

**ROCK ART CHRONOLOGY IN THE ORINOCO BASIN  
OF SOUTHWESTERN VENEZUELA**

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Doctor of Philosophy

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by

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## ABSTRACT

A framework for the future study of rock art in the Puerto Ayacucho area of the middle and upper Orinoco of southwestern Venezuela is based on a tentative, initial chronology of periods in the painted cave art of the area. Seven relative time periods are defined according to superpositional relations and described by technological attributes and content from a sample of 38 sites. The art is believed to cover at least 5000 years, but it has not been directly dated. Tentative associations have been made with the Archaic, late preceramic hunters-collectors, and Saladoid, Cedeñoid, Barrancoid, Arauquinoid, and Nericagua ceramic series and complexes. These associations provide tentative absolute ages for the proposed periods.

Project approach consists of locating sites, photographing the art, and gathering related cultural information from local indigenous people. Sites are more numerous and diverse than previously assumed, and the art is geographically and temporally complex. It occurs in all geographic settings and occupies a variety of site types. Various social and historical themes are identifiable, and temporal changes between styles may be due mostly to changes between populations, such as inter-ethnic pressures or replacement. Some art may be associated with early Sáliva groups (ancestors to the present Piaroa), although multi-ethnic origins and associations are obvious. This study establishes the necessary initial chronological framework for subsequent more intensive attribute analyses of content which, in turn, will explain relations between periods, help better define developmental branches in the art, and provide better explanation of proposed stylistic change within periods and between areas.

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## CHAPTER 1

# INTRODUCTION

Construction of a detailed and reliable chronological sequence is the archeologist's most important task. It is a prerequisite to the reconstruction of prehistory, to the tracing of cultural diffusion, to the study of culture change (Meggers 1968:9).

### **Purpose of the Project**

The purpose of this study is to provide a context for future study of rock art in southern Venezuela by organizing the art of a relatively small geographic area into a regional chronology of art periods. These are recognized by superpositioning and stylistically distinctive characteristics; consideration is also given to geographic differences within periods. The primary objective, then, is to recognize periods in the art and then categorize the characteristics in such a way that, (1) periods of occupation can be recognized at sites which do not contain examples of superpositioning, (2) periods form a chronological sequence representing the history of painted art in the area, (3) possible cultural information can be discerned relative to each period and changes between them, and (4) artistic content can be compared with ceramic decorations to, (a) date the art absolutely through cross dating, and (b) enhance cultural information based on a regional sequence of archeological phases by the integration of rock art data.

## **Theoretical Approach**

The study has been conducted as a data-gathering project to provide the intended chronological framework. A sample of 38 sites with painted rock art, found through nonsystematic reconnaissance of an area of the Orinoco drainage of southwestern Venezuela, serves as the basis for analysis. The effort has been inspectional in nature, and there has been no formal hypothesis testing or overriding theoretical position guiding the study. The design is inductive, and the validity of the provisional, inspectional categories must be tested with other kinds of information in other sites, with attention paid to artistic content. No absolute dating or formal pigment analyses have been done. By using a limited geographic area for this study, it was hoped that there would be few problems with geographic variation, although such variation now is recognized. In all, the present approach produces a chronology that can serve as the temporal framework for additional study.

## **Methodology**

Periods in the art are recognized, identified, and defined on the basis of superpositional context. Characteristics of the art of each period — the temporal styles — are then distinguished, differentiated, and described first, as much as possible, on technology — kind of paints and details of their application. When that fails or is redundant or nondiscriminatory, differentiation is based secondarily on content of the figures themselves — artistic form and possible referent — and personal manner of application. Thus, temporal styles are described according to temporally sensitive physical characteristics with consistent superpositional relations between them. Characteristics within periods

and differences between periods are used to suggest cultural information relative to the people responsible for the paintings.

### **Importance of Study**

The importance of the study is in the presentation of new survey data within a regional context and the description of that data in a chronological framework. The proposed chronology is the primary, integral component of a contextual, investigative framework to guide future rock art study in southern Venezuela. This initial attempt at chronological organization is part of a context to be reevaluated, augmented, and reorganized during future work.

Period styles identified here can be used to identify period affiliation of paintings in other sites through cross dating of those components. New sites thus can be integrated into a broader scheme of regional interpretation, and the absolute ages for period components is accomplished through ceramic cross-dating proposed in this study.

Chronological control is necessary for comparative rock art studies between sites. It makes possible organization of temporal variation in site function or use and recognition of geographic distributions by site, age, and function. Such an organization will provide a better understanding of the function of rock art within Orinoco societies, how ritual sites functioned within systems of integrated site types (cf. Tarble 1990a; Hartley and Vawser 1994; Hartley *et al.* 1993), ethnic origins, developmental relations of the art, and its significance or symbolism (Tarble and Scaramelli 1993a).

Rock art is important because it has the potential to provide information on prehistoric and early historic beliefs and ritual usually unavailable from

traditional archeological studies of artifacts and architecture. Rock art of the Atures and upper-middle Orinoco region could uniquely indicate, perhaps better than other media, aspects of the complex history of this cultural transitional zone. Consideration of local cultures from a regional perspective, however, must be done in diachronic context, and this study provides the initial ordering of rock art for such a context.

The extension of such a focus, of course, is the integration of rock art information with other kinds of archeological data, ethnographic detail, and distributional variation in artistic content across time and space to help provide a more inclusive historical and interpretative framework for future study. In this study aspects of archeological data are used to date the art and provide information on associated cultural systems. An attempt is made to consider various aspects of ethnographic information that pertain to rock art and related subjects. Distributional study of sites and styles will add more detail on regional use, cultural practices, and temporal change in the cultural history as a whole.

Local rock art chronology, offered here as organizational hypotheses, forms a necessary foundation for integrating rock art and rock art sites with each other and with other kinds of archeological sites and information, and for understanding the nature of that interaction. This integration of data helps define cultural systems which occupied this area. When the absolute ages of art periods and ceramic complexes are known, it is possible to place sites into a diachronic pattern of interaction, with rock art sites integrated into ceramic-based occupational sequences and placed within broader settlement system contexts.

Such data integration is necessary for consideration of aesthetics, art, and the ideology of the indigenous people who occupied the area, both in prehistoric

times and in the early historic period. Treatment of the art considers attributes of the art (motifs, styles, pigment identification), geographic parameters (number of sites, kinds, settings, accessibility), and informant information (traditional interpretations, values, paint identification and preparation, function). This information contributes to any historical synthesis of the region, past settlement patterns, past land use, archeological chronology, movement of past ethnic groups, or details of past indigenous people as possible relatives of present people — that is, the culture history of the people who occupy the area today. The results are relevant to current work by archeologists, ethnographers, and other specialists, and to worldwide debates on shamanism (for various approaches see Sujo 1975; de Valencia and Sujo 1987; Tarble 1990a; Williams 1985; and R. Delgado 1976).

Knowledge of the age and content of rock art in the study area may be applicable to study and comparison of rock art in other parts of Venezuela and surrounding areas, or to other areas of both lowland and Andean South America. There appear to be elements of chronologically sensitive technology, artistic approach, content, and specialized symbolism that are shared between the art of southern Venezuela and other parts of the continent (Dubelaar 1986b; Williams, 1985; de Valencia and Sujo 1987). Study of content and age will eventually help explain more about the related complexities between the Andes, central and northern portions of the Amazon basin, the Venezuelan *llanos*, the Orinoco basin, and the Caribbean (for an indication of future possibilities see Dubelaar 1986b and Williams 1985). In the meantime, taking one area at a time, this study begins to organize data from one small part of the Orinoco drainage.

## CHAPTER 2

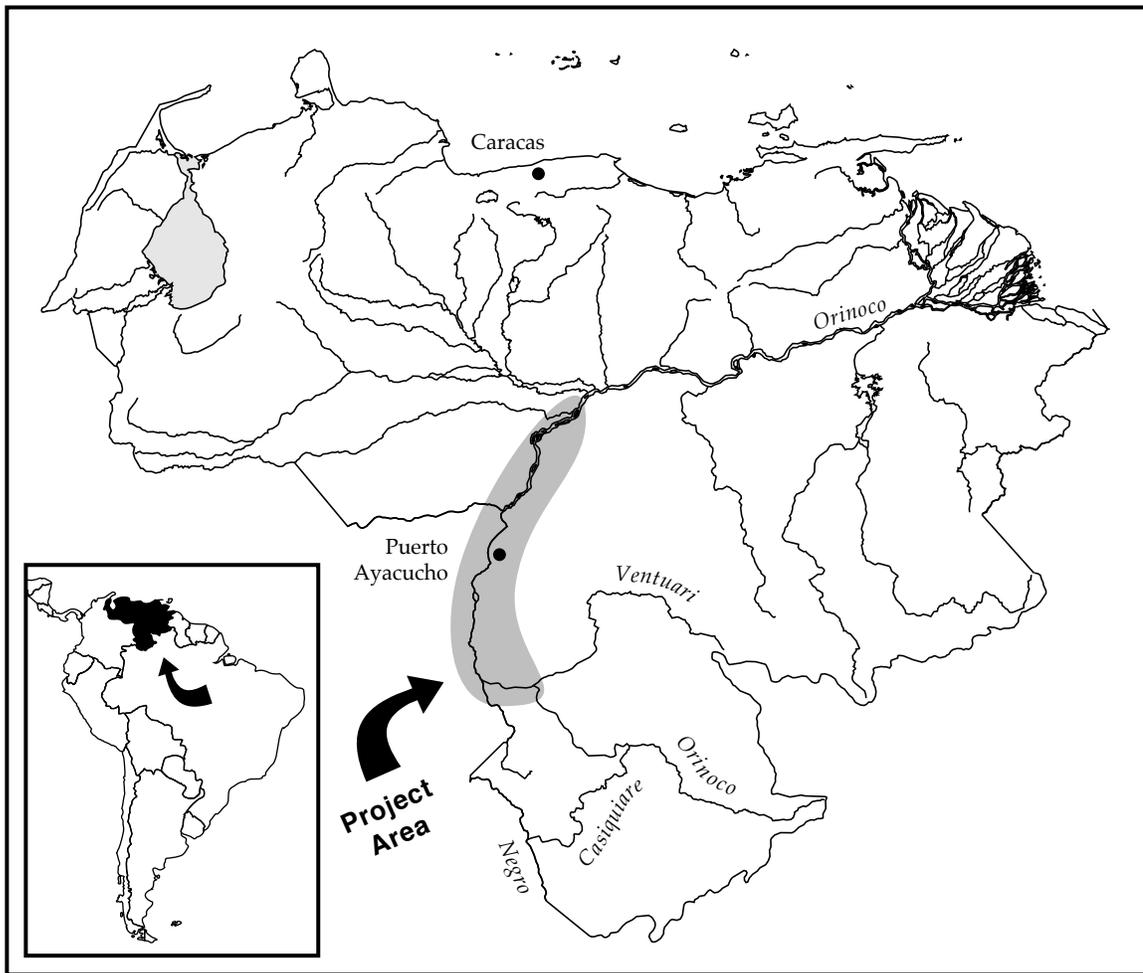
# THE STUDY AREA

The project area is in southwestern Venezuela, mostly within the Great Bend of the Orinoco river and centered on the modern town of Puerto Ayacucho (Figure 1).<sup>1</sup> The Orinoco begins in the dense tropical forests of Amazonas, in the extreme southern part of the country, and runs west and northwest to Puerto Ayacucho, where it turns north and northeast and descends across the states of Bolívar and Apure on its course to the Caribbean. The channel is mostly sandy, and sandy banks usually are lined with dense forest vegetation. Throughout the length of the river, these sandy banks and river channel are periodically interrupted by boulder concentrations and streamside bedrock exposures (*lajas*), many of which contain petroglyphs. In numerous places the channel is transformed by sets of rapids at boulder chokes and worn bedrock ledges. The major Maipures and Atures rapids at Puerto Ayacucho arbitrarily divide the upper Orinoco from the middle Orinoco (Figure 3).<sup>2</sup> The middle Orinoco, likewise, extends to Ciudad Bolívar (old Angostura), and the lower Orinoco from there to the delta.

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<sup>1</sup> See Weibezahn and Janssen-Weibezahn 1987 for a bibliography on the natural and cultural environmental setting and history of the Amazonas region of southern Venezuela.

<sup>2</sup> This is the traditional geographical division also used by archeologists. González Niño (1975) uses another natural division: upper Orinoco from Raudales Guaharibo to the Casiquiare, middle Orinoco from the Casiquiare to the Atures rapids, and the lower Orinoco to the mouth. He also points out that an even better, more natural division (relative to terrain and vegetation) would be a simple upper-lower division based on the Atures rapids at Puerto Ayacucho.



**Figure 1.** Venezuela, showing shaded project area.

The study area is within Venezuela, although sites are prolific in adjacent areas of Colombia. The study area extends from about San Fernando de Atabapo (the mouth of the Ventuari river) on the upper Orinoco to the south, to Caicara (the mouth of the Apure river) on the middle Orinoco to the north, and from the Orinoco channel east to the edge of the main highlands, for a total area of about 400 km north-south by 200 km east-west (Figure 2). Field reconnaissance has been limited mostly to the west-central portion of this zone, or a strip along the Orinoco about 250 km long and 25 km wide running from about the Suapure river in the north to the Sipapo river in the south. Other areas have also been

visited, particularly surrounding areas up the Orinoco and along major tributary rivers running up into the higher back country.

The area is an intermediate savanna-tropical forest setting, a massive ecotonal zone with extensive savannas and broken country to the north and northwest, epitomized by the extensive plains (*llanos*) along the middle Orinoco of Apure state. To the south and southeast the dense rain forests of Amazonas dominate the upper Orinoco. The immediate zone is characterized by broken country, with areas of open savanna grassland and with high canopy rain forest bordering rivers and streams and running back to the highlands and increasing to the south.

This region is essentially on the southern and western edges of the Guiana Shield, a remnant sandstone (Roraima formation) peneplain now represented by impressive uplands and high, steep-sided mesas (*tepuys*). Huge bubbly batholiths of coarse Precambrian granite, with their characteristic curved surfaces and fractured vertical walls, protrude from beneath the Shield and form the dominant exposed bedrock series in the study area. Caves and overhangs suitable for painting and habitation mostly are formed along eroded horizontal fractures in near-vertical walls of these loaf-shaped hills. Also in the area are a few exposures of a coarse sandstone material which appears to be redeposited and recemented Roraima formation sandstone (or something similar). I know of no rock art sites in this material; if such were to exist, the art probably would be eroded and in poor condition. At least one large hill appears to be silicified volcanic ash (Cerro Lugo, lower Parguaza river valley) into which tunnel-like caves are formed along vertical joints. Other more typical rockshelters and overhangs also occur here, and most of these cavities have been used as burial sites. No rock art has yet been found in this formation.

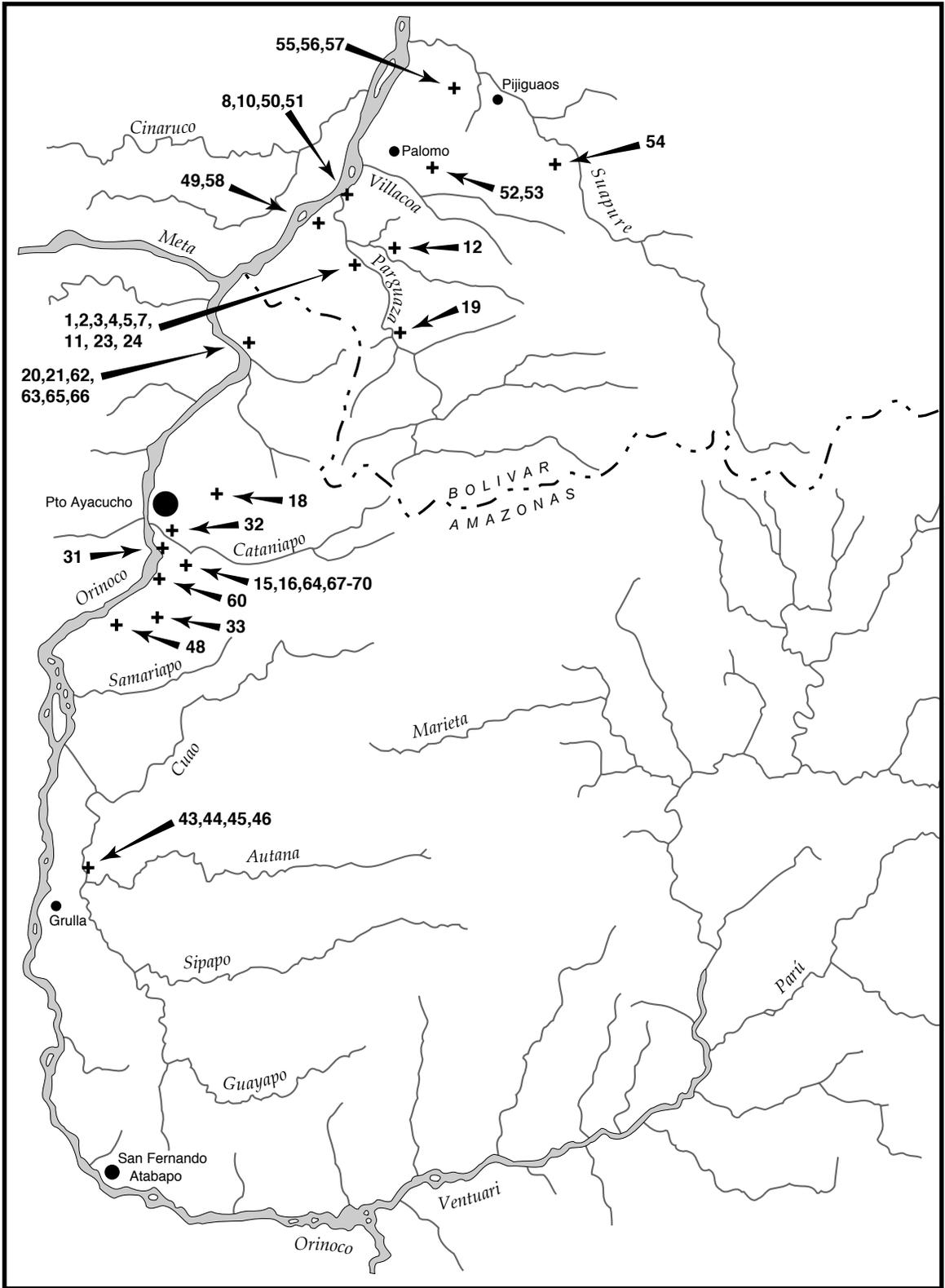
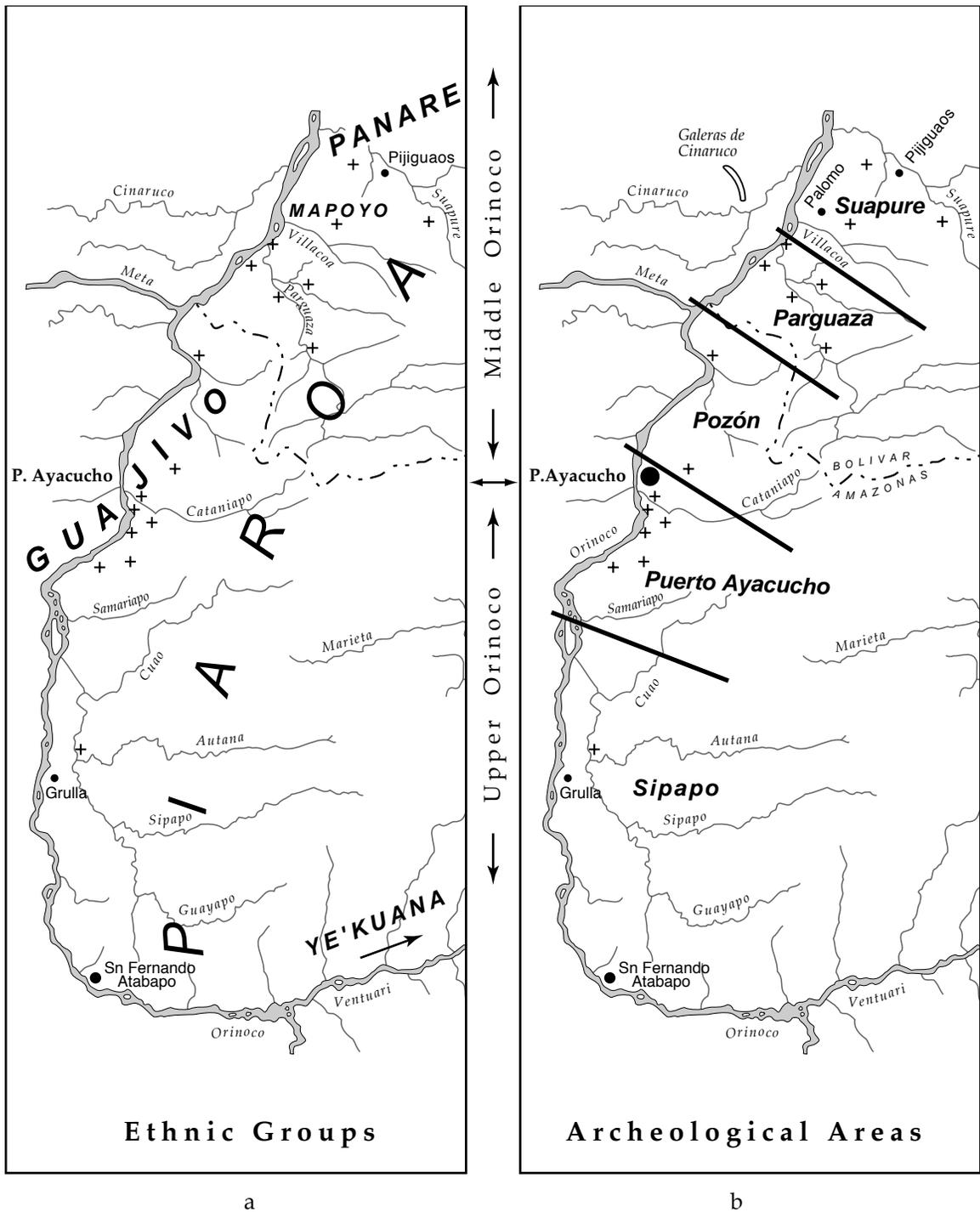


Figure 2. Detail of study area showing numbered pictograph sites.

The Orinoco valley can be thought of as a sandy flatland with scattered granite inselbergs or isolated hills, ridges, uplands, and mountains. Lowlands dominate areas along the Orinoco and its tributary rivers and creeks, while isolated granite hills and ridges are scattered across both open savanna and dense forested areas. Hills, ridges, and upland plateaus are full of various forms of caves, rockshelters, and suspended or perched boulders in all areas. The main portion of this diverse zone is mostly below about 300 m elevation (a.m.s.l.) and is covered with a mixture of savanna, dryland thorny brush, and dense tropical rain forest. Although basal deposition areas are mostly fairly flat, the area gives the general impression of a hilly zone because of the visual dominance of numerous, large granite uplifts and eroded hills, often with impressive vertical faces. Adjacent areas form the edge of the Guiana Shield, with highlands rising up to 1000-3000 m and characterized by high cliffs, waterfalls, and the *tepuy* system of scattered mesas. Between these more distant highlands is a series of foothills or piedmont zones which intergrade into the scattered granite uplifts and long prominent ridges of the study area. Rock art sites occur in all areas, from the lowest terraces to the highlands.

The main towns in the area are Caicara to the north, Puerto Ayacucho in the middle part of the zone (present state capitol; at the Apure rapids), and San Fernando de Atabapo to the south (previous territorial capitol; just above the Ventuari river). Pijiguaos is a growing mining community on the Suapure river, and smaller *criollo* and Indian communities (usually somewhat mixed) are scattered throughout the area. Throughout Amazonas there is a large and diverse indigenous ethnic population, most of whom still practice their original non-Western lifestyles (Figure 3, a; also Chapter 10).



**Figure 3.** The study area, showing present approximate locations of the main indigenous groups (a) and areas of potential geographic differences in the rock art (b).

The area is dissected by numerous rivers and tributaries which now are used as major travel routes. Lowland rivers are mostly placid, making most lowland areas accessible by boat and providing some access to the uplands. Almost all goods on the upper Orinoco, above Puerto Ayacucho, are transported by boat. Most of the Orinoco valley north of Puerto Ayacucho is at least somewhat accessible by roads, and a paved highway runs from Puerto Ayacucho downstream through Pijiguaos to Caicara and Ciudad Bolívar.

Cross-country travel in the past, during early historic times (and to some extent still today), was mostly on foot trails, due in part to problems of passing rapids on the upper rivers (Melnyk 1991; Zent 1992). Crossing inter-valley ridges usually is the fastest route between upper valley areas. Examples of this are the major trails from the upper Parguaza to the Cataniapo (and into Puerto Ayacucho), the upper Ventuari (and into Ye'kuana country), and the upper Cuao (the Piaroa heartland); or from the middle Cataniapo over the ridge to the Cuao, a day's travel on foot as opposed to longer periods by boat. Foot travel also negates the need for consideration of unnecessary aspects of material complexity or ownership. Foot travel is cheaper and more available, especially at a moment's notice, than travel by boat. Perhaps the main reason for upland foot travel is due to the shorter distance, more direct routes, and faster travel or transport time when crossing ridges from one valley to another. Anduze (1963) has pointed out that the indigenous orientation seems to be toward pedestrian travel utilizing a dense maze of trails.

Rock art is closely related to the area's geography and may reflect a difference in travel and habitation orientation. Burial caves and pictograph sites occur most commonly in upland areas or on large granite hills to small domes within the river valleys. Most pictograph sites seem to be within reasonable access to

streams, rather than being great distances back in the upper back country (although that setting has not been adequately checked). The area is dissected by numerous rivers, most of which have petroglyphs on boulders and bedrock exposures beside or within the river channel (Delgado 1976). Petroglyphs occur almost exclusively along these numerous streams, but some also are found on the exposed sides of some massive granite mountains (Vicariato 1988) and rarely in rockshelters (Tarble 1990c, 1991). The distribution of pictograph sites suggests an upland orientation, while petroglyph distribution suggests a relation with riverine use possibly by different ethnic groups.<sup>3</sup> Some possibilities for north-south differences in the painted rock art also have been noted, though not adequately described (Figure 3, b).

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<sup>3</sup> Tarble (personal communication 1991-1995) believes that pictographs and petroglyphs in the middle Orinoco are related and notes that petroglyphs occur also in caves. I believe there is no relationship between the two art forms and observe that petroglyphs rarely occur in shelters, and then only to the north. These differences of opinion represent experience in different, essentially contiguous study zones, which in turn must reflect geographic and perhaps temporal and cultural differences in the art which have not yet been studied.

## CHAPTER 3

# PREVIOUS ARCHEOLOGICAL RESEARCH

### **Previous Attention and Orientation**

Archeological research in the Orinoco basin has been dominated by various people in different parts of the basin and by some overriding theories. Although there were various early observations, stratigraphic testing programs at some of the largest sites on the middle and lower Orinoco (Petruccio 1939; Osgood and Howard 1943; Howard 1943) set up the general sequence and heavily influenced all subsequent work. Osgood and Howard's work recognized the Saladoid and Barrancoid series of ceramics and divisions within them. Some people continue to use their terms Early and Late Ronquín rather than the newer terms of Saladoid (Ronquín phase) and Arauquinoid (particularly the Camoruco phases).

Most archeological explanation for the Orinoco is based on diffusion. Cultural traits appear to have spread from one place to another, and areas of earliest dates, highest density, or greatest diversity indicate the most likely place of origin. The main point of origin for this part of the world seems to be around the mouth of the Amazon or some point on the lower river near the mouth of the Río Negro. Researchers do not suggest that late (post-preceramic) developments began in the Orinoco basin.

It is generally assumed that different cultural groups moved around spreading assemblages of material culture with them. The underlying assumption is that

changes in material remains in an area are the result of changes in the people occupying the area, or that the introduction of new methods of ceramic manufacture indicates newly immigrating groups of people.<sup>4</sup> In this area such cultural groups are linked with language families. Thus, the entry of Saladoid ceramics into the middle Orinoco was the result of early Arawakan speakers immigrating from the northern Amazon basin. The early split of Maipurán from the Arawakan parent language spawned another archeological complex, and the Maipurán separation into two groups explains the newly defined Cedeñoid ceramic series as proto-Baré speakers. Since Arauquinoid ceramics are so different and are late they are considered to be associated with early Cariban speakers.

Venezuelan archeology is dominated by Irving Rouse. His early interest in Caribbean archeology and the origin of those cultures led to his initial collaboration with Cruxent, who provided a detailed knowledge of Venezuelan archeology. Together they tested sites and organized the resulting knowledge into what today is the basic foundation for all work in this extended region (especially Cruxent and Rouse 1958, 1961; Rouse and Cruxent 1963). Their overall purpose was to organize similarities in archeological material culture into broad categories which could explain interregional relations. Always at the back of this organization was the question of who settled the Caribbean islands, when, how, and why. Thus, the various material categories were seen as representing groups of people. Relations between categories defined on the basis of ceramics were interpreted as relations between cultures, and movements of one therefore were

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<sup>4</sup> The spread of polychrome pottery may be an exception. Zucchi (1972) suggests that early polychromy may have spread in the western *llanos* as a technological trait independent of cultural affiliation. Perhaps it entered the Orinoco basin the same way.

seen as movements of the other. Again, different cultures were seen as represented by different linguistic groups.

Rouse and his colleagues and students, together with Cruxent (and Cruxent's collaboration with several people, not the least of whom were Evans and Meggers), continued to test sites and organize data on the history of the Orinoco basin and its relation with the Antilles. In the middle of this, Donald Lathrap completed his dissertation on the montaña area of Peru and provided a detailed overview of lowland-montaña area archeological cultural development. Part of this was published in 1970 as an organization of the archeology of lowland South American. Although exceptional in extent and detail, Lathrap's synthesis is an extension of Rouse's comparing of material similarities across broad expanses, assuming direct associational relations between similarities, interpreting those relations in terms of cultural identity, and defining cultures in terms of language families. Again, movements of complexes of materials indicated movements of linguistic groups, and vice versa. And movement of linguistic groups was seen as large-scale migration, not as a nuclear family or an individual trader carrying ideas from one place to another.

### **Archeological Research**

Considerable archeological work has been done along the middle and upper Orinoco, and several good summaries are available (Barse 1989; Scaramelli 1992; Roosevelt 1980; Cruxent and Rouse 1958, 1961; Rouse and Cruxent 1963; Sanoja and Vargas 1983; Oliver 1989). My comments here are oriented mainly toward information potentially pertinent to the study of painted rock art and are mainly historical and general. See **Chapter 8** for a discussion of the local ceramic chronology.

Other than minor observations of rock art, most archeological attention has been toward exploration and attempted temporal ordering of ceramics. Activities have concentrated on reconnaissance and test excavations at open sites along the Orinoco and a few of the major tributary rivers (e.g., Osgood and Howard 1943; Evans, Meggers, and Cruxent 1959). Excavations at stratified village sites have been conducted particularly on the lower Orinoco below Ciudad Bolívar, on the middle Orinoco around the mouth of the Apure river, and on the upper Orinoco around the mouth of the Ventuari. Smaller test excavations have been conducted at open sites on all parts of the Orinoco, but relatively few are published.

Although all areas have been studied to varying degrees, most work has concentrated on only a few areas and is dominated by only a few individuals and their colleagues. On the middle Orinoco, the most relevant work is that of Osgood and Howard, Rouse, Roosevelt, Zucchi, Tarble, associated students (e.g., Oliver 1989), and researchers involved in other matters (e.g., Riley and Perera). Particularly relevant on the lower Orinoco is the early work of Osgood and Howard, Rouse, and Olsen, and more recently Sanoja and Vargas and their students and associates. The upper Orinoco has received relatively minor attention although testing programs by Evans, Meggers, Cruxent, Wagner, Barse, and Zucchi have contributed enough information to begin regional synthesis.

Previous work has produced some understanding of the kinds of open sites, with main attention toward larger, more easily recognized sites in zones of relatively easy access. Most work, particularly along the middle and lower Orinoco, has resulted in conflicting versions of a tentative chronology for the region. Information on the upper part of the river is only loosely compared with the lower river sequence and seems to represent a different development (Barse 1989; Evans, Meggers, and Cruxent 1959; Zucchi 1989, 1991b).

Although the ages of various ceramic phases are in question, there is some consensus concerning the general archeological sequence. **Table 1** shows the main middle Orinoco archeological traditions with dates mainly from the Rouse-Roosevelt model of the La Gruta sequence (see **Chapter 8**).

Historic	after 1600 A.D.
Camoruco (late Arauquinoid)	600–1600 A.D.
Corozal (early Arauquinoid)	650 B.C. – 600 A.D.
Barrancoid	1000 B.C. – 400 A.D.
Saladoid	2000–650 B.C.
Preceramic	7000–2000 B.C.

**Table 1.** Summary dates for middle Orinoco sequence.

### **Rock Art Research**

Painted rock art sites and burial caves have long been known for the huge area occupied by the Piaroa (Crucent 1946, 1960; Perera and Moreno 1984; Perera 1986a; Tavera-Acosta 1956). Some aspects of the art have been discussed in the specialized literature of the area, but no intensive survey to locate and record rock art sites has been conducted in southern Venezuela. Most early comments on rock art mention only obvious petroglyph boulders along the Orinoco and tributary rivers. Painted art has not been studied in depth and nothing is known of its quantity, age, geographic or temporal variation, relation to other archeological remains (such as ceramics or other kinds of archeological sites), or its possible relation to modern indigenous peoples. It has only been in the last few years that more intensive recording and study have begun (Sujo 1975; de Valencia and Sujo 1987; Scaramelli 1992; Colantoni and Delgado 1992), and only recently the quantity and complexity of the painted art have begun to be understood. There have been a few initial attempts to organize the art and

recognize some aspects of its variation (Tarble 1991; Tarble and Scaramelli 1993b; Novoa 1985). Several other researchers (mostly Universidad Central de Venezuela [UCV] students from Caracas) visit the area sporadically, and my project is intended to assist their studies. Students under the guidance of Kay Tarble, in Caracas, continue to work on rock art and related aspects of archeology and ethnography (Tarble 1990c; Fernández and Gassón 1993), and Franz Scaramelli is pursuing detailed study of two important sites near the lower Parguaza, following his interpretive work on the middle Orinoco just to the north (Scaramelli 1992, 1993).

Looking at rock art research in historical perspective, the existence of art in this area has been noted for over 200 years (see syntheses by Sujo 1975; Scaramelli 1992; Perera 1986a; Novoa 1985). Sites and figures were mentioned during the XVIII century by early missionaries either stationed within or passing through the Orinoco country (Gilij 1965; Gumilla 1944; Bueno 1965; summarized in Perera 1992 and Zent 1992). Diaries and descriptions by explorers passing along the Orinoco in the early 1800's introduced sites and native peoples to the Western scientific and geographic community (Humboldt 1821, 1956). For instance, burials and rock art at Atarupe (JG-31) near Puerto Ayacucho were first discussed by Humboldt in 1800 and were revisited by several people thereafter (Perera 1986a; Tavera-Acosta 1927). Exploration throughout the XIX century and into the early XX century resulted in several discussions of the sites, rock art, and cave burials (Chaffanjon 1986; Crevaux 1988; Marcano 1971; Koch-Grünberg 1907; Labesse d'Angers 1904; Matos 1912). Early reports by some Venezuelan residents also mention the art, particularly petroglyphs along the rivers (Tavera-Acosta 1907, 1927). These early reports have little useful information on paintings

except to point out that they were not done by modern groups and instead seem to be attributable to earlier people.

The mid-XX century saw a dramatic increase in scientific work in the area, and archeologists concentrated their attention on ceramic sequences (Cruxent and Rouse 1958, 1961; Rouse and Cruxent 1963). Rock art papers became progressively more detailed, and there were some attempts to place the art into limited archeological, ethnographic, or interpretive context (Tavera-Acosta 1956; Acosta 1956, 1961, 1980; Padilla 1956). The main introduction to pictographs occurred during the late 1940's and 1950's (von der Osten 1946; Cruxent 1946, 1960).

During the 1950's and beyond there was generally a decrease in scientific attention to petroglyphs despite an increase in expeditions to the upper Orinoco. Most papers mention and briefly describe selected petroglyphs along waterways as do earlier publications (Cruxent 1947; Cruxent and Kamen-Kaye 1949; Grelier 1953, 1955, 1957b; Gheerbrant 1955).

Since the 1950's there has been increased attention toward painted art, not just in the Puerto Ayacucho area but also further down the Orinoco (Sanoja and Vargas 1970; Sanoja 1977) and in nearby areas of Colombia (Reichel-Dolmatoff 1971, 1975). In the last few decades more detailed rock art studies by specialists have become common, in concert with a general increase in local ethnographic and archeological work. Efforts by the Sociedad Venezolana de Espeleología (Perera, Moreno, Scaramelli, Galán, and others) have contributed to the survey and recording of painted rockshelters. Information on many painted sites has been published in the Society's bulletin (of particular relevance, see Perera 1971, 1972, 1974, 1983a, 1983b, 1986a, 1986b, 1988a, 1988b, 1991; Perera and Moreno

1984). Other studies have provided descriptions of sites and the art, and in some cases comparative discussions (Novoa 1985; Delgado 1976). A synthesis of previous work by the late Roberto Colantoni, a professional photographer and writer, is being prepared (Colantoni and Delgado 1992). Colantoni died in the field early in 1992 while photographing perhaps the most important painted cave in the area (site JG-58), at that time unreported and unvisited by professional archeologists.

The best information in recent years began with Sujo's inventory and synthesis studies, including an early application of computer aided numerical taxonomy to rock art (Sujo 1975, 1976, 1978; de Valencia and Sujo 1987). Similar regional overviews for northeastern South America have included Venezuelan petroglyphs and have attempted to view rock art in a regional perspective (Dubelaar 1986a, 1986b; Williams 1985). The usefulness of these regional studies should be strengthened when more local work is done.

Such detailed work has begun and is being continued with Tarble and Scaramelli's work of dating the art and placing it into overall geographic and cultural contexts (Tarble 1990a, 1990b, 1990c, 1991, 1993; Tarble and Scaramelli 1993b; Scaramelli 1992, 1993; Scaramelli and Tarble 1993). The most useful discussions have been by Scaramelli (1992) who reports archeological reconnaissance and rock art recording on the middle Orinoco as part of an ongoing large, multi-dimensional regional project directed by Kay Tarble of the Universidad Central de Venezuela in Caracas. My work is meant to complement the above studies by adding information from local Indian informants, a provisional sequence of art styles, and suggested cultural contexts for these styles (Greer 1993, 1994, 1995). At the same time, more intensive treatment of

petroglyphs is becoming common, some with detailed recording and comparative studies (Rivas 1993).

### **Synthesis and Needs**

The archeological framework, and especially the ceramic sequence, is only partially defined and understood for the middle and upper Orinoco. Several versions of a tentative chronology, the basis for which was suggested nearly 50 years ago, are still being discussed. White-on-red painted decorations are present on early Saladoid ceramics, presumably introduced sometime between 2000 and 650 B.C., while early incised designs on Barrancoid ceramics with Formative curvilinear characteristics also appear early, possibly by 1000 B.C. (see Sanoja 1979). Lathrap and Oliver (1987) suggest that black-red-on-white ceramics may date around 4000 B.C. It is not clear what the antecedents for these styles are, where they originated, or what their related ideology and possible associated rock art might be. These and later ceramics progress through a sequence of ceramic series (or general wares) which overlap in time, decoration, and geographic range. However, stylistically sensitive categories have not been defined in enough detail to determine how these vary in age, geographic range, cultural association, and social function. Some researchers (e.g., Tarble) continue to focus on comparisons between rock art and other aspects of material cultural (such as roller stamp designs and pottery decoration) within broadly defined and dated ceramic series, mostly treated as periods, in an attempt to date the art and place it within a larger cultural context. Petroglyphs are being considered as well as pictographs.

Previous rock art research and related observations mostly have provided drawings of individual petroglyphs and minimal information on site locations.

Petroglyphs are common on boulders in and beside the Orinoco and major rivers, and large panels of massive figures occur on a few openly exposed, near vertical sides of prominent granite domes south of Puerto Ayacucho. The ubiquity of petroglyphs throughout this area is well known, and figures have been mentioned or discussed to various degrees. Although most sites have not been studied in detail, the current focus on rock art is providing a milieu in which such studies are undoubtedly forthcoming.

Petroglyphs occur primarily in the two contexts mentioned above. Engravings of many motifs occur on boulders and sloping bedrock along the major rivers, often within the channel itself. Some figures are permanently below water level, but it is not clear whether they were originally produced below water or if the relative position of the water level and the petroglyphs has changed since the figures were made. The orientation here is clearly toward the river, and most commonly (though not always) figures appear in the context of rapids or fast moving water. It is generally believed that figures relate to mythology, or mythological beings within an oral tradition. It is not clear how modern interpretation of these figures within an existing oral tradition equates with the original intent of the people who produced them. It is not believed that petroglyphs relate to the designation of territorial boundaries, constitute pictorial histories or biographic art, or serve as power symbols or enhancements in procurement of fish or aquatic animals (such as manatee, porpoise, giant otter, caiman, turtles). The figures clearly are public art to be viewed from the river. For the most part, the relation between these petroglyphs and the painted cave art is unknown, but even though there is some minor overlap between motifs (especially the outlined cross and stick humans), the two art systems do not

appear to be related, at least not south of the Suapure. Of course, future study could change this view.

The other petroglyph format or setting also is clearly public. Giant figures are etched high into granite hillsides by pounding away the black lichen-coated surface to expose the lighter interior stone. Some panels are complex, and all are composed of multiple figures. However, they can hardly be called carefully planned, and figures do not seem to be especially arranged into integrated panels. Such panels may exceed 30 meters across and generally are visible from a great distance. About four or five of these panels are known; all are just south of Puerto Ayacucho and on both sides of the Orinoco. Although their age is unknown, there is a striking similarity between these petroglyph forms and some painted figures in the same area. Those small black paintings date from my Period 6, probably very late prehistoric or protohistoric in age. The purpose of the massive panels is unknown, but they appear to refer to mythology, particularly the anaconda power being associated with deep water, and possibly to various aspects of shaman activity such as acquisition or attainment of the various levels of knowledge or consciousness during a shaman's lifetime.

Pictographs also have been discussed in the past, but no detailed regional work has been offered. No publication describing the painted art at any single site has been attempted, although it seems that some unpublished detailed recording was done at Cueva de El Elefante (Sanoja and Vargas 1970) and some of Scaramelli's sites on the middle Orinoco (Scaramelli 1992). From previous work we know of several site locations, although most are only briefly mentioned and some are only alluded to in publications on other subjects. These publications indicate the existence of painted art, but the amount and diversity were never clear and only now have been realized by revisiting the sites and

talking to people in the field. Previous work for the most part has alerted us to the need for more comprehensive inventory and the potential information to be gained through additional recording and study. My project is the first attempt to organize the art into a temporal framework and to relate that framework provisionally to the established ceramic chronology of the area.

## CHAPTER 4

# DATA COLLECTION

### Fieldwork

This dissertation study is considered part of an ongoing project and long-term interest in the rock art of southern Venezuela. I have conducted all fieldwork and associated research, with occasional field assistance from interested persons and students from the United States and Venezuela. Periodic fieldwork 1990-1995 involved a total of two months around Puerto Ayacucho and six additional months in other areas. Field observations were recorded as notes and photographs. Recorded information included sketch maps, sketches of the art, written observations, information from informants, and color slides. Due to field conditions, there was little consistency in the kind or degree of recording. DCN topographic maps of the División de Cartografía Nacional were used during fieldwork and for plotting site locations. All notes, photographs, and maps are in the possession of the author, presently in Casper, Wyoming.

Reconnaissance involves wide range geographic survey based almost entirely on the use of local key informants and local guides.<sup>5</sup> Most work is conducted in Spanish, with English secondarily used with some assistants and students. Bilingualism is common with most native informants, and a translator is always available when explanations are given in an indigenous language (e.g., Piaroa).

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<sup>5</sup> This strategy has been described and evaluated by MacNeish (1978).

Sites are usually visited with guides, and there is emphasis away from pedestrian *exploration* (aimless searching). Most sites are known to local hunters and foragers and rural residents, and thereby also to other people knowledgeable of local geography. Many sites are still used today as cemeteries by native communities. Limited aerial reconnaissance is used in remote areas and for noting locational relations and geographical similarities between sites.

There is no formal reconnaissance design and, for the most part, areas are visited when sites are reported and as time allows. When an area is entered, there is an attempt to visit as many sites as practical in that area before moving. This results in clusters of sites (such as the El Carmen area on the Parguaza and the Cerro Pintado area south of Puerto Ayacucho) which gives a false impression of distribution. There presently is a back-log of over a hundred sites reported to me in one form or another in most intervening areas, but which I have not visited due to lack of time or local permission. The project thus involves unstructured limited reconnaissance, with no intensive survey.

The initial inventory is intended to determine what information exists — the number of available sites and their locations. In southern Venezuela this activity is laced with problems and is anything but simple. Locations are difficult to find and often are even more difficult to visit. In the field it is necessary to establish contact with people who are familiar with the sites and who control the local area. Given that these places are often considered sacred, and many locations continue to be used as cemeteries, it is necessary to treat the site, the paintings, and the remains with respect. Recording in caves mostly is limited to noting details of the motifs, recording information on the superposition of figures, and photographing the art. Caves fall under a complex system of ownership and control, and access to most sites is variably restricted and in many areas is

denied. Recording time and activities — such as drawing and photography — also may be restricted, both absolutely and in time allowed. These controls affect available information in site distribution and content.

### The Sample

Thirty-eight sites with painted rock art were recorded before January 1995 and now form the primary data set for the study — 23 sites in the state of Bolívar, 15 in Amazonas (Table 2). Several more have been recorded since that time.<sup>6</sup> An estimated additional 100+ sites are known from various sources, including those seen from a distance and those discussed with various informants. Besides painted caves, hundreds of petroglyph sites occur along the rivers. Numerous painted (and unpainted) caves and boulder overhangs have been used (and still are in use today) as burial sites or more formal cemeteries, although there is no obvious relation between burials and paintings.

An effort has been made to do a low-level recording of as much art as possible, with the goal of defining a chronological framework upon which future, more intensive work could be based. The sample is adequate for this task. Information on the quantity of rock art in the area and the degree to which it has been recorded is incomplete. There has been no estimate made of the total number of figures although there is a range of only a few figures at the smallest sites, probably 100-1000 figures at middle-size sites, to probably over 10,000 in the

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<sup>6</sup> During a trip in January 1995 nine more painted caves were recorded (as well as several burial caves and petroglyphs) in the Pozón-La Vaca area north of Puerto Ayacucho and the Cerro Pintado area just south of town. I also received information on at least 15 new painted caves not yet recorded. One of these is a cave whose ceiling is reported to be covered with painted depictions of guanacos, high in the Sierra Neblina area in the southern part of Amazonas, about 5-6 days climb from the nearest boat landing (Figure 5).

largest shelters (e.g., Iglesias, JG-11). Rock surface varies from a meter or two of painted wall space to hundreds of square meters of painted wall and ceiling.

An effort has been made to photograph all of the art on 35 mm color slide film using standard techniques with available light and occasionally single flash. No special photographic techniques have been possible, such as use of multiple strobes, polarizing filters on flash units, special color filters on camera and flash, night photography, infrared or ultraviolet lighting sources, wetting painted surfaces (no longer an approved technique), or long-exposure time photography. Photographic coverage is incomplete at several sites due to time constraints and restrictions imposed by native guides and local Indian residents. In nearly all sites, there is incomplete coverage of individual figures, and in some sites (e.g., JG-11, JG-19) large portions of painted wall and ceiling (estimated up to hundreds of square meters) were not photographed or even closely viewed. Brief sketches have been made of selected figures, both in the field and from color slides. It is roughly estimated that, overall, perhaps 80 percent of visited art has been photographed (quality of the 4000+ slides is highly variable), and less than one percent has been drawn. Analysis information comes from field observations, field drawings, observations from color slides, and drawings and tracings from color slides.

The following sections summarize some site information. Descriptions of individual sites, their content, and their contribution to the study are presented in the **Appendix**.

### **Kinds of Sites**

Pictographs occur on boulders, rock faces, and small to large rockshelters; within all topographic zones, from areas next to the Orinoco and tributary rivers

to areas well up into the highlands; and in all topographic settings within those zones. Most sites are small, less than 15 meters wide. Some, however, are larger and may range to over 250 meters long. The following general categories describe the kinds of rock features with which pictographs are associated.

### **Rockshelters**

Natural concavities occur on hillside faces of granite uplifts and usually are formed along zone intersections similar to bedding planes. These protected areas vary from shallow overhangs to deep cave-like rooms and range in size from a few meters to over 250 meters long. Enlarged horizontal cracks usually form into low, deep, flat-ceiling rooms. Usually there are no associated cultural deposits, but a few shelters do contain thinly scattered to deep deposits indicating occasional use as habitation sites. Cultural deposits are always accompanied by grinding facets on exposed floor bedrock or large boulders under the overhang. Paintings occur on vertical and sloping walls, on the ceiling (usually lower areas below vertical faces), and on protected boulders within the overhang area. Sites are arbitrarily categorized by size ([Table 3](#)) according to the following general limits: **small rockshelters** (1-10 meters), **medium rockshelters** (11-40 meters), **large rockshelters** (more than 40 meters). Of the six large shelters, most are about 50-100 meters long; Cueva Iglesias (JG-11) is estimated at more than 250 meters.

**Table 2.** Sites by period and presence of human remains. ✓ = best guess age; ? = other possible age (seemingly lower probability); ● = burials present. □ = Period 7, represented only at JG-52.

Period		1	2	3	4	5	6	Burials
<b>Bolívar</b>								
JG-01	Cerro Iguanitas 1	✓	✓	✓	✓	?		●
JG-02	Cerro Iguanitas 2	?	✓	✓		?		
JG-03	Cerro Iguanitas 3				✓	✓		
JG-04	Cerro Muertos 1		✓		✓			●
JG-05	Cerro Muertos 2			✓	✓		✓	●
JG-07	Cerro Muertos 3				✓			
JG-08	Laja Parguaza 1		?	✓	✓		✓	●
JG-10	Laja Parguaza 4				✓			
JG-11	Cueva Iglesias		?	✓	✓	?	✓	●
JG-12	Cueva Caño Ore		?		✓		✓	●
JG-19	Idora Santa Fe				✓			●
JG-23	Cerro Mohetico 1				✓			●
JG-24	Cerro Mohetico 2		✓					
JG-49	Cerro Gavilán 2			?	✓	?	✓	bones
JG-50	Laja Parguaza 2		✓					
JG-51	Cerro Secreto 1		✓					
JG-52	Cueva Pintada				✓	✓	✓ □	
JG-53	Cuevita Pintada		✓					
JG-54	Idora Punta Brava				✓		✓	●
JG-55	Cerro Morrocoy 1				✓			
JG-56	Cerro Morrocoy 2				✓			
JG-57	Cerro Morrocoy 3				✓			
JG-58	Cerro Gavilán 1		✓	✓	✓	✓	✓	●
<b>Amazonas</b>								
JG-15	Cerro Pintado 1	?	?		✓	?	✓	
JG-16	Cerro Pintado 2	?	?		?			
JG-18	Carinagua 1	✓	?		✓	?		?
JG-20	Cueva Pozón		?		?			
JG-21	Cerro La Vaca 1	✓	✓		✓	?		bones
JG-31	Cueva Ataruipe	?	✓		✓	✓	✓	●
JG-32	Cueva Cataniapo			?	?	?	✓	●
JG-33	Cueva Coromoto		?		✓			
JG-43	Laja Tinaja 1		✓					●
JG-44	Laja Tinaja 2		✓					●
JG-45	Laja Tinaja 3		✓					●
JG-46	Cerro Pelota		✓					●
JG-47	Cerro Pintado 5						✓	
JG-48	Cerro Tigrito		✓					
JG-60	Piedra Tiburón		?		✓			
<b>subtotal ✓</b>		3	15	6	24	4	12	= 64
<b>subtotal ?</b>		4	9	2	3	8	0	= 26
<b>TOTAL</b>		7	24	8	27	12	12	= 90

**Table 3.** Sites by category.

State	No.	Name	small shelter	medium shelter	large shelter	perched boulder	boulder shelter
Bo	01	Cerro Iguanitas 1		●			
Bo	02	Cerro Iguanitas 2		●			
Bo	03	Cerro Iguanitas 3		●			
Bo	04	Cerro Muertos 1					●
Bo	05	Cerro Muertos 2		●			
Bo	07	Cerro Muertos 3				●	
Bo	08	Laja Parguaza 1		●			
Bo	10	Laja Parguaza 4	●				
Bo	11	Cueva Iglesias			●		
Bo	12	Cueva Caño Ore		●			
Am	15	Cerro Pintado 1				●	
Am	16	Cerro Pintado 2					●
Am	18	Alta Carinagua		●			
Bo	19	Idora Santa Fe			●		
Am	20	Cueva Pozón				●	
Am	21	Cerro La Vaca 1			●		
Bo	23	Cerro Mohetico 1		●			
Bo	24	Cerro Mohetico 2	●				
Am	31	Cueva Ataruipe			●		
Am	32	Cueva Cataniapo				●	
Am	33	Cueva Coromoto				●	
Am	43	Laja Tinaja 1				●	
Am	44	Laja Tinaja 2				●	
Am	45	Laja Tinaja 3				●	
Am	46	Cerro Pelota 1				●	
Am	47	Cerro Pintado 5		●			
Am	48	Cerro Tigrito 1				●	
Bo	49	Cerro Gavilán 2			●		
Bo	50	Laja Parguaza 2					●
Bo	51	Cerro Secreto 1				●	
Bo	52	Cueva Pintada					●
Bo	53	Cuevita Pintada					●
Bo	54	Idora Punta Brava		●			
Bo	55	Cerro Morrocroy 1					●
Bo	56	Cerro Morrocroy 2					●
Bo	57	Cerro Morrocroy 3					●
Bo	58	Cerro Gavilán 1			●		
Am	60	Piedra Tiburón					●

### **Boulder Shelters**

Overhangs occur under the edges of isolated to clustered boulders but are formed on the faces of individual rocks. They occur in all areas, and again there is substantial diversity in size and shape. Paintings can occur on any protected vertical or overhanging surface of the boulder, or on the ceiling of deep concavities or cave-like rooms.

### **Perched Boulders**

This is a special kind of boulder shelter that occurs as huge blocks perched on top of a large bedrock exposure (*laja*), hillside, or hilltop — sometimes in direct contact with bedrock and sometimes sitting on top of support rocks above the exposure. They are most often characterized by prominently projecting overhangs with distinct ceilings and are recognizable from a distance. Shelters are often in high hillside locations with distant views from the site. Such boulders are commonly painted, with figures most often covering the ceiling and also occurring on protected areas of the floor and adjacent ledges.

### **Boulder Caves**

Somewhat open to almost totally enclosed rooms are formed by contiguous, often enormous clustered boulders mostly on the lower slopes of steep hillsides. Rooms range in size from a couple of meters to over 30 meters across. Hundreds of such rooms occur throughout the territory, many with smooth stable walls, but they are almost never painted.

## General Site Information

Minimal individual site information is provided here. Other than discussions of pictographs and superpositioning, most details are peripheral to this study and are included for interested persons for whom the information might be useful. No attempt is made for completeness in any category, such as previously published references to a site or all observations made during field visits regarding site setting, physical attributes, cultural contents, or details of the rock art. Details on each site, its art, and superpositional relations are presented in the **Appendix** (also **Tables 1-5**).

### Site Names

There is no standard site registry system in Venezuela, and site renaming by different researchers over the years has resulted in numerous designations, some of which are visitor specific (**Table 4**). In some cases the local name has been used, or slightly modified. This has resulted in local indigenous terms and Spanish equivalents for such words as *cave*, *rockshelter*, *stone house*, *old house*, and *cemetery cave* (Piaroa *idora*). The name may be modified, as in this study, by attaching the name of the adjacent village, as with Idora de Santa Fe (JG-19) or Idora de Punta Brava (JG-54). Some caves were initially named according to visit-specific reference, such as Cueva del Golpe (JG-51, in which the local guide hit his head when first entering the shelter), Cueva de las Abispas (JG-14, at which all members of the visiting party were stung by aggressive wasps — not a unique experience), or Cueva de Luís (JG-10, which was found by that particular guide). Such sites have been renamed herein with geographical referents.

Many sites have been renamed in this study in an effort to standardize site nomenclature and alleviate present and potential future confusion in the

literature. Most have been named after the hill or rock on which they occur, and using the primary local Spanish name when no name is included on published maps. Sites for each such hill are numbered consecutively, such as Cerro Morrocoy 1, 2, 3, etc.

In the redesignation of sites, Cueva Boulton (JG-8), also known as Cueva Santos and several other names, is renamed Laja Parguaza 1 (after the name of the hill as shown on the topographic map). Likewise, JG-50 is renamed Laja Parguaza 2, a nearby burial cave is Laja Parguaza 3, JG-10 is Laja Parguaza 4, and so on. The various names for the Parguaza El Carmen area sites are similarly named by hill as the Cerro Muertos and Cerro Iguanitas series. Sites like Susudé Inava (Cerro Iguanitas 1, JG-1) and Cementerio Piaroa (Cerro Muertos 1, JG-4), however, are so well known in the literature that the new name initially will not be widely used. As more sites are recorded on each hill, it is a simple matter to expand the system, such as with Cerro Pintado, which now has 13 numbered sites, or Cerro Maraca/Guaca at Santa Fe, where numerous additional unrecorded sites are known to exist. This system has been used effectively and simply by Tarble in her work in the Pijiguaos area, such as with her Cerro Morrocoy sites (JG-55, 56, 57). As always, however, communication regarding any particular site may be best served by alternate names.

Problems of site nomenclature are anticipated for the future, especially for sites which have not been named according to geographic referents. For instance, sites in the Palomo area include Cueva Pintada and Cuevita Pintada (nonlocal names published for 50 years) as well as several burial caves with diverse and mostly nonlocal names. These eventually could be renamed as Palomo 1, 2, etc. In other cases, a local informant may suggest a name for a cave, but the name may not be historical or known by other members of the community, such as the

cases for such sites as Susudé Inava (JG-1, Piaroa for “house of stone” according to Cruxent 1946; presumably a local Piaroa word for “rockshelter”) and Caviroboto (JG-33, Guahibo for “ancient house,” Novoa 1985). Indian residents in both areas have told me that these names are never used for these sites. An effort should be made to use names published on current topographic maps unless local residents agree that those names are in error and suggest an alternative — such as the local (and map) names for Cerro Gavilán (map Iguanitas) near the mouth of the Parguaza, and Cerro Maraca (map La Guaca) near the Parguaza village of Santa Fe.

**Table 4.** Site names and sources. Primary site name is listed first, in bold type, followed by secondary names (the main previously published names also are in bold type). Sites mostly are named after geographic features (hills, streams, bedrock exposures) or cultural location. Some published names have become well established in the literature and general archeological use, such as Casa de Piedra (JG-1) and Cueva Pintada J(G-52). See the **Appendix** for variants to these names.

	<b>Names</b>	<b>Source</b>
<b>Bolívar</b>		
JG-01	<p><b>Cerro Iguanitas 1</b></p> <p>= Casa de Piedra Sur = <b>Casa de Piedra</b></p> <p>= <b>Susudé Inava</b> = Tiger Cave = <b>El Carmen</b></p>	<p>New name (Greer), after name of hill from Cruxent. Previously published under several other names. Southern of the two contiguous rockshelters. Greer; southern shelter of Cruxent’s site. Cruxent 1946 (translated from Piaroa); Perera and Moreno 1984 (includes both northern and southern shelters). Cruxent 1946; Piaroa for “casa de piedra”. Milliken; some Puerto Ayacucho guides various.</p>
JG-02	<p><b>Cerro Iguanitas 2</b></p> <p>= Casa de Piedra Norte</p> <p>= (other names same as JG-01)</p>	<p>New name (Greer). See JG-01 above; southern of the two contiguous shelters. Greer; this is the northern shelter of Cruxent’s site. (references same as JG-01).</p>
JG-03	<p><b>Cerro Iguanitas 3</b> = <b>Cueva Iguanitas</b></p>	<p>New name (Greer). Greer (previous name).</p>

(continued)

Table 4 (page 2)

	Names	Source
<b>Bolívar</b>		
JG-04	<b>Cerro Muertos 1</b> = <b>Cementerio Piaroa</b> = Cueva Cementerio Piaroa de El Carmen = Mountain of the Dead	New name (Greer), after local name of hill. Perera 1983b; name is widely used. Scaramelli 1992.  Milliken; after the local name for the hill.
JG-05	<b>Cerro Muertos 2</b> = El Carmen 3 = Cave of the New Burials	New name (Greer). Scaramelli 1992. Milliken.
JG-07	<b>Cerro Muertos 3</b> = Sitio El Carmen 2 = Roca Arriba	New name (Greer). Scaramelli 1992. Greer; previous name still on some notes.
JG-08	<b>Laja Parguaza 1</b> = <b>Cueva Boulton</b>  = Cueva del Santo (or Santo 1)  = Red Cave	New name (Greer); map name for hill. Cruxent and Rouse 1958; named after geographer who was at the site with Cruxent. Scaramelli 1992; after previous local name for the hill. Milliken; some local guides.
JG-10	<b>Laja Parguaza 4</b> = Cueva de Luís = Cueva de la Tinaja	New name (Greer). Greer; previous name still in some notes. "
JG-11	<b>Cueva Iglesias</b> = Cueva del Cerro de las Iglesias  = Cueva Iglesia = Mapoyo Cave	Greer; local name. Perera 1988a; de Valencia and Sujo Volsky 1987. Scaramelli 1992. Milliken; some local guides.
JG-12	<b>Cueva del Caño Ore</b> = Cueva del Chamán = White Shaman Cave	Scaramelli 1992. Puerto Ayacucho guides. Milliken.
JG-19	<b>Idora de Santa Fe</b>	New name (Greer); no local name. Hill is Cerro Guaca (map) or C. Maraca (local).
JG-23	<b>Cerro Mohetico 1</b>	New name (Greer); local name for hill.
JG-24	<b>Cerro Mohetico 2</b>	New name (Greer); local name for hill.
JG-49	<b>Cerro Gavilán 2</b> = Cueva Gavilán	New name (Greer); no local name. Greer; temporary name from local rancher.
JG-50	<b>Laja Parguaza 2</b> = Cueva 2 del Santo	New name (Greer). Scaramelli 1992.
JG-51	<b>Cerro Secreto 1</b> = Cueva del Golpe = Castillos 1	New name (Greer); after hill. Greer; previous name still on some notes. "
JG-52	<b>Cueva Pintada</b>	von der Osten 1946, and subsequent refs.
JG-53	<b>Cuevita Pintada</b>	von der Osten 1946, and subsequent refs.
JG-54	<b>Idora de Punta Brava</b>	New name (Greer).

(continued)

**Table 4** (page 3)

	<b>Names</b>	<b>Source</b>
<b>Bolívar</b>		
JG-55	<b>Cerro Morrocoy 1</b>	Greer, after Tarble 1990b, her site BO-12
JG-56	<b>Cerro Morrocoy 2</b>	Greer, after Tarble 1990b, her site BO-12
JG-57	<b>Cerro Morrocoy 3</b>	Greer, after Tarble 1990b, her site BO-12
JG-58	<b>Cerro Gavilán 1</b> = Cueva Colantoni  = Cueva Gavilán	New name (Greer); local name for hill. Greer, after Roberto Colantoni who died at the cave while photographing the art. Tarble and Scaramelli.
<b>Amazonas</b>		
JG-15	<b>Cerro Pintado 1</b> = Cerro Pintado Abrigo 3	New name (Greer). Novoa 1985.
JG-16	<b>Cerro Pintado 2</b> = Cerro Pintado Abrigos 4 y 5	New name (Greer). Novoa 1985; Shelter 4 = JG-16a; Shelter 5 = JG-16b.
JG-18	<b>Alta Carinagua 1</b> = Wueyuhuari	New name (Greer). Christie; supposedly a Piaroa name.
JG-20	<b>Cueva Pozón</b>	New name (Greer).
JG-21	<b>Cerro La Vaca 1</b> = Cueva La Vaca = Cueva Grande del Cerro La Vaca	New name (Greer). Greer, etc. (after Perera and Moreno 1984). Perera and Moreno 1984.
JG-31	<b>Cueva Ataruipe</b> = Cerro Papelón = Atarhuipa = Cerro de los Muertos = Roca de Tortuga = Cabeza de la Tortuga = Turtle Rock	see Perera 1986a for synthesis. Cruxent 1960. Humboldt 1956. Perera 1986a. local name in Puerto Ayacucho. " "
JG-32	<b>Cueva Cataniapo</b> = Casa Antigua de Cataniapo = Cataniapo = Cueva Gavilán	New name (Greer). Local name (to Greer, 1990-95) Novoa 1985. Greer, previous name still on some notes.
JG-33	<b>Cueva Coromoto</b> = Cvirroboto	New name (Greer); no local name in 1993. Novoa 1985, said to be Guahibo for "piedra antigua" [refuted by local people to Greer, 1993]
JG-43	<b>Laja Tinaja 1</b>	New name (Greer); at Laja Tinaja.
JG-44	<b>Laja Tinaja 2</b>	New name (Greer); at Laja Tinaja.
JG-45	<b>Laja Tinaja 3</b>	New name (Greer); at Laja Tinaja.
JG-46	<b>Cerro Pelota 1</b>	New name (Greer); name of hill.
JG-47	<b>Cerro Pintado 5</b>	New name (Greer).
JG-48	<b>Cerro Tigrito 1</b> = Cueva de Manuelito	New name (Greer); map name for hill. Greer, initial name after nearby village.
JG-60	<b>Piedra Tiburón</b>	New name (Greer); local name.

