as during sex, nightmares, erotic dreams, fasting, and by sudden frights. They may also be triggered by smells, and sounds made by particular musical instruments (Reichel-Dolmatoff 1979: 42). Entoptic phenomena have been scientifically verified in a number of studies.
(e.g. Siegel and Jarvik 1975) and they are different than hallucinations, which are experienced as subjective visions (Lewis-Williams and Dowson 1988: 202).

Phosphenes are flickering iridescent shapes which can be induced by putting pressure on the eyeball but which also appear in the early stages of trance. Reichel-Dolmatoff suggests that for the Desana, different categories of light patterns (marari, nomeri, dobéri, and dari) correspond to different kinds of phosphenes which the Desana say can also be seen fleetingly during orgasm (by both men and women), and during yagé intoxication (Reichel-Dolmatoff 1978: 275-276). Dari are luminous streaks or threads, marari is "a mass of luminous particles similar to powdered quartz crystals," which precedes nomeri, which can be translated as, "to paint with fine dots." Noméri is related to women (nomeo), in the sense that women are 'exciting' and invoke passion and love, the word also means 'to ejaculate' in shamanic language (Reichel-Dolmatoff 1979: 41). Noméri is seen as scintillating dots on a bright yellow background. Dobéri means, "to paint with large dots" and these dots are described as floating in a sea of red. All of these words are related to the Desana word for 'brightness'- gohséri. Both noméri and dobéri are said to be 'seen' by a man whose semen is being 'cooked' in his wife's uterus to produce a child (Reichel-Dolmatoff 1978: 276).

The geometric elements on Chorrera ceramics are interpreted here partly by comparing them to Desana artistic motifs (Figure 35). These motifs were interpreted as phosphene patterns (after Knoll in Reichel-Dolmatoff 1972, 1975, 1978a) by Reichel-Dolmatoff who discovered that when he gave Tukano men pencils and paper and encouraged them to draw yagé images, a series of drawings were elicited which included a set of consistently repeated design elements. When questioned about these elements, the men's interpretations mostly coincided, leading Reichel-Dolmatoff (1972: 106) to conclude that, "...these motifs were codified, each having the fixed value of an ideographic sign."

Chorrera design motifs were similarly standardized and codified. Their basic elements are combined in various complex ways and by using
different techniques, but they are essentially the same elements used repeatedly.

**Triangles and Diamonds**

The design on the snakes which are represented on Chorrera jars is clearly meant to be a naturalistic representation of the X-shaped markings on the skin of either the fer-de-lance (*Bothrops asper* or *atrox*, called *equis* in Ecuadorian coastal Spanish) or the bushmaster (*Lachesis muta*). The boa (*Boa constrictor*, also found on the coast) has similar markings. Cross-hatched triangles have also been interpreted as serpentine motifs on Valdivia vessels (especially early bowls) by Stahl (1984: see Figure 18).

Damp (1982: 174) also interprets the triangle markings on early Valdivia bowls as snake patterns, and the “interlocking T elements” as feline motifs. His argument for the triangle patterns as snake markings is convincing but his argument for the feline faces is not. (Although there are some anthropomorphic faces on early Valdivia pottery, they are not necessarily were-felines). I interpret the “interlocking T elements” or “bands” on this pottery as representations of coiling snakes. This interpretation was suggested by Mary Helms (1993: 224) in her iconographic reading of the painted designs on Coclé ceramics, where she shows that, “... depiction of the V-element, Y-element, or YC scroll may be a substitution for literal depiction of a recognizable serpent.” The Valdivia design is much more convincing as a snake, especially since it is continuous around the bowl rim.

Roe (1989: 38, n.2) argues that although the diamond designs in ethnic art styles throughout the Amazon may be based on analogical 'natural symbols' (i.e. powerful snakes), the ,"... complex similarities in non-obvious mythic domains, such as the associations of these designs with thunder, lightning, the rainbow, seduction and cannibalism, could not all be the result of purely contingent, independant associations." Thus the patterned skin markings of snakes, based on the natural skins of the snakes which live on the Ecuadorian coast (boa, fer-de-lance and bushmaster), also have mythological connotations.
Yagé visions often include snakes. A Barasana yagé pot displays a very similar design to the one found on the Chorrera vessels (Figure 102, after Carmichael et.al 1985: 92). The yagé pot features attached nested diamonds in different colours of paint with a circle in the centre of each diamond on the shoulder of the pot. Triangles and diamonds are among the hallucinatory form constants or entoptic images seen under the influence of both *Banisteriopsis* and cocaine (Stahl 1985: Figure 13).

The Desana interpret triangles and diamonds as the phallus and the womb respectively. A triangle, accompanied on each side by a vertical line ending in a spiral (a scroll) is the male organ, associated with semen and also with the fruit and latex of the rubber tree (*Hevea pauciflora*) which also has seminal connotations (Reichel-Dolmatoff 1972: 107, 1978a: 30). Roe (1992: 73-74, n.35, and Fig. 4)) has pointed out that the male and female figures on the Black and White Portal at Chavin have genitals or genital coverings which are 1. a triangular 'tooth' on a Cayman's mask for the male, and b. a 'mouth' with teeth in it for the female. These motifs correspond quite well to the incised pattern above the genitals of a male figurine (Lathrap et al. 1975: 38, Fig. 49), and also to the stepped opening or dark space at the female figurines' genitals.

The female organ is represented by a diamond. When it is represented with a small dot or circle in its centre this indicates fertilization or a phratry. The symbolism of this particular shape becomes more complicated, however, if the colour of the triangle and the dot are the same or different ('our people' vs. 'other people'), and diamonds combined in an interlocking unit with dots of a different colour represents the reciprocal relationship among exogamic groups. "A vertical row of diamonds, sometimes simplified in the form of a zigzag line, represents a line of descent, a concept of fecundity, and of social continuity." (Reichel-Dolmatoff 1972: 109).

The diamond pattern on the snake jars might have had the same meaning for the Chorrera people as it does for the Desana. I believe that it also has another symbolic function however, a shamanistic one which is
related to the colours used in the pattern, and the dark spot in the centre of each diamond. In reading about entoptic phenomena, I was struck by the consistent experience of subjects in states of altered consciousness of the phenomenon which Lewis-Williams and Dowson (1988, 1993, and see also Lewis-Williams 1996) have called, 'the vortex.' The vortex is seen in the third stage or deepest level of trance, where the person experiences being drawn into a vortex or a tunnel. Lewis Williams (1996:15) writes,

"Sometimes the sides of the vortex appear to be marked by a lattice, in the squares of which are the first iconic hallucinations, though entoptic forms persist peripherally into this third stage, some of the iconic images on the sides of the vortex soon become central to the subjects' experience. When the subjects emerge from the far end of the vortex, they find themselves in a fantastic realm where they experience hallucinations of monsters and fantastic or ecstatic events, they also feel themselves transformed, partially or completely, into animals."

The vortex is seen as the entrance or gateway to the other worlds which the shaman may visit. It is described as a journey underwater or underground by shamans in different cultures (Lewis-Williams 1995: 16), or a journey through the mouth of the serpent or the entrance to a cave or sinkhole (the axis mundi) in the southwestern United States and Mexico (Boyd 1996). The polychrome diamonds in the snake designs on the coiled-snake ceramics may be interpreted as representations of the vortex or the entrance to the Underworld, as well as representations of the skin marking of poisonous snakes.

The Kogi have a very similar thread cross made of vines which they call nuizi/'bat.' These thread crosses are placed in the funnel-shaped roof-apex of the temple to guard the inhabitants against evil. Thread crosses are associated with vampire (blood-sucking) bats, the vagina, and menstruation, but they are also, "a model of the soul's cross-roads to the beyond." (Reichel-Dolmatoff 1990: 32)
Interestingly, a Huichol symbolic thread cross called, the 'eye of god' by Mesoamericanists which also appears on Nayarit vessels, is very similar to the diamonds on Chorrera ceramics. Furst (1973: 64) explains its significance as a protective device for young children, who are symbolically placed in the vortex of the universe. The protective influence extends from the four directions to where the soul attached to the centre of the head. The thread cross can also, however, be,

"tiiwe, jaguar, whose function it is to act as spirit trap or barrier, to keep the dead from upsetting the re-established equilibrium until such time as their actual presence among the living is desired. As in all such instances, these functions are not mutually exclusive but are complementary." (Furst 1973: 64)

**Volutes**

Volutes are incised on vessels which depict monkeys and on a series of special vessels which are *Lagenaria* effigy vessels. These may be simple representations of monkey's tails, which, for the Tukano, represent, "...the penis, and masculine sexuality, incestuous and untamed." (Reichel-Dolmatoff 1972: 96) Where the scrolls are paired the symbolism is similar (the male organ) and the more general interpretation is of emerging life or growth (Reichel-Dolmatoff 1978: 30). The *Lagenaria* vessel series has a version of the Milky Way design on them, in a pattern which looks like a spiral (see drawings). The scrolls are incised around the outer edge of the spiral and inside the space formed by the main figure.

**Negative Resist Designs**

One interpretation of a design on a bowl with negative resist painting on its interior (Figure 43, upper) is that the design represents, "... lesser anteaters (*Tamandua*) standing on a honeycomb-like base that may represent a beehive or an anthill (Lathrap et al. 1975: 89, #303)." When rendered as a drawing, however, the design looks more like the Desana version of the Milky Way Serpent, with its traditional two heads and shimmering body-spots. Lathrap et al.'s interpretation may not be "wrong," (inasmuch as the
anteater is related to the Dragon according to Roe) and the beehive may also be the Milky Way or the Pleiades -- obviously these symbols are also multivalent and interchangeable - but on this vessel the 'light' design is dominant, and I believe that the figure is meant to be seen as the Milky Way (S. Hugh-Jones 1979, Roe 1982: 188-189). A similar design is found on two other bowls (e.g. Figure 43, lower) but may sometimes be difficult to see, due to the fugitive quality of Negative Resist. Another Negative Resist design which may represent the ophidian qualities of a shamanistic creature is the design which appears on a reclining monkey. (Figure 89) Here, the monkey is depicted in the same posture as a reclining Afflicted Man, with the Negative Resist design on its upper surface.

**Colour symbolism**

Buffs, browns, reds, reddish-browns and dusky reds predominate in the colours of the ceramic assemblage, especially for plain polished vessels (such as the majority of plain jars and whistling bottles) and these vessels are also often self-slipped. All of the variations of brown and reddish-brown slip however, seem to rely on the same kind of slip, which becomes darker brown when it is fired at a higher heat, or is more reddish when it is fired at a lower heat. This technique can be surmised from the variations on individual vessels, and also by fire-clouding on some of the less expertly fired vessels. Particular self-slipped reds, such as the vibrant orange-red from Pinpiquasi, are probably due to the colours in local clays. Red slip by itself also seems to have been important and many of the bowls have red slip on their exterior surfaces.

Red and white (or yellowish-whites) seem to be have been the most significant colours for the early ceramics, and this combination is also found on fine ceramics with special symbolic significance (such as red-and-white or yellow vessels with platforms). Many of the vessels in both collections are decorated primarily with a combination of red-on-white. White-infilling in incised decoration was also important, and especially for the emphasis of certain features or patterns (see 'Milky Way' design in Design Categories).
Black vessels obviously had a high symbolic value as well. Black smudging seems to have been used mainly for bat bowls, and for some vessels with iridescent paint on them. (These vessels are rarer than most of the other decorative types). Negative-resist painted vessels should probably also be included in this category, and here either a negative-resist or a 'positive-resist' technique was used to create black patterns over the natural clay colour, or, more rarely, a buff pattern on an entirely smudged surface.

Polychrome vessels or those which utilize the entire colour spectrum which was available to Chorrera potters are quite rare. In this category we may include the snake jars and jars with four spots, jars with the Harpy Eagle design on them, a few bowls, and a couple of square vessels.

Finally, vessels with a yellow or a blue/green postfire pigment on them (called "Maya Blue" in the Mesoamerican literature) seem to be late manifestations of the Chorrera tradition, judging from the fact that this colour is much more common on Jama Coaque vessels from the San Isidro region.

A Munsell Colour Chart book (1992) was used to classify the colours of the ceramics and slips. The Munsell Colour Chart was originally designed for classifying geological soil samples, but it is sometimes equally useful for classifying clay colours in ceramics which employ the normal range of colours. The pages of the chart which I used most were naturally the ones in which yellows and reds predominated (10YR, 2.5YR, 5YR, 7.5YR) and the colour palette, not surprisingly, tended to cluster around reddish browns and brownish yellows. Each page of the chart is divided diagonally according to chroma and hue, thus the upper left corner of each page of colour is brighter and the lower right corner is darker, while the colours change from those with more white in them at the top of the page to those with more black in them at the bottom. The Munsell book was not found to be particularly useful, mainly because the colours on the ceramics did not vary much.

Red is obviously a significant colour. Many of the vessels are slipped red or brownish red, especially vessels which represent animals. Red lines
are painted on the rims and mouths of vessels, and on pedestal bowl bases. Stahl (1985: 119-120) speculates on the significance of the red slip which was used on Valdivia vessels. Hemispherical bowl forms, hallucinogenic iconography and the use of red slips are correlated in Valdivia by Stahl. He points out that form constants which are seen under increased drug dosages seem to shift towards the red end of the spectrum (Siegel 1977), and that, "In light of these data, it is worthwhile noting the ritual importance attached to red paints and dyes by many native New World cultures." (Stahl 1985: 120)

Red is generally associated with life, fertility, blood (women's menstrual blood), and fecundity. "The red pigment from the seeds of urucú (Bixa orellana), used by women to paint their faces, is Romi Kumu's menstrual blood." (S. Hugh-Jones 1979: 179) Shaman's apprentices are painted red at their initiations, and sick persons are also painted red in order to attract good spirits (see Stahl 1985: 120 for several examples of both uses).

White and Yellow are also important colours. For the Desana, white and yellow are associated with the Sun's energies, and also with semen. White or yellow represent male properties.

"In its liquid form semen is symbolized,...by saliva and honey, in a mineralized form by crystal or quartzite, in other organic forms by a series of animals of yellow color -- the squirrel, the tinamou, macaw and so forth, and by certain edible worms whose meat is white and soft, in a vegetable form by manioc starch, by cotton and by the fibers of the cumare palm." (Reichel-Dolmatoff 1971: 48)

Black (usually Genipa americana) is also used as face-paint. The serpentine designs described by Roe (1989: 10-16, Gebhart-Sayer 1985: 149) are created using black pigment. Black also signifies the Moon, death and evil for the Desana (Reichel-Dolmatoff 1978a: 257-258).

I have suggested that Iridescent slip was utilized on bat bowls to focus the shaman's visions while they were in an hallucinatory trance. Iridescence is luminous (reflects light). This property is important because the luminous spots which the Desana see when under the influence of yagé or other
hallucinogens are said to be equivalent to spots seen while engaged in procreative activities.

**Colour Energies and Colour Symbolism**

Like red, yellow represents fertility, sexuality and procreation. It is often paired with red, in a colour schema which includes white, yellow, red, and black.

"All men and women contain an equal amount of colour energies which are transmitted by the semen of their fathers [yellow] and the blood of their mothers [red]. At death, the colors return to their original source, the sun, and become once more part of the 'brilliance,' gohseri." (Reichel-Dolmatoff 1978a: 258, my additions)

White and black are, in fact, not really colours for the Desana, they are rather concepts of hue and chroma (Reichel-Dolmatoff 1978a: 258). Hue and chroma are important in Native American cosmologies, especially in the Tropical Lowlands of South America where the brilliance of the animals of the forest canopy contrasts with the more sombre colours of the animals of the forest floor, and where the dark forest itself contrasts with the light and bright clearings. Colour chromatism (brightness/darkness) in South American and southern Mesoamerican cultures has been discussed by Roe (1991, drawing on Reichel-Dolmatoff and Lévi-Strauss) and by Helms (1993, 1995). Both authors emphasize the native contrast of drab, dusky colours versus bright, shiny or iridescent colours, and the significance that each has in mythological terms. Bright colours are generally positive, so that a bright red or a bright white (yellow-white) has good connotations and a dark, dull red or dull white has connotations of evil and decay.

Lévi-Strauss (1969: 280, 319-325) has discussed chromatism with relation to poison in South American mythology, where poison becomes the 'short circuit' in the short interval between culture and nature. In Lévi-Strauss' interpretation, poison, a natural substance, is used in cultural activities such as hunting or fishing to simplify them and to make them more effective, thus the use of poison is, "a cultural act developing directly
from a natural property." Poison is linked to the rainbow, and to the origin of diseases by a number of Amazonian groups (Arecuna, Guianian Carib, Barasana). Lévi-Strauss also equates the seducer (and I would add here the incestuous seducer in particular) who acts to subvert the social or cultural order with his/her natural properties. "Consequently, he too represents the violent intrusion of nature into the very heart of culture." (Lévi-Strauss 1969: 276) I have already discussed the concept of chromaticism in the theoretical section of this thesis, with regard to Roe's ideas about Dual Triadic Dualism and Amazonian concepts of overlapping identities of particular mythical characters. Lévi-Strauss' (1969: 280-281) final comments on chromaticism are directly pertinent here, when he writes that,

"the South American conception of chromaticism - conceived, in the first place, in terms of the visual code - is neither bizarre nor exotic, since from Plato and Aristotle on, West Europeans have treated it (albeit on the musical level) with the same mistrust and have credited it with the same ambiguity, associating it, as the Indians of Brazil do the rainbow, with suffering and bereavement (Lévi Strauss 1969: 280-281).

Form and Function: Chorrera ritual vessel forms and their significance

In this section I examine the possible significance of Chorrera vessel forms. I begin with two premises which will be explored contiguously throughout this section, first, that Chorrera forms had Valdivia antecedents which were also ritually significant vessels derived from gourd forms, and second, that the rituals in which they were employed were specifically shamanistic funerary rites. I explore the second point by comparing the Chorrera forms with modern ethnographically recorded ceramic and gourd vessels which are used today in the Colombian Vaupés, as well as in other Amazonian areas which are related to the coast of Ecuador.

Gourd-form ceramics (bowls and jars) in Valdivia and the transition to Chorrera

It would be easy to dismiss the argument for gourd-like or globular shapes as a function of the ceramics themselves in that there are obvious
physical limitations or restrictions to making a useful, or at least recognizable, ceramic vessel. However, I believe that the figurative ceramics which do not actually depict gourds and which seem to be among some of the most important (iconographically speaking) are also modeled in imitation of gourds. This shape is repeated in many of the figurative ceramics, and seems to be fundamental or key to the assemblage as a whole.