(end)

## Site Numbers

Sites are referenced here according to temporary personal inventory numbers with a **JG-** prefix (author's initials). Other numbering systems referenced here (Table 5) include those of the Sociedad Venezolana de Espeleología (Catastro Espeleológico Nacional in Caracas), Franz G. Scaramelli (in Scaramelli 1992 and elsewhere), Jeannine Sujo Volsky (from Sujo's personal site files in Caracas, also published by de Valencia and Sujo 1989), and Jessica Christie-Shults (from Christie's personal notes in Austin, Texas; some sites also published by Christie-Shults 1992). In each system, numbers are assigned not only to rock art sites but also other kinds of archeological sites as part of a running inventory. CATASTRO numbers of SVE are assigned mainly to cave features and only to rock art associated with rockshelters.

Since there is no national or local registry, there is no formal numbering or naming system and no reasonable location for the storage of site information. Everyone seems to have their own system, primarily applied on a project by project basis. The exception is the SVE national cave registry (CEN) which maintains files of caves (including rockshelters with paintings) arranged and numbered according to state. Jeannine Sujo put together the National Rock Art Data Bank during her thesis research (Sujo 1975) and subsequently published portions of the inventory (de Valencia and Sujo 1987). Sujo maintains the site and bibliographic files at her house in Caracas. It would be useful to future research if that information were eventually placed in a public repository, perhaps a curation facility associated with the Instituto Venezolano de Investigaciones Científicas (IVIC) in Caracas.

**Table 5.** Corresponding site numbers. FGS (Scaramelli 1992), CEN (Catastro Espeleológico National of the Sociedad Venezolana de Espeleología, as published in Scaramelli 1992 and others), JSV (Jeannine Sujo's National Rock Art Data Bank, as published in de Valencia and Sujo 1987, and from Sujo's personal files in Caracas), and JCS (Jessica Christie's numbers as published in Christie-Shults 1992 and from Christie's personal notes in Austin, Texas).

		FGS	CEN	JSV	JCS	Tarble 1990b
<b>Bolívar</b>						
JG-01	Cerro Iguanitas 1	4	Bo.55	50		
JG-02	Cerro Iguanitas 2	4	Bo.55			
JG-03	Cerro Iguanitas 3					
JG-04	Cerro Muertos 1	3	Bo.52		7(2)	
JG-05	Cerro Muertos 2	21	Bo.54		7(1)	
JG-07	Cerro Muertos 3	23	Bo.53			
JG-08	Laja Parguaza 1	10	Bo.46			
JG-10	Laja Parguaza 4					
JG-11	Cueva Iglesias	6		327	9	
JG-12	Cueva Caño Ore	22	Bo.51		8	
JG-19	Idora Santa Fe					
JG-23	Cerro Mohetico 1					
JG-24	Cerro Mohetico 2					
JG-49	Cerro Gavilán 2					
JG-50	Laja Parguaza 2	11	Bo.47			
JG-51	Cerro Secreto 1					
JG-52	Cueva Pintada	2		48		
JG-53	Cuevita Pintada	1		83		
JG-54	Idora Punta Brava					
JG-55	Cerro Morrocoy 1	27				BO-12
JG-56	Cerro Morrocoy 2	27				BO-12
JG-57	Cerro Morrocoy 3	27				BO-12
JG-58	Cerro Gavilán 1					
<b>Amazonas</b>						
JG-15	Cerro Pintado 1			258/346		
JG-16	Cerro Pintado 2			258/347		
JG-18	Carinagua 1				1	
JG-20	Cueva Pozón					
JG-21	Cerro La Vaca 1	30		299		
JG-31	Cueva Ataruipe			85	2	
JG-32	Cueva Cataniapo			344		
JG-33	Cueva Coromoto			348		
JG-43	Laja Tinaja 1				3	
JG-44	Laja Tinaja 2				4	
JG-45	Laja Tinaja 3				5	
JG-46	Cerro Pelota				6	
JG-47	Cerro Pintado 5					
JG-48	Cerro Tigrito 1					
JG-60	Piedra Tiburón					

## Site Locations

Maps used during this study are primarily topographic maps published by the Dirección de Cartografía Nacional (DCN), Ministerio del Ambiente y de los Recursos Naturales Renovables (MARNR). References herein to these maps (Table 6 and text) indicate the scale in thousands (100K = 1:100,000). The basic 100K map is labeled with a single number (6734). This is divided into 50K quarters which are labeled clockwise with Roman numerals beginning in the NE (6734-I). Each of these is subdivided into 25K quarters labeled with directions (SO = southwest, etc.). Thus, map 6734-I-SE (25K) is the southeast quarter of the northeast quarter of map 6734.

In most cases, the map imprint or publication date (e.g., 1985) is several years after the aerial flights (e.g., 1970) and field checks (e.g., 1972-1978; see Table 7). Although maps appear fairly accurate on the ground — that is, the relative location between points on the map is usually as it seems on the ground — there appear to be problems with the placement of Universal Transverse Mercator (UTM) coordinate lines (see below). There presently are rumors that the entire Amazonas area has been remapped recently with sophisticated equipment in a dual effort by the Venezuelan government and the United States Geological Survey which will alleviate problems of the current map series. Present estimates are that printing on some of those new maps may begin late in 1995.

The primary locational measurement system is metric UTM (Table 6). Latitude-longitude position is provided only for locations recorded in the field at the time of UTM instrument measurement. All UTM locations are in Zone 19.

Global Positioning System (GPS) measurements were taken in the field at several sites in January-February 1993 with a Trimble FlightMate GPS hand-held

receiver (three-channel) and in January 1995 using a Trimble GeoExplorer receiver (a six-channel surveyor model). Measurements normally were made as offset locations (1-50 meters) and then corrected to the center of the site. All readings are single-unit; no differential correction (DGPS) was possible. To attain the greatest accuracy possible, individual readings mostly are averages of 99 points in 1993 and 300 points in 1995 (of about 1.5 points per second); some composite readings are averages of multiple averaged groupings (e.g., the average of three groups of 99-300 points each). Due to United States military scrambling of satellite signals, as well as variable satellite availability during readings, final on-ground accuracy cannot be measured. Accuracy indicated by the GPS receiver during measurement varied  $\pm 30$ -300 meters, but Trimble Navigation (Paul Roberts, personal communication 1994) suggests that all readings actually should be  $\pm 33$  meters (or less if Selective Availability is reduced or turned off, as it was on some satellites during the 1995 work). All readings were taken with at least three satellites visible to the receiver. GPS measurements are believed accurate within the world system, but they cannot be used on presently available DCN maps because of the UTM map error.

All sites were field-plotted onto DCN maps, and UTM measurements were made of those plottings. In some cases, maps were enlarged and site locations more accurately measured than would have been possible with the original small-scale maps. Measurements from published sources (Scaramelli 1992; Perera 1983a, 1986a; Perera and Moreno 1984) are also included in [Table 6](#).

There are variable distance errors between GPS readings and measurements from site plottings on DCN maps. In most of the study area, map locations are usually approximately 500-800 meters north-northeast of the GPS location (the error is variable in distance and direction, and there is no consistent error factor).

The difference between GPS and DCN map measurements is believed due mostly to inaccuracies in present editions of southern Venezuela maps (Darius Chagnon, personal communication 1992). Even so, DCN measurements must be used to replot locations onto existing maps and therefore are listed in Table 6 in bold type (with →).

For all DCN map plottings, there is an estimated error of 0.1% due to the approximation of the map plotting plus the difficulty of estimating close distances due to scale preciseness (e.g., 1 mm = 100 m). Thus, 100K has an estimated error of  $\pm 100\text{m}$ ; 50K= $\pm 50\text{m}$ ; 25K= $\pm 25\text{m}$ . Measurements were taken from printed maps (1:1), unless otherwise indicated. Some measurements were made from enlarged maps and are listed as “enlarged to ...” the indicated scale — with the resulting reduction in estimated error, such as a 100K map enlarged 4x to a new scale of 25K, for a measurement error of  $\pm 25\text{m}$ . In most cases map measurement precision exceeds accuracy of site plotting, where plotting error in some cases could be more than  $\pm 100\text{m}$ .

### **Burials**

Most sites today contain no burials, or only recent ones, while some sites contain remains of a few to many individuals left at the cave for many years with no intention to collect the bones for reburial. Some sites have low horizontal crevice-like dry areas reasonable for placing bodies and could have been so used in the past, although there are no remains today. At other sites without human remains, careful examination of areas where bodies would be expected yields small fragments from woven *catumares* (woven palm open basket used to carry the body to the cave) or tied *cacures* (bark or cane sheath which envelop the body). In a few cases only the large stone covering slabs (brought in to cover the

*cacure* and keep animals from scattering the bones) are all that remain. It has been documented at other sites that the bones have been completely removed by artifact collectors, have been removed by Indians as part of the secondary burial process, have been removed by Indians because of tourist pressure (to keep tourists from disturbing the remains), and in one instance have been completely burned for the same reason. The lack of bones, therefore, is meaningless in designating previous cave use.

Looking at the present sample of 38 painted cave sites, 19 (50%) contain evidence of use as a repository for the dead. Sixteen of those contain remains of human bodies, *cacures*, *catumares*, or covering stones, indicating unquestionable use as cemetery caves. One site contains possible fragments of an old *cacure*, and there are stories that burials were here several years ago (Alta Carinagua, JG-18). Two other sites (Cerro La Vaca 1, JG-21; and Cerro Gavilán 2, JG-49) contain human bones in backdirt from disturbed cultural deposits; the context of the bones is unknown.

### **Artifacts**

In no case has a search been made for artifacts during the present fieldwork, although a few have been observed accidentally (mostly ceramics, chipped-stone flakes and bifaces, and ground-stone tools). Sherds, figurines, and clay pipes have been reported from several caves by local residents, tourist guides, collectors, and archeologists from Caracas. Although ceramics in painted sites could be the same age as the art, it is equally possible that all ceramics are unrelated to the art and perhaps are a different age.

**Table 6.** Legal locations of sites in this study. UTM measurements in **bold** type (→) must be used to plot sites onto available maps (see **Site Locations**).

<b>Key</b>	UTM	Universal Transverse Mercator
	DCN	Dirección de Cartografía Nacional
	6734-I-SE	map number
	100K	map scale 1:100,000
	FGS	Scaramelli 1992
	GPS	UTM measured by Greer using a Global Positioning System receiver
	JG	UTM measured by Greer from indicated DCN map
	*2x	map enlargement ratio for UTM measurement
	<b>bold name</b>	primary name
	<b>→</b>	most reliable map measurement for pre-1995 maps (bold type)

**Estado Bolívar** (23 sites)

JG-	Name	UTM
01	<b>Cerro Iguanitas 1</b> Casa de Piedra Sur Susudé Inava	UTM N <b>687.815</b> , E <b>709.410</b> (JG, 6734-I-SE * 2x; 25K enlarged to 12.5K) UTM N 688.250, E 709.200 (FGS, 6734, 100K); same as in Perera and Moreno 1984:24
02	<b>Cerro Iguanitas 2</b> Casa de Piedra Norte	<b>→ UTM N 687.865</b> , E <b>709.405</b> (JG, 6734-I-SE * 2x; 25K enlarged to 12.5K)
03	<b>Cerro Iguanitas 3</b> Cueva Iguanitas	N 6°12'58.6", W 67°06'34.4" (GPS ±300m; 1/93) UTM N 687.485, E 709.167 (GPS ±300m; 1/93) <b>→ UTM N 688.720</b> , E <b>708.965</b> (JG, 6734-I-SE * 2x; 25K enlarged to 12.5K)
04	<b>Cerro Muertos 1</b> Cementerio Piaroa	<b>→ UTM N 686.865</b> , E <b>710.175</b> (JG, 6734-I-SE * 2x; 25K enlarged to 12.5K; plotting approximate) UTM N 686.700, E 710.000 (FGS, 6734, 100K); same as in Perera 1983:30
05	<b>Cerro Muertos 2</b> El Carmen 3 Cave of New Burials	<b>→ UTM N 686.960</b> , E <b>710.070</b> (JG, 6734-I-SE * 2x; 25K enlarged to 12.5K; plotting approximate) UTM N 686.700, E 710.000 (FGS, map 6734, 100K)
07	<b>Cerro Muertos 3</b> Roca Arriba	<b>→ UTM N 686.955</b> , E <b>710.130</b> (JG, 6734-I-SE * 2x; 25K enlarged to 12.5K; plotting approximate) UTM N 686.700, E 710.000 (FGS, 6734, 100K; or +50 m N)
08	<b>Laja Parguaza 1</b> Cueva Boulton Red Cave	N 6°26'47.0", W 67°09'19.1" (GPS ±300m; 1/93) UTM N 712.919, E 704.013 (GPS ±300m; 1/93) <b>→ UTM N 713.460</b> , E <b>704.260</b> (JG, 6735-II-NO, 25K) UTM N 713.450, E 704.450 (FGS, 6735, 100K)
10	<b>Laja Parguaza 4</b> Cueva de Luís	N 6°26'41.9", W 67°09'23.3" (GPS ±300m; 1/93) UTM N 712.762, E 703.888 (GPS ±300m; 1/93) <b>→ UTM N 713.205</b> , E <b>704.165</b> (JG, 6735-II-NO, 25K)

**Table 6** (page 2, Bolívar)

11	<b>Cueva Iglesias</b>	→ UTM N 683.340, E 717.000 (JG, 6734-I-SE, 25K) UTM N 683.500, E 716.750 (FGS, 6734, 100K)
12	<b>Cueva Caño Ore</b> White Shaman Cave	N 6°18'26.3", W 67°06'17.2" (GPS ±300m; 2/93) UTM N 697.557, E 709.659 (GPS ±300m; 2/93) → UTM N 697.770, E 710.130 (JG, 6734-I-NE, 25K; plotting uncertain) UTM N 696.700, E 709.400 (FGS, 6734, 100K)
19	<b>Idora de Santa Fe</b>	→ UTM N 665.205, E 728.095 (JG, 6834-III-SO, 25K)
23	<b>Cerro Mohetico 1</b>	N 6°14'12.5", W 67°07'53.2" (GPS ±300m; 1/93) UTM N 689.748, E 706.737 (GPS ±300m; 1/93) → UTM N 690.160, E 707.190 (JG, 6734-I-SO, 25K)
24	<b>Cerro Mohetico 2</b>	N 6°14'18.6", W 67°07'47.4" (GPS ±300m; 1/93) UTM N 689.935, E 706.914 (GPS ±300m; 1/93) → UTM N 690.240, E 707.345 (JG, 6734-I-SO, 25K)
49	<b>Cerro Gavilán 2</b>	N 6°18'42.3", W 67°12'54.9" (GPS ±100m; 1/93) UTM N 698.004, E 697.433 (GPS ±100m; 1/93) → UTM N 698.465, E 697.555 (JG, 6734-I-NO, 25K)
50	<b>Laja Parguaza 2</b> Santos 2	N6°26'41.8", W 67°09'19.6" (GPS ±300m; 1/93) UTM N 712.760, E 703.999 (GPS ±300m; 1/93) → UTM N 713.300, E 704.235 (JG, 6735-II-NO, 25K) UTM N 713.300, E 704.300 (FGS, 2735, 100K)
51	<b>Cerro Secreto 1</b> Cueva de Golpe Castillos 1	N 6°26'11.3", W 67°08'48.9" (GPS ±300m; 1/93) UTM N 711.824, E 704.947 (GPS ±300m; 1/93) → UTM N 712.075, E 705.200 (JG, 6535-II-NO, 25K)
52	<b>Cueva Pintada</b>	N 6°30'00.4", W 66°57'34.4" (GPS ±100m; 1/93) UTM N 718.942, E 725.647 (GPS ±100m; 1/93) → UTM N 719.250, E 725.865 (JG, 6835-IV-SO, 25K)
53	<b>Cuevita Pintada</b>	N 6°30'14.4", W 66°57'42.2" (GPS ±300m; 1/93) UTM N 719.374, E 725.406 (GPS ±300m; 1/93) → UTM N 719.740, E 725.540 (JG, 6835-IV-SO, 25K) UTM N 721.000, E 721.900 (FGS, 6835, 100K)
54	<b>Idora de Punta Brava</b>	N 6°31'24.4", W 66°41'29.8" (GPS ±100m; 1/93) UTM N 721.652, E 755.282 (GPS ±100m; 1/93) → UTM N 722.000, E 755.510 (JG, 6835-I-SO, 25K)
55	<b>Cerro Morrocroy 1</b>	N 6°36'04.6", W 66°46'32.4" (GPS ±100m; 1/93) UTM N 730.222, E 745.943 (GPS ±100m; 1/93) → UTM N 731.025, E 745.930 (JG, 6835-IV-NE, 25K)
56	<b>Cerro Morrocroy 2</b>	N 6°36'01.3", W 66°46'31.5" (GPS ±300m; 1/93) UTM N 730.121, E 745.970 (GPS ±300m; 1/93) → UTM N 730.820, E 746.095 (JG, 6835-IV-NE, 25K)
57	<b>Cerro Morrocroy 3</b>	N 6°36'02.2", W 66°46'30.9" (GPS ±300m; 1/93) UTM N 730.146, E 745.988 (GPS ±300m; 1/93) → UTM N 730.715, E 746.080 (JG, 6835-IV-NE, 25K)
58	<b>Cerro Gavilán 1</b> Cueva Colantoni	N 6°18'54.9", W 67°13'17.6" (GPS 2d±30; 2/93) UTM N 698.388, E 696.733 (GPS ±30m; 2/93) → UTM N 698.800, E 696.900 (JG, 6734-I-NO, 25K)

Table 6 (page 3)

## Estado Amazonas (15 sites)

JG-	Name	UTM
15	<b>Cerro Pintado 1</b>	N 5°31'40.1", W 67°32'56.2" (GPS ±300m; 2/93) UTM N 611.204, E 660.736 (GPS ±300m; 2/93) → UTM N 611.723, E 661.064 (JG, 6632-I, 50K)
16	<b>Cerro Pintado 2</b>	N 5°31'47.1", W 67°32'52.7" (GPS ±100m; 2/93) UTM N 611418, E 660.845 (GPS ±100m; 2/93) → UTM N 611.991, E 661.209 (JG, 6632-I, 50K)
18	<b>Alta Carinagua</b>	N 5°41'12.8", W 67°32'54.1" (GPS ±100m; 1/93) UTM N 628.795, E 660.758 (GPS ±100m; 1/93) → UTM N 629.070, E 660.900 (JG, 6633 * 2x; 100K enlarged to 50K)
20	<b>Cueva Pozón</b>	N 6°02'16.37", W 67°24'46.71" (GPS ±32m; 1/95) UTM N 667.648, E 675.645 (GPS ±32m; 1/95) → UTM N 667.920, E 675.850 (JG, 6734 * 2x; 100K enlarged to 50K); (should be available on 6734-III-SO, 25K)
21	<b>Cerro La Vaca 1</b>	N 6°05'54.8", W 67°23'26.9" (GPS ±300m; 2/93) UTM N 674.366, E 678.079 (GPS ±300m; 2/93) → UTM N 674.650, E 678.275 (JG, 6734 * 2x; 100K enlarged to 50K) UTM N 674.400, E 677.100 (FGS, 6734, 100K) same as in Perera and Moreno 1984:24
31	<b>Ataruipe</b>	N 5°33'38.4", W 67°35'33.7" (GPS ±30m; 1/93) UTM N 614.825, E 655.882 (GPS ±30m; 1/93) → UTM N 615.170, E 656.100 (JG, map 6632-I, 50K) UTM N 615.180, E 656.100 (Perera 1986:13; 6632-I, 50K)
32	<b>Cueva Cataniapo</b>	N 5°36'16.5", W 67°35'25.3" (GPS ±100m; 1/93) UTM N 619.683, E 656.127 (GPS ±100m; 1/93) → UTM N 620.120, E 656.550 (JG, 6632-I, 50K)
33	<b>Coromoto</b>	N 5°24'48.8", W 67°36'19.4" (GPS ±300m; 1/93) UTM N 598.556, E 654.512 (GPS ±300m; 1/93) → UTM N 598.855, E 654.935 (JG, 6632-II, 50K)
43	<b>Laja Tinaja 1</b>	N 4°48'07.1", W 67°44'00.7" (GPS ±100m; 2/93) UTM N 530.904, E 640.448 (GPS ±100m; 2/93) → UTM N 531.220, E 641.010 (JG, 6630 * 4x; 100K enlarged to 25K)
44	<b>Laja Tinaja 2</b>	N 4°48'04.4", W 67°43'57.4" (GPS ±100m; 2/93) UTM N 530.823, E 640.548 (GPS ±100m; 2/93) → UTM N 531.200, E 641.110 (JG, 6630 * 4x; 100K enlarged to 25K)
45	<b>Laja Tinaja 3</b>	N 4°48'02.7", W 67°43'55.3" (GPS ±300m; 2/93) UTM N 530.770, E 640.614 (GPS ±300m; 2/93) → UTM N 531.175, E 641.190 (JG, 6630 * 4x; 100K enlarged to 25K)
46	<b>Cerro Pelota</b>	N 4°45'51.9", W 67°43'15.0" (GPS ±300m; 2/93) UTM N 526.756, E 641.862 (GPS ±300m; 2/93) → UTM N 527.020, E 642.140 (JG, 6630 * 4x; 100K enlarged to 25K)

**Table 6** (page 4, Amazonas)

47	<b>Cerro Pintado 5</b>	N 5°31'51.6", W 67°32'56.7" (GPS ±100m; 2/93) N 5°31'52.5", W 67°32'58.0" (GPS ±32m; 1/95) UTM N 611.558, E 660.720 (GPS ±100m; 2/93) UTM N 611.583, E 660.681 (GPS ±32m; 1/95) → <b>UTM N 611.902, E 660.914</b> (JG, 6632-I, 50K)
48	<b>Cerro Tigrito 1</b>	N 5°22'21.5", W 67°40'37.1" (GPS ±300m; 1/93) UTM N 594.013, E 646.589 (GPS ±300m; 1/93) → <b>UTM N 594.360, E 646.800</b> (JG, 6632-II, 50K)
60	<b>Piedra Tiburón</b>	N 5°30'44.0", W 67°36'22.1" (GPS ±100m; 2/93) UTM N 609.465, E 654.403 (GPS ±100m; 2/93) → <b>UTM N 609.810, E 654.600</b> (map 6632-I, 50K; estimate)

**Table 7.** Information on topographic maps (Dirección de Cartografía Nacional) referred to in the text or in reference to site locations.

Number	Name	Scale	Aerial Flight	Ground Check	Printing Date
6630	Boca del Río Cuao	100 K	1970	1972-78	1986
6632	Cataniapo	100 K	1970	1972-78	1985
6632 -I	Cataniapo	50 K	1970	—	1979
6632-II	Coromoto	50 K	1970	—	1979
6734	Puerto Páez	100 K	1961	1966	1973
6734-I-NE	La Sabanita	25 K	—	—	1972
6734-I-NO	Las Mangas de Parguaza	25 K	—	—	1972
6734-I-SE	El Carmen	25 K	—	—	1972
6734-I-SO	Caño Garzón	25 K	—	—	1972
6735	Villacoa	100 K	1961	1967	1973
6735-II-NO	La Laja de Parguaza	25 K	—	—	1972
6833	Río Parguaza	100 K	1972	1974, 80	1988
6834	Colorado de Parguaza	100 K	1961	1966	1973
6834-III-SO	Río Parguaza I	25 K	1961	—	1972
6835	Túriba	100 K	1961	1966	1973
6835-I-SO	El Machete	25 K	1961	—	1972
6835-IV-NE	Los Pijiguaos	25 K	1961	—	1972
6835-IV-SO	Aceítico	25 K	1961	—	1972

## Site and Wall Selection for Painting

Most dry rockshelters and protected overhangs with light colored, smooth, stable surfaces were painted in this region. Many small to large caves and overhanging bluffs are not particularly suitable for painting and were not used (or at least no evidence of previous paintings has survived). Some caves, however, especially many small to large shelters throughout the upland region just south of Cueva Pozón (JG-20), seem ideally suitable for painting and yet were not used. The reasons for site selection are not clear, except that most long horizontal crevices and obvious shelters were used.

In most sites walls protected from rain are not uniformly ideal for painting. The best wall surface is one which is white to light yellowish, smooth, and hard. In most cases, however, walls are generally grayish (from water flow or lichen growth), rough (from erosion), or chalky (essentially a nonstable surface). For the most part, this limits where paintings are likely to be placed within caves. Even so, numerous areas in most sites conform to ideal surface characteristics, and yet only selected areas were used and others were not.

In most sites containing a lot of art from one period, figures from any one period are densely clustered into one, usually fairly large area of the cave wall. Such clustered paintings do not really form an integrated panel, but the clustering indicates an intentional selection of a *main painting area*. This may be the area where a particular ritual was performed with associated wall painting. Artistic attention was certainly focused on selected wall space, and paintings were not haphazardly drawn across the cave.

Broad, flat, nearly vertical faces obviously would be preferred for painting, and most suitable surfaces were used to varying degrees. These usually are areas

where painters and viewers could readily see the art. Figures in these areas would be public art.<sup>7</sup> In some cases such surfaces could have served as *blackboards* for instruction to an audience, such as to a group of young people during an initiation ceremony.

Low flat ceilings also were commonly painted, extensively at some sites (e.g., Santa Fe, JG-19). Some ceilings contain natural indentations — like shallow bubble concavities — of various sizes which were specially selected. In some sites, small areas (about 30 cm across) of especially smooth and white surfaces were selected for dense clustering of tiny miniature figures; this may be most common during Period 4. Ceiling art requires an individual to enter the cavity to view the figures. Some sites, like Laja Parguaza 1 (JG-8) and Coromoto (JG-33), have an adequately high ceiling to allow groups of people to experience the art. At other sites, however, such as Santa Fe (JG-19), Cerro La Vaca 1 (JG-21), and the upper shelter at Cueva Pozón (JG-20), low ceiling height barely allows entry of one individual, and ceiling art certainly was not placed for public viewing in those spatially restricted areas.

Cerro La Vaca 1 (JG-21) is a very long shelter with at least 100 meters of available wall space and adjacent ceiling surface suitable for painting. Much of this surface was used, but the greatest concentration of paintings is noticeably at the distant east end of the shelter. This is also the only area with panels of densely clustered repetitive symbols, like groups of handprints, groups of segmented boxes, and panels of fish and other animals. Each group is internally consistent enough and tightly enough grouped to have been drawn at the same time, as if associated with a single event. What makes the place special is the

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<sup>7</sup> See **Chapter 5** for a discussion of **Public and Private Art**.

presence of a huge balanced boulder, a tabular stone about 3 meters across, a meter thick, and slightly rounded on the bottom. The stone is not stable but easily can be tilted by changing its balance (easiest by standing or sitting on its flat, worn surface) to produce a rocking motion. The accompanying pulsating roar is a magnificent booming resonance which, by its combined striking sound and extended duration, is like a combination of a monstrous base drum and a huge base cane flute. The repetitive air-shattering vibration fills the cave, almost with a feeling of physical dominance, and echoes out across the open savanna. The physical and psychological setting high above the open savanna and looking out toward distant hills and upland massifs is an ideal location for ritual, and the clustered paintings here attest to its use as such in the past.

### **Subregions in Artistic Variation**

Presently it seems that each river valley has some uniqueness of tradition — such as the Sipapo basin, the area just south and east of Puerto Ayacucho, the area just west across the Orinoco (not included in this study), the Pozón area north of Puerto Ayacucho, the lower and middle Parguaza valley (the upper river is unknown), the general Cueva Pintada area of the Villacoa just to the north (Mapoyo area around Palomo), and the Suapure river to the north ([Figure 3](#)). Temporal details of that uniqueness, however, are not known. For instance, the Villacoa river seems to be a possible center of artistic expression, but this view is unevenly influenced by the art at Cueva Pintada (JG-52), which is dominated by late art of Periods 5 and 6. Otherwise, older art at this site and at the nearby Cuevita Pintada (JG-53) suggests that during Period 2 and perhaps Period 4 the art was similar to the Parguaza of the same ages. The same seems true for the Suapure area, where Period 6 paintings at Punta Brava (JG-54) seem

different from other areas, but earlier Period 4 paintings are similar to the Parguaza. At the nearby Morrocoy sites (JG 55-57), however, Period 4 anthropomorphs seem related in general character to the Parguaza style, but are clearly portrayed in local variation — larger, wider, and with different kinds of body decoration and arm-leg positioning. Definition of this geographic variation, its relation to style periods, and its cultural implications must await future study with a larger sample of sites.

## CHAPTER 5

# ANALYSIS FRAMEWORK AND METHODOLOGY

This study is intended to provide a context for future attention to rock art in the area by defining a chronology in the art of 38 caves. Pertinent information also is offered on geography, archeology, and ethnography. This chapter discusses assumptions under which the study was conducted, basic terms and concepts applicable to the analysis, and a description of the inspectional methodology resulting in the chronology.

### **Assumptions for the Study**

The study is based on a few basic tenets supported by prior experience in several areas. Preliminary survey and initial ordering of art here showed a high concordance with prior expectations. Some assumptions were found not to be entirely applicable to this sample and were revised accordingly. These transformed tenets form the basis for the study.

### **Limited Ethnic Affiliation**

The study area was selected as large enough to contain an adequate sample of sites but small enough to be considered a local area. It was considered larger than the zone of influence of a single village or a single ethnic group, but small enough that there should be cultural continuity across the area. The art of any one period within the region was thought to be the work of a single ethnic entity

or similar entities with the same kind of artistic expression. Ethnic differences within the region and during one period would not affect overall characteristics of a style, and general discriminating characteristics of a style would overshadow individual ethnic differences in that period within the study zone.

It is now believed that art styles based on ethnic differences may be similar to each other to varying degrees, or they may be more similar to other, perhaps unrelated styles pertaining to other ethnic groups, time periods, or geographic areas. Ethnic differences in artistic approach (technology, content, manner, context) may be great enough to obscure overall temporal or geographic relations.

It is still felt, however, that the most recent art should be related to specific ethnic groups referenced in early historical written accounts. Information on such recent art should contribute to the culture historical knowledge of modern groups (*viz.* O'Shaughnessy and Corry 1977).

### **Artistic Uniformity**

The study area was originally considered small enough that there should be adequate artistic uniformity across the region, and art styles and chronological trends should be relatively uniform. Art styles should extend across the entire study zone. Superpositional relations between styles would be consistent across the region, thus making possible the identification and description of a chronological ordering of styles representing regionally consistent historical periods of artistic development for the area. Functional and idiosyncratic differences within the art of a particular period would be overshadowed by the main art characteristics describing that period and would not appear as

distinctive styles. Differences between periods would be discernible while local differences would be masked and overlooked as minor noise.

Examination now indicates a considerable diversity in art across the region. The far southern patterns around the Sipapo river seem hardly related to those in the north in the Parguaza, Palomo, and Suapure areas. External influences from the middle Orinoco are evident in the rock art at the northern end of the study area but are barely recognizable, if at all, in the southern areas. Areas exhibiting influence of external contacts will likely change through time, according to the kind and direction of external influence, and the local art will vary according to the intensity and kind of such influence.

There is a likelihood that art prepared for different purposes, or as related to different cultural activities, is produced differently and has different contents according to activities related to the production of the art. Individuals may have unique and differing approaches to art which may include access to and use of raw materials, paint preparation techniques, ideas of what should be portrayed and how, and personal preferences of paint application and appearance. Such attitudes and behavior could yield broadly differing patterns which might be identified as nonrelated cultural styles. This proposition is supported by the Piaroa and Yanomamī stress on individualism and on individual expressive freedom within those societies. Substyles based on different function, associated with different activities, or varying according to individual expression (or idiosyncrasy) may occur in different parts of a site and thus appear as unrelated expressions. Thus, the concept of artistic uniformity within any particular time or area is seriously challenged.

### Stylistic Discriminating Characteristics

An attempt was made first to describe styles solely on the basis of technological attributes (e.g., color), but analysis showed that this is not reasonable.<sup>8</sup> Technology can be used as the first discriminating dimension (or criterion) for initial description of a style (or to distinguish between styles), but the second dimension must be content. The final description of styles and comparison between them must be based on a combination of technology and content, perhaps together with context, condition, and personal manner of execution. It appears that further intensive consideration of content will result in revisions to the chronology, further refinement according to geographic variation within styles, and indications of relations among styles.

The main error in describing styles (or designating periods) solely by technology is the false assumption that only one color or color combination was used during each period, and that each period has a unique technology. Instead, the opposite seems to be true: (1) any color can be used during different periods, and (2) multiple colors or color combinations can be used during any one period. This suggests the need for a more complex approach to describing styles. Initial technological categories should be further subdivided according to more limiting technological attributes, such as thickness of the paint, shade, kind of color overlap in bichrome figures, positive versus negative painting, or relation with underlying figures (as the case of overpainting with *caraña* or the placement of Period 5 symbols on top of Period 3 animals). Technological groupings also could be divided further by such other aspects as overall size of the figure, distance from floor, or degree of grouping with adjacent figures.

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<sup>8</sup> See the following **Styles and Periods** section for relevant discussion of terms and concepts.

Although the first categorization of artistic characteristics can be made according to technology, it is vulnerable to overriding change in content. The second consideration should be gross content, or major kinds of motifs, followed by smaller categories or variation within motifs.

An example of this would be a color-described grouping of red pictographs which could represent more than one period or style and therefore should be split into smaller groups, presumably on the basis of differences in content. The same can be done with the red-white bichrome group, which can be divided according to kinds of figures (content) — wide-body humans, fish-animals, geometric symbols, and large geometric patterns. What is obvious is that different dimensions (and their level and sorting order) are differentially important for discrimination of styles. It is possible to sort first along one dimension, then split that major category into smaller components to form analytically useful groupings.

### **Comparisons with Other Materials**

Art periods can be correlated with archeological periods defined by other means, thus making possible the integration of art data (sites, activities, belief systems) with other archaeological cultural information identified from material complexes. This process is implemented with ceramic phase comparisons discussed in **Chapter 9**.

### **Styles and Periods**

The art sequence is divided into a number of periods represented by styles, and these periods form the basic units for regional organization and comparison. An art style here is recognized and defined by its consistent superpositional

relation to other styles at sites within the limited geographic range of the study area. The style is then described according to its physical attributes of technology, content, and manner. Thus, a style is an identifiable combination of physical attributes with a distinct time-space distribution. The temporal span of the style identifies a period and, in most cases, styles are discussed relative to their corresponding period. There appear to be two developmental branches in the study area, and each branch is divided into periods. Corresponding periods of each branch are not necessarily identical, and there may be overlap between periods.

Within any area, rock art varies through time according to physical characteristics of the art. Because there is duration in the application of art to spatially limited surfaces, there is figure superposition that represents different ages within the area's history. Superposition between different kinds of art (styles with different physical attributes) is used to define historic periods, and periods therefore are represented by the associated style. Styles vary not only between periods but also across geographic space as a reflection of ethnic distribution and other matters. Thus, styles are defined and ordered in time and space according to superposition within individual sites and geographical distribution of motifs (recurring figure forms).

As can be seen, the terms *styles* and *periods* are often used very closely. *Style* refers to the physical attributes, and *period* refers to a time during which activities relating to a particular style were taking place. More appropriately, in this study periods are a time within the occupational history of the area, defined by superpositional relations in the art, and styles are the physical remains pertaining to those periods.

*Style* is made up of three dimensions<sup>9</sup> — physical, temporal, and spatial. The *temporal* dimension refers to either relative or absolute age. *Spatial* refers to geographic distribution. The *physical* dimension describes the art, as it appears on the wall, in terms of technology, content, and personal manner of application. *Technology* is seen as physical attributes of the paint — components, raw materials, methods of preparation, color, hue, intensity, thickness, kinds of impurities, degree of oxidation, kinds and degree of mineralization forming over the paint, interaction of the paint with silica skins, penetration of the paint into the bedrock, how the paint was applied, etc. *Content* refers to shapes drawn and what those shapes were intended to portray. Personal *manner* of expression is the way the artist portrayed those shapes and reflects his intention and skill, and probably other secondary personality information such as degree of attention toward the art, amount of time spent drawing a figure, attention to detail, attention to uniformity, attention to uniqueness, degree of apparent care or uniformity within one figure or between figures, control of motor skills, and visual-mechanical coordination.

Of the three physical components, *technology* seems to be easily observable, and discrimination between classes of paintings usually can be made on the basis of relatively few visual attributes. Of course, special analysis is necessary for paint constituent identification although suggestions of paint components can be made on the basis of visual inspection and comparison with paints of known composition. *Content*, though grossly observable, is probably the most complex

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<sup>9</sup> Other dimensions such as functional, social, or contextual mostly are not considered here. *Context* in this sense would include which parts of a site are used, or where painting occurs relative to wall space, relative to each other, relative to natural or cultural features, relative to astronomical interaction, relative to activities by individuals (e.g., at the entrance to a small cave where they can be seen easily upon entry), or other similar considerations of location and interaction.

of the three components and therefore should be analytically defined. For the description of regional styles, and not just site specific inventory, content usually should be considered after detailed recording at multiple sites to identify regionally recurring motifs and other aspects of art not limited to a single village or individual. Gross aspects of *manner* are also immediately observable in the field, though probably the most subjective and difficult dimension to categorize and quantify.

Previous attempts in other areas to define historical styles in rock art, and to order those styles relatively in time, have been based mostly on content of the art (Turner 1963; Sujo 1976, 1978). In those schemes, usually individual figures are typologically sorted into co-occurring motifs which are thus interpreted as making up regional assemblages, or styles (Schaafsma 1972, 1992; Wellman 1979). The occurrence of multiple assemblages within a particular area usually is interpreted as indicative of historical change from one assemblage to another. Sometimes directional change is inherently implied in style definitions, such as gradual shifting from simple to complex and back to simple. Ordering the direction of change, or defining the chronology, is usually fairly simple based on physical characteristics of the art (such as degree of weathering) or other archeological knowledge, such as pottery designs of known age in the art, or subject matter changes such as from guanaco hunting to llama herding (Santoro and Dauelsberg 1985).

Alternatively, styles can be described by their appearance first in terms of technological features and secondly by content and individual manner of application. Although the most complete description would use all three physical dimensions, it is possible to describe periods in art development by first using technological attributes (the most easily describable of the three) and

secondly content (as reflective of cultural values relating more to art function) and manner (as reflective more of the individual artist or community).

Subdivisions of styles can be based on almost anything distinctive, such as technology, content, function, restricted duration, relative age, ethnic affiliation, or degree of weathering<sup>10</sup>. A *fine-line substyle* of Period 2 can refer to distinctive fish, birds, and lizards executed in a characteristic thick purplish paint with a fine-line brush; or an *interior-line substyle* can refer to fish with characteristic vertical interior lines within the overall definition of Period 2 or 4. Substyles may also refer to geographic range, such as a particular area or even a site with a distinctive manner of art.

A *style* (following Rouse and Cruxent 1958:2; Barse 1989:32) is conceived as representing all paintings done by a single group or by related groups whose paintings presently are not distinguishable from each other and instead form a single collection of art. Cultural implications may be suggested by differences between styles, or changes from one period to the next. For instance, the degree of change may be interpreted as indicating changes in ecological orientation or technological habits of the people. Change could also reflect temporal variation in ideological expression internally within a cultural group, or the kind (or degree) of contact (or replacement) between cultural groups.

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<sup>10</sup> It is questionable whether substyles would be designated on the basis of this characteristic alone. More likely, fading could be linked to inherent properties of the paint, and those characteristics would be more logical indicators of substyle categories.

## Superpositioning

Superposition of figures is common in many, if not most of the 38 sites in the study (see **Appendix**), and this relative positioning make possible the definition of a general stylistic sequence (**Table 8**). The resulting chronological order presented below is probably over-simplified, but it does indicate the general temporal organization of the art, best seen in the Parguaza area. The situation is complex, and in areas without superimposed figures it is often difficult or impossible to assign individual elements to a particular style or period, especially as distance from the Parguaza increases. This is especially evident with similarities between monochrome reds of Periods 2 and 4 and with many seemingly inseparable substyles of white and colored clays of Period 6. Late Period 1 orange figures are occasionally complicated by being overpainted with what is believed to be late Period 6 dark brown resin paint (presumably *caraña*) in at least two caves (plus another found in 1995). Of course, overpainting and mixing of paint between painting episodes often obscures not only designs but also relations between figures.

Superpositioning indicates only the relative position between two or more figures. By linking stylistically similar figures it is possible to infer relative temporal relations between styles, or periods. Elapsed time between paintings is not indicated and could be anything from a few seconds to many centuries. For the most part, it appears in this region that overpainting was done during different periods years apart. However, the art has not been dated, and there is no firm evidence for such an inference.

**Table 8.** Superpositional relations represented in the study. Upper periods are listed down the side; lower periods are listed across the bottom.

<b>Top ↓</b>				JG-52		
<b>Period 7</b>				JG-52		
<b>Period 6</b>	JG-15	JG-58	JG-05 JG-08 JG-11 JG-58	JG-05 JG-11 JG-12 JG-15 JG-49 JG-52 JG-54 JG-58	JG-58	JG-11 JG-32 JG-49 JG-54 JG-58
<b>Period 5</b>		JG-58	JG-58	JG-02 JG-11 JG-18 JG-19 JG-58		
<b>Period 4</b>	JG-15 JG-18	JG-04 JG-18 JG-31 JG-58	JG-01 JG-05 JG-11 JG-49 JG-58	JG-11		
<b>Period 3</b>		JG-01 JG-58	JG-05 JG-11 JG-58			
<b>Period 2</b>	JG-01 JG-21	JG-01 JG-46				
<b>Period 1</b>						
<b>Bottom →</b>	<b>Period 1</b>	<b>Period 2</b>	<b>Period 3</b>	<b>Period 4</b>	<b>Period 5</b>	<b>Period 6</b>

### Analysis Methodology: An Inspectional Approach

This section discusses how the chronology was derived from casual inspection of art at a number of sites spread over a relatively large area. The process of definition was one of trial and error from field observations and study of color slides. Discrimination of styles was based on inspection of superpositional relations and art attributes.

Styles were recognized on the basis of superposition, which usually is fairly obvious, with one color painted across the top of another. Even in cases where both layers are the same color, usually one paint is a different shade or thickness from the other, and the relation usually is clear. Overlap was occasionally checked in the field with a hand lens.

Superimposed layers were examined for physical differentiation on the basis of easily recognized distinctive features. Key attributes were selected to distinguish layers from each other. This resulted in a loosely defined configuration of physical characteristics for each layer.

The most obvious recurring characteristics were color, line thickness, and overall figure size. It was initially hoped that technological sorting according to color, or color combination, would chronologically segregate styles. This resulted in categories of red paint ranging from light orange-pink to purple and various intensities from dull to bright. This initial consideration of color (discussed in more detail below) produced a correspondence with chronological periods. Period 1 was seen as being designated by light colors (light red, pink, and light orange), Period 2 by purplish-red, Period 3 by red-white bichrome, and Period 4 by medium red. Period 6 was seen as designated mostly by white, but it was soon recognized that the period included several other colors, and it was later recognized that the period was much more color-complex than first recognized. Period 5 was eventually recognized by its transitional characteristics, mostly on the basis of content. Period 7 was recognized on the basis of content alone.

When I began looking at the art, fine-line purplish figures mostly of large lizards (Figure 6, e), birds with outstretched wings (Figure 6, b), and interior-line fish (Figure 6, a) seemed to be overlain by almost everything. Elongated stylized

humans drawn at an angle (Figure 6, e; turned vertical for illustration) also appeared to be early. Therefore, these forms were considered early (now Period 2). At some sites, however, such as Cerro Iguanitas 1 (JG-1), the purplish figures overlay older lines of fish and other figures; and at Cerro La Vaca 1 (JG-21), a line of camelids (Figure 4, c) marched out from under the right side of a large fine-line purplish fish (Figure 6, a). Thus, these earlier figures, which still do not seem to form a coherent pattern, were deemed to represent a time prior to the fine-lined fish and eventually were designated Period 1.

Artistic content — the number and kinds of figures and their relations with each other — was noted to vary from site to site and style to style, and this helped in the recognition of patterns in technology. Geographic variation exhibited content differences from north to south (Figure 3), such that the Suapure-Caicara area to the north contains a high percentage of anthropomorphs and geometrics, while the Parguaza area contains a high percentage of shamans and animals, and the Sipapo area to the south is dominated by seemingly different geometrics and symbols. At times, there would be fairly consistent relations between physical characteristics of the art (color, line thickness) and artistic content. Such was the relation between purplish fine lines and interior-line fish, large lizards, elongated stylized humans, and particularly the last two drawn at an angle (upper left to lower right; see Figure 6, b, d-e). This led to the recognition that medium red figures with the same characteristics co-occurred with the purplish fine-line figures and therefore seemed to be associated with them during a general time period (Period 2).

A major concern was how to divide monochrome red — the dominant color in the area — into different styles. As just mentioned, it was noted that some purplish figures were superimposed over lighter-colored earlier ones, and that

led to the designation of Period 1 red figures underlying Period 2 red (and purplish). At several sites red was overlain with white and several other colors of what appeared to be clay paint, as opposed to the finer consistency of the earlier reds. Thus, white was seen as the latest of the paints, almost completely replacing red. White and related clay paints came to designate the Late Period (now *multicolor phase* Period 5 and Period 6).

Attention was then turned to further splitting of the *Middle Period* reds (Periods 2 and 4, and to some extent Period 5). Large realistic figures in red-white bichrome (e.g., [Figure 7](#)) were noted as occurring on top of red monochrome figures, and other red figures were subsequently painted over the bichrome. Thus, it was recognized that the monochrome red Middle Period was split by the red-white bichrome, and it appeared that the bichrome formed a style with a fairly consistent internal content. The style seemed to be short lived and therefore originally was termed the *Bichrome Horizon* (now Period 3).

The above process, carried much further, resulted in a sequence of seven periods, initially named and rechecked and eventually numbered (originally Periods 1-5 plus transitional 4-5 or 5a; now renumbered 1 through 6, plus the historic Period 7). Refinements in the sequence resulted mainly from studying color slides, paying attention to superposition and content, revisits to sites, and adding new sites to the inventory. This led to revising style relations at several sites. The few possible exceptions to the chronology were shown to have been misidentified initially and instead fit within the current system.

A notable revision was made on complex panels at Cueva Iglesias (JG-11). Yellow clay figures, particularly the *bowlegged man* motif, occurred beneath Middle Period monochrome red initially thought to be from Period 2 (Early

Middle Period). Yellow clay figures would not be expected in this context and instead *should* have been from Period 6 (at that time recognized by clay paints, then designated Period 5) which otherwise overlay Period 4 monochrome red. The yellow clay figures, therefore, initially were thought to be early forms (presumably representing an aberrant style) which disrupted the smoothness of the sequence. During review of the color slides, however, it was noted that the medium to bright red figures were more finely drawn than most Period 2 art — more like Period 4. Close examination of computer enhanced scanned color slides showed that these yellow figures are outlined with a thin red line. It was further realized that the *bowlegged man* is a distinctive form almost unique to Period 3, and in the Iglesias panels it simply had a yellow, rather than bright white, interior. With that, it was obvious that the yellow men were variant forms of the Period 3 bichrome, an observation which expanded the recognized variation for the style. The overlying red figures were then understood to be Period 4 (Late Middle Period), exactly as their general appearance (content and manner) suggests — which until then had not been adequately recognized. Subsequent Period 6 (Late Period) white figures in this panel were placed in the sequence correctly. This situation of removing what had appeared to be exceptions to the sequence happened several times until, it appears now, most deviations have been accounted for.

Recognition of a particular style, solely on the basis of physical characteristics, isolated and not superimposed, is often difficult in the field. Most figures throughout the sequence are monochrome red, with no superpositioning. All figures at some sites are impossible to date with certainty because of problems of nondistinctiveness and no relation to other categories of art, like figures at Piedra Tiburón (JG-60), Cerro Muertos 1 (JG-4), Cerro Muertos 3 (JG-7), Laja Parguaza 4

(JG-10), Cerro Secreto 1 (JG-51), and the Cerro Morrocoy sites (JG-55-57). A high percentage of art at all large sites (which contain some superpositioning) is nonsuperimposed and nondistinctive.

Style definition, therefore, is based on relatively few cases of superpositioning (Table 8). This affords the recognition of general character traits for each style (Table 9), to which other nonsuperimposed figures and panels may be compared. A *best guess* association is offered for most otherwise undatable art. Even so, the sequence, based as it is on working through an inspectional process, seems to work.<sup>11</sup>

### Figures and Motifs

Rock art, for the most part, is represented by figures and motifs. *Figure* refers in a traditional sense to a complete individual element within the art, independent of the kind or category of art of which it is a part.<sup>12</sup> *Motif* refers to a

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<sup>11</sup> As more sites are found and as close scrutiny of all sites continues (especially with review of color slides), more questions are coming to light. These mostly involve content questions of relations between periods based on certain kinds of motifs or the similarity of seemingly related figures. The same is true between sites, and resulting questions most often are based on possibly related motifs having seemingly different stylistic contexts at different sites. The biggest problems have come from review of complex data at Cerro Gavilán 1 (JG-58) where there are questions regarding basic definitions of period styles, the physical relationship between these styles, possible implied associations, the effects of geographically related ethnic influences, and resulting questions on stylistic periods. Most questions are briefly discussed in footnote form in the **Appendix**, under the appropriate sites (e.g., JG-1, JG-3, JG-54, JG-58). In all cases, these discussions are pertinent to this study's attempted organization of the rock art, but the results of long-term, detailed study of art content are not considered essential to the intent of this study — to provide a preliminary chronological organization to help direct future work. Enough discussion of content and other aspects of the appearance of the art is provided to alert the reader to the fact that more work undoubtedly will alter what is being proposed here. Experience shows that each day of fieldwork adds new sites, and that each new site contains information that conflicts with current interpretation, shows new relations in the art, or clarifies things presently not clear or not suggested at all.

<sup>12</sup> There are many categorizations of rock art. *Representational* also refers to *figurative*, and *naturalistic*. *Nonrepresentational* may refer to *nonnaturalistic*, *nonrealistic*, *nonfigurative*, and *conventionalized*. *Geometric* refers to patterns and symbols (e.g., signs and icons). *Abstract* may

recurring, relatively standardized form, such as Kokopelli in the southwestern United States, handprints on the Northwestern Plains, kinds of plumed serpents, or recurring pottery designs. Individual figures are difficult to interpret, partially due to their subjectivity to idiosyncratic expression, while motifs are more likely to be culturally meaningful and therefore are more useful in archeological analysis and interpretation.<sup>13</sup>

Following is a partial listing of motifs that have been recognized within the site sample and are referenced in the text. These are recurring forms which usually display considerable variation. No detailed study of content (including definition or distribution of motifs) has been done.

**Arracones**<sup>14</sup>: descending balls; small solid circles hanging by a string from a horizontal line; great variability in the number of dangling balls (Figure 10, t); consistently date to Period 4.

**Band patterns**: appear to represent neck-banded pottery decoration, particularly Arauquinoid (Figure 9, c).

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refer both to *geometric* and *stylized* art. *Geometric*, *abstract*, and *stylized* figures may also have referential meaning.

<sup>13</sup> Henley and Mattéi-Muller (1978:125) use the terms differently. *Motifs* are recurrent forms in a graphic pattern (essentially as I use the term). *Figures* are motifs that represent some form in the real world. In other studies these are referred to as “figurative art” or “representational art.” The dictionary defines *motif* as a recurring element, or a repeated figure or design.

<sup>14</sup> The term *arracones* was transcribed from a video tape taken by tourists at Idora de Santa Fe (JG-19) about 1992. The group was accompanied by the Piaroa *capitán* of the Santa Fe community. When asked what the descending ball figure referred to (“¿Qué significa esta figura?”), he replied frankly and clearly, “*arracones*.” Since then I have questioned linguists, ethnographers, and Piaroas regarding the meaning of *arracones*, but I have found no one familiar with the term. Questioning of Piaroas from various areas on the possible meaning of the motif also has not produced reliable results. I have not returned to Santa Fe to question the *capitán*.

**Barbell**: two circles or concentric circles connected with 2-3 straight or slightly curved lines (Figure 19, d-e, h; Figure 75, o), presumably mostly associated with Barrancoid and probably Saladoid.

**Basketry tray**: bounded circle with interior angular pattern; consistent with modern basketry trays (*guapas*) associated mostly with manioc production (Figure 10, i).

**Circle chains**: an alignment of open circles, either contiguous or connected with lines (Figure 10, l-n; Figure 20, k).

**Circle-grid**: small open circles arranged in a straight line or a rectilinear grid of parallel lines, with the circles at grid intersections and connected along grid lines (Figure 19, a-c; Figure 20, i). These appear to date to Period 5 (both developmental branches) and may have evolved into the *concentric circles with nodes* motif of Period 6.

**Circles, clustered**: positive or negative circles arranged together; seem likely to represent nests of turtle eggs (Figure 10, j-k; Figure 11, a; Figure 20, a-e).

**Circles, concentric with nodes** (compare to circle-grid): concentric circles with small open circles at specified points along the circles (e.g., four or six points), with circles connected to each other (Figure 20, m-n). This could have developed out of the *circle-grid* motif. They date to Periods 6 and 7.

**Circles, concentric**: double or multiple rings.

**Circles, connected**: simple circles or sets of concentric circles connected to each other with straight lines.

**Circles, rayed**: simple circles or concentric circles; rays extend outside the exterior margin (Figure 10, c-g).

**Circles, segmented:** typically, a set of three or more concentric circles, with contiguous circles connected with rays, and with no rays extending beyond the outer circle (Figure 10, a). Alternate forms intermediate between this ideal and *rayed circles* (Figure 10, b, h) would be *rayed-segmented circles*.

**Circles, winged:** usually loop wings in four directions (Figure 9, a; 23, l-m).

**Cross, outlined:** simple or multiple crosses (Figure 12; late deviant forms in Figure 75, a-g).

**Cross, simple:** single cross or multiple crosses, not outlined (Figure 10, s; Figure 75, h).

**Footprints:** realistic human footprints. Some small juvenile prints may be made by stamping the edge of an adult fist, then painting toe impressions with the finger.

**Handprints:** realistic human handprints, stamped; both adult and pubescent juvenile.

**Human, bowlegged man:** realistic human with bowed legs, solid or open body (Figure 8, c-d; 12, e-g).

**Humans, falling:** usually small stylized human figures in unstructured groups of individuals (Figure 13, dd-ii).

**Humans, warime ghost figures:** spirits in Piaroa cosmology represented in ceremonies by dancers in costume. Pictographic figures are usually large, with wide flowing bodies and usually pointed heads. They appear floating as ghosts (Figure 8, a-b; Figure 13, c-d). They appear to pertain to Period 3 and intrude into Period 4.

**Humans, wide-body:** square or triangular bodies (Figure 4, f-h; Figures 14-16).

**Interior-line fish:** multiple vertical or curved lines, sometimes concentric, in the body of the fish (Figure 6, a).

**Lizard:** lizards, geckos, caimans, *babos*,<sup>15</sup> and related forms (Figure 6, e).

**Monkeys on a line:** alignment of animals, usually with long curving tails, sometimes arranged by size (e.g., small left to large right). Usually one individual is carrying a baby on its back.<sup>16</sup>

**Quilt patterns:** large repetitive woven mat designs; these may be several meters across in total painted area.

**Vegetable products:** plants, fruits, and seed pods (including *onoto*, pineapple, manioc).

### Public and Private Art

Art occurs in different settings with varying degrees of openness. The easiest classification of setting and position of the art follows the presumed intention of the artist according to a distinction between *Public* and *Private* art. There are several ways to consider these distinctions, and some examples are discussed here. Field indications mostly pertain to the openness of a set of figures to outside areas, and thereby more distant viewing or very restricted viewing only from up-close, and to some extent the size of the figures and the ease with which they may be viewed from various distances.

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<sup>15</sup> Species of alligators: **caimán** (*Crocodylus intermedius*) lives in rivers, grows to a large size, narrow nose; **babo** (*Caiman crocodilus*) lives in lagoons, smaller body, wider nose.

<sup>16</sup> The monkey alignment motif could be considered a subset of animal alignments, which would include deer, camelids, and other forms.

### **View from the Painter**

The original intent of the painter may have determined how art was considered by the community. It is uncertain, however, that the original intention now can be known, although physical setting may suggest plausible interpretations. The dichotomy between public and private is general and partially integrates discriminatory access to the art, or access controlled differentially to members of groups.

In this scheme it is assumed that the art was produced by a single individual at one time and was not the result of group action. It presently is not clear how individual versus group art can be distinguished archeologically.

**Public Art.** Some art was intended for public viewing. People other than the painter would be expected or required to view the art. Access would be open to the entire community, to designated factions within a community, and/or to persons outside the community. Placement of the art and its ease of access are not important considerations. Small isolated figures in highly isolated settings and positions of difficult viewing, therefore, could be considered public.

**Private Art.** Some art was intended for private viewing by a single individual. Presumably the viewer would be only the painter, although it is conceivable that the painter might designate other people who would also be allowed to view the art in a private context. The latter case could include art produced by a particular shaman but meant to be viewed also by other designated shamans or community officers by invitation. It is unlikely that large outside panels would have been considered private (although it is possible). Such a panel would be easily observable by all within sight of the wall, and its setting would tend to draw

people to it. This instead would suggest that such a panel should be considered public by virtue of its setting.

**Nonhuman Viewing.** Art might be intended for viewing by spirits or for interaction with beings other than humans. Some art might not be meant to be viewed at all, but the importance was in the production (the act of *giving birth* to a figure, of drawing it on the wall, or just the act of drawing on an in-situ rock wall) or its location, and its viewing may have been considered unimportant or not allowed.

### **View from the Setting**

This classification is based on the physical setting of the art and its immediate surroundings. There is a presumption that the locational context suggests how the art may have been used relative to whom it was meant to be viewed by.

**Public Art.** Open settings suggest that the art was public and was meant to be viewed by groups of people. An example would be a panel that overlooks a moderately spacious area, such as shelter wall or high ceiling easily viewed by a dozen or so people sitting in the mouth of the cave. Another case would be art, such as a painted vertical wall, which is easily viewed from a distance or which overlooks a large area.

**Private Art.** Enclosed settings seem to indicate restricted access to areas intended for individual viewing. Such locations would be more personal or isolated in nature. These could include small rooms, alcoves, low ceiling areas, or places from which the paintings are not readily noticeable or visible from a distance.

### View from the Art

An alternative consideration of intended functional orientation is from the view of the art itself, as if it were conceived as an independent being with the ability and desire to see. Its importance may be the kind and degree of interaction with the rock, the wall, the site, or the outside world. The art may be placed according to what it can see, with its location based on how open and free the location was, or how enclosed and isolated.

Some art may not be meant to be viewed at all, but rather only to exist at a particular location. The act of painting may be the important action, not the state of continued existence or an ability to be viewed by humans, animals, or spiritual beings.

### Directional Orientation of the Art

The intended direction for *exterior* oriented public art may be outward toward the outside world, or inward from the outside world back toward the shelter wall. The two orientations are based on whether one is looking outward from inside the site, or is looking at the site from a distance (Greer and Greer 1995).

**Outward.** The orientation may be from inside the site, looking outward and away from the site toward the surrounding country or toward a specific geographic or cultural location or feature, such as looking out toward a mountain, a river, or a village. In this area perched boulders occur on hillsides with extensive vistas or overlook recognizably specific features or locations. Vistas may be important from the standpoint of the art, the cave, the artist, people visiting the site, or spirits. These elements may be able to look out over the country or over a specific location (such as a village or fields). Alternatively,

the vista may be oriented more upward toward the heavens, or the site's elevated position may be important relative to either the ground or the sky.

**Inward.** Art may be viewable from a distance or from a nearby outside area looking back toward the site and the paintings. Paintable walls and the painted figures on those walls are easily viewed from some distance in front of the site, or from an outside location looking back toward the site. Obvious examples in other areas are trail markers to designate a route, panels to sanctify or provide protection to a route, or figures to indicate who passed by a location, or the sociocultural affiliation of such travelers.

### **Who Painted the Orinoco Art**

It is assumed, without firm foundation, that shamans (as ritual specialists) probably are responsible for the rock paintings here, and thus it is assumed that most of the art reflects shamanistic activity. Paintings, then, would be the result of an individual's actions, perhaps portraying religious ideas, the recounting of events, or a reference to secular matters. Almost all known art could function as references to the supernatural, creation myths, ancestral beings and actions, other religious concepts, and social or spiritual conventions (cf. Boglar 1976).

There is no indication of attempted access or use restriction for figures on vertical faces open to the front of the site although there could have been social regulations controlling who was allowed to look at the figures, or even who had access to the site. In local Piaroa society, shamans are almost exclusively male<sup>17</sup>, and females generally are restricted from observation or knowledge of ritual

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<sup>17</sup> Joanna Overing (personal communication 1994) states from her 1970's fieldwork with the Piaroa that females can become shamans although they rarely do. This essentially contradicts other observations of female exclusion from ritual paraphernalia.

preparation and from access to caves where ritual gear is stored (Overing 1975; Overing and Kaplan 1988; Boglar 1976).

Although most art is on open faces, private use or restricted display is suggested by isolated locations for some figures, such as laterally restricted low ceiling areas or small domes best occupied or monopolized by a single individual or best viewed by one person at a time, and by the small size of many isolated figures. The placement of very small figures in isolated areas of low ceiling space is common at such sites as Idora de Santa Fe (JG-19) and Cerro La Vaca 1 (JG-21) and may indicate multiple purposes for the art within any one site. Small figures perhaps were intended more for their existence on the rock than for viewing. Some open painted panels are in rear areas not easily viewed from a distance and perhaps are most easily viewed from immediately in front of the art.

## CHAPTER 6

# PROPOSED ORGANIZATION OF THE ART

The following descriptions summarize the most salient features of technology, content, and other aspects of the art of each period (Tables 9 and 12). Cultural explanation is attempted regarding who was associated with the art — new people, internal changes in society, etc. Cultural suggestions are intended to go

PERIOD	COLOR	PIGMENTS	PAINTED FIGURES
7	yellowish-beige white	clay	historic buildings geometrics
6	<u>monochrome</u> = white yellow pink black (late) dark brown (late)	colors = clays black = charcoal brown = <i>caraña</i>	generally not concise mostly finger paint
5	<u>combinations</u> = polychrome r-b-w negative red w/r; r/w	red = vegetal white = clay black = unknown	complex geometrics
4	<u>monochrome</u> = med. to deep red	medium = <i>onoto</i> dark = <i>k'eräü</i>	individual figures figure diversity
3	<u>bichrome</u> = red-white red-light yellow	red = vegetal? white = clay	red-white figures complex panels fish, animals humans in costumes variable human forms
2	<u>monochrome</u> = medium red purplish	vegetal = red = <i>onoto</i> purple = unknown	fine-line figs. common interior-line fish birds, lizards elongated humans
1	<u>monochrome</u> = medium red light orange	mineral (hematite)	geom. predominant camelids elongated humans

**Table 9.** Basic art characteristics by period style. See **Table 12** for additional attributes.

beyond the paintings and propose related aspects of culture history or process. These are meant as suggestions for future consideration. Following the discussions of periods is a summary to help field identification of figures to period.

## Period 1

### Technology and Content

Period 1 is defined as anything overpainted by (or stratigraphically earlier than) distinctive initial Period 2 fine-line dark red to purplish figures. Where such superpositioning occurs, light orange and light red are consistently the earlier colors. Therefore, Period 1 is characterized by monochrome medium red, light red, and light orange paint. This thin paint appears to be a mineral paint, possibly hematite, but no chemical analysis has been done. In some caves on the Sipapo to the south, there is some use of a dark red (or oxidized) paint in what may be early figures, similar to the purplish paint of early Period 2 of the Parguaza area. Most of the early orange occurs in sites just south and east of Puerto Ayacucho, such as Alta Carinagua (JG-18) and Cerro Pintado 1 (JG-15). Examples on the Parguaza to the north are mostly light to medium red.

Paintings occur mostly as patterns, designs, symbols, and simple animal and human figures (Figure 4). Geometric figures seem to predominate. Some orange figures at Alta Carinagua (JG-18; Figure 4, a) appear to portray designs similar to modern Piaroa body stamps (Overing and Kaplan 1988:342-343; Vicariato 1988:79; Hernández 1992; see Figure 34), and other designs also occur. Light orange figures at Cerro Pintado 1 (JG-15; Figure 4, b, d-f) include elongated humans (some with angular parallel lines representing body stamps across the

torso) and other small fine-line figures. Examples of early light to medium red or orangish-red figures to the north include a row of small camelids, presumably guanacos, at Cerro La Vaca 1 (JG-21; Figure 4, c) and a row of smeared fish at Cerro Iguanitas 1 (JG-1). Dark red designs on the Sipapo to the south, such as at Cerro Pelota (JG-46; Figure 6, f-g), include wavy parallel lines.

Few human figures are known from Period 1, but most are elongated figures with diagonally cross-hatched body decoration, or stylized forms with concentric interior lines (Figure 4, b, d-f; also Figure 13, k, which may be related). It is assumed that the anthropomorphs known so far, due to their similarity of approach, are from a short time near the end of Period 1. The beginning of Period 1 is presently conceived as open-ended, and stylistic uniformity for the period is not assumed.

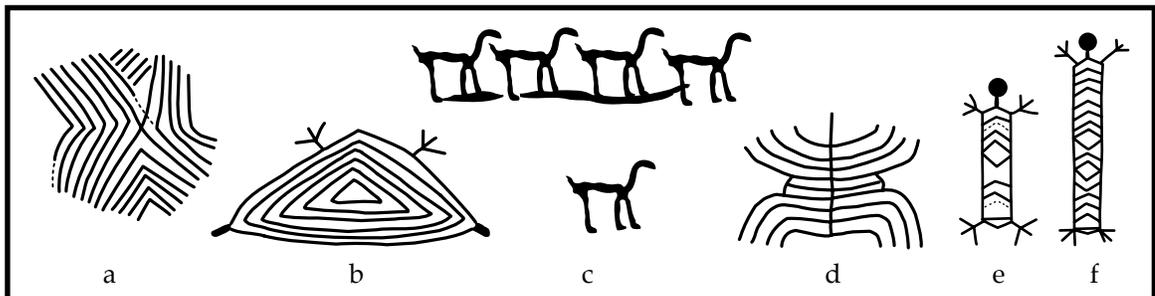


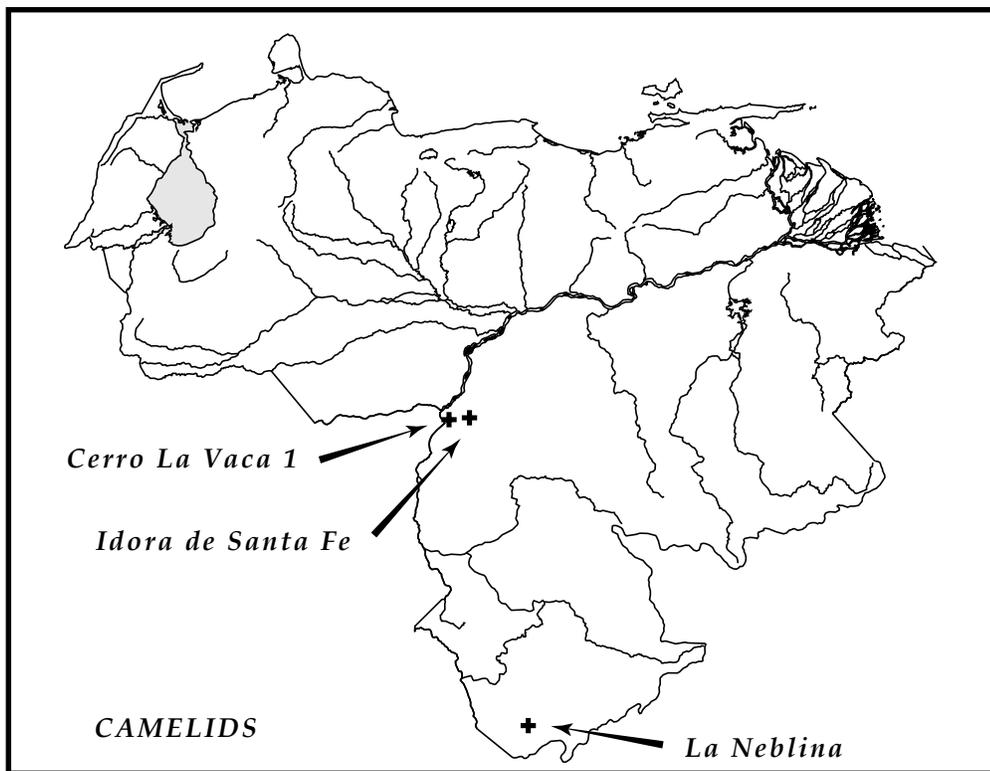
Figure 4. Possible Period 1 figures. c, early. a-b, d-f, late.

### Cultural Explanation

Since Period 1 is currently defined as having unknown duration, cultural generalization is impossible. It is not possible to judge how many cultures occupied the area, or when, and which ones utilized art, or how. It is assumed that paintings were made by local groups, but there is no way to judge this.

Camelids are not found in the area today, and the prehistoric range of guanaco and related early forms is not known. Although no ages for depictions of

camelids are known, it is assumed that they represent the earliest paintings and could date to the early Archaic period, presumably any time between 10,000 and 1000 B.C. They also could date later within ceramic periods since the history of camelid occurrence here is not known. Paintings could depict animals either resident to the area, intrusive to the area (perhaps with later caravans), or resident of other regions (such as the Andes foothills or highlands) and drawn by people familiar with those perhaps distant regions. Paintings could have been done by local residents (observing animals either here or somewhere else) or by visitors from distant areas. The age of the camelids is unknown, as is their homeland (see [Figure 5](#)).



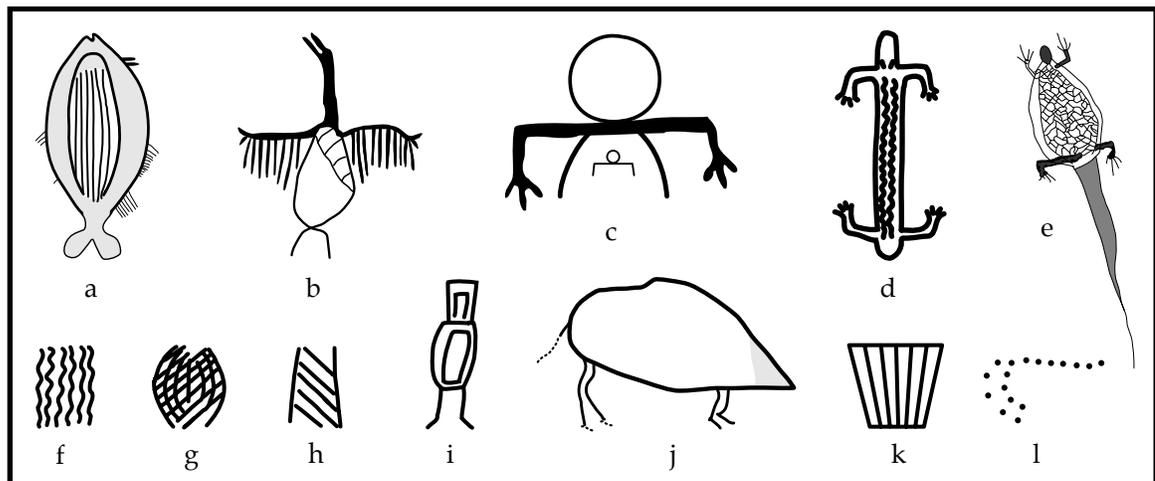
**Figure 5.** Rock art sites in southern Venezuela with depictions of camelids.

It presently seems that most other paintings overlaid by early Period 2 figures, including light orange figurative and geometric art, probably date to a fairly short period immediately preceding Period 2 (as with the anthropomorphs mentioned above), although there is no way to measure this. Likewise, presumed technological and content diversity in Period 1 art from north to south could represent some presently unmeasurable heterogeneity of local groups. A study of the technology and content of figures from this period at additional sites may someday help with these questions.

## Period 2

### Technology and Content

This period utilizes a diverse series of monochrome red paints (presumed mostly to be processed vegetal pigments) with what appears to be some temporal variation. Chemical analyses have not been done, and suggested pigment source is based on color (e.g., tint, intensity), thickness, limited comparison with ethnographic samples of body paints, and informants' opinions and explanations.



**Figure 6.** Possible Period 2 figures. All are monochrome red (shading is red smearing).

The beginning of Period 2 is defined as the introduction of fine-line monochrome figures painted in dark red to deep purplish liquid paint applied with a fine brush or frayed stick. Distinctive, usually fairly large, fine-line animal representations, such as broad interior-line fish, long lizards, and large birds with outstretched wings (Figure 6), predominate. Human figures continue to have the earlier characteristic of static elongated bodies, some with interior torso decoration. At some sites, especially Cerro Gavilán 1 (JG-58), early interior-lined figures may be huge and made of thick lines (e.g., Figure 6, c), but they are consistently early wherever they occur in superpositional context.

It appears that the early Period 2 fine-line purplish figures are partially coeval with and partially superseded by medium to light red naturalistic figures, presumably painted in lighter color *onoto* mixtures (from the *onoto* tree, *Bixa orellana*). These are most commonly fish (especially Cerro Iguanitas 1, JG-01).

### **Cultural Explanation**

From content of the art, especially human forms, it appears that some of the artistic characteristics of late Period 1 continued into Period 2, with the introduction of a new technology of painting and a few new elements. This may be viewed as representing a fairly stable local population, with some new ideas resulting from either internal change or influence from beyond the group. Changes into Period 2 could indicate the influence of locally expanding groups, such as are observable today in this area with the Piaroa (Mansutti-Rodríguez 1990) and Yanomami (Chagnon 1992). Ethnohistoric information for the last 250 years indicates that the area always has been occupied by a wide variety of ethnic groups representing several language families (Rojas 1989), and that not only did groups cohabit the region, but they constantly moved around within it

(Mansutti-Rodríguez 1986; Vicariato 1988). Changes from late Period 1 to Period 2, with their continuity of similar forms, could represent changes in political power and ideological influence of such shifting local groups, such that control or influence regionally shifted from one dominant group to another, but without drastic population changes on a regional level.

### Period 3

#### Technology, Content, Manner, and Context

This period is characterized by red-white bichrome figures with wide, solid white bodies bordered with dark, bright red outlines. These overlie the red monochrome of Period 2 and are overpainted by more recent figures of monochrome bright red (most likely Period 5) in several sites.

Period 3 introduces complex panels of red-white figures of fish, animals, humans, and geometric forms with more elaboration than seen previously. Forms are suddenly different from previous paintings. Figures are larger, more closely clustered, and cover more of the wall than previous work. Human forms are variable and often appear to be clothed in costume (e.g., [Figure 8](#), g-h). For the first time, figures are often complex and occasionally dynamic.

Most distinctive to this period are large realistic figures with a solid white body outlined with bright darkish red fingerline. There is a heavy stress on fish and other aquatic and terrestrial animals ([Figure 7](#)). These occur mainly in and around the Parguaza drainage ([Figure 39](#)) and are thought to constitute an emphasis on totem-like animals, and not on food procurement (cf. Boglar 1976). The most intensively painted sites of this style are Cerro Muertos 2 (JG-5) and Cerro Gavilán 1 (JG-58).

Utilizing the same attributes are large ghost-like humans (Figure 8, a-b), probably most notable and well known at Cerro Iguanitas 1 (JG-1; Cruxent 1946: Fig. 22; Scaramelli 1992). In a large complex panel at this site are three such humans, a running deer being pursued, another apparently in a trap or snare, another running deer or dog, two possible drums, at least three other symbols containing multiple concentric circles, and other possibly related smaller humans and other figures (Figures 51-57). The large open-body ghost-like humans mostly have no body decoration and are distinguished from each other mainly by a couple of different kinds of head ornamentation. The figures probably represent mythical *warime* spirits, represented today in Piaroa villages by dancers wearing large reed costumes typical of lowland South American dances. All Period 3 human forms appear to be resident to the Parguaza area.

Another body style introduced during Period 3 is the *bowlegged man* motif

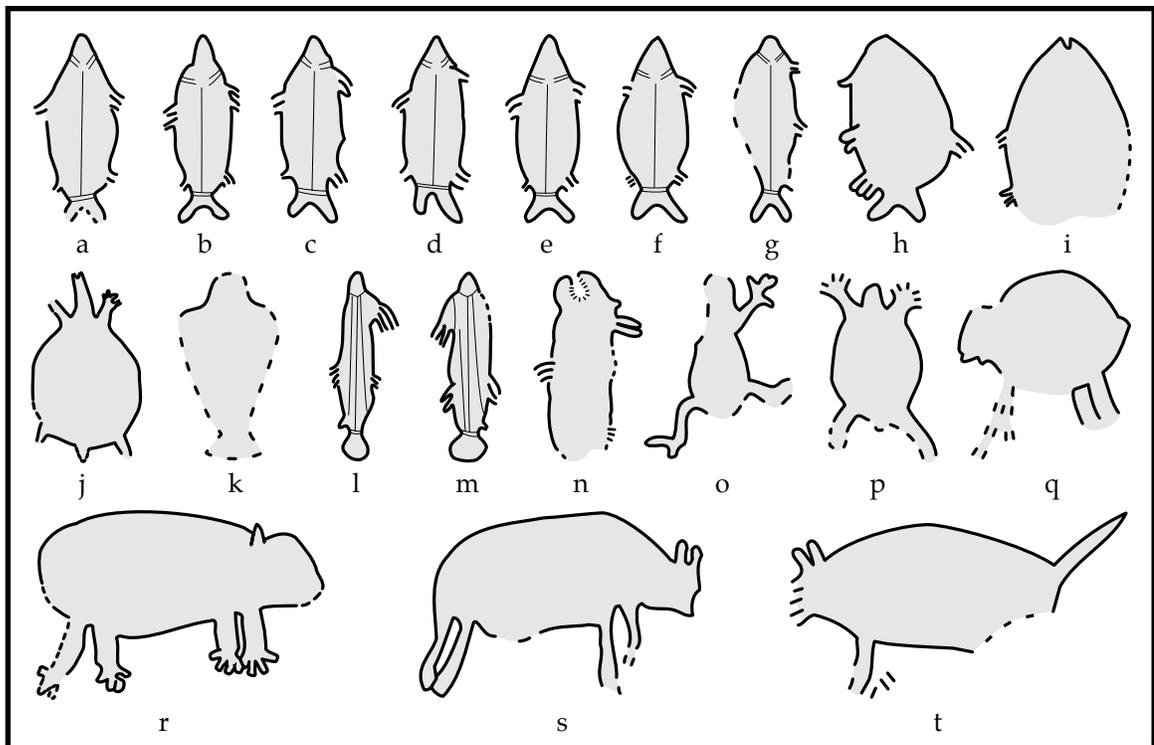


Figure 7. Period 3 zoomorphs from JG-58. All are red-white bichrome (shading is white).

(Figure 8, c-d). It typically has a slightly elongated full open body and short bowed legs. Occasional body attachments suggest that this may be a dancer of some kind, possibly representing a specific ancestral spirit or being. The body is typically white or yellow, with bright red outline. Similar figures with plain body interiors generally are thought to be intrusive into contemporaneous portions of Period 4 (Figure 13, a-h). The distribution presently is limited to the Parguaza drainage.

The third human form which appears to be introduced at this time has a wide squarish body divided in half, and with a pattern of parallel chevrons (alternating red-white, or red lines with white between) on either side of the centerline (Figure 8, f-h). This probably represents a loosely woven palm leaf body cloak for a dancer or shaman, common today in many areas. Most figures have various kinds of headdresses. Some red-white bichrome humans of this style are either on top of or are covered by monochrome red anthropomorphs of the same form. This is viewed more as the interaction between Period 3 middle Orinoco influence onto a resident Period 4 population, although it may also be viewed as painting variation within a single style. Thus, while the form continued with some elaboration into subsequent periods, some superposed human figures may be essentially the same age as each other and simply indicate the use of monochrome red during Period 3 (Cueva Iglesias, JG-11). This human form mainly occurs in the Parguaza drainage area, and its occurrence south of

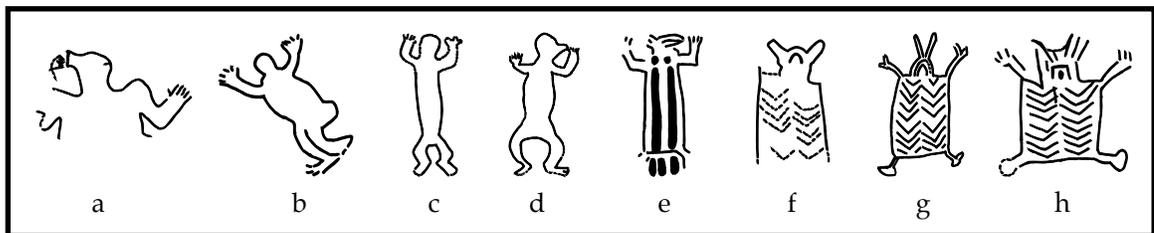


Figure 8. Period 3 anthropomorphs.

Puerto Ayacucho could indicate interregional contact or movements of individuals (possibly engaged in trade, etc.) from the Parguaza area.

Other realistic figures with alternating red-white interior-line body decoration also occur and are believed to relate to Period 3. One such figure is the drawing of a large, white-on-red bichrome ceramic jar on the Parguaza (site JG-2; see Scaramelli 1992) which may date to either Period 3 or Period 5.

Geometric figures and patterns also occur throughout the region (Figure 9). The *outlined cross* motif may occur now, but its origin, maximum popularity, and dominance are associated with the local Period 4 (Figure 12), with which the north-oriented Period 3 is somewhat contemporaneous. Some large repetitive woven mat designs seem to have been introduced during this period and occur mainly at sites near the Orinoco (e.g., JG-8, JG-33).

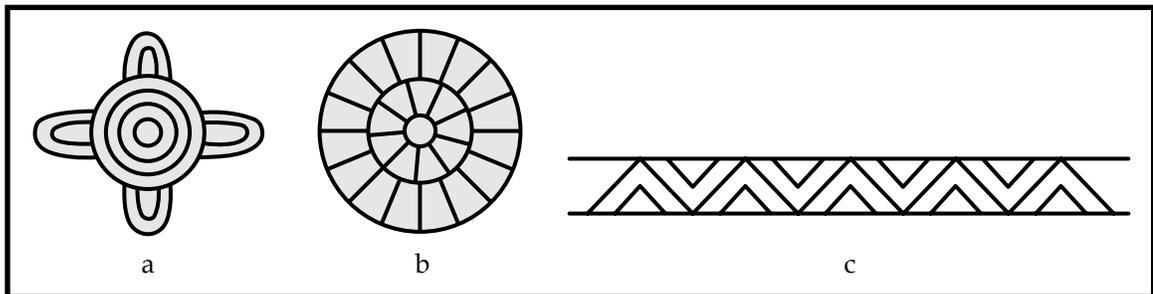


Figure 9. Possible Period 3 geometrics (possibly Period 5).  
a-b, red-white bichrome. c, red monochrome.

### Cultural Explanation

With the introduction of bichrome there is a change in subject matter, painting technology, general approach to art, and use of artistic space. These changes suggest an influx of new people in a position to affect — perhaps influence, control, or change — the indigenous culture. This new ideological influence continued into succeeding periods in the northern areas (cf. Tarble 1985).

Period 3 bichrome is an interruption of the general monochrome red tradition of the middle part of the sequence. The bichrome style seems widespread at least in the middle and northern parts of the zone, particularly from the Pozón area northward past the Parguaza river. Future study should test the possibility that this period is associated with Saladoid occupation since the use of combined red-white color was introduced during these two respective periods (Saladoid and Period 3 rock art). Future work should test the possibility that the period can be separated into functional or temporal components by selected motifs, such as a dissociation between humans (early), geometrics, and animals-fish (late).

#### **Period 4**

##### **Technology and Content**

Period 4 continues the use of monochrome light to medium red paint (and rarely dark red), perhaps resulting from the use of a variety of processed vegetable mixtures. Period 4 art is distinguishable from the previous similar use of red on the basis of paint characteristics, manner, and content, at least in several sites in the Parguaza drainage area. In some sites Period 4 monochrome red figures appear to be superimposed over Period 3 red-white bichrome, but overall it appears that Period 4 art is probably somewhat contemporaneous with Period 3 and represents a different population. Occasionally later figures, especially Period 5 monochrome dark red and Period 6 white, are painted over Period 4 monochrome red.

It is suggested at some sites, such as Idora de Santa Fe (JG-19) on the Parguaza River, that there is an increased use, possibly toward the end of this period, of a darker, brighter red believed to be *k'eräü* (see **Glossary**). Among figures done in

this paint is a small group of camelids (not pictured) which overlie a series of fine-line red monochrome large squares possibly representing pens or corrals.

Figurative art and carefully planned and executed geometrics (Figure 10) seem to predominate in Period 4. Although there is ample variation from area to area within the region, figures usually are relatively small and carefully painted. The monochrome red and smaller size of Period 4 figures distinguish them from the Period 3 red-white bichrome style. Where present, Period 5 monochrome darker red smaller symbols overlie the medium red figurative art of Period 4. Larger Period 5 figures, often of a darker and thicker red, also directly overlie Period 3 art. The care in painting distinguishes Period 4 from the later sprawling geometrics and somewhat *freestyle* white figures of Period 6.

Period 4 is represented by a wide variety of forms exhibiting a diversity of shapes and subjects. Numerous kinds of human forms are shown as individuals, in groups, and in more complex panels with other kinds of figures. Depiction is

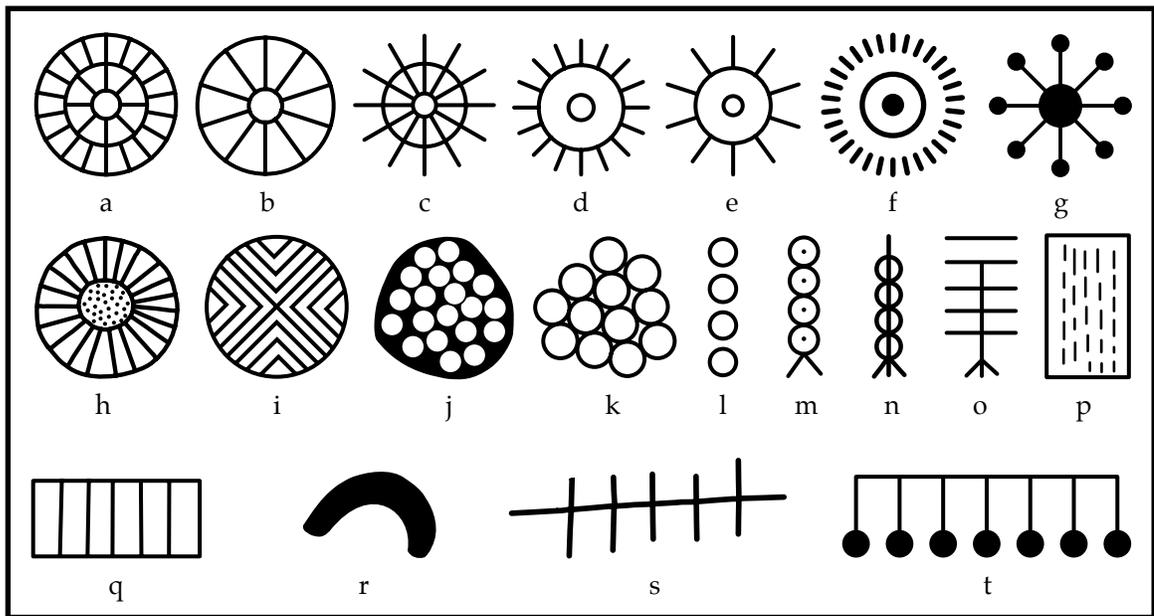
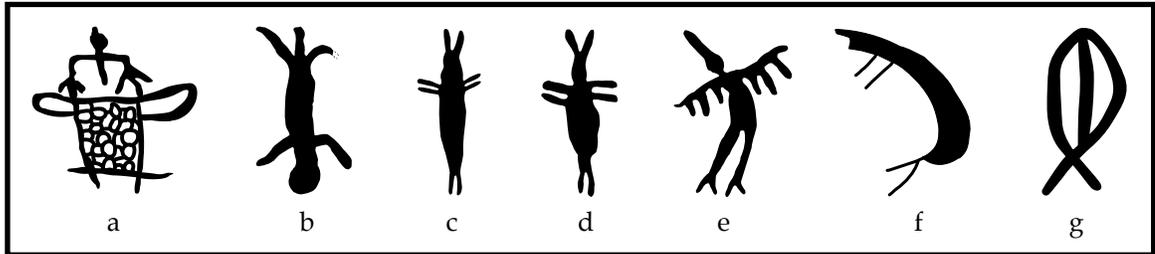


Figure 10. Period 4 geometric figures, red monochrome.

both static and dynamic, with various conditions or activities (see discussion below).



**Figure 11.** Period 4 zoomorphic figures, red monochrome.  
a, possibly bird or turtle on nest.

Animals are especially numerous and range from somewhat stylized stick figures to full-bodied portrayals (Figure 11). Terrestrial animals seem to predominate (such as tapir, sloth, monkey, deer, dogs, birds, and turtles), although fish and possibly aquatic mammals are also represented. Snakes are rare, if present at all. Plants are represented by such forms as *onoto* seed pods and manioc plants and tubers. Material items include such things as basketry trays and bags, hafted axes, arrows, and hunting clubs. There is a wide variety of geometric motifs, such as large woven mat patterns (some similar to middle Orinoco roller stamps), body stamp plaques and designs, stars, and various symmetrical and asymmetrical shapes. Most figures seem to represent individual objects although relations between figures are also shown (some unidentified), such as a manioc plant in the body cavity of a deer, lines of monkeys, monkeys carrying their young, and hunting scenes.

An important motif is the outlined cross (Figure 12). It appears to have been introduced during this period and is very widespread. There are many variations to the basic form (see **Chapter 7, Outlined Cross Motif** section).

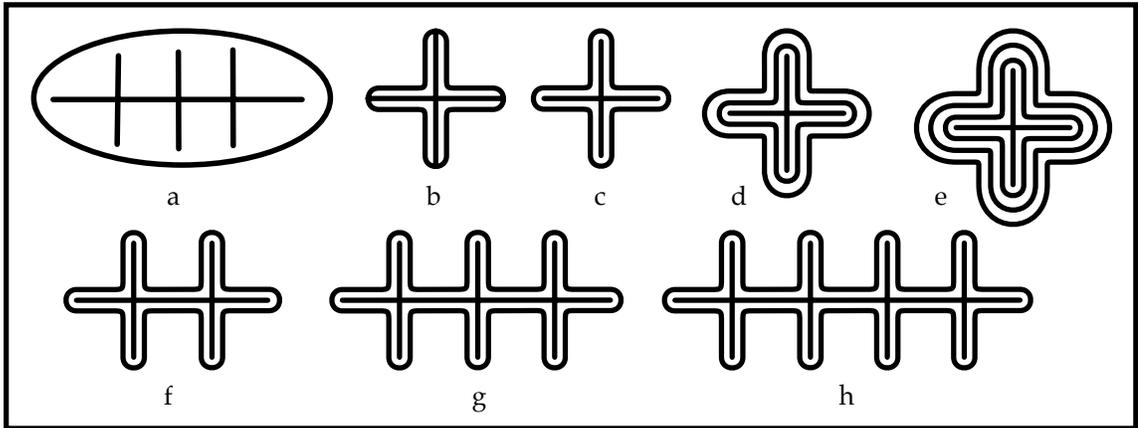


Figure 12. Period 4 outlined crosses, red monochrome.

### Anthropomorphs

Human forms exemplify morphological variety within the period (Figure 13). There appears to be more variation here than in earlier periods, such as Periods 1 and 2 when most elongated and narrow humans seem to belong to a different tradition. While some changes are credited to Period 3 influence, it is within

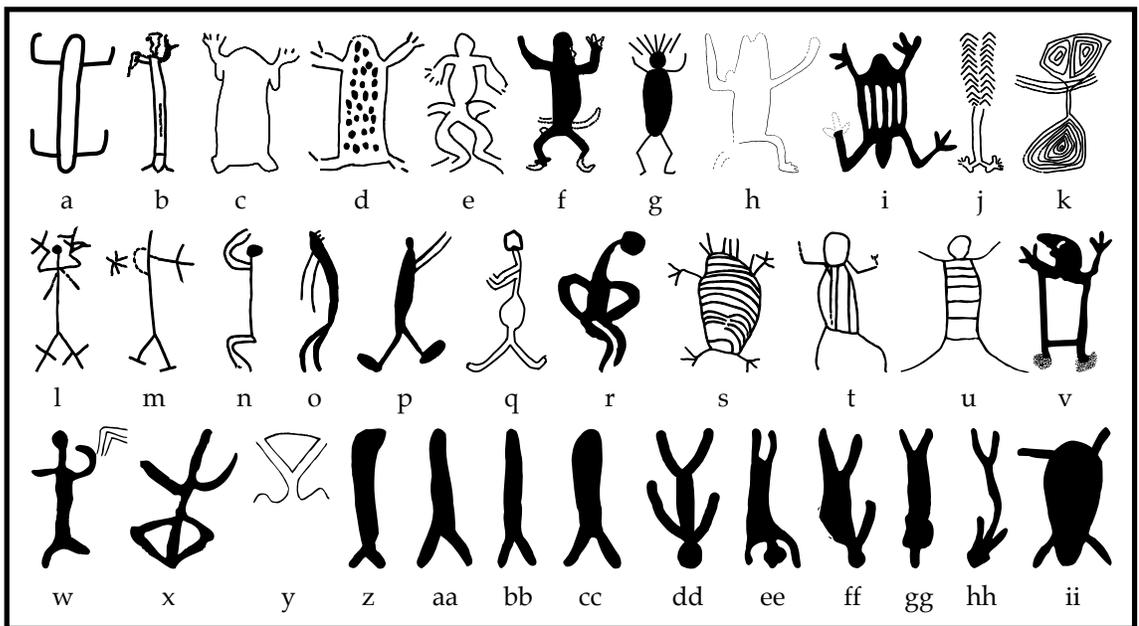


Figure 13. Period 4 miscellaneous anthropomorphs, red monochrome.  
k, is from the Sipapo river and may be Period 2 (cf. Figure 2, b, d).

Period 4 that human forms seem to be in their greatest number and diversity. This wide variety of humans includes individual stick figures, lines of dancers, a pregnant woman (Figure 13, q), and simple to complex bodies with various kinds of attachments. Figures mostly seem to be painted as individuals, although there are also some small integrated panels of multiple figures. Humans may be static in appearance or they may show action, such as hunting or dancing. Condition is also portrayed, as with the depiction of the pregnant woman.

The period does not stand in isolation. Ghost-like figures and the bowlegged man (Figure 13, c-h), forms which are almost exclusively associated with Period 3 bichrome, are also present in Period 4. This is also the case with dancers in costume (Figure 14), which continue into Period 6. Other human forms also continue into Period 6, such as particularly common stick figures. Groups of figures also appear now, such as line dancing or group dancing (Figure 13, z-cc).

**Wide Bodies.** A common human form has either a wide squarish (Figures 14 and 15) or a teardrop-shaped body (Figures 16 and 17), usually with interior body lines, torso decorations, head ornamentation, and occasionally objects attached to the arms or legs.

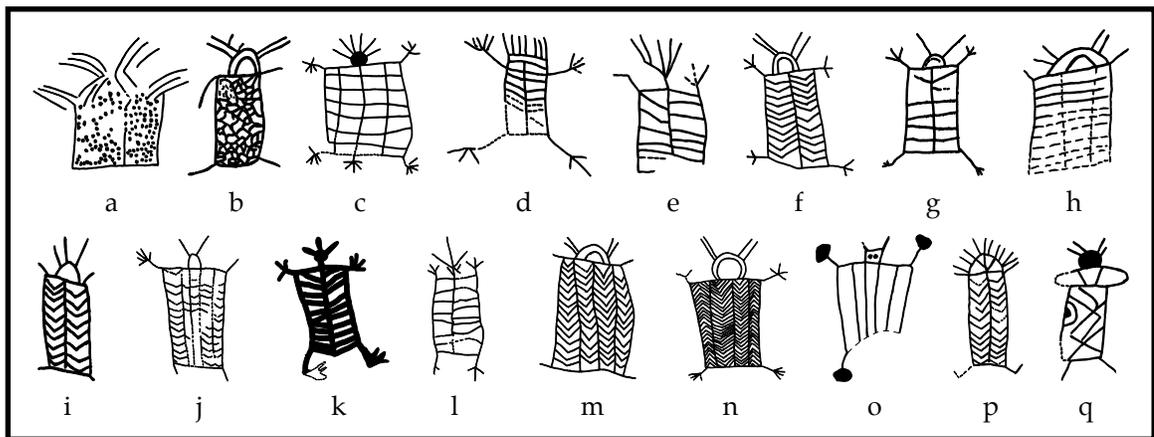


Figure 14. Period 4 square-body humans with headdresses, red monochrome.

and headdresses it is believed that these may portray spirits represented as dancers (e.g., *warime* for modern Piaroa) with reed or woven body coverings. The two body shapes are similar and are assumed to be closely related as subsets of a common motif. A few intermediate figures have characteristics of both modes and appear with subrectangular torsos, often widening slightly at the bottom. Both square and triangular body forms are centered on the Parguaza.

**Square Bodies.** Wide squarish bodies usually have vertical divisions and various kinds of interior body lines (Figures 14 and 15). There are two main kinds of body decoration. In the first, the torso is divided in half or into multiple divisions by vertical lines which separate columns of angular parallel lines (especially diagonal or chevrons) on either side of centerline (or multiple divisions). In the second variation, the torso is covered with parallel vertical lines. Both decorations seem to represent woven or draped palm leaf body coating for a dancer or shaman. Most figures have some kind of rayed headdress.

Squarish bodies are a development apparently inherent to Period 3, with some refinements, elaboration, and additional forms in Period 4. Some forms continue into Period 6. This is particularly obvious in bodies with parallel bands of

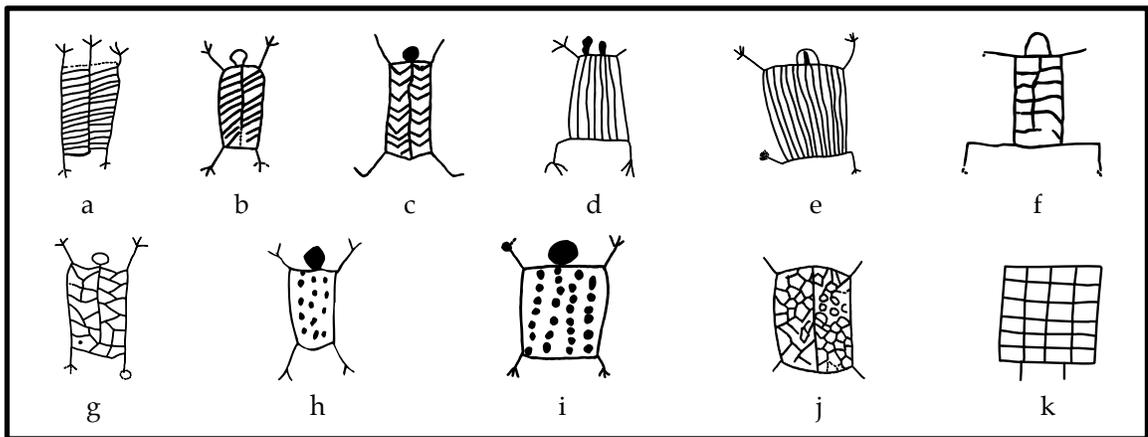
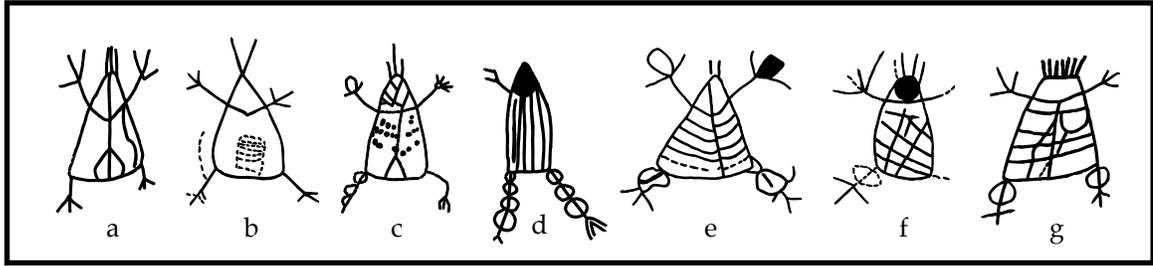


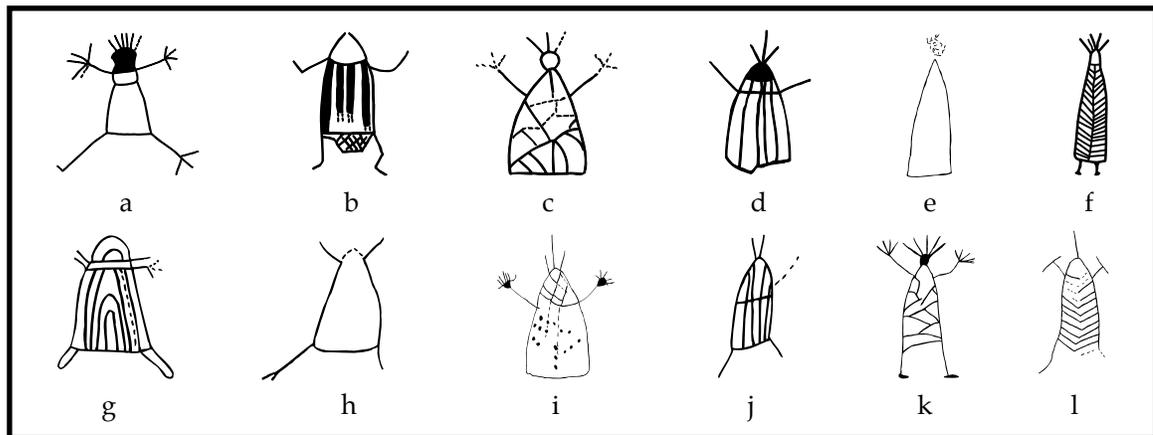
Figure 15. Period 4 square humans without headdresses, red monochrome.



**Figure 16.** Period 4 possible female humans and leg bands or rattles, red monochrome.  
 a-c, figures with possible genital representation.  
 c-g, loops on legs as possible rattles or leg bands.

chevrons — which in Period 3 are alternating red-white lines and in Period 6 are all white. Bodies covered with parallel vertical lines (presumably draped palm leaves) seem to begin during Period 4, although there are no examples to indicate the decoration continues into Period 6.

**Triangular Bodies.** Triangular or tear-drop shaped bodies (Figures 16 and 17) occasionally have the central vertical division line, though only rarely with parallel diagonal lines or chevrons to either side of the centerline. Some triangular figures have distinctive markings on the lower-central torso which may denote them as females (Figure 16, a-c). Triangular torsos also are the only wide-body forms to have open circles on the legs of some figures (Figure 16, c-g).



**Figure 17.** Period 4 other triangular figures, red monochrome.

These may be rattles used in dances, or leg bands as worn today by Panare women (Valles 1993), Piaroa men and women, and members of other ethnic groups in the region (Chaffanjon 1986:85; Crevaux 1988:261; Vicariato 1988:54; Overing and Kaplan 1988:371).

Triangular bodies seem to occur only in Period 4. They presently are not known in Period 3 red-white bichrome or in the white forms of Period 6.

**Dancers.** Dancing appears to be an activity commonly portrayed. Square and triangular figures may represent ritual dancers with various kinds of woven palm leaf body covering and head ornamentation (Vicariato 1988; Overing and Kaplan 1988:348). Features such as possible leg rattles are believed to indicate dancing. Line dancing or group dancing appears to be represented by rows of humans in various forms, usually plain solid. Rows occur both singly and paired, and they vary in length and in number of individuals. So far, all seem to date to

Site	Rows	Figures	Period
JG-15	one row	5 figures	Period 4
JG-21	one row	6 figures	Period 4
JG-23	one row	3 figures	Period 4
JG-23	double row upper lower	8 figures 8 figures	Period 4
JG-23	one row	9 figures	Period 4
JG-23	one row	8 figures	Period 4
JG-23	one row	4 figures	Period 4
JG-52	one row	6 figures	Period 4
JG-54	two rows upper lower	25+ figures 31 figures	Period 4
JG-54	two rows upper lower	14 figures 11+ figures	Period 4
JG-54	one row	15+ figures	Period 4

**Table 10.** Examples of line dancers.

Period 4 (Table 10).

**Falling Figures.** A local myth, probably describing at least one historical event, may be represented in several sites by groups of upside-down humans or falling figures (Figure 13, dd-ii). The story describes a group of Mapoyo committing communal suicide by jumping off a mountain (Anduze 1974:31; Henley 1975:40; Perera 1992 and references therein). This story is widespread, and there are at least two mountains, one in the study area and one just to the north, where the event is reported to have occurred. Small upside-down humans may also refer to other activities or conditions.

**Group Hunting Scene.** A panel at Cueva Iglesias (JG-11) shows at least three men, one with what appear to be throwing clubs in an upraised hand, facing or surrounding a deer with an arrow or spear in the back of its neck (Figure 18). Another smaller animal may represent a more distant deer, a smaller deer, or a dog used in hunting.<sup>18</sup> A trail of deer tracks leads up to the wounded deer.

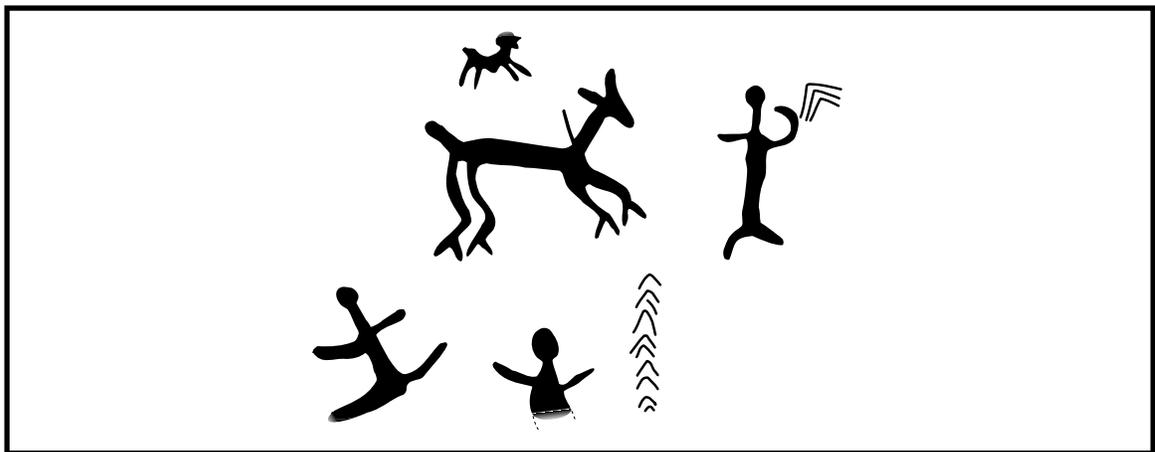


Figure 18. Period 4 hunting scene at Cueva Iglesias (JG-11), red monochrome.

<sup>18</sup> Hunting with dogs is documented for the Piaroa (Anduze 1974:39; Mansutti-Rodríguez 1986:23; Zent 1992:214, 220; Eden 1990:69), Ye'kuana (Sponsel 1986), and other groups.

## Cultural Explanation

The technology of early Period 4 is similar to Period 2 with its domination by monochrome red. Period 4 presently is thought to be a continuation of the developmental branch from Period 2. The break between Periods 2 and 4 may be a simple developmental change, with Period 3 acting as an external influence in Period 4.

These changes can be seen as cultural interactions. Period 3 stylistic intrusion into an existing artistic tradition seems to indicate the entry of a new cultural tradition by an intrusive group (Period 3). It seems unlikely at this point that the indigenous residents (Period 4) were significantly displaced or otherwise lost control of artistic (ideological) expression, political power, or regional social status. It would seem from the continuing nature of Period 4, with minimal Period 3 outside influence, that the original Period 4 indigenous population remained intact and in control of their territory, and their artistic expression was minimally influenced by incoming people with bichrome art. The new groups apparently stayed mostly to the north, downstream on the middle Orinoco.

Period 3 influence is seen minimally in Period 4, but the trend continued into subsequent periods. This presumably represents a trend in social influence, and possibly growth of political power, with a configuration of belief systems and ideological expression associated with social activities expressed in cave paintings. This developmental trend is seen to be separate from that of Period 4, but parallel and interactive.

Within Period 4 there seem to be intersite differences in both artistic content and manner of application which may equate with a changing cultural environment, perhaps best seen in the Parguaza area. Some sites seem to have

their own unique style or substyle based on both manner and content. For example, Cueva Iglesias (JG-11) has a delicate Period 4 style, figures of which seem to be recognizable at other sites. Idora de Santa Fe (JG-19) art seems to be recognizable from its seemingly unique figures (tapirs, monkeys, and a plethora of *arracones* or descending balls, see [Figure 10](#), t) and colors (especially dark bright red). The same is true for Cerro La Vaca 1 (JG-21) with its tasseled segmented boxes and handprints. Cerro Gavilán 1 (JG-58) appears to be a rendezvous site owing to an aggregate of styles derived from other sites such as Santa Fe (JG-19), Cueva Iglesias (JG-11), Cerro Muertos 2 (JG-5), and Cueva Pintada (JG-52).

Geographic and intersite artistic diversity in Period 4 seems to indicate the existence of a number of distinguishable groups. Local area or site-specific styles likewise suggest the existence of somewhat autonomous communities. These could be either different cultural or political groups, or art differences could reflect different political or religious structures. Distribution of recognizable site-specific motifs at distant sites across the region and the occurrence of rendezvous sites, together, indicate regional or interregional contact of probably several kinds. The people certainly were not isolated from each other or territorially restricted to one area. It does not seem that different villages of a single cultural group would account for such single-period variability; a heterogeneous cultural atmosphere seems more likely.

## Period 5

At the end of Periods 3 and 4 and the beginning of Period 6 is a transitional development only now beginning to be recognized.<sup>19</sup> Its existence was recently suggested as a transitional subperiod (Period 4–5 Transition of Greer 1995; later designated Period 5a), but here it is renamed a formal period on the basis of recognizable standardization of content.

### Technology and Content

The period is characterized mostly by geometric symbols and patterns (Figure 19). Two substyles are recognized, seemingly representing different developments and possibly having some minor variation in age. The *monochrome phase* is associated with Period 4, and the *multicolor phase* (which also includes monochrome figures) is associated mostly with Period 3. These are best exemplified by monochrome red geometrics at Cerro Iguanitas 3 (JG-3) and polychrome geometrics at Cerro Gavilán 1 (JG-58).

**Monochrome Phase.** This substyle appears most easily recognized as fairly small dark red symbols that overlies Period 4 medium to light-medium red figurative art (e.g., animals and humans). This relative positioning occurs in such sites as Alta Carinagua (JG-18), Cerro Iguanitas 3 (JG-3), and Cerro Gavilán 1; and possibly Cerro Pintado 1 (JG-15), Cerro Iguanitas 1 (JG-1), and Cerro Iguanitas 2 (JG-2).

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<sup>19</sup> The recently discovered Cerro Pintaito 1 (JG-67) site just south of Puerto Ayacucho and the San Borja 1 (JG-62) site near Pozón support the separation between Period 4 and early Period 5 monochrome red. At the same time, Period 5 red figures at Pintaito 1 are identical with bichrome and polychrome Period 5 motifs at Cerro Gavilán 1 (JG-58) and indicate a clear relationship. Observations at those new sites, therefore, reinforce some of the cautious suggestions made here.

Various kinds of connected or related circles, or portions of circles, are common, and concentric arcs (Figure 19, i) occur apparently in this context at several sites. The *outlined cross* motif changes from previous forms. Period 4 crosses are moderately large, carefully done, composed of finger width lines of medium red paint, and prominently placed on the wall. Period 5 crosses are usually smaller (10-15 cm tall), less symmetrical (not as carefully drawn), still composed of finer lines but of dark red paint, and do not stand out so much from surrounding figures. Highly stylized versions also occur in Period 5.

Perhaps the most readily recognizable figure class for this substyle is the *circle-grid* motif. It is composed of small carefully made circles arranged in a rectilinear pattern and connected horizontally and vertically (not diagonally) with straight lines (Figure 19, a-c). These variously occur as two circles, as a single row of circles, as a double row (with the rows connected), and as larger grids.

**Multicolor Phase.** This substyle (or at least more elaborate art) is mainly recognized by the use of multiple colors and distinctive geometric patterns. When occurring in superpositional context, figures most often are painted on top of Period 3 realistic art. Red-black-white polychrome occurs for the first time (Cerro Gavilán 1, JG-58), along with negative red designs (cf. Figures 10, j, and

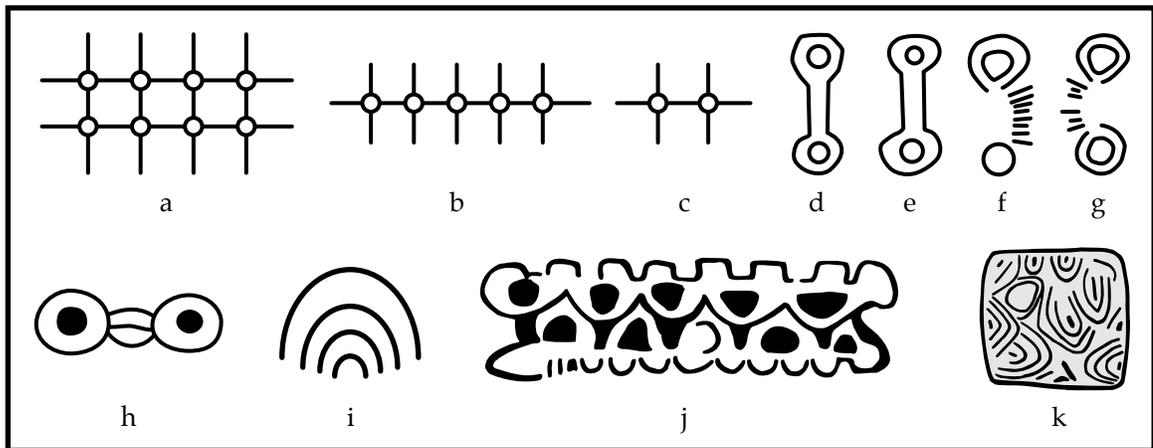


Figure 19. Period 5 geometrics. Solid is red, shaded is white.

20, a), and monochrome designs painted over a solid background (white-on-red, red-on-white, and red-on-cream). The Gavilán 1 red-black-white figures (*circle-grid* motif similar to Figure 19, a) are the only case of polychrome found so far and point to a kind of increased complexity in the art. The most obvious shared motif between the two substyles is the *circle-grid* pattern. No anthropomorphic forms have been recognized yet for this component.

Bichrome and polychrome figures are temporally or culturally distinct from monochrome dark red forms painted over Period 4. Colored *circle-grid* patterns seem to be related to the dark red grids of the *monochrome phase*, but with different paint characteristics, shapes, and manner of production. A thicker, brighter red paint is also used for monochrome figures during the *multicolor phase*. The new use of multiple colors and the brighter red seem to forecast or introduce Period 6. The rectilinear pattern of the Period 5 *circle-grid* motif may be ancestral to the *concentric circles with nodes* motif — circular arrangements of connected small circles, especially on a painted background (Figure 20, m-n) — typical of Period 6 at such sites as Cueva Pintada (JG-52).

For the most part, multicolor paints of Period 5 appear to be prepared and mixed more like Period 3 (high quality processed vegetable mixtures) than the typical coarse or runny clay paints of the following Period 6. The use of two or three colors in combination — in some cases bichrome and true polychrome figures — is also unusual and seemingly short-lived. Figures are distinct from the Period 3 bichrome style of red-outlining of white or yellowish bodies.

### **Cultural Explanation**

Although Period 5 generally appears to forecast the strong geometric content and increased geometric elaboration of Period 6, it is uncertain what the change

means in cultural terms. It seems that motifs are distinct and different enough from Period 4 animals, humans, and patterns — and from Period 3 animals and fish — to suggest a cultural change. It seems most likely that there was external stylistic influence, whether or not the art itself was drawn by local or foreign people. Differences between the red monochrome and multicolor substyles may reflect early and late phases relative to technological similarity to the art of Periods 4 and 6, respectively; or color differences between the substyles may reflect only who did the art — local indigenous groups (monochrome red) or middle Orinoco interlopers (multicolor). The complex, however, is poorly understood and for now is impossible to interpret.

## **Period 6**

### **Technology and Content**

Technology changes somewhat and most paintings are done in various colored clays, with figures most conspicuously in monochrome white. Paintings also are done in pink, yellow, and other colors of clay-based paint (and various shades of each). In the northern part of the zone, particularly Cerro Gavilán 1 (JG-58) and Cueva Pintada (JG-52), there are examples of negative painting and new color superpositioning, particularly red-on-beige and red-on-plain (with the plain area outlined). Figures often appear to be not so carefully drawn as in Period 4. In some cases, the application appears quite sloppy and not carefully done at all, particularly figures drawn in thin runny white paint.

Monochrome white is common throughout the study area (Figure 43). Other colors are exemplified by pink anthropomorphs and other figures at Punta Brava (JG-54), yellow and golden figures (including a large caiman or lizard) at Cerro Gavilán 2 (JG-49), and small dark figures drawn in dark brown resin

(presumably *caraña*) and possibly black charcoal at sites near Puerto Ayacucho (Figure 21, j and m) and on the Parguaza (Table 11, Figure 44). Figures from this period include various kinds of humans, animals, and geometric shapes (Figures 20 and 21).

Anthropomorphs are relatively rare, at least in traditionally recognizable form; many stylized figures probably represent anthropomorphic beings of some sort. It seems that most humans are simple stick figures and may occur individually or in combination. In some cases, pairs may represent people in opposition, such as showing conflict or dancing (which may reflect the same activity or relation), such as two sets of dual figures at Punta Brava (JG-54; Figure 21, h). The static wide-bodied, clothed humans and crude linear and full-bodied figures apparently introduced during Period 3 seem to continue into Period 6, but now many appear to be less carefully drawn.

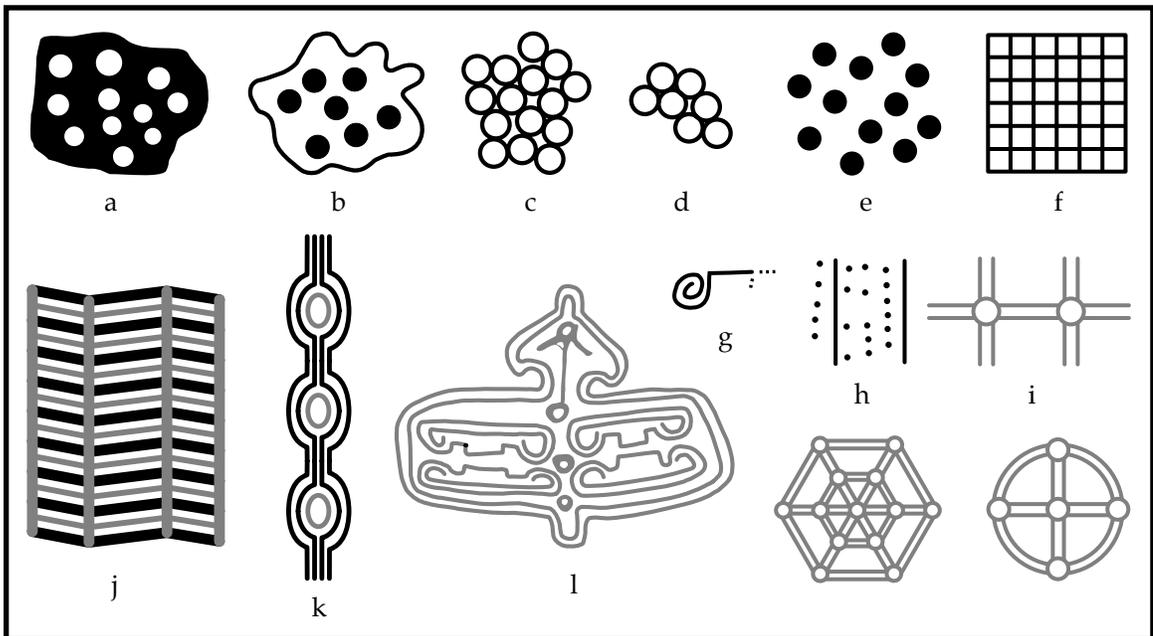
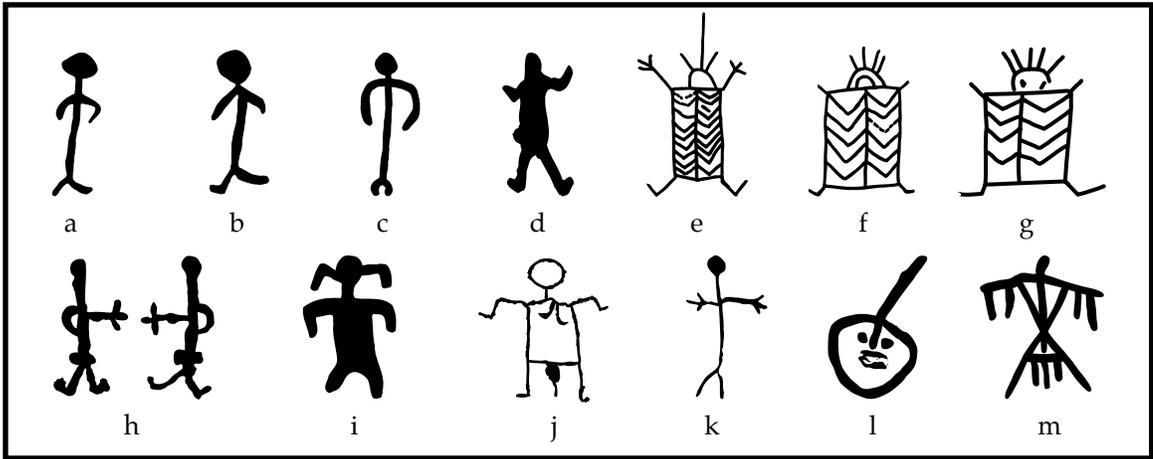


Figure 20. Period 6 geometrics. Shaded areas are white in combination with red lines.



**Figure 21.** Period 6 anthropomorphs and bird. Colors are white, pink, and black. e-g, note similarity to humans in Periods 3 and 4.

Within this period it appears that the most recent, presumably prehistoric figures are monochrome white. Application is variable, with some painting fairly concise and realistic, and other panels and figures less so. Figures still are variable, but one is left with the impression that there is little attention to realistic representation, to a high level of artistic accuracy, to technical or artistic skill, or to time spent in execution of the drawing. There is a change in execution toward inaccuracy of portrayal, lack of organization within panels or between figures, lack of consistency of sizes or orientation, and less attention to clarity of figures.

A few small fine-line figures in dark brown to black resin appear during this (presumably protohistoric) period (Figure 21, j, m; Table 11). These mostly are stylized shamans, birds, geometric forms, dot patterns, and seemingly randomly scattered dots. All resin figures are miniatures and are carefully made by placing semi-liquid resin (probably *caraña*) on the wall with a fine stick. Examples are noted at Cerro Pintado 1 (JG-15), Cerro Pintado 5 (JG-47), Cerro Muertos 2 (JG-05), and Cerro Gavilán 1 (JG-58).<sup>20</sup> At Cerro Pintado 1 (JG-15) several figures are

<sup>20</sup> Additional *caraña* figures have been found recently at Cerro Pintado 1 (JG-67) near Cerro Pintado. As in the other sites, some *caraña* appears to enhance early orange figures (late Period

made by carefully enhancing small late Period 1 (or Period 2) orange figures with later resin application. Some small, fine-line *caraña* figures at Cerro Gavilán 1 also appear precisely to overpaint early light red figures (presumably Period 2) in the same way, although the *caraña* appears also to be quite late. At Cerro Pintado 1, several *caraña* figures are the same form as the large, famous petroglyphs (including a 30-meter long anaconda) high on the open hillside of Cerro Pintado (Vicariato 1988). Those petroglyphs and late Period 6 resin figures may be the same age.<sup>21</sup>

JG-05	Cerro Muertos 2	Parguaza river, El Carmen area
JG-15	Cerro Pintado 1	south of Puerto Ayacucho
JG-47	Cerro Pintado 5	south of Puerto Ayacucho
JG-58	Cerro Gavilán 1	lower Parguaza-Orinoco area
JG-67	Cerro Pintaito 1	south of Puerto Ayacucho

**Table 11.** Sites with miniature figures of *caraña* resin.

### Cultural Explanation

This period shows a continued development from Period 5 geometrics and use of multiple paints. There is a stress on monochrome figures in white paint and other secondary materials often seemingly less carefully painted than previously. This could indicate the introduction of another group of people into the area or changing conditions of the same resident groups. Change in technology and manner of painting could be the result of a decimated population, with painting now done by untrained people who are trying to carry out activities previously

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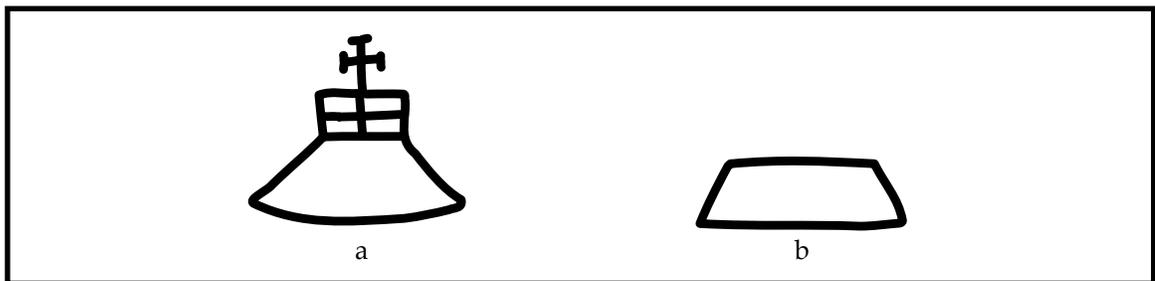
1 or Period 2), but related *caraña* figures are also clearly superimposed over Period 4 and perhaps Period 5 figures.

<sup>21</sup> Dark red Period 5 snakes were also noted recently in nearby Cerro Pintaito 1 (JG-67).

done by specialists. This would be consistent with the kinds of social changes taking place during the early historic period, with massive changes resulting from reduced populations caused by slavery and epidemic diseases. If this period dates to late prehistoric Arauquinoid times, as postulated in **Chapter 8**, Caribe populations or local resident groups must have been having a similarly difficult time. Alternatively, some paintings may reflect population changes resulting from the epidemic and invasionary problems of 1532-1738 A.D. (see **Period 7** below).

### Period 7

European contact in the historic period is represented by an early Spanish mission and a trapezoidal building (**Figure 22**), both done in light yellowish-beige clay paint and occurring together in Cueva Pintada (JG-52) north of the Parguaza river. The *breadloaf* communal house is still a standard form used by many local groups. No other European objects or symbols have been recognized, although some previously discussed art, especially the latest monochrome white and the brown *caraña*, could date from this period.



**Figure 22.** Period 7 historic figures (church and Indian house), light yellowish-beige.

Also at the same site is a white example of the *concentric circle with nodes* motif. It has a central circle plus one ring of four connected circles (e.g., **Figure 20**, n).

As indicated by the bright, clean condition of the thick paint, this figure is late within the Period 6 sequence and is thought to be historic. The motif is recurrent in Period 6.