The most significant vessel shapes in the Early Formative Valdivia ceramics were probably originally imitations of various types of cut gourds. Lathrap calls them *skeuomorphs* (Lathrap 1974). Many of the bowl and jar forms in Valdivia may be seen as variations on vessel forms derived from either *Crescentia* or *Lagenaria* gourd containers as they were interpreted and copied by Valdivia potters. The Chorrera ritual forms which evolved out of these earlier shapes are also derived from gourd forms especially forms such as whistling bottles and maté vessels.

**Bowl**

The identification of gourd-imitative forms in pottery was first noted by Donald Lathrap, who spotted the resemblance between decorations on gourds found at the Huaca Prieta site (ca. 2125 B.C.) on the north coast of Peru and Valdivia bowls. The excavation of Huaca Prieta was undertaken by Junius Bird in 1946-47. The gourds which Bird found in Burial #903 (Layer O, Test Pit 3, dated to 1950 B.C.) were enclosed in a special cloth pouch beside the skeleton of an aged female who Bird dubbed 'the lady of the gourds' (Bird and Hyslop 1985: 60, 72). When the gourds were sufficiently treated to decipher the carvings on them, the decorations representing rectangular goggle-eyed faces were recognized by Donald Lathrap as a being very similar to the designs on bowls in the style of Valdivia Phases 3 and 4. Valdivia Phase 3 ceramics (from the Loma Alta or Valdivia sites) are imitation half-gourds, with particularly significant anthropomorphic incised designs on them. Lathrap (and Bird) believed that the gourds had been imported to Huaca Prieta from the Ecuadorian coast. The bowls are a variant of Valdivia Excised (Meggers, et al. 1965: 60, fig. 31) and Lathrap noted that they were,
"marked by a small, precisely circular depression on the exterior and a corresponding interior conical mound, both exactly centered. This particular configuration is always found in both halves of a kettle race bottle gourd when it is cut horizontally. ... The distal dimple is the scar left by the blossom, and the proximal one is the seat of the stem." (Lathrap 1974: 121)

Lathrap's (1974: figs.1-5) illustrations of the Valdivia bowls, which he compares with Covarrubias' drawings of the designs on the Huaca Prieta gourds (as well as his comparison of both with modern Peruvian carved bottle gourds) makes his argument convincing.

Passing directly to Chorrera bowls, we find that many are either skeuomorphs of half-gourds (either the kettle-race variety of bottle gourds or else tree calabashes), or they are representations which combine bat-wing shapes with gourd-shapes. Both large and small bowls are made to look like gourds cut in half, with an indentation just below the rim which is clearly intended to represent the stem-scar of a gourd. The gourd-shaped bowls are usually round, but there are also heart-shaped vessels which are gourd forms as well.

Gourd bowls are ubiquitous as cups and serving vessels all over South America. Both Lagenaria and Crescentia gourds serve this purpose, and they are readily available in almost any indigenous market, even in places where they do not grow. Matés (this is from a Highland Indian Quechua word, "mati") are used principally to serve liquids, at fiestas they are used to serve manioc and corn beverages (chichas of various types) and they are also employed to serve hallucinogenic brews. Reichel-Dolmatoff (1975: 159, 161) has described the use of gourd cups for serving yajé. The Tukano Indians with whom he conducted fieldwork on this topic described their drawings of the successive stages of hallucinations with reference to the number of cups of yajé drunk (Reichel-Dolmatoff 1975: 173).

Schultes (1992: 132-133) illustrates the Cubeo (Kubeo) practice of drinking chicha from a gourd cut in half with the caption, "Chicha, an
intoxicating drink..., is supposedly purifying and and ritualistic." Funerary rites among the Cubeo Indians of course include drinking copious amounts of chicha, as well as the ingestion of both coca and yajé and one may presume that cut gourds were used to serve all of these substances (Goldman 1963). One of the funerary customs of the Cubeo, which was recorded by Goldman but never witnessed by him, was, "the magical absorption of the substance of the deceased into the body of the sib." This was accomplished by pounding the exhumed bones of the deceased into a powder and then mixing them with chicha which the men of the sib then drank. Although other Tukano groups of the Vaupés area do not seem to practice this ritual, other native groups of the Northwest Amazon, such as the Yanomamo, use a particular species of gourd for a very similar ceremony. Like the Cubeo, the Yanomamo celebrate the deaths of ordinary men, women and children over 3 years old in one day of drinking and feasting but chiefs are accorded a longer ceremony of 3 days. The Yanomamo cremate their dead, but the bones which are left after cremation are then pulverized and kept in a gourd plugged with beeswax. According to Hans Becher (1960: 152), the pulverized bones are kept in jamarru gourds (Cucurbita idolatrica Lacerda) until the big annual festival of the dead, during which the ashes of the dead are drunk in a plantain soup.

Jars

Interestingly, although Lathrap (1974) had realized the significance of these gourds and their skeuomorphs in Valdivia 3 bowls for Huaca Prieta, the exhibit catalogue for "Ancient Ecuador" (written primarily by him in collaboration with Donald Collier and Helen Chandra for an exhibit mounted at the Field Museum in Chicago in 1975) makes very little of the other, rather obviously gourd-form Valdivia ceramics from Phase 2 onwards. By Valdivia Phase 6, jar forms appear which, according to the catalogue, "suggest(s) a bottle gourd tied during the growth process." (Lathrap et al. 1975: 75) What these jars suggest to me are bottle gourds used as lime containers which, as they are used, accumulate a thick layer of lime around the top of the opening where the lime stick is inserted.
The best illustration of these bottle-gourd lime-containers can be found in Reichel-Dolmatoff's (1990: Plate XXVI) monograph on the Kógi, where the photograph clearly shows the rounded accumulation of lime on the gourds used by the men. (Figure 90) The ritual and religious significance of the lime gourd for the Kógi is extremely interesting in this regard, because of its implications for possible metaphorical interpretations of both Valdivia and Chorrera gourd-form ceramics.

The distinctive jar form which appears in Phases 6, 7, and 8 at San Pablo, Valdivia (see Lathrap et al. 1975: 75, no. 44), Loma Alta, Chacras, and San Isidro (see Zeidler and Pearsall 1994: 113, Figure 7.1) can be interpreted as a copy in clay of a bottle gourd with lime encrustation on its top. This form is described as a Form 14. Exteriory thickened Rim Jar, but is closer to the type described as Form 21. Angular Cambered Rim, by Meggers (Meggers, et al. 1965: Figure 54, Table A, Plate 105). Valdivia forms were classified using the Type-Frequency method, which is somewhat frustrating, since it separates forms and decorative types and gives preference to the latter. Betsy Hill's (1972-74) re-seriation of Valdivia (into 8 phases) is more helpful, with a moderately deep bowl with a thick, folded rim - the same form of neck as the rimmed jar - beginning in Valdivia IV. The rimmed jars per se begin only in Valdivia 6 however, where the distinctive method of decoration called "Red Zoned Punctate" by Meggers, Evans and Estrada adorns, "...the extremely carinated rims of small jars that are overall red slipped or have slip applied only to the decorated zones (Hill 1972-74: figs. 58 and 59, Lathrap et al. 1976: 75, no. 43, Chacras, Manabi). Rimmed jars of a similar type but with a deep, square cambered rim with incised decoration on it are from Phases 6, 7 and 8 (also called Valdivia Broad-line Incised by Meggers, Evans and Estrada in 1965).

What is particularly interesting is that both of the Valdivia bowl and jar forms which most resemble bottle gourds are distinctive types, with what seem to be special decorative motifs on them. The bowls with anthropomorphic faces on them occur in Phases 3 to 5, and the cambered rim
jars in Phases 4 to 8, but basically similar forms occur throughout the Valdivia sequence. We do not know, however, whether these particular forms were found in burials, or in the domestic areas of excavated Valdivia sites.

**Whistling bottles (and ocarinas)**

Whistling bottles or small whistles (or 'ocarinas') have been commented upon in the archaeological literature (e.g. Hickmann 1986) but seem never to have been associated. This seems curious, as these ceramic objects have the same conceptual function, the idea of a 'noise-maker', and such a distinctive one, seems to be an obvious indicator of the relationship between them. There also exist monkey bottles and whistles which were clearly made by the same potter(s) (see below).

Blowing into the whistling bottles, or filling them with liquid and tipping them back and forth produces unearthly sounds, although most of the small whistles and ocarinas simply sound fairly high-pitched notes. The sounds might have been perceived by their producers as, "...the animation of some imagined quality believed to be inherent in living things (Cummins and Holm 1989: 12)." but they also might have been meant to be "otherworldly".

In mortuary ceremonies the world over, noisemakers of various kinds have been used to help the spirits to find their way to the land of the dead. They are also used to protect the living by scaring away or warding off the spirit of the dead person or the spirits of the dead in general. In both Amazonian and (especially in) Andean mythology the spirits themselves make strange, unearthly noises, especially when they are disturbed or upset. The noises produced by bottles and whistles may have served any, or all, of these functions for the Chorrera people.

That whistling bottles and whistles were made by the same potter(s) is illustrated by a beautiful bottle and a very similar whistle from the Las Chacras site in the Río Chico area (Figure 92). The bottle depicts a small monkey (adorno) seated on one quarter of the bulbous quartered stem-end of
a squash/gourd. Its tail, which forms the hollow strap-handle of the bottle, extends out of the middle of its back and curls around the spout of the bottle. The whistle hole is a double hole under the monkey's chin. The monkey is a *Cebus*, possibly a woolly monkey, with a whitish (unslipped) area around the slightly bulbous eyes and nose. The whole vessel is slipped dark reddish-brown, and is highly polished.

The miniature ceramic whistle (Lathrap et al. 1975: 104 #484) depicts exactly the same monkey, but with two small nubbins added to represent its feet and its tail forms the spout. It is smudged a very dark brown or black colour and is also highly polished. The dark-brown/black colour is probably a result of its being fired at the same time as the bottle, when the slip of the smaller piece was fired more quickly.

Monkeys and birds are the most commonly depicted animals on Chorrera ocarinas or whistles but a number of other animals can also be found on these miniature ceramics. Ellen Hickmann (1986) illustrates two bats, two birds, a monkey with prominent ribs wearing what looks like a turban, and a crocodilian. She also illustrates a tiny ocarina depicting a squash which she lists as "cultura indefinida" but which looks very much like a rattle in the form of a squash among the larger Chorrera ceramics in the Banco Central - Guayaquil. Although most of the instruments shown appear to be in the Chorrera-Bahía style they do illustrate some of the range of creatures. It is interesting and perhaps significant that crocodilians seem only depicted on miniature ceramics, as whistles, or as lime-pots and snuffing tubes. Other ocarinas which I have seen in the museum collections depict marine shells or snails (these are very common), and opossums or coatimundis.

A description by Frank Speck (1941: 44) shows how pottery whistles and whistling bottles might have been derived from whistles or ocarina-like instruments made from gourds:

"24. Blow gourd and whistle
One other musical instrument made of a gourd is on record for the Virginia area. The object is, however, reported only from the Chickahominy and Pamunkey units. There it is called a "blow gourd" (Figs. 28, 30). A small gourd (Lagenaria) about three inches long, is cut off at the neck to create an opening like a bottle mouth. Four little holes are bored in pairs on one side. About half an inch of water is put inside to modify the pitch. Such a chamber held against the chin and blown into obliquely across the opening with air expelled from the mouth produces a tooting sound the tone of which can be varied by closing the holes with the first two fingers of each hand that holds it. Its use and the whistle-sounds produced somewhat resemble those of an ocarina."

How the whistles in most forms of whistling bottles work is illustrated by Crespo Toral (1966). Most of the whistles in effigy vessels are duct whistles. There are actually three kinds of duct whistles: the first and second are simply a hollow space (sometimes in a raised bulb) on the base of the bridge or strap handle. The air entering through the spout and then from the body of the vessel, or just through the spout, is expelled as a whistle through the hole(s) in the bridge. The third type is actually a modeled hollow sphere with a hole in it which is attached to the interior of the vessel with appliqué pieces of rolled clay. The air enters through the spout and is forced down a tube (the duct) into a hollow sphere, where it resonates. It is then expelled as a whistle from one or more holes - these are usually located in the head of whatever animal or human is represented by the vessel (Crespo Toral's fig. 10 shows a monkey, for example). Some bottles have only one whistle, others have two, or even three or four whistle holes.

A close ethnographic analogy to the Chorrera whistling bottles is a musical instrument which is made and used by the Cubeo in their funerary rites. During the funerary dances, figures who impersonate jaguars (dressed in barkcloth 'masks') carry a jug whistle whose noise is said to imitate the sound of the angry beast.

"The whistle is a short length of ambauva palm set into a pottery dish made expressly for the purpose. The pot is enveloped in brown bark thongs that cross the opening, where they are fastened to the whistle,
thus allowing the instrument to be held with one hand. The entire pot is hung with bark fringes. The dancers move as a pair," (Goldman 1963: 225)

Conclusions

Some conclusions about the iconography of the Late Formative assemblages from the Jama Valley (Tabuchila ceramics) and the Río Chico/Portoviejo river drainage are made here with regard to the animals, plants and human figures represented on the effigy vessels. Here my conclusions about the mythological framework into which these symbolic representations fit are discussed.

Anthropomorphic Figures

All of the anthropomorphic figures, including the figurines, seem to be representations of shamans, and, in particular, of psychopomp figures. The role of the mediator between this world and the world of the dead is accomplished through trance and music, and trance is sometimes attained through music. Perhaps the world of the dead is also sometimes reached through the intervention of supernatural little people. Head coverings seem to be important, as do body-painting or tattoos which evoke the spirit of the Great Serpent.

Animals

The animals which are represented in the assemblage include those creatures which inhabit the house garden, the chacra, and its vicinity. These are also animals which are human commensals, or those creatures which thrive in environments which have been disturbed by human activity. These include dogs, parrots, monkeys, and coatis, all of which can be domesticated, rodents of all kinds, and predators attracted by those rodents (owls, raptors and snakes), and finally deer, and opossums, as well as bats which eat insects attracted by tree crops, nectar from flowering trees, and fruit.

Some of these animals are also found in both the uppermost and the lowest levels of the forest and are therefore associated mythologically with the dangerous region outside the human-controlled world. These include
monkeys, coatis, quail, curassow, peccaries, and snakes. Note that many of these animals are also nocturnal or crepuscular creatures. Many of the same animals also inhabit holes or hollows in tree-trunks, holes in the ground, and caves, which are also associated with the underworld. Animals associated with the watery underworld (including the sea and lakes) include shrimp, toads/frogs, crocodilians, crabs, turtles, waterbirds and fish.

Because in so many of the myths the animals not only have spiritual, but also astronomical significance, it seems quite probable that Chorrera animals also had correlations with astronomical entities. We know that these associations were extremely important to all Native American groups for whom we have data from before the Spanish conquest (e.g. the Maya) and from Spanish chroniclers' recordings of native testimonials (the Inca) and that they are still operative amongst Tropical Forest groups today (see Urton 1985 for examples). We know, for instance, that the Sun and Moon are often associated in origin myths (as elder brother and younger brother, or as brother and sister), and that they are usually given attributes which are both supernatural and human (Roe 1982). Various birds are associated with the sun, and solar energy and power, such as eagles and other raptors. Bats are associated with the Moon, as are armadillos (Reichel-Dolmatoff 1971: 100-101). The opossum is associated with Venus (which is both the Morning and the Evening Star) as well as the Pleiades (Hugh-Jones 1979). Finally, the anaconda is the animal equivalent of the Milky Way, as the boa is the equivalent of the rainbow (Reichel-Dolmatoff 1981, Whitten 1979).

Animals and plants in the assemblage fit within the Tropical Forest Cosmological General Model but my interpretations are validated by the associations which I make through ethnographic analogy with Tukano cosmology. The cosmological and mythic associations of the animals with other parts of the model help to verify the complex of symbols which emerges from the assemblage. Because these animals are associated with death, and usually also with rebirth (births usually take place outside the house but close to it, in the chacra or house-garden), those which are
portrayed have more than one association with these concepts in the ethnographic literature.

The animals associated with death and femaleness in the model include most of the same creatures found on the ceramics which are listed above as denizens of the known world around the communal house, and the underworld. These animals are listed here in order of their frequency of occurrence on vessels studied in museums in Guayaquil, Ecuador. I have divided them into two categories for clarity: primarily land-based and primarily water-based creatures. Amphibians such as frogs/toads and turtles are water creatures.

Monkeys are anomalous creatures in terms of their being the animals most like humans, and although in the wild they are found in the high canopy of the rainforest, they are also kept as pets by many of the Tropical Forest groups. Monkeys are female-associated because they are considered libidinous, and filthy creatures. Bats, owls and snakes, which are the creatures (apart from monkeys) most often portrayed, are all 'dangerous' creatures associated with the underworld, death and decay. Dogs are mediators between life and death, and herald death or guide humans to the subterranean world. Raptors, especially vultures and other birds which eat carrion (such as the harpy eagle) are feminine and dangerous. Opossums are associated with rebirth because of their pouches and because they miraculously revive after "dying", but also with the night and the moon because they are nocturnal creatures with big reflecting eyes.

Shrimp are water 'spirits', they are anomalous in that they have an exoskeleton which is soft and they also have whiskers like a cat. Some of the fish portrayed, though difficult to identify, are probably catfish, which also have whiskers, and the armor-headed catfish in particular, which has scaly plates. Snails (whether land or marine) are underworld or underwater creatures because they are soft-bodied, like worms, but they are encased in a hard shell (like shrimp) which contains their soft bodies. Kógi creation myths often feature worms at the beginning of things, which are eventually
replaced by animals and human beings which have bones. (A Chorrera vessel in the Banco Central in Quito may illustrate this concept, where a "monkey-man" opens the gourd of darkness and a worm (the first anaconda?), crawls out (de Civrieux 1980: 25, Laurie Beckwith, personal communication 1994).

Most of the animals portrayed are edible in the sense that most are the favoured game of the hunters of the lowlands. It is interesting in this regard that some of the larger and more sought-after mammalian species, such as peccary*, tapir, capybara, and sloth are not depicted on the ceramics, although we know that they were found in the area during the Early Formative Period (Stahl 1994: 197).