The historic art in this cave (JG-52) is believed to relate to the Mapoyo. The history of the area is summarized by Zent (1992), Perera (1992), Henley (1975, 1983), and González Niño (1975). Although a few Spanish explorers and missionaries were in the area in 1532-1600 or so, the first mission at Atures was established in 1682 by Fiol. The mission San José de Mapoyes was established in 1731 by Gumilla on the lower Parguaza specifically for the Mapoyos, but it was essentially unattended by the Indians and lasted only until 1739. Thus, it was in existence, at least theoretically, during the main Caribe (Kariña) offensive against the missionaries and the Otomaco, Piaroa, Mapoyos, and other middle Orinoco groups. The main epidemics that reduced the Mapoyo and Piaroa populations also occurred in 1738, thus compounding the problem of ethnic existence. This would probably tend to align the Mapoyos somewhat with the Spanish and perhaps somewhat with the church (although there is no evidence for this). Although the Spanish were in the area during the following decades, there appears to have been little attention from the Mapoyo. It was not until 1920 that the priest stationed at the La Urbana mission baptized most of the Mapoyos. By the time of Osten's visit to Cueva Pintada in 1946, drawings of the church and other building appeared to be quite old and beyond the memory and knowledge of the local guides (von der Osten 1946), who described the paintings as, "son antiquísimos ... del tiempo de los españoles" (which is to say, beyond their collective memory).

It seems fairly certain that the pictographs are the work of the Mapoyo. They were done after 1682 and probably after 1731. It seems most likely that they were

done around 1738 to 1750, during or just after the problems with the Caribes and the epidemics. It is possible that the paintings were done as late as the main baptism in 1920, but that seems too late.

### **Attributes for Field Identification of Periods**

The following general listing of periods by key elements is an attempt to assist in field identification in distinguishing between periods by distinctive motifs, colors, or color combinations. Superpositional context is the most important factor and should be used in combination with these attributes. In most cases, period designation is probable but not definite, and motifs may not be restricted to the suggested period.

#### **Period 1**

1. Figures beneath Period 2 fine-line purplish figures in the Parguaza area.
2. Light orange figures in the Puerto Ayacucho area (may overlap with Period 2 as presently conceived in that area; the distinction is not clear).

#### **Period 2**

1. Large birds and lizards of very fine lines in dark purplish paint.
2. Interior-line fish in dark purplish paint.
3. Probably fingerline interior-line fish in light red, pink, or orange paint.
4. Fingerline interior-line fish in light red paint (shared with Period 4).
5. In the south, anthropomorphs made up of concentric lines (may be shared with late Period 1 and doubtfully Period 4).

#### **Period 3**

1. Red-white bichrome geometric figures with alternating red-white lines (in some areas large figures could be Period 6).

2. Large quilt patterns, usually several meters across; usually red-white bichrome.
3. Fish in solid black liquid paint (period uncertain, perhaps Period 5).
4. Red-white bichrome, if high quantity of figures.
5. Red-white bichrome if dark monochrome red geometrics or stylized animals (Period 5) are painted over it.
6. Red-white bichrome realistic fish or animals.
7. Red-white bichrome wide-bodied humans.
8. Red-white bichrome bowlegged man with white or yellow body outlined in red.
9. Monochrome white if obviously associated with Period 3 bichrome fish and animals.
10. Large realistic deer with open bodies, often showing motion in bent leg position, often one squared ear.

#### **Period 3 Morphological Influence in Period 4**

1. Bowlegged man (in local red monochrome).
2. Solid-body *warime* or ghost humans (in local red monochrome).
3. Moderately large quilt patterns (in local red monochrome).

#### **Period 3 Technological Influence in Period 4**

1. Square and triangular wide-bodied humans with headdresses and body covering (this may be a native Period 4 form which in some areas was portrayed in Period 3 bichrome; i.e., the influence is seen in the paint technology, not in form).

#### **Period 4**

1. *Segmented box* motif.

2. *Arracones* motif.
3. Emphasis on small animals.
4. Groups of animals (a few exceptions).
5. Alignment of monkeys on a line, perhaps with a young animal on the back of an adult.
6. Several animals in a concentrated area.
7. Large outlined crosses (especially 20-35 cm), neatly made.
8. Outlined crosses with multiple outlines, neatly made.
9. Handprints.
10. Falling humans.
11. Lines of humans.
12. Terrestrial lizards (caiman-like animals shared with Period 5 and probably Period 6).
13. Manioc (uncertain if shared with other periods).
14. Fairly dull (not highly saturated) medium red paint.
15. Shrimp-like zoomorphs.
16. Dragon-fly-like zoomorphs.
17. Red monochrome square and triangular wide-bodied humans with headdresses and body covering.
18. Triangular wide-bodied humans with loops on legs.

#### **Period 5**

1. Band patterns (like angular geometric banding on Arauquinoid pottery).
2. Circle grids.
3. Circle chains.
4. Winged circles.
5. Clustered circles (motif may also be shared with Periods 4 and 6).

6. Lines of connected winged circles.
7. Poorly made, messy, or highly stylized outlined crosses.
8. Small outlined crosses probably.
9. Red-black-white polychrome.
10. Dark red paint, not great intensity or deeply saturated, if:
  - fairly small figures, especially geometric.
  - fairly large quantity in a fairly small restricted area.
  - geometrics include *circle grid* motif.

### **Period 6**

1. Clustered circles (probably shared with Period 5).
2. Concentric circles with nodes.
3. White pineapples (uncertain if red shared with Period 4).
4. Very small fine-line figures in black or dark brown, especially a wax-like substance believed to be *caraña*
5. Pink paint (not certain if pink is limited only to Period 6).
6. Two opposing solid-body humans as if in battle, conflict, or dance.
7. Negative figures, especially plain circle-dots on a red background.
8. Monochrome white if it overlies medium red or dark red figures (e.g., Period 4) and is not obviously associated with Period 3 bichrome fish and animals.

### **Period 7**

1. European buildings (e.g., church).
2. Indian style loaf-shaped houses.

## CHAPTER 7

# ROCK ART CHANGES THROUGH TIME

### General Changes

Periods vary in several aspects of technology, content, and manner of expression (or condition). These subjects can be viewed according to how they change through time and the amount or intensity of change between periods. For instance, changes from late Period 1 to Period 2 are fairly weak, as are changes from Period 2 to Period 4, from Period 4 to *monochrome phase* Period 5, and from *multicolor phase* Period 5 to Period 6. These changes are not dramatic and generally are difficult to recognize. Period 3 is the most dramatic change within the sequence of monochrome reds but appears to forecast the coming of *multicolor phase* Period 5 and the general trend toward more complex, multicolored figures and panels, which is continued with Periods 5 and 6. At the same time, Period 4 seems to remain moderately intact as a development from Period 2, even with the added elements and technology from Period 3.

Thus, there may be two general trends or branches in the development of the art — Periods 1–2–4 and 3–5–6–7 — which overlap each other at Periods 3 and 4.<sup>22</sup> This possibility, now becoming more likely, has not been fully studied. It is

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<sup>22</sup> For convenience, the order of periods in the following discussions is given numerically 1–7, rather than developmentally 1-2-4 + 3-5-6-7. Since distinctions between the two developments during the Period 3–7 range is poorly understood, these periods mostly are discussed in general terms.

believed, however, that a larger sample in this area and study of a larger geographic area will support this proposition.

**Table 12.** Estimated distribution of artistic traits by period.  
 Periods are developmentally arranged 1-2-4 and 3-5-6-7.  
 No study of content has been done.

Trait ↓	Period →	1	2	4	3	5	6	7
color: light orange		x	?					
color: light red		x	x	?				
color: medium red		x	x	x	x			
color: dark red, dull			?	?		x	?	
color: dark red, bright				?	x	x	x	
color: dark purplish		?	x			?		
color: reddish-brown							x	
color: yellow							x	
color: golden							x	
color: pink							x	
color: yellowish-cream					x		?	x
color: white monochrome					?	?	x	x
color: black (liquid)						x		
color: dark brown-black (wax)							x	
color: red-white bichrome					x	x	x	
color: white-on-red background					x		x	
color: red-black bichrome						x		
color: red-black-white polychrome						x	?	
color: negative painting							x	
paint: earth					x	x	x	x
paint hematite?		?						
paint: <i>onoto</i> ?		?	?	?				
paint: <i>chica</i> ( <i>k'eräü</i> )?				?	?	?	?	
paint: thin		x	x	x			x	
paint: moderate thickness			x	x			x	
paint: thick					x	x	x	x
line width: finger pad, single		x	x	x		x	x	
line width: finger pad, multiple					x	x	x	x
line width: finger edge		x	x	x				
line width: narrow stick ( <i>puya</i> )			x	x				
line width: quite wide			x					

(continued)

Table 12 (continued)

Trait ↓	Period →	1	2	4	3	5	6	7
execution: messy							x	
execution: moderately neat		x	x	x		x	x	
execution: neat		x	x	x	x	x	x	x
planning: some planning		x	x	x	x	x	x	x
planning: well planned					x	x	x	
category: figurative		x	x	x	x	x	x	x
category: geometric		x	x	x	x	x	x	x
figure size: small		x		x			x	
figure size: medium		x	x	x	x	x	x	
figure size: relatively large			x		x	x	x	x
figure size: very large					x			
action: static only		x	x			x	x	x
action: some dynamic				x	x			
interaction: absent		x	x			x	x	x
interaction: present				x	x			
integration: none		x	x			x		
integration: some				x	x		x	x
superposition: absent or rare		x	x	x				
superposition: more common					x	x	x	?
key sites: none identifiable		x						
key sites: some identifiable			x	x	x	x	x	x
humans: long, narrow body		x	x					
humans: wide ghost-shaped body				x	x			
humans: bowlegged men				x	x			
humans: pregnant women				x				
humans: wide square				x	x		x	
humans: wide triangular				x				
humans: open fingers, toes					x			
humans: vulva portrayed?				x				
humans with leg bands				x				
humans with belts							x	
humans with necklace							x	
possible body stamp designs		x		?		x	?	
cultivated plants				x			x	
houses								x
fish			x	x	x	x	?	
terrestrial animals		x	x	x	x	?		
outlined cross				x	?	x	?	

## Themes

No studies of themes or symbolism in the art have been done, but a few preliminary suggestions are presented here. It is expected that additional study of content may identify kinds of symbolism and themes in the art which will add to an understanding of relations between periods.

Most of the painted art throughout the sequence is believed to relate to Creation Time, mythical beings, distant ancestors, previous important people, and historical events. Sympathetic magic and requested spiritual assistance may be closely related subjects. One example of an event is the portrayed reference in several caves to a local story of a Mapoyo group who committed communal suicide by jumping off a cliff. While pictured animals are common, it is believed that they represent various kinds and levels of totems rather than simple food sources. This interpretation agrees with Piaroa information and analyses presented by Boglar (1976), who states that Piaroa life is dominated by animal symbolism that relates directly to creation time, mythology, and totemism. Fertility also may be a strong underlying theme in the art, as especially pointed out by Becher (1976) for the Yanomamï, but portrayal of or reference to human sexual activity appears to be absent. The figure of a pregnant woman at Cueva Iglesias (JG-11) may be the only recognizable example.

## Outlined Cross Motif

The outlined cross is well represented in this area (Figure 12). It appears that the motif was introduced in Period 4 and was integral to the art of that period. A number of variant forms differ according the number of component crosses and concentric outlines. The cross has been specifically noted in Period 4 context at 15

sites (39%), or at about 60% of sites containing Period 4 art. Thus, over half of all Period 4 sites contain at least one cross.

The cross in Periods 5 and 6 appears to degrade in conciseness and become more stylized. Most deviant and abstract forms occur in these two periods. The cross is present at Cueva Cataniapo (JG-32) in superpositional context, but those late layers appear to be so heavily influenced by presumed late Saladoid and Arauquinoid styles that the relation between this site and Period 4 crosses this far south is not clear. A possible deviant Period 6 outlined cross occurs at Cueva Pintada (JG-52).

The *outlined cross* motif has a continuous distribution across nearly all of South America, the Caribbean, Central America, the southwestern part of North America, and parts of southeastern North America (Dubelaar 1986b; Patterson and Patterson 1991; Patterson 1992; Greer, unpublished literature study). Within this huge area nothing has been synthesized on its date of introduction, and nothing is known of its early time-transgressive distribution or spread. It appears to have been present throughout South America at least by 600 A.D., and probably southwestern North America not long thereafter. It is still used in some areas today. There are several explanations of its primary meaning, such as a representation of Venus, a major astronomical pathway (sun, moon, Venus, etc.) crossing the horizon or the Milky Way, any of the numerous recognized astronomical crosses (both light and dark), or some sort of unity between dichotomous opposing forces. Most modern meanings or interpretations in North America and Mexico seem to revolve around its representation as something having to do with Venus.

Becher (1976) points out the dominance of moon symbolism among the Yanomamĩ, where the moon is portrayed as a cross. He also discusses the concept of the world (and the moon) being divided into east-west halves, particularly representing the direction of the sun and moon. At the same time the horizon divides space into upper and lower realms (or the sky and the underworld). The sun and moon [and Venus], of course, cross the sky during the light hours, dividing upper space in half north-south, and they do the same at night with the lower space of the underworld. Thus, the upper and lower worlds, separated by the horizon, are divided by the pathways of the planetary bodies. This general relation may be expressed in other similar ways, such as the relation between the horizon and the Milky Way (the celestial river), the horizon and the celestial equator, the Milky Way and the pathways of the sun, moon, and Venus, and other similar associations.

As in other areas, the cross here has a wide variety of forms, with single to multiple cross bars, single or multiple outlines or borders, and various kinds of line and border details and relations (a few variations are shown in [Figures 12](#) and [75](#)). There are also various kinds of non-bordered crosses which seem to be closely related and may represent the same referent or serve the same function as the more usual forms of bordered crosses. The motif is persistent throughout the region and is present also in petroglyphs along the Orinoco. It is usually of a fairly consistent large size (ca. 30 cm) and usually is in a prominent place within the site as if for public viewing.

### **Paint Material**

Paint samples have not been analyzed, but from inspection of external characteristics it appears that raw materials used to make paint vary through

time. There is a postulated change from early mineral paint, to minimally processed vegetal paint, to more complex vegetal mixtures, and finally to clay-based paints. Paint materials are discussed in **Chapter 9** and further identified in the **Glossary**.

**Period 1:** simple iron minerals, presumably hematite (iron oxide) mixed with water, usually producing thin paint.

**Period 2:** simple vegetal paint, presumably based on crushed *onoto* seeds.

**Period 3:** use of kaolinite for white paint and processed vegetal materials for red. The red is usually a dark, bright, rich red similar to that of *k'eräü*, although a similar red can be produced from *onoto*.

**Period 4:** processed vegetal paint. This probably consists of mixtures of *onoto*, *chica*, *caraña*, and *seje* palm oil. Color and texture could be controlled through variation of constituents and preparation methods.

**Period 5:** thick paints. Dark red and black appear to be processed vegetal materials, while other colors may preview the Period 6 use of coarse earth pigments. White also is fairly finely ground and carefully mixed. In general, it appears that considerable care went into paint preparation although execution may not be so careful as previously.

**Period 6:** use of colored clays producing a thick paint sometimes with coarse grains and impurities, and often with a dull, almost chalky appearance. Period 7 continues the technological trends of late Period 6.

Two low-level pigment analyses have been conducted previously in the Orinoco basin. Perera and Moreno (1984:29) performed a spectral analysis under a scanning electron microscope of a paint sample from Cerro La Vaca 1 (JG-21).

They report trace elements (Cl, K, Na, P, S) and conclude that the paint is organic. No other details are given. Presumably this was red paint dating to Period 4, since that is the main period represented in the central part of the site where Perera conducted his test excavations (earlier paintings are also present in the shelter).

Vargas (1981:487) did a pigment analysis of ceramic paint on six excavated sherds from Parmana on the middle Orinoco (Table 13). The analysis was only a simple field test, but she expresses no reservations about the results. She only recorded the paint as organic or not, but the results are as would be expected. The two red samples are both organic, indicating either a vegetal pigment or vegetal mixing of the paint. Three of the four white samples were inorganic, suggesting that the material is essentially pure kaolinite<sup>23</sup>. The fourth white sample contains organics, which suggests kaolinite was mixed with palm oil or *caraña* for better adhesive qualities.

Sample	Color	Pintura
G4-4-6 (3)	white	inorganic
G4-4-6 (3)	white	inorganic
G4-4-6 (2)	white	organic
G4-4-8 (1)	white	inorganic
G2-5-3	red	organic
G2-5-3	red	organic

Table 13. Organic testing of painted sherds from Parmana, after Vargas 1981.

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<sup>23</sup> Kaolinite outcroppings occur at Tierra Blanca on the Parguaza river.

## Color Variation<sup>24</sup>

Although no systematic recording of color has been done, trends in the variation of color by period are suggested. Generally, earlier reds are lighter, and later reds are darker. A distinctive purplish color occurs at the beginning of Period 2. Multiple colors are used in later periods, and the number of colors apparently in use at one time increases in the latest art.

**Period 1:** orange, light red, medium red. Light orange seems to occur exclusively during late Period 1 (or Period 2) around Puerto Ayacucho. In the Parguaza area most early figures seem more commonly to be light to medium red. Along the Sipapo, early dark red figures may be from late Period 1.

**Period 2:** dark red in late Period 1 and early Period 2, to medium red in late Period 2. The early purplish-red or mauve color of fine-line figures, such as the distinctive interior-line fish and large delicate lizards, is fairly widespread but is most common in the general Parguaza area.

**Period 3:** bichrome red-white. Most figurative art (mostly fish and animals) has solid white bodies outlined in high intensity, bright red paint. Geometric figures mostly are composed of alternating red and white lines, or mostly red designs with white in-fill.

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<sup>24</sup> Color variation refers to different colors as well as variation in color values, as in tint (lightness gradation of a color with reference to its mixture with white to lessen the saturation) and shade (degree of darkness of a color with reference to its mixture with black to decrease its illumination, its gradation of darkness). Note that the Munsell system of hue-value-chroma is the same as hue-brightness-intensity (in the standard HIB system). Intensity is the same as saturation — the vividness of hue, or the degree of difference from a gray of the same lightness or brightness.

**Period 4:** medium and bright red. The use of medium red suggests a cultural continuum with Period 2, but with changes in content and manner. The use of distinctive rich bright red (presumably *k'eräü*) at Santa Fe (JG-19) and other sites may be a natural development (including technological addition introduced during this period) or an adoption of the kind of paint used in Period 3.

**Period 5:** dark red, red-white bichrome, red-black bichrome, red-black-white polychrome, black. Throughout the study area, Period 4 medium red is overpainted with small dark red figures of Period 5. In a seemingly different tradition, Period 3 figures are overpainted with larger dark red figures and any of the other colors listed above. This is seen as a preview to Period 6.

**Period 6:** white along with several new colors and combinations. These include white, pink, rust, brown, yellow, and golden clays or earth-based paints. The period is best recognized by the use of monochrome white paint, usually thin. The latest paintings probably are white in most areas. However, dark yellow and golden figures (particularly a large caiman or lizard) are painted on top of a panel of late white figures at Cerro Gavilán 2 (JG-49). Red is a minor color and usually is a rich, bright, dark red (*k'eräü*). Simple to complex figures of dark brown wax-like *caraña* occur at a few sites and are always late.

**Period 7:** continuation of late Period 6. A beige clay mission church and auxiliary building are the only definitely historic paintings in the area. These occur in late Period 6 context at Cueva Pintada (JG-52). A white segmented circle at that site, on the same part of the wall-ceiling as the historic buildings, appears to be very late and also is believed to be historic. It is a motif form also appearing in Period 6.

## Line Width and Paint Density

Most lines seem to have been made with the finger. Single pass lines generally are about 1 cm wide, while multiple pass lines usually range up to about 1.5 cm. A few wide lines also occur (see below), but they are rare. Finer lines could be made with the finger edge, and narrow lines undoubtedly were made with a frayed stick or various plant fibers.

**Period 1:** predominantly finger pad and finger edge width lines. Most lines average about 0.5 to 1.5 cm wide, and the paint is thin.

**Period 2:** variable width. Most lines were made with the finger pad or finger edge (average about 0.5 to 1.5 cm wide), and the paint is of moderate thickness. A few large early figures at Cerro Gavilán 1 (JG-58) are drawn with wide lines (up to 5-8 cm) of a thin dark paint (possibly mixed black). Most fine-line figures, especially the thin interior-line style of the early part of the period, were made with a frayed stick, although other interior-line figures apparently were made with finger edge and finger pad.

**Period 3:** thicker finger lines. Most lines seem to have been made by multiple passes, thus producing a wider and thicker line than is usually the case in previous periods.

**Period 4:** thinner lines. Line thickness is variable, as are content and execution, but there seems to be a trend toward narrower lines produced with thin to medium thickness paint. Some miniatures are made with finger edge and frayed stick. In general, thinner lines distinguish the finer figures of Period 4 from the previous late Period 2 red monochrome figures with their slightly thicker lines.

**Period 5**: thick finger lines. Most paintings seem to be done with the finger. Paints mostly are opaque and relatively thick.

**Period 6**: thicker finger lines. Painting was done almost entirely with the finger pad, occasionally with some secondary line detail added by multiple passes. Color and execution are more important than line width. Paint thickness is variable and ranges from thick and chalky or sandy (especially yellow or gold) to thin and watery (especially late white). Some negative painting, such as negative clustered circles, may have been done by painting around a circular object.

### **Execution**

Execution equates with how a painting was done and the personal attention of the artist. Included are such attributes as apparent planning, care in painting (neatness), painting tools, and painting order in composite figures (e.g., Period 3 bichrome). Figures have not been studied in detail, and observations are mostly impressionistic.

**Period 1**: moderately neat. Not enough is known for sufficient generalization, but figures mostly are fairly concise.

**Period 2**: variable neatness. Early fine-line figures seem to have been fairly carefully made, with attention paid to detail. Later finger-line figures were mostly fairly neatly done, but seemingly not with great care.

**Period 3**: neat, some planning. Most of the representational and geometric bichrome art from this period is carefully made, with good attention to

anatomical detail, proportion, and balance. Interior fill was made by smearing,<sup>25</sup> and final red outlines generally were done over the top of the white fill. It is assumed that a red outline was produced first, followed by the white fill and subsequent re-outlining over the previous red. In a few cases, the white fill was done last. In a few examples, the figure may have been painted first in white, then the outer edge was enhanced or bordered with red. All painting in this period appears to have been done with the finger.

**Period 4:** neat, some planning. Figures generally seem to be fairly carefully made and with good attention to detail.

**Period 5:** moderately neat. There is considerable variation in the complexity of figures and the degree of care in their execution. Most of the complex figures are carefully done. Some planning went into placing figures over the top of Period 3 animals.

**Period 6:** mostly not as neat as previously. There is variation in apparent conciseness of painting, but most figures today would not be considered especially well done. Most colored figures are more carefully made, particularly those in dark yellow, pink, dark red, and dark brown (*caraña*). Although some white figures are also symmetrical and concise, most white figures generally appear not particularly neatly done. In some cases, especially geometric forms, the painting seems to be done with little care or planning; lines are not particularly straight and wander considerably. On one hand, it is possible that the artist was under the influence of drugs, which may have promoted haphazard designation of the design to be drawn and also affected the artist's

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<sup>25</sup> All fill and background is done by painting or smearing throughout this zone. There are no known examples of dabbing, sponging, or blowing for any period in the art along the Orinoco.

ability to execute the design. On the other hand, it is equally possible that these meandering lines are the expression of a formal, intentional execution of a kind not previously recognized. The height on the wall of many of these figures would seem to preclude painting by adolescents. There appears to be notable variation within the study area.

**Period 7**: fairly neat. The three figures recognized as historic are fairly carefully and concisely drawn.

### **Kinds of Figures**

There is considerable variation in figure form. Early geometrics are followed by a predominance of animals and interior-line forms. These are followed by the large bichrome in-fill animals and fish and stylized geometric patterns. Later red figures are mostly fairly realistic but variable in subject. The most recent figures continue this variability in subject although geometrics seem to be more common.

**Period 1**: variable, with both figurative and geometric forms. The period essentially is defined as anything underlying Period 2 fine-line dark red figures, and the earlier figures of Period 1 form no coherent pattern. Animal forms are noted north of Puerto Ayacucho at Cerro La Vaca 1 (JG-21; [Figure 4, c](#)), and angular body stamp designs are present at Alta Carinagua (JG-18; [Figure 4, a](#)) just east of Puerto Ayacucho. Just south of town at the Cerro Pintado sites (at least JG-15; [Figure 4, b, d-f](#)), small early figures include elongated humans and other forms similar to initial Period 2 fine-line forms (and actually may be from that period or at least represent the preview of that tradition in this area).

**Period 2:** figurative in the north, geometrics in the south. At least in the Parguaza area there is a predominance of animals and interior-lined forms, especially fish. In the early part of the period (fine-line style), anthropomorphs are elongated, and birds have widely outstretched wings and beaks reaching upward (especially typical of cormorants). Many of the early figures are distinctively painted at an angle (upper left to lower right). Along the Sipapo there is an early stress on geometric representations, although their placement within Periods 1 or 2 is not certain. These motifs may be symbols, abstract representations of ideas or concepts, or stylized figurative art. Geometrics are evident as the dark red patterns of parallel wavy lines at Cerro Pelota (JG-46; [Figure 6](#), f-g). Later forms in this period continue earlier patterns (fish on the Parguaza and northward, mostly non-figurative art on the Sipapo), but mostly in finger paint and with seemingly less attention to detail.

**Period 3:** full figures on the Parguaza, geometrics elsewhere. Large solid realistic figures dominate the Parguaza area, especially the large fish, aquatic and terrestrial animals, and symbols at Cerro Gavilán 1 (JG-58) and Cerro Muertos 2 (JG-5); a distinctive panel with *warime* ghosts (cf. Vicariato 1988; Overing and Kaplan 1988), running deer, and other symbols at Cerro Iguanitas 1 (JG-1; see Cruxent 1946, Scaramelli 1992); and presumably the representation of a decorated ceramic jar at Cerro Iguanitas 2 (JG-2; Cruxent 1946, Scaramelli 1992). Areas to the north and south have no known large panels and contain only smaller stylized figures, symbols, and designs in red with white infill.

**Period 4:** mostly figurative, with some geometric patterns. The use of monochrome red is marked by variable figure types. Most common are small individual animals, stick figures, and elaborate humans, perhaps best

exemplified by the main central panels at Cueva Iglesias (JG-11). Large (1-7 meters) composite mat or blanket patterns at such sites as Coromoto (JG-33) and Laja Parguaza 1 (JG-8) seem to be from this period, along with several geometric forms.

**Period 5:** mostly geometric. Forms are variable, but geometric symbols, designs, and patterns predominate. The outlined cross continues but now is smaller and less well done. Some fairly large complex designs are present, especially at Cerro Gavilán 1 (JG-58) and in smaller form at other sites. There appears to be a large number of formal motifs with recognized acceptable variation as well as idiosyncratic expression of general ideas.

**Period 6:** both figurative and nonfigurative. Realistic figurative art is common and is especially well exemplified by lizards or caimans at Cerro Gavilán 2 (JG-49) and ritual dancers at Cueva Iglesias (JG-11) and Punta Brava (JG-54). A stress on geometrics and stylized figures, symbols, and patterns is especially common at such sites as Cueva Pintada (JG-52) north of the Parguaza. Many figures, especially of runny white paint, are poorly done and difficult to discern, and many seem to be partial figures, uninterpretable figures, vague shapes and composites, and almost random lines.

**Period 7:** figurative and geometric. The only figures known are fairly realistic drawings of a mission and a large communal house. A carefully made white geometric (circle with nodes) is also present.

### **Figure Size**

There is some variation through the sequence in the absolute size of painted figures. All periods, however, contain everything from large figures up to a

meter or more across to miniatures only a couple of centimeters long. Even so, generalizations may be suggested.

**Period 1:** medium size to fairly small. The camelids at Cerro La Vaca 1 (JG-21; [Figure 4, a](#)) are fairly small. The row of red fish at Cerro Iguanitas 1 (JG-1) is approximately natural size for such small or medium-size fish as the *palometa* or *caribe/piraña* (see Bueno 1965; Royero 1989), but they seem generally smaller than most Period 2 interior-line figures. Body stamp designs at Alta Carinagua (JG-18; [Figure 4, a](#)) are medium size. No tiny forms like the Period 4 miniatures at Cueva Iglesias (JG-11) or Santa Fe (JG-19) are known from this period, although some of the late Period 1 early orange figures at Cerro Pintado 1 (JG-15) are fairly small.

**Period 2:** mostly medium size to relatively large. Some figures, such as a large open-body human figure ([Figure 6, c](#)) and an interior-line fish at Cerro Gavilán 1 (JG-58), are large (some larger than life size) and with very thick lines (perhaps up to 5 cm or more). An interior-line fish at Cerro La Vaca 1 (JG-21; [Figure 6, a](#)) is the largest figure at the site. Several fine-line purplish figures at Cerro Iguanitas 1 (JG-1; [Figure 6, b, d-e](#)) are not unusually large, but they are larger than anything else at the site (other than Period 3 figures).

**Period 3:** large figures, often near life size. Size varies from medium to large, and in all cases these figures dominate the superimposed panels on which they occur.

**Period 4:** generally fairly small figures. Some are miniatures.

**Period 5:** medium to fairly large. Multicolor figures are larger than Period 4 and mostly are smaller than Period 3 animals. Some complex designs and symbols are relatively large. Monochrome dark red figures painted over Period 4

animals mostly are about the same size as the smaller Period 4 figures, or perhaps a little larger. The outlined cross, however, is smaller.

**Period 6:** mostly small. Size is variable, but figures mostly are fairly small, though often slightly larger than those of Period 4. Some figures, like a large yellow lizard at Cerro Gavilán 2 (JG-49), are large — up to nearly a meter long.

### **Action**

For the most part, art in southern Venezuela is static with no obvious portrayal of activity or action. There are a few exceptions in this sample.

**Period 1:** static figures and portraits. Most figures are static, lone portrayals with minimal decoration, no action, and no interaction between figures. The line of camelids at Cerro La Vaca 1 (JG-21; [Figure 4](#), c) seems to portray the animals in the process of walking, but the view is a portrait with no indication of action.

**Period 2:** static figures and portraits. Like the camelids above, animals and people are shown in various positions, but the figures are portraits with no indication of movement.

**Period 3:** introduction of action and interaction. Most figures are static portraits, but some complex panels indicate movement. A scene at Cerro Iguanitas 1 (JG-1) shows three running deer, one of which is looking back over its shoulder (see [Panel Integration](#) below). At Cueva Iglesias (JG-11), several small bichrome ritual dancers are tilted slightly to one side (usually upper left to lower right), and some are additionally slightly skewed, as if looking at the figure not quite face-on. The result is a portrait of a static figure but one with a slight feeling of movement, such as the swaying and turning motion that accompanies many local indigenous dances.

**Period 4:** static figures, very little action. Most figures are static portraits, but at least one small panel in Cueva Iglesias (JG-11) shows the interaction between a hunter and deer being hunted (see **Panel Integration** below). The scene is fairly static, however, and details of movement mostly are absent. Several scenes show groups of upside-down humans apparently in the process of falling to their deaths during group suicide by jumping off a mountain (Perera 1992). Lines of individuals are believed to represent line dancing.

**Period 5:** static figures. Almost all figures are geometric with no indication of motion or action.

**Period 6:** static figures, no action. Most figures are static portraits, but two people facing each other in Punta Brava (JG-54) seem to be engaged in some interaction — perhaps dance or combat.

### **Rock Art as Dynamic**

A few figures clearly portray action, as discussed above. It is hypothesized, however, that many, if not most, figures have assumed action; that is, the rock art is conceived as dynamic and alive although no motion or action is portrayed. Most of the figurative art of Periods 1, 2, and 4 probably do not represent static symbols or signs which simply stand for some concept, idea, ancestor, being, or object, although geometric figures may do so. Such a static orientation may also be intended for the geometrically dominated art of the later Periods 5 and 6. With the realistic bichrome figures of Period 3, the observer is left with the feeling that most of these instead are static symbols — most simply do not have the feeling of freedom and movement of the art attributed to Periods 2 and 4. The *warime* deer-hunting scene at Cerro Iguanitas 1 (JG-1) is the obvious Period 3 exception, and deer showing movement like this also occur in other sites. Unfortunately, there is

no way to code this concept adequately enough to measure it within any one period or to indicate changes between periods. Nonetheless, the impression that figures represent action is common with many people who view the art.

During fieldwork on the Parguaza, Franz Scaramelli asked a group of men, who were sitting around with him discussing pictographs in caves near Pendare, what the meaning was of the outlined cross (also see discussion in **Chapter 9, Evaluation of Informants** section). After long deliberation, they discussed that the creator of the world had an unfaithful wife who left him. The lines of the cross (or multiple crosses) could designate the rivers and valleys and mountains and divides, and the curved outline represents her route around the objects or places. The outside curve is continuous, which shows that she continued her trip over and over, without end (Scaramelli 1992; personal communication 1992-93). Thus, to them, the curve could represent action, not just a trail or a route, but her continued travel along the route in a dynamic sense.

It is possible that at least some animal figures represent similar action. One local colleague has suggested that animals and symbols near each other relate stories of actions — trips, calls, yells, progress through life, etc. It is possible that animals each represent an action more than just a symbol of an animal, mythological being, totem, or other spiritual force. The original viewers would likely have seen not just a lizard but a lizard moving, proceeding upward, jumping toward the various layers of the overworld, or making its way in a particular direction or toward some goal or quarry. Fish may also represent an activity, a motion, or a direction, and not just a static symbol. That is, it may be understood that the action is within the symbol itself, and the symbol is in the act of moving in its place on the cave wall — not just that the symbol represents some action in the past. Thus, a fish may be jumping or swimming or going in

some direction, not just a token that represents fishing or a specific fishing trip. It is also likely that the separation of static from dynamic as characteristics of animals or beings is a modern Western concept, and that the artists would not be able to conceive of a symbol or a picture without its inherent action, personality, and soul. Such possibilities should be considered during future informant questioning and interpretation

### **Panel Integration**

The entire sequence is dominated by the drawing of individual figures. Rare are groups of figures which together impart some story or relation between the different elements of a panel.

**Periods 1 and 2:** no interaction.

**Period 3:** some interaction. Large panels of clustered figures are introduced in this period. Most of these are simply clusters of figures, but an example of careful arrangement can be seen at Cerro Gavilán 1 (JG-58). In the main dense panel of the western alcove the upper row of fish was identified by the knowledgeable local resident land owner (non Indian) as being drawn about the same size on the wall but representing forms which varied from small (left) to large (right) in real life.<sup>26</sup> The most striking example of an integrated panel is a scene at Cerro Iguanitas 1 (JG-1) with three large *warime* ghost humans with pointed heads (upper part of body only, 63-95 cm tall) next to three running deer (100-110 cm long) — one simply running straight, one jumping and looking back over its shoulder, another jumping and in a trap — and three large symbols above (two generally interpreted as drums). The entire panel is 3 m wide and 2 m tall (293 x

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<sup>26</sup> Other local people at the site during this visit fully agreed with this observation.

188 cm). The panel has been illustrated by Cruxent (1946), Scaramelli (1992), and Colantoni and Delgado (1992:5) [see **Appendix**].

**Period 4:** interaction rare. There are occasional small groups of interacting figures which appear to be new forms. All show some degree of action and have been mentioned above. One example is a hunting scene at Cueva Iglesias (JG-11; **Figure 18**) showing an armed hunter with an upraised hand holding three throwing clubs, a running deer with a spear or arrow in the back of its neck, a smaller dog (or other deer in the distance), two accompanying people (drivers) with upraised hands and driving the deer past the hunter, and a deer trail (or the deer's route) portrayed as an alignment of deer tracks.

Other Period 4 scenes show groups of upside-down humans presumably jumping off a mountain during a fabled Mapoyo group suicide (**Figure 11**, b; **Figure 13**, dd-ii; Perera 1992). A group of six figures is shown at Cerro Gavilán 1 (JG-58), several figures are scattered down the wall at Cerro Iguanitas 3 (JG-3), and isolated figures are shown in at least two locations in Cueva Iglesias (JG-11).

Lines of individuals engaged in line dancing are also shown in Period 4 (**Figure 13**, z-cc; **Table 10**). Lines may be single or double, and each line may contain up to 31 figures. Two horizontal rows (one above the other) of dancers at Cerro Mohetico 1 (JG-23) apparently represent opposing lines facing each other, such as male-female lines or some other form of ceremonial duality or opposition. Another line of six red dancers is shown in Cueva Pintada (JG-52).

**Period 5:** no interaction. There is no obvious interaction between geometric symbols of this period. However, it appears that some symbols were carefully placed over Period 3 animals as an intentional indication of interaction (see **Appendix**, JG-58 discussion; **Figure 76**).

**Period 6:** interaction rare. There are a few places where figures seem to have been placed together. The most obvious of these are two small humans facing each other in some interactive manner, possibly in dance or combat (Figure 21, h). Also, fine *caraña* figures are carefully, precisely superposed over early orange and light red figures (presumably late Period 1 or Period 2) at some sites.

### Overpainting and Superposition

Figures are most often painted on clean portions of wall. There are a few instances of figure superpositioning during Periods 2 and 4 (Table 8), but the early emphasis obviously was painting on a clean wall where the resulting figure would occupy its own space and would stand out from other figures. This changed with Period 3 bichrome when superpositioning became common. The trend continued into Period 5 with overpainting common throughout the zone, and this trend continued into Period 6. The kinds and degree of overpainting in Period 6, during which Period 6 figures are painted over the top of other Period 6 figures, suggests that the practice of intentional overpainting of selected figures during Period 5 continued into Period 6 (see Appendix, JG-58 discussion, and Figure 76).

The approach to wall space and previous art again supports the possibility for two developmental trends, or branches, within the art. The art of late Period 1, Period 2, and Period 4 (without Period 3 influence) is mostly done without superpositioning. Figures seem mostly spread out and drawn on clean wall space. There seems to have been preference for a new figure to occupy its own space. With Period 3, 5, and 6, however, paintings mostly are placed on top of previous art. In some cases, the overpainting is specific, intentional, and planned. Period 3 animals and fish are placed on top of everything. Early Period 5 art is

placed on top of Period 4 art, even when there is adequate space for new Period 5 figures. Late Period 5 multicolor figures are sometimes intentionally placed on top of previous figures (Figure 76). Such planned overpainting certainly is the case with the *caraña* figures both in the Parguaza area and around Cerro Pintado. This appears to represent a different trend, although the kind, degree, and intent of the overpainting is not clear. The two approaches to art, however, appear to be different enough to represent different cultural traditions.

### The Concept of Key Sites

It seems generally the case that each period has some exceptionally heavily painted *main* sites, plus many smaller sites with just a few figures. Reasons for this are not clear, but some sites obviously were more important than others. It would be reasonable to suppose that each geographic-cultural area — each political area — had a *main cave* where paintings and related ceremonies took place. Examples follow (Cerro Gavilán 1, JG-58, is discussed separately).

**Period 1.** There is no obvious central place for cave art although there is some concentrated painting at Alta Carinagua (JG-18).

**Period 2.** Fairly intensive painting occurs at several sites, such as Cerro Iguanitas 1 (JG-1) on the Parguaza, Cerro Gavilán 1 (JG-58) near the Orinoco, Cerro Pintado 1 (JG-15) just south of Puerto Ayacucho, and Cerro Pelota (JG-46) on the Sipapo.

**Period 3.** The main sites are Cerro Muertos 2 (JG-5), Cerro Iguanitas 1 (JG-1), Cerro Iguanitas 2 (JG-2), and Cerro Gavilán 1 (JG-58).

**Period 4.** The most notable are Laja Parguaza 1 (JG-8), Cueva Iglesias (JG-11), Santa Fe (JG-19), Cerro Mohetico 1 (JG-23), Cerro Gavilán 2 (JG-49), Cerro La

Vaca 1 (JG-21), Punta Brava (JG-54), possibly Alta Carinagua (JG-18), Ataruipe (JG-31), and perhaps Cerro Tigrito 1 (JG-48).

**Period 5.** Several sites contain Period 5 figures, but without obviously unusual concentration. The main sites seem to be Alta Carinagua (JG-18), Cerro Pintado 1 (JG-15), Cerro Gavilan 1 (JG-58), Cerro Iguanitas 3 (JG-3), and several new sites.

**Period 6.** The main sites are most notably Cueva Pintada (JG-52), Cueva Iglesias (JG-11), Cerro Gavilán 2 (JG-49), Cerro Pintado 1 (JG-15), and a reported cave near La Grulla (south of Puerto Ayacucho and south of the mouth of the Cuao).

Some of these heavily painted, larger caves have distinctive art styles (as discussed in other sections) which seem to occur most intensively at one site (or in one area) and are recognizable as such when they occur elsewhere. Such is the case with paintings at Cueva Pintada (JG-52), Cueva Iglesias (JG-11), Santa Fe (JG-19), and perhaps Cerro Muertos 2 (JG-5). An interesting study would be to determine which other sites contain these distinctive paintings and what else is in the cave with them. For instance, early Period 5 grids of connected circles, which seemingly are most common on the Parguaza (e.g., Cerro Iguanitas 3, JG-3), apparently occur later in great numbers at Cueva Pintada (JG-52) to the north. The areas are not a great distance apart, but the occurrence does suggest some contact between the two.

One of the more interesting sites is Cerro Gavilán 1 (JG-58). This long rockshelter is located on top a prominent mountain at the point where the Parguaza almost reaches the Orinoco and then turns northward. The site is fairly easily accessible from the Parguaza, the Orinoco, and overland. It commands an impressive view of the surrounding region, including the Galeras de Cinaruco to

the northeast — the major isolated mountain east of the Orinoco and on the edge of the *llanos*, and known to contain many unrecorded painted caves. The art in Gavilán 1 is almost overwhelming in amount and density. Most importantly, however, many figures are in the distinctive styles of distant sites mentioned above, such as Santa Fe (JG-19) and Cerro Muertos 2 (JG-5) to the east, Cerro La Vaca 1 (JG-21) to the south, and Cueva Pintada (JG-52) to the north. It seems reasonable that Gavilán 1 probably served as a regional gathering place or a rendezvous point for different cultural groups throughout at least most of the rock art sequence. This is the only site studied during this project where there is such a suggestion of regional interaction on such a scale.<sup>27</sup>

### **Anthropomorphs**

Although no attribute study has been done on any forms, observations on anthropomorphs provide suggestions on the distribution of some traits, an indication of variation within periods, and ideas on variation between periods. Anthropomorphic traits include body shape, body covering, body decoration, head styles, headdresses, shapes of hands and feet, various body attachments, and associated figures. Recurring decorations and other traits indicate that at least some motifs are culturally meaningful and analytically useful. Recurring traits may reflect morphological, temporal, or locational variation for which cultural explanation of changes between temporal styles can be suggested. The following observations are based on a review of color slides and field notes.

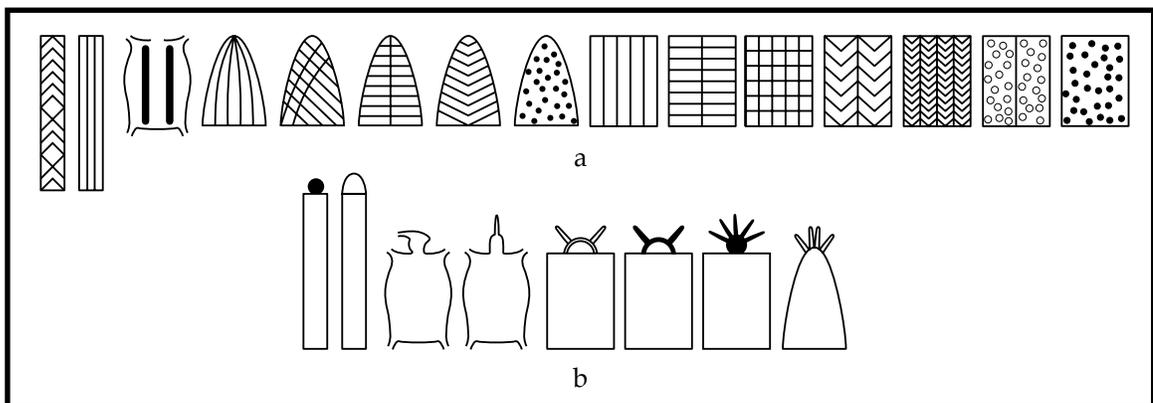
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<sup>27</sup> The cave is scheduled to be investigated in detail by Franz Scaramelli and Kay Tarble (UCV); the project was recently approved for funding, but national economic problems have delayed fieldwork (Tarble, personal communication 1994).

## Body Shape

There are relatively few recurring body shapes (Figure 23).

- Stick figures in various positions occur throughout the sequence.
- Long, narrow, rectangular bodies occur mostly in late Period 1 or Period 2.
- Large ghost-shaped figures occur in Period 3.
- Bowlegged figures occur mostly in Periods 3 and 4.
- One pregnant woman is portrayed in Period 4 (Figure 13, q).
- Wide square bodies and related teardrop-shaped bodies with body coverings and occasionally other attachments are introduced as a major form in Period 3. They are present in Period 4 and possibly Period 6.



**Figure 23.** Examples of anthropomorphic body forms and headdresses.  
a, torso shapes. b, head and headdress shapes with different torsos.

## Body Coverings

Wide figures with square and teardrop shaped bodies (Periods 3-6) have the most diverse array of body coverings, torso decorations, and attachments. One common covering seems to represent linear palm leaves hanging in a wide covering that extends from the head to the ground (Figure 13, t; Figure 14, o; Figure 15, d-e; Figure 17 d).

Another distinctive covering is portrayed by parallel chevrons. Bilateral symmetry divides the torso into either two or four vertical strips of chevrons. Coverings with four strips probably represent a full covering of loosely woven palm leaves (e.g., [Figure 14](#), m-n), and those with two strips may do the same (e.g., [Figure 14](#), f, i; [Figure 15](#), c). On two-strip figures, however, the chevron covering could also represent bare ribs, such as from skeletons, and thus might represent dead individuals or death (as has been suggested by some local visitors familiar with the art). Chevrons could also represent body covering and death at the same time, with coverings woven in a form to represent bare ribs. Ribs are especially suggested by one example from Period 4 at Cueva Iglesias (JG-11; [Figure 13](#), j) in which the lower portion of the body from the waist down is drawn in a Period 3 open-body style (with detailed feet and splayed toes), but with the upper skeletonized body represented only by the two sets of chevrons and with no indication of head or arms.

### **Body Decoration**

It is often difficult to distinguish body painting or stamping from designs representing clothing. In some cases (such as Period 2), interior lines may be an artistic device and may not represent anything real; humans may not even have been decorated in these ways.

**Periods 1 and 2.** Early elongated bodies often have interior parallel lines, such as occur on fish and other figures in Period 2. Others have body stamp designs, which usually occur in late Period 1 and perhaps into early Period 2.

**Period 3.** Ghost-like forms and bowlegged figures have solid white or yellowish bodies with no decoration.

**Period 4.** Some figures, such as a pregnant woman at Cueva Iglesias (JG-11; [Figure 13](#), q), have empty undecorated bodies. At least one rectangular-body human at Iglesias (JG-11) has the torso covered with a Piaroa-style body stamp design. Bowlegged figures may have open or solid bodies.

Some Period 4 squarish humans at Iglesias (JG-11) have the torso covered with intersecting circles (e.g., [Figure 14](#), b; [Figure 15](#), j), which may represent a net-like weave of palm leaves, while others have dots scattered over the body (e.g., [Figure 15](#), h-i). Although these circles and dots could refer to the jaguar or any number of other concepts, it would be interesting to investigate whether any of the dotted figures date from the 1500's and perhaps represent European diseases such as smallpox or measles (or magic against such diseases). Indigenous people throughout lowland South America still cover their bodies (and often their baskets) with dots and circles, although the meaning and origin for these decorations mostly have not been studied. In the few documented cases of expressed meaning, dots and circles often refer to various kinds of cats, particularly jaguar, ocelot, and puma.

### **Body Stamps**

Orange geometric figures of late Period 1, especially at Alta Carinagua (JG-18; [Figure 4](#), a) are similar in design to body stamps used by the Piaroa in the area today. However, since late Period 1 figures could be of considerable age, it is possible that there is a discontinuity between the earliest geometric symbols and the modern use of body stamp designs, such that there may be no direct historical relation between the two.

There may be a historical relation, however, with later prehistoric complexes. Very similar designs occur on Arauquinoid ceramics, and although widespread

throughout central Venezuela, the Arauquinoid development center on the Orinoco seems to be around the mouth of the Apure. Sáliva, as the western branch of ancestral Piaroa, mainly ranged during early historic times from the lower Meta up to the mouth of the Apure and perhaps were a prominent group in the area (Morey and Morey 1980). There is a possibility, therefore, that some Piaroa designs are holdovers from late Arauquinoid forms. There is similarly the likelihood that not all Arauquinoid ceramics and related occupation sites are Caribe. Certainly there is a distributional correspondence between early Sáliva groups and the Valloid series of ceramics within the Arauquinoid tradition which could exemplify such a multicultural association with spicule temper — both are late prehistoric to protohistoric in age and occupied the area from the mouth of the Meta to the mouth of the Apure.

### **Body Attachments**

Most objects attached to bodies seem to date to Period 4 (with some in Periods 3 and 6). Circles drawn on the legs of several figures are believed to represent either rattles or bound leg bands (Figure 16, c-g). Some people are shown holding objects in the hands, such as clubs (Figure 18). Some have projections at the waist, such as two pairs of figures wearing what appear to be traditional Panare belts (with the distinctive large cotton string balls at either side) at Idora de Punta Brava (JG-54), just south of the Suapure river and at the present southern edge of modern Panare territory. Some wide-body forms show a frontal genital flap representing clothing on either male or female figures (e.g., Figure 17, b). Shaman necklaces with wild pig canine teeth date to Period 6 (e.g., Figure 21, j).

## **Headdresses**

The few kinds of headdresses mostly seem to revolve around the use of feathers. Most common are 2-4 feathers sticking out of the head and probably representing circular feather crowns. Solid circular crowns (common in petroglyph styles to the south) are rare, if present at all. Period 3 ghost-like *warime* figures have a palm leaf covering pulled into a central spire above the head, although on others the *spire* is portrayed off to the side.

## **Hands and Feet**

Hands may or may not be portrayed, but when they are, they may be shown with three, four, or five digits — either fairly solid or stylized. Legs often are not portrayed or else are simply stubby single lines with no details or attachments. When present, feet are portrayed as small blobs, large blobs, stylized with prominent heels and toes, or simply three or four rays coming out of the leg. Prominent fingers and toes open on the end (not closed lines) are restricted to Period 3 (or its influence in Period 4); they are often broad, squarish, and somewhat exaggerated in width or thickness.

### **Variation within Periods**

Each period seems to be somewhat distinctive in artistic content. In all periods, animals and geometric symbols outnumber anthropomorphs, and some simple human forms such as stick figures seem to occur throughout the sequence. While there is moderate diversity in body shape, body decoration, and other attributes, each period contains anthropomorphic forms more or less distinct to that period, such as the elongated bodies of Period 1 and the bowlegged figures of Period 3. Anthropomorphs exemplify content variation between periods, but it is the

pattern of the total assemblage that gives a style its character and shows its range of variation in manner of expression and subject matter. Geographic north-south differences in the art probably reflect distinctions in the range of settlements, activities, and influence between different local groups along different parts of the river. No patterned inconsistencies presently are clear in kinds of paintings between low areas next to rivers and upland sites in the highlands. As such, individual periods are viewed as representing somewhat culturally stable times, but with widespread geographic contact between groups up and down the Orinoco and from the river back into the highlands (cf. Mansutti-Rodríguez 1986).

### **Changes between Periods**

Relatively little variation within a period suggests some degree of cultural similarity and stability, while noticeable changes in art styles between periods seem to represent just the opposite — some kind or degree of cultural change. These changes could have any number of causes, such as changing populations, external effects, or changing conditions within the local culture. Such changes might be in response to environmental stress from over-production of agricultural products, better agricultural potential due to technological innovations or increased specialist knowledge, food stress or social changes linked with population growth, or social stress due to population reduction from disease.<sup>28</sup>

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<sup>28</sup> During the winter of 1819 at Ciudad Bolívar (Angostura), it was estimated that an average of 20 people a day died of yellow fever (Vivian 1967:174). Some accounts of disease in other parts of Guyana-Venezuela-Brazil have shown even greater death rates, and some early missionary accounts have discussed whole Indian villages dying off, with the few survivors taking refuge in the back country (Brett 1868).

Two main traditions are suggested by variation in anthropomorphic form — essentially the time before the introduction of Period 3 red-white bichrome and the time after. The difference again seems to support the two possible developmental branches already hinted at with Periods 1–2–4 and 3–5–6.

There appears to be some continuity between late Period 1 and Period 2, with minor changes in painting and some new motifs. In Period 4, human forms which show no Period 3 influence seem congruent with a general developmental trend from late Period 2. The relatively few Period 3 forms assigned to Period 4 are believed to be late and intrusive into the style. Other than these new forms, the rest of the Period 1–2–4 development could represent normal internal change within a resident population.

With Period 3 bichrome there is a sudden change in technology, content, use of space, and approach to art. This is a strong artistic expression, not only from the technological standpoint of red-white bichrome paint intruding on the local red monochrome, but also the introduction of distinctly different forms. New anthropomorphs include wide-body *warime* type shaman figures, wide-bodied figures with fairly complex body coverings, ghost-like figures, bowlegged figures, and open-bodied figures. There is a dramatic increase in the absolute and relative number of anthropomorphs, the number of kinds of anthropomorphic representations, and the complexity of attributes of these figures.

The kind and intensity of artistic change in Period 3 seem to reflect a change in ideology (or at least the way it is portrayed) resulting from the introduction of a new group of people, new cultural traditions, and new artistic expression. This influence is somewhat evident in Period 4, which is thought to represent resident groups at the time of the Period 3 influx of new people and ideas. Period 3

expression continues into Periods 5 and 6, especially evident with complex human forms or ritually dressed dancers. The Period 3–5–6 continuity is strongest in the northern part of the zone, especially in areas near the Orinoco, and it is assumed that the influence is due to residents of the middle Orinoco coming south into the Parguaza area.

## CHAPTER 8

# ARCHEOLOGICAL COMPARISON

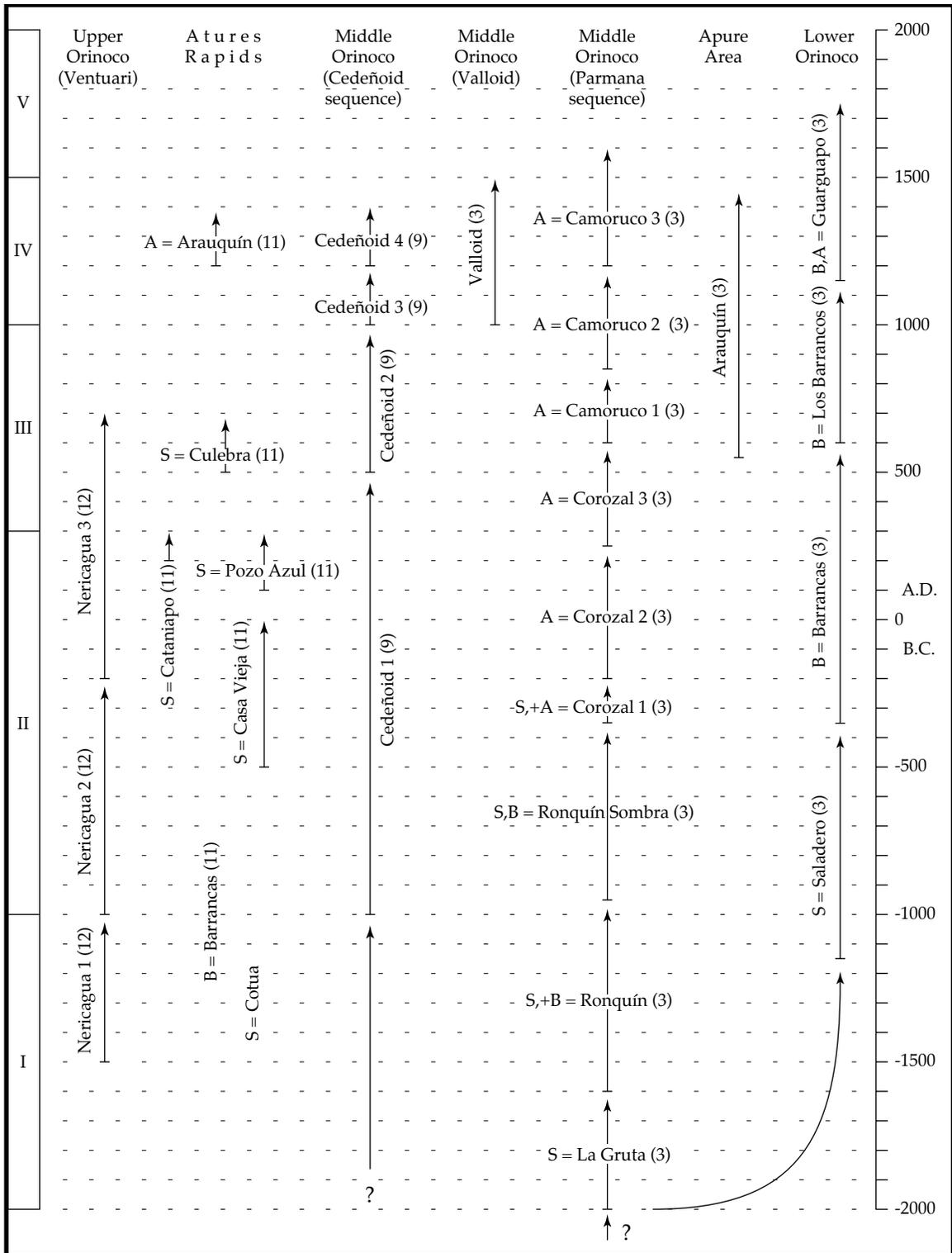
This chapter begins with a general orientation and some basic considerations for the comparison of the region's ceramic series to the present study of rock art. This is followed by a discussion of each ceramic series or tradition. Additional comments on the long and short sequences of the Rouse-Roosevelt and Sanoja-Vargas models follow; these are additionally discussed and partially evaluated, particularly in the Saladoid and Barrancoid sections. Next, models are presented to explain possible routes of introduction of the earliest ceramics into the Orinoco basin. This is followed by various comments regarding the possible dating of the rock art sequence proposed here, and finally by some suggestions for restructuring the hypothesized rock art sequence on the basis of the ceramic sequence.

Peripheral to the main goal of this study are comparisons of rock art with ceramic designs and the ceramic sequence, attempts to equate rock art with more inclusive archeological phases and people, and attempts at absolute dating of the suggested rock art periods. Some suggestions in such directions are offered here as an indication of the potential for such an approach later.

This review of the archeological sequence (summarized in [Table 14](#) and [Figure 24](#)) was done after the study of the provisional chronology of the art. This includes considerations of the ceramic sequence and synthesis of ideas regarding

various dating schemes, particularly the *long* sequence of Rouse and Roosevelt and the *short* sequence of Vargas and Sanoja. Also considered are various models to explain the initial introduction of ceramics into the middle Orinoco relative to migrating groups of people as well as the spread of ideas and traits either together with or independent from those population movements.

The chapter begins with sections describing and evaluating each major period, stage, or tradition within the middle, lower, and upper Orinoco because of the potential relation each tradition has with the rock art of the study area. The entire area has been discussed by Rouse in most of his publications (including Cruxent and Rouse 1958, 1959, 1961), and most substantive information in my discussion likely comes from his syntheses and overviews. The early work by Osgood and Howard (1943; Howard 1943) has been reclassified and put into modern terminological perspective of later syntheses. Other than Rouse's work, most attention on the lower Orinoco revolves around projects carried out by Sanoja and Vargas. The main upper Orinoco projects pertinent here are those by Barse (1989, 1990) around Puerto Ayacucho, the Smithsonian testing program on the Ventuari in the 1950's (Evans, Meggers, and Cruxent 1959), and Zucchi's more recent program of archeological testing combined with linguistic research to attempt reconstruction of the culture history of ethnic groups throughout the area.



**Figure 24.** Orinoco ceramic chronology, showing series and phases (periods I-V after Rouse and Allaire 1978). Prefix letter is ceramic series. See [Table 14](#) for references (parentheses) and series keys. Traditions: S=Saladoid; B=Barrancoid; N=Nericagua; A=Arauquinoïd.

**Table 14.** Dates for Orinoco ceramic series and phases. The key also applies to references and series in **Figure 24**. Bold line entries (◀) are considered the best of multiple estimates.

<b>SERIES</b>	<b>AREA</b>	<b>SOURCE</b>
A = Arauquinoid B = Barranoid S = Saladoid V = Valloid C = Cedeñoid (Saladoid variant) + = noticeable influence ± = minor influence	m-Or = middle Orinoco l-Or = lower Orinoco u-Or = upper Orinoco Ap = Apure river At = Atures rapids (Puerto Ayacucho).	1 = Cruxent & Rouse 1961 2 = Rouse & Cruxent 1963 3 = Rouse & Allaire 1978 4 = Rouse 1978 (La Gruta) 5 = Roosevelt 1980 (La Gruta) 6 = Mario Sanoja (per. comm. 1993) 7 = Kay Tarble (per. comm. 1992) 8 = Tarble & Zucchi 1984 (Valloid) 9 = Zucchi & Tarble 1984 (Cedeñoid) 10 = Evans, Meggers, Cruxent 1959 11 = Barse 1989, 1990 12 = this study (Orinoco rock art)

Series	Phase	Area	Date	Source
<b>Valloid</b>				
	Valloid series	m-Or	1000-1500 ad	8, 7
<b>Arauquinoid</b>				
A	Arauquinoid series	m-Or	400-1400 ad (esp. 600-700 ad on m-Or)	7
B,A	Guarguapo	l-Or	1150-1750 ad	3, 2
A	Araucúin	Ap	550-1450 ad	3
A	Araucúin	At	1200-1400 ad	11
A	Nericagua 3	u-Or	est. 100 bc - 700 ad	10, 11
A	<b>Camoruco series</b>	m-Or	<b>600-1600 ad</b> ▶	3
A	Camoruco series	m-Or	500-1500 ad	4
A	Camoruco series	m-Or	400-1500 ad	5
A	<b>Camoruco 3</b>	m-Or	<b>1200-1600 ad</b> ▶	3
A	Camoruco 3	m-Or	1150-1500 ad	4
A	Camoruco 3	m-Or	1100-1500 ad	5
A	<b>Camoruco 2</b>	m-Or	<b>850-1200 ad</b> ▶	3
A	Camoruco 2	m-Or	750-1150 ad	4
A	Camoruco 2	m-Or	700-1100 ad	5
A	<b>Camoruco 1</b>	m-Or	<b>600-850 ad</b> ▶	3
A	Camoruco 1	m-Or	500-750 ad	4
A	Camoruco 1	m-Or	400-700 ad	5
<b>Arauquinoid transition</b>				
unk (S/A?)	Nericagua 2	u-Or	est. 1000-100 bc	11, 12
S,B,A	<b>Corozal series</b>	m-Or	<b>650 bc - 600 ad</b> ▶	2
S,B,A	Corozal series	m-Or	750 bc - 500 ad	5
S,B,A	Corozal series	m-Or	800 bc - 400 ad	6
A,±B	<b>Corozal 3</b>	m-Or	<b>250-600 ad</b> ▶	2
A,±B	Corozal 3	m-Or	200-500 ad	5
A,±B	Corozal 3	m-Or	100-400 ad	6

(continued)

Table 14 (page 2)

A,+S,+B	<b>Corozal 2</b>	m-Or	<b>200 bc - 250 ad ←</b>	3
A,+S,+B	Corozal 2	m-Or	300 bc - 200 ad	4
A,+S,+B	Corozal 2	m-Or	400 bc - 100 ad	5
S,B,+A	<b>Corozal 1</b>	m-Or	<b>650-200 bc ←</b>	3
S,B,+A	Corozal 1	m-Or	750-300 bc	4
S,B,+A	Corozal 1	m-Or	800-500 bc	5
<b>Barranoid</b>				
B	Barranoid series	m-Or	1000 bc - 400 ad or later	7
B,+S,A	Barranoid series	l-Or	650 bc - 1750 ad	3
B,+?	Barranoid series	l-Or	to after 1500 on coast	6
B,A	Guarguapo	l-Or	1150-1750 ad ←	3
B	<b>Los Barrancos</b>	l-Or	<b>600-1150 ad ←</b>	3
B	Los Barrancos	l-Or	300-1000 ad	2
B,+S	<b>Barrancas</b>	l-Or	<b>650 bc - 600 ad ←</b>	3
B,+S	Barrancas	l-Or	1000 bc - 300 ad	2
B	Isla Barrancas	l-Or	1000 bc	11
<b>Saladoid</b>				
S	Saladoid series	m-Or	2000-650 bc	3
S	Saladoid series	m-Or	2100-750 bc	4
S	Saladoid series	m-Or	2100-800 bc	3, 5
S	Saladoid series	m-Or	1500 bc - 150 ad or later	7
S	Saladoid series	u-Or	1600-650 bc	3
unk (S?)	Nericagua 1	u-Or	est. 1500-1000 bc	10, 12
S,B	Cotua	At	c. 1000-700 bc (my guess)	1, 2
S	Culebra	At	500-700 ad	11
S	Cataniapo	At	200-300 ad	11
S	Pozo Azul	At	1-300 ad	11
S	Casa Vieja	At	500-1 bc	11
S	<b>Saladero</b>	l-Or	<b>1150-650 bc ←</b>	3
S	Saladero	l-Or	1000 bc	3
S,+B	<b>Ronquín Sombra</b>	m-Or	<b>1050-650 bc ←</b>	3
S,+B	Ronquín Sombra	m-Or	1000-750 bc	4
S,+B	Ronquín Sombra	m-Or	1000-800 bc	5
S,+B	<b>Ronquín</b>	m-Or	<b>1400-1050 bc ←</b>	3
S,+B	Ronquín	m-Or	1600-1000 bc	4
S,+B	Ronquín	m-Or	1600-1100 bc	5
S	<b>La Gruta</b>	m-Or	<b>2000-1400 bc ←</b>	3
S	La Gruta	m-Or	2100-1000 bc	4, 5
<b>Cedeñoid</b>				
C,A	Cedeñoid series	m-Or	1000 bc - 1400 ad	9
C,A	Cedeñoid 4	m-Or	1200-1400 ad	9
C,A	Cedeñoid 3	m-Or	1000-1200 ad	9
C,A	Cedeñoid 2	m-Or	500-1000 ad	9
C	Cedeñoid 1	m-Or	1000 bc - 500 ad	9

(end)

Middle Orinoco archeology is complex, and the long sequence is known from stratigraphic excavations at several large sites including La Gruta, Ronquín, Cedeño, Agüerito, Camoruco (not on the river), and others. The La Gruta sequence is based on test excavation data from left-bank open habitation sites in the general Caicara area just above the mouth of the Apure river, or about 165 kilometers northeast of the Suapure river, which marks the edge of the present study area. Generally, I rely heavily on the La Gruta (Parmana area) sequence as discussed primarily by Rouse (1978; Rouse and Allaire 1978) and Roosevelt (1978, 1980), and their information should be assumed in all discussions herein. Discussions by Sanoja and Vargas (1983) pertinent to that sequence are also basic to all considerations. Any discussions dealing with movements of people necessarily involve ideas, models, and projections presented by Lathrap (1970), Rouse, and Zucchi.

Details regarding specific traditions are extracted mainly as pertinent to the problem of showing possible relations with the art in an effort to link rock art with ceramic designs and movements of people. The purpose is to provide possible cultural association and indications of absolute age for the art. Reasonable comparisons can be made mostly between the ceramic and cultural data on the middle Orinoco with rock art sites at the north end of the survey zone, essentially from the Parguaza northward. This particularly includes the latest art at Cerro Gavilán 1 (JG-58; just south of the Parguaza mouth) and Cueva Pintada (JG-52; east of Palomo near the Villacoa), and perhaps the Period 3 bichrome at Cerro Iguanitas 1 (JG-1) and Cerro Muertos 2 (JG-5), both on the Parguaza near El Carmen. The middle Orinoco ceramic sequence as defined in the Caicara area does not seem to be fully applicable to rock art south of Puerto Ayacucho.

## Preceramic Periods

The preceramic component of the archeological sequence so far has received essentially no attention on the lower, middle, or upper Orinoco, and only minimal recent work in the area of the Atures rapids (Puerto Ayacucho). This may be due, in part, to the difficulty in finding or recognizing sites from this stage.

Materials around Puerto Ayacucho appear to date to this period. Two small open stratified sites near Puerto Ayacucho were tested by Barse (1989, 1990) and were found to contain deposits and lithics dating from before 7000 to 5000 B.C. Archaic-like lithic artifacts are not uncommon surface finds, and several have been found in the lower Cataniapo river just south of Puerto Ayacucho by local residents (Puerto Ayacucho informants to Greer 1990-93). It is my impression that some pictograph sites probably contain preceramic deposits also.

Archaic artifacts at least 5000 years old have been reported from the Canaima area to the northeast (Cruxent and Rouse 1958). Shell middens on the coast of Guyana date to about 3600-4000 B.C. (Sanoja and Vargas 1983:207). Comparison with the rest of Venezuela, particularly the Falcón area, suggest an even longer period of use than the 5000 years at Canaima and 9000 years at Atures.

It is reasonable that cave use and some of the rock art could be at least this old, especially considering early dates for cave occupation and somewhat similar paintings (e.g., with guanacos or camelids) over much of western South America. Early dates for rock art also have been reported from all over Brazil (Ignacio 1987).

It may be that preceramic deposits on the middle Orinoco are more common than presently thought and that some reported materials and dates may actually

be attributable to preceramic occupations. For instance, Vargas (1981:523) pictures a chipped stone dart point found during her 1977 excavations at La Gruta (site G4). The form is a standard, stemmed middle Archaic shape found over much of South America and fits well with Cruxent's Canaima complex (Rouse and Cruxent 1963). The form has a moderately wide triangular blade, prominent barbs, and a prominent narrow contracting stem. Willey (1971) discusses this shape as represented by San Antonio phase points of eastern Brazil (p. 63); Ayampitín and Lauricocha II points of Peru (p. 58), El Inga III points of Ecuador (p. 58), Canaima points of Venezuela (p. 60), and the middle part of the Intihuasi sequence from Chile (p. 212). From Willey's data, I would guess these points date around 6000-2500 B.C., with the Orinoco dates probably 5000-2500 B.C. The likelihood that Vargas' point from La Gruta pertains to earlier preceramic occupation, and not Saladoid as reported, would help explain some of Roosevelt's early dates from this site.

Oliver (1989:408-410, 487) believes the earliest wave of people bringing ceramics with them entered from Brazil at least by 4000 B.C. and arrived at the Agüerito site at the mouth of the Apure by at least 3600 B.C. Zucchi's dates from Agüerito are 3030, 3475, and 3730 B.C. (Zucchi, Tarble, and Vaz 1984:175). The association of these dates with pottery seems questionable, although the dates themselves may be good. Zucchi rejects the dates as too early since she is dealing with the earliest ceramics belonging to the Ronquín Sombra phase. However, she gives no technical reason why the dates should not be reliable. Lathrap and Oliver (1987) believe the early dates are correct and provide the age of the earliest deposits at Agüerito with an initial polychrome ceramic complex dated 3600 B.C. (4500 B.C. corrected) — distinct from and earlier than the Cedeñoid component discussed by Zucchi, Tarble, and Vaz (1984).

It seems that the combined Agüerito dates may indeed be reliable, but it is not clear to me that the dates pertain to an early ceramic component rather than a preceramic component not recognized in the field. All discussions of the site point to admixture of materials in the sandy deposits, and the mixing of initial ceramic deposits with previous undifferentiated deposits with no ceramics certainly would be a reasonable and common field error. Therefore, I see a likelihood of preceramic deposits at Agüerito dating to around 3000-4000 B.C.

Barse (1989) previously reached similar conclusions and suggests that some of the confusion over early dates in the deep terrace sites on the middle Orinoco may be the result of the presence of unrecognized preceramic deposits and the admixture of charcoal from preceramic and ceramic deposits in the lowest levels of the sites. This is exactly the situation I propose possible at Agüerito and likely is present at other sites as well.

The existence of such deposits, of course, would not be surprising. If the middle Archaic were not represented on the middle Orinoco, it would probably be the only place in the world with no evidence of occupation during that period of population and technological expansion. Of course, Barse (1989, 1990) has shown through excavations that early and middle Archaic occupations are indeed present, with C14 dates 7000-4000 B.C. and later. The pictographs reported herein also suggest a fairly long preceramic presence (Periods 1 and 2), and cultural deposits in occupied caves are estimated (from experience with similar deposits) to date, at least in part, to the preceramic.

### **Ceramic Periods**

The ceramic sequence for the area begins between 2000 and 1000 B.C. and proceeds through a series of fairly well known traditions or periods with several

local variant names. These complexes mostly were established and described over 35 years ago by Cruxent and Rouse (1958, 1959, 1961; Rouse and Cruxent 1963).

The date of introduction of early ceramics on the middle Orinoco (e.g., the mouth of the Apure river) is a matter of debate (Vargas 1981; Zucchi, Tarble, and Vaz 1984; Oliver 1989; Rouse 1978; Rouse and Allaire 1978; Barse 1989). There are essentially two explanatory approaches: the Rouse-Roosevelt model (mostly Rouse and Allaire 1978) and the Sanoja-Vargas model (mostly Sanoja and Vargas 1983). Rouse and Roosevelt propose that Saladoid is the earliest ceramic tradition on the Orinoco, begins about 2100 B.C., and gives rise to Barrancoid. Sanoja and Vargas, on the other hand, have Barrancas as the earliest tradition, coming in about 1000 B.C. on the lower Orinoco and developing out of a Formative tradition widespread across western South America. To them, Saladoid (their Ronquín tradition) came into the middle Orinoco later, about 650 B.C.

Most researchers do agree, however, that at least by 1000 B.C. semi-sedentary pottery-using villages were firmly established on the middle Orinoco. The earliest traditions appear to be Saladoid and Cedeñoid series (Zucchi and Tarble 1984), which represent in-coming Arawak speakers. Barse (1989) still feels that Barrancas is the earliest series and predates Saladoid at least as far up the river as the Atures rapids. I review the Nericagua complex here and propose an early beginning for that tradition also. Throughout the Orinoco basin these series are superseded by the Arauquinoid ceramic series, representing the Caribe presence in the area. The newly defined Valloid series (Tarble and Zucchi 1984) is a late Caribe component which probably could be considered part of the general Arauquinoid complex. Possible directions for the expansion of people or the

diffusion of ideas relative to the main periods, as well as rock art, are included here (Figures 25-28 and 36).

The following sections present a general sequence of the main proposed ceramic series, general traditions, or complexes. This discussion is strongly oriented toward information potentially pertinent to rock art dating and cultural affiliation.

### **Early vrs. Late Pottery Traditions**

Orinoco ceramics are dominated early and late in the sequence by different technological and decorative characteristics. These are itemized below in general terms as a guide for discussions in subsequent sections.

#### **Early Characteristics**

**Fine Sand Tradition.** This characterizes Saladoid and early Barrancoid pottery and seems to be associated with broad-line incision and white-on-red painted decoration.

**Cariapé Temper.** The use of burned bark as pottery temper has the added quality of making the clay harder and more durable. This is associated with early Nericagua complex pottery on the upper Orinoco and is rarely found in the early pottery of the middle Orinoco.

**Broad-line Incised Decoration.** This is most common on the middle and lower Orinoco and represents the early ceramics of the Saladoid and Barrancoid series, thus equating fairly closely with fine sand temper. Designs often incorporate curvilinear geometric abstract motifs, as well as both representational and stylized human and animal forms.

**White-on-Red Painting.** The earliest pottery is decorated with white designs painted over a red background. This is typified by the Saladoid series and is closely linked with fine sand temper and apparently with broad-line incision. Many researchers believe this painted tradition comes from northern Amazonia.

### **Late Characteristics**

**Cauxi Temper.** The use of sponge spicule temper is wide-spread in later times throughout northern South America and appears to be related to the spread of Cariban speakers after about 500 A.D. In the middle Orinoco this temper is associated with Arauquinoid ceramics.

**Crushed Rock Temper.** This is particularly relevant in the late Arauquinoid and Valloid series ceramics.

**Fine-line Incised Decoration.** Late period ceramics associated with *cauxi* temper are decorated with zoned incisions which are finer and relatively deeper than previously. Designs are commonly rectilinear to angular and are formed by parallel lines arranged in geometric zones. Fine-line zoned banding is typical of the Arauquinoid series, and the decorative tradition is widespread across South America. It is believed to have developed in northern Amazonia.

**Polychrome Painting.** Multicolor painting over a plain or painted background, especially over a white zoned slip, seems to come into the Orinoco after the end of the main Saladoid-Barrancoid dominance and at the beginning of the Arauquinoid influence, sometime during the Corozal phases. The polychrome tradition is believed to have come from the western *llanos*, together with maize agriculture (and in exchange for manioc cultivation). The presence of bichrome and polychrome paintings only in the northern part of the study zone, that is,

around the lower Parguaza and presumably northward toward the mouth of the Apure, rather than southward toward the upper Orinoco, seems to support the hypothesis of a western polychrome origin and direction of entry into the middle Orinoco probably down the Apure.

### **Saladoid Series**

This may be the earliest ceramic series on the middle Orinoco. Sites in this area mostly occur along the Orinoco and its major tributaries. Ceramics are characterized by a reddish paste with fine sand temper. The most distinctive decorations include modeled lugs, white-on-red, buff-on-red, and white-buff-on-red painting, and buff slip-wash. The origin of the series is unknown, but it is generally accepted that Saladoid probably represents the eastern Arawak who expanded out of the middle Orinoco to the coast and through the Antilles (Figure 25). The last part of the Saladoid sequence is heavily influenced by Barrancoid from the lower Orinoco (Rouse). The earliest petroglyphs on the Orinoco may date to this period (Tarble personal communication 1992).

The sequence of three temporal phases within the Rouse-Roosevelt model is discussed by Rouse (1978) and Roosevelt (1978, 1980) and is derived from excavations at the La Gruta and Ronquín sites. The phases begin with La Gruta, continue through Ronquín (equivalent to the Early Ronquín ceramics of Howard 1943), and end with Ronquín Sombra.

The ceramic sequence begins with the sudden introduction of Saladoid, coming from some unknown source and suddenly changing the local setting with fully developed ceramics, manioc agriculture, and a new iconography, presumably with an associated complex of new beliefs and traditions (Rouse 1978). The people settled on the middle Orinoco around the mouth of the Apure

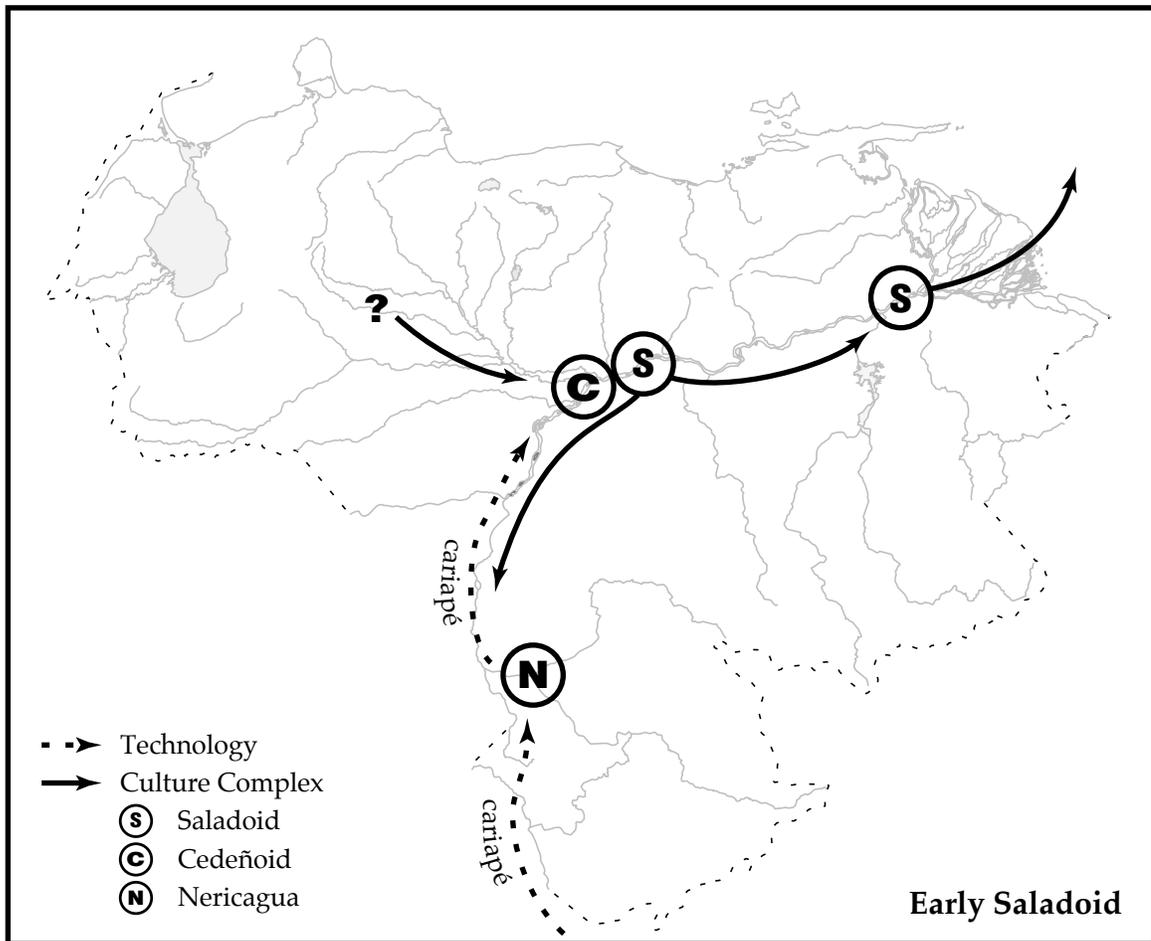


Figure 25. Ceramic complex spread during early Saladoid.

river (generally the Caicara-Parmana area) and ranged out from there in satellite villages. They subsequently extended cultural influence through such actions as trade and outward migrations into the lower Orinoco valley, other parts of Venezuela, and out into the Antilles.

Changes through Saladoid appear to represent mostly in-situ local development with some external influences but no major influx of foreign populations from beyond the Orinoco valley (Rouse and Allaire 1978). Thus, there are no external reasons to anticipate drastic changes to occur in the rock art

during this period, beyond the documented Barrancoid influence toward the end of the sequence.

The following sections discuss various aspects of the tradition, mostly in consideration of subjects of interest to rock art. Most of the discussion follows the Rouse-Roosevelt organization for convenience.

### **Introduction of Ceramics and Agriculture**

The Saladoid tradition represents the introduction of ceramics and presumably agriculture into the Orinoco valley, with economy based on manioc production (Rouse 1978).<sup>29</sup> Maize is not yet present. Rouse (1978:210) states that, “An invasion of Saladoid peoples must have carried them along the route, for these peoples are everywhere the first pottery-makers and the first agriculturists and, wherever we have earlier preceramic remains, there is a sharp break between them and the Saladoid phases.”

Any rock art representations of ceramics or manioc presumably would date no earlier than Saladoid, since Rouse (1978) proposes that both were introduced into the middle Orinoco during this period. It is not known whether garden plots existed before this, and if so, what kinds of plants would have been grown in them and therefore might be portrayed in rock art prior to this period.

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<sup>29</sup> The introduction of manioc agriculture is assumed because this is the first occurrence of pottery manioc griddles (*budares*). This should be obvious since it is also the first pottery. It does not, however, indicate that manioc was not present before this date; there simply is not yet any physical evidence for it (Rouse and Allaire 1978). However, it should be noted that in 1945 many Piaroa were still using thin rock slabs for *budares*, rather than ceramic griddles (Comité 1945). Ceramic griddles, therefore, are not essential and do not necessarily indicate the first use of manioc. Today many families use the cut-out ends of 55-gallon metal barrels.

Ceramics and cultivated plants are portrayed in rock art in the study area. A Period 3 (or Period 5) decorated ceramic jar is portrayed at Cerro Iguanitas 2 (JG-2). Examples of pictured cultigens include a Period 4 (possibly Period 3) deer with a manioc plant in its body cavity at Iglesias (JG-11), Period 4 *onoto* seed pods at Coromoto (JG-33), and Period 6 pineapples at Cueva Pintada (JG-52). These would indicate that Periods 3, 4, 5, and 6 date no earlier than Saladoid.<sup>30</sup>

### **Characteristics by Phase**

The La Gruta phase was defined solely on the basis of radiocarbon dates and pottery excavated at the La Gruta site (Roosevelt 1978). As such it is more an aggregate of archeological materials than an assemblage or a phase. Rouse, however, treats it as a phase, and therefore the term is so used here also. The complex apparently has not been recognized in stratigraphic context, although the subsequent Ronquín and Ronquín Sombra phases were recognized as separate phases from minor testing at the Ronquín site (Roosevelt 1978; Rouse 1978). Ronquín is defined from the lower deposits, while Ronquín Sombra statistically (partially) overlies Ronquín phase ceramics in one area of that site.

Meggens and Evans (1983) mention that the main decorative difference between the two early Orinoco pottery traditions is that Saladoid is painted and incised, while Barrancoid is only incised. Both are sand tempered with floated to polished surfaces. The following discussion of phase contents is mainly from Roosevelt (1978).

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<sup>30</sup> It is postulated elsewhere in this paper that Period 4 begins near the end of the preceramic, and that Saladoid was introduced by Period 3 peoples within the lifetime of Period 4.

## La Gruta phase

Most sherds have a dense sand temper. The other ware in the La Gruta assemblage is tempered with crushed sherds and small amounts of fiber. It is assumed that Roosevelt's crushed sherd temper<sup>31</sup> is now reclassified as Cedeñoid (Zucchi and Tarble 1984), while the fiber tempering<sup>32</sup> probably is related to Nericagua 1 (defined herein, see **Nericagua Complex**). Most La Gruta surfaces have been rubbed to a floated, semi-polished surface, and surfaces are often covered with a white wash or thin slip.

A large proportion of the pottery is decorated. Most common is broad-line rectilinear and curvilinear incising and zoomorphic modeling characteristic of Barrancoid. Incising is usually in a horizontal band below the rim, and common motifs include straight lines, curved lines, and dots.

Red and white post-fired painting is common, often with a combination of positive and negative techniques (Roosevelt 1978). Painted lines are sometimes combined with painted block areas. Some negative lines are formed by rubbing them into a painted block area. One such technique of combined positive-negative designs is as follows: (1) an area of red paint was laid down; (2) a thick layer of white was placed around the red (and overlapping the edges of the red); (3) a white border was formed by scraping away some of the white paint; (4) the red panel was overpainted with white fine-line rectilinear and curvilinear geometric designs. There is a stress on geometrics in the art. Incised designs are *impressionistic* and are both curvilinear and rectilinear (Rouse 1978; Rouse and Allaire 1978; Roosevelt 1978, 1980).

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<sup>31</sup> This appears to be unfired clay and is better described as clay pellets or crushed clay.

<sup>32</sup> In much published work the distinction between fiber and *cariapé* (bark) tempering is not clear.

The use, in some cases almost a dominance of white, indicates a more than casual attention toward the use of white paint (Roosevelt 1978). The generally low quality of the paint and the use of red and white together seem similar to paint use in rock art Periods 3, 5, and 6. The combination of positive and negative techniques would seem to equate only with rock art Period 6. The use of two colors, the outlining of a red prepared surface with white, the use of variant negative painting, the painting of fine-line geometric figures in white, and the overpainting of a solid background with another color all are congruent only with rock art Period 6.

Human face adornos have dimpled eyes (Roosevelt 1978; Rouse 1978). Zoomorphic adornos and possible reference to stylized animals in geometric designs on pottery indicate a cultural emphasis on the portrayal of animals and fish. In rock art this would seem to equate most closely with late Period 3 naturalistic figurative art with its emphasis on animals and fish. This emphasis on animals and fish is also seen as a Barrancoid trait (Meggers and Evans 1983).

The emphasis on vessel decoration indicates that the people generally considered decoration important. As such there would seem to be a tendency to paint in other media, such as in caves, although cave art presumably would not necessarily serve the same function as ceramic art.

### **Ronquín Phase**

Pottery is still sand-tempered but now has much harder and better integrated paste (Roosevelt 1978). There is still sherd and fiber tempering, as before. In this respect, development parallels the Nericagua 2 phase. Floating and polishing are better quality than previously due to the nature of the paste. Decoration and other technological aspects are essentially the same as during the previous La

Gruta phase. The width and depth of incised lines seem to be more variable than previously (Roosevelt 1978).

### **Ronquín Sombra Phase**

There is a substantial increase in crushed sherd and fiber tempering. There are also new elaborate forms of painting and modeling (Roosevelt 1978). By this phase there is a very strong Barrancoid influence evident in all technological and decorative aspects of the pottery.

### **Temporal Change by Mode**

Rouse (1978) discusses the Saladoid series mostly relative to individual technological and decorative modes and changes in those modes through time, through the three proposed temporal phases defined by Roosevelt (1978, 1980).

Temper is predominantly sand. The relatively minor amount of fiber and sherd tempering (or crushed clay) increases through time (Rouse 1978).

Various modes become more Barrancoid through time, culminating in the most Barrancoid-like traits by the end of the Ronquín Sombra phase (Rouse 1978):

- vessel rim form,
- rim decoration,
- vessel body form,
- fiber tempering,
- attributes of decorative painting,
- attributes of incising,
- location of incising,
- modeled and incised faces,
- handles and lugs (location, manufacture, shape, and decoration).

White, red, and white-on-red painting occurs in all three phases (Rouse 1978). Paint is fugitive, and designs therefore are difficult to discern (the same also seems to be the case for the Nericagua phases). In La Gruta, curved lines, and painted areas combined with lines are common. Negative designs formed by scraping fine lines in painted surfaces are present during this phase. In Ronquín, designs become more linear and begin to include crosshatching, both Saladoid traits. In both Ronquín and Ronquín Sombra painted designs become bolder and begin to include red and plain areas separated by white lines, both Barrancoid traits. In Ronquín Sombra there are additional elaborate forms of painting. White-on-red painting was gradually abandoned by the end of the Saladoid series (Rouse 1978).

Incised decoration is most common. La Gruta lines are broad, shallow, irregular, and impressionistic. In the two subsequent phases, lines become narrower, deeper, and firmer (more like late Barrancoid to early Arauquinoid). Designs become more complex and include more areas of multiple parallel lines. These traits indicate an increase in Barrancoid traits (Rouse 1978).

Modeled and incised (not painted) human faces are commonly portrayed on vessels throughout the sequence, indicating an iconographic emphasis on human facial features. Bottles are covered with curvilinear channeling, a decorative technique which could be mirrored in rock art. The curvilinear pattern could be the same as shown in the bichrome rectangular stamp designs at Cerro Gavilán 1 (JG-58), presumably in Period 3 or 5. The design does not occur in rock art before Period 3. Modeling and incising show increased Barrancoid influence through the sequence (Rouse 1978).

Adornos change somewhat through time. La Gruta adornos have dimpled eyes. In the Ronquín phase, facial features are better distinguished by incision, and doughnut-shaped eyes begin to replace dimpled forms. In Ronquín Sombra there is a higher proportion of doughnut-shaped eyes, and there are other new elaborate forms of modeling. The development parallels Barrancoid changes (Rouse 1978).

### **Sanoja-Vargas Model**

Sanoja and Vargas (1983) have a slightly different view of the history of the Saladoid occupation, or Ronquín in their terminology. In the Sanoja-Vargas scheme, early Saladoid, their Ronquín Period 1, dates around 650-1 B.C. and appears to equate with the Rouse-Roosevelt Ronquín phase<sup>33</sup> and apparently most of Ronquín Sombra.

Early Ronquín pottery is tempered with fine sand, *cariapé*, carbon, ash, and hard unfired clay (Sanoja and Vargas 1983). To me, the *cariapé* temper suggests early connections with the parent technological tradition responsible for Nericagua 1 on the upper Orinoco. The hard unfired clay temper is now seen as the indicator for the Cedeñoid series (Zucchi and Tarble 1984).

Sanoja and Vargas (1983:237-239) describe decorations of early Saladoid (their Early Ronquín) as white and red painting, white-on-red, black-white-on-red, zoned incision, punctation and incision, modeling and incision, and grooving. From the beginning there is a high degree of technical and aesthetic formality and complexity. Other general Saladoid traits (their Ronquín tradition) include

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<sup>33</sup> It is not clear whether the La Gruta phase is represented in the Sanoja-Vargas model. Their ceramics, however, include cultural deposits below those excavated by Roosevelt, in the same pits. Ceramics from those deposits are labeled Ronquín phase.

broad flat incision, zoned cross hachure, zoned punctation, incision filled with red pigment, red-on-white painting, and graphite painting.

Vargas (1981) pictures Ronquín (Saladoid) decorations from her excavations at La Gruta and Ronquín. Decorations most similar to pictographs are Barrancoid-like broad-line incisions which seem most reminiscent of my Period 3 and perhaps some of Period 5. This is especially relevant with the connected circles, connected raised and incised eyes (*Ibid.*, p. 198, Fig 21, #4). These are clearly Barrancoid traits and almost certainly would fall into the Rouse-Roosevelt Ronquín Sombra phase.

Vargas (1979) describes coastal Saladoid just northwest of the Orinoco delta. Her illustrations of painted and incised decorations show no obvious similarities with my Period 3 and seem closest to Periods 5 and 6. I have nothing like her white-on-red, with its fine white bordering around red fill. Her red-on-white with a thicker red bordering over a white fill is similar to the general concept of Period 3, but its manner appears more like the later periods. Her white-on-buff seems clearly reminiscent of Period 6. Her banding and fine incision (both Arauquinoid traits) seem most like Arauquinoid patterns and may be represented in some of the late art along the Orinoco in the northern part of the rock art study zone.

### **Problems with Age**

Roosevelt (1978) proposes the La Gruta phase from mixed sherds in isolated deposits out of stratigraphic context from the rest of the Saladoid sequence, and on the basis of questionable radiocarbon dates interprets this sherd aggregate to represent the earliest pottery in Venezuela; or, as Sanoja and Vargas (1983) state, the earliest painted pottery in the Americas. Roosevelt (1978, 1980) reports the La

Gruta aggregate as a cultural assemblage, which she presents throughout her discussion as a cultural phase; no distinction is made between these three concepts in her writings. Rouse (1978; Rouse and Allaire 1978) accepts his student's proposal as reasonable from the standpoint of apparent technological and stylistic changes through time, as he simplifies, abstracts, and presents those changes, somewhat differently from Roosevelt's, as a logical progression within the context of the rest of the Saladoid sequence. This is what I call the Rouse-Roosevelt model.

In what I call the Sanoja-Vargas model, Sanoja and Vargas (1983) are critical of Roosevelt's suggestion. A problem with Roosevelt's work is that she may have excavated in an area of questionable stratigraphic integrity and apparently did not reach the bottom of the deposits (Vargas 1981; Sanoja and Vargas 1983; Sanoja personal communication 1992), and yet her dates are interpreted as indicating a beginning for Saladoid at around 2100 B.C. Vargas returned to the site later that year to continue her own excavations. In addition to excavating in the well preserved central area of the site, she cleaned out Roosevelt's abandoned pits and excavated down into underlying, undisturbed cultural deposits at the bottom of Roosevelt's pits (Vargas 1981; Sanoja and Vargas 1983). The result of Vargas' work is what she considers clear evidence and dates to show that the La Gruta site materials do not predate about 650 B.C. Thus, Sanoja and Vargas (1983) propose that initial Saladoid, whether a proposed La Gruta phase or the early part of the already recognized Ronquín phase, dates about 1000 years or more later than proposed by Roosevelt. The details of Roosevelt's work, including what sites she excavated (in 1974-75), where she excavated, and what she found, have not been published.

In an evaluation of the La Gruta sequence, Vargas (1979) states that initial Saladoid entered the middle Orinoco around 100-500 B.C. Sanoja and Vargas (1983) later revise their estimate slightly and use 655 B.C. as the date for the Saladoid entry into the area.

The early part of the Nericagua complex on the upper Orinoco (discussed in a later section) is pertinent to the problem of Saladoid age, with Nericagua 1 historically approximately equivalent to Ronquín. Basing Nericagua 1 and 2 estimates on the Rouse-Roosevelt model, I suggest the early part of the sequence, before the introduction of *cauxi* temper, dates about 1500-200 B.C. Other researchers (Evans, Meggers, and Cruxent 1959; Zucchi 1989, 1990, 1991a, 1991b) suggest an alternate age of about 100-800 A.D. for Nericagua 1. Those previous estimates, partially supported by radiocarbon dates, support the Sanoja-Vargas model.

Barse (1989, 1990) proposes that his earliest Saladoid phases begin about 500 B.C. in the Atures area and extend up to about 300 A.D. (Table 15). He also states that Barrancoid (Barrancas, with its wide, deeply rounded incised designs) preceded Saladoid by several centuries in this area and dates around 1000 B.C., much as Sanoja has suggested (Sanoja 1979; Sanoja and Vargas 1983). Likewise, he sees Saladoid as developing out of Barrancoid, beginning around 500 B.C. Barse's stratigraphy and radiocarbon dates on the Atures phases tend to support the Sanoja-Vargas model.

A point to be considered is that Barse may be dealing in the Atures area mostly with late Saladoid, often with Barrancoid influence. How his sequence and phases are influenced by the Nericagua development and the Arauquinoid-Nericagua interaction is not clear.

At the mouth of the Parguaza, Cruxent collected Barrancoid ceramics from Cueva Boulton (JG-8) (Cruxent and Rouse 1961). Relative to the newer Rouse-Roosevelt terminology it is possible that these ceramics would be classified now as Ronquín Sombra, or late Saladoid strongly influenced by Barrancoid. The same also may be the case with sherds from Cerro Iguanitas 1 (JG-1) reported by Perera and Moreno (1984). Both these sites contain rock art figures similar to Barrancoid pottery motifs.

The Cotua site at the Atures rapids, just above Puerto Ayacucho, contains Saladoid style white-on-red pottery and broadly incised ware showing strong Barrancoid influence (Cruxent 1950; Cruxent and Rouse 1961; Rouse and Cruxent 1963; Rouse and Allaire 1978). It is assumed that this occupation probably would be classified now as Ronquín and Ronquín Sombra.

Est. Date	Series	Phase	Decoration	Sites
A.D. 1200-1400	Araquinoid	Araquín	Bichrome and polychrome painted. Narrow-line incised; punctations, appliqué.	Rabo de Cochino, Pozo Azul Sur
A.D. 500-700	Saladoid	Culebra	No paint. Incised only.	Culebra, CAT-2, Alto Carinagua, Albarical
A.D. 200-300		Cataniapo	No decoration.	Culebra
A.D. 1-300		Pozo Azul	Reddish surface. Broad-line incised.	Pozo Azul, Provincial
500 B.C. - 1 A.D.		Casa Vieja	Plainware.	Casa Vieja
1000 B.C.	Barrancoid	Isla Barrancas	Broad-line incision.	Rabo de Cochino, Casa Vieja 2
5000-4000 B.C.	Preceramic	Atures II	—	Culebra
7000-5000 B.C.		Atures I	—	Culebra, Provincial

**Table 15.** Cultural sequence in the Atures area at Puerto Ayacucho, after Barse (1989).

Back on the middle Orinoco, from a study of thermoluminescence dates on sherds from Agüerito, Zucchi and colleagues suggest that the Ronquín phase, begins about 200 A.D. (Zucchi, Tarble, and Vaz 1984), again supporting the Sanoja-Vargas model. Their estimates from dates run on excavated carbon also support such a suggestion, although their technological and decorative comparisons suggest that their ceramic assemblage is later within the Saladoid sequence.

Obviously the situation is not clear. More excavation is needed at more sites, particularly ones with more stable soil conditions, clearer stratigraphic separation of cultural layers, dates available from charcoal taken directly from cultural features (and not just loose in the deposits), and charcoal free of contamination from peat and coal. What is probably needed most are direct dates from carbonized material in sherds. This would obviate questions of sherd-date association or the possibility that the early dates are instead associated with early preceramic cultural deposits.

In the meantime, and with the understanding of the possible errors, I have chosen to present most age estimates for this project following the Rouse-Roosevelt model. This is simply more convenient since the sequence is spread out, and changes are more easily separated along a time scale.<sup>34</sup> Both dating models make sense logically, and the Rouse-Roosevelt model is the more detailed of the two. By using this model, I am able to consider possible changes in the sequence not easily considered in the alternate model, and I am able to attempt to relate rock art more easily to the former model of exaggerated time. I discuss changes in the ceramic sequence and the rock art as much as possible in

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<sup>34</sup> Lathrap and Oliver's arguments (1987) extend the ceramic sequence back to 4000 B.C., further lengthening the duration of the model. Those dates, however, are not used in my comparison.

terms of phase names, rather than absolute time. It is assumed that the periods will remain approximately the same during future work, with some minor shifting of definitions and terminology, and mainly the associated dates will change. There should, therefore, be no problems in the future of translating my synthesis or projections to a replacement system.

### **Rouse Discussion of Saladoid and Barrancoid**

Saladoid people came here from some unknown area — presumably either, (a) from the south down the Orinoco from the Amazon, or (b) east out of the western *llanos* — and settled on the middle Orinoco around the mouth of the Apure river during the La Gruta phase (Rouse and Allaire 1978)<sup>35</sup>. Apparently during this early impetus Saladoid groups pushed to the lower Orinoco and set up communities there also, resulting in the Saladero phase. Saladoid brought with it fully developed and decorated pottery and perhaps manioc cultivation. Manioc could already have been in-place when ceramics arrived but, as Rouse points out, there presently is no evidence (Rouse and Allaire 1978).

Sometime during the La Gruta phase of initial Saladoid, there was a cultural split, and one of the middle Orinoco groups went to the lower Orinoco (Rouse 1978; Rouse and Allaire 1978). This was the beginning of the Barrancoid development (according to Rouse). The original La Gruta phase had both modeling-incision and white-on-red pottery. With the regional split, however, the lower Orinoco Saladero potters stressed white-on-red painted decoration on its growth into Barrancoid, while Ronquín potters still upstream stressed modeling-incising during the continued developing Saladoid, but with obvious

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<sup>35</sup> A reference to Rouse and Allaire's 1978 synthesis necessarily assumes related material in all other Rouse, Cruxent and Rouse, Roosevelt, and other co-authored publications.

interaction between the two areas. While Saladoid development continued into the Ronquín Sombra phase on the middle Orinoco, there was increasing influence back from the Barranoid development further down the river so that Ronquín Sombra shows the clear mixing of the two traditions (Rouse 1978).

Backing up just a bit, the La Gruta introduction of Saladoid seems to have no antecedent. However, when the people entered the middle Orinoco, they continued on to the coast (or perhaps come from there first). The middle Orinoco group subsequently split, and one faction again headed downstream, pushing their presumed kinfolk in front of them and out to the delta and into the Antilles. The original Saladoid people used painted multicolor decoration, and that orientation was retained by groups who subsequently fissioned off the now-resident group at the mouth of the Apure. If the fissioning of the Apure group had been unidirectional, then the only breakoff group could have headed for the lower Orinoco. However, the fissioning may have been multidirectional, perhaps with a principal wave going downstream to settle, and eventually becoming archeologically distinct, while at the same time smaller groups went upstream in a system of smaller villages or outlier hamlets. The alternative to this latter explanation of early Saladoid and proto-Barranoid settlement toward Atures would be that after the Saladero group split from La Gruta, it began (or continued) its Barranoid development, with influence through personal contact back into the La Gruta area and perhaps further upstream. Considering the Formative nature of the Barranoid artistic expression, such a back-influence could have been in the nature of missionary expansion as easily as casual economic contact.

Lathrap (1970:110-112) hypothesizes, on the basis of ceramic similarities, that initial Saladoid expansion into the middle Orinoco and out into the Antilles was

the result of early Arawak expansion from the northern Amazon basin. Rouse reiterates this possibility and mentions also that, alternatively, the Saladoid complex may have come in from the west, such as out of the western *llanos* and down the Apure. Simply from the painted rock art, I would favor a western *llanos* or northern downstream Orinoco entry, but eventual study of petroglyphs along the middle and upper Orinoco and down the Casiquiare and Negro could conceivably change the strength of that comparison. What the northern distribution of multicolor rock art presently seems to suggest is influence from developed Saladoid out of the middle Orinoco and not necessarily the result of early ceramic groups initially expanding into that area.

As mentioned above, incipient Barranoid seems to have split off from mainstream Saladoid very early, with the group departing from La Gruta and setting up Saladero on the lower river (Rouse 1978; Rouse and Allaire 1978). The Barranoid style continued to develop, and the cultural influence continued to grow. The political composition and stylistic impetus of the Barranoid influence presently are not known, but its influence was clearly expansionistic over a wide area. The material culture in the middle Orinoco homeland was completely transformed into a combined Saladoid-Barranoid structure by Ronquín Sombra times, and sites all the way to the Atures rapids contain Barranoid pottery. What appear clearly to be Barranoid pictographic design motifs are present at least to the Parguaza (Cerro Gavilán 1, JG-58).

Rouse points out that Barranoid was always very active and expansionistic from its beginning and all through the Saladoid occupation (Rouse 1978; Rouse and Allaire 1978). There was ceramic influence from the lower Orinoco developmental area back into the middle Orinoco homeland, and presumably up to the Atures rapids (Cruxent 1950).

Lathrap (1970:113-117) sees Barrancoid as a different group of people with distinctively different ceramic forms, ceramic decorative elements, decorative approach, and village layout. He points out that the evidence suggests a larger population than Saladoid, a different settlement pattern, secure economic base, complex social patterns, strong political controls, and large stable communities. He sees that Barrancoid replaced Saladoid, apparently through direct contact by a wave of immigrants, by about 700-800 B.C. The Barrancas settlements lasted at least 1000 years (with a range of at least 700 B.C. to 700 A.D.). Lathrap also points out that during the Barrancas phase, territorial expansion was not only up the Orinoco but also moved in other directions and into other areas to the east and west, resulting in satellite colonies. Expansionistic colonization continued into the Los Barrancos phase. Barrancoid influence also is seen by Lathrap as occurring all through the Amazon drainage and into the Andean foothill canyons. How he distinguishes Barrancoid influence in these areas from other Formative influences from the west or southwest (perhaps originating in the Andean highlands) is not clear to me.

Lathrap's view of a separate strong culture is not particularly at odds with the out-growth model of Rouse. Lathrap points out that Barrancas arrived at the coast as a developed entity and that it must have come down the Orinoco from the south. Rouse proposes that Barrancas was an offshoot of La Gruta Saladoid which apparently grew, through Saladero, into a politically influential entity of the Barrancas phase, which itself defines the form of developed Barrancoid (Rouse and Allaire 1978). It is not clear whether the La Gruta root (or whatever La Gruta came from) originated to the south (up the Orinoco) or to the west (up the Apure).

An alternative model of early expansion is possible following the general Sanoja-Vargas scheme of Barrancoid-first. Barrancoid stylistic influence from the lower Orinoco could have been enhanced by painted decoration spreading at the same time out of the western *llanos*, and the two traditions (Barrancoid and polychrome) — not necessarily migrating populations — may have met at the mouth of the Apure. This could have resulted from the diffusion of ideas and techniques, and even movements of small groups of people, into an area already occupied and controlled by a local, politically strong culture with contacts up and down the Orinoco and up the main tributary rivers into the western *llanos*. The distribution of bichrome rock art at the northern end of the study zone supports such an explanation.

### **Petroglyphs**

Riley (1957) briefly reports Saladoid petroglyphs at the Cedeño site. The site is on the right bank of the middle Orinoco about a kilometer northeast of Caicara. This large prehistoric Ronquín (now generalized Saladoid) site contains large glyphs on boulders extending out into the river and covered during the rainy season. Figures include a concentric circle, a wing-like element, and a stylized curvilinear figure (almost certainly an animal). He points out that the petroglyphs seem different from usual Ronquín ceramic designs, which mostly tend toward geometric figures or realistic life forms.

He seems to feel that these figures likely date to early Ronquín series, using the earlier terminology of Howard (1943) — or undifferentiated Saladoid as used by Rouse-Roosevelt. To me the figures also look like Saladoid with a noticeable Barrancoid influence in the form of the curvilinear pattern and wide lines. This might suggest Ronquín or Ronquín Sombra affiliation.

## **Cedeñoid Series**

This is a middle Orinoco early ceramic tradition characterized by clay pellet and fiber temper (Kay Tarble, personal communication 1991, 1995). Decoration consists mainly of incised bands of angular zigzags; painting is also present. Cedeñoid people are thought to have arrived into the middle Orinoco at least as early as Saladoid but distinctly separate from it. The tradition apparently came from a different place at a different time and represents different people, presumably western Arawak (Zucchi 1991b). The people subsequently spread further westward out into the southern *llanos* and northwestward across the *llanos*, while Saladoid (as eastern Arawak) spread down the Orinoco and out into the Antilles. Zucchi suggests that Cedeñoid arrived on the middle Orinoco sometime between 2000 and 1000 B.C. and spread into the western *llanos* about 700-800 A.D. The tradition is discussed in detail below, mainly from information presented by Zucchi and Tarble (1984).

### **Agüerito Excavations and Periods**

The Cedeñoid tradition is defined mainly from test excavations at Agüerito, an open terrace site on the middle Orinoco. Comparison is also made with other excavated sites in the area. Although Cedeñoid ceramics are reported at other sites, the component is relatively pure only at the Cedeño site. Stylistic evolution within Cedeñoid is suggested only at Agüerito.

Zucchi's excavations consisted of 17 m<sup>2</sup> excavated in arbitrary 25 cm levels and only 1 m<sup>2</sup> excavated in 10 cm levels. The total depth of deposit was a maximum of only 125 cm. In her tables, Zucchi reports arbitrary excavation levels in sandy deposits as cultural periods 1-6 (as different from analysis periods 1-3). The thickness of the excavation levels alone would indicate mixing of

cultural occupation layers, but mixing of layers and distributional mixing of cultural materials are unavoidable in such undifferentiated sandy deposits. This resulting admixture is relevant to evaluation of the proposed sequence.

### **Age of Cedeñoid**

Cedeñoid is said to range in age from 1000 B.C. to 1400 A.D. (Zucchi and Tarble 1984). The tradition may date contemporary with or before the La Gruta phase of Saladoid (or perhaps back to 2000 B.C.), and perhaps Cedeñoid people predate Saladoid groups on the middle Orinoco. Apparently in response to the Arauquinoid intrusion, which came to dominate the area by 600 A.D., the Cedeñoid population expanded westward out into the *llanos* by 1000 A.D., practically abandoning the middle Orinoco. The Cedeñoid groups remaining on the Orinoco, however, experienced a marked demographic increase apparently due to improved subsistence strategies (Zucchi and Tarble 1984).

Zucchi further divides the Agüerito sequence into three analysis periods which, to me, equate essentially with previously established periods on the middle Orinoco. Period 1 dates about 1000 B.C. to 500 A.D. and to me equates closely with Ronquín Sombra (late Saladoid tradition) and perhaps Corozal 1 (initial Arauquinoid tradition). Period 2 dates about 500-1000 A.D. and to me equates with Corozal and beginning Camoruco (incipient and early Arauquinoid). Period 3 dates 1000-1500 A.D. and equates with the main Camoruco phases and Valloid (developed and late Arauquinoid).

### **Temper**

Temper is dried-clay which appears as angular crushed clay, rounded clay pellets, and sometimes similar to crushed unfired sherds. Other tempering

agents include sand, spicule (*cauxi*), ash, vegetal material, and fiber (resulting in porous paste), *cariapé* (bark), and possibly other carbon.<sup>36</sup> There is a temporal change from sand and clay pellet temper early, to clay and spicule, and finally to domination by spicule.

Although tempering in analytical Period 1 (1000 B.C. to 500 A.D.) at Agüerito is not clearly stated, the period apparently is dominated by Cedeñoid clay-tempered sherds, presumably also containing sand and probably *cariapé* (?). Zucchi suggests that Agüerito was occupied by small groups. Saladoid supposedly was introduced about 400 A.D., with strong Barrancoid influence.

Spicule tempering supposedly was introduced in Period 2 (500-1000 A.D.), although no support information from distribution tables is presented. This is said to relate to Corozal phases. Barrancoid influence continues, apparently with *cauxi* tempered pottery, and thus is said to indicate permanent contacts between the middle and lower Orinoco.

Spicule temper becomes predominant in Period 3 (1000-1500 A.D.), indicating the growth of Arauquinoid. Saladoid and Cedeñoid ceramics diminish, which Zucchi and Tarble interpret as indicating a Saladoid and Cedeñoid expansive movement beyond the middle Orinoco area. Valloid pottery comes in toward the end of this period (1200-1400 A.D.) which somehow is interpreted as the last great Arauquinoid (Caribe) expansion.

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<sup>36</sup> Ash, vegetal material, *cariapé*, burned pores, and other carbon may be what is often described in English as “fiber tempered.”

## Decoration

Only about 12% of the excavated sherds at Agüerito are decorated. This consists mostly of incision and painting, and there is a predominance of incised decoration on vessel lips and rims. Most incision is broad lines, multiple and single parallel lines, and geometric complex figures. Less common are modeling, and appliqué. Painting is represented by monochrome, bichrome, and polychrome, but not many details are given regarding the distribution of these forms, and no information is provided for bichrome.

Incising is represented in the lowest levels mostly by broad lines and rectilinear motifs. I interpret some of the illustrated sherds to indicate strong Barrancoid influence. Broad-line incising diminishes through the deposits, indicating less stress on Saladoid and Barrancoid characteristics. Fine-line incision is also present in the early levels, with both rectilinear and curvilinear designs. The gradual increased frequency of the fine-line rectilinear forms is said to indicate the beginnings of Arauquinoid influence, which continues to develop through the rest of the sequence. To me, the sequence of incising is evident of the change from Ronquín Sombra through the Corozal phases and into Camoruco of fully developed Arauquinoid.

Polychrome painting is said to be most common during Period 1 and the early part of Period 2 at Agüerito (or perhaps 1000 B.C. to 750 A.D.). Polychrome at other sites usually is thought of as late Ronquín Sombra or Corozal, and the attempt to push polychrome at Agüerito back to 1000 B.C. is curious. Zucchi and Tarble do not seem to distinguish bichrome painting, such as the Saladoid standard white-on-red, or their illustrated red-on-white decoration. Thus, there is no way to evaluate from their published material whether the material is

bichrome Saladoid, presumably late Saladoid or Ronquín Sombra, or instead is later Corozal polychrome. The pictured polychrome appears to be the general complexity of Corozal-Osoid decoration.

In the latest levels of late Period 2 and Period 3 (or about 750-1500 A.D.) there are almost exclusively red-on-white bands painted on everted vessel rims. This is said to be an Arauquinoid trait. Also appearing now are brown-on-white geometric motifs clearly different from the earlier Saladoid painting. Such brown-on-white and red-on-white decorations generally are interpreted on the middle Orinoco as associated with Corozal or early Camoruco, as they appear to be here also.

### **Ceramic Associations**

Agüerito pottery is classified according to temper into a number of general series. Series A pottery is sand tempered and apparently is equivalent with Ronquín Sombra, or late Saladoid with strong Barrancoid influence. Series B pottery is Cedeñoid, with clay pellet temper. Series C pottery has spicule temper and is Arauquinoid, presumably equating with early Corozal (with some continued Saladoid influence) and Camoruco phases. Series B-C pottery is the combined B and C series with both spicule and clay temper and appears to represent the mixing of Cedeñoid with Corozal and Camoruco. Series D pottery has crushed rock (quartz) temper and presumably is Valloid.

While Zucchi and Tarble plot the vertical distribution of Cedeñoid pottery at Agüerito, they do not indicate the distribution of the other series, so there is no way to evaluate their attempted separation of Cedeñoid from the other series on anything but technological grounds. Indeed, their separation seems somewhat questionable from the data presented. It appears that Cedeñoid may instead be a

pottery technology more associated with the major series. Early Cedeñoid, which seems to date no earlier than Ronquín Sombra, apparently contains sand and clay temper. Later, as the beginning of Arauquinoid influence begins to be felt more with the Corozal phases, Cedeñoid sherds begin to contain spicule temper. And spicule content increases as Camoruco Arauquinoid continues development.

Cedeñoid previously was considered associated with, contemporary with, and presumed part of Saladoid. At Parmana (Roosevelt 1978) Cedeñoid type pottery became more common during the Ronquín Sombra phase. The earliest Cedeñoid materials at Agüerito are also associated with sand temper (Saladoid) and spicule temper (Corozal 1?). In the latest levels at Agüerito temper is essentially replaced by *cauxi*, or fully developed Arauquinoid. Other sites containing Cedeñoid pottery are predominantly Arauquinoid with spicule tempering.

### **Evaluation of Cedeñoid at Agüerito**

Early Cedeñoid pottery at Agüerito and other sites may be similar and closely related to Ronquín Sombra (late Saladoid) with some early Corozal influence in the minor quantity of spicule temper (incipient Arauquinoid). This developed into full Arauquinoid, with increased spicule temper, of the later Corozal and Camoruco phases. Such an interpretation conforms with Zucchi and Tarble's (1984) discussion of the deposits, dates, and projected cultural associations.

The whole Cedeñoid series seems more like a functional or technological division than an ethnic association or development. For example, Zucchi and Tarble found no manioc trays (*budares*) made out of Cedeñoid pottery although trays were present as associated Saladoid and Arauquinoid sherds in the same deposits. If this was a separate ethnic group, apparently another group (e.g.,

Saladoid) would have supplied the budares through exchange. The main support for their suggestion that this is a separate tradition is the domination of Cedeñoid ceramics at Cedeño, but this may be due to the pattern of their excavations. Riley (1953b, 1957) reported Ronquín phase Saladoid ceramics (at that time reported as Early Ronquín, after Howard 1943) at the same site, although in the 1950's he probably would not have recognized the Cedeñoid variation as significant.

### **Cedeñoid Discussion**

Zucchi and Tarble (1984; Zucchi, Tarble, and Vaz 1984), from their study of Agüerito, state a preference for the short sequence on the middle Orinoco and point to their analysis of the Agüerito ceramics to support that choice. From their data, Saladoid is believed to have begun sometime before 1000 B.C. However, they point out that their sequence essentially dates back only to Ronquín Sombra, or the end of Saladoid when the Barrancoid influence was strongest. Cedeñoid ceramics are shown to be different from mainstream Saladoid, probably date as early as La Gruta or before, and likely represent the earliest people in the middle Orinoco to receive pottery. It seems somewhat inconsistent that their earliest Saladoid is Ronquín Sombra, and yet they attempt to extend Cedeñoid back equivalent with or before Roosevelt's postulated La Gruta phase. Their dates also place Cedeñoid 1 as relatively late, equivalent in age with Ronquín Sombra and consistent with their explanation of late Saladoid.

Therefore, I see that their Cedeñoid 1 phase and its dates tend to support the Rouse suggestions for the middle Orinoco sequence more than the Vargas-Sanoja suggested base date of about 650 B.C. for the entry of painted ceramics into the valley. Zucchi and Tarble (1984; also Zucchi 1991b) consistently state that the

beginning of Cedeñoid must date sometime between 2000 B.C. and 1000 B.C., which logically and correctly assumes a beginning prior to their dated samples.<sup>37</sup>

I am somewhat reluctant at this time to accept Zucchi's suggestion that early Cedeñoid, apparently in an earlier as yet undefined phase, may represent the earliest acceptance of pottery in the area (Zucchi and Tarble 1984; Zucchi 1991b). I accept the possibility that Cedeñoid and Saladoid may represent two different peoples with different ceramic traditions, but the relation between the two during the pre-1000 B.C. time frame is not clear. According to Zucchi, sometime after 1000 B.C. the culture seems to have developed in different ways and eventually expanded out in different directions, Saladoid northeast and Cedeñoid northwest. But before that time it is not clear if these two ceramic traditions represent one or more of the following explanations (which might influence how rock art could be associated with this development):

1. Saladoid and Cedeñoid represent two different, distinct, immigrating groups of people, each bringing with them a distinctive ceramic tradition. The Cedeñoid ceramic series or complex may result from immigrating proto-Baré linguistic groups (Zucchi 1991b).
2. Ceramics were initially brought to the middle Orinoco by the first immigrating wave of Saladoid populations, who continued to produce pottery according to their tradition (Saladoid). Pottery making was also passed on to local resident groups who accepted the technology, perhaps as part of a technology exchange partially due to intermarriage. Those local groups differentially selected and accepted ceramic traits (perhaps partially affected by available

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<sup>37</sup> In this discussion I am mostly accepting Zucchi and Tarble's hypothesis that Cedeñoid is a separate technological and ethnic entity from Saladoid and Arauquinoid, although I have just questioned that assumption.

local raw materials) and developed those traits as a distinctive Cedeñoid ceramic series which persisted through time. Thus, there was the early co-existence of two distinctive ceramic series representing two different peoples — the original Saladoid immigrants introducing ceramics on the one hand, and on the other, Cedeñoid developing out of acceptance of some of those traits.

3. Arawak groups entering the middle Orinoco brought with them Saladoid ceramics, and the people continued production of those ceramics. However, sometime later (perhaps during the La Gruta or Ronquín periods) the Saladoid population split, presumably the result of some kind of fissioning, and the offshoot Cedeñoid group continued pottery-making with gradual changes in a different developmental direction from the main Saladoid trend, much like the suggested La Gruta to Saladero to Barrancas development of the lower Orinoco.
4. A fourth alternative to the identity of Cedeñoid closely follows the last possibility of population split. Instead of fissioning, however, it is possible that in some areas along the river, groups of potters used crushed clay for temper. If so, Cedeñoid may represent more a technology associated with a specific area of pottery production by a group of potters, not an entire population. This would seem to be consistent with Zucchi and Tarble's (1984) observations on the distributions of Cedeñoid pottery centered generally on Cedeño. The occurrence of this pottery in numerous sites is easily explained through exchange of ideas, exchange of potters (perhaps women<sup>38</sup>) between villages,

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<sup>38</sup> One should note the decoration of early pottery by what may be sacred symbols. In many areas the production or possession of such symbols seems to be the male domain, as part of ritual control. Later, during Camoruco times, there is a suggestion of intensified ceramic production for trade purposes. Such commercial production is often associated with male

movements of potters from one village to another, or simply trade in pottery as it occurs all over the world.

I assume that Cedeñoid is likely represented in rock art, especially considering that I am hypothesizing Saladoid, Barrancoid, Arauquinoid (Corozal and Camoruco), and preceramic art in the study area, and Tarble and Scaramelli (1993b) suggest Valloid association with pictographs. Three possible linkings between Cedeñoid and rock art seem reasonably feasible: local groups with distinctive art, intrusive people entering with distinct art, or undifferentiated art making cultural distinction impossible at this time. These are considered as follows:

1. If Cedeñoid represents a local culture who was in the area previously, initially with its own art style, and who accepted incoming Saladoid pottery, it would be likely that their art would become affected to some extent by Saladoid through interaction between the two groups and their exchange of ideas (and maybe group members). Such an explanation would be consistent with the style associated with art Period 4, a style which seems to develop more questions the more it is studied. There are problems with its relation with Period 3, both through superpositional relations observed in the field and logically when considering a number of developmental trends and their relations with each other. If Cedeñoid were local Period 4, and Period 3 represents Saladoid, then sporadic Period 3 figures into Period 4 panels could be explained as an occasional representation in art of the Saladoid-Cedeñoid

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potters, or with males and females working together. In all cases that I know of, males always take an active role in ceramic production, whether they form the pots or not. Therefore, I see no evidence in this area that pottery production is strictly a female activity, and there is a likelihood that males held a prominent, if not dominant role in ceramic preparation, production, and/or distribution.

interaction. The possible Cedeñoid–Period 4 linking might also clear up the relation of Period 4 medium red animals (as initial preceramic proto-Cedeñoid) with the superimposed *monochrome phase* Period 5 dark red symbols (as externally influenced Cedeñoid after the introduction of Corozal ceramics); the superposition of the dark red symbols over the medium red animals is widespread. This might also help explain the geographic distribution of Period 5 monochrome red symbols in the south (as indigenous Cedeñoid) and the more decorated Period 5 bichrome and polychrome symbols in the north, closer to the centers for Saladoid, Barrancoid, and Corozal.

2. Cedeñoid could represent a different group of people who entered the area separately from Saladoid and with a different style of art. Zucchi (1989, 1990, 1991b) suggests that the Cedeñoid ceramic series came into the middle Orinoco area with an immigration of proto-Baré groups from northern Brazil. The result could still be Cedeñoid represented by art Period 4, as discussed above, subsequently influenced by Period 3 Saladoid and Barrancoid, and with later Period 5 (*monochrome and multicolor phases*) overpainting with symbols showing additional influence from late Saladoid, Barrancoid, and incipient Arauquinoid (Corozal).
3. Alternatively, Cedeñoid art could have been so close to original Saladoid or to developed Saladoid (with Barrancoid influence) that it presently is not distinguishable as a separate entity. As such, no distinction might be made on the basis of art between these people. Similarly, if Cedeñoid is a functional or technological variant of the general Saladoid ceramic series, or Arauquinoid during later times, there should be no discernible Cedeñoid rock art as a distinguishable ethnically associated entity. So far these possibilities have not been explored.

## Barranoid Series

Nearly everyone seems to agree on what Barranoid is, and the style is fairly distinctive. What is not universally accepted is where it came from, how old it is, and what the interaction was between the middle and lower Orinoco (Figure 26). Rouse and colleagues generally describe Barranoid on the lower Orinoco as developing out of the Saladero (Saladoid) phase to the Barrancas phase of classic Barranoid, to the Los Barrancos phase of late Barranoid. Sanoja and Vargas generally consider Barranoid as divided into the Preclassic, Classic, and Postclassic periods of the Barrancas phase and to have come into the area before Saladoid. These are discussed more at length below.

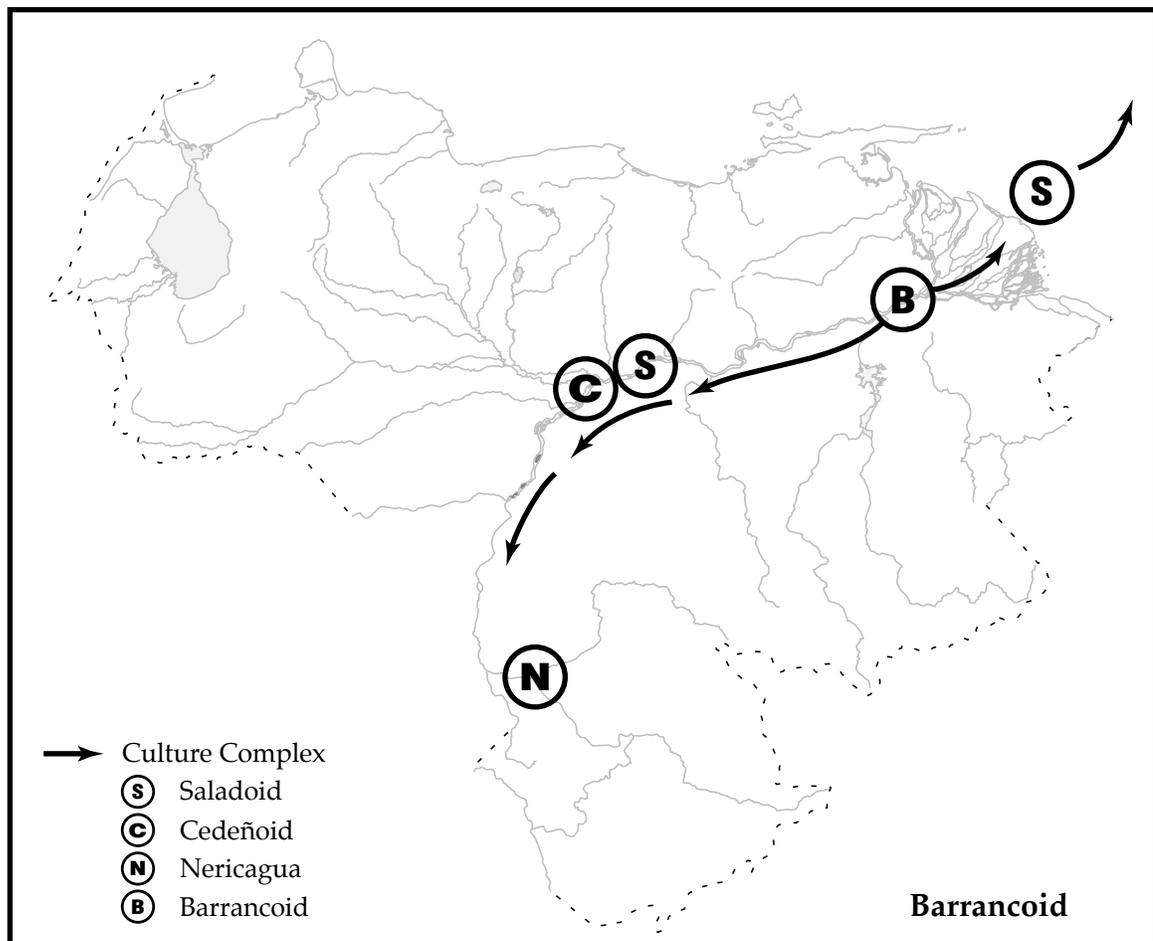


Figure 26. Ceramic complex spread during late Saladoid and Barranoid.