Those animals that do not fit into the category of edible creatures are animals which are often considered dangerous or which are poisonous, such as bats, snakes, and toads. Jaguars are not depicted convincingly and this may be because they were subsumed into the category which encompassed "dog" or they may have been associated too closely with (solar) male power to be buried in graves.

Gourds

Donald Lathrap (1977) commented on the importance of gourds in early South American cultures in his exploration of the imagery on the Chavín period Obelisk Tello, but his discussion only extended to the bottle gourd. In many contemporary Amazonian and Andean cultures the gourd stands for the womb or vagina in mythological and ritual contexts. Among the Kogi, for example, the bottle gourd is used as a lime container, lime gourds are associated with both procreation and death, and always with women, the gourds are the 'wives' of their owners. Gourds are associated with wombs, and also with skulls, which 'give birth' to stinging and poisonous pests. Gourds seem to be key symbols in the assemblage, and

* There is one lime-pot which depicts a peccary but no large vessels.
many of the animal and anthropomorphic figures have rather gourdlike bodies.

The associations which I have traced in the Chorrera assemblage, between plants (gourds), animals, and particular supernatural human figures, as well as the decorative patterns which appear on the ceramics, also seem to have been part of a ritual complex, possibly with connections to a present-day fertility and ancestor cult called yurupary. Particular juxtapositions, such as a ceramic model of a little monkey on a gourd-trumpet, can be interpreted without too much trouble as examples of illustrations of this symbolic complex which was still operative in Northwestern Amazonia in the 1970s (cf. C. Hugh-Jones 1979 and S. Hugh-Jones 1979). (Figure 98)

Transformation, death and the social

One of the main points that Reichel-Dolmatoff makes about Desana and Tukano shamans is that their power lies in transformation. They transform themselves, they transform the world around them and they transform other human beings through this power. The transformative power is an integral part of their nature as shamans, and as part of Culture and Nature, they become transformed. They become jaguars, or other “wild” creatures, and their cures and sorceries are effected with natural substances which are usually consumed as transformed (cooked) substances.

The substance used to represent ideas about transformation (and shamanism) in the Chorrera culture (and other Pre-columbian cultures) is clay, which is itself transformed through a cultural process – firing/cooking. For the Desana, the creation of human beings (babies) involves the transformation of the essential substances: blood, from the mother, and semen, from the father, through a process involving something like cooking, or at least a process attributed to the application of (solar) energy. Thus, the making of clay pots and fertility are intimately connected.

"The power of transformation of a payé is one of the most important aspects of the office that he fulfills in his group. This ability to transform himself is called ye’e mahsá uári/payé-people-to pass
from one place to another. On a horizontal plane, within the biosphere, the payé can transfer himself geographically, for example, to a hill, or can convert himself (dohpá ye'egë/to take the place of) into a jaguar or into an anaconda. That the jaguar represents a phallic concept of active biospermatic energy while the anaconda has the character of a maternal, uterine being is of interest here because it suggests the energetic ambivalence of the payé as well as his equivalence with land and aquatic animals.” (Reichel-Dolmatoff 1971)

It would take another entire thesis to fully discuss the concept of transformation and the power of the shaman in this context (indeed Reichel-Dolmatoff and many others have devoted hundreds of pages to this discussion) therefore I concentrate on the transformative aspects of shamanism only as they pertain to the discussion of ceramic vessels, and the particular animals, plants and human beings portrayed in the Chorrera ceramic assemblage.

The Chorrera anthropomorphic vessels and figurines are images with shamanistic implications. They were placed in graves for particular reasons and indeed, it seems that the cosmological meaning that they carry simply as modeled clay objects seems to be many-sided. The most salient feature of these objects (apart from their iconographic significance) is that they are made of clay. Ceramics, by their very nature, are of both earth and water and this makes them immensely suitable for inclusion with the dead. In most South (and Central) American cosmologies the underworld is portrayed as the dark, watery earth below the present world. The journey to the underworld for ordinary folk, and especially for shamans, involves transformation, and this change suggests an affinity with clay pots which must be transformed (through firing) in order to keep their shapes.

The connection between clay, pottery and cosmological ideas about transformation includes the yajé vessel, which is also made of clay and thus the transformative power of the hallucinogenic drug must also be embodied in the pot. For the Desana, the drug experience is compared to the sexual act and the visual experience of hallucination is the same as that seen while engaging in sexual intercourse. It is also the same process which is said to
take place when the human embryo is developing in the womb. Women are compared to clay vessels, specifically, cooking pots and, "Desana women paint around their waists a belt of black design motifs, exactly the same as those surrounding the mouth of the cooking vessel." (Reichel-Dolmatoff 1978b: 282).

The white-filled punctate designs on the Río Chico type figurines, and the white-filled punctate designs and negative resist designs, seem to me to echo the Desana practice described above. I have already identified the particular design as the Dragon, or the Milky Way, and have suggested that it is a material representation of the phosphenes seen under the influence of hallucinogenic drugs. The phallic motif enclosed within a uterine motif on two of these vessels (Figure 100) seems also to bear out my contention that it was the combination or conjunction of male and female elements on their vessels that was important for the rebirth or continuation of the essence of the deceased in the social body of the group.
Ch. 6 Conclusions

Problems with Analogy

The amount of time elapsed between the creation of Chorrera ceramics (nearly 3,000 years) and my interpretation of their symbology based on ethnography collected by anthropologists well after the European conquest of the continent is undoubtedly problematic. Given the major disruption of "traditional" ways of life which must have affected the natives of South America immensely, both physically and spiritually, one might ask if it is justifiable to use this analogy to interpret an assemblage which seems to be so far removed temporally from contemporary native groups living in the Amazon and its' peripheries.

Part of this problem was countered with the proposition that there was a Paleolithic Urkultur which was brought by the earliest migrants to the Americas which has survived in various guises as the basis for most (if not all) of the religions of the New World.

The specific comparisons which I have made, between the symbols used by Colombian Tukano groups and motifs found in Chorrera figurative ceramics might have also been explained through an ecologically determinist argument -- that similar environments provoke similar cosmological ideas/responses in the cultures which survive in them. This argument was disproved by examining the other symbols found in the assemblage, those which are not animals or plants. In addition, the complex of symbols of which they form a part should be internally consistent and coherent and they are, or at least they seem to be. Although symbols may be multivalent and may represent a number of meanings, the 'core' or basic meaning of the
Chorrera symbols is demonstrably contiguous from present to past and vice-versa.

**Source-Side Criticism**

My own critical examination of the source documents which I have used for the analogy is not immediately apparent, although I did try to take into account, and certainly indicate that many of the documents which I was reading for the work were re-tellings (and often translations) of traditional myths and stories. In some cases the motifs were also re-worked into a General Model by Roe (1982) and I have usually pointed this out where it is relevant or have quoted directly from Roe.

Reichel-Dolmatoff's various ethnographies on the Tukano and on the Kogi are used extensively in this thesis and his work really merits a more in-depth scholarly treatment than I can give it here. The few points which I can remark upon include an observation that his work suffers from a number of problems which I did not really address in this thesis while using his ethnography as a source.

Reichel did his fieldwork with the Kogi early on in his career and very little of it was translated, so that it seems to mostly remain true to his original observations. Some of the mythological and cosmological information is difficult to follow but this is perhaps unavoidable. It is the Tukano fieldwork which is rather problematic. Reichel spent much of his career writing about the Desana and several other Tukano groups, and more specifically on the shamanistic aspects of their cosmologies. His early fieldwork with the K6gi left its indelible mark on his subsequent efforts, however, and his preoccupations with particular aspects of Tukano culture probably stem from his experience with the K6gi. While this has proved very useful to the interpretation of Pre-Columbian cosmology, some of Reichel's idiosyncrasies, such as his insistence on the Tukano preoccupation with sexuality and procreation, make it possible that his emphasis might have obscured other equally valid interpretations. Reichel also conflates Desana and other groups' cosmological views. We usually do know when and where Reichel carried
out most of his fieldwork, and we can often distinguish Reichel's own observations from stories or myths told to him by elderly shamans and other informants. Reichel's personal experiences are also presented plainly, such as the hallucinations which he experienced under the influence of yagé.

In addition, because Reichel's informants were mainly, and perhaps exclusively, men, interpretations of women's points of view are simply not part of his analysis. Unfortunately, my interpretations are accordingly rather gender-biased because of my reliance on Reichel-Dolmatoff and also Stephen Hugh-Jones as sources of ethnographic material. Two of the ethnographies which I used were written by women (Christine Hugh-Jones and Jean Jackson) but neither of these focuses on shamanism, which is usually an exclusively male preserve though there are generally symbolic analogues in women's cosmological worlds (cf. Whitten 1976 and 1985).

In general, however, I believe that I have made as good use of analogical reasoning as was possible, given the inherent limitations of the ethnographic information and the archaeological data with which I had to work. In future, a more critical examination of the ethnography, and more detail from excavations which should be available soon should make this kind of effort more fulfilling.

**Chorrera ceramics as a mortuary tradition**

The assemblage of ceramics which I (and many others) have been calling 'Chorrera' -- the group of finely made jars, whistling bottles, bowls, and maté vessels which are housed in museums and private collections all over Ecuador, is, in fact, not an assemblage *per se*, but a mortuary tradition which was shared by different groups on the coast and in the river valleys of coastal Ecuador. It may also have been shared by highland groups to some extent, but we do not have enough published evidence to infer this as well. As part of this mortuary tradition, particular kinds of vessels may have been made in specific regions, and traded to other regions such as the highlands for luxury goods such as turquoise, obsidian and crystal. This brief florescence of a highly symbolic ceramic tradition may have been abruptly ended by
volcanic activity in the region, or an El Niño event or both (Zeidler and Pearsall 1994). Some continuity of symbolism and technique does appear in the early phases of Jama-Coaque ceramics, however the emphasis in that group of ceramics seems to shift more towards representations of human activities, rather than natural symbols of animals and plants.

Chorrera ceramics are probably mortuary furniture. I make this assertion based on several lines of evidence, taking into account that no-one has yet scientifically excavated a Chorrera burial with grave goods in it, and published the results satisfactorily. Many of the ceramics in the assemblage are not particularly functional. Some of the iridescent bat and snake bowls may have been used, since they have use-wear marks on their interiors, but the ceramics do not look as though they were used and re-used over long periods of time. Rather the bowls look as though they were used once, but quite intensively, as though for a particular ceremony. I would suggest that they were used by a group of mourners in a ritual hallucinatory experience, before being interred with the deceased.

The Late Formative burial

Many of the Tabuchila and Río Chico ceramics have what seem to be shamanistic vessels in them, for example, the pairs of shaman's tablets and bowls. Based on this, and on the evidence from the Los Cerritos graves, I believe that there may have been differences, between shaman's burials and non-shaman's burials (or gradations thereof). Perhaps everyone participated in ritual processes to greater or lesser degrees, and were therefore buried with more or fewer grave-goods accordingly, as among some Amazonian groups (Reichel-Dolmatoff 1974, Whitten and Whitten 1988).

Given the evidence from the burials at Los Cerritos (Engoroy and other sites), and the occurrence of certain types of ceramics in the collections, I would predict that in the more elaborate graves (presumably those of more spiritually powerful people) one would expect to find bat bowls, animal effigies, the gourd-effigy pots, human effigies and figurines, and limepots. Shell jewelry, obsidian mirrors, and crystal necklaces are also possibilities.
The figurines would probably be more likely to be in the female burials. In the more ordinary graves would be found the much more numerous simple, self-slipped and polished jars or perhaps a single plain polished whistling bottle. Distributed randomly would be whistles or ocarinas, pendants, shell beads, and perhaps stone celts or small axes. If organic remains were preserved on the coast of Ecuador we could also expect to find gourds (perhaps even carved gourds), coca leaves, other hallucinogenic plants, cotton textiles and fibers, and probably reed matting, which may have been used to wrap both primary and secondary burials.

**Chorrera as a mortuary complex**

In spite of the lack of direct scientifically verified evidence for a context for the Late Formative vessels from the Jama and Río Chico Valleys, I have argued that the effigy vessels (and especially the whistling bottles) and other fine ceramics which are housed in museum and private collections are mainly mortuary vessels. There are several reasons for thinking that this is true:

First, there is a consensus amongst Ecuadorianist archaeologists and art historians that the fine ceramics are grave goods (Cummins 1992: 65, Cummins n.d. [1994]: 9, Estrada 1957: 10, Norton 1992: 28, Zeidler and Sutliff 1994: 115). This supposition is based to a certain extent on hearsay accounts from tomb-robbers, which indicate that the majority of fine ceramics are being taken from shaft tombs or from burial chambers constructed from stone slabs (Evan Engwall, personal communication 1997). Vicús-Moche ceramics from the North Coast of Peru, many of which are very similar to Chorrera forms (see my discussions of particular ceramics in the **Analysis** section), definitely come from grave-lots (McEwan 1997).

Secondly, although it is possible that not all of the ceramics in the assemblage were mortuary goods, the fact that so many remain whole and intact argues for this supposition. Thirdly, the ceramics in the collections are of a similar style and demonstrate similar types of both form and decoration. There are certainly regional variations on particular themes but overall the
same themes and attributes are repeated over and over again with minor variations. I would argue that this indicates that the ceramics in the collections are a representative sample of looted mortuary ceramics.

Thirdly, ceramic forms from grave-contexts which are very similar to the ones in the museums are illustrated or described in Estrada's (1957: 94) overview of the prehistory of Manabí, Bushnell's (1956) report on the Engoroy cemetery at La Libertad on the Santa Elena Peninsula, and Zevallos' (1965) report on the Los Cerritos cemetery excavations in the Bahía de Santa Elena. Fourthly, whistling bottles seem to be one of the more significant forms in terms of the imagery in the assemblage and they also seem to be fairly rare in excavated material. And finally, the imagery used on the ceramics seems to me to emphasize precisely those aspects which would or ought to be significant if the majority were funerary offerings.

**Huaquero accounts**

*Huaqueros* or tomb-robbers are professionals, and are often middlemen rather than undertaking the excavations themselves, although in a particularly rich site or area they will excavate as well (Zeidler 1992). In Ecuador, there seems to have been a central group of families on the Manabí coast who carried out these middleman operations during the time that the Central Bank was still purchasing ceramics and other artifacts. Cataloguing cards for the Late Formative collections indicate the names of the sellers of the pieces to the Central Bank. In many cases, the surnames show that the vendor was related to a particular family on either the maternal or the paternal side, since both names are usually given.

Some of the archaeologists working in the Manabí area have spoken with self-professed *huaqueros* about specific sites, and these men have indicated that the ceramics do indeed come from tombs although the locations of these are usually closely guarded secrets (Evan Engwall, personal communication 1997). Visitors to the coast's resorts and beaches are also regularly offered ceramics from *tumbas*, although many of these may be reproductions.
Two Ecuadorian archaeologists have made comments which clearly indicate that the fine ceramics are from tombs or graves in the Manabí area. Estrada wrote that the Tabuchila pieces were obtained from sepulchres which were constructed from rock slabs (lajas de piedra Estrada 1957: 86, my translation). Norton, in his discussion of a ceramic type which he calls "Classic Chorrera," also mentions that the beautiful Chorrera figurines and bottles formed part of funerary assemblages, and were probably produced by specialists towards this end. He comments that, in contrast with earlier cultures who generally buried their dead inside their settlements, the grave-robbers had always excavated Chorrera cemeteries hundreds of meters outside the ancient communities (Norton 1992: 28, my translation). Both of these men excavated extensively throughout the coast of Manabí, and both were well-respected archaeologists and collectors in Ecuador.

The sample

The group of ceramics which is analyzed here permits direct access to an important sample of archaeological material. It is also representative of assemblages of the effigy ceramics from the central and northern parts of the province of Manabí. These figural ceramics are the result of looting activity but they also seem to be a reasonably representative selection of materials and artifact classes in mortuary contexts, judging from my surveys of both public and private collections.

In spite of the bias implied by the selection process, it now appears that in other places where museum collections have been amassed through purchases of looted material, the sample has turned out to be reasonably representative. Patricia Lyon (1995: 380) has argued that,

"Because of the sheer number of graves found by looters in the areas where the Moche and Nasca cultures flourished, we can be reasonably assured that the results of their vandalism is relatively representative of the total sample."

For the Peruvian archaeological cultures of Moche and Nasca, assemblages of looted material (from burials) which are found in museums
appear to closely approximate those excavated by archaeologists in terms of both materials and artifact classes (Lyon 1995: 381). This argument has been further supported by excavations undertaken by Christopher Donnan (Donnan and Castillo 1992) and by Steve Bourget (1995), which were moreover based on the iconographic analysis of ceramics in museum collections. I have already argued in several sections of this thesis that Peruvian looted assemblages (especially northern Moche which is closely linked to the Ecuadorian assemblages through Vicús) are comparable to the Ecuadorian assemblages. I believe that the looted material which I have analyzed in this thesis will also eventually be shown to be reasonably representative of the mortuary materials which will be excavated from burials in the Manabí region.

**Whole vessels**

It may be a truism to state that most of the whole ceramics which are found in museum collections usually indicate a mortuary function and are from tombs or graves, but none of the general texts on archaeological pottery which I have consulted in fact do so (e.g. Freestone and Gaimster 1997, Rice 1987, Sinopoli 1991). Generally, however, whole vessels, and especially effigy vessels which are found in Mesoamerican and South American museum collections, do seem to come from mortuary contexts. Whistling effigy vessels and animal effigy whistles (which I have suggested are symbolically associated with one another) from West Mexico, and in Northern Peruvian archaeological assemblages such as Moche and Vicús have been found in graves excavated by archaeologists (Bourget n.d., Donnan 1992, Furst 1965, Makowski et al. 1994, McEwan 1997).

**The Evidence for Shamanism in Late Formative ceramics and other artifacts**

The evidence for shamanistic activity in both the Early and Late Formative artifacts can be inferred through ethnographic analogy with Tropical Forest Lowland peoples’ shamanic practices today. Snuffing tubes, benches or stools, and figurines are all found in the Valdivia and Chorrera assemblages and are all very important paraphernalia used in the practice of
shamanism in Northwestern South America (see above and also Stahl 1984). Additionally, obsidian mirrors, iridescent platters, and crystal necklaces, as well as the decorative motifs on the anthropomorphic figures point to even more emphasis on shamanistic activities in the Late Formative, and perhaps to a more elaborated shamanic complex.