## Decoration

Ceramics generally are large thick, sand-tempered vessels with heavy lugs and polished surfaces (Meggers and Evans 1983:304). They are massively decorated with large, wide incised lines, most often with curvilinear designs. Circles with central dots and connected circles are especially common. There is an emphasis on scrolls, and polished areas are often separated from nonpolished zones (Sanoja 1979). Lathrap (1970:113-117) describes Barrancas — or classic Barrancoid — decoration as most often geometric, but sometimes representing stylized anthropomorphs and zoomorphs. He sees the geometric designs as consisting of widely spaced lines arranged in evenly flowing curves and spirals. Otherwise, there was a secondary stress on representational art, or more realistic to stylized human and animal forms. The stylistic continuum eventually changed into the Los Barrancos style with asymmetrical, discontinuous rims with intricate designs. Vargas (1979) pictures Barrancoid-like designs as broad-line incisions and wide circular eyes.

Some broad-line designs, particularly wide circular eyes, bulging eyes, circles with central dots, and circles connected by two or three lines seem reminiscent of some eyes in Period 3 rock art and possibly Period 5 connected circles. Such circles are pictured in this report ([Figures 75 and 76](#)) and by Cruxent (1946: Figs. 1, 24). Barrancoid influence appears to be strongest during Period 3, and possibly somewhat into Period 5, thus equating late Period 3 and/or Period 5 with the Ronquín Sombra phase (late Saladoid) of the middle Orinoco sequence ([Figure 35](#)).

## Lower Orinoco: The Sanoja-Vargas Model

Sanoja (1976) and Sanoja and Vargas (1983) describe the Barrancas tradition on the lower Orinoco as representing an age of about 1000 B.C. to 1500 A.D. or later (also Mario Sanoja, personal communication 1992). The tradition consists of three developmental time periods.

1. **Preclassic Barrancas period** (1000 or 600 to 1 B.C.; Sanoja 1976). Sometime between 900 and 600 B.C. (Sanoja and Vargas 1983) the tradition was established from a Formative base, presumably from highland or lowland Colombia or similar cultures, probably entering along the coast. Decoration is exemplified by a complete red slip (or partially zoned), incised decorations, and small modeled incised adornos. This includes broad curvilinear incisions, incision associated with modeling, red slip over the entire vessel, polished incision, zoned polishing, zoned red-and-black, zoned punctation, and graphite painting (Sanoja and Vargas 1983). Broad-line incision emphasizes scrolls and often separates polished and unpolished zones (Meggers and Evans 1983). Pottery is sand tempered, with fine sand early and coarse sand later. This change in temper may represent an intensification of mass production, more widespread distribution, and a trend toward increased secular use.
2. **Classic Barrancas period** (1-700 A.D.). The red slip now has less total coverage than before, and there is greater complexity in modeled and incised decorative techniques. Common motifs include bats, felines, fish, other animals, and human faces (Meggers and Evans 1983). Spicule (*cauxi*) tempering begins to be used. There is considerable uniformity in the complex pottery which indicates production specialists (Sanoja and Vargas 1983). At about 250 A.D. there was a

sudden dramatic expansion of Barrancas pottery across a huge portion of Venezuela and surrounding areas, and there was marked upstream expansion around 400-500 A.D. Generally, the Classic period is a time of Barrancas population expansion interpreted as territorial expansion, with an increased diversity of phases across South America. Lathrap (1970) points out Barrancoid dates in Brazil of about 100 B.C. to 500 A.D. and dates on the Ucayali around 200 B.C. Zucchi (1991b) mentions that on the upper Vaupés in Colombia, not far southwest of Puerto Ayacucho, Barrancoid dates of around 950 A.D. also are presumably attributable to Classic Barrancas (although they are later than those suggested by Sanoja).

3. **Postclassic Barrancas period** (700-1500 A.D.). There is progressive degeneration of classic Barrancas elements and their replacement with simpler geometric designs. This results in rudimentary decorations based on zoned incision and punctation, reminiscent of the latest Camoruco phases on the middle Orinoco. There is also an overwhelming dominance of spicule temper, again indicating Camoruco. Thus, influences from the middle Orinoco Arauquinoid begin to be felt during this time.

Sanoja and Vargas believe that Preclassic Barrancas developed locally from an external Formative influence probably along the coast from Colombia. Barrancas is believed to be an offshoot from the same tradition responsible for Puerto Hormiga in Colombia and Valdivia in Ecuador.<sup>39</sup> The tradition continued to evolve locally (Sanoja 1979; Sanoja and Vargas 1983; Meggers and Evans 1983:304-305) without influences from any major external sources. Indeed, just

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<sup>39</sup> This discussion is based on publications by Sanoja and Vargas. No comparison of dates from early coastal ceramic sites and complexes from Ecuador to Colombia to coastal Brazil is done here.

the opposite seems to be the case: Classic Barrancas expanded to influence much of the surrounding part of lowland South America. External influences came toward the end with the spicule tempering indicating strong local Arauquinoid (Caribe) development.

Rouse and Roosevelt's reconstruction (Rouse 1978; Rouse and Allaire 1978; Roosevelt 1978) is rejected by Sanoja and Vargas (1983) that Barrancoid (or Barrancas) developed out of the Saladero phase, which itself had been suggested by Rouse as an off-shoot of La Gruta from the middle Orinoco. Additionally, Roosevelt's early dates for the La Gruta phase are not accepted, and Barrancas is seen as the parent, not the offspring, of the middle Orinoco Saladoid (which Sanoja-Vargas call Ronquín). The Rouse-Roosevelt model suggests the beginning of Saladoid around 2100 B.C. and Barrancoid about 1100 B.C. The Sanoja-Vargas model suggests Barrancas as the earlier of the two, beginning about 900 B.C. and giving rise to Ronquín (Saladoid) around 700 B.C. (Sanoja and Vargas 1983:227).

### **Middle Orinoco: The Rouse-Roosevelt Model**

There seems to general agreement regarding characteristics which constitute Barrancoid pottery and its decorations. Differences arise from acceptance of radiocarbon dates and explanations of development and projected influence, as noted above. Rouse and Roosevelt suggest that the La Gruta phase of Saladoid represents the introduction of pottery into the Orinoco drainage, with continued development in the middle Orinoco. An early offshoot continued downstream to form the Saladero complex essentially as the parent to Barrancoid, represented first by the Classic Barrancas phase, which in turn developed into the Los Barrancos phase. With the introduction of spicule temper on the lower Orinoco, the Los Barrancos phase developed into the Guarguapo phase (Figure 24).

Most important for the present rock art study is Rouse's suggested strong influence of developed Barrancoid back up the Orinoco during the Ronquín phase. This influence is seen in ceramics at least to the mouth of the Parguaza river and probably at least as far upstream as the Atures rapids (see the **Saladoid** discussion). It is suggested that this upstream Barrancoid influence is evidenced in the painted rock art of Period 3 (and perhaps Period 5; see comments above under **Decoration**).

### **Araquinoid Series**

Ceramics in this later period are recognized by sponge spicule (*cauxi*) temper and zoned fine-line incised decoration. Polychrome pottery comes in during the early part of the period from the west. There is an increased use of metates (and maize production). The Araquinoid series appears to represent an expansion period (**Figure 27**), with more sites, larger sites, and greater material density. There was a change in settlement pattern from villages primarily along the river to expansion out into the hinterlands. The tradition begins calmly and slowly on the middle Orinoco about 350 B.C. and lasts up to about the time of European entry (**Figure 24**). There is considerable temporal diversity within the series (Rouse 1978; Rouse and Allaire 1978; Roosevelt 1978; Zucchi and Tarble 1984; Tarble and Zucchi 1984; Zucchi, Tarble, and Vaz 1984; Barse 1989).

On the middle Orinoco the Araquinoid tradition is represented by at least three series or subtraditions. Two were recognized during Roosevelt's work in the Parmana area: Corozal, with three subphases or periods, and Camoruco, also with three temporal periods. The third, Valloid, is defined by Tarble and Zucchi (1984) as a separate ceramic series and therefore is discussed separately.

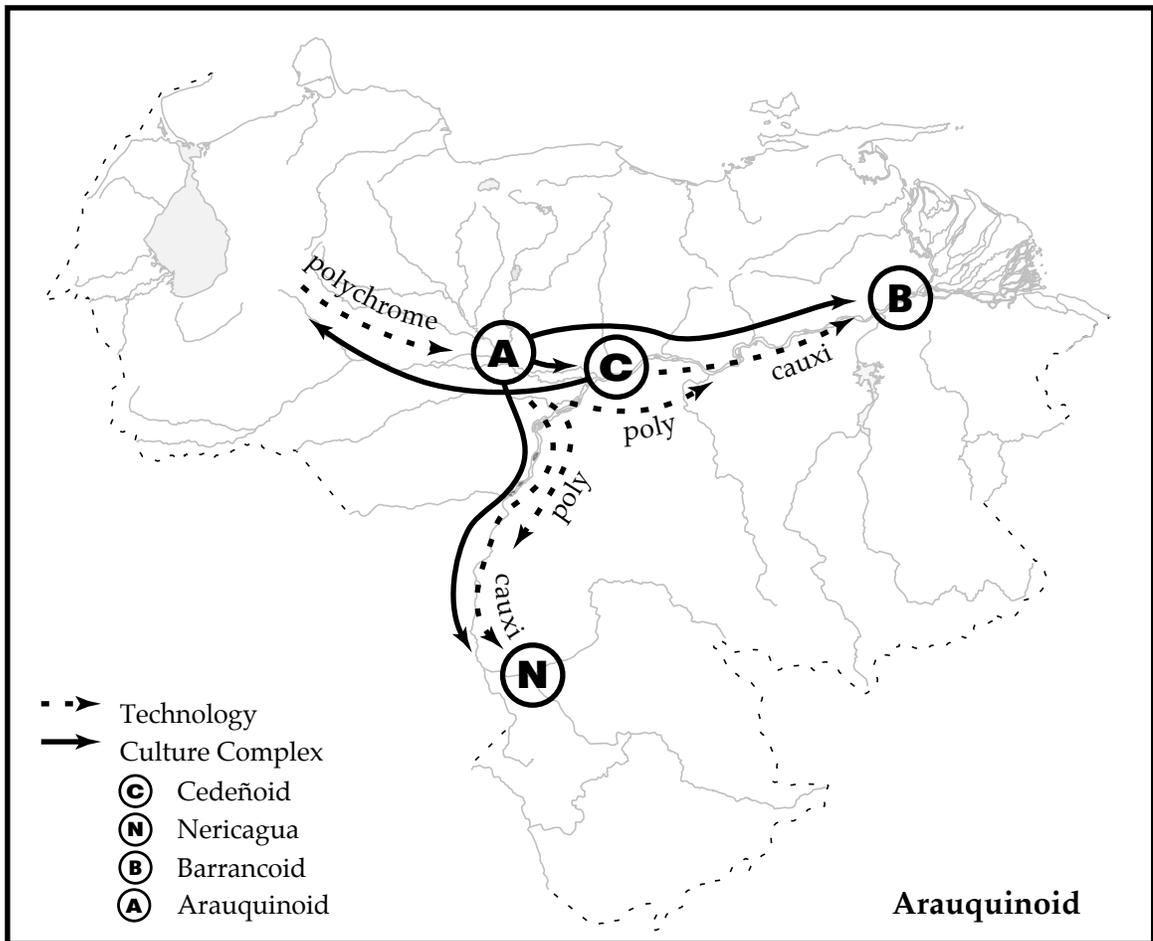


Figure 27. Ceramic complex spread during Arauquinoid (Corozal and Camoruco complexes).

### Corozal Phases

This complex appears to be a gradual intermediate transition between late Saladoid (Ronquín Sombra) and the later Camoruco phases of the developed Arauquinoid series (Rouse 1978; Rouse and Allaire 1978; Roosevelt 1978). Rouse (1978) sees this as an intermediate phase representing local, transitional, slowly continuing development, with a gradual dying out of Saladoid traits and the gradual introduction and growth of Arauquinoid characteristics. Roosevelt (1978, 1980) defines this period as made up of three phases which together date about 350 B.C. to 600 A.D.

In the Sanoja-Vargas scheme (Sanoja and Vargas 1983), their Ronquín Period 2 of the middle Orinoco dates around 1-500 A.D. and appears to equate fairly closely with the Corozal phases of the Rouse-Roosevelt model (with the beginning of spicule temper). There may be some minor overlap with the previous Ronquín Sombra phase of Saladoid.

Decoration is fairly elaborate and is represented by bichrome and polychrome painting, fine-line incision, and modeling (Rouse 1978; Roosevelt 1978). Decorative modes changed with the introduction of spicule temper. Previous white-on-red decorations from Ronquín Sombra are replaced by black, brown, red, and white linear painting (Rouse 1978; Roosevelt 1978). Also abandoned are black-red-on-white painting and grooving (Sanoja and Vargas 1983).

With Corozal, bichrome remains the principal technique and is much more common than the newly introduced polychrome. New color combinations include white-on-plain, white-on-orange, red-on-plain, red-on-orange, white-red-on-plain, and white-red-on-orange. Designs are geometric and appear to be inspired by external western sources. An overall mauve wash begins during the later phases and continues through the Camoruco period (Rouse 1978; Roosevelt 1978). Zoned incised crosshachure was added (Sanoja and Vargas 1983:232), and zoned incised geometric banding is common, in anticipation of fully developed Camoruco decorations. A typical incised pattern is a series of oblique parallel lines separated from the rim by a horizontal line (and occasionally punctations). Zoomorphic adorns continue with faces and limbs.

Bichrome and polychrome geometric painting styles on the middle Orinoco are similar to styles in the western Venezuelan *llanos*, and it seems likely that the new painting introduced during this period diffused from that western source

(Rouse 1978; Roosevelt 1980; Zucchi 1972, 1985). Specifically there are similarities with the Osoid series of the *llanos* of Barinas state still farther north and west (Rouse 1978; Zucchi 1972, 1985).

Rouse (1978; Rouse and Allaire 1978) discusses the Corozal complex (800 B.C. to 500 A.D.) as a gradual Saladoid-Araquinoïd transition during which the Barrancoïd-influenced Saladoid culture continued with the addition of spicule-tempered pottery. By this time there was no more Saladoid white-on-red pottery although there were rare examples of red-brown-black-on-white decorations (apparently throughout the Corozal sequence). This polychrome painting is intrusive and seems to represent pottery traits coming in from the western *llanos*, possibly from the Osoid complex (estimated 900 B.C. to 650 A.D.; Zucchi 1972) with its maize and painted ceramics. Other Saladoid and Barrancoïd traits died out slowly through the three Corozal phases, while at the same time sponge spicule tempering and other Araquinoïd traits increased in frequency and degree.

The Corozal period is seen by Rouse and Roosevelt as a transitional period with mostly an in-situ resident population. This middle Orinoco population had begun as Saladoid but was transformed by constant and increasing Barrancoïd influence from the lower Orinoco over several centuries. With Corozal came the beginning of influence from another developing power probably in the San Fernando area upstream on the Apure river (Rouse 1978). As the presumed Apure polity seemed to grow in political or economic power, its increased influence was reflected in the Corozal ceramics at the mouth of the Apure. The transition was complete by the end of the series.

During the Corozal phases, there were some external contacts but little, if any population movement (Rouse 1978). Roosevelt (1980:196), however, suggests that the break between the Ronquín Sombra phase of Saladoid and the initial Corozal phase was “sufficiently abrupt to suggest that the Corozal ceramic style did not develop locally but was introduced ... [in a] more than simple invasion and conquest.” She apparently sees this as the introduction of Arauquinoid influence preliminary to the full-blown Camoruco phases. There are gradual changes in ceramic vessel form and tempering, with the introduction and gradual increase in Arauquinoid spicule temper. Maize was introduced during the Corozal period, but its use was not widespread until the subsequent Camoruco series (Roosevelt 1980; Zucchi 1985; Rouse and Allaire 1978). This would suggest a gradual change for all cultural elements, including painted art (and presumably pictographs), as part of an in-situ development or change (Rouse 1978).

The nature of the Ronquín Sombra to Corozal transition is important to expectations for associated rock art. This could be a gradual internal development within a resident population, as Rouse suggests; or the resident population may have been influenced by other people, as Roosevelt (1980) and others believe. Early Arauquinoid influence affected ceramic production and presumably other matters as well, and this influence increased throughout the Corozal series with the eventual effect of becoming dominant by Camoruco times. It is tempting, as Rouse (1978) hints, to view this as a developing chiefdom, centered on the Apure river perhaps around San Fernando, with an increasing growth in regional power and influence. Zucchi (1985), however, suggests that the change is the result of gradual Caribe influence from the east and south which increased in intensity until eventual dominance during the Camoruco phases.

### Camoruco Phases

The Camoruco ceramic series (or complex) is seen on the middle Orinoco as fully developed Arauquinoid. There is a domination of spicule temper, an absence of painted designs, and a stronger emphasis on zoned fine-line incised rectilinear geometric banding, appliqué, and punctation. Roosevelt (1978, 1980) defines the period as made up of three phases which together date about 600-1600 A.D. During this time, maize becomes widely used and of economic importance, although it is not portrayed in the rock art.

Camoruco represents the local expression of the Arauquinoid horizon which extended throughout the Orinoco valley. It appears to be a local development expressed as a gradual trend of cultural change within a regional resident population rather than a sudden change in personnel. To Rouse (1978) it does not appear to be an immigration of people from Amazonia, although Lathrap (1970:164-170) seems to see this more as a continuation and intensification of a population movement. Even so, the series, represented by profuse spicule temper, spread rapidly throughout the Orinoco valley and therefore acts as a horizon style (Rouse 1978). This would suggest a rapid dissemination of information and technological change over a very large area.

Fine-line incisions arranged in zones of geometric patterns dominate ceramic decoration. Sherds lack painting except for mauve wash which appears to be the continuation of a post-fired maroon or mauve wash appearing late in Corozal 3. Portrayals of human faces occur incised on lugs, on some jars, and as anthropomorphic adornos. Human face lugs with coffee-bean eyes occur in the earlier phases, and slit eyes in the last phase. Although animal lugs are also common, the orientation toward human forms or features indicates an attitude

toward human portrayal, and especially human features. The relative role of animal forms and geometrics is not clear.

The portrayal of facial features on Camoruco pottery does not occur in pictographs. The only example is a rounded face with dot eyes from Period 6 at Punta Brava (JG-54), but the features are not distinctive (Figure 21, 1).

The Arauquinoid tradition apparently ends at European contact. This would be the ceramic series most likely associated with the latest art at Cueva Pintada (JG-52), where the church and historic house are portrayed (Figure 22).

In interpreting the origins of Arauquinoid, Rouse is not clear on the big picture. He sees Corozal as indicating in-situ development in the eastern Apure *llanos* and gradual influence spread from there down the Apure the short distance to the middle Orinoco. The Arauquín phase on the *llanos* is essentially the same age as Camoruco 2 on the middle Orinoco, and there was obviously widespread regional contact throughout the Arauquinoid period (Rouse 1978; Rouse and Allaire 1978).

On the other hand, the spread of Arauquinoid throughout the Orinoco is unquestionable and may represent a spread of people taking ceramic traits with them. The traits clearly spread downstream to the lower Orinoco, where intrusive Arauquinoid ceramic traits are combined with a Barrancoid base to form the Guarguapo phase, but the nature of the spread is not easily interpreted — whether representing a spread of ideas or movements of people. The same is true going upstream, with spicule tempering designating the Nericagua 3 phase on the upper Orinoco, although the antecedents for the phase are not clear. From the ceramics at Cotua island (Cruxent 1950) at the Atures rapids and the Ventuari river testing program (Evans, Meggers, and Cruxent 1958) it appears that

Nericagua may represent the result of what I see in the Cotua sequence as a gradual change from Saladoid (Ronquín phase?), to Saladoid + Barrancoid (Ronquín Sombra?), to Nericagua 3 or Camoruco. If this is the case, the correspondence would indicate wide-area influences and communication during these periods. How Barse's (1989) late phases at Atures fit into this format is not clear, since he mainly discusses these as Saladoid — Casa Vieja, Cataniapo, Pozo Azul, and Culebra as equivalent in time to Corozal (as incipient Arauquinoid), and Arauquín as equivalent in time to late Camoruco.

Rouse (1978; Rouse and Allaire 1978) points out the similarity of the Camoruco ceramic style with the Amazonian fine-line and incised punctate zone patterns and discusses the possibility that Arauquinoid could have developed to the south and spread northward into the middle Orinoco as part of another wave of people. Lathrap (1970) takes the discussion further and sees the Orinoco Arauquinoid simply as part of a near continent-wide expansion possibly related to the spread of Cariban languages. Again, like the previously proposed spreads of Saladoid and Barrancoid suddenly across a huge portion of South America, it is difficult to imagine what impetus stimulated such a massive move<sup>40</sup> and how such an expansion, during which whole ceramic patterns (technology, shape, decoration) remained uncannily uniform, was choreographed. Lathrap was certain of the place of origin (mouth of the Río Negro) and the time and direction of movement; but in consideration of the middle Orinoco suggested linking with a developing polity on the Apure, it would be wise to keep an open mind regarding possible movements of large numbers of people. Presently I know of no good evidence on the upper Orinoco to support Lathrap's projected

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<sup>40</sup> Lathrap (1970) seems to believe the cause was insufficient natural resources, especially food, to sustain expanding populations.

migrations of people, although future study of rock art through those areas (including petroglyphs along the waterways) may eventually help solve the dilemma. Zucchi's recent project on the upper Orinoco and her projects of people and/or ideas flowing northward out of Brazil and into the Orinoco basin are particularly relevant and are discussed here.

### **Zucchi's Views on Caribe Expansion**

Zucchi (1985) postulates a series of three stages for the main Caribe habitation of the middle Orinoco (also Zucchi and Tarble 1982<sup>41</sup>). Along with her discussion of general Arauquinoid stages, she includes a set of maps portraying her hypothesized models of movements of populations and material traits. These maps somewhat follow discussions and models previously presented by Lathrap (1970) and Durbin (1977). Lathrap had discussed the likelihood of a Caribe expansion from northern Amazonia as evidenced by the spread of pottery with spicule temper and zoned fine-lined incision decoration. Durbin had postulated that the Caribe expansion into the lower and middle Orinoco originated from the coastal areas to the east, presumably in the Guianas.

During Zucchi's (1985) Early or Intrusive Stage around 400-500 A.D., the Arauquinoid tradition on the middle Orinoco began as nonaggressive contact or immigration with Roosevelt's (1978, 1990) Corozal 1 period between the Caribe to the east and south and the local Arawak resident population. Minor and perhaps informal contacts by individuals and small groups prior to this are evidenced by the sporadic use of spicule-tempered pottery throughout the previous Saladoid period, but those contacts became intensified during Corozal

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<sup>41</sup> Tarble (1985) also discusses a series of variations in Caribe expansion models.

and the older Saladoid tradition characteristics began to decline in popularity. The immigration apparently was along the major rivers, with the strong influence of spicule (*cauxi*) temper showing up only in larger settlements of the Saladoid, Cedeñooid, and Barrancooid traditions and not in smaller isolated aldeas. It appears that these contacts were peaceful and were not threatened with political or economic competition (which characterizes the historic period).

This period apparently was also the time of contact with the *llanos* area. At about 500 A.D., as part of the Arauquinoid (Caribe) expansion, Cedeñooid (Arawak) groups came into more intimate contact with Arauquín groups of the Apure region and apparently moved into the western *llanos* where they interacted with Osoid groups who had possessed polychrome pottery and maize agriculture since about 1000 B.C. The cultural exchange brought manioc cultivation to the Osoid *llanos* at that time and polychrome and maize to the middle Orinoco (Zucchi 1985; Rouse 1978). This period of contact is also evidenced on the lower Orinoco where the Barrancooid assemblage, during the *Classic* Barrancas period, also shows the influences of spicule temper and polychrome pottery (Sanoja 1976, 1979; Zucchi 1985).

Zucchi's (1985) Intermediate or Trade Stage around 500-1000 A.D. represents an intensification of peaceful contacts between the rising Caribe population and Arawak residents. The relation must have been based on marriage alliances, ceremonial exchange, economic symbiosis, and other forms of mutually beneficial interaction.

In relative terms, Zucchi (1985) equates this stage with Roosevelt's (1978, 1980) Corozal 2 and 3 phases on the middle Orinoco, Sanoja's (1976, 1979) late *Classic* Barrancas period (and the Macapaima phase) and possibly the beginning of his

*Postclassic* period, and the last part of the Nericagua phase (Evans, Meggers, Cruxent 1959; what I herein call Nericagua 3). Cedeñoid and Valloid tradition elements also are both present at this time, with Valloid apparently developing as a Caribe subgroup occupying the entire middle Orinoco (also Tarble and Zucchi 1984; Tarble and Scaramelli 1993b).

Maize cultivation continued with very slow acceptance. There appear to have been considerable population growth, an increase in the number of sites, and an intensification of agriculture (also Zucchi 1978; Zucchi and Denevan 1974, 1979). Between about 500 and 700 A.D., or the beginning of this stage, there was interaction between the Caribes (spreading spicule temper) and resident Arawak groups throughout the Orinoco valley and over into the western *llanos*. This spread apparently intensified about 700-800 A.D. The direction of interaction with the upper river was obviously from the middle Orinoco toward the upper Orinoco, although a mixture of *cariapé* temper in Corozal sites on the middle Orinoco also indicates a mutual exchange of technological traits.

Incised decorations continue, with strong use of punctate patterns, modeling, and anthropomorphic and zoomorphic adornos. The most common painting on the middle Orinoco is red-on-plain, black-on-plain, and light red-on-polished black (postfired); polychrome decorations are also present. Painting and basketry impression are common on the lower Orinoco. Crisscross and parallel incised lines continue to represent Cedeñoid while the *frog* motif is common in Valloid incisions. Ceramic roller stamps apparently are common throughout late Arauquinoid, from about Corozal 3 through Camoruco 3.

Zucchi's (1985) Third Stage or Domination (1000-1400 A.D.) represents the domination of the occupational sequence throughout this zone by spicule-

tempered pottery decorated with incision and punctation. There was an increase in sites throughout the Orinoco valley. Zucchi (1985) equates this stage with Guarguapo on the lower Orinoco, the Camoruco phases and the Valloid complex on the middle Orinoco, and other phases in the *llanos* and other areas.

### **Roller Stamps as a Medium for Arauquinoid Design**

Ceramic roller stamps provide another source for Arauquinoid design comparison. Tarble has studied roller stamps on the Orinoco and has found that they were made only during the Arauquinoid tradition, as indicated by spicule temper and their occurrence in upper levels of excavated sites. Stamps date to 1000-1400 A.D. and presumably are associated with Caribe ethnic groups (Tarble and Vaz 1986). Stamps are grouped into six classes based on the stylistic criteria of form, texture, diameter, decorative technique, motifs, and kind of symmetry of the design. These classes vary across time and space within the Arauquinoid tradition.

Stylistic differences vary through time in several ways. Care in workmanship declines, with greater precision in design execution early to less careful workmanship later. Vertical slotted stamps occur in the middle of the sequence and decline later. There is also a proliferation of new stylistic treatments during the latest part of the tradition.

I would interpret this process as indicating increased production through time — increase in number, increase in diversity of the finished product, and decrease in quality. This closely parallels a similar process of increased diversity and decreased care in manufacture and decoration of pottery noted by Sanoja (1979; Sanoja and Vargas 1983) for the general Barrancas tradition on the lower Orinoco during approximately the same period. Sanoja believes this trend parallels an

increase in mass production by specialists. I see it also as concurrent with increased population size, an increase in number of villages, and increase in village identity (possibly exemplified by distinctive signs).

Geographic variation between styles is thought to relate styles to specific villages and to indicate such external contacts as trade. Tarble sees wider distribution during later times as corresponding to a population expansion out of the middle Orinoco and into surrounding areas. I would suggest, relative to her proposed use of roller stamps as trade items, however, that the increased geographic expansion of the stamps may be more due to longer distance trade, greater networking of other kinds of social or cultural contacts, and perhaps more formal kinds of trade institutions and trade relations, rather than simply expanding population size and massive migrations of people from one area to another.

Tarble also points out that the distribution of roller stamps and their related styles may be the result of exchange of the stamps themselves or just the knowledge of the stamps — the diffusion of ideas perhaps separate from the materials themselves (very much congruent with Zucchi's idea of polychrome pottery from the western *llanos* arriving on the middle Orinoco during the first part of the Arauquinoid period; Zucchi 1972). What is obvious, nonetheless, is that the restricted distribution of roller stamps during the early part of the period seems to indicate a degree of sedentariness which later on turns more to greater external contacts and possibly territorial expansion.

The only direction considered so far is westward into the *llanos*, although southward expansion or exploration up the river and into the upper Orinoco country should be considered also. I have already demonstrated Arauquinoid

technological influence into the existing *cariapé* tempering tradition in the later part of the Nericagua complex, in the Nericagua 3 phase. This parallels the same kind of influence in the Guarguapo phase during late Barrancoid on the lower Orinoco and similar influences west through the *llanos* and along the coast.

Tarble notes the wide range of stylistic variation in the roller stamps and points out that such variation may be functional or social as well as temporal or related to ethnic identification. She proposes a close relation with modern body painting and refers to modern body stamping, which now is mostly done with flat wooden stamps (*pintaderas*), but with many of the same kinds of designs as occur on the Arauquinoid pottery stamps. Ceramic roller stamps are thought to indicate a kind of formality of design application associated with body painting, or body stamping. She also notes a functional (and potential stylistic) difference between secular and sacred associations for the stamps.

This, of course, parallels her hypothesized organization of Arauquinoid pottery decorations into rectilinear secular designs and curvilinear sacred designs (Tarble 1985). She points out (Tarble and Vaz 1986) that the most common kinds of pottery decoration are, “designs following a mirror reflection type of symmetry in which straight lines, triangles, zigzags, and rows of dots are common incised elements. However, a small minority of ceramic bowls have elaborately incised and excised bands that do not follow these rigid rules of symmetry, but rather emphasize asymmetrical diagonal divisions similar to those found on many of the roller stamps.”

She further relates petroglyphs to this system, since she interprets co-occurrence (both within caves and within larger geographic areas) as cultural association (cf. Tarble and Scaramelli 1993b). The asymmetrical designs, thought

to fall into the sacred category above, are said also to occur on numerous petroglyphs associated with many sites in the middle Orinoco area. It should be noted that Tarble has recorded petroglyphs not only along the river, but also in more upland settings, including inside rockshelters and boulder shelters (also Tarble 1990c). She sees these petroglyphs as representative of a ritual mode of Arauquinoid decoration.

### **Additional Rock Art Considerations**

Riley (1957) briefly reports a possible Arauquinoid petroglyph site in an upland setting away from the Orinoco. The La Loma site is on a small branch of the Bendiciones tributary of the Cuchivero, northeast of the present project area and just southeast of Caicara. The petroglyphs are far up the side rivers from the Orinoco, and additionally the engraved boulders are said to “line the steep slope on the south side of the valley.” From this, there can be little question that this is an upland, non-riverine setting, and possibly the first such setting reported for petroglyphs in this area. The incisions are narrow and shallow compared to petroglyphs along the Orinoco. The Panare who occupy the area now state that the petroglyphs were made by unknown people who predate their relatively recent entry into the area. Riley points out that the figures are similar to Late Ronquín, which now is known as Arauquinoid, presumably Camoruco.

I agree that his designs certainly look more Arauquinoid than anything else, especially with the repeated-contiguous triangle figures and the stress on concentric lines. His square figure appears to be a body stamp or roller stamp design with curved spirals coming off the corners. Again, the whole appearance is more like Arauquinoid than anything else right now.

Roller stamp designs, similar to Piaroa body stamp interior designs, occur late in the painted rock art. One such design at Cerro Gavilán 1 (JG-58), believed to date to late Period 5, is nearly identical to ones published by Tarble (1991) and Tarble and Vaz (1986). Other examples of similar forms are common.

Painted roller stamp symbols are mostly late red-white or black-white bichrome designs presumably dating to Periods 5 and 6. This would agree with the late introduction of roller stamps into the Orinoco sequence, presumably mostly during the Camoruco period (Tarble 1991; Tarble and Vaz 1986; LaBrecque *et al.* 1988). The correspondence would again reinforce the Arauquinoid affiliation of late Period 5 or Period 6 rock art.

As mentioned above, Tarble points out that Arauquinoid Caribe pottery decorations occur both as secular and sacred designs (Tarble 1991; Tarble and Vaz 1986). Secular designs are zoned rectilinear and V-shaped incision, whereas sacred art is designated mostly by its curvilinear elements. It is possible that what Tarble sees as ritual art is a holdover of Barrancoid stylistic influence, or perhaps a new or continued feedback from the lower Orinoco area with the Arauquinoid-influenced Guarguapo phase. Some of the design elements that she pictures (e.g., Fig. 10 a, b, j, n) as typically Arauquinoid sacred substyle are also design elements specifically listed by Sanoja (1976, 1979) as diagnostic of Barrancoid designs. The presence of curvilinear design elements in Arauquinoid art is noteworthy, however, and may help explain some of the apparently Barrancoid influence in the Period 5 art (as well as the *bug-eyes* and other Barrancoid features of Period 3).

Vargas (1981) studied Arauquinoid designs from her excavations in the Parmana area. The emphasis of her sample is clearly on geometrics, mostly

angular designs either intersecting or with sharp-angle corners. A few curves, hooks, and circles are present (as Tarble points out, 1991), but nothing looks particularly similar to the rock art. From her illustrations, however, it is clear that the pictograph of the decorated ceramic jar in JG-2 (pictured in Cruxent 1947: Fig. 21) is Arauquinoid in its zoned design, almost certainly representing an incised pattern which covers the body of the vessel. This pictograph is red-white bichrome and is tentatively linked with Period 3, although its association on the same panel with seemingly later symbols along with the Arauquinoid similarity would suggest that it instead should be reclassified as Period 5. If so, this would be an example where content and context together override technology to designate the period.

### **Valloid Series**

The Valloid tradition has been relatively recently identified by Zucchi and Tarble (1984), and further discussed by Zucchi (1985), from survey and testing work on the middle Orinoco. The series is well represented throughout that area and is probably the most common pottery in the painted caves (Tarble and Scaramelli 1993b).

The pottery is tempered with ground rock of variable size but often protruding onto the well polished vessel surface. Decoration is not common, with only 5% of analyzed sherds having indications of decoration (Zucchi and Tarble 1984). This consists of mostly incised-punctate appliqué, rarely incision, and occasionally modeled zoomorphic adornos. There is considerable homogeneity in the pottery (which to me suggests fairly tight control on pottery production and possibly by relatively few potters).

Incised-punctate appliqué is the most common means of decoration and is distinctive (Zucchi and Tarble 1984). Very fine appliqué bands (2-7 mm wide) are applied in angular geometric patterns. These low, narrow bands have along their length a row of closely spaced fine round to linear punctations, such that the effect is a line of punctations placed on a narrow raised mound of clay, and these punctated mounds form the decorative patterns. In some cases the punctations are placed on rows or clusters of small raised dots of clay (small mounds or nipple-like protuberances). The appliqué bands divide the decorated surface into two or more sectors, each of which may contain angular designs. Angular geometric patterns are made up of parallel lines and concentric triangular or diamond-shaped figures, composed either of the raised appliqué bands or rows of punctated dots. These designs, to me, are reminiscent of Arauquinoid ceramic roller stamps and modern Piaroa wooden body stamps.

Incising is not used alone (as it is in Arauquinoid) and instead occurs only in combination with the punctate-appliqué lines. Incision always occurs as rectilinear geometric patterns of fine lines, either deep or superficial, apparently the same as usual Arauquinoid designs.

Modeling is most often represented as animal forms or animal parts, such as arms, legs, ears, or whole animals (possible jaguar). In some cases incisions are added for realism, such as for the eyes or mouth, or dots on the back of cats (Zucchi and Tarble 1984). Representations of the *frog* motif are characteristic of Valloid (Zucchi 1985).

Valloid is almost always found in sites containing spicule-tempered Arauquinoid pottery (Zucchi and Tarble 1984). It appears that Arauquinoid and Valloid groups lived in the same areas at the same time. There is strong

Araquinoid stylistic influence into Valloid as well as indicated social relations between the two groups (Zucchi and Tarble 1984). This is supported by their similarity of zoomorphic adornos and modeling.

Zucchi (1985) also interprets Valloid design elements as showing Barrancoid influence. She specifically notes lower Orinoco influence in the form of punctated zoomorphic appendages (adornos) and small punctated interlocking incisions arranged at the base of the vessel neck (or on the shoulder).

Zucchi and Tarble point out that Valloid pottery is essentially the same as Corobal phase ceramics of the upper Ventuari identified by Evans, Meggers, and Cruxent (1959). Thus, it seems that there is a connection between the two complexes (Zucchi and Tarble 1984), and Valloid may represent a shift in settlement of Corobal groups (also Zucchi 1985) perhaps the result of these Caribe groups being pushed northward over the divide from the Ventuari drainage to the Orinoco by expanding Yanomamĩ-related groups from the south (Tarble 1985).

Valloid dates about 900-1500 A.D. It is believed possibly to represent a subgroup of the western Guyana Caribe who arrived in the middle Orinoco area about 900-1000 A.D. and spread throughout the zone. On the middle Orinoco they may have been associated with the Pareca and Wánai (Mapoyo). The cause of their expansion into this area may have been pressure from Yanomamĩ and Tupĩ expansion from the south, who presumably put pressure on the Corobal phase groups to move out of the highlands of the upper Ventuari country and into the middle Orinoco. Their expansion took them about 1000 A.D. westward across the *llanos* and north into the Lake Maracaibo area, and on the middle Orinoco their pressure stimulated movement of other groups (Zucchi 1985).

## Nericagua Complex

A testing program was conducted in the 1950's on the Ventuari river and adjacent parts of the Orinoco by Evans, Meggers, and Cruxent (1959). There they found a series of pottery types that they lump into the Nericagua phase, which seems to define the ceramic history of the area around the mouth of the Ventuari. [Figure 28](#) (page 220) presents their pottery data in chart form for what I here call the *Nericagua complex*. This presently not well understood local historical construct consists of three typological phases (named here) which probably relate to more widespread ceramic series best identified from other regions. The two earliest phases are part of a *cariapé* tempering tradition, while the third phase indicates the beginnings of Arauquinoid technological influence with its sponge spicule temper onto the previous *cariapé* tradition. Numbered stage or period designations are suggested for purposes of communication and comparison. Estimated ages are given in [Table 16](#) (page 219).

Later work by Zucchi (1989, 1990, 1991a, 1991b) in the same area seems to corroborate the earlier findings. Her project is discussed following the phase definitions. Although her detailed data are not yet available, preliminary papers suggest that she witnesses the same general trends as the earlier project.

### Nericagua 1 (*Cariapé Grueso*)

The earliest phase is dominated by Nericagua Plain pottery with coarse *cariapé* temper and soft paste. This constitutes the majority of the earliest pottery. Sand temper is never common in the sequence (6-12 percent), as represented by Yacuray Plain. Fine *cariapé* and hard paste are essentially absent. Decorated sherds are rare, but it appears that red-slipped pottery, negative painting, and possibly resin glazing are present; incising appears to be dominant, and

modeling of human and animal rim adorns is common. Incised rectilinear motifs mostly are in zones around the tops of bowls and are composed of zigzag lines, zoned parallel lines, parallel straight lines, and other simple combinations. Curvilinear designs are rare.

I believe that the well developed use of *cariapé* temper in this early phase represents an extension of an established Brazilian ceramic tradition based on the use of *cariapé*, a technology still prevalent throughout the Río Negro and main Amazonas drainages. The technology is weakly represented on the middle Orinoco and may be a remnant of early contact with the south. I view the Nericagua 1 phase as distinct from the middle Orinoco sequence, although it probably would be coeval, at least in part, with Saladoid, perhaps Ronquín or early Ronquín Sombra phase.

If the general Ronquín time range is correct (which is not certain), the estimated comparative date for Nericagua 1 could be somewhere around 1500-1000 B.C. Evans *et al.* suggest (p.368) that the phase ended around 800 A.D., and they may have assumed that the beginning would not be too many centuries before this (I estimate a range of 300-800 A.D. for their earliest phase). Their C14 dates were run in the late 1950's on palm nuts loose in the deposits, two facts plagued with interpretive problems. However, it is interesting that, when adjusted to my proposed phases, Zucchi's estimated dates are precisely the same as those suggested by Evans, or about 300-800 A.D. — about 1800 years later than my middle Orinoco-based estimates.

The phase in the Ventuari testing program is not placed in time relative to whatever came before. Therefore, there is no reason to believe either, (1) that the Evans sample represents the beginning of the Nericagua 1 phase, or (2) that

Nericagua 1 is necessarily the first pottery on the upper Orinoco, associated either with the Nericagua complex or with any other presently unrecognized complex. Zucchi's data seem to support this suggestion.

### Nericagua 2 (*Cariapé Fino*)

The middle of the sequence still appears to be dominated by coarse *cariapé* and soft paste and with some support from sand temper, but now there is the introduction of a new technology with fine *cariapé* temper and hard paste. Decoration is rare and the techniques continue as before. Rectilinear incising decreases in relative popularity, and modeling now becomes dominant with human and animal rim adorns. Painting may also increase slightly during this time.

It would seem that this is a logical extension of the Nericagua 1 phase with added technological improvement either from internal change or external suggestion. It would be reasonable for this phase to equate with the middle Orinoco Saladoid sequence in the latter part of the Ronquín Sombra phase through perhaps early Corozal 2.

Barse reports *cariapé* temper in his Casa Vieja phase (reportedly his earliest phase of Saladoid) dating about 550 to perhaps 200 B.C. and designated by plainware at one site near Puerto Ayacucho; he views this as post-dating Barrancoid by about 1000 years. If the correspondence with Ronquín Sombra, Corozal 2, and Casa Vieja is reasonably correct, an estimated date for Nericagua 1 could be somewhere around 1000-100 B.C.

Evans *et al.* report a date of about 800 A.D. from about a third the way through the sequence, which I interpret as possibly around the beginning of what I am

here calling Nericagua 2. They also report another date of 1400 A.D. about one-fourth the distance from the top of the sequence which I assume must be somewhere after the end of this phase and within Phase 3. A generalization of Evans' estimates, therefore, would be something like 800-1400 A.D. Since this falls totally within the generally accepted range for Arauquinoid spicule temper, but sequentially is mostly before spicule use in the Nericagua sequence, it presently seems that Evans' dates may be unacceptably late. They do, however, agree with the projected age from Zucchi's data.

### **Nericagua 3 (Cauxi Temprano)**

The final part of the sequence is marked by a continued strong use of *cariapé*, both coarse and fine, a near absence of sand temper, and the introduction and beginning florescence of spicule tempering (with Canaraben Plain pottery). Decorated sherds still are uncommon, but it seems that painting may be more common than previously (unless its presence is due solely to physical preservation of the paint). Modeling apparently continues, but there is a decrease in zoned incising. Roller stamps occur late in the sequence, presumably during this phase.

Spicule use seems just to be coming in with this phase and is not yet dominant. This would suggest the beginnings of Arauquinoid influence, possibly equivalent with late Corozal 2 or Camoruco 1 on the middle Orinoco. If so, the estimated date would be somewhere around 100 B.C. to 700 A.D. Evans' and Zucchi's dates, on the other hand, would suggest a questionable beginning for this phase around 1200-1400 A.D.

The reported decline in fine-lined zone incising is noteworthy since that trait usually is considered linked with spicule tempering to designate Arauquinoid

influence. Usually this trait complex is thought to support the hypothesized influx of Cariban speakers from the south. The evidence from this phase would suggest instead that the spicule temper and incised decorations are independent traits (at least in this area), and that zoned incising is more closely related with the *cariapé* tempering tradition from the south, while spicule tempering appears to come into this area from the middle Orinoco separate from fine-line incising.

### **Nericagua Decoration**

Most of the Nericagua complex sherds reported by Evans and colleagues are plainware. Decorated sherds are said to be rare and make up only 4 percent of the 30,000 collected sherds. The count increase through time of both slipped and painted wares may be due more to preservation than manufacture. What appears to be a fugitive red slip seems to be present throughout the sequence.

Negative painted designs are all resist ware with delicate, carefully made fine, parallel, wavy lines. After application of the resist material, the vessel was dipped and fired, or refired over a smudgy fire. In another kind of application, some vessels were first turned upside down before fine-line decorative painting, and what is interpreted as a resist material was sloppily poured or daubed over the vessel in such a way that it ran unevenly over the surface and created a crude, haphazard pattern. To me this seems to be the initial attempts at resin glazing (*chipa* tree resin, Burseraceae; very similar to *caraña*, *Protium* sp.), a technique and material still used in northern Brazil (Berlin 1984:31).

Incision is the dominant decoration in the early half of the sequence, equating with the use of *cariapé* temper and not with spicule, but there is a marked decline in popularity through time. Motifs are rectilinear and are composed of zigzag lines, zoned parallel lines, parallel straight lines, and other simple combinations.

Most incising is around the tops of bowls, apparently zoned. Curvilinear designs are rare. Modeling of human and animal figures as rim adornos is present in the early phase and apparently becomes relatively dominant in the middle phase (although its absolute increase through time is not clear).

### **Diffusion Patterns**

The phase sequence of the Nericagua complex suggests that fine-line incision, zoned decoration, *cauxi* (spicule) temper, and *cariapé* (bark ash) temper may have come from different directions, possibly with some sort of feedback mechanism. *Cariapé* presumably came from the south, possibly accompanied by fine-line zoned incising. The incising clearly predates spicule temper on the upper Orinoco, as represented in the Nericagua complex. Fine-line incising is an integral part of the later Arauquinoid tradition further downstream on the middle Orinoco, and so it would be reasonable that the fine-line incision trait would have gone downstream and eventually reached the Apure. It has been suggested that the Apure (perhaps near the modern town of San Fernando de Apure) is the homeland for development of the Arauquín polity or economic-political influence that resulted in (or at least accepted and continued to develop) Arauquinoid series pottery, which is identified by its spicule temper plus fine-lined zoned incision (Rouse 1978). It is therefore projected, on the basis of different ages for the traits in the Nericagua complex, that spicule tempering spread out of the Apure homeland and found its way back upstream to the upper Orinoco, but now apart and independent from fine-line incised zoning, and influenced a technological change in local ceramic production previously dominated by a strong Brazilian *cariapé* tradition.

The changing directions of dominant technological and decorative traits seem to indicate a complexity for the explanatory model not previously recognized. How these traditions, traits, directions, and influences went together, therefore, is not clear. It is possible that some traits, such as *cariapé* and zoned incision came from the south (as Rouse 1978 proposes), while Zucchi's model (1985) of Caribe technological influence entering the lower to middle Orinoco from the east would account for the spicule temper and additional fine-lined zone incision. The exchange of traits both owing their parentage ultimately to the northern Amazon basin, but reaching different parts of the Orinoco basin from different directions, would be reasonable, with the two branches meeting again at the cultural boundary of the Atures rapids at the junction of the middle and upper Orinoco.

This can be restated in its fuller pattern (following Durbin 1977, Zucchi 1985, 1991; Rouse 1978; Rouse and Allaire 1978, and the above discussion). The Cariban base developed in the northern Amazon basin and there split into two major groups. One group remained in the area of the mouth of the Río Negro, with migrations up the Río Negro and to the upper Orinoco, bringing with them distinctive ceramic technology, dominated by *cariapé* temper, which is represented in Nericagua 1 and 2. Another branch probably went up the coast or up the Río Branco into the Guyana area, and that branch eventually influenced migrations from the east and south into the lower and middle Orinoco, bringing with them distinctive ceramic technology represented in the Arauquinoid ceramic series, dominated by spicule temper. Both the northern and southern Caribe pottery is decorated with zoned fine-line incisions in angular geometric patterns. The northern Arauquinoid tradition of spicule temper came from the middle Orinoco upstream to influence late ceramic production, as seen in

Nericagua 3. Thus, the two Caribe branches essentially met at the Atures rapids, which is seen as a major, long-standing cultural boundary.

### **Zucchi's Testing Program**

Zucchi (1991b) presents some summary information on her testing program at 20 open terrace sites on the upper Orinoco from about La Grulla to the mouth of the Ventuari (Figure 2) and then about that much farther up to Puruname, and about that far up the Atabapo river (across from and south of San Fernando de Atabapo; Figure 2). She discusses the Nericagua phase, following the previous work of Evans *et al.*, as a single cultural unit without obvious, major temporal variation. Her sample has mainly *cariapé* temper, with almost no sand or *cauxi*, and she reports almost no painted pottery<sup>42</sup> and very little red slip. This makes her sample sound more like Evans' middle sequence range, or what I here call Nericagua 2. She reports only the earliest dates from selected sites in an attempt to show the beginning of the Nericagua phase, and thus reports dates of 100 B.C. to 1250 A.D. — there is no mention of her latest dates. In another presentation (Zucchi 1990:30) she mentions that three dates fall in the 100-300 A.D. range, while most of the rest of the dates indicate an occupational intensification between about 800 and 1300 A.D. Her dates refer to the entire Nericagua occupation and are not differentiated to subphase as presented here.

Zucchi (1990:28) suggests that the Nericagua phase is equated with early migrations by proto-Piapoco Maipurán speakers. She sees these people as splitting off from their parent group in Brazil probably about 100 A.D. (p. 30). She

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<sup>42</sup> Zucchi mistakenly reports that Evans *et al.* found painted pottery beginning only in the middle of the sequence. What they report, however, is painted pottery increasing in frequency through time, from the earliest to latest levels, possibly due to preservation problems of the paint.

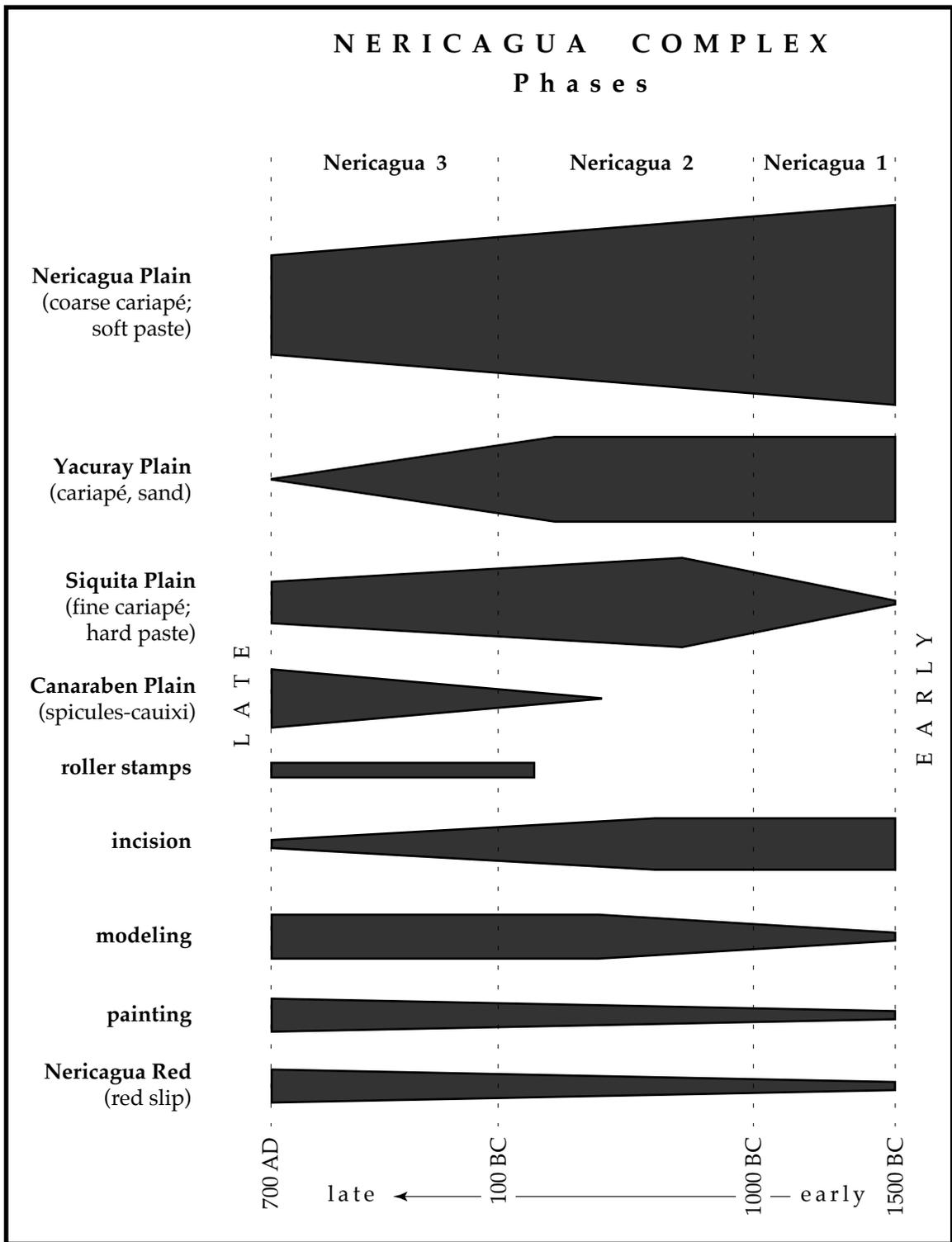
also sees both *cariapé* and *cauxi* as originating in the Brazilian Amazon drainage and spreading from there to the Orinoco (Zucchi 1991b).

### **Rock Art Associations**

No rock art presently can be attributed with certainty to the Nericagua complex or to the people who were responsible for it. The complex is discussed here because it is assumed to extend to the Atures rapids, and it is always discussed with the archeology of the Puerto Ayacucho area (i.e., the upper Orinoco). Petroglyphs abound in the rivers where Nericagua open sites are found, but a relation has not been shown. Pictograph sites are known to exist in this general area, upstream and downstream from the mouth of the Ventuari (I have seen paintings from a distance and have been told of others by local informants), but so far none have been recorded throughout the zone. On the other hand, pictographs on the Sipapo reported in this study are within the general range of Nericagua and are different from paintings to the north, below Atures. It would be reasonable, therefore, for the Sipapo sites to be associated with Nericagua. More survey up the Orinoco and tributaries needs to be done to test this possible relationship.

Phase	Greer	Evans <i>et al.</i> 1959	Zucchi 1990, 1991b
Nericagua 3	100 bc - 700 ad	1400-? ad	no data
Nericagua 2	1000-100 bc	800-1400 ad	800-1300 ad
Nericagua 1	1500-1000 bc	(300)-800 ad	100-300 (-800) ad

**Table 16.** Nericagua complex age estimates. My estimates are based on comparison with estimated middle Orinoco phase ages according to the Rouse-Roosevelt model. Evans' estimates are based on dates run in the 1950's on palm nuts loose in the soil and then summarized in a short presentation. Zucchi's ages are based on C14 dates, but she reports all dates together and does not divide Nericagua into subunits. Parentheses are my estimated projections of Zucchi's and Evans' dates. See **Nericagua Complex** text for discussion.



**Figure 28.** Nericagua complex sherd distributions as indicated by Evans, Meggers, and Cruxent 1959. Phases are defined here.

## Two Models of the Orinoco Sequence

There are several key differences between the Rouse-Roosevelt explanation of the Orinoco archeological history and the general explanation proposed by the Sanoja-Vargas model. A summary of these differences is outlined by Sanoja and Vargas (1983:240-241), paraphrased and somewhat augmented here:

1. Rouse-Roosevelt date the sudden, intrusive appearance of white-on-red pottery on the middle Orinoco at about 2000 B.C., making it the earliest known occurrence of the technique in the hemisphere. Sanoja-Vargas date the introduction of painted pottery (not to be confused with the later polychrome from the western *llanos*) at about 650 B.C. and consider it an intrusion from late Formative complexes to the west.
2. Rouse-Roosevelt consider the Barrancoid (Barrancas) tradition to be derived from the middle Orinoco Saladoid tradition. Rouse postulates a split during the La Gruta phase, with the fissioning group continuing downstream and becoming the Saladero phase, which in turn developed into the Barrancas (or classic) phase of Barrancoid. Sanoja-Vargas consider Barrancas to be a separate offshoot of the early Formative Andean ceramic horizon, and specifically derived along the coast from the parent tradition responsible for Puerto Hormiga in Colombia, Valdivia in Ecuador, and other early ceramic complexes with similar characteristics.
3. Rouse-Roosevelt accept the early dates of ca. 2000 B.C. from the La Gruta site and thereby construct a sequence incorporating several long gaps, showing great ceramic stability, and having no known antecedents. Sanoja-Vargas reject the early dates and instead construct a sequence which, they say, has no significant gaps, shows slow but observable cultural change, and is compatible

with the time-space distribution of ceramic features shared by Formative complexes to the west.

As described above by Sanoja and Vargas, the two models are primarily concerned with the inception date for the introduction of the earliest ceramics. All ages are supported by radiocarbon dates, mostly on loose charcoal (or palm seeds) in the deposits. There are, nonetheless, differences of opinion over excavation techniques, interpretation of stratigraphic profiles, physical characteristics of the dated materials, and actual association of the C14 samples with the ceramic series in question.

The long sequence of the Rouse-Roosevelt model introduces ceramics into the middle Orinoco before 2000 B.C. (Rouse *et al.* 1976; Rouse 1978; Rouse and Allaire 1978; Roosevelt 1978, 1980). Their La Gruta phase of the Saladoid tradition, or complex, begins about 2000 B.C. (Tables 17 and 18, Figure 24), and it is assumed that the ceramics arrived before that time. Oliver (1989) believes the earliest wave of people bringing ceramics with them entered the area from Brazil at least by 4000 B.C., but the association of his dates with pottery is, to me, not secure.

The short sequence of the Sanoja-Vargas model proposes a ceramic introduction probably around 600 B.C. (Sanoja 1979; Sanoja and Vargas 1983; Vargas 1979, 1981). Vargas' arguments stem not only from her carbon dates but also from her theoretical position: If these ceramics were developed in another area and eventually arrived after that time on the middle Orinoco, then the middle Orinoco pottery cannot predate the source occupation. Since Formative cultures to the west dating to around 600 B.C. are presumed to be the source, then the earliest Orinoco ceramics must be no older than that age (Barse 1989:32-41).

Several new dates have become available in the last few years for the entire Orinoco valley. For the most part, these are interpreted as somewhat supporting the short sequence of the Sanoja-Vargas model. Closer inspection, however, especially of dates and associated ceramic complexes discussed in various publications by Zucchi and Tarble, show that the dates generally tend to agree fairly well at the beginning of the sequence with the Rouse-Roosevelt model.

For instance, the earliest dates and projections suggest that Cedeñoid ceramic tradition was introduced into the middle Orinoco by immigrating Arawakan groups between 2000 and 1000 B.C., and dates on excavated ceramics from the Agüerito site reportedly reach back to nearly 1000 B.C.<sup>43</sup> (Zucchi and Tarble 1984; Zucchi, Tarble, and Vaz 1984). Zucchi (1989, 1990, 1991a, 1991b) similarly ties this sequence into her archeological and related linguistic research on the upper Orinoco with comparable dates of introduction.

The problem with Zucchi's projection is that most of the early Agüerito dates are in fairly good agreement with the middle Saladoid age (Ronquín phase) of the Rouse-Roosevelt scheme, and the stylistic equivalence seems close also. A comparison of the ceramics indicates that Cedeñoid 1 is technologically and stylistically similar to Ronquín Sombra and likely is coeval with it. The Rouse-Roosevelt model suggests a beginning date on Ronquín Sombra around 950 B.C., essentially the same as the Cedeñoid 1 dates from Agüerito. Thus, Zucchi's projected beginning of the tradition as pre-Cedeñoid 1 would be essentially coeval with La Gruta as suggested by Rouse-Roosevelt. As such, there are no clear differences between the two sequences, and Zucchi's dates seem to support the Rouse-Roosevelt model.

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<sup>43</sup> Oliver (1989) interprets ceramics at this site as dating to 3600 B.C. (see above).

It is expected, nonetheless, that some adjustments in the absolute dates associated with these complexes eventually will be made, bringing the sequence into more of a compromise position between the two proposed sequences. Necessary for this to happen, however, will be a series of AMS radiocarbon dates run directly on the carbon contents of the sherds themselves. Only in this way will it be possible to overcome the interpretive problems of cultural association. In the meantime, I have chosen, for convenience, to work within Rouse's framework of the *long sequence*.

Series	Approx. Dates	Characteristics
<b>Valloid</b>	after 1000 A.D. (1200-1400 A.D.?)	Temper of coarse sand to gravel. Limited decoration.
<b>Araquinoid</b>	400-1400 A.D. (esp. 600-700 A.D.)	Expansion period, with a change in settlement pattern from along the river to out into the hinterlands. Increased use of metates. Sponge spicule ( <i>cauxi</i> ) temper.
<b>Barrancoid</b>	1000 B.C. - A.D. 400 or later <sup>44</sup>	Large, thick vessels with heavy lugs. Massively decorated with large, wide incised lines.
<b>Cedeñoid</b>	1000 B.C.	Western Arawak. Expanded out into the southern <i>llanos</i> and northwest. Fiber and sherd (clay pellets) temper. Decoration by incised bands of angular zigzags.
<b>Saladoid</b>	1500 B.C. - A.D. 150 or later	Eastern Arawak. Expanded out to coast and thru Antilles. Sites mostly along the river. Red paste with fine sand temper. Modeled lugs. white-on-red, buff-on-red, white-and-buff-on-red, buff slip-wash. Maybe earliest petroglyphs on Orinoco.

**Table 17.** Ceramic sequence on the middle Orinoco(Kay Tarble, personal communication 1992).

<sup>44</sup> Barrancoid lasted into historic times on the coast (Mario Sanoja, personal communication 1992).

	<b>Rouse (1978)</b>	<b>Roosevelt (1980)</b>
<b>Camoruco</b>	<b><u>500-1500 A.D.</u></b>	<b><u>400-1500 A.D.</u></b>
Camoruco 3	1150-1500 A.D.	1100-1500 A.D.
Camoruco 2	750-1150 A.D.	700-1100 A.D.
Camoruco 1	500-750 A.D.	400-700 A.D.
<b>Corozal</b>	<b><u>750 B.C.– 500 A.D.</u></b>	<b><u>800 B.C.– 400 A.D.</u></b>
Corozal 3	200-500 A.D.	100-400 A.D.
Corozal 2	300 B.C.– 200 A.D.	400 B.C.– 100 A.D.
Corozal 1	750-300 B.C.	800-400 B.C.
<b>Saladoid</b>	<b><u>2100-750 B.C.</u></b>	<b><u>2100-800 B.C.</u></b>
Ronquín Sombra	1000-750 B.C.	1100-800 B.C.
Ronquín	1600-1000 B.C.	1600-1100 B.C.
La Gruta	2100-1600 B.C.	2100-1600 B.C.

**Table 18.** Suggested *long sequence* dates for the La Gruta sequence, after Rouse (1973) and Roosevelt (1980).

### **Diffusion Models for the Origin of Orinoco Ceramics**

The earliest pottery on the middle Orinoco appears to be the Saladoid tradition, and particularly the La Gruta phase. Cedeñoid tradition pottery also is early, and Zucchi and Tarble (1984) suggest a possible origin age comparable with the La Gruta phase. Some of the early pottery is painted with white-on-red motifs and designs, and it is obvious that the tradition did not originate here but is intrusive. Several hypotheses have been proposed regarding the origin of the pottery, with a Brazilian origin nearly universally accepted.

The following sections summarize five possible models for the introduction of pottery into the middle Orinoco. Several models have been discussed previously by most people who have worked in the area (Rouse 1978; Rouse and Cruxent 1963; Cruxent and Rouse 1958, 1959, 1961; Rouse and Allaire 1978; Lathrap 1970; Oliver 1989; Zucchi 1972, 1985, 1989, 1990, 1991a, 1991b; Zucchi and Tarble 1984; Tarble 1985; Sanoja and Vargas 1983). While most of these models and explanations consider the transport of ideas as peripheral to or the result of

movements of people, Zucchi (1972, 1985) mentions the possibility of ideas or material traits moving between groups and independent of cultural origin.

The following informal models explain how these early well developed ceramics could have arrived in the area from another source. In the accompanying figures, arrows indicate possible routes taken by people or cultures in some cases, and the routes of traits or ideas in others. Not enough detailed work, however, has been done with sites, ceramics, or dating throughout the region to define key differences which would allow recognition of distinctions between dissimilar cultural elements. There presently is no way to judge which of the models or alternative variations are most reasonable.

### **Amazonian Homeland Model**

Most researchers suggest a south-to-north expansion out of the Amazon basin and into the Orinoco basin and thence west across the *llanos* to western Venezuela and east into the lower Orinoco, and from there to Trinidad and the Antilles (Figure 29). More detailed views show the parent culture developing around the mouth of the Amazon, and then following the Río Negro up to the Casiquiare and to the upper Orinoco, then down that river to the Apure. Some have suggested that the main route went up the Negro, then overland to the Atabapo or one of the other rivers running into the Orinoco at the mouth of the Ventuari, and then down the Orinoco as before.

Oliver (1989:487) suggests that polychrome pottery (at least white-on-red bichrome) was firmly in place on the middle Orinoco around 4000 B.C., during his proposed Stage 1 Proto-Arawakan-Maipuran Expansion. The spread of the Amazonian Polychrome Tradition, with its characteristic white-on-red decorations, is associated with a cultural expansion out of a middle Amazonian

homeland. The tradition spread northward up the Río Negro and into the Orinoco basin. He sees that the expansion is evidenced by about 3700 B.C. in the lowest levels of the Agüerito site on the middle Orinoco, across from the mouth of the Apure river (also Lathrap and Oliver 1987). From here the spread continued through the *llanos* and into western Venezuela. Zucchi and others report that the earliest ceramics at Agüerito seem to date no earlier than about 1000 B.C. (Zucchi and Tarble 1984; Zucchi, Tarble, and Vaz 1984). It is possible that the early Agüerito dates considered by Lathrap and Oliver during their reanalysis of Zucchi's data pertain instead to a mixed preceramic component at the site.

Rouse also links the development of Saladoid pottery on the Orinoco with a linguistic model of Arawakan expansion out of an ancestral homeland in Amazonia (as Oliver has described). However, he proposes that Saladoid

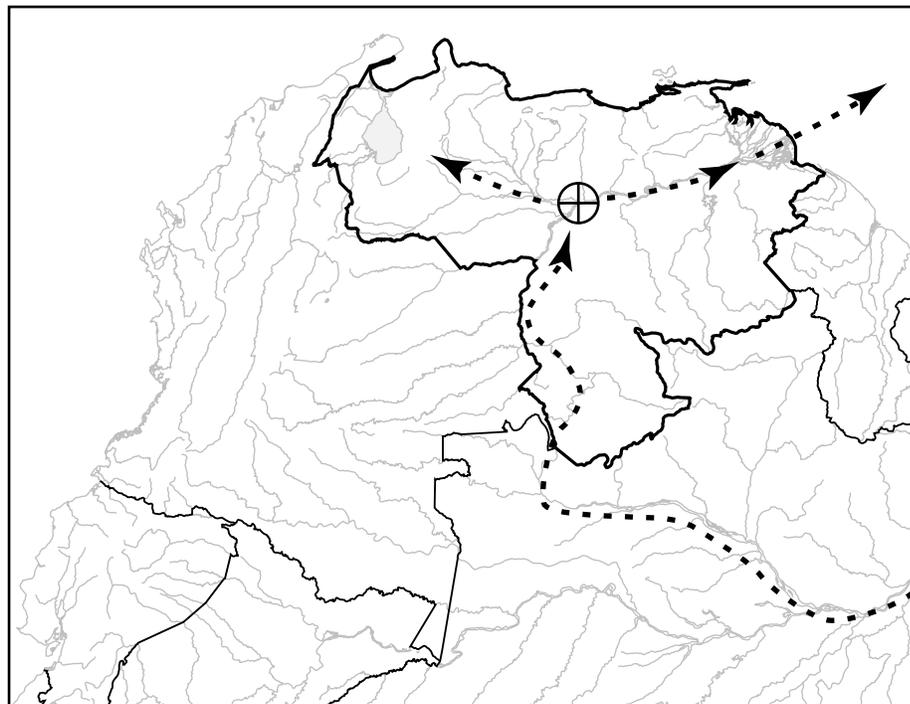
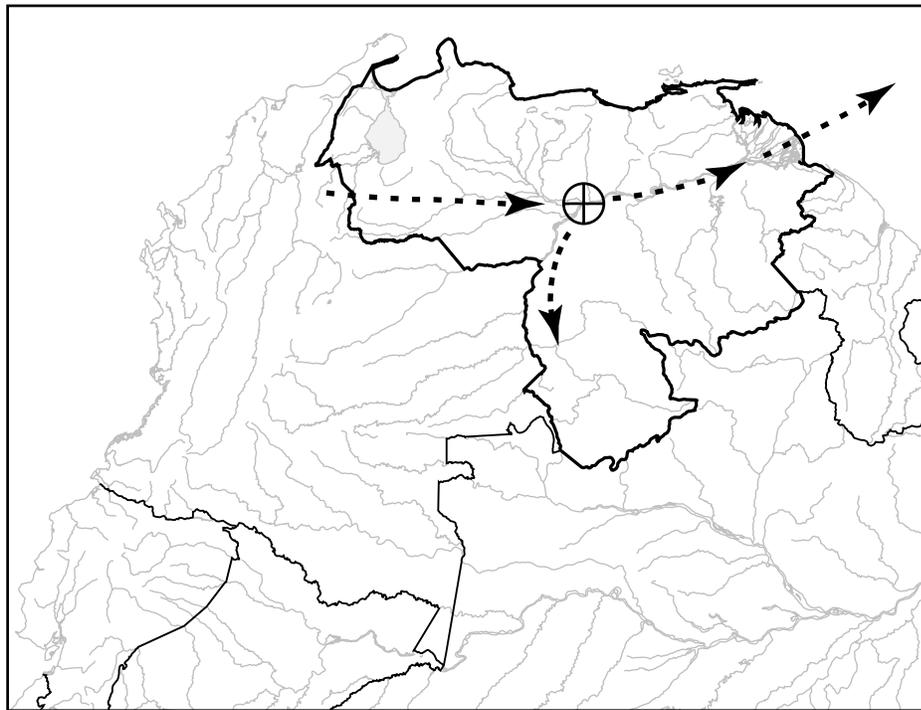


Figure 29. Amazonian Homeland model of initial Orinoco ceramics.

continued development on the middle Orinoco and spread from there outward toward the delta (Rouse *et al.* 1976; Rouse and Allaire 1978). Zucchi, likewise, sees Saladoid and Cedeñoid originating from a southern parent ultimately traceable to the mouth of the Amazon, coming up the Río Negro and into the middle Orinoco. After a period of independent development, the two traditions continued their spread along different lines of dispersion (Zucchi 1989, 1990, 1991a, 1991b).

### **Llanos Model**

People carrying early knowledge of ceramic production could have left the Andean highlands and moved down across the *llanos* of Barinas and Apure, presumably along the Apure or Meta rivers, and into the middle Orinoco, then up and down the Orinoco and into the hinterlands (Figure 30). Sanoja and Vargas (e.g., 1983) suggest that Saladoid pottery (or its antecedents) probably



**Figure 30.** Llanos model of initial Orinoco ceramics.

came into the middle Orinoco by about 655 B.C., ultimately from the Andean uplands, as part of a widespread expansion of Formative cultures, as exemplified by white-on-red ceramics. The Llanos model seems applicable for the later spread of polychrome painting and maize agriculture from the western *llanos* to the middle Orinoco (Zucchi 1991b).

### **Andes to Amazonia Expansion Model**

This combined model applies to the Amazonian homeland expansion but with the ultimate origin going back into the Andean highlands (Figure 31). As such the white-on-red pattern could have developed on the eastern flanks of the Andean highlands and presumably left the mountains further south and entered upper Amazonia from the west (presumably into the northern part of the basin). The expansion presumably would have continued to spread in all directions, including northward into the Río Negro drainage, and from there into the

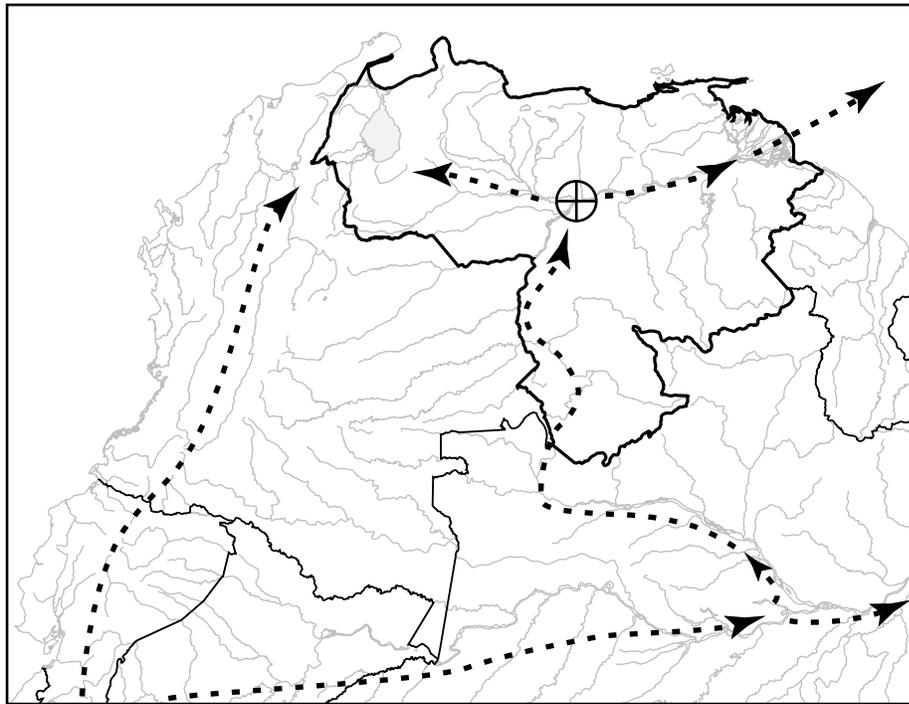


Figure 31. Andes to Amazonia Expansion model of initial Orinoco ceramics.

Orinoco basin. This combines Oliver and Rouse's direction of movement into the Orinoco basin with the alternate concept of Andean origins. It is also possible that the spread continued out of the middle Orinoco and back across the *llanos* toward western Venezuela where the early ceramic impetus spreading along the mountains from the south was again united in the highlands with other developed forms of the same distant tradition. With careful study it might be possible to recognize the direction of spread, associated cultural interactions, and the possible reuniting of differentially developed Andean traditions.

### **Multidirectional Andean Model**

The source of ceramic introduction (presumably related to cultural expansion) could be in the mountains, but with a multidirectional spread following several routes into the middle Orinoco basin (Figure 32). The Andean influence may not have been from a single source but was an outgrowth of the general process of

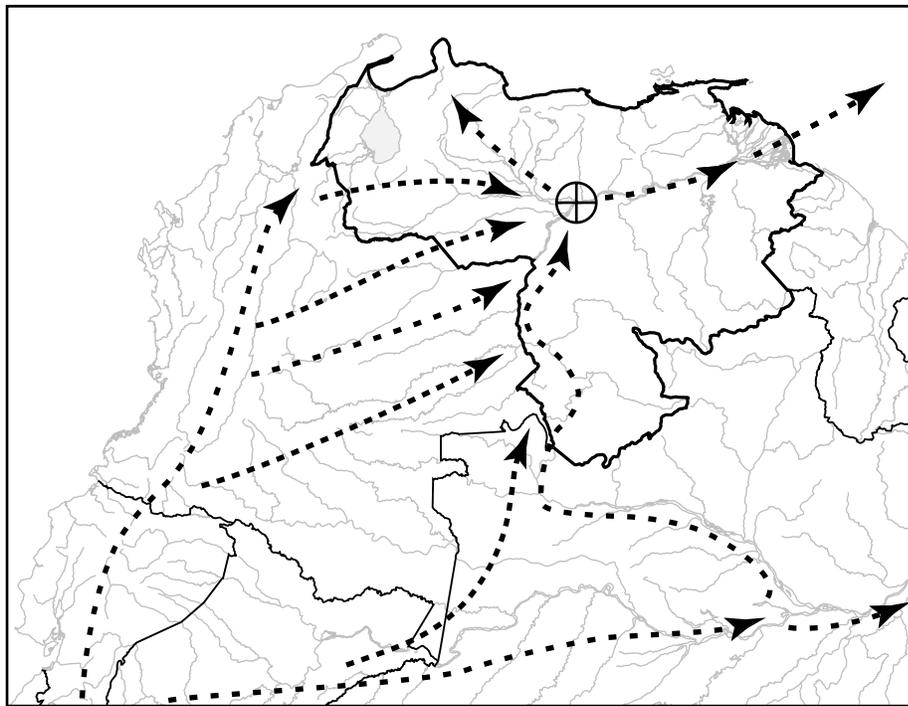


Figure 32. Multidirectional Andean model of initial Orinoco ceramics.

interregional eastern contacts between the sierra (or the montaña) and the lowlands. The intensification of contacts could have been part of a general movement of people due to an expansion of political, economic, or population pressures. If the spread of white-on-red decoration actually had the kind of drive, momentum, and endurance that expansion models suggest, it would be reasonable for the push to have come out of the mountains from different places and spread in different directions into the lowlands along several routes at one time. People with similar material attributes could have entered central or northern Amazonia at the about same time that they began to drift into the Venezuelan *llanos*, and then eventually converged along the Orinoco. Absolute dates for rock art, etc., are necessary to provide any kind of test for this model.

### **Coastal-Delta Model**

If Sanoja and Vargas (1983) are correct that Barranoid represents the earliest pottery, with expansion upstream, then Barranoid could be derived from traits and possibly people coming from Colombia to the west (Figure 33). At about the same time traits and/or people could come north up the coast from the Amazon mouth area, and the two waves could meet on the lower Orinoco as the beginning the Barranoid tradition. From here, the main ceramic series could spread upstream with its incised decoration. Continued expansion up the Apure and into the western *llanos* could bring the tradition into contact with Osoid groups with a painted pottery tradition. The painted tradition could influence a different development on the middle Orinoco, with both incising and painting expanding out from there. Barranoid would continue to influence the middle areas, and painting also would be expected to reach the lower river to some degree. At the same time this is going on, it is believed that the *cariapé* tradition

spread north from the Amazon and initiated the Nericagua tradition, which in turn spread minimally down the Orinoco.

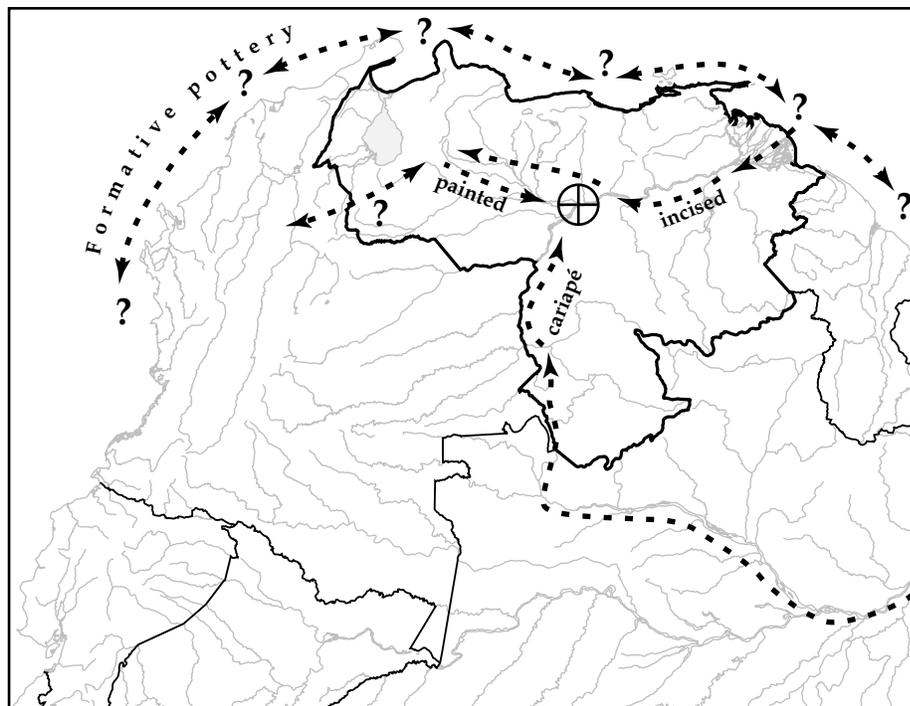


Figure 33. Coastal-Delta model of initial Orinoco ceramics.

## CHAPTER 9

# ETHNOGRAPHIC CONSIDERATIONS

### Local Indigenous Cultures

The moment of the European Invasion is fixed at nearly 500 years ago for this area (González Niño 1975), although reliable ethnographic information has only been available since about 1750. In 1532 Ordaz attempted to reach the upper Orinoco but failed. In 1639 Acuña discovered the Casiquiare, which drains from the Orinoco south into the Río Negro (Amazon drainage). In 1682 Fiol established the first mission at Atures, at the mouth of the Cataniapo river just above present-day Puerto Ayacucho. From that time on there was increased advance by Europeans, including slavery expeditions during the 1700's.

The area today is occupied by several indigenous groups who still maintain various levels of their traditional culture (Wilbert 1966; [Figure 3](#); [Table 19](#)). Most groups practice hunting, fishing, and collecting in concert with slash-and-burn agriculture based mostly on manioc cultivation and garden plots (Zent 1992). Shamanism is still important, especially in more remote villages. While a considerable amount of ethnographic work has been done among several groups, most information deals with subsistence, economy, health, demography, and kinship.

There is almost no published information on symbolism (Hernández 1992; Tavera-Acosta 1956; Vicariato 1988), art, or use of paint, and there is no

information from native sources on modern rock art or on attitudes toward, influences of, or uses of older rock art or rock art sites (see Scaramelli 1992; Tarble 1991). Although there is a constant concern to evaluate each indigenous group for authorship of the art, it appears that no people still paint in caves, and most interpretative information from modern groups seems to be problematic. No modern group is known to produce rock art today. Ethnographic data on general function and use of art have been recorded in nearby areas of Colombia (Reichel-Dolmatoff 1971, 1975), but the styles are so dissimilar that comparison between the two areas is difficult. With the current increasing interest in rock art interpretation, however, particularly by Scaramelli and me in the Puerto Ayacucho area (Scaramelli 1992; Scaramelli and Tarble 1993; Greer 1994, 1995) and other researchers in surrounding areas (de Valencia and Sujo 1987; Williams 1985), an increasing amount of relevant ethnographic information is expected.

Arawak	Caribe	Sáliva	Independent
Baniva	Mapoyo	Sáliva	Guahibo
Baré	Panare	Piaroa	Joti
Curripaco	Pemón	Maco	Puinave
Warekena	Yabarana	Yaruro/Pumé	Yanomamĩ
Piapoco	Ye'kuana	(prev. Atures)	

**Table 19.** Ethnic groups in and around the study area, by language family.  
 Piaroa sometimes is categorized as independent;  
 Maco is a dialect of Piaroa.

The main local indigenous groups mentioned in this paper are briefly listed below, with an indication of their present location, linguistic family, and cultural characteristics potentially pertinent to the study of local rock art. Groups are listed first by the most common name, followed in parenthesis by the term most commonly considered the best autodesignation. Other names and spelling

variations are listed as alternatives [Note: /æ/ refers to the “a” in English “cat”; no distinction is made here between /i/ and /i̯ /].

There is some disagreement over ethnic names. In this study I mainly use the primary common names (cf. Krute 1989:6). Popular names dominate older scientific papers, many modern works, most popular publications, and most Spanish language conversations in the country. What are supposedly emic-ethnic names are becoming more common in ethnographic articles although, in some cases, there is disagreement among Westerners over exactly what various terms refer to, or if they are correct. The literature is full of variations and alternatives to nearly all ethnic autodesignations. This seems particularly true for the Piaroa, the dominant group in the area.

### **Piaroa (Wóthuha)**

**Alternatives.** De'aruwa, De'áruwa, Deá'ru'wa, De'aruwæ, Dearuwa, Dëdë-yaruá, Deha'ruhan, Pearoa, Piaróa, Uhuottöja, Uhuöttöja, Uwóth<sup>h</sup>uha, Uwotjuja, Wathiha, Wo'tiheh, Wóthihã, Wot<sup>h</sup>ihæ, Wóthihæ, Wotiha, Wotuha, Wotjüjä (Anduze 1974:11; Coppens 1980:307; Overing and Kaplan 1988:318-320; Krute 1989:5; Zent 1992:50-51; Overing 1975:16-18; Krisólogo 1976:10, 13; Boglar 1972:62; and others)

**Linguistic Affiliation.** Sáliva, an independent language family, has two main subdivisions. The eastern group is formed by the Piaroa (with its various local dialects), the related Maco/Maku (Wirö) of the Ventuari drainage, and the now extinct Atures of the area just above Puerto Ayacucho. The eastern group occupy territory along the east side of the Orinoco (right bank) and east back up into the highlands from Puerto Ayacucho. The Sáliva and Pumé/Yaruro form most of the western branch, centered on the Meta river northwest of Puerto Ayacucho. At

least in early historic times, these western speakers also occupied the lower Meta and the Orinoco right bank from about the Guaviare river (above Puerto Ayacucho) down past the mouth of the Parguaza. Morey and Morey (1980) describe the Sáliva as occupying the entire area from the mouth of the Meta to the mouth of the Apure during historic times. Thus, the main western Sáliva overlapped with the eastern Piaroa branch. The histories of these two branches and the relation between them are not known, but they could represent the original, independent linguistic group in the area before the initial Arawak and Caribe immigrations (Overing and Kaplan 1988:320-321; Morey and Morey 1980; Rojas 1989; Zent 1992).

**Discussion.** This is one of the more numerous indigenous groups in southern Venezuela and occupies most of the territory of the present study. Earliest identification of the group here is questionable, and it may be that the group was known by a number of different designations. For instance, the Atures (for which the rapids at Puerto Ayacucho are named) appear to be either a Piaroa subgroup or other Sáliva speakers closely related to Piaroa but distinct from them (Tavera-Acosta 1907:5 believes Piaroa and Atures are simply different names applied to the same people). Since at least 1600 the Piaroa have been expanding and their territory changing, but it is believed that their homeland is in the general area of the upper Cuao and Marieta rivers. It is possible, however, that prehistorically they occupied the Parguaza drainage (with or without the Mapoyo), then during late protohistoric or early historic times abandoned that area and retreated into the less easily accessible Cuao-Marieta regions, only to begin their movement back into the Parguaza area again after about 1920. Because the Piaroa are so dominant in the accessible areas around Puerto Ayacucho, and due to their continued hunting-gathering lifestyle and heavy emphasis on shamanism, they

attract scientific and popular attention. Their geographic and cultural history is not clear, and there are conflicting opinions on these issues despite considerable attention in the anthropological literature (Anduze 1974; Boglar 1972; Coppens 1980; Costanzo 1977; Hernández 1992; Krisólogo 1976:10, 13; Krute 1989; Mansutti-Rodríguez 1986, 1990; Monod 1970; Overing 1975; Overing and Kaplan 1988; Rojas 1989; Zent 1992; see **Previous Study of the Piaroa**, below).

### **Mapoyo (Wánai)**

**Alternatives.** Babajæ, Mapoye (Zent 1992:53; Henley 1983).

**Linguistic Affiliation.** Cariban language family.

**Discussion.** This small group occupies the village of Palomo in the area of the Caripo and Villacoa rivers of Bolívar state, just north of the Parguaza river and in the northwest corner of the present inventory zone. Historically they occupied a somewhat larger area which extended into the Parguaza valley, at least along the right (north) bank. Until recent land disputes, the Piaroa and Mapoyo seem to have maintained a close relation, including intermarriage, frequent visits, participation in each other's ceremonies, and possibly the co-utilization of caves (Henley 1975, 1983; Perera 1992; Scaramelli, Tarble, and Perera 1993; Zent 1993).

### **Panare (E'ñapá)**

**Alternatives.** E'niapá, E'niepá.

**Linguistic Affiliation.** Cariban language family.

**Discussion.** This is a fairly large group at the northern end of the study area. They moved into this area in modern times and only recently expanded to the south side of the Suapure river (Dumont 1976). There are several villages, especially in the middle Orinoco tributary valleys of the Cuchivero, Suapure, and

Guaniamo rivers. They occupy both upland and lowland territory similar to the Piaroa, and their general approach to cave use for placement of the dead, beliefs associated with caves-dead-paintings, interaction with the geography of the region, and beliefs in the power of animal spirits are similar (Riley 1953a; Krisólogo 1965; Dumont 1976; Henley 1988; Valles 1993).

**Maquiritare** (Ye'kuana)

**Alternatives.** Yek'uana, Yekuana, Yecuana.

**Linguistic Affiliation.** Cariban language family.

**Discussion.** This large group occupies the upper Ventuari area valleys of the Caura, Paragua, Erebató, Ventuari, and Cunucunuma rivers, especially headwater areas in the *tepuy* (remnant mesa) country. Rock art is common throughout their region, and there are numerous painted caves, some with art styles similar to those in Piaroa country. No rock art in this area, however, has been studied. The headwaters of the Ventuari drainage are just over a well-traveled narrow pass east of the upper Parguaza and Cuao, and there was substantial contact between groups in these areas at least during the historic period (Arvelo 1974; Mansutti-Rodríguez 1986; de Civrieux 1980). The group now goes almost exclusively by their native name, Ye'kuana.

**Guahibo** (Hiwi)

**Alternatives.** Guajibo (most common), Guahivo, Guajivo, Uajiba, Goahibo, Guaiba, Guahiba, Guaiva, Goahivo, Guagibo, Jivi. According to Conaway (1984:9), some people include the closely related Cuiva (and its variant spellings).

**Linguistic Affiliation.** Independent language family.

**Discussion.** This group relatively recently expanded out of Colombia, from west and northwest of Puerto Ayacucho, and now is one of the major groups in the Puerto Ayacucho area (Metzger and Morey 1983; Vicariato 1988; Conaway 1984). They are culturally somewhat similar to the Piaroa (though more sedentary and acculturated) and occasionally interact closely with them (Metzger 1968; Anduze 1974). The Piaroa often characterize the Guahibo as *people of the savanna*, while the Piaroa think of themselves as *people of the forest* (*dueños de la selva*).

### **Previous Study of the Piaroa**

The study area coincides mostly with the present distribution of the Piaroa, the largest group in the immediate area (Wilbert 1958, 1966, 1972; Zent 1992:48-50), and some of the paintings may be related to their past. These people were here in early historic times and are still a major economic group. Surviving members of the independent Sáliva language family, of which the Piaroa are a part, are interspersed mostly around the edges of Arawak and Caribe speakers. Thus, it seems likely that the Piaroa were in the area before the Arawak expansion (Oliver 1989) and certainly before the Caribe invasion and early historic slavery expeditions (Morey and Morey 1980; Perera 1992). Their economy is based on hunting, foraging, and manioc horticulture both along the major and minor streams and back into interior areas, the same distribution as the pictographs. They also have distinctive body stamps (Figure 34) with designs not used by other local groups (Vicariato 1988; Hernández 1992; Valles 1993) but which are similar to early rock art designs (Greer 1994).

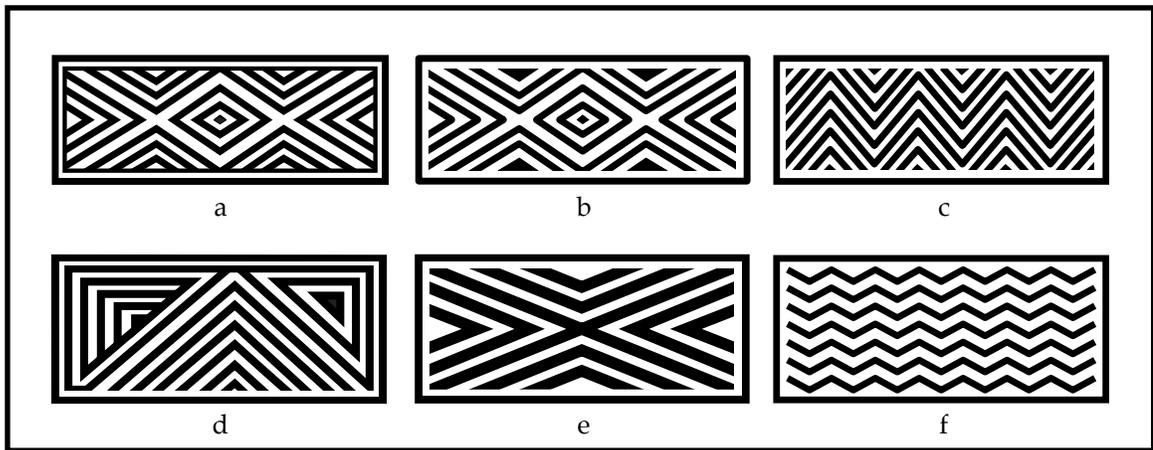


Figure 34. Piaroa body stamps.

The Piaroa are one of the most studied groups in Venezuela. They appear first to have been discussed by early missionaries, certainly by 1683 (Zent 1992:50) and more commonly after the mid-XVIII century. They continued to be the subject of early description and speculation through about 1800. From this early work varying amounts are known about their distribution, beliefs, mythology, and other aspects of their culture (Gumilla 1944; Bueno 1965).

Modern geographical exploration of the upper Orinoco began about 1800 with Humboldt's classic voyage. Similar expeditions continued throughout the century and into the early 1900's, with resulting ethnographic accounts of the Piaroa and surrounding groups. These explorers provided details on the use of caves for burial and noted that the rock art apparently was not done by modern groups. They also provided details that today can be used in historical perspective and may eventually help explain some of the cave paintings and other forms of art and decoration (Humboldt 1821, 1956; Crevaux 1988; Chaffanjon 1986; Koch-Grünberg 1907; Matos 1912).

Increased attention in the mid-1900's offered more detailed descriptions and in-depth information of all aspects of culture and health. Information on burial

customs exists, but there is no information on the relation between the Piaroa and rock art (Cruxent 1947; Cruxent and Kamen-Kaye 1949; Grelier 1953, 1957a; Wilbert 1958; Gheerbrant 1954:84-135).

Since about 1960 there appear to be an increasing number of studies on the Piaroa, with numerous specialty studies of cultural composition, religion, beliefs, economy, crafts, ecology, inter-tribal trade, and attitudes and customs associated with the dead (Wilbert 1966, 1972; Costanzo 1977; Monod 1970; Anduze 1974; Eden 1974; Overing 1975; Morey and Morey 1980; Vicariato 1988; Overing and Kaplan 1988; Krute 1989; Mansutti-Rodríguez 1990; Melnyk 1991; Zent 1992; Krisólogo 1976). Few studies have dealt in detail with traditional body decoration (Hernández 1992; Overing and Kaplan 1988; Anduze 1974), and nobody has been able to associate these designs with cave paintings. A few studies (mostly by Scaramelli and me) have considered modern beliefs and interpretations relative to rock art (esp. Scaramelli 1992; also González 1980 and 1986 for the Casiquiare area). Even so, there presently seems to be almost no evidence to relate modern cultural beliefs and practices with rock art.

### **Ethnic Affiliation of the Art**

The area containing paintings has been occupied during the historic period by a number of indigenous groups representing Arawak, Caribe, and independent language families. These people include the Piaroa, Atures, Maipures (?), Baniva, Puinabe, Sáliva, Chiricoa, Panare, Ye'kuana, Maco, Guahibo, Mapoyo, Curricapo, Yanomamĩ, and others (Vicariato 1988; [Table 19](#)). All seem to share some degree of uniformity in their modern paint technology and use, and some paintings may be attributable to early relatives of almost any of these people, or others now

extinct. Paintings extend over a larger geographic area, well into almost all parts of southern Venezuela and into areas occupied by almost all indigenous groups.

The immediate study area around Puerto Ayacucho is the center of the present distribution of Piaroa, and this has lead observers to assume an inherent relation between paintings and the Piaroa (Christie-Shults 1992). Although it is possible that at least some pictographs within the present inventory zone are attributable to the Piaroa, there presently are no concrete data to support such an association. All available ethnographic evidence and everything presently being collected by Scaramelli, ethnographer Stanford Zent (personal communication, 1992-93), and me indicate that the Piaroa have not painted caves any time during the historic period, and the Piaroa now believe they never painted these sites. A knowledgeable Puerto Ayacucho resident in contact with the Piaroa for several years told me in 1990 and 1992 that he knew of no Piaroa who had ever painted in a cave and said that Piaroa on the Parguaza river had told him that they had never painted in caves — they attributed the paintings to prior people in the area. Other *criollo* guides and Piaroa informants (Parguaza, Cataniapo, and Sipapo rivers) have told both Scaramelli and me the same — the Piaroa do not paint in caves, and they never have. Some of the more traditional Piaroa have suggested that the art was created in ancient times by mythical beings (Franz Scaramelli, personal communication 1991-94; Stanford Zent, personal communication 1992) or by people preceding the Piaroa in this area (see below).

Generally, Piaroa along the Parguaza river state off-handedly that the Mapoyo painted the caves — an informal reference apparently not so much to relatives of modern Mapoyo just to the north, but rather a reference to people who used to be in this area and are now gone. The confusion by archeologists has been that Piaroa often use the term *Mapoyo* indiscriminantly for unspecified people who

used to be here, a term based generally on historical fact since the Mapoyo used to live in the Parguaza valley (Perera 1992; Scaramelli, Tarble, and Perera 1993; Mansutti-Rodríguez 1990).

In another similar — and somewhat questionable — bit of information, a Piaroa shaman on the Parguaza told me in 1991, during careful questioning, that the paintings were done by a people who seemed to be his general concept of “ancestors.” They were not Piaroa, not paleo-Piaroa, and not related to Piaroa; they were a different race. He referred to them as the Parenque (or Palenque), the previous people who used to live in the area and no longer live here (again, the general concept of unrelated ancestor). He described them as paleo-Mapoyo or old relatives to the Mapoyo, the “old people” during “Conquest times” (the standard reference to “long ago before our memories”) — explicitly not Mapoyo but closely related to Mapoyo (presumably this would be equivalent to some unspecified Caribe speaking group). His *Parenque* term may be a corruption of Spanish *pariente* for “kinfolk” or “relative,” or he could have been referring to the Palenque Caribe of the lower Orinoco. The Mapoyo also are Cariban speakers. There is no way to evaluate further what this individual was referring to or how he came to such information.

Attempts have been made recently to associate paintings with the early Mapoyo (Scaramelli 1992; Scaramelli and Tarble 1993). These attempts have been based mostly on comments along the Parguaza that the “Mapoyo” painted the caves, plus the fact that the Mapoyo ranged into the Parguaza valley during early historic times. The suggestions make sense, but so far they are not supported by evidence. A possible exception is the suggested linking of historic Period 7 figures at Cueva Pintada (JG-52) with XVIII century Mapoyo.

Attempts to relate paintings to specific ethnic groups have been based on the co-occurrence of where groups live now and the locations of painted sites, and the use of painted caves as cemeteries. Many groups here use caves for burial, but there is no known relation between rock art and human burials (or any other ritual activity in caves). Most groups have myths and beliefs associated with caves and hills (e.g., Perera 1991), and even with some petroglyphs along the rivers and a couple of the northern caves (Perera 1988a; González 1980), but no references to people actually painting in caves.

It is therefore clear that it is presently impossible to identify ethnic origins of the paintings. While there is a possibility that the Piaroa may have been responsible for some paintings, it is impossible to assign paintings to that group. The Piaroa have occupied the same area as the parietal art, as have many others according to historical documents, at least since about 1600 A.D.

Scaramelli has shown the importance of caves and pictographs in Piaroa myths; and several geometric motifs, animals, and dancing figures have been interpreted as sacred beings or as representing ritual activity or paraphernalia by Piaroa informants in the Parguaza area (Scaramelli 1992). However, caution is called for in the acceptance of such explanation from informants who are post-1940 immigrants to the Parguaza (or perhaps back into the area if they previously left or were driven out; also see Mansutti-Rodríguez 1990).

An important point is that, regardless of authorship, interpretation or reinterpretation of paintings is an essential element of Piaroa culture, regardless of their relationship to the original artist. It is likely that in many cases in the Orinoco region, pre-existing rock paintings and petroglyphs are incorporated into the cosmovision and myths of groups entering into a new area in such a way

as to reinforce territorial rights through the reenactment of cosmogenesis and the establishment of sacred landmarks such as mountain peaks, rapids, and caves. It is possible that either casual or more formal interpretations of the art have now become accepted as historical fact. This may be an example of the more general case in which ideas and interpretations become repeated, and thereby more formalized until they become accepted within the oral tradition of the group. To state this another way: Thoughts become beliefs when people commit to them with their soul; and, when ideas are repeated, formalized, and accepted by the community, they become cultural beliefs and an integral part of the culture history of the group.

Painted sites now are considered important, but it is not clear which came first, the paintings or the site's importance. Were paintings placed in a cave because the cave was an important place, or is the cave now an important place because it contains old paintings (and maybe therefore was continuously repainted)?

Regarding ethnic origin, there are essentially four possible ethnic affiliations for varying portions of the art — (1) Piaroa, (2) Mapoyo, (3) other previous now-unrecognized groups, or (4) multi-ethnic. Association presently is impossible to evaluate, and there appear to be both support for and argument against each explanation. There can be no question that in total the art is multi-ethnic, as indicated by its wide distribution within the entire Orinoco drainage and beyond. Cultural geographic boundaries for the art, with its seemingly long temporal range, however, are presently unknown, though perhaps study of rock art styles could help define such boundaries. Thus, we are unable to evaluate ethnic affiliation of the art, or explanatory models that relate kinds of rock art (e.g., paintings and petroglyphs) with each other and with identifiable indigenous groups.

Particularly relevant in this regard is the possibility that some paintings may be attributable to early Sáliva speakers, and that these groups changed in character and geographic range in response to immigrant encroachments or major invasions, such as by Arawak, Caribe, and Europeans. Assuming an early Sáliva base population, the kinds of cultural diversity likely among Sáliva groups should be considered. It is reasonable that the Sáliva may have consisted both of lowland chiefdoms involved in long distance trade and taking of slaves, as well as hunter-collectors living in the forest and back country highlands. Likewise, it is possible that proto-Piaroa once were organized as a chiefdom and more recently, perhaps in response to Caribe or European invasion, become more of a refuge group. It is not known what changes occurred with proto-Piaroa, and there is no evidence to indicate how foraging groups might be affected by linguistically related protohistoric chiefdoms taking slaves from surrounding weaker groups. We do know that larger communities along some major tributaries of the middle Orinoco engaged in various forms of warfare of which slavery was one expression. We do not know, however, how many early Sáliva groups or villages, if any, were engaged in reciprocal warfare or slave-taking although it would be reasonable for them to have done so, considering the presence of formalized conflict among political factions on the middle Orinoco during late prehistoric and protohistoric times.

The problem is not simply trying to retrodict the kind and degree of cultural change in response to overwhelming pressures, such as slavery (as with the Caribe or Europeans) or a campaign of cultural and ideological change (as with the Christian church). The problem of understanding the relation of past cultures to rock art also involves the cultural makeup of the region, particularly the possible symbiotic (or otherwise) relation between small village foragers (with

part-time agriculture) and adjacent complex agricultural chiefdoms. The relations and changing cultural characteristics hinted at here may be discernible somehow — someday — in the rock art. Future research here and in surrounding areas should contemplate ways to discern such information and test possible interpretations. Until then, we can only continue to question Piaroa, Mapoyo, Panare, Guahibo, Ye'kuana, and others who today occupy the area and who may be able to contribute their views on what the paintings might mean and what social function they might represent. No one group presently seems to have the necessary answers, and the accuracy and applicability of their information is difficult to evaluate.

#### **Applying Inferred Culture Change to Affiliation and Dating of Rock Art**

General cultural trends and responses in other areas have implications for dating the Orinoco materials. Specifically, it is assumed that responses to cultural and social pressures are likely reflected in the rock art, particularly evident in the latest styles.

The initial European contact period in the New World marked a dramatic population decline as the result of introduced diseases, as well as European induced intentional population reduction through slavery and slaughter. In southeastern North America (e.g., the lower Mississippi River area to Florida) this seems to have marked the end of permanent settlement systems and stable territorial boundaries that had become firmly established and formalized at least by Mississippian times, and the beginning of more haphazard movements of the small remaining groups of people. As the large towns dwindled in size or disappeared completely, the remaining people changed to more of a pattern of movement and immigration (Smith 1987; Milanich 1992).

This process is essentially the same as in Venezuela. Probably before the European invasion resident populations were firmly established geographically, with defined, recognized, and regionally accepted territorial boundaries, and with formal trade networks among territories (Morey and Morey 1975; Mansutti 1986). Extreme population reduction, beginning probably at the moment of European contact, would have resulted in the remaining societies beginning a more or less directed emigration pattern of shifting ethnic groups. Some moving groups would flow into empty, presumably evacuated areas, but the movements of these and other people throughout the region would result in a kind of directional energy movement or flow. Subsequent movements would tend to move in concert with that energy flow. The process is best exemplified by the forward pressures resulting when a moving group pushes into a resident group. This necessitates a compensation due to incompatibility between the two groups, minor or major differences on any level between the two, resulting population pressure on the carrying capacity of the area, or any number of other reasons. The result would be that either, (1) the trajectory of the incoming group would tend to shear away from the resident group, (2) the resident group would begin (or continue) to move away from the incoming group, or (3) both groups would tend to move in different directions. As those two groups continued to move, they would meet other groups, and the process would be continue. At the same time, any areas left temporarily vacant by any mobile groups in this sense would act as vacuums to be filled by other groups (e.g., from group immigration, expansion, or fissioning). This process is one of social convection, much like liquid or gaseous convection currents in physics.

Social convection is obvious in eastern North America during the early European colonial period. As Europeans moved in, they pressured resident

groups to move westward. Those groups, in turn, created pressure for other resident groups in their path to move also. On the Northern Plains, the Sioux continued the process in their forays further west. The Shoshone did the same from the west in their move through the Great Basin and into the Northwestern Plains, and also with their southern branch as the Comanche moved southward into Mexico. The same is true for the Blackfeet of the Great Lakes area as they moved southwestward into southern Alberta, Montana, and Wyoming, pushing people before them and generally upsetting what until then appears to have been a fairly resident population. Such must also have been the response to massive expansion efforts out of central Mexico as military and immigration pressures increased to the north, resulting in social convections across northern Mexico. The process, of course, is a historically documented fact and seems obviously basic to biological history, not just for humans.

The same process in Amazonas was undoubtedly accelerated by early historic population decline. Before this time, territories were relatively stable, but the early period of European contact marks a dramatic reduction of social geographical stability, and this is the moment when groups began massive movements resulting in the ethnic territorial confusion of the period from about 1550 to the present. The historic period generally is marked by groups moving and pushing each other through a continually changing pattern of territorial occupancy (Vicariato 1988; Mansutti 1990). This expansionist movement continues today with the Piaroa moving into Mapoyo and Ye'kuana territories, and the Yanomami constantly pushing on the Ye'kuana from the southeast and now moving further down the Orinoco.

An important result of the drastic population reduction must have been the loss of key members of the society, such as religious leaders, shamans, and

healers, resulting in the loss of much traditional knowledge. This would have affected belief systems, expression of those beliefs (such as the conduct of ceremonies and the use of rock art within ritual behavior), knowledge of traditional mythology, and probably the people's view of culture history. It is my contention that, for at least most Amazonas groups, Creation Time was redefined as beginning during this period, or probably about 400 years ago. Probably many of the ancestor beings, their names, personalities, characteristics, and relations with other beings remained mostly intact, and some of the basic stories may have remained mostly unchanged (such as the story of the Tree of Life), but places and times of past events probably changed. New myths, today often attributed to Creation Time by their respective ethnic groups, were probably introduced during this period (such as the Mapoyo story of group suicide; Perera 1992). Zucchi and her team, Silvia Vidal and Omar González, believe that oral history can contribute information on early population movements and other matters, but even their information seems best viewed as having gone through major transformations during the early historic period (Zucchi 1991a, 1991b, and references cited therein).

I would guess that social institutions, burial practices, and land use were also affected by population reduction, threat of disease, and the fact that everyone around them was dying (cf. Perera 1982). A similar situation of responsive group emigration was described in the mid-1800's when Indians threatened by invading epidemics left their traditional resident areas near the major rivers and again retreated into back-country highlands for cultural isolation (Brett 1868). The same probably happened on the middle and upper Orinoco.

Thus, during the initial epidemics and slavery expeditions of the early historic period, resident groups may have left their riverside centers and retreated into

the hinterland uplands at the forecast of potential or certain threat to their existence. If so, the distribution of ethnic groups during the XVII and XVIII centuries probably was not representative of the pre-Contact period. Proposed early modern ethnic distributions (e.g., Mansutti 1990) are based entirely on the few recordings of the often questionable interpreted observations and solicited names by a few Spanish priests. It is no wonder that there is uncertainty concerning what groups were where, and when; indeed, it is remarkable that today we can make any sense out of the reported situation at all.

There is therefore no firm evidence that the recent Piaroa movement into the Puerto Ayacucho and Parguaza areas, or the previous Mapoyo partial occupancy of parts of the Parguaza and more recent restriction to the Palomo area of the Villacoa, is indicative of where either of these groups (or any others) lived during pre-Contact times. Certainly the proto-Sáliva occupied much of the area of these paintings during early historic times (Morey and Morey 1980). Since cave paintings seemingly are mostly prehistoric, possible links between the paintings and modern ethnic groups are uncertain. Enough simply is not known about the early distribution of these groups to accept or deny any possible relation with the art.

An important question, however, is how early historic social, religious, psychological, and territorial degrading — and possible social and geographic mixing — of local groups might be manifest in the rock art. Without any good ethnographic comparative evidence, I would suggest at least four reasonable possibilities: (1) there might be a change in technology, such as the kinds of paints used or how those paints were prepared; (2) the art would not be as well done as previously, such as perhaps less careful manner or less organization in the art; (3) there would be new elements introduced into the art while still

maintaining some of the basic foundation and complexity of the previous art; and (4) there would be more diversity in the art, both in content and in manner of execution, possibly as a reflection of an increased number of diverse groups occupying the same region and painting in the same sites, though presumably at different times.

All four factors are consistent with characteristics of the art in this study beginning in Period 5 and becoming manifest in Period 6. These changes generally mirror less cohesion in the art:

- change in the kinds of paints and colors used — manifested as the change to clay paints and dark resins;
- increased diversity in kinds of paints used — best exemplified by the many different colors;
- change in manner of presentation — exemplified by what appears to be less care in the painting;
- continuation of some basic motifs — seemingly representing a continuation of some of the basic ideology or mythology;
- increased diversity in how the painting was done and in what was being painted — exemplified by the use of different color combinations, use of negative designs, different approach to background colors, and introduction of new complex motifs.

Although these are unmeasured general observations, they suggest that characteristics of the latest paintings may be responses to similar kinds of social problems as occurred during the early historic period. This could suggest that terminal Arauquinoid, with its Caribe intensification, may have had some of the

same problems as during the historic European period and that at least part of Period 6 could have continued after 1550 or so (here as Period 7). Such a date is in agreement with the historic church and building pictured at Cueva Pintada (JG-52) in what appears to be late Period 6 paint technology.

### **Modern Pigments and Paints**

Although no indigenous groups are known to paint in caves, paint is still produced and utilized for other forms of decoration. Some prepared paints and paint products are mentioned briefly in the Glossary. The following discussion of materials, associated production methods, and related use and meaning indicates the inconsistency and diversity of information presently available. It begins with summaries by researcher (my comments mostly are given in brackets), followed by my field observations. Some information on materials is summarized in [Table 20](#).

Most indigenous groups use paint, especially for body decoration. Painting is also done on manioc grater boards and occasionally arrow points, other weapons, and other utensils. Body painting seems not to be limited by gender or age, although some literature attributes the application to females (such statements may be due to inadequate questioning). The same literature also reports that paints are made by women, although photographs of work in progress clearly show production is not limited by gender. Colors mostly are yellow, various shades of red (including yellow, orange, light to dark red, and deep bright red), white, black, brown, and reddish-brown.<sup>45</sup> Most paint is based

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<sup>45</sup> The Yanomamĩ produce a bright blue, highly liquid paint with very long duration adherence on human skin. I have been told in those areas that it is used on special occasions (such as during inter-village warfare) and is not used for casual decoration. I have no information on its use downstream from Puerto Ayacucho. Brett (1968:140) also mentions the use of blue as a facial paint in the Guianas area (which for him extended almost to the middle Orinoco) but gives no information on its manufacture.

on the cooking of mixtures of one or more colorants with at least one binder, such as palm nut oil or a resin. There is almost no information on the use of extenders. Very little information also is available on differential use of colors or paints by gender, age, application method, design form, association with social functions, or general purpose or meaning. There is enough information,

Scientific	Name	Part	Notes
<i>Arrabidea chica</i>	Spanish <i>chica</i>	leaves	mixed with <i>caraña</i> to produce deep bright red <i>k'eräü</i>
<i>Bixa orellana</i>	Spanish <i>onoto</i> , <i>achiote</i> English <i>annoto</i> , <i>anotto</i> , <i>annatto</i> Piaroa <i>mañu'ka</i> , <i>mujú</i> , <i>muñi</i> , etc.	seeds	light orange to dark red, yellow
<i>Protium carana</i> <i>Protium carana</i> <i>Bursera simaruba</i>	Spanish <i>caraña</i> Piaroa <i>karaña</i> , <i>meruä</i>	resin	orangish-brown to black; or mixed with pigments for added color
<i>Jessenia bataua</i>	Spanish <i>aceite de seje</i>	seeds	this oil binder is mixed with various pigments
?	Spanish <i>peremán</i> Piaroa <i>manika</i>	resin	black; reddish-black when mixed with <i>onoto</i>
<i>Couma macrocarpa</i>	Spanish <i>pendare</i> Piaroa <i>ufa</i>	resin	black
<i>Genipa</i> sp.	Spanish <i>caruto</i>	fruit	bluish-black
?	English charcoal	sticks	black
?	Spanish (?) <i>purüma</i>		
?	Spanish <i>mora</i>		
kaolinite <sup>46</sup>	Spanish <i>redaca</i> Spanish <i>yeso</i> (English gypsum)	earth	white to cream; from exposed river bank layers at Tierra Blanca on the Parguaza

Table 20. Modern paint materials.

<sup>46</sup> A sample of this material was identified in 1995 at the Geology Department, University of Missouri–Columbia, by Louis Ross, under the coordination of Dr. A. G. Unklesbay. Optical microscope review shows an appearance similar to gypsum, with small orange stains scattered throughout. XRay Diffraction analysis (XRD), used to identify the mineral, indicates kaolinite with inclusions of quartz; it is a silicon oxide, predominantly quartz, with a trace of feldspar.

however, to suggest strongly that body painting in the past was not casual and without meaning, and there appear once to have been formal rules of use. No association between body painting and cave art is known, but a strong relation between the two forms seems likely, especially considering various similarities.

### **Published Sources**<sup>47</sup>

**Anduze** (1974:52) summarizes information on the Piaroa. To paint themselves, women take the sap of *cupi* and other shrubs yielding yellow resin and mix it with *onoto*. The final viscous product is called *ke-rau* and is kept in cane containers. This paint is applied with small stick applicators to the arms, legs, and faces, and it remains as if tattooed. Variable facial designs, according to one's wishes, are applied with a thin stick with a frayed end like a brush [*puya*]. Paint containers are called *kerautuwawoki* [*k'eräu* container] and the small stick brushes are called *maruwakewawada*, whose name implies that the paint is mixed with *caraña* [Piaroa *meruä*]. The paint adheres to the skin for many days. Anduze mentions that on rare occasions he has seen tattooed Piaroa.

**Hernández** (1992:144) collected data from the Piaroa village of Santa Fe on the Parguaza. She summarizes information from Humboldt (1985 III:353-355) that the following paints were in use in 1800 on the Orinoco: *onoto* (common use), *chica* (more festive use), *purüma*, and *mora*. All body paints used today on the Parguaza are made by women, but males and females of all ages today use body painting. Colors include white, red, yellow, and reddish-brown, prepared as shown in [Table 21](#).

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<sup>47</sup> In this section, entries in brackets are my translations, explanations, and comments.

Color	Preparation
white	Extract the sap of the <i>pendare</i> tree and mix with ashes <sup>48</sup> ; put in the sun to dry.
red	Screen <i>onoto</i> seeds on a basket tray and dry; grind up and mix with water into a paste; dry in the sun.
yellow	Dry <i>onoto</i> seeds on a basket tray; grind and mix with water and a <u>generous</u> amount of <i>seje</i> oil. The amount of oil added to the paste determines color variation, from yellow to reddish brown.
reddish-brown ( <i>caraña</i> )	Dry <i>onoto</i> seeds on a basket tray (as with red-yellow colorant); then grind and mix with water and a <u>minimal</u> amount of <i>seje</i> oil. <sup>49</sup>

**Table 21.** Paint color preparation according to Hernández (1992).

**Boglar** (1976) studied Piaroa intensively but has published very little on the use of paint. In discussing the *warime* ritual and the dominance of specific animal symbolism, he mentions the making of masks for the participants. Masks are formed, in accordance with symbolism, by putting together different covers of bark, wax, and paint on top of one another. The symbolism for the wild bee and its nest culminates with the final addition of white earth-paint (intended “to alienate” like the bee) which emphasizes the presence of the spiritual being in the mask.

**Mansutti-Rodríguez** (1986) discusses trade materials as part of his overall study of the Piaroa. Products of regional trade include several items relating to

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<sup>48</sup> Ashes, as specified by Hernández, are those from the *budare* — the enclosed stove-like stand on which large manioc cakes are cooked. The ashes I have observed are very fine and powdery.

<sup>49</sup> My interviews with two people in Santa Fe indicate that now only *onoto* is used, although *chica* was used in the past, particularly or solely for women. The information was not checked, and reliability is uncertain. However, Hernández appears to be in agreement since she lists the reddish-brown paint as being made up of *onoto* (seeds) and does not mention *chica* (leaves). She is in error, however, that this is *caraña* (a resin) and may be confusing it with *k'eräü*. On the other hand, she may have observed the processing of *caraña* (although she does not mention the resin) during which *onoto* was added for color and *seje* oil was added for texture and binding, both common practices. Yanomamí at El Cejal have told me that the dark red *k'eräü* color can be achieved by special processing of *onoto* mixtures. This processing may be substituted for *chica* at Santa Fe.

the use or production of paint: *peremán*, *pendare*, manioc graters, *pintaderas*, *onoto*, *caraña*, *chica con caraña* (*k'eräü*), and gypsum [kaolinite].

- *Peremán* is a vegetable resin with multiple uses. It is used to “paint” blowgun darts (to make them faster) and as glue for various purposes. It has a reddish color that it acquires from its mixture with *onoto*. [There is no mention that it was used as paint.]

- *Pendare* is a kind of glue used in trapping birds. It is extensively used throughout Piaroa territory, but it is not found naturally on the Parguaza. [There is no mention that it was used as paint.]

- Manioc graters (*rallo para yuca*) are traded within the territory. The Piaroa grater has black stones and is painted in geometric designs with red *pendare*. [Mansutti’s photograph looks like the designs are black on a white background, with white concentric V-shaped designs like on Piaroa body stamps.<sup>50</sup>] Ye'kuana boards have white stones and are covered with black *pendare*; decorative areas at both ends are painted with zoomorphic figures.

- *Pintaderas* are made by men and are used by men and women. Those pictured (his p. 31) look like usual Piaroa designs, but one with carved squares looks very similar to Panare stamp designs.

- *Onoto* is widely grown by all groups. Women process the paint mixture and prepare large balls of the paste.

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<sup>50</sup> Graters at the Ethnographic Museum in Puerto Ayacucho appear to be similarly painted with a dark *pendare*-like material with *onoto* mixed in to give it a reddish tint. Others that I have observed from La Grulla to Atures to Pozón are similar.

- *Caraña* is a crystallized resin with an agreeable odor. It is mixed with *chica* to make a pigment with which people paint themselves. They also burn *caraña* as an air freshener, like incense, to calm down upset people and rude children.

- *Chica* and *caraña* mixture (Piaroa *k'eräu*) is prepared and widely traded as a paint. Gilij (1965, I:200) mentioned in 1780 that the Piaroa make a red paint from *chica*. Ten years later in 1800 R. Bueno (1965:136) observed that the Piaroa produce paint balls which form a good part of the commerce between Orinoco groups. The Piaroa process *chica* leaves and add *caraña*, an aromatic resin, to form a nice-smelling dark red paint mixture used for painting one's face and body. Morey and Morey (1975) identified *chica* as *Arrabidea chica*, whose leaves are crushed and boiled until the resulting fluid has acquired the desired consistency and color. The rich red pigment is the *kereu* (*k'eräu*) mentioned by the chroniclers and results from the combination of *chica* with *caraña* resin.

- Gypsum (*yeso*) is used to whiten *guayucos* (their clothes). It is attained on the lower Autana and the lower Parguaza [analysis shows the Parguaza material to be kaolinite].

**Overing and Kaplan** (1988:339), writing about Piaroa just south of Puerto Ayacucho, indicate that both men and women use an intense red paint called *k'eräu* to paint the face with *pintaderas*. The paint is made from the leaves of a vine that are dried in the sun and then pulverized. Before applying the paint it is mixed with a small amount of *seje* palm oil, black resin (*meruä*) [which Vicariato 1988 lists as *caraña*<sup>51</sup>], and *onoto*. [The result is a mixture of *chica*, *onoto*, *caraña*, and *seje* oil which together is called *k'eräu*.] Traditionally both men and women

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<sup>51</sup> Auxiliary information from the original author is given in parenthesis. My comments are in brackets.

paint themselves with cultivated *onoto* (*muñi*); designs are distinct between men and women. Women also place stamped designs on their legs and arms with *pintaderas* using black resin [*caraña*].

**Zent** (1992) studied Piaroa economy on the upper Cua. Plants which he indicates are related to the production of paint are listed in [Table 22](#).

Scientific	Name	Piaroa	Part	Notes	Pg
<i>Arrabidaea chica</i>	<i>chica</i>	<i>k'eräu</i>		dye	195
<i>Bixa orellana</i>	<i>onoto</i>	<i>mihu</i>		dye	195
<i>Byrsonima crista</i>		<i>dira</i>	bark	dye additive	232
<i>Couma macrocarpa</i>	<i>pendare</i>	<i>up ä</i>	sap	paint additive	231
<i>Miconia dispar</i>		<i>tuäka dau</i>	sap	dye	232
<i>Myrcia</i> sp.		<i>bare kumädi</i>	bark	dye	233
unidentified		<i>muwi</i>	bark	dye additive	232
unidentified		<i>woibä</i>	sap	dye additive	233
unidentified		<i>hicu ukä sari</i>	leaf	dye additive	233
unidentified		<i>kwo dau</i>	sap	dye	233

**Table 22.** Plants associated with Piaroa dyes, from Zent (1992).

**Vicariato** (1988:79, 213, 220) indicates that *caraña* (*Protyum carana*) and *onoto* (*Bixa orellana*) are used in Amazonas. The Piaroa use 'k'eräu (a mixture of *onoto* with *caraña*) with their *pintaderas*. The Ye'kuana use a mixture of *onoto* and an unspecified resin.

**Cruzent** (1946) reports on the paintings at Casa de Piedra [Cerro Iguanitas 1 and 2, JG-1 and JG-2] on the Parguaza river. He mentions that some of the red paintings could be a composition of *chica* (*Arrabidea chica*) mixed with *caraña* (*Bursera simaruba*), the mixture that is used today with wooden stamps for body decoration. Other paintings that combine red and white are possibly made with an ochre clay (*una arcilla ocrosa*) known locally as *redaca*, which occurs in the

banks of the Parguaza and which the Piaroa use as soap to whiten their *guayucos*. This information also is summarized by Sujo (1975:742).

**Cruzent** (1955) mentions a site on the Cunucunuma river, just off the upper Orinoco, where he observed a petroglyph block fallen over, with figures on the underside. When the block was tilted up, it was found that the petroglyphs had been enhanced with *onoto* paint and *caraña*, and remnants of those materials were still in the grooves. He lists *caraña* as a vegetable resin extracted from *Bursera simaruba* and mentions that it had special magical as well as medicinal significance to residents of the Orinoco country. This information is summarized by Sujo (de Valencia and Sujo 1987:88).

**Valles** (1993) presents detailed information on Panare use of paint at the villages of Colorado and Las Bateas on the Suapure river at the north end of the survey area. Paints currently used are *onoto*, *caruto*, and *caraña*, and to a lesser degree charcoal alone or combined with *caruto*. Valles sees a slight difference in use of the various materials according to the kind of design to be painted, the use of *pintaderas* or not, gender, the kind of activity, or importance of the event for which the painting is done.

- *Onoto* (*Bixa orellana*). Occurs all year long but is most abundant in the period between the rainy and dry seasons, or August–October. The seeds are extracted from the pod and are sundried, then soaked and sifted to release the reddish pigment they contain. This liquid is mixed with oil and pounded corn grains, yuca, or grated plantain, which are used as thickening agents. This paste is boiled for hours, with constant stirring. Once dry, it is kneaded to form balls (called *pelotas*) and then sundried. The entire process is done by women and

children. The *onoto* ball is sometimes used for direct application of paint, either dry or mixed with water or saliva as necessary.

- *Caruto* (*Genipa* sp.). Immature fruits from the *caruto* tree are collected to make bluish-black pigment. These look like a very small white fruit in the middle of bright, dark green leaves. The fruit's pulp is separated from its peel, grated or teeth-crushed, and then mixed with charcoal and small amounts of water. This paint can be used 24-48 hours, though its effect on skin can last up to 10 days.

- *Caraña* (*Protium carana*). The resin of the *caraña* tree is extracted by making linear, diagonal incisions on the tree trunk with a knife or machete. Due to its viscosity, the resin takes 2-5 days to flow an amount sufficient to be collected. Of mentholated smell and medicinal effect, it can be applied directly on the skin without further preparation, though oil is sometimes added to make it more fluid. Its color, once applied and dry on the body, is between orange and brown. It possesses the quality of adhering to the body and has a slight volume [i.e., it is thick] when used for stippled designs. [In other areas of his discussions on designs, especially those used by women, he mentions that *caraña* mostly is placed as stippling, or as dot patterns, essentially the same as my Cerro Pintado sites. This kind of decoration compares favorably with late Arauquinoid and Valloid ceramic decoration.]

- *Pintaderas*. *Onoto* and more commonly *caruto* are used on stamps. Men use stamp designs that are square or rectangular and are variable in size, depending on what part of the body they are to be applied. Women use stamp designs that are smaller, circular, and of more uniform size.

- *Puyas*. A small, more or less pointed stick is also used for application of *caruto* and *caraña*. For *caruto*, sometimes the end of the stick is covered with a

cotton swab [from the locally grown cotton tree] to facilitate application of the paint. Blowgun darts and fingers are sometimes used as *puyas*.

**Smole** (1976) describes plant uses of the Yanomamĩ of the Parima area of the upper Orinoco east of La Esmeralda. *Onoto* comes from a small cultivated tree (pp. 121-122). The crushed seeds provide a fragrant red coloring applied freely to the body, baskets, arrowheads, and ornaments. Color can be varied from light pink to dark purple by diluting with water or adding other ingredients such as wood ashes. At least one, unidentified species of tree is scarified to produce a resin (“oil”) which is mixed with *onoto* paint (pp. 171-172). An unspecified aromatic resin [presumably *caraña*] is collected in solidified form and is used for starting fires. In general, Smole’s information is not particularly complete.

**Zerries and Schuster** (1974) present an impressive study of an upper Orinoco Yanomamĩ village just southeast of La Esmeralda. Extensive descriptions, discussions, and drawings are presented of painted designs on bodies (pp. 67-93), faces, arrowpoints, arrowpoint holders, baskets, woven trays, bullroarers, and other objects.

Most paints are based on mixtures of *onoto* and other constituents to produce various shades of red. Black is not as common and is produced from resin and charcoal. *Onoto* seeds are gathered, crushed, and cooked in a palm bark container until a bright red paste, then allowed to darken [by drying and heating?] until a dark reddish-brown to violet. Much of the darker body paint comes from mixing *onoto* with resin. Paint is applied with a thin stick with a frayed end [*puya*] for fine-line facial paint, or by finger for most body application. Some *onoto* pieces are also used as simple stamps. A bluish-black paint is made from the *genipapo* tree, *Genipa americana* (see Valles 1993, caruto above); Zerries suggests this is the

same paint described previously by Grelier and Anduze. They also make a blackish-blue color for painting their whole bodies from a mixture of charcoal and water. While the German team was in the village, the people also took delight in making this paint from the carbon contents of flashlight batteries. Black body paint is used in preparation of intervillage raiding or warfare, and also for other special rituals involving conflict behavior. Black paint is also used on bodies on special occasions (as has been previously reported), possibly to portray specific mythical beings. White may be similarly used, usually in the form of crosses or wavy snake-lines, painted over either black or natural skin. Bodies also may be colored white with ashes.