The evidence for shamanistic practices in Chorrera ceramics is inferential but plentiful. Artifacts such as snuffing tubes, and ceramics depicting the possible inhalation of medicinal drugs, hallucinatory and metamorphosing animals, and iridescent paint on ceramics were all commented upon by Lathrap (Lathrap et al. 1975) but there also exist certain ceramic objects (not all are vessels) which may be interpreted as having been used specifically for shamanistic rituals. Foremost among these are the bat bowls, which were probably used as serving vessels for hallucinogenic brews or snuffs taken by the participants in mortuary ceremonies, but there are other vessels which also appear to have been specifically intended for shamanistic practices. This is not to say that all of these vessels were made for use, in fact, many of them were probably never used, but some of the larger bowls and the bat bowls do seem to have use-wear marks on their interiors.

Bowls of various kinds are the primary form in this category of ceramics but there are also other sorts of objects which may have had specific functions in shamanistic rituals. Handles for obsidian mirrors, snuffing tubes, head- or neck-rests, vessels in the form of human body parts (heads, arms, legs, feet, phalli), square vessels with elaborate geometric designs on them, and two pairs of vessels which can only be described as preparation slabs or tablets can all be included in this category.

Flared neck jars with Polychrome Incised designs mimic the form of a coiled snake and the yagé plant as it grows (Figure 69). The designs on these jars are very similar to those on a Desana yagé pot (Figure 102). The symbols on the jars are multi-referential, so that the jars were not necessarily used as
yagé vessels, but they are fairly good evidence (in the absence of organic remains) that yagé was an hallucinogen which was used by Chorrera people.

Two other vessels (which are not a pair) also deserve mention here. Both depict the right hand and arm. The first has a flattened scraper-like bowl, rather more like a spatula than than a deep container, and the arm is sausage-shaped, with a small hand attached to it. The arm which forms the handle is hollow, with a hole at its base where it joins the main part of the vessel. The hand has crooked fingers and a straightened thumb. The second vessel has a spherical bowl set into the end of the hollow arm. The arm's elbow is crooked, and the hand also has crooked fingers and a straightened thumb. Both vessels are slipped red. Neither of these vessels appears to be very practical for use as ladles or as spoons for serving liquids, so that I infer that they might have been used to serve a more viscous liquid such as yagé.

Finally, a pair of vessels which depict toads (or possibly turtles) have ethnographic parallels in Canelos Quichua pottery (Whitten and Whitten 1988). The bodies of the animals are simply round bowls with head and legs attached to them. The heads have the characteristic bulging eyes of reptilian species, with prominent nostrils and flat-lipped mouths.

**Shamanism and the symbols in the assemblage**

Shamanistic practices had been attributed early on to the Valdivia culture by Donald Lathrap and his students (Damp 1979, Lathrap et al. 1975, Stahl 1984, Zeidler 1988). Peter Stahl's generalized cosmological model, for example, was formulated for his interpretation of the Valdivia assemblage which he had excavated for his doctoral thesis at Loma Alta. It gave priority to a shamanistic interpretation of the Valdivia artifacts which he had found during excavation, but it did not deal strictly with mortuary remains.

In retracing the steps of the thought-process which led to the interpretation of of the 'fancy' or 'fine' ceramics of the Chorrera mortuary ceramic assemblage I began with the gourd representations. This was because they were the most numerous and noticeable group of ceramics, and also partly because I had discovered that there was a distinctive group of gourd
representations that had not been written about in the literature on Ecuadorian coastal pottery. The bat bowls also seemed likely to be representations of gourds, and perhaps not of the species *Lagenaria siceraria* but of the species *Crescentia cujete*. Scientific research on archaeological cucurbits in the Andes is fairly sparse, if one considers that gourds are probably one of the first cultivars in the New World. This is partly a problem of preservation, especially in the more tropical areas, but there also seems to be a perception amongst Andean archaeologists that gourds just are not very important, even though they have been found in many archaeological mortuary contexts. Gourds also continue to be used ritually by many peoples in an enormous variety of ways in both the Lowlands and the Highlands of South America.

The whistling bottles have obviously gourd-like shapes, which are interpreted as representations of both male and female, with the body of the vessel representing a womb and the phallic spout. Many of the animal effigy vessels (representations of monkeys, for example) were modeled with the body in the shape of a *Lagenaria* gourd. House vessels and snail vessels are interpreted as alternates of gourds. Some of the figurines also have half-gourd-shaped headdresses or helmets.

The shamanistic aspects of the Chorrera assemblage do not, in fact, become clear until one looks at the typology of the anthropomorphic effigy vessels (mainly whistling bottles) and the figurines. These ceramics do not really make sense iconographically as representations of gourd-forms, and the 'gourd-helmets', though striking, are not the only headgear to be found on the figurines. The figures may be seen as part of a cosmology which accepts life in death and death in life as part of a cycle. The ceramics themselves, as containers made of fired clay and water, make sense as part of this cosmological cycle. In addition, it is fairly clear that the ceramic culture which came after Chorrera in the Jama Valley (northern Manabí Province) — Jama Coaque — probably represents a continuation of many of the same ideas, but in more elaborate and baroque representations.
My concept of the twinned (and primarily female) entities of yagé and coca emerge from the emphasis placed both on gourds, and on the triangle designs which are found on both non-representational vessels and on anthropomorphic representations (figurines). The pairing of these psychoactive substances is found in the ethnographic literature, and especially in the Tropical Forest Lowlands of Colombia. Both of these substances are also associated with death, or with the Underworld. Other psychoactive substances are probably also represented in the ceramic imagery (such as tobacco, *Virola* or *Anadenanthera* which were used to make snuff, and also possibly a substance made from a poisonous exudate of the toad, *Bufo marinus*) but the use of these is more difficult to substantiate from the artifacts. The ethnographic and ethnobotanical literature is also less clear on the ritual contexts in which these are used.

It is most unfortunate that we do not have any direct information on the actual mortuary contexts in which these ceramics were found. I have ventured some suggestions as to possible combinations of representations which might be found together in Chorrera graves, as well as other artifacts and material remains which might be found as well. In this I partly draw on a paper by James Zeidler, Peter Stahl and Marie Sutliff (in press) on a Valdivia burial which they have interpreted as the remains of a woman shaman with accompanying grave goods. Chorrera burials were probably more elaborate (given the elaboration of some of the same themes as in Valdivia in the ceramics) but they likely contained similar objects.

The Amazonian cosmological model makes sense as I have applied it to the Chorrera assemblage but the key to interpreting the cluster or system of symbols in the assemblage is to see it as an illustration of a shamanistic worldview. I have argued that the imagery of shamanism was the basis for Chorrera mortuary iconography. According to many archaeologists and others working on iconographic imagery in the Americas, shamanism was the religious foundation upon which many of the early great civilizations of the New World were based (Freidel and Schele 1995, Sharon and Donnan
Shamanism seems to have been brought to the Americas by the very earliest and the latest peoples to cross the Bering Straits from Siberia and Northern Asia, and to have survived in a scarcely altered basic form amongst those peoples who succeeded them. Elements of shamanism seem to appear in all of the religions of the Americas, and it may not be too broad a statement to assert that this may be part of the explanation for the extraordinary similarities of mythical elements and scenarios in myths from both North and South America (for example, the myth of the explanation for the Moon's spots which is found among both Inuit and South American Amazonian peoples).

The generalized model is an accurate reflection of an Amazonian or Tropical Forest cosmology that has been a continuous source of native religion for over nearly three thousand years. In this sub-assemblage humans, plants (gourds) and animals depicted on the vessels are associated only with death, and therefore do not represent the entire cosmos as it might be extrapolated from the cosmological model of Tropical Forest Cultures.

Liminal and marginal animals may have been important as mediators between life and death, in the same way as shamans were (and are) mediators or go-betweens. Gourds, and, by extension the entire assemblage, represent ideas about death and rebirth (and fertility) through the womb of the Earth Mother. The major emphasis in effigy vessel representation is on the Underworld, and its concomitant, the underwater world. We may, therefore, begin to interpret the figures on the vessels as part of a wider group of symbols from the model which are not all depicted in the assemblage.

**The multivalency of symbols in the Chorrera assemblage**

In the above section I have summarized some of the meanings which I believe are apparent in Chorrera iconography. The multiple connections between the symbols represented by the assemblage should also be evident by now in the relationships between gourds, humans and animals, and in the abstract geometric patterns which decorate both these and other vessels in the museum collections. The signification of these objects lies not only in their
representation, but also in the way in which they are represented, and I have tried to show that this seems to have been important as well. The symbols which were used by the Late Formative potters were about sexuality, fertility, the natural environment, the domestic environment, social hierarchy and death. All were "the Serpent's Children" because they were descended from the Great Serpent, mother and father, gourd and yagé vine, whose coils spread across the landscape like the rivers.
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Appendix 1:

There once was a young woman who had no manual skill whatever, and the pottery she made was shapeless. To mock her, her sisters-in-law molded clay around her head and told her to bake this clay to make a pot.

One day an old woman appeared and the young woman told her of her misfortunes. The old woman was a tender-hearted sprite who taught the
young woman how to make magnificent pots. On taking leave of the young woman, the sprite told her that she would henceforth appear in the form of a snake, and that the young woman should not be afraid to embrace it. The heroine did as she was told, and the snake at once turned into a sprite, who showed her protegée how to paint earthenware pots: "She took some white clay and smoothed it evenly around the pots. Then, with yellow clay, brown clay, and rucu (urucu: Bixa orellana ) she drew beautiful variegated patterns and said to the young woman: 'There are two kinds of painting: Indian painting and flower painting. The kind of painting that draws the lizard's head, the Great Snake's tracks, the branch of the pepper tree, the breast of Boyúsú the rainbow serpent, etc., is what we call Indian painting, and the other is the kind that consists in painting flowers.'

Then the sprite took black varnish and used it to decorate and give luster to numerous gourds, on the insides of which she drew a variety of patterns: the shell of the land tortoise, shafts of rain, a meandering river, a fishhook, and a great many pretty designs...." (Lévi-Strauss 1969: 322-3, translated from Tastevin 1925)

The story continues:

Afterwards, she added, "Now, my child, I must go. When you wish to paint the breast of Boyúsú, take a gourd, go down to the river, turn the gourd over in the water and tap on it. Then I will come to show you my breast, and you may draw from the original model." (Tastevin 1925: 196, my translation)

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**Appendix 2:**

**Desana 'Masters'or Beings, Their Functions and Dwelling-Places**
### Important Male Characters

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viho-mahsē (blue)</td>
<td>Master of Viho</td>
<td>Owner of sickness and witchcraft</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Milkwate</td>
</tr>
<tr>
<td>Emèkori-mahsē (white)</td>
<td>Being of Day</td>
<td>In charge of social mores; rules of spiritual life</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Concerned with passing of time</td>
</tr>
<tr>
<td>Diroá-mahsē (red)</td>
<td>Being of Blood</td>
<td>Corporeality; health, good life.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physical well-being, curing, childbirth</td>
</tr>
<tr>
<td>Vai-mahsē (x2)</td>
<td>Master of Animals Owner of animals/fish; procreator</td>
<td>Fore</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chief of animals; opposed to Vai-mahsē</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Associated esp. w. peccary, toucan, deer</td>
</tr>
<tr>
<td>boráro (kurupíra)</td>
<td>Spirit of the Forest (forest ogre)</td>
<td>Chief of animals; opposed to Vai-mahsē</td>
</tr>
<tr>
<td></td>
<td>&quot;chief of animals&quot;</td>
<td>Associated esp. w. peccary, toucan, deer</td>
</tr>
<tr>
<td>Pamurí-mahsē</td>
<td>Creator of people</td>
<td>Representative of the Sun; took first Desani to their homes in pamurí-gahsirũ (snake-c)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>First to drink chicha (manioc beer)</td>
</tr>
</tbody>
</table>

### Neuter characters

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nyamikēri-mahsē Night People</td>
<td>Intermediaries for witchcraft and sorcery Evil spirits of amoral dead people</td>
</tr>
<tr>
<td>Jaguar (Ye'e) Thunder (yellow)</td>
<td>Watch over humans and protect them Earth Sexuality; phallic, solar Shamanic power; procreation</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Shrimp (constellation)</td>
<td>Master of Rainy Season Anounces arrival of rainy season</td>
</tr>
<tr>
<td>Cut Shrimp (constellation)</td>
<td>Master of Dry Season Anounces arrival of dry season</td>
</tr>
<tr>
<td>Rainbow</td>
<td>A fish/giant eel Came out of the water after World Fire Intermediary between sky and earth A 'cosmic vagina'</td>
</tr>
</tbody>
</table>

### Important Female Characters
Abé-mango  Daughter of the Sun  Sexuality; First menstruating woman Found vño powder in the Sun's navel Taught Desana how to make pottery and how to use baskets, how to make loincloths Taught people how to eat fish, wild fruit Invented fire, stone ax, magic plants Mother of first shamans Introduced death into the world Impregnated by Sun and gave birth to Yagé Child

Vai-mango  Daughter of Aracú  Seduced by the first Desana man
Vai-bogó  Mother of Fish  With Vai-mahsé (who gave her honey).
Boréka-mango  (Fish Woman)  All Desana sibs born from this union Tales about first sexual act include: water turtle, curassow, sloth, uari fish, bat, c poisonous spider, scorpion, large black ant (Associated with horticulture -- first field an Invented manioc squeezer

Daughter of Vai-mahsé  Owner of Yagé plant (from her little finger)
Daughter of Vai-mahsé  Owner of coca plant (from her little finger)

Yagé Woman

Important Barasana mythical characters

FEMALE CHARACTERS
Romí Kumu  Poison Anaconda's daughter. Fish poison.
  (Woman Shaman, Sky and sky mother. Rainbow.
Pleiades, Seucy, Opossum, Identified with gourd filled with wax and coca, esp. her g
  mother of Yurupary =Coadidop, Androgynous and immortal.
Meneriyo (Ingá Woman), Creative mother and sexually voracious ogress.
Yawira (Fish Anaconda's Identified with menstrual blood. Bad smell.
  Daughter)  Controls weather (wet season/dry season).
  Identified with poison and poisonous creatures.
  With other women stole yurupary instruments from m
  Mother of yurupary instruments or He. (He people are a
dead.)
  Cunauru frog.

Frog Wife  Her 'skin' decays and she becomes like a rotted fruit. W
Live Woman/Spirit Woman - Myth in which Live Woman goes to the Underworld and has several adventures involving her mother-in-law. She returns to the world through successful shamanism.

Agouti Woman - Helps Live Woman to return to the world.

Dragonfly's daughters - Starch Woman and Fibre Woman. Seduced by Yeba.

**MALE CHARACTERS**

<table>
<thead>
<tr>
<th>Character</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yebo Haku (Primal Sun)</td>
<td>Sun created gourd (calabash/Crescentia cujete) which is a container for coca and thus very powerful and dangerous.</td>
</tr>
<tr>
<td>Sun = Gourd</td>
<td>Sun created gourd (calabash/Crescentia cujete) which is a container for coca and thus very powerful and dangerous.</td>
</tr>
<tr>
<td>Moon</td>
<td>Waxes and wanes from eating cooked agouti. Copulated with his younger sister and made her pregnant. Associated with Underworld.</td>
</tr>
<tr>
<td>Old Macaw (Sun/Moon??)</td>
<td>Long flutes used at the beginning of Yurupary. Married Jaguar Woman who gave birth to Yebo (Jaguar).</td>
</tr>
<tr>
<td>Yebo (Jaguar; Earth)</td>
<td>Ancestor of Barasana (and Bará). Shaman.</td>
</tr>
<tr>
<td>Warimi (Yurupary)</td>
<td>Son of Yebo and Yawira. Steals curare poison from his father-in-law, Poison Anaconda. Monkey.</td>
</tr>
<tr>
<td>Wekua kumu</td>
<td>Tapir shaman. Teaches the Barasana the proper chants from his Seducer. Mediator.</td>
</tr>
<tr>
<td>Fire Callicebus</td>
<td>Youngest of the Ayawa or Thunders. Kanae the shaman callicebus (titi) monkey in order to steal fire from his grandfather.</td>
</tr>
<tr>
<td>Fire Howler Monkey</td>
<td>One of two people (w. Fire Callicebus) who paddle the S up the Underworld river at night.</td>
</tr>
</tbody>
</table>

**Yurupary or He trumpets and flutes (all pairs)**
Old Macaw        Brother of Manioc-Stick Anaconda  Long flutes
Old Macaw's wife (pair to Old Macaw)

Old Amazona Parrot

Dance Anaconda

Manioc-Squeezing Women  Romi Kumu's daughters.  Long trumpet

Old Star, White Star  Orion (?), Thunder Jaguar  Short trumpet

Old Deer, Old Muscovy Duck

Old Callicebus Monkey (titi)  see above; shaman; identified with Manioc-Stick Anaconda  Shorter trumpet

Tree-fruit jaguar  Long flute

Old Sloth  Shorter flute

Sabicea Flower  Shorter trumpet

Old Guan  Long flute

Bosoro Huria  initiates?  Shortest flutes

Appendix 3: DATA AND DESCRIPTIONS OF ARTIFACTS FROM ALL COLLECTIONS
HUMAN EFFIGY VESSELS (BC AND B de P COLLECTIONS):

Burden Carrier
GA-2-1756-81 (S.I.) topknot, early jar
GA-8-1245-79 (S.I.) topknot, early jar
GA-11-1458-80 (S.I.) jar
GA-8-37-76 jar
GA-4-2846-85 bottle
MBCQ 24-5-84 (fine, w. cream tumpline) maté
MBCQ 1-5-83 (shoe-shaped, w. pedestal) jar
MBCQ 3-41-73 (S.I.) grey w. body in relief) (early?) jar
399 = (Chacras) ; Burden carrier maté jar red slip; bl paint; neg resist
397 = (La Balsita) Burden carrier wh bottle; red slip and black paint

Twins
04298 Twin figures back to back wh bottle; square platform; red on buff
GA-1-2677-84 Two identical figures paddling a canoe; bowl
2

Water-jug Carrier
GA-1-2871-85 (San Isidro) wh bottle
GA-2-2040-81 (Resbalón) wh bottle
2

Tranced Personage:
GA-2-2360-82 (Junín) (wh bottle)
GA-2-2557-83 (Rocafuerte) (wh bottle)
GA-1-2447-78 (S.I.) (wh bottle, crossed legs)
GA-1-2057-81 (El Gramal) (wh bottle, crossed legs, staff)
GA-1-2853-85 (S.I.) (wh bottle, crossed legs, deformed earlobes, face -- coca chewer?)
5

Afflicted Man
GA-1-1350-80 (Pueblito) wh bottle
06239 Afflicted man reclining wh bottle; incised punctates inside circles
402 = (Calderon) Afflicted Man wh bottle; red slip; smudging; rocker-stamping
3
Reclining Affl Man GA-1-1600-80 (San Isidro) reclining wh bottle
1
TOTAL: 4+1 HFJ=5

Man in Reed Boat
395 = (Charapoto) Man in reed boat wh bottle; incised; polychrome; smudged
GA-1-1597-80  Man in reed boat maté jar 

Neckrest
GA-2-1522-80 (Tosagua) (front) 
GA-101-200-76 (front) 
GA-424-200-76 (back) 
342 = (Pueblo Nuevo) anthro neckrest with two faces and arms 
343 = (Chacras) anthro neckrest; lying on stomach; incised and punctate design 
344 = anthro neckrest; lying on stomach; 
345 = (Chacras) anthro neckrest; lying on back; incised and punctate design 

Person with implement
GA-4-738-78 (Rocafuerte) tattoos with bottle 
   GA-1-394-77 (Las Chacras) tattoos (pair) with bottle 
MBCQ Catalogue # 6 tattoos (pair) with bottle 
404 = (Peru) Man holding Implement with bottle; red slip and black paint 

Bound personage
GA-3-1463-80 (San Isidro) maté jar 
398 = (Resbalon) Bound man with bottle; red slip on buff 

Acrobat
GA-1-129-76 with bottle 
MCBQ 1-12-84 jar 
405 = (Chacras) Acrobat jar; red on buff 

Flute Player
GA-1-1684-80 (S.I.) (burden on back, headdress flaps) with bottle 
GA-2-1501-80 Jar (weird face, headdress flaps) jar 
GA-2-2057-81 with bottle 
396 = (El Junco) Flute player w. headdress flaps with bottle; red slip; smudged 
400 = (Chacras) Flute Player with bottle; red slip 
401 = (Calderon) Flute Player with bottle; red on buff; black paint 
04296 Hunchbacked Fluteplayer w. headdress flaps with bottle; red slip 

Dwarf
GA-4-2506-83 (San Isidro) (crossed legs) 
GA-1-1638-80 (Pedernales) (f)
GA-2-1048-78 (Miguelillo) (f)
GA-3-1305-79 (Don Juan) (f)
GA-15-1458-80 (San Isidro) (f)
GA-1-966-76 tassels on turban (drawing only) (f)
GA-2-2200-82 listed as Bahía (crossed legs)
GA-10-1103-79 with tail
GA-5-394-77 bells or ornaments on turban
GA-1-2031-81 (f)

10

**Hollow Maté Jars**
GA-2-87-76 (punctate and incised)
GA-4-3-75 lying on side
393 = (La Balsita) **Anthro maté jar; white slip on buff**
394 = **2-headed Anthro maté jar; incised necklace**
04244 Hollow figure fl neck jar; red/black paint; incised w/nubbins
5 + 1 HFJ=6

**Anomalous figures in Chorrera style**
GA-4-1946-81 deformed face, headdress flaps(S.I.) beaked nose, lumps on mouth) (FEMALE?)
04352 Figure w helmet & fangs wh bottle; areas left unslipped
04353 Figure holding a double-headed snake wh bottle; red slip; neg resist; postfire yellow paint
3

**Person with tubes to ears**
GA-1-2703-84 Person w/tubes to ears wh bottle
407 = (Rio Verde) Man w/tubes to ears wh bottle; zoned incised; red slip; smudging
2

**TOTAL : 68**

**Anthropomorphic Vessels in Different Styles**
1. **ENGRAVED** Flared Jar/rectangular vessel (from San Isidro – prob. late)
   GA-1-2773-85 (rectangular vessel w. figurine)
   GA-1-2727-84 (Flared vase w. face)
   GA-1-1602-80 (Flared vase w. figurine)
   GA-2-2915-86 (barrel-shaped jar w. figurine)

   **Total: 4**

   (N.B. Other vessels with this pattern from San Isidro.)

2. Tubular Jars: (figures have similar facial characteristics)
   GA-2-2210-82 (coca chewer)
   GA-3-2220-82 (crossed arms, wings/horns on head)
   GA-4-2740-84 (horns on head)
411 = (Resbalon) Tubular anthro effigy jar

3. Chief on Platform whistling bottles (Bahía)
   GA-24-200-76
   GA-3-2013-81
   04119
   04131 Personage on a platform wh bottle; carinated shoulder; incised hatched triangles on vessel body

4. Salaite Bottle
   338 = Salaite Bottle (iridescent)
   1 + 1HFJ=2

   Total = 81+3 HFJ = 84+4 limepots = 88

ANIMALS IN THE BANCO CENTRAL COLLECTIONS

Agouti
   GA-1-2297-82 wh bottle; paws to nose (S.I.) **
   GA-3-2677-84 wh bottle; lying on its side; paws to nose (S.I.) **
   2

Armadillo: All BdeP

Bat:
Bat bowls with small modeled heads (identifiable as bats)

   GA-2-375-77 deep square-ish bowl with bat modeled on interior as part of the bowl with wings extended (San Pablo)
   GA-1-40-76 square pedestal bowl; modeled head, hands and feet of bat deep, heavy pedestal bowl; tiny modeled head and nubbins; flat lip with incised double line (probably S.I., but Chacras style?)
   GA-6-690-78 leaf-shaped bowl; modeled head and feet of bat on exterior (S.I.)
   GA-2-1785-81 heart-shaped bowl; nubbin at top; lip incised with one line (S.I.)
   GA-1-2619-84 front and profile faces of a big-eared bat; three nubbins and wavy lip; double-line incised lip (S.I.)
   GA-2-66-76 creature in relief; incised decoration on wavy wing-shaped lip
   GA-3-1699-80 creature in relief and incised; incised decoration on wavy wing-shaped lip; suspension hole (S.I.) (ficha)
   GA-2-1699-80 head of bat modeled on rim; incised decoration on interior (S.I.) (similar to 04383 on ficha)
GA-4-2031-81 bowl; like GA-3-1699-80; modeled lip; sm. creature in relief; suspension hole (ficha with sketch)

GA-2-2172-82 modeled head and feet (Charapotó) Guangala?? feet are like Guangala frogware

YLK-039 Chacras style ped. bowl; ficha

YLK-040 Chacras style ped. bowl; ficha

13

Bat bowls without modeled heads, wing-shape and/or nubbins only

GA-9-1083-78 pedestal bowl; three nubbins at each end of bowl (S.I.)

GA-12-1458-80 oblong pedestal bowl (S.I.)

GA-3-2071-81 incised and zoned slipped int. (S.I.)

GA-5-1568-80 incised and zoned slipped int. (S.I.)

GA-7-1568-80 incised and slipped int.; iridescent paint; one of a pair (S.I.)

GA-8-1568-80 incised and slipped int.; iridescent paint; one of a pair

GA-2-245-77 heart-shaped pedestal bowl; nubbins at head and foot; incised decoration on int. (S.I.) **

GA-19-1247-79 heart-shaped bowl; indent; suspension hole; use-wear (S.I.) **

GA-5-2089-81 incised decoration; nubbins; ped base (Chacras style)

[see also GA-1-2619-84; GA-3-1699-80; GA-3-2846-85/GA-1-2850-85 pair of snuff-tablets w bowls]

GA-2-2789-84 flower-shaped bowl; nubbins; bat's wing design incised on interior; incised lip w. single line (ficha)**

11

Total: 25

Related bowls (w. opossum; w. double figures; gourd-bowl types)

GA-10-161-76 opossum/bat adorno on lip; incised design on interior; suspension hole (ficha)

GA-5-1848-81 same workshop as GA-10-161-76; pair??; incised design on interior; suspension hole; (ficha)

GA-1-900-78 similar to GA-1-2398-82 - double opossum figures (S.I.)

GA-4-2103-81 double-compartment gourd-shaped bowl with cup; incised bat-wing designs on interior; suspension holes (ficha with sketch)**

GA-12-443-77 pedestaled double-compartment gourd-shaped bowl; bat-claw design on pedestal (ficha)

GA-8-1994-81 pedestal gourd-shaped bowl; bat-claw design on pedestal; same workshop as GA-12-443-77 **

GA-10-1756-81 pedestal bowl with nicked lip; bat-claw design on interior **
GA-3-1866-81 'fish/bat' bowl with fins and bat-wing tail, modeled face with lined forehead; [interior design similar to GA-5-1848-81, GA-10-161-76 and GA-4-2103-81]

GA-2-2878-86 pedestal bowl with wide flanged lip; incised design on lip (S.I.) **

GA-4-2727-84 pedestal bowl with flower design on interior (S.I.) **

GA-5-2868-85 flat bowl with two crimped sides (S.I.) **

GA-1-2777-77 deep flat-bottomed bowl w incised bat/dragon design (S.I.) **

GA-5-2290-82 spittoon-shaped bowl w flat lip (represents male lower torso?); suspension hole

GA-4-2856-85 plain oval bowl w bent triangular piece and suspension hole; incised line below lip; use-wear??

14 total

25+14 = 39

BIRDS: SEE SEPARATE FILE (BIRDS IN BC) Total: 26

Coati:
GA-2-1684-80 wh bottle; (S.I.) **
GA-2-1463-80 wh bottle; paws to nose (S.I.) **
GA-1-2983-87 wh bottle; paws to nose (S.I.)**
GA-2-1984-81 wh bottle (no strap handle) howling; striped tail (S.I.) **
GA-3-507-77 wh bottle; pair; irid paint and incis **
GA-2-79-76 wh bottle; pair; irid paint and incis **
GA-3-1861-81 wh bottle; on gourd (S.I.) **
GA-1-1536-80 wh bottle; on gourd (S.I.) **
MCBQ Cat.#17 wh bottle; on warty gourd

Crab:
GA-1-2117-81 hollow shell vessel with lip (S.I.)**
GA-1-609-78 bowl with flanges and faces (S.I)**
GA-1-1067-78 wh bottle (Miguelillo)**

3

Deer:
GA-2-1359-80 - whistling bottle
GA-93-118-79 (with horns) - maté jar
2

DOG (with straight tail)
GA-1-2600-84 maté vessel (ficha)**
GA-2-2439-83 maté vessel (ficha)**
2

FELINE (with kinked tail)
GA-1-3003-87 maté vessel; red mouth, red vessel rim(ficha)**
GA-1-2907-86 maté vessel
GA-1-1084-78 whistling bottle; red mouth, red spout (ficha)**

Fish:
GA-1-2335-82 whistling bottle; (Discus) (Río Grande)
GA-1-2594-84 bowl (S.I.)
GA-2-2279-82 bottle; (Calderón) fish sitting on its tail, Arapaima?
Arapaima gigas/umasapa? CichlaÜrus festivus
GA-2-2103-81 whistling bottle; cichlid? on top of round bottle (S.I.)
GA-1-2405-82 pedestal bowl; scorpionfish "brujo"? (Scorpaenidae) (Mejía)
GA-3-210-76 bowl

6

Guinea-pig: only in BdeP

Monkeys:

GA-3-2101-81 monkey lying on its side (neg painting)(S.I.)**
GA-2-2652-84 seated Woolly monkey w. collar
GA-2-2987-87 seated Woolly monkey w. collar (S.I.)**
GA-1-79-76 seated monkey w. square collar** Cebus?
GA-1-2912-86 seated monkey w. collar and phallic tail (S.I.)**
GA-2-2912-86 seated monkey w. collar (S.I.)**
GA-2-2652-84 seated monkey w. collar (S.I.)**
GA-3-2912-86 Cebus/Capuchin monkey making offering (S.I.)**
GA-1-413-77 Howler monkey (prob. Chacras)** (SigAm)

GA-3-394-77 monkey adorno (grasping spout) incised design
(Chacras)**
GA-1-2220-82 monkey adorno
GA-2-394-77 monkey adorno on gourd-top (Río Chico)**
GA-1-2220-82 monkey adorno (S.I.)**
GA-1-1929-81 monkey adorno (grasping spout) (S.I.)**
GA-9-1848-81 monkey adorno (S.I.)**
GA-15-1607-80 monkey adorno (paws to snout, howling?) (Los Tres Charcos)**
GA-3-1425-80 monkey adorno (whistling?) (Bahía)**
GA-1-1495-80 monkey adorno (S.I.)**
GA-2-1466-80 monkey adorno (peeing) (S.I.)**
GA-2-1694-80 monkey adorno (tail and legs in relief) (S.I.)**
GA-6-1011-78 relief of monkey upside down (incised design)
GA-4-1702-80 relief of monkey head & torso (incised design) (S.I.)**
GA-335-200-76 skeletal head, arms and legs in relief **
GA-14-1165-79 maté, double-headed monkey vessel (S.I.)**
GA-102-200-76 maté, double-headed **

GA-4-2190-82 squirrel monkey maté vessel, head, arms in relief (S.I.)**
GA-3-2709-84 semi-adorno, whistling bottle w. "cotton"; "siamese twins" (S.I.)**
MCBQ 2-53-84 monkey adorno on gourd trumpet
MCBQ 232-14-65 seated monkey w. collar

Rabbit:
GA-17-609-78 rabbit; wh bottle; red slip

1

Reptile:
GA-2-34-76 large bowl, iguana and frog adorns on rim **
GA-1-34-76 large bowl, lizard and crab adorns on rim **
GA-2-2408-82 jar, incised w. modeled head of iguana (?) **

3

Shells:
GA-313-200-76 maté jar; spiral shell (prob. Strophocheilus popelairianus) **
GA-307-200-76 jar; spiral gastropod; pair??
GA-9-1241-79 jar; spiral gastropod; pair? (El Golpe) **
GA-4-810-78 jar; (Nautilus?) (S.I.) **
GA-1-2854-85 maté jars attached; triple spiral shells (S.I.) **
GA-1-2868-85 bottle; multiple spiral shells (S.I.) **
GA-2-2600-84 wh bottle; mollusc (prob. Malea Ringens) (Tosagua)
GA-1-1091-78 wh bottle; spiral shell; slipped white (S.I.)**
GA-3-2723-84 wh bottle; stylized shell (S.I.) **
GA-3-2097-81 wh bottle; striped; (prob. Strophocheilus popelairianus) (S.I.)

10

Shrimp:
GA-1-1864-81 wh bottle; ridged head; segmented tail (S.I.)
GA-1-1000-78 wh bottle; attached pair; segmented tail (Rocafuerte)
GA-1-1531-80 wh bottle; modeled on platform (S.I.)
GA-1-2984-87 wh bottle; segmented body; bottle spout on platform
GA-548-200-76 maté vessel; ridged head
GA-2-2347-82 maté vessel; segmented body
GA-2-1473-80 maté vessel; segmented body (Pueblito)
GA-7-2090-81 maté vessel; segmented body (S.I.)
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</tr>
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<td>Jar; modeled head of fer-de-lance or bushmaster**</td>
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<td>GA-1-2826-85</td>
<td>Jar; one snake w/4 indents &amp; obsidian eyes (Río Chico) (ficha) **</td>
</tr>
<tr>
<td>GA-20-1060-78</td>
<td>Pedestal bowl with snake modeled in relief below rim; nubbins (7 sets of 2); use-wear (ficha)</td>
</tr>
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<td>GA-259-200-76</td>
<td>Bowl; abstract representation</td>
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<td>Pair, bowl with legs, probably toad (S.I.)**</td>
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<td>Whistling bottle, pair of frogs (?) copulating (Cucuy)**</td>
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<td>Whistling bottle, frog (?) (ficha w/sketch) 4</td>
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<td>GA-4-2071-81</td>
<td>Ray w. lizards (S.I.)</td>
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<td>Mâté; wood quail (like Ch-365)</td>
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<td>Wh bottle; tinamou (S.I.)**</td>
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**TOTAL: 130**

**BIRDS**

*Bird Vessel Count (see also Double-lobed vessels in Gourd Vessel count)*

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**TOTAL: 130**
GA-13-2103-81 bottle; possibly curassow (helmeted?) (S.I.)**
GA-1-2981-87 bowl w. appliqué modeling; curassow (possibly *Notocráx urumutum* or Nocturnal Curassow) (Esmeraldas)**
GA-4-1806A-81 wh bottle; curassow (S.I.)**

**Water birds**

GA-1-1287-79 maté; pair; sandpiper **(ficha)
GA-2-1097-79 maté; pair; sandpiper (S.I.)**
GA-1-2386-83 bowl; duck? (S.I.)**
GA-4-1600-80 wh bottle; duck (S.I.)**(ficha)
GA-3-2420-82 deep bowl; stork/geron(S.I.)**
GA-1-2752-84 wh bottle; jabiru/pelican? (Cucuy - Chone)**

GA-2-2843-85 wh bottle; ibis
GA-1-2831-85 wh bottle; ibis

GA-1-1118-79 wh bottle; gull on Triangle gourd** (ficha)
10-20-83R wh bottle; gull on Triangle gourd (sketch)
GA-1-1644-81 wh bottle; gull on shrimp** (ficha)

**Spirit or Omen birds**

GA-3-2141-82 wh bottle; parrot (Junín) **
GA-1-1688-80 wh bottle; parrot/macaw (ficha)
GA-1-2736-84 wh bottle; pair; owl (S.I.)**(ficha)
GA-1-2750-84 wh bottle; pair; owl (S.I.)**(ficha)
GA-582-200-76 wh bottle; Spectacled owl (see Ch-366)
GA-5-37-76 ped bowl; owl?
GA-2-2848-85 bowl; owl? (S.I.)**