The people recognize a wide variety of colors and shades and have an adequate vocabulary to account for them (pp. 60-61). Zerries points out (p. 68) the similarity between Yanomami designs and designs of other groups in Guyana and also to the west and suggests the possibility of eventual interpretation of those motifs. The designs are believed to have supernatural power because of the properties of the paint.

Bodies and objects are covered with geometric designs generally composed of parallel lines, crossed lines, crosses, circles, and half circles. These are expressed as open circles, circles with interior markings (dots, crosses, etc.), broad bands, or wavy lines (mostly parallel, sometimes crisscrossing or concentric). There appear to be differences according to age and gender. Zerries discusses the likelihood that most body designs have animal referents now, or did in the past (there are ample examples and discussion of this point).

Facial paint is not so varied as body painting, and facial designs include circles, points, straight lines, crosses, zigzag lines, wavy lines, and bands. These

designs often refer to animals. Besides observer-recorded variation in designs, the authors present 14 original drawings of motifs by Yanomamĩ, with explanations of their meanings — such as a circle with an interior dot (jaguar), circle with interior cross (ocelot), lattice-like twined mat-like pattern (puma), etc. — which should be useful in attempted identification of Yanomamĩ rock art, should it ever be found. Both sexes share most symbols, although some designs [and perhaps meaning?] vary by gender.

**Gheerbrandt** (1954) presents a popular account of his crossing of the Sierra Parima with Ye'kuana and Yanomamĩ guides in 1950. One guide, nicknamed Sanoma because of his Yanomamĩ (Sanoma) affiliation, apparently was loosely affiliated with the Ye'kuana on the Ventuari. He carried with him all his possessions, apart from his weapons, in a small cloth bag slung over his shoulder with a bowstring. Apparently this was a common custom. In the bag were tobacco leaves (which the Yanomamĩ are never without), some matches, a red cloth *guayuco* (skirt or loincloth), and “a piece of engraved wood for stamping designs on the face” (p. 263). In other words, the individual went into the bush armed with his bow and arrows and a *pintadera*. This is the only example I know of, of a Yanomamĩ using a *pintadera* (stamp), and its prominence in his tool kit suggests that, to him, body painting and facial stamping were not simply decorative and instead were important to survival.

**Becher** (1976) writes of mythology and symbolism of the Yanomamĩ of northern Brazil. Body painting utilizes mythological symbolism at least partially related to fertility. It often carries reference to male-female dichotomy and to aspects of the importance of the moon. Regarding paint materials and colors, he specifically mentions two examples which relate to a particular myth being discussed [photographs indicate that the people paint themselves extensively].

During a girl's puberty rite, which takes place during her first menstruation, she is isolated in a menstrual hut. Her mother rubs her with the blood; but if there is insufficient blood, the mother rubs the daughter with *onoto* as a substitute. This coating is meant to protect men from her blood and from any future actions she may wish to take against men by using her blood in a magical way. Also during the rite, the mother makes a linear dotted tattoo above the girl's lip and colors it with a blue vegetable dye. This is meant to represent a crescent moon. In most body painting the moon is represented as a cross, stars as dots, and a snake or tied-up penis as a wavy line. In general, males equate with snakes and brightness, while women are associated with the moon and darker color (as the dark half of the moon). The tonsure, or circular shaved area on top of the head of males and females, also is said to represent the moon. Generally it appears from Becher's information that all body painting and painted designs have specific cultural meaning and are done for specific purposes.

**Northern Brazil.** Posey (1984) discusses economic plants and field use of the Kayapó of the Xingu drainage. The main paint materials listed are *Bixa orellana* (locally known as *urucú*) and *Genipa americana*. We have already seen *Bixa* as the main constituent of red paint, and *Genipa* used on the middle Orinoco to the back country of the upper Orinoco and Río Negro as the source for deep blackish-blue paint (see above, Valles 1993, and Zerries and Schuster 1974). The *onoto* trees are said to last at least 25 years in abandoned fields. Lewis and Elvin-Lewis (1984) indicate that *Genipa americana* is also used throughout this area by the Jívaro as a means of tooth extraction [a dual paint-medicine use like *caraña* on the middle and upper Orinoco], and van den Berg (1984) points out that the *Genipa* fruit is commonly sold in local markets in Amazonian Brazil.

## Personal Field Notes

**Punta Brava** (Suapure river, 1993). This Piaroa village was founded in 1992 by people from Curianera on the Parguaza. During a short conversation the Piaroa residents explained that paint mostly is made with *onoto*. A little *caraña* mixed with the *onoto* paint makes the paint stronger, and it will stick better. *K'eräü* is made by both men and women, but it is used only by small girls, who paint it on with their finger [I suspect this information is incomplete]. *Pintaderas* are used by men, women, and small girls for special occasions only. The *capitán* boils *caraña* down into a thick paste which is a very good medicine for burns and cuts; it smells like mentholatum. People in the past used to paint designs on their bodies with *caraña* on special occasions, but now it is used only as medicine.

**Sabanita de Cataniapo** (Cataniapo river, 1995). A young Piaroa man living near Cerro Pintado, south of Puerto Ayacucho, explained that all paint in the caves must necessarily be *k'eräü*, because it adheres so well to the rock. This adherence is due to the *caraña* content. *Onoto* mixtures will not adhere to stone in this way and are used only as body paint. *K'eräü* is sometimes used for body painting also.

**Santa Fe** (Parguaza, 1991). A young Piaroa man explained that *k'eräü* previously was used by both men and women equally, but it is no longer used. *Onoto* previously was used by men, but it is no longer used as a body paint. This information was received during the exact time that Hernández was in the same village conducting her observations and interviews which resulted in her thesis on present use of body stamps and painted decorations (see Hernández discussion above). My information clearly is not reliable; this is a good example of potential problems with informant information.

El Cejal (upper Orinoco, 1992). Yanomamĩ residents on the upper Orinoco provided information on paint materials and preparation (I did not observe the preparation). Red paint is prepared mostly from a mixture of *onoto* and *caraña*. To prepare *onoto* it is necessary to grind the seeds totally, boil to a paste, and dry beside the fire like rice. The flour-like substance is then scraped off with a knife. Dry chunks of *caraña* resin (initially white) are gathered in the forest, brought back to the village, placed on the ground, and burned beneath a pot turned upside down to catch the smoke. The soot collects inside the pot, and this black residue is then scraped off the walls of the pot, and the powder is mixed into the *onoto* paste. The more *caraña* added to the paste, the darker the resulting red color; less *caraña* yields a lighter red. The malleable paste is then formed into balls (*bolas*) of various sizes, as convenient, which are dried in the sun. The largest ball I observed was 10 cm long. The more the ball is heat-dried next to or over the fire, the darker the resulting color will be.

- The ball may be moistened locally with saliva and used as a crayon. The dryish paste also can be mixed with saliva or water into a thick to thin liquid which is then applied with a small stick (*puya*) or fingers.

- Some people mix in honey when the *onoto* is first ground and cooked, before the *caraña* is added. No oil is used. To make the paint permanent, one can add resin from a tree similar to *pendare* and similar also to the mango tree. The ingredient did not seem to be *caraña* but was described as a different material [it was not clear what material was being discussed].

- The people also have a bright, almost iridescent violet paint made from a low plant found in the brush (*monte*). It is prepared as a very thin liquid and is used only during warfare or inter-village fights.

**La Reforma** (lower Cataniapo river, 1993). An Indian man living just south of Puerto Ayacucho decorates pots with a dense black liquid paint resulting in an opaque, somewhat lustrous appearance. It is made from a tree bark.

**Stanford Zent** (ethnographer, 1991). Zent wrote his dissertation (1992) on Piaroa economy, based on 2.5 years of fieldwork mostly in the upper Cuaio river (from which there is direct contact with the upper Cataniapo and upper Parguaza). In 1991 he provided me with various details and ideas regarding Piaroa use of paint. He collected one *k'eräü* paint ball about 8 cm long and 5 cm thick; it is the characteristic dark red.

- The Piaroa make and use a variety of paints. Red is most common and is made from *onoto* or *k'eräü* [this appears to be the Piaroa term for the *chica* plant, as well as the mixed paint]. Black is made from various plants, and a dense purplish-black is also made from a plant. White is from kaolin. Various paints, including *onoto* and *k'eräü*, are mixed with *caraña* because of its magical properties.

- From his experience, all red paint is *onoto* and *k'eräü*. He has no information or experience on the use of ochre or hematite for red or yellow paint. The men apparently use *onoto* (a garden tree) to cover their bodies. Women use *k'eräü*, a dark red paint (made from a cultivated vine) mixed with *caraña* because of the latter's magic protection. To make *k'eräü* the leaves are gathered, dried, and boiled for a long time into a sticky mass, which is then left to dry further; finally it is formed into malleable cakes or balls. Women paint their body with *k'eräü* applied with *pintaderas* (wooden body stamps). When the men use *k'eräü* they only wipe it on the lower part of the calf in transverse (horizontal) finger lines. It appears that the Piaroa usually use body stamps (*pintaderas*) and mostly do not

paint symbols on their body by hand. In general, tree plants are associated with males and vine plants with females, and *onoto* and *k'eräü* [*chica*] follow that pattern. Baskets [as women's items] are generally painted with *k'eräü*. However, *onoto* and *k'eräü* are sometimes mixed together, such as on manioc graters.

- *Pera manda* [*peremán?*] is a dense, naturally black wax made from *Synfonia bulifera* (Fam. Guttiferae). It is used on blowgun darts and for coating baskets. *Onoto* can be mixed with this to produce a dark reddish-black tint.

### **Cemeteries and Ritual Use of Caves**

Modern use of caves as repositories for the dead — or cemeteries — is attributed mostly to the Piaroa although many other groups have occupied the area. The use of caves for burial (and other ceremonies), however, is greater than generally realized. Historical documents mention that several native groups — at least in the past — placed their dead in caves, rockshelters, overhangs, and horizontal crevices. Within this general area dead (or dying) persons were so placed at least by the Piaroa, Atures (related to Piaroa), Mapoyo, Otomaco, Ye'kuana, Yabarana, and Guahibo (Gumilla 1944; Bueno 1933; Humboldt 1821, 1956; Chaffanjon 1986; Rosenblat 1936, 1964; Matos 1912; Marcano 1971). From field questioning and direct observations I can confirm present use by the Piaroa and at least recent past use by the Mapoyo, Guahibo, and Panare. Some caves may be used by more than one village within an ethnic group, and possibly (unconfirmed) by different ethnic groups at the same time (e.g., Mapoyo–Piaroa or Guahibo–Piaroa). Archeological and ethnographic research shows that the practice of using caves as cemeteries was widespread across much of Venezuela (and still is common today; for summary see Perera 1988b).

Caves figure prominently in regional indigenous mythology and have been used for various ritual purposes by numerous groups (Perera 1991). The Piaroa, at least until recently, used to keep ritual paraphernalia (including sacred flutes) in rockshelters and apparently conducted various rituals there (e.g., Anduze 1974). The Pareca and Sáliva of the middle Orinoco have been cited as using caves for ritual purposes (Morey and Morey 1980; Gilij 1965 II:101). The Panare of the Suapure are said to have used caves for burial and ritual (Piaroa informants at Punta Brava 1993; e.g., JG-54). The Yanomamĩ of the upper Orinoco region are known to use caves at least for initiation ceremonies (Napolean Chagnon, personal communication 1993). Any of these ethnic groups — or others not designated in the historical literature — may have contributed to the elaboration of painted art in rockshelters.

### **Deposition of the Dead**

Most information on the placement of bodies in caves relates to the practice by the Piaroa. It seems most usual for the bodies of the dead simply to be wrapped in a hammock and then in a wooden *cacure* (wooden burial sheath, or something similar), and then placed in the cave with no other grave goods. Some bodies are simply tied up in a hammock and carried to the cave in a *catumare* (specialized carrying basket); in such a case the *catumare* also is left in the cave. In some cases the dying person (not yet dead) is treated in the same manner since they are going to die anyway; they are wrapped and placed in the cave with no other goods (Matos 1912; also personal communication from Piaroa shaman informant from the hamlet of Coromoto del Parguaza 1991). The placement of food containers (metal pans, dishes, cups, eating utensils) near the body, with or

without food, is a common practice, although there is no information on how common it is.

Secondary burial is done, but its prevalence is not clear from evidence in the caves.<sup>52</sup> Most of the numerous remains in caves are all primary deposition of bodies which have been long abandoned. Perera has noted a few painted bones in caves (Cueva Iglesias, JG-11) which indicate secondary burial (Perera 1988a), but such bones are rare. Today secondary burial appears to be selective (also Piaroa informants from Las Pavas community 1991), although it was much more common in the past (Marcano 1971; Crevaux 1988; Chaffanjon 1986).

Christie-Shults (1992) implies that Piaroa remains during secondary burial are always placed in urns back in the same cave or under boulders. It appears, rather, that the use of large burial urns may have been a rather localized practice around the Atures and Maipures rapids just above Puerto Ayacucho. The practice was discontinued sometime before 1800 (Humboldt 1821, 1956) and likely can be attributed to the Atures or other prior groups who lived in that area (Marcano 1971). The only indication that the Piaroa ever practiced this custom came to me from two Piaroa informants from Las Pavas community (1991) while discussing the practice at a burial cave which still contained urns south of Puerto Ayacucho. They indicated that the practice was known but that secondary burial was selective. They stated that the bones could be placed in urns, but that they instead were usually wrapped in a mat and usually taken to a different cave (or other location).

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<sup>52</sup> Statements by Christie-Shults (1992) concerning cave burial are unsubstantiated and are not considered reliable.

Urns clearly were once common in cave sites around the Atures rapids, and they have been removed by early explorers, military personnel, local collectors, antiquity dealers, tourists, and almost anyone else with access to the sites (particularly see Humboldt 1956; Chaffanjon 1986; Perera 1983a; Marcano 1971:247-248). It is not clear how widespread the practice was, or how much it was used by the Piaroa. To my knowledge, only one cave still contains substantial remains of ceramic burial urns (Cueva de las Tinajas, JG-17, not included in this study); the last complete urn was removed by a local antiquities dealer in 1990 (personal information).

### **Paintings and Burials**

Both burials and paintings occur in caves in this region — essentially the area occupied today by the Piaroa. Although no systematic site survey or ethnographic questioning has been done, experience suggests that probably no more than about 25-30% of cemetery burial caves contain paintings. Most painted caves, however, at one time also contained burials, even though most human remains now have been removed.

It seems reasonable that painted caves were somehow considered special because of the paintings, as they are to various people today, both indigenous and foreign. Zent's experiences on the upper Cuaio river, however, suggest just the opposite (Stanford Zent, personal communication 1991): In areas where people hold traditional views of the supernatural, heavily painted caves may be thought of as spiritually hazardous places to avoid. The same attitude apparently was previously prevalent along the Parguaza (Cruxent 1946:84). In such areas, burial may be more common in unpainted caves and horizontal crevices.

The association of art with modern burials is tenuous. The co-occurrence of paintings and burials in many cases may be fortuitous and based on dual use of the same caves for different — and perhaps unrelated — purposes (Scaramelli, Tarble, and Greer 1995). Burial sites may be painted because, (1) burials are most often placed in caves (as are pictographs), and (2) many burial caves had been previously painted. In some cases, caves may have been selected as cemeteries because they also contained paintings — although I have been told that such is not the case (Piaroa informants from Coromoto del Parguaza 1991 and Sabanita del Cataniapo 1995). The only requirement, according to the Piaroa, is that the area is protected and dry and that no water runs through it (down the walls or across the floor) during the rainy season. It is the case however, that burial bundles (*cacures*) are most often placed in distinctive locations such as small alcoves with low ceilings, isolated ledges, etc., which also contain pictographs.

Even though no evidence for human burials exists in many *ideal* locations, small geometric pictographs almost always occur there. Through experience in the area it is possible to develop a sense for the kinds of small fingerline symbols which occur in such places, at least in the Parguaza area, and those small symbols somehow seem different from other nearby art. It seems likely that at some point in the recent past, placement of human bodies in caves was accompanied by painting. Some local *criollo* observers of such symbols on the wall or ceiling above burial remains view the symbols as telling a story about the deceased or particular details of their lives (much as portrayed in Northern Plains biographic ledger art or robe art), although the interpretation may be merely that of the modern viewer. The interpretation has not been confirmed with native informants.

Attitudes toward spiritual power associated with caves, rock, mountains, prehistoric paintings, and the dead vary from region to region, village to village, and individual to individual (cf. Perera 1991). I have been variously told by Piaroa informants on the Suapure, Parguaza, Cataniapo, and Sipapo rivers that, (a) spirits are greatly disturbed by visits to caves, (b) spirits are not disturbed by visits but only by photography of the art, (c) spirits are not disturbed by visits or any other activity in the caves (in some cases, even moving the bones is acceptable), and (d) there are no spirits associated with the dead in the caves (at least after the spirits have left, presumably after the bones are bare). The Panare on the Suapure say that if their distant burial cave is disturbed (such as by photographing the art), the village will suffer — in this case, the fishing will be bad, or fish will cease to bite (Piaroa informants at the adjacent village of Punta Brava 1993). On the Cataniapo, disturbing burial caves has led to jaguars coming down out of the hills and coming into the village to kill dogs and threaten or kill children (Piaroa informants at Gavilán 1993). Prehistoric attitudes, of course, are unknown.

### **Body Decoration and Rock Art**

It appears that all ethnic groups in the region painted their bodies, and many still do. The designs seem to vary between groups and remain somewhat similar within broad ethnic categories (Blixen and Klappenbach 1966; Overing and Kaplan 1988; Valles 1993; Hernández 1992; Marcano 1971; Vicariato 1988). Thus, Piaroa designs are generally distinct from Panare, Ye'kuana decoration is somewhat different from the others (though similar to the related Panare), and Yanomamĩ decoration appears different still (though in some cases similar to Kayapó of northern Brazil). Although body painting in this area has never been

studied in detail (see Zerries and Schuster 1974), a few general observations are possible. Body painting is practiced by all ages of both sexes, not only the women (Hernández 1992; Valles 1993).

Native informants from several groups report to me that all designs are for decoration only and no longer have special meaning of any kind (Baré, Piaroa, Panare, and Yanomamï informants 1990-1992; also Anduze 1974, Valles 1993; alternatively, see Zerries and Schuster 1974). Most groups seem to have a considerable degree of personal freedom of choice for the kinds of paintings which are applied, but most of that choice seems to me to be in the form of certain areas of the body to be painted freehand with the use of small frayed sticks. Even in these areas there appear to be various kinds of designs which are used, and others are not. Acceptable design form associated with other kinds of application, part of the body, or gender, such as the use of body stamping with wooden *pintaderas* on women's bodies, seems to be more formally regulated (Valles 1993). In some cases, people in villages take constant care to maintain designs on their body at all times, very similar to design use as clothing (Tarble and Vaz 1986). It is also common to paint visitors in one's village. The anticipation of special activities within a village or the expectation of visitors for some special purpose may prompt the application of clean and concise body painting, perhaps with different designs (Valles 1993).

Body painting is believed to function (both now and in the past) on village and personal levels. Because of differences between ethnic groups, and consistency within groups and between sexes, it appears that designs once had societal meaning. Rather than being family markers or status indicators, however, designs more likely served as symbols related to fertility (Valles 1993) or hunting success (Overing and Kaplan 1988:373) — that is, the symbols served to promote

one's ability to function appropriately in one's role (e.g., gender) within the society. It is equally possible that the paint or the designs (or both) originally were considered necessary for spiritual protection or assistance (and perhaps still are so considered), and this explanation may be part of the reason for continual painting and stamping by some groups (cf. Valles 1993).

Rock art could have functioned similarly to promote one's abilities — by an individual, a village, or by most members of the population. The function and orientation of the shaman and/or headman in these societies was as mediator between the spirit world and the village, or protector of the village and its members from malevolent forces within the spirit world. The shaman does not work for himself, but rather his orientation is toward other members of the community. It is felt that the painter of the rock art probably acted in a similar manner. Paintings were placed on cave walls for communal rather than personal gain.

It does not seem that the art functioned as family markers or status indicators (as Christie-Shults 1992 has suggested) any more than do body stamps. Those concepts appear to be foreign to the region today, other than gender related clothing and shaman's necklaces — items worn on the body and for personal identification. It is felt that rock art at a site distant from the community would not have functioned to identify one's social status or the affiliation of one's family or clan,<sup>53</sup> and neither would rock art in a private context.

Design differences in body painting between ethnic groups indicate that different groups internally recognize rules for acceptable design form and usage.

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<sup>53</sup> There are examples of such practices around the world, such as the placement by the Hopi in the American Southwest of clan symbol petroglyphs at distant key locations.

Because painted body decoration is somewhat distinctive by group, it is possible that designs could perhaps be used to identify or distinguish between ethnic groups.<sup>54</sup> With such a system for art in-place within the region, it is likely that rock art similarly contains presently unrecognizable differences pertaining to different groups.

What appear to be body stamp and/or roller stamp designs occur in the painted rock art, although this specific kind of art content has not been studied. The earliest examples seem to be late Period 1 orange concentric-line angular stamps with no borders (Figure 4, b). Their similarity with modern Piaroa body stamps suggests that they may be affiliated with ancestral Sáliva predecessors of the Piaroa. Later stamps seem mostly to be rectangular and bordered, with various kinds of interior patterning not recognizably related to modern stamp designs. Future study of possible stamp patterns, however, might help indicate decorative differences between ethnic groups responsible for the art, and perhaps provide indications of cultural territorial boundaries.

### **Piaroa Beliefs on Designs**

Overing discusses psychological designs associated with Piaroa belief systems (Overing and Kaplan 1988:373; elaborated by Joanna Overing, personal communication 1994). These designs, which may have real-world counterparts,

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<sup>54</sup> People today do not seem to view ethnic distinctiveness in body decoration or designs as ever having served as a form of tribal indicator. Differences in painted designs conceivably could promote pride in group membership, but body paint designs are not necessary for identification from beyond the group (other physical attributes are more obvious). Design differences more likely reflect different ways that groups dealt with similar problems, particularly regarding protection from malevolent spiritual power, enhancement of benevolent power, and assistance for personal power or fertility. Ethnic distinction in design seems to reflect distinction in solution.

are associated with both male and female members of the community. Specific design forms are not discussed.

Body stamp designs applied by women with a *pintadera* are said to refer to menstruation. The same designs are inside her body and are the cause of fertility.

Male designs mostly relate to a shaman's acquisition of knowledge and spiritual power. Internally these designs relate to hunting success (and thereby fertility) and shamanistic power through control of the content of religious chants or songs. The designs are also said to be expressed on baskets. The external design serves (along with the appropriate power) as a visual portrayal of one's inner self. The designs are referred to metaphorically as "the path of the beads" (or "the path of the words of the song") since the beads that a man has within his body are filled with the words of the songs, and the design is his pathway. Overing further notes that the Tianawa gods give the words of the chants to an apprentice shaman (either male or female) and in so doing place the songs within the shaman's interior "beads of life." Men can see these special designs while under hallucinogenic trance, most commonly from ingestion of yopo. During a ceremony in which initiates consume a beverage containing a hallucinogenic powder, apprentices see the words of the song of the hunt; they can see these special designs (the path or design of the beads) that they have inside their body and that they receive through the ritual.

In Overing's discussion, the path or design of the beads does not refer to a specific order of designs or words. Rather, it is a metaphorical representation of the path of knowledge acquired in spiritual quest during a man's lifetime. Because designs reflect a person's private experiences, it probably would be impossible to understand rock art symbols resulting from such an activity due to

their inherent foundation on such individual symbolism. Some progress could be made in understanding painted designs if they symbolize important elements within general Piaroa ritual knowledge or mythology, or if elements are widely used by multiple members of the society in the same way and with similar meaning.

Following Overing's comments, other researchers and I continue to try (with the aid of Piaroa informants) to relate drug induced designs and other kinds of entoptic patterns with rock art motifs, both geometric and figurative, but so far, without much success. Some informants identify certain designs (particularly concentric circles) as the window or doorway to the "other world" through which the spirit passes during trance. Scaramelli (1992:99-101) reports on the possibility that figures refer to local history, mythical ancestor beings, mythical spirits, and hallucinogenic designs and symbolism. His tantalizing interview information on drug-induced symbolism is in close agreement with Overing's discussion of inner-symbolism and should be pursued before the knowledge is lost through acculturation. So far, comparative knowledge has been sparse and incomplete.

### **Ethnographic Analogy in Art Interpretation**

Rock art interpretation should be done as much as possible within the ethnographic context most closely associated with the art. For instance, rock art in the Maya area should be interpreted in terms of what we know archeologically about the Maya, related as closely as possible to the archeological developmental period to which the rock art is believed associated, and supplemented with ethnographic analogy ideally with current Maya-speaking people living in rural conditions as near the study area as possible. Rock art in Pueblo areas of New

Mexico can be interpreted through ethnographic analogy with existing Pueblo or Hopi people (depending on where the sites occur), supplemented with ethnohistoric and archeological data, including excavated kiva murals.

It is possible to begin interpretation of the art by looking first at elements of the art itself and possible meanings of variation through spatial analysis of motifs. Smader (1994) has mentioned that spatial analysis, especially of motifs, is essential in rock art studies, and its purpose is to identify patterns for the interpretation of meaning and function of the art. As he points out, discerning such patterns may be affected by the distribution of motifs across sites or within sites only— that is, cultural patterns versus site specific occurrence. Motifs general to the culture (or region) as a whole occur at multiple sites, while some motifs may be site specific (or specific only to a particular place, position, or attitude within a site) and refer to a specific activity (or village or individual artist). His reference, of course, is to how geographic variation in art content may be related to function and therefore affect the interpretation of an assemblage. Any progress in such pattern recognition should be considered within the ethnographic context of the area, or through ethnographic analogy.

In the present study, attention must be given to the complex ethnographic history of the area in which people seemingly have moved around constantly at least since initial European contact, and to the presumed long rock art chronology reported here. While it may seem that the Piaroa would be the best group for comparison (Christie-Shults 1992), because they are seminomadic hunter-collector horticulturists who presently occupy most of the study area (together with several other smaller groups), their presumably recent entry into the area suggests that analogy between the Piaroa and the prehistoric painted rock art may not be justified (Mansutti-Rodríguez 1990; Perera 1992; Scaramelli

and Tarble 1993; Scaramelli, Tarble, and Perera 1993). Indeed, preliminary assessment shows no obvious relation between the two.

Even though there is no indication that any of the art was made by the Piaroa, it was made by people from the same cultural area, and where recognizable linguistic or cultural differences occur, they are among people in contact with each other and living in the same environmental setting. It is therefore reasonable to use Piaroa as informants for data relating to paint materials, site location and selection, general approaches to art, suggested identification of content forms (symbols, designs, figures, motifs), and possible ideas on function and other aspects of the art.

### **Local Consultants and Ethnographic Comparison**

Within ethnographic context, identification or interpretation of rock art figures is occasionally possible. Local informants from several affiliations are often able to identify various animals to species, even when stylized, such as fish, lizards, birds, insects, and small and large mammals. Identification is also made of manufactured products (e.g., baskets, mats, axes, arrows), plants (e.g., manioc, pineapple, and *onoto*), and occasionally possible drug symbolism (presumed drug-induced entoptics, such as hallucinations from nasal ingestion of yopo; see Scaramelli 1992:101). Identification and explanations are also given for clothing and adornments, such as different kinds of necklaces and feather crowns and their social uses.

On one occasion I questioned Piaroa informants about two late Period 6 human figures (drawn in black *caraña*) which I had just found at Cerro Pintado 5 (JG-47). I identified the lower pendulous object between the legs of each figure as genitals (Figure 21, j), but informants insist that this represents the *guayuco* (short

hanging pants or wrapped cloth) of traditional Piaroa elders and shamans. Early photos of Piaroa men in small triangular *guayucos* with tassels hanging down the front support their interpretation (Comité 1945:8; Wilbert 1966; Puerto Ayacucho Ethnographic Museum photos).

Research and questioning also involve other aspects of the real and supernatural world which may pertain to the art, its use, and its interpretation. These include belief systems, mythological history, activities relating to death, technological aspects of paint production, restricted use of paints, symbolism and decoration, matters pertaining to food acquisition, classification of foods, and drug use. Careful and often detailed questioning in conversational format is common, but no formal interviews have been conducted.

Looking at comparisons between painted figures and observed or historic ethnographic practices, line dances may be associated with various levels of ritual, and at least in Yanomamĩ country these may be carried out as much for fun as in seriousness. Line dancing is portrayed in the art by groups of people in line, showing both single-line and double-line (opposing lines) dancing. Other ceremonies involving dancing are referenced by persons with distinctive body decoration, body coverings, body attachments (such as crowns, headdresses, and possibly waist attachments). Most ritual activity seems to be portrayed in Periods 3, 4, and 6. Social status is evidenced by shaman necklaces, such as the two Period 6 individuals at Cerro Pintado 5 (JG-47; e.g., [Figure 21](#), j).

Body stamp designs similar to those used by Piaroa today (and different from stamp decorations used by other people), and possibly other Sáliva speaking groups in the past, seem to decorate late Period 1 and early Period 2 elongated bodies, such as those at Cerro Pintado 1 (JG-15; [Figure 4](#), e-f) and Cerro Iguanitas

1 (JG-1). Separate stamp designs, not associated with depicted human forms, occur in late Period 1 context at Alta Carinagua (JG-18; [Figure 4, a](#)). Similar later examples occur as complete stamps in Period 5 at Cerro Gavilán 1 (JG-58) and possibly other sites. This occurrence of stamp-like designs suggests that some art could be associated with ancestral Sáliva groups. Period 5 designs could portray designs on Arauquinoid ceramic roller stamps.

Modern mythology refers to a Mapoyo leader who led his group in communal suicide by jumping off a mountain. All sites possibly portraying this story with groups of upside-down humans are on the Parguaza river, reasonably near Cerro Mapoyo, one of the mountains where the event is said to have occurred (Perera 1992; at rock art site JG-22, not included in this sample).

### **Evaluation of Informants**

With information coming from a wide array of sources, it is necessary to evaluate constantly both the informant and the resulting information. Any time an informant is used, he is evaluated on how he relates to the information being presented and on the likelihood that the response is reliable. Evaluation of the individual is considered separately from the resulting contribution of information, although the two are closely related. Information is checked against multiple informants as much as possible, although this is often sensitive in the informal setting of this study.

Not all local residents are good informants: Not all have equal access to all information, equal ability to impart that information, or a willingness to provide accurate information, complete information, or sometimes any information at all. Some people know more about cave locations than do other members of the community, and a person knowledgeable about cave locations may not be as

useful an informant on the use of caves as burial places, spirit associations with caves, meanings in rock art, meanings in body painting, paint preparation methods, or identification of pigments. Personality, mood, and prior experience with outsiders all affect the quality of induced explanation.

A problem equally difficult to overcome is the informant's understanding of what information is being solicited, particularly relative to what information that individual has access to. It is necessary constantly to evaluate whether the informant understands what is being asked, and whether his answer really pertains to the investigator's intent of the question. This was made clear recently when trying to discern a possible Piaroa distinction between hill and rock (both of which are generally expressed as some form of *inawa*, bedrock), or between terms for unused cave (e.g., *susudé inäwa* or *idora*) versus a burial cave (e.g., *idora* or *wätáme*), especially since some caves have had the burials removed. Approaching information from a number of different directions, and with different informants, often helps identify and sometimes alleviate such problems. There are always associated problems of conflicting information between people of different ages within one community or area, between communities, or between regions (such as the middle Parguaza and the Sipapo).

It is also necessary to evaluate the likelihood that the information or explanation pertains to another temporal or cultural setting. As various people have pointed out, rock art along the Orinoco probably predates modern ethnic groups. Petroglyphs and pictographs seem mostly to predate the historic period, although modern indigenous people provide figure or functional interpretation within their cultural system or imaginative scope (for example, see Marcano 1971). This seems to be the case with modern Guarekena informants on the upper Orinoco and Casiquiare (González 1980, 1986) who interpret petroglyphs

according to their particular mythology. In another example, during a village gathering on the Parguaza river to discuss rock art, the people were asked the meaning of the outlined cross, a common pictograph motif in the area. After an initial answer of "*We have no idea,*" then silence, the men talked among themselves and after a while proposed that *maybe* it related to a particular activity by a particular personality during creation time and went on to explain how the outline in the cross might relate to and enhance that well known story (Scaramelli 1992; personal communication 1992-93). The information may be useful in modern studies as a possible modern explanation, perhaps becoming part of that village's historical knowledge at the moment of that particular conversation. Its explanatory ability in a prehistoric context should be evaluated independently and used cautiously since it is not necessarily an explanation related to the intention or knowledge of early artists who actually painted the figure.

In another situation I questioned an old *capitán*-shaman about the area and asked, "*Are there any other caves in this region?*" His son translated the question to the old man, sitting disinterested on the bare dirt floor. He was quiet for a while, then began a fairly calm discourse (in Piaroa) which became progressively more animated, accompanied by occasional shouts and waving arms. It was obvious he was discussing tourists, people disturbing burials, people messing with the rock art, and other forms of bother and utter disrespect, which in turn fueled the intensity of his 15-minute discourse. He would point and discuss and describe and make motions regarding the sizes of many caves and paintings, their directions and distances from his village, and other similar comments. As he finished, and the ringing walls again fell into silence, the son calmly turned to us and stated, "*No.*" Only later, during a quiet pause to enjoy a refresco on a hot

day, did the son privately discuss the knowledge of the old man, his feelings, and the reasons he felt the way he did. The official unedited interview would have resulted in, "No, there are no other caves in this region." The follow-up evaluation found, among much other pertinent information, that the region has numerous caves with paintings apparently different from other areas. It is therefore necessary to evaluate one's solicited answers.

## CHAPTER 10

# EVALUATION AND RECOMMENDATIONS

This chapter evaluates the dating of the art from a number of directions and then discusses possible problems with the proposed stylistic organization. A program of future encompassing rock art research is described as interrelated topical components which will allow gathering and integration of several kinds of related data. Future considerations for continued research are further discussed in both general and specific terms.

### **Dating the Rock Art**

Several approaches to dating of the art are considered below. These include absolute dating, comparison with ceramic technology and decoration, possible association of potsherds in sites with rock art, and considerations of cultural dynamics possibly associated with the art.

#### **Direct Dating of the Art**

Assignment of absolute age from the art itself presently is not possible. Paint samples have not been dated, and only a relative chronological sequence is available at this time. Variation in the condition of the art and the differentiation between the various styles suggest that the sequence has a reasonably long duration. Portrayals of camelids suggest that the earliest art could date to early preceramic times, perhaps several thousand years. The latest art is obviously

historic. Absolute dates, however, will be required to calibrate and test the proposed sequence and its relation with other archeological materials.

### **Ceramic Cross-Dating**

It is assumed that a relation should exist between ceramic decoration and rock art, at least along the lines of technological and figurative modes. One class contains painted and incised depictions, symbols, and patterns on ceramics, and the other is seen as painted depictions, symbols, and patterns on cave walls. These are different media for potentially the same kind of expression or function.

Orinoco ceramics contain a variety of painted and incised decorations in several configurations. The earliest paint is seen as white-on-red decorations, while several other combinations come and go through the sequence. Incised decorations begin as broad-line forms associated with early Saladoid and Barrancoid and change in form and design on their way through to the final fine-line geometric of terminal Arauquinoid. It should be possible to cross-date the proposed chronological rock art styles by comparison with ceramic decoration.

The earliest pictographs of Period 1 are believed to be preceramic in age, particularly the early camelids at Cerro La Vaca 1 (JG-21; [Figure 4](#), c). Other early monochrome red paintings of Periods 1 and 2 seem to be dissimilar to ceramic technology or decoration and, by default, mostly are believed to be the result of preceramic period hunter-collector groups.

After that, technology and content seem to fit better in a ceramic context. Agriculture is associated with Periods 4 and 6, as evidenced by portrayals of manioc plants and manioc trays (*guapas*) in Period 4, and manioc trays and pineapples in Period 6. Period 4 also pictures seed pods of *onoto*, which presently

is considered a cultivated tree. Manioc cultivation is believed by most researchers to have been introduced with Saladoid (and perhaps the related Cedeñoid), based on the introduction of ceramic griddles at that time. It is, therefore, assumed that Periods 4 through 6 would not predate the earliest date for Saladoid — 2000 B.C. in the Rouse-Roosevelt scheme and 650 B.C. in according to the Sanoja-Vargas explanation. If manioc production precedes the introduction of ceramics, it probably would be associated with the suggested preceramic portion of Period 4 (Figure 35).

Period 3 introduces white paint and bichrome red-white animals and fish into the area. Comparatively it seems that Saladoid painted decorations are the most likely correspondence with the rock art. White-on-red ceramic decoration came in with Saladoid, and the introduction into the area of red-white bichrome in both the art and the ceramics seems a reasonable basis for assumed association. Some of the bug-eyes associated with Period 3 rock art figures seem closely related to both early Saladoid and early Barrancoid.

It is understood that Barrancoid influence increases throughout Saladoid occupation of the area, and its influence on rock art appears to be represented by Barrancoid-like design elements and general approach in Period 3 and the multi-color figures of Period 5. It is beginning to appear that Period 5 directly follows Period 3 at the north end of the survey zone and may represent incipient Corozal complex (Period 4 overlaps at least Period 3). Thus, the Barrancoid influence in Periods 3 and 5 seems reasonable.

Period 5 changes character from Period 3, becomes more geometric, and picks up red-black-white polychrome from the north as part of a general multi-color orientation. This seems closely related to the Corozal phases as the introduction

of the Arauquinoid series. Some of the design elements believed to date to Period 5 (or perhaps early Period 6) also seem to represent Tarble's sacred substyle of Arauquinoid decoration.

Period 5 grades easily into Period 6 with the use of multiple colors in new combinations, new motifs, and increased complexity. With Period 6 there is not only a dominance of the use of white paint, but also the only occurrence in the regional rock art of white designs or figures painted on a prepared red background. Everything about Period 6 seems to equate well with the Camoruco phases of the established Arauquinoid tradition.

Arauquinoid is believed to continue up to historic times with the various Caribe groups. The historic buildings pictured at JG-52 are believed to be the work of historic Cariban speakers, presumably early Mapoyo.

The place of the enigmatic Period 4 is not clear within this scheme. A reasonable suggestion seems to be that it represents the resident population at the time of the Saladoid and Cedeñoid entry. The people continued to paint much as before, with what seems to be a general continuation from late Period 2. There is obvious sharing of motifs with early Period 3 red-white bichrome (such as the bowlegged man and wide-bodied dancers), but these red-white figures do not seem to co-occur with the main late Period 3 fish and animals (which seem to lead more into Period 5). The association and possible sharing of motifs between Period 4 monochrome red and early red-white bichrome may indicate Saladoid and Cedeñoid stylistic and technological influence on resident art styles.

### Dating by Material Associations

Archeological artifacts, especially ceramics are found in many painted caves. Even though potsherds can be assigned to ceramic traditions, and thereby give a provisional age for archeological activity at a site, they do not necessarily date the art on the cave walls. In dealing with the relationship, it is necessary to consider problems of associating surface artifacts with rock art, including the choosing of one surface artifact type out of all those that may be present as the probable cultural association with which to date the art. So far the results are questionable.

It is difficult to determine the relation between paintings and other items in sites. Assigning both absolute age and ethnic origin to rock art is complicated by an inability to determine what cultural materials in rockshelters are actually culturally associated with the paintings — as opposed to fortuitous co-occurrence of materials in the same site. Surface ceramics in several painted caves are attributable (according to distinctive paste, temper, vessel shape, and decoration) to Cedeñoid, Saladoid, Barrancoid, Arauquinoid, and Valloid series, and include several wares not yet defined to series but distinctive in their manufacture. In other words, nearly all kinds of archeological ceramics in the region — and including nearly the entire ceramic sequence from at least 1000 B.C. to 1500 A.D. or so — have been found in caves containing pictographs (Tarble 1990a, 1991; Tarble and Scaramelli 1993b; Scaramelli and Tarble 1993; also see Perera and Moreno 1984). Contemporary or modern objects found in burial caves — e.g., glass bottles, enameled plates, aluminum pots, plastic flowers, hammocks, carrying baskets, etc. — indicate continued use from early historic times to the present (Scaramelli 1992; Scaramelli and Tarble 1993; Perera and Moreno 1984; Perera 1988a; Cruxent 1946; Greer personal observation). Also

present is all manner of discarded trash — e.g., food cans, automotive oil cans, paper, plastic bags, plastic bottles, etc. — indicating modern to recent periodic use of painted caves as temporary shelters.

Caves are a normal location for cultural attention — for ceremonies, permanent or temporary habitation, temporary use as shelter from the weather, storage of secular materials or sacred objects, cemeteries for disposal of the dead, or ossuaries for storage of secondary burial remains. These activities may be non-exclusive and may result in materials from several unrelated activities, perhaps from unrelated groups, being left in the same cave.

The problem, then, is how to distinguish cultural association from unrelated co-occurrence of materials left in the shelter. It is essentially impossible to determine accurately what items are culturally associated with the paintings and which simply co-occupy the site due to reuse of a rockshelter over a long period of time, by the same or different people. Many shelters contain modern glass beverage bottles and commercial cigarette butts, the result of modern use and tourist visitation, but no one has suggested that the paintings are modern because of these associations. What instead is more common is for people to find a few sherds and proclaim that those bits of pottery date the prehistoric activity evidenced in the caves, such as the paintings. This assumption of cultural association on the basis of co-occupancy of surface material in a rockshelter, with its limited space and unusual protection from rain and heat, should be treated cautiously until independent tests confirm not only that the separate materials are the same age, but also their cultural association. For instance, there is usually no basis to assume that two archeological items left millennia ago were left at the same moment by the same people. The objects may be several years apart in age, or they could have been left only hours apart by people coming from different

geographic zones and representing different ethnic groups (and the same or different archeological material complexes). Therefore, even though sherds are observed in these sites, and even though the ceramics suggest some ideas regarding the age and cultural association of the art, there still is no firm basis to assume cultural association with the ceramics or resulting absolute age.

An attempt has been made by Tarble and Scaramelli (1993b) to date the art using ceramic dating based on assumed association. Although I am critical of various aspects of the study, their effort certainly is justified and essential. For their sample, they use ceramics in painted caves, ceramics in caves with no paintings, and ceramics in open sites sometimes considerable distances from painted caves. They cross date the paintings on the assumption that the paintings and the sherds are all the same age because they occur in the same sites, or they occur in somewhat similar kinds of sites (caves with no paintings), or at least they are in the same geographic region (the Orinoco valley south of Caicara).

Tarble and Scaramelli's initial attempt produced interesting results similar to mine. What they have essentially shown, however, is that the latest pottery, which represents an explosion of population size and geographic range, is found in most caves with rock art, as naturally would be expected from random occurrence alone. They also find that the most temporally complicated rock art sites, painted over the longest period of time, also have ceramics from the most traditions, which shows that the utilization of some caves more than others is reflected in both the rock art and the discarded ceramics (such as Laja Parguaza 1, JG-8, near the Orinoco). There presently is no indication of a functional or

social association between the ceramics and the art which would serve as the basis for using one to indicate the age or function of the other.<sup>55</sup>

Tarble and Scaramelli point out not just regional or site-specific co-occurrences of ceramics and rock art, but they also delimit patterns of area use or site distribution for various classes of sites and changes through time. They then compare those changes to support their case. The result is that the geographic correspondences seem to support somewhat their presumed associations of ceramics and rock art, although the argument may be somewhat circular.

Their results, however, appear to be supported somewhat by my study of the Puerto Ayacucho area. The two studies overlap from the Parguaza river to the Suapure, and it is precisely in that area that I find the strongest influence of late-period art from northern ceramic traditions, just as Tarble and Scaramelli have suggested from their study area to the north. I have already discussed that Tarble and I have different interpretations (particularly on petroglyphs) based on different, independent observations in different, but contiguous regions. An eventual combining of those regions and ideas undoubtedly will produce a broader explanation. Of course, absolute dates from the paintings themselves are essential to evaluate fully the proposals of both studies.

### **Dating by Cultural Dynamics of Change in Art Styles**

A possible means of archeological cross dating, not yet successfully done, is to attempt to postulate cultural dynamics associated with stylistic change in the art and then compare those suggested causes with cultural changes suggested by or correlated with the local ceramic sequence. Early migrations of Arawak and

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<sup>55</sup> For an explanatory settlement system approach which includes a similar integration of rock art sites, see Tarble 1990a.

Caribe people must have had significant cultural repercussions on the local society — settlement patterns, political composition, belief systems, ritual activity, and religious expression. Later European entry produced drastic population reduction and profound social change. Just the results of introduced diseases, alone, are expected dramatically to have changed the social organization, general psychology of the people, and their view of history.

Population change and possible concomitant political and ideological modification, as believed associated with these invasions, are believed to be potentially detectable in the art. In addition to major migrations, the general pattern throughout the region appears to be for continual currents of tribal or group movement, mostly in the form of village fissioning due to population growth or development of political factions, or of joining (either within or between ethnic groups) due to ecological or political problems (e.g., warfare) best resolved by population or resource pooling. Attempts continue to relate population movements and affiliated cultural changes both to the rock art and to ceramic archeological cultures (e.g., Zucchi and Tarble 1984; Tarble 1985; Zucchi 1985, 1990, 1991a, 1991b).

For now, the proposed rock art periods seem to form a reasonable scheme relative to documented population changes. Periods 2 and 4 seem to represent a tradition of gradual change which slowly became more complex. This is seen as an indication of internal changes consistent with the explanation of local resident hunter-collector groups who eventually became influenced by the introduction of new Saladoid technology and decoration. Period 3 is the first drastic change and would seem to equate with the new Arawak immigration. Likewise, Period 5 seems to represent a sufficiently abrupt change to indicate new personnel, while closely related changes in Period 6 seem to equate well with the hypothesized

population growth and intensification of the Arauquinoid Caribe. The decay in the art, exemplified seemingly by less planning and less care of execution, would seem to parallel documented cultural and social changes of the early historic period and equates well with hypothesized cultural changes during the late prehistoric and protohistoric Caribe (Arauquinoid) intensification. Thus, equating hypothesized cultural associations, as represented in the art, with historical cultural events related through other kinds of information supports the previously suggested dating of the art periods.<sup>56</sup>

### Changing Views of the Rock Art Sequence

Analysis of the Orinoco ceramic sequence has made possible the development of ideas regarding the relation between rock art and ceramic series, their ages, and the people responsible for them. All, of course, is more hypothetical than observed and is based on comparisons, likely possibilities, and logic. Rock art superpositioning and style formulation indicate several areas of question regarding style composition and relations between styles. Some problems came up while trying to explain patterns of change both internally, strictly within the art sequence, and externally in comparison with cultural development suggested by the ceramic sequence and the projected linking of the rock art with that sequence (Figure 35). Some questions involve initial assumptions of this study, and some assumptions were thus altered. Other questions arose from review of the art at Cerro Gavilán 1 (JG-58) and comparisons with other sites. Following are observations that were difficult to explain by the initial simple ordering of periods.

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<sup>56</sup> See Chapter 9, the Applying Inferred Culture Change to Affiliation and Dating of Rock Art section, for additional discussion using historical ethnographic comparison.

1. The relation between Periods 3 and 5 is not clear considering, (a) the overpainting of Period 3 fish and animals by Period 5 symbols, (b) the apparent intentional, integrative relation between them, (c) and the lack of Period 4 figures between them, either over Period 3 fish or under Period 5 bichrome symbols. This led to the suggestion that Period 4 is a separate development at least partially coeval with Period 3.
2. There is a superpositional relation between Period 5 symbols over Period 3 fish and animals, but never over presumed Period 3 humans or geometrics. This would seem to indicate a possible separation within Period 3 of earlier humans and geometrics from later fish and animals.
3. There is a general lack of Period 4 figures painted over late Period 3 fish and animals. The only good examples of superposition seemingly are Period 4 figures over simple bichrome shapes, along with the *bowlegged man* motif. This also would seem to suggest a possible split within Period 3 of earlier humans and geometrics from later fish and animals.
4. There is a sharing of some human motifs between Periods 3 and 4, such as some wide-body human forms and the bowlegged man, while animal and fish forms between the two periods seem to be distinct. This, again, suggests a possible split within Period 3 of humans and geometrics from fish and animals and a contemporaneity and interaction between Periods 3 and 4 as lines of parallel development.
5. There is a similarity between interior-line fish attributed to Period 2 (dark red to purple paint, fine to wide lines) and others believed to be Period 4 (medium red paint, finger lines, not so carefully done). The similarity suggests a direct,

historical relation between the two styles, thus supporting that Periods 2 and 4 are in the same line of development.

6. The relation between Period 5 dark red monochrome figures with Period 5 multicolor figures is not understood, but they appear to be related on the basis of shared geometric motifs. Monochrome dark red geometric figures are painted over Period 4 medium red humans, animals, and standardized symbol motifs (such as the outlined cross) from the mouth of the Sipapo to the Suapure. Both monochrome (broader lines) and multicolor geometrics and stylized figures are painted over Period 3 fish and grade easily into Period 6 styles in the northern area around the lower Parguaza.

Following are suggestions regarding possible revisions of the rock art sequence to be considered during future work. Some of these are based on direct observation, some on inspectional comparison among rock art periods or between rock art and ceramics, and some on logic alone. These suggested sequence changes are intended as considerations to be tested in the future. The relation between periods in the two hypothesized developmental branches is shown in chart form in [Figure 35](#). The suggested temporal interaction or spread between the various periods is shown as a map model in [Figure 36](#).

### **Local Development**

**Early Period 1.** The art is probably attributable to early preceramic (Archaic or Paleoindian) hunters and collectors. One candidate is the group of early camelids at Cerro La Vaca 1 (JG-21); a less likely possibility is that the overlying dark fine-line fish is late Period 4, and the camelids are early Period 4 animals.

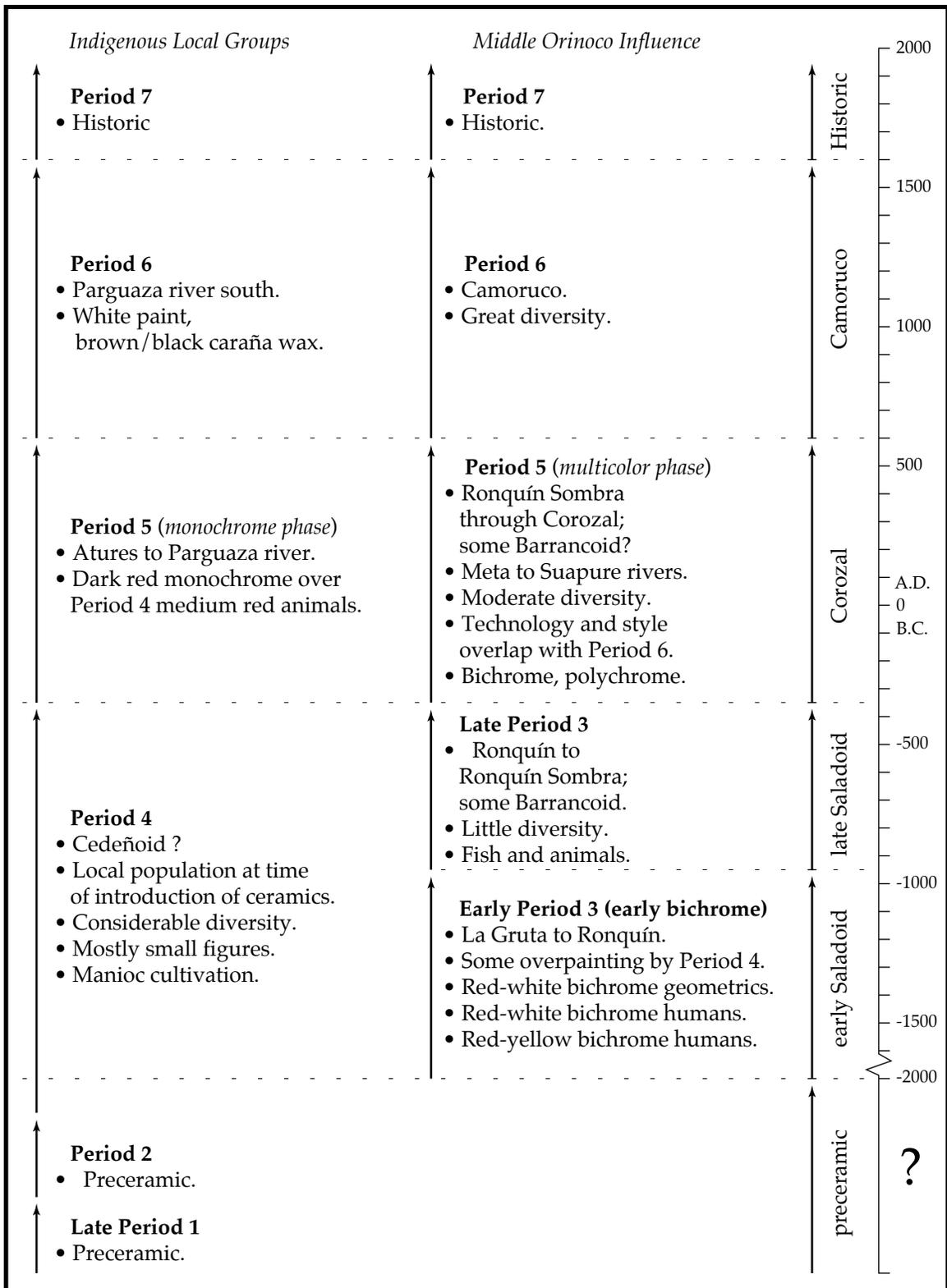


Figure 35. Proposed rock art sequence.

**Late Period 1.** This is presumably preceramic in age and represented by early orange at JG-15, elongated humans at JG-15, and stylized human forms composed of concentric lines at JG-15 and JG-43.

**Period 2.** This is presumably preceramic in age and represented by fine-line purplish animals and some interior-line fish. Less likely is that fine-line purplish figures believed to be early Period 2 are instead *monochrome phase* Period 5 with its characteristic fine-line dark red paint which normally overlies Period 4. Purple-maroon paint on pottery equates most with Corozal.

**Early Period 4.** The period probably represents local resident groups from preceramic into Cedeñoid and Saladoid periods. Realistic animals are most common. Large animals seem to occur early within the period (JG-58), while small solid-body or open-body animals and humans seem to occur later (JG-1, JG-3, JG-11, JG-19, JG-67). Animals are never painted over Period 3 (or *Early Bichrome*) wide-bodied humans.

**Late Period 4.** These appear to be local resident groups with some Saladoid influence. Wide-bodied humans begin to appear now.

**Period 5.** Small monochrome dark red geometrics and symbols in the general style of Late Period 4 (and painted over Period 4 small animals and humans) appear to be local resident groups, some with minimal Corozal influence.

**Period 6.** White paint, bichrome red-white figures, and miniature figures in black wax paint are believed to be the work of local people with outside influence. The Guajivo and other nonlocal groups may enter the area for the first time. The processing of *caraña*, with its combined medicinal and religious importance, appears to be introduced during this period.

**Period 7.** No obviously historic art figures have been recognized in the southern part of the zone.

### **Middle Orinoco Influence**

**Early Period 3** (*Early Bichrome*). The first bichrome paint seems to indicate initial Saladoid or Cedeñoid and the first influence from middle Orinoco cultures into the area south of the Suapure. Motifs include bichrome wide-bodied human dancers with headdresses and the bichrome bowlegged man at Iglesias (JG-11). Other monochrome red bowlegged men are intrusive into Period 4 from the Period 3 Middle Orinoco influence. Other early bichrome symbols and geometrics may also pertain to Period 3. An alternative to the middle Orinoco origin for this influence is that it instead is a local development of the lower Parguaza; the northern extent of the multicolor orientation is unknown.

**Late Period 3.** This appears to be late Saladoid (Ronquín Sombra) tradition with Barrancoid influence. There is an emphasis on fish, aquatic animals, and terrestrial animals and apparently minor use of monochrome white paint.

**Period 5.** In the north are dark red monochrome figures (painted over Period 3 animals) and multicolor figures which show strong Corozal (initial Arauquinoid) influence and may represent new ideas and people coming into the area from the north. There is continued bichrome from late Period 3, and symbols are painted over Period 3 bichrome fish and animals (JG-58). There is use of the same distinctive geometric motifs as local *monochrome phase* Period 5, of possibly the same age but with slightly different portrayal and technology. There is the beginning of white monochrome for symbols, stylized figures, and abstractions; and generally this period previews Period 6 in paint technology and approach to art.

**Period 6.** This appears to represent the Camoruco period (developing Arauquinoid) and perhaps Valloid, whose distribution equates with that of early Sáliva speakers. There is intensified use of symbols, bichrome paint, negative painting, and paintings over prepared surfaces (this may have begun with Period 5 symbols painted over white bodies of Period 3 animals).

**Period 7.** Historic paintings, as a general continuation of late Period 6, are believed attributable to such local groups as Mapoyo and Sáliva. The church, loaf-shaped building, and probably a white segmented circle figure at JG-52 are the only obviously historic period figures in the sample.

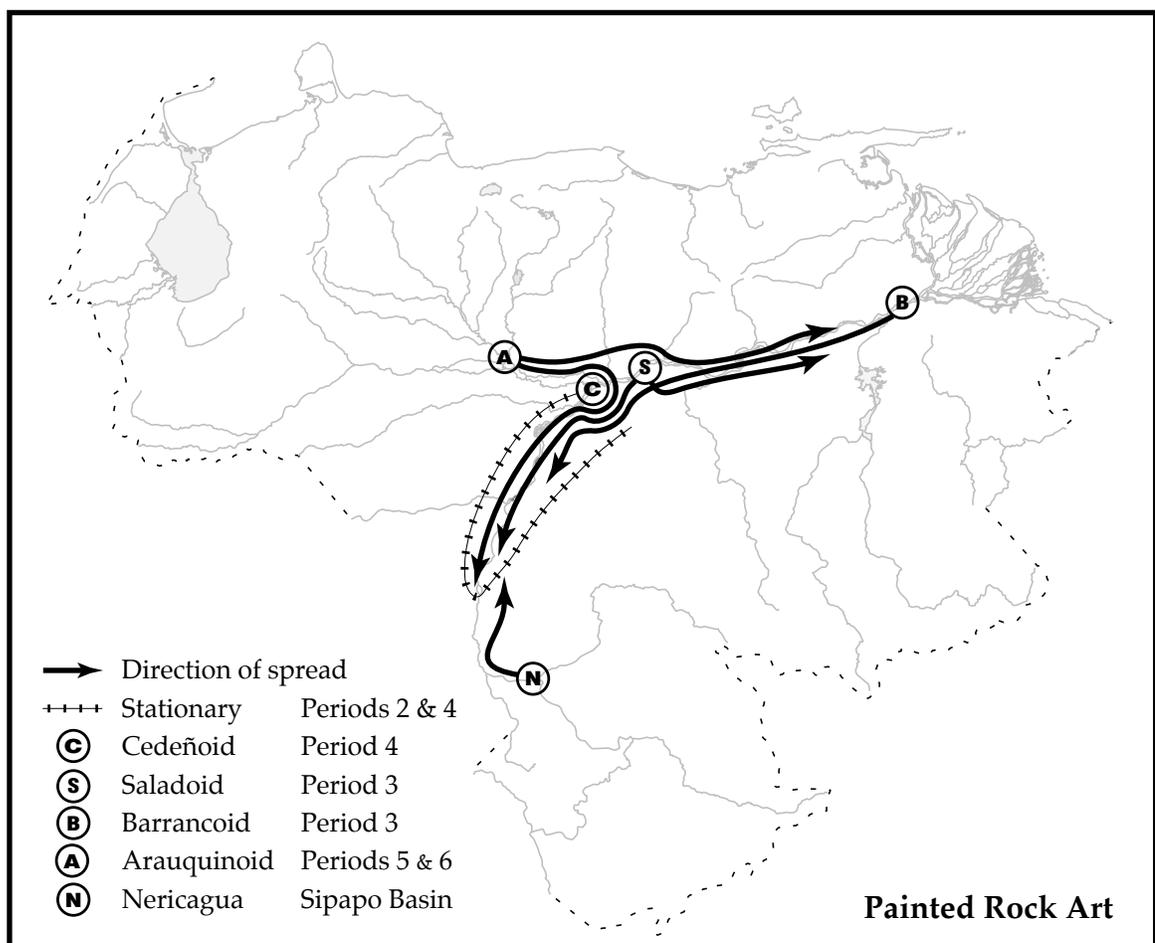


Figure 36. Suggested spread of rock art traditions (period styles).

## **Proposed Investigative Structure of Future Research**

This study is seen as an initial introduction and provisional organization within a general study of southern Venezuelan rock art. The more inclusive future study is perceived as research components formulated on the assumption that discernible patterns exist within the data, that the patterns are culturally meaningful, and that the identification of patterns and the anomalies which disrupt them are pertinent to regional culture history. This includes aspects of cultural ecology, subsistence, settlement patterning, ideology and religious beliefs and practices, and intercultural relations or interactions. The various components for a more detailed study are discussed below.

### **Preliminary Planning and Evaluation**

The purpose of this initial study is to gather information on a number of subjects to help establish a context for further work, and to evaluate the means and directions for future attention. As such, it provides a sample of the various aspects of an overall framework on which to conduct additional recording and study of the various components. The analysis segment of this contextual framework is a provisional stylistic chronology to demonstrate and organize time depth within the area's art.

### **Inventory and Recording**

A site inventory should organize available information from all sources and add new sites through guided field travel and additional checking of likely areas. Recording of the art should be as complete as possible. Site information should include location, setting, access, physical character, and contents. Such data are useful to estimate the number of sites in the region, topographic or geographic

distributions, number and locations of key sites, general categorization of site types (by size, content, etc.), current or historic use, and details of the art.

Special information may be necessary for planning additional revisits and recording, such as access time and methodology, access restrictions, estimated recording time, available maps, etc. Sites may be many days walk away, helicopter insertion may be necessary or impossible, or access may be by special permit only. At one large, fairly inaccessible site, it was estimated that initial recording of the art would take six months with a team of six persons, but permission to visit was restricted. In cases such as this, both long-term and short-term planning of visits and recording may be essential.

### **Site and Art Analysis**

Studies of sites would include geographical distribution, setting, intrasite analysis, and intersite comparisons. Analysis of the art would include relative age by superposition, study of content and manner, intrasite distribution, use of space, relations between elements, intersite comparison, refining the stylistic chronology, and considerations of geographic variation. Analysis and explanation would attempt placing technology, content, context, manner, and superposition within a single system of styles, and to use characteristics of these styles to suggest cultural explanation beyond the physical attributes of the art. In some cases, relations between sites might be evidenced by distinctive subject, form, or manner.

### **Pigment Identification and Dating**

Painted rock art is made up of the physical pigments on the wall, later effects on those pigments, and the context of paintings within the site and the region.

Contextual considerations are discussed above. Analysis of the physical remains is a complex process which begins with collection and analysis under controlled conditions of modern paint samples, raw materials, and production information, including data on pigment components, mixtures, preparation methods, control of color variation, and variable adhesive qualities. Archeological pigment analysis can be done first on-site (nondestructively) and then through a program of pigment collection and off-site analyses, including comparison of archeological results with ethnographic information. Part of the pigment study should include collection and analysis of mineral coatings over the paint. Pigments containing organics should be dated directly through AMS techniques. This should be done for temporally sensitive styles and distinctive motifs. Absolute dating will make possible testing of the provisional chronological sequence and its relation with the ceramic chronology.

### **Related Ethnographic Information**

Ethnographic information and interpretation should include data potentially useful to the evaluation of ethnic affiliation with the art. Modern indigenous explanation and values related to rock art interpretation may include information on symbolism and motifs, body paint, body stamps, basketry, ceramics, and other modern examples of artistic design useful for comparison with rock art. Informant evaluation should consider group affiliation with the rock art, the individual's access to group knowledge, and his ability and willingness to impart that information accurately. In some cases, literature review augmented with modern ethnographic questioning could produce useful comparative information on cultural explanation and probable ethnic affiliation.

### **Archeological Comparisons**

Information from rock art analyses — including pigment analyses, absolute dating, stylistic analysis, art symbols, technological attributes, and geographic information — should be compared with other available data such as ceramic designs, archeological pigments, settlement patterns, and other aspects of culture history. This is expected to yield information on age, function, meaning, archeological phase identification, related ethnic group, possible interpretations, and cultural implications. A strong relation between rock art and ceramic decoration has already been shown.

### **Comparison Between Painted and Engraved Art**

A detailed comparison between pictographs and petroglyphs, as possibly two separate systems