**BIRDS TOTAL: 25**

130 + 25 = 155

**ANIMAL VESSELS (BANCO DEL PACIFICO)**

**Agouti**

354 = (Chacras) agouti *wh bottle* (paws to nose)
1

**Anteater**

355 = (La Irene) anteater wh bottle; red on tan slip

1

**Armadillo**

04372 Armadillo neckrest; incised; red slip

274 = (Calderon) armadillo neckrest; smudging, incised

2

**Bats**

327 = (La Balsita) bat bowl; red slip ext; smudged int

328 = (Cuatro Esquinas) bat bowl (heart-shaped); iridescent; smudged

329 = (La Irene) bat bowl (oblong); red slip; smudged (susp. hole)

330 = (Calderon) bat bowl (five-pointed rim; pedestal); red slip

331 = (Chacras) bat bowl (heart-shaped; pedestal); smudged

332 = (La Balsita) bat bowl (free-form rim; pedestal; face); incised design on int

333 = (Chacras) bat bowl (face on rim); incised design on int

321 = (Miguelillo) (bat?) ped bowl with nubbins on rim; red on buff design int

05567 Large oblong bowl; opossum adorno; incised patterns

04000 Rio Chico style ped bat bowl; adorno head and nubbins; incised ped base; red on buff

04123 Rio Chico style ped bat bowl; incised ped base; irid lines on interior; red on buff

04124 Rio Chico style ped bat bowl; irid lines on interior; incised ped base; red on buff

04125 Rio Chico style ped bat bowl; irid pattern on interior; incised ped base; red on buff

04126 Rio Chico style ped bat bowl; adorno head and nubbins; irid lines on interior; incised ped base; red on buff

04147 Rio Chico style ped bat bowl; irid pattern on interior; incised ped base; red on buff

04134 Large rect ped bowl; nubbins; incised pattern on int

04383 Large rect ped bowl; nubbins; incised pattern on int

CH-84 Two-winged bowl; red slip

04136 Large rect ped bowl; dk red neg painting

04138 Large rect ped bowl; incised pattern on rim

CH-87 Triangular bowl; modeled bat head; red slip

06184 Freeform ped bowl; modeled bat head; nubbins; incised; red slip

04144 Goblet with 2 sm faces; notched below rim; similar incised ped base as RC bat bowls; red on buff

04347 Bat dipper/spoon with head and legs; incised lines; dk red-brown slip

364 = (La Horma) free tail bat wh bottle; red slip on buff

310 = (Pimpiguasi) fl neck jar; incised bat wing design; punctate

319 = (Aljahuela) bats fl neck jar; smudging
27

**Birds**

347 = (Chacras) owl ped bowl; red slip ext; smudged on int
367 = (La Horma) barn owl on squash wh bottle; red slip on buff
368 = (La Balsita) 2 wood quail (ducks) wh bottle on incised square platform
371 = wood quail wh bottle; neg resist dots
365 = wood quail maté jar; neg resist; red slip
369 = (Resbalon) parakeet on Ingá pod wh bottle; red slip and smudged
370 = (La Horma) 2 ducks wh bottle on round platform; red slip on buff
372 = (La Balsita) woodpecker adorno wh bottle; red slip on buff
373 = (La Horma) macaw wh bottle; red on white; punctate
366 = (La Balsita) spectacled owl maté jar; red slip on white
325 = (Chacras) wh bottle; upside down Harpy Eagle incised; polychrome
326 = (Ojo de Agua) jar frag; stylized Harpy Eagle design incised
275 = (La Horma) owl bottle; red on buff; bosses

CH-91Large round ped bowl with bird adornos; neg paint design on int

14

**Coati**

352 = (La Horma) coati with curled tail wh bottle; iridescent; incised
351 = (Chacras) reclining coati wh bottle; red slip
314 = (Chacras) fl neck jar; coati head and incised design on buff surface
350 = (Resbalon) reclining coati neckrest; incised; smudged

4

**Crab**

385 = (Aljahuela) Crab and Harpy Eagle fl neck jar

1

**Deer**

361 = (Pimpiguasi) deer bottle

1

**Dog or Feline**

349 = (Chacras) Dog wh bottle; red/white/black
363 = (Chacras) Feline maté jar; red slip on buff

2

**Fish**

04078  Fish vessel (oblong bowl; dark red/brown slip ext
04077  Fish vessel (oblong bowl); red/brown slip ext/int
04339  Fish vessel (oblong bowl); incised and fingernail punctate; dark red/brown slip
348 = (La Balsita) half gourd fish bowl; red on buff; mend holes
384 = (Bejuco de Junin) 2 Cichlid fish wh bottle; incised; red slip
381 = (Calderon) Bumphead wrasse fl neck jar; red and black paint; incised
382 = (Miguelillo) Pufferfish fl neck jar; incised; red slip; smudged
**Grub**
387 = (Cuatro Esquinas) Palm grub wh bottle

**Monkeys**
06185   Capuchin monkey dipper; red on white
356 = (Calderon) howler monkey with amulet
357 = (Resbalon) monkey adorno on wh bottle
358 = (Calderon) woolly monkey (wh bottle) making an offering
359 = (La Balsita) spider monkey (wh bottle) with amulet
04291   Monkey adorno wh bottle; on round platform; incised volutes
04419   Monkey adorno wh bottle; incised hatched triangles on base
04289   Monkey w amulet wh bottle; dk red slip
04287   Monkey wh bottle; no arms
360 = (Calderon) squirrel monkey maté jar
04439   Monkey face & arms Maté jar; red slip applied sloppily
04212   Unidentifiable creature (monkey?) on fl neck jar; incised; dk red/brown slip
406 = (Calderon) Monkey-man wh bottle; incised scrolls; red slip

**Rodent**
334 = (Chacras) donut-shaped wh bottle; rodent (?); red slip; black paint
04342   Guinea pig double-lobed wh bottle; red on white

**Sloth**
04251   Sloth bottle; red on buff

**Snakes**
288 = (Chacras) snake bowl; ped base; iridescent diamond pattern and rosette on interior
04117   Bowl w sm modeled snake below rim; irid paint on int
335 = donut-shaped wh bottle; snake; neg resist diamond pattern
04343   Wh bottle; modeled and incised snake; obsidian eyes
375 = Laughing falcon and snake fl neck jar; red slip; smudged; incised
376 = (Calderon) Snake head and incised body fl neck jar; red slip; smudged; incised
377 = (Chacras) Modeled snake fl neck jar; red slip, smudged; incised
04236   Fl neck jar; Snake w Bahía Monster head; incised; Dk gray/brown slip
04362   Fl neck jar; 4 spot jar; 2 Snakes w Bahía Monster style heads
Toad
362 = (Río Chico) Bufo bottle
1

Turtle
378 = (La Ponga) Land turtle bowl; incised; smudged
379 = (Chacras) Marine turtle fl neck jar; red on buff
380 = (Chacras) Marine turtle fl neck jar; red on buff
3

Snails
04345 Strombus wh bottle; pinkish slip
388 = (Cerro Verde) Spondylus shell bowl; red slip on buff
386 = (Loma Rita) Marine snail wh bottle; neg resist
3

Spider
04087 3 Spiders on Maté Jar; Dark yellowish brown
1

Shrimp
383 = (Calderon) Shrimp bottle; red slip; incised
1

95

Bahía Monster
336 = (Resbalon) donut-shaped bottle; Bahía Monster (2 heads); neg resist
337 = fl neck bottle; Bahía Monster (2 heads); red slip; incised; neg resist
374 = (Ojo de Agua) lizard adorno with diamond pattern jar frag
3

IDENTIFIABLE GOURD FORMS IN BANCO CENTRAL COLLECTIONS
(136)
KEY: ** photo
* drawing

LOBED (GADROONED) FORMS (PROBABLY C. MAXIMA or C. MOSCHATA)
GA-3-1929-81 bottle (S.I.)**(platform type #3)
GA-14-1092-78 (S.I.)**
GA-1-1975-81 incised ladder design (S.I.)**
GA-27-1060-78 (S.I.)**
GA-5-2856-85 (S.I.)**
GA-2-2100-81 wh bottle (S.I.)**
GA-2-2067-81 wh bottle (S.I.)**(platform type #3)
wh bottle (Pueblito, Rocafuerte) ** (platform type #3)

GA-2-2850-85 pair? (S.I.)**
GA-3-2850-85 pair? (S.I.)**
GA-8-1555-80 (S.I)**
GA-3-2595-84 bottle (S.I)**
GA-3-2600-84 wh bottle (Tosagua) **gadrooned
GA-5-1429-80 wh bottle (S.I.)** (also with platform type 1)
gadrooned

GA-4-1977-81 wh bottle (Junín) gadrooned
GA-9-1226-79 wh bottle (S.I.)**gadrooned

16

LAGENARIA

Some of these are spherical whistling bottles which are polished but which have no other distinguishing characteristics. Whistling bottles which definitely represent Lagenaria can be securely identified by their characteristic, slightly teardrop-shaped body (elongated at the top).

GA-1-2849-85 wh bottle (S.I)**(tall bottle)
GA-4-2090-81 wh bottle; polished (S.I)**
GA-1-2064-81 wh bottle; polished (Junín)**
GA-7-2064-81 wh bottle; incised design; polished (Junín)** (plat 3)
GA-2-1755-81 wh bottle; polished
GA-2-1644-81 wh bottle; fine (Los Tres Charcos)**
GA-2-2739-84 wh bottle; fine (S.I.)**
MCBQ 4-8-82 wh bottle; fine; incised Dragon design
GA-9-1006-78 wh bottle; fine; incised Dragon design (S.I)**
GA-2-1826-81 wh bottle; fine; incised design (S.I)**
GA-2-1994-81 wh bottle (S.I)**(platform type 1)
GA-3-1994-81 wh bottle; polished (S.I)**
GA-2-1458-80 wh bottle (S.I)**(platform type 1)
GA-5-1977-81 wh bottle; fine; zoned incised (San Rafael)
GA-3-1944-81 wh bottle (S.I)**
GA-1-2067-81 wh bottle (S.I)**
GA-2-1755-81 wh bottle (S.I)**
GA-1536-80 wh bottle (S.I)**
GA-4-2038-81 wh bottle (S.I)**
GA-10-1714-80 wh bottle (Chimborazo)**
GA-1-1925-81 wh bottle (Calderón)**
GA-4-1756-81 wh bottle (S.I)**
GA-2-1829-81 wh bottle (S.I)**
GA-2-2854-85 wh bottle (S.I)**
GA-2-2650-84 wh bottle (S.I)**
GA-5-2718-84 wh bottle (S.I)**
GA-2-2782-85 wh bottle; neg paint (S.I)**
GA-3-2782-85 wh bottle; neg paint (S.I)**
GA-2-2672-84  wh bottle; neg paint resist (S.I.)**
GA-3-2688-84  wh bottle (Junín)**
GA-4-2688-84  wh bottle (Junín)**
GA-2-1864-81  wh bottle; with mouse adorno; (S.I.)**
GA-1-2739-84  wh bottle; pair; fine
GA-2-2739-84  wh bottle; pair; fine (S.I.)**
GA-3-2739-84  wh bottle; fine (S.I.)**
GA-6-806-78  wh bottle; trichrome paint scheme (S.I.)**
GA-1-2211-82  wh bottle; trichrome paint scheme; incised*
37

Counted with Animals
GA-2-2843-85  wh bottle; pair; fine; ibis & Dragon design (S.I.)**
GA-1-2831-85  wh bottle; pair; fine; ibis & Dragon design
GA-4-1702-80  wh bottle; monkey shaman (S.I.)**(platform type 1)

Gourd-effigy on Platform
GA-3-1806A-81  wh bottle; on cone platform
      (S.I.)**gadrooned
GA-3-822-78  wh bottle; pumpkin; on cone base
      (S.I.)**(platform type #3)
GA-4-2196-82  wh bottle; on tubular base
3

Spout on Platform
3 types
1. round platform with narrow lip which is distinct from vessel
2. flat platform that is part of vessel with delineated line-break
3. smooth upper shoulder with incised delineated line-break
(see also other categories of Gourd vessel for matches)

GA-3-1960-81  wh bottle; incised design; polished (S.I.)**
GA-3-1977-81  wh bottle; incised design; polished **
GA-1-2011-81  wh bottle; incised design; polished **
GA-8-2064-81  wh bottle; incised design; polished (Junín)**
GA-3-1848-81  wh bottle; incised design; polished (S.I.)**
GA-4-1848-81  wh bottle; incised design; polished (S.I.)**
GA-2-2076-81  wh bottle w/out strap (Las Chacras)**
GA-1-2393-82  wh bottle w/incised design (Junín)

GA-5-1829-81  wh bottle (S.I.)**(see also Lagenaria vessels)
GA-3-2670-84  wh bottle; fine incision (S.I.)**
GA-6-2601-84  wh bottle; fine incision (Canuto)**

GA-1-2471-83  wh bottle; polychrome design
GA-1-1699-80  wh bottle; raised polychrome design
<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA-1-1670-80</td>
<td>wh bottle; red-on-white slip</td>
</tr>
<tr>
<td>GA-1-2671-84</td>
<td>wh bottle; incised; red-on-white slip</td>
</tr>
<tr>
<td>GA-2-1235-70</td>
<td>wh bottle; incised; red-on-buff slip</td>
</tr>
<tr>
<td>GA-2-2471-83</td>
<td>wh bottle; incised; red-on-white slip</td>
</tr>
<tr>
<td>GA-2-1763-81</td>
<td>wh bottle; incised; red-on-buff slip</td>
</tr>
</tbody>
</table>

**Counted as House Vessel**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>#3-20-83R</td>
<td>wh bottle; small round gourd on top of round maloca vessel (BC, Quito, from rescued exhibit)</td>
</tr>
</tbody>
</table>

**OTHER GOURD EFFIGIES**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA-1-1542-80</td>
<td>wh bottle; melon-shaped; polychrome</td>
</tr>
<tr>
<td>GA-1-2325-82</td>
<td>wh bottle; four pointed lobes (S.I.)**(RECsheet)*</td>
</tr>
<tr>
<td>GA-6-2158-82</td>
<td>wh bottle; four pointed lobes; spout on platform (S.I.)**</td>
</tr>
<tr>
<td>GA-3-1805-81</td>
<td>wh bottle; flattened 'saucer' shape (S.I.)**</td>
</tr>
<tr>
<td>GA-2-147-76</td>
<td>wh bottle; ridged</td>
</tr>
<tr>
<td>GA-3-273-77</td>
<td>wh bottle; uneven lobes in wave (S.I.)**</td>
</tr>
<tr>
<td>GA-14-1846-81</td>
<td>wh bottle; elongated (S.I.)**</td>
</tr>
<tr>
<td>GA-2-2275-82</td>
<td>jar; four lobes divided by lines (Calderón)**</td>
</tr>
<tr>
<td>GA-1-1912-81</td>
<td>wh bottle; &quot;Acorn squash&quot; (S.I.)**</td>
</tr>
<tr>
<td>GA-1-66-76</td>
<td>flattened saucer shape with line indents**</td>
</tr>
</tbody>
</table>

**CYCLANTHERA PEDATA**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA-2-713-78</td>
<td>pedestal bowl; (S.I.) **</td>
</tr>
</tbody>
</table>

**TRIANGLE**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA-2-1500-80</td>
<td>wh bottle (S.I.)**</td>
</tr>
<tr>
<td>GA-3-1912-81</td>
<td>wh bottle (S.I.)**</td>
</tr>
<tr>
<td>GA-1-654-78</td>
<td>wh bottle; with bird</td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

**WINTER SQUASH (Warty C. maxima)**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA-3-2076-81</td>
<td>wh bottle (Las Chacras)**(platform type #3)</td>
</tr>
</tbody>
</table>

**4 SPOT VESSELS (like snake jars):**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA-1-162-76</td>
<td>wh bottle **</td>
</tr>
<tr>
<td>GA-4-2600-84</td>
<td>wh bottle; two spots/ditch (Tosagua)**</td>
</tr>
<tr>
<td>GA-2-2677-84</td>
<td>wh bottle; red-on-white slip (S.I.)**</td>
</tr>
<tr>
<td>GA-8-394-77</td>
<td>jar; (Las Chacras)**(RECsheet)*</td>
</tr>
<tr>
<td>GA-2-2158-82</td>
<td>jar; four-petaled flowers (S.I.)**</td>
</tr>
</tbody>
</table>

**18**

**OTHER**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>
**HALF GOURD BOWLS**
GA-7-1699-80  bowl; w/stem-scar
GA-4-2076-81  lg. bowl; w/stem-scar;
GA-2-2050-81  lg. bowl; w/stem-scar

**DOUBLE-LOBED BOTTLES (LAGENARIA)**
GA-1-2470-83  sq jar; anth head w/whistle (S.I.)**
GA-2-1861-81  sq jar w/bridge; anth head w/whistle (S.I.)**
GA-1-2528-83  sq jar w/incision; bird whistle (S.I.)**
GA-1-2418-82  sq jar; bird whistle; small pot (S.I.)**
GA-1-2569-83  sq jar; bird whistle; small pot (S.I.)**
GA-1-1763-81  sq jar; bird whistle (S.I.)**
GA-2855-85    round jar; anth head w/whistle (S.I.)**
GA-5-2158-82  round jar; bird whistle (S.I.)**
GA-2-2738-84  round jar; bird whistle (S.I.)**
GA-3-2001-81  round jar; bird whistle (Calceta)**
GA-4-2001-81  round jar; bird whistle (Calceta)**
GA-3-2057-81  round jar; bird whistle (El Gramal)**
GA-2-1665-80  round jar; bird whistle (S.I.)**
GA-1-2395-82  sq/round jar; bird whistle (S.I.)**
GA-4-2677-84  sq/round jar; bird whistle (S.I.)**

**FRUIT OR NUTS**
GA-1-1542-80  wh bottle; curved shape; polychrome slip (see Man in Reed Boat Lathrap et al. 1975: 24, Fig. 8)
GA-5-1702-80  wh bottle; 'frilled' top (S.I.)** fruit
GA-4-423-77   wh bottle; pair; pecan???
GA-543-200-76  wh bottle; pair; pecan? **
GA-2-2595-84  bottle; four lobes divided by lines; nut? (S.I.)**
GA-2-1947-81  wh bottle; incised lines ending at curved lobes - nut? (S.I.)**
GA-1-2248-82  wh bottle; pair; lobes with sharp edges -- fruit? (like star fruit)**
GA-2-2247-83  wh bottle; pair; lobes with sharp edges - fruit??
GA-1-2709-84  wh bottle; fine; pair; polyhedral*
GA-2-2709-84  wh bottle; fine; pair; polyhedral

**MATE JARS**
GA-4-1873-81  maté vessel; incised w/white fill (Pedro Carbo)**
GA-3-2843-85  maté vessel; incised w/white fill (S.I.)**
GA-1-747-78   maté vessel; incised w/white fill (S.I.)**
GA-3-1061-78   maté vessel; no decoration ((S.I.)**
GA-7-264-77    maté vessel; "Dragon" design ((Cucuy)**
**RED-AND-WHITE LOBED WHISTLING BOTTLES (POSSIBLE ROOT CROP)**

GA-1-1960-81
GA-3-1755-81
GA-4-1466-80
GA-2-2871-85
GA-1-1768-81
GA-2-2727-84 (copulating frogs vessel GA-2-2752-84 has same spout)
GA-4-2032-81
GA-2-275-77

Total = 136

**GOURDS**

**Whistling Bottles**

279 = (Charapoto) wh bottle; smudged and zoned incised (series)
280 = (Chacras) wh bottle; red slip; fine line incised (series)
281 = (Peru) wh bottle; red slip; fine line incised
282 = (La Balsita) wh bottle; dome platform; fine line incised
285 = (Barranco Blanco) wh bottle; dome platform; shelf; fine line incised
284 = (Calderon) wh bottle; dome platform; shelf; carinated shoulder; incised and punctate design
313 = (Aljahuela) wh bottle; red slip; smudged; buff design
315 = wh bottle; zoned incised; red slip and black paint; polychrome
322 = wh bottle; iridescent; smudged
390 = (La Balsita) Lagenaria-shaped wh bottle; iridescent; zoned incised

10

298 = (La Balsita) fruit wh bottle; smooth platform; flattened lobes
308 = (Calderon) Gadrooned donut-shaped wh bottle; red slip; smudging
309 = (Carrizal) fruit wh bottle; four lobes & bosses; smudged; incised (irid?)
3

408 = (Playa Prieta) double-lobed bottle frag; man w/panpipes; red slip; smudging
409 = double-lobed bottle; man w/panpipes; red slip; smudging
410 = double-lobed bottle; man w/panpipes; red slip; smudging; neg resist
04150 Bird adorno double-lobed wh bottle; red slip
04151 Human adorno playing instrument double-lobed wh bottle

5

04120 Gourd trumpet wh bottle; red on buff
04295 Lobed gourd wh bottle; incised lines; dk red/brown slip
Lobed gourd wh bottle; platform; red/buff lobes
Gourd wh bottle w "frill"of nubbins around spout
Wh bottle; incised geometric pattern; fine spout; dk red/brown

Total: 23

**Half-gourd Bowls**
295 = half gourd bowl; red on white
297 = (La Balsita) half gourd bowl; red on white slipped pattern on int
403 = (La Balsita) half gourd bowl with red slip rim; rocker-stamping

Half gourd bowl; round; red slipped ext
Half gourd bowl; round; red slipped int and ext
Half gourd bowl; round; red slipped ext
Half gourd bowl; teardrop shaped; red slipped rim
Half gourd bowl; teardrop shaped; int red slip
Half gourd oblong bowl; nubbin repr stem; dk grey slip
Half-gourd bowl; round; red "petals on rim; notched below rim; red slipped base
Striped shallow bowl; red on white int pattern
Half-gourd striped shallow bowl; red on white int pattern

**Pedestal bowl**
Ped bowl w nubbins; (Cyclanthera); red slip

**Maté Jars**
(Río Chico) mate jar; red slip; incised; smudging
maté jar w/nubbins; (Cyclanthera?); red slip
389 = (La Ponga) Pineapple jar; red slip on buff

**Flared Neck Jars**
(Río Chico) fl neck jar; red on buff; zoned incised
(Resbalon) fl neck jar; zoned incised; smudging

Lobed gourd fl neck jar; platform; Yellowish red slip
Gourd-shaped fl neck jar; carinated base
Segmented gourd fl neck jar; red slip

Tri-lobed fruit fl neck jar; red/brown slip
Fruit or bean pod fl neck jar; platform; irid paint in stripes
Fruit or Gourd fl neck jar; red/brown slip

4-SPOT JARS
(La Balsita) fl neck jar; four red spots; zoned incised; smudging

Bat-wing/Flower fl neck jar; 4 red spots; incised; line punctate

4 spot fl neck jar; fingernail punctate on lower body; red slip on upper body

4 spot fl neck jar; fingernail punctate all over body

4 spot fl neck jar; bosses on upper body; red slip on base

4 spot fl neck jar; sloppy red slip on base

FINAL TOTAL: 55

Whistling Bottles: 23
Bowls: 13
Pedestal Bowls: 1
Fl Neck Jars: 15
Maté jars: 3

LIMEPOTS

MISCELLANEOUS
444 = (Chacras) Foot limepot
450 = (Chacras) handled pot limepot
453 = (La Ponga) "Spittoon" limepot
455 = (Zozote) Carinated jar limepot
307 = limepot red slip; incised; smudging (Ht. 6.7 cm)

5

GOURD-SHAPED
436 = Gourd limepot
448 = (La Horma) Gourd limepot
449 = Gourd limepot
451 = (Chacras) Carved Gourd limepot
391 = (La Irene) limepot; Warty gourd (C. maxima); (Ht. 11.5 cm)
GA-421-200-76 limepot; C. maxima/moschata gourd**

5

HUMANS
434 = Person with hands to mouth, lying on stomach; limepot
437 = (Chacras) Burden carrier limepot
439 = (La Balsita) Burden carrier limepot

GA-2-2849-85  Burden Carrier Limepot (S.I)**

3

ANIMALS
438 = (Resbalon) Animal limepot
441 = (Pimpiguasi) Snake limepot
443 = (Zozote) Snake limepot
446 = (La Balsita) Guinea pig limepot
458 = (La Horma) spiral snail shell limepot
460 = (Chacras) Curassow limepot
461 = (Guabito) Peccary limepot
462 = Anadara grandis limepot
463 = (La Balsita) Frog/toad limepot
464 = (Chacras) Feline limepot
465 = (Negrital de Majía) Turtle limepot
466 = (Calderon) Feline limepot

12

01014/0829 lliiptero CONCHA (SHELL)
01017/0832 lliiptero CONCHA (SHELL)
01030/0830 lliiptero CONCHA (SHELL)
01033/0827 lliiptero CONCHA (SHELL)
01038/0831 lliiptero CONCHA (SHELL)
01047/0828 lliiptero CONCHA (SHELL)
01448/699 lliiptero ANIMAL
01474/700 lliiptero ANIMAL
01463/704 lliiptero CROCODILE
01446/701 lliiptero CROCODILE
01747/670 lliiptero OSO (BEAR?)
01756/655 lliiptero ZOOMORPH HEAD
01757/656 lliiptero SERPENT HEAD

13

GA-2-2855-85  house limepot (S.I)**

TOTAL: 43 (25 + 18) + 3 = 46 TOTAL

OTHER VESSELS

PEDESTALED PLATES W/ATTACHMENTS
GA-3-2846-85 pedestal plate with an attached bowl (pair)
GA-1-2850-85 pedestal plate with an attached bowl (pair)
GA-1-2879-86 pedestal plate combined with a hollow bridge attached to rim
GA-2-2879-86 pedestal plate combined with a hollow bridge attached to rim

**BODY PARTS**

**Head:**
GA-10-492-77 (Las Chacras) bowl
GA-6-1467-80 ((S.I.) bowl
GA-2-2039-81 (Río Chico) deformed eye; bowl
GA-3-1112-79 (Calderón) bowl

**Arm and hand**
GA-1-3008-87 dipper/spoon
GA-1-1544-80 dipper/spoon

[see also Katz: #21, Vessel with ring handle in the form of a human arm and hand Negative Vicús AD300-700]

**Leg and foot:**
GA-1-1397-80 pair, w. negative paint (Río Chico) bowl
GA-2-1397-80 pair, w. negative paint (Río Chico) bowl
MCBQ 11-20-83R pair, with leg bands and square opening; bowl
MCBQ 12-20-83R pair, with leg bands and square opening (Al rescate de su pasado) bowl

**Foot:**
GA-2-3008-87 fl neck jar
06238  **Foot fl neck jar (Miguelillo)**

**Phallus:**
MCBQ,#1-3-87 (recipiente fálico) bowl
solid phallus

**HOUSE VESSELS**

**Square houses on mounds**
GA-1-2282-82  wh bottle; sq house w/gabled roof on sq platform
GA-1-895-78  wh bottle; sq house w/gabled roof on sq platform
GA-1-965-78  neckrest; sq house w/gabled roof on low sq platform

**Circular houses with 'thatched' roofs**
MCBQ 3-20-83R

4

**Not included in counts but e.g. only**
Circular house
Cat. #146 Cruz De Peron Collection (from the exhibit Al Rescate del Olvido)

**Engraved Red-on-White vessels from the Jama Valley (Non-Representational Vessels)**

- GA-539-200-76  Sq vessel with step**
- GA-1-2723-84  Flaring vase**
- GA-1-2993-87  Flaring vase**
- GA-1-2670-84  large pedestal plate
- MCBQ Cat. #15  Sq vessel with rounded sides and swastika

5

**Flaring Vases**

- GA-1-2100-81  Flaring vase w postfire paint (see GA-1-2727-84 above)
- GA-2-2672-84  plain flared vase
- GA-6-2656-84  plain flared vase (tall) w/anul base

- GA-2-2282-82  flared vase w punctate design (see #302 in Lathrap et al.)
- GA-1-2381-82  sm vase w/anul base and punctate design w/incised horizontal lines

5

**Tubular Jars with engraved geometric design (red-on-white)**

- GA-3-948-78  plain Tubular jar w/anul base
- GA-4-1245-79  Tubular jar w/geometric design (incl triangles and stepped lines)
- GA-5-1245-79  Tubular jar w/geometric design (incl triangles and stepped lines with small circles)
- GA-6-1245-79  Tubular jar w/geometric design (incl triangles and stepped lines)
- GA-12-2103-81  plain Tubular jar with restricted mouth
- GA-2-2736-84  plain Tubular jar with restricted mouth
- GA-1-2439-83  Tubular jar w/geometric design (incl hatched triangles and stepped lines with small circles)
- GA-3-2471-83  Tubular jar w/geometric design (incl triangles and stepped lines with small circles)
- GA-4-2471-83  Tubular jar w/geometric design (incl triangles and stepped lines with small circles)
- GA-1-2820-85  Tubular jar w/geometric design (incl hatched triangles and stepped lines)
- GA-2-2981-87  Tubular jar w/geometric design (incl triangles and stepped lines)

21 total

**Bahía Monster**

336 = (Resbalon) donut-shaped bottle; Bahía Monster (2 heads); neg resist
337 = fl neck bottle; Bahía Monster (2 heads); red slip; incised; neg resist
374 = (Ojo de Agua) **lizard adorno** with diamond pattern jar frag

**RED-ON-UNSLIPPED VESSELS FROM BOTH COLLECTIONS**

**Red-on-White Jars from the Banco Central collections**
(catalogue numbers not recorded)

<table>
<thead>
<tr>
<th>Burden Carrier</th>
<th>Small Figure</th>
<th>Splayed Figure</th>
<th>Opossum</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flared Neck Jar</td>
<td>10</td>
<td>11</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Bottle</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Lobed Flared</td>
<td>8</td>
<td>0</td>
<td>2</td>
<td>27</td>
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<tr>
<td>Neck Jar</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Mate</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Total** 21 14 7 37 79

**Red-on-Unslipped Vessels from the Banco Central collections (with catalogue numbers)**

GA-2-1487-80 shoe-shaped maté jar
GA-2-2855-85 (S.I.) maté jar; human/monkey
GA-2-2528-83 maté jar; human?
GA-3-2868-85 (S.I.) maté jar; human
GA-3-2849-85 (S.I.) maté vessel; w/small animal; incised 'ladder' patterns
GA-5-2727-84 maté jar; human?
GA-5-948-78 shoe-shaped maté jar; opossum/human
GA-7-1555-80 shoe-shaped maté jar
GA-10-1702-80 shoe-shaped maté jar; opossum
GA-165-200-76 maté jar; human/opossum
GA-SE-101-89 maté jar; opossum splayed figure (Colección Estrada)
GA-549-200-76 **lobed** maté jar; 5 opossum heads

13

GA-6-987-78 flared neck jar
GA-3-1724-80 flared neck jar; 1 opossum head; vertical red stripes
GA-26-13-75 flared neck jar; 3 opossum heads
GA-SE-1040-89 **lobed** flared neck jar; splayed opossum figure (soul catcher) (Colección Estrada)

4

GA-3-227-76 bowl w/notched rim

1

**Total: 18**

**Red-on-Unslipped Vessels from the Banco del Pacífico Collections**
04174 (La Horma) **lobed** flared neck jar; 1 opossum/man head
04178 (Chacras) **lobed** flared neck jar; 2 opossum heads
04206 (Resbalón) flared neck jar with decoration but no figure
04245 (Cerro Verde) wide-mouthed jar; 1 opossum head (paws to nose)
04219 fl neck jar; turbaned figure; red and dk brown slip on turban
5
04257 bottle with carinated shoulder; 6 opossum heads
1
353 (Manabí province); **lobed** maté jar
392 (Resbalon) human effigy maté jar; incised
2
04373 tall jar/bowl w/nubbins and carinated shoulder
1
Total: 9

**Bowls with a carinated shoulder and small opossum/man heads**
04093 bowl w/lobed body; 1 opossum head
04090 carinated bowl; 4 opossum heads with paws to nose; nubbins and incis
2
Total: 11

Total: 108 + 1 HFJ = 109

**MUSICAL INSTRUMENTS (NOT COUNTED AS VESSELS)**

GA-46-394-77 ocarina; marine snail?; (Las Chacras) **
GA-83-118-76 ocarina; skeletal with gourd turban; (Tosagua)**
GA-3-877-78 ocarina, monkey making offering; (Calderón)**
GA-120-200-76 ocarina, siamese twin monkeys **
GA-1-1982-81 ocarina, unidentifiable bird**
GA-13-812-78 ocarina; unidentifiable animal; (Sosote)**

GA-5-1122-79 rattle (S.I.) (ficha)**
GA-44-394-77 rattle (Las Chacras)**

8

**FIGURINES**

GA-1-2270-82 polished helmet w/red slip; elongated neck; modeled skirt

GA-1-1665-80 (S.I.) polished helmet w/red slip; incised fingers
GA-2-2016-81 (S.I.) incised vert lines around genitals; incised swirl on turban
GA-1-2595-84 (S.I.) incised V on helmet
GA-7-2568-83 (Río Grande) incised split on helmet; incised lines at wrists; FEMALE
GA-4-2069-81 (Miguelillo) blobby features; incised fingers
GA-1-1555-80 (S.I.) red slipped helmet FEMALE
GA-1-1848-81 (S.I.) modeled V on helmet
GA-1-1994-81 (S.I.) polished helmet
GA-2-2248-82 incised split on helmet; incised fingers and lines at wrists; FEMALE
GA-1-1961-81 (S.I.) modeled V on helmet
GA-1-1433-80 (S.I.) incised split on helmet; incised necklace; earrings
GA-2-2099-81 (S.I.) incised swirl on helmet FEMALE
GA-2-2220-82 (S.I.) incised split on helmet; incised fingers and lines at wrists; FEMALE

**Incised punctate designs on body: split headdress**
GA-2077-81 (Miguelillo) incised and punctate pattern around genitals; incised necklace; split turban w knobs; FEMALE
GA-96-200-76 modeled split on helmet; incised punctate designs on upper torso; incised design around genitals FEMALE

**Incised punctate designs on body**
GA-1-2236-82 (S.I.) earrings; smooth helmet; incised punctate pattern and hatched triangles on upper torso; incised horiz lines around genitals; MALE
GA-5-2024-81 (Calderón) incised punctate designs on upper torso; horiz lines and punctates around genitals FEMALE
GA-1-1978-81 (Junín) modeled split on helmet; incised punctate designs on upper torso; incised punctate designs around genitals; HERMAPHRODITE
GA-1-2843-85 (S.I.) smooth helmet; incised punctate designs on upper torso; incised punctate designs around genitals; MALE
GA-16-916-78 smooth helmet; horiz lines and incised punctate designs around genitals; face-painting around eyes and on cheeks FEMALE

**Large bulbous head covering which tapers down to a small, rather squashed face**
GA-4-2057-81 (El Gramal) incised vert lines around genitals; incised punctate pattern on upper torso; incised swirl on turban FEMALE
GA-1-1983-81 (Junín) hands on stomach; incised swirl on turban
GA-3-2017-81 (Rocafuerte) incised swirl on helmet; vert lines around genitals
GA-9-1969-81 (Don Juan) incised swirls around genitals; incised fingers and lines at wrists
GA-3-1983-81 (Junín) incised swirl on helmet; incised punctate design on upper torso; incised vert lines at genitals

**Hands on stomach but same as above**
GA-4-1560-80 (S.I.) hands on stomach; FEMALE
GA-1-1567-80 (S.I.) hands incised on stomach; incised swirl on turban FEMALE
GA-22-394-77 hands incised on stomach; incised swirl on turban FEMALE
GA-2-1983-81 hands incised on stomach; incised swirl on turban

**A cleanly modeled, helmet with a notch at the top: helmet is sharply delineated from the face by a smooth break**
GA-1-1286-79 (S.I.) smooth helmet; incised and slip face-paint; hatched triangles around waist and genitals and legs
GA-1-1306-79 (Don Juan) w/crossed legs; incised hatched triangles on legs; incised necklace; earrings; helmet

**Woman holding small figure (Yagé Woman)**
GA-1-1534-80 smooth helmet; punctate design on upper torso; legs crossed left over right
GA-1-2505-83 helmet with flaps; bead necklace; legs crossed left over right
GA-1-2564-83 smooth helmet; punctate design and hatched triangles on upper torso; punctate design and hatched triangles on lower legs; legs crossed left over right

**Figurine molds**
GA-1-2178-82 (S.I.) FEMALE holes in mold
GA-2-2784-85 (S.I.) FEMALE legs broken
GA-2-2196-82 (S.I.) FEMALE legs broken
GA-1-2152-82 (S.I.) FEMALE

**Figurines**
417 = (Pimpiguasi) Figurine (female); punctate design
419 = (Chacras) Figurine (female); punctate design
418 = (La Balsita) Figurine (female); punctate decoration
421 = (Chacras) Figurine (female) punctate decoration
420 = (Cerro Verde) Figurine (male) incised hatched triangles and punctate decoration
422 = (Chacras) Figurine (female) incis hatched triangles and punctate decoration

2
427 = (San Isidro) Figurine; (female) hatched rectangles; delin helmet
416 = (Junín) Figurine (female); hatched rectangles; delin helmet
423 = (Miguellillo) Figurine; delin helmet (smooth)
424 = (Resbalon) Figurine; delin helmet (smooth); hand to mouth
426 = (San Isidro) Figurine; delin helmet (smooth)
429 = (Bejuco) Figurine; double-headed; delin helmet
431 = (San Isidro) Figurine; delin notched helmet; hand to mouth
432 = (Calderon) Figurine; notched helmet; hands on knees
8
430 = Figurine; no arms
1
Total = 15

**VESSELS IN THE HERBERT F. JOHNSON MUSEUM OF ART (CORNELL UNIV) COLLECTIONS**

<table>
<thead>
<tr>
<th>Cat. #</th>
<th>Description</th>
<th>Catalog Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>#13</td>
<td>Engraved Vase; red slip with white engraving; horiz and vert lines and punctates (perhaps Tabuchila)</td>
<td>80.29.3</td>
</tr>
<tr>
<td>#17</td>
<td>Red-on-unslipped lobed shoe-shaped jar w/opossum head &amp; body</td>
<td>80.29.8</td>
</tr>
<tr>
<td>#11</td>
<td>Half-gourd bowl; red-on-white stripes on int</td>
<td>74.53.120</td>
</tr>
<tr>
<td>#12</td>
<td>Río Chico bat bowl; pink <em>irid</em> paint in lines on int</td>
<td>74.53.119</td>
</tr>
<tr>
<td>#14</td>
<td>Río Chico bat bowl; bat head and nubbins; <em>irid</em> paint in lines on int</td>
<td>74.53.85</td>
</tr>
<tr>
<td>#15</td>
<td>Fl neck jar w/modeled head of iguana and incised body</td>
<td>74.53.67</td>
</tr>
<tr>
<td>#25</td>
<td>Bahía Monster fl neck jar; 2 monster heads and 4 snakes; incised polychrome diamonds on upper body</td>
<td>74.53.131</td>
</tr>
<tr>
<td>#23</td>
<td>Double-headed hollow <em>maté</em> jar w/incis necklace</td>
<td>74.52.18</td>
</tr>
<tr>
<td>#26</td>
<td>Afflicted Man <em>wh bottle</em> w/buboes and Incised Circles w/Punctates</td>
<td>80.29.4</td>
</tr>
<tr>
<td>#27</td>
<td>Salaite style anthropomorphinc <em>wh bottle</em>; blue and yellow postfire paint; incised lines</td>
<td>74.53.8</td>
</tr>
</tbody>
</table>
MAPS
Map 1
Sites, river valleys, and provinces mentioned in the text
Map 2
The confluence of the Río Chico and Río Portoviejo showing major towns and some important archaeological sites
Map 3
Ethnographic groups mentioned in the text
Map 4.
Map of Tukano Tribes in the Vaupés Region
(After S. Hugh-Jones 1979: 20)
Map 5
Map of North Coast Peru with locations of Vicús and Cupisnique pottery styles
(After Donnan 1995: 119)
FIGURES
KEY TO VESSELS IN THE FIGURES

A simple number (e.g. 04120) designates vessels from the Norton/Perez collections in the Museo del Banco del Pacífico

GA-0-000-00 designates vessels from the Museo del Banco Central collections. (The last two numbers are the accession date of the piece.)
GA-SE-000-00 designates vessels from the Banco Central collections in the Colección Emilio Estrada
MCBQ #00 designates vessels from the Museo del Banco Central in Quito collections. These photographs are taken from the catalogue.

Cat. #000 designates vessels from the Zorach Collection in the Herbert F. Johnson Museum of Art at Cornell University (Ithaca, N.Y.) These are illustrated in the catalogue of the 1982 exhibit entitled, "Pre-Columbian Art of Ecuador" and reproduced by permission of the Herbert F. Johnson Museum.

Credits
Black and white photos with the prefix GA- were photographed by Marco Vinueza R. and printed from negatives in the Museo Arqueológico del Banco Central photography studio.

Other black and white photos of vessels are scanned from the exhibit catalogue Ancient Ecuador Culture, Clay and Creativity (Lathrap, Collier and Chandra 1975).
Photos are courtesy of the Field Museum of Natural History (Chicago, IL)
Photo Archives and are reproduced with the kind permission of Nina Cummings, Photography. These vessels are now housed in the Banco del Pacífico collections.

The drawings are my attempts to capture specific details of vessels.

One house vessel is from Al Rescate del Olvido Arqueología de la Hoya de Quito Centro Cultural Artes, Quito, Ecuador, catálogo de exposición abril 6 - mayo 13 de 1994. Vessels illustrated in the catalogue are from the private collection of Iván Cruz Cevallos.

Two Chacras style bat bowls (YLK-039 and YLK-040) are in the private collection of Yela Loffredo de Klein
Figure 1
A comparison of Valdivia long-neck bottle spouts (Staller 1994: 375, Figures 45a. and b.) and Chorrera whistling bottle spouts
Figure 2 A comparison of Valdivia carinated bottle spouts (Staller 1994: 380, Figures 48 a. and b.) and a Chorrera bottle spout
Figure 3 A seriation of whistling bottle spouts indicating also some regional variation
Figure 4 A comparison of a Valdivia constricted bowl (Stalter 1994: 364-365, Figure 41a.) and two Chorrera Red-on-Unslipped Maté Jars
Figure 5 Gourd-form lobed maté jars from San Isidro and Río Chico
Figure 6 A comparison of Machalilla and Chorrera carinated bowl forms
Figure 7 Examples of patterns on Quadrapartite Red-on-White bowls
Figure 8 A gourd-form bowl with two compartments and the 'Ladder' design on its interior. Note the two holes in the lower half where the compartments join, and the wear on the cup.
Figure 9 A comparison of a Valdivia globular everted bottle (Staller 1994: 373-374, Figure 44) and a Chorrera flared neck jar.
Figure 10 A comparison of Machalilla and Chorrera flared neck jars
Figure 11 The General Model for Tropical Forest Cosmology (After Roe 1982)
Figure 12 Two examples of the Burden Carrier depicted in different styles
Figure 13 Three examples of limepots depicting the Burden Carrier
Figure 14 Two examples of the Water-Jug Carrier
Figure 15 Two examples of Afflicted Man whistling bottles. Note the warts or buboes, rocker-stamping or punctate designs on the body, deformed limbs and sabre shins.
Figure 16 Pair of Figures with Implement on Shoulder. 
Note the facial tattoos and posture 
A. is from the Museo del Banco Central in Quito and 
B. from the Museo del Banco Central in Guayaquil
Figure 17 Two examples of the Bound personage, note that both have smooth caps but are otherwise nude
A. A shaman performing "pavungaqtug" or the "celestial rising to the moon" in which the shaman frees himself from his bonds and rises to the beyond. (After Saladin D'Anglure 1988: 98)

Figure 18 B. A dancer under the influence of yagé (After Reichel-Dolmatoff 1975: Fig. 35)
Figure 19 Two examples of the Acrobat. Both wear trusses or loincloths and elaborate jewelry.
A. has a negative resist diamond pattern on the legs.
Figure 20 Two examples of the Flute Player. Both have headdresses with long flaps, possibly indicating that they are female.
Figure 21 Three examples of anthropomorphic neckrests. C. has the Incised Punctate design on its platform.
Figure 22 Three examples of the Seated Woman with a Small Figure on her lap.  
A. has hatched triangles and punctates on chest and lower legs.  
B. has the Incised Punctate design on her chest.
Figure 23 Two examples of Female Dwarf whistling bottles. B. has headdress flaps and small horns.
Figure 24 A comparison of fer-de-lance and bushmaster snakes' facial markings with the face-paint or tattoos on the faces of male and female figurines.
Figure 25 Twin figures paddling a canoe.
Figure 26 Two examples of the Man in the Reed Boat
The facial characteristics of A. are the same as those of the Acrobat
Figure 27 Figurine depicting a person in trance with crossed legs (Museo del Banco Central Cat. #16)
Figure 28 A comparison of two photographs of shamans in yagé trance with two whistling bottles depicting persons in trance.
Figure 29 Two examples of anthropomorphic mate jars with Incised or Incised Punctate designs on them. These may also have been intended as neckrests.
Figure 30 Two examples of the Person with Tubes to his Ears, both with Zoned Incision. B. also has Incised Punctate designs on the vessel.
Fig. 31  A. An example of a "Chief on Platform" whistling bottle with Zoned Incision

B. An example of an anthropomorphic tubular jar
Figure 32 A Salaite style whistling bottle. These bottles reportedly come from the site of Salaite, Manabí and are all essentially identical except for decorative details such as Iridescent Slip and Postfire Blue/Green Paint.
Figure 33: Examples of Male and Hermaphrodite Figurines. Both examples have incised punctate designs on the torso.

A. 50.5 cm

B. 36 cm
Figure 34 An example of a figurine representing an adolescent female with Hatched Triangle design on her lower torso and legs.
Desana motifs

Phosphenes (entoptic phenomena)

Figure 35 A comparison of Desana motifs and phosphenes. (After Reichel-Dolmatoff 1975: 40) These are very similar to many of the designs on Chorrera vessels and figurines.
Figure 36 A close-up view of the Milky Way design on a figurine. This design is similar to Incised Punctate design.
Figure 37 A comparison of the Long tongued Bat (Glossophaga soricina) and a Chorrera bat bowls
Figure 38 Flower patterns on bat bowls and jar. The flowers may be either Crescentia or Datura.
Figure 39 An example of a bowl with small creatures modeled in relief at each end and an incised pattern on the interior
Figure 40 An example of an Iridescent design. This bowl is one of a pair of bat bowls, identified by the oblong shape with nubbins at each end.
Figure 41 Three examples of bat bowls from Río Chico

Herbert F. Johnson Museum (Cornell Univ.) 1982: Cat.#14

Head and wings of bat on bowl rim
Figure 42 Three examples of Río Chico bat bowls. Note the areas of red slip and similar incised decoration on the pedestal base.
Figure 43 Two examples of bowls with Negative Resist decoration
Figure 44 Chorrera squirrel monkey vessel identified by comparison with photographs of squirrel monkeys
Figure 45 Two examples of ceramics depicting woolly monkeys. The monkeys are identified by their stance on two legs supported by the tail and by their facial characteristics.
Figure 46 Two examples of woolly monkeys with amulets and collars. The amulets and collars may mark them as pets or sacred animals.
Figure 47 Identification of a Chorrera howler monkey vessel by comparison with a photograph of a Howler. Note the large ear-cowls and human-like pose of the monkey on the vessel.
Figure 48 A group of whistling bottles depicting monkeys with incised volutes on them. B, C, and D were probably made in the same workshop.
Figure 49 Two examples of depictions of skeletal monkeys. A is a vessel and B is an ocarina or whistle.
Figure 50 Two examples of whistling bottles with monkey adornos on them
Figure 51 Examples of vessels depicting quails and ducks. A, B, and E are identified as ducks because they have flat beaks, but A, B, C, and D all have similar head ruffs.
Figure 52
A. A bowl depicting a curassow. Identifying characteristics are the heavy tail, bare area around eye, head ruff and wattles on the throat.
B. A whistling bottle depicting a tinamou. Note the compact body and small, pointed beak.
Figure 53 Examples of vessels depicting large wading birds. A. may be either a Jabiru stork or a pelican.
Figure 54 Identification of a pair of maté vessels depicting birds with long curved bills and speckled markings by comparison with a photograph of a Sandpiper (Calidris mauri). The curious whorled attachments on the vessels may be marine snails.
Figure 55 Three examples of owl vessels.

C. depicts a Barn Owl, identified by its white face ruff, perched on a gadrooned gourd-shaped vessel.
Figure 56 Two vessels identified as representations of juvenile spectacled owls. Only juveniles have white plumage with a black 'mask' around the eyes. Plumage darkens as the owl matures.
Figure 57 Flared neck jar with modeled crab and incised stylized Harpy Eagle
Figure 58 Two vessels depicting parrots. A. may be a macaw, and B. a parakeet.
Figure 59 A whistling bottle depicting a woodpecker, identified by its red head ruff and position on the vessel.
Figure 60 A whistling bottle identified as a depiction of an agouti, note the rounded muzzle, large heavy hindquarters, and rounded ears. The animal on the whistling bottle grasps its nose, this gesture may have had ritual significance.
Figure 61 A pair of coati whistling bottles decorated with Iridescent Slip. The coatis are identified primarily by their long flexible snouts and small rounded ears.
Figure 62 A comparison of an adult coati being killed by a boa with a depiction of a coati howling with its striped tail wrapped around its body.
Figure 63 Gourd-shaped vessels compared with gourd-shaped vessels with coatis.
Figure 64 Three examples of vessels depicting marine and freshwater fish.
Figure 65 Examples of vessels depicting Dogs and Felines. A, B and E are dogs identified by their straight tails, C and D are felines identified by their curved tails and fangs.
Figure 66 Whistling bottle depicting copulating frogs
Figure 67 A vessel depicting a toad compared with a photograph of Bufo marinus, the marine toad. Note especially the prominent poisonous skin glands behind the eyes.
Figure 68 Two examples of bowls with small modeled snakes below the rim and Iridescent Slip.
Figure 69 A comparison of the growth of a Banisteriopsis caapi (yagé) vine and the modeling on a Polychrome Incised snake jar
Figure 70 Two examples of neckrests depicting armadillos
Figure 71 Examples of vessels depicting turtles
A. and B. are a pair. C. is probably a limepot.
Figure 72 Vessel A. is a freshwater crab, identified by its carapace and paddle-shaped posterior legs. Vessel B. is a shrimp, identified by its body shape and the spiny rostrum on its head.
Figure 73 Vessels depicting marine shell species
Figure 74 Comparison of whistling bottles depicting a lobed or segmented gourd and a palm grub which is also segmented. Note also the similarities between the spouts and bridge handles on both vessels.
Figure 75 Identification of whistling bottles depicting Lagenaria siceraria or Bottle Gourd
Figure 76 A whistling bottle decorated with Zoned Incision and Iridescent slip probably depicting a bottle gourd (Lagenaria siceraria)
Figure 77 A group of Smudged and Zoned Incised whistling bottles. These vessels were probably made in the same workshop and may have been found in the same burial.
Figure 78 Special whistling bottle "Dragon" design series
Figure 79 Identification of Half-gourd bowls as Crescentia cujete or Tree calabash
Figure 80 Identification of vessels as Cucurbita maxima or moschata
Figure 81 Gourd-shaped ceramic rattles.  
A. is probably an imitation of a winter squash (Cucurbita maxima).  
B. may be an imitation of a rattle made from either a bottle gourd or a calabash.
Figure 82 Vessels representing Triangle gourds, a variety of Cucurbita maxima. B. has a bird, probably a gull, perched on top of the gourd.
Figure 83 Identification of a representation of Cyclanthera pedata on a shoe-shaped jar.
Figure 84. A comparison of flower stalks or peduncles of various types of gourds and the spouts of gourd-shaped whistling bottles. Cucurbita maxima seems to be the closest match to the spouts of these vessels but other vessels may be C. moschata.
Figure 85
A. A gourd-shaped vessel with monkey adorno. The monkey's phallus forms the vessel's bridge handle.
B. Afflicted man with an enlarged phallus as the vessel's spout. The man's facial characteristics are similar to those of Acrobat A.
Figure 86 Vessels depicting square houses or temples with thatched and gabled roofs.
Figure 87 Vessels depicting round houses. Note that both have gourd-shaped additions on their roofs.
Figure 88 A comparison of two effigy vessels depicting the Afflicted Man and a monkey shown in the same pose, squatting, with their hands on their knees.
Figure 89
A. A reclining human figure with circles enclosing punctates, warts and sabre shins
B. A reclining monkey with negative resist pattern on the body
Figure 90 A comparison of a Valdivia Phase 6 jar and a Kogi lime gourd. The Valdivia jar has the waisted configuration of the bottle gourd and a thickened rim and lip in imitation of the lime deposit on the rim of the gourd.
Figure 91 Examples of double-lobed whistling bottles. 
A. has an adorno of a person playing panpipes, B. has a bird adorno, 
C. is anomalous in that it has modeled lobes depicting guinea pigs dancing
Figure 92 A whistling bottle with a monkey adorno and a whistle depicting a nearly identical monkey.
Figure 93 Examples of snuffing tubes, possibly used for tobacco or hallucinogenic snuff. A. is made from human bone and may depict a shaman on his stool.
Figure 94 Two pairs of vessels with similar platters or shallow pedestal bowls with an attachment. Both sets have use-wear at the bottom of the bowls or platters. These vessels may have been used to prepare hallucinogenic snuffs and/or liquids.
Figure 95 A pair of bowls depicting toads. These vessels may have been used to serve hallucinogenic liquids.
Figure 96 Various examples of miniature ceramics.
A. - I. are limepots, J. is an ocarina or whistle.
(All examples approximately life-size except for J. which is 8.7 cm long)
Quartz and agate necklace approximately 20 cm long

Figure 97 A quartz crystal necklace and the ceramic handle for an obsidian mirror. Both objects are considered to be essential shamanistic aids.
Figure 98 A gourd-shaped whistling bottle with a monkey adorno on the bridge handle compared with a sacred Kógi gourd trumpet.
Figure 99 A comparison of pedestal bowls with similar incised lines on the interior and on the pedestal base (see also colour illustrations).
Figure 100 Square Red on White Engraved Vessels from the Jama Valley

A. 15 cm

B. Detail of an engraved flaring vase with the same motif as A.

C. 14.5 cm

D. 19 cm
Figure 101 Red on White Engraved Tubular Jars from the Jama Valley
Figure 102 Two Desana Yagé Pots. The diamond pattern on the upper pot is very similar to the design on Chorrera flared neck jars with snakes on them.
Figure 103 Canelos Quichua ceramics (After Whitten and Whitten 1988)
Figure 104 Bahía Monster flared neck jar
(Acc.#74.053.131 Photograph courtesy of the Herbert F. Johnson Museum of Art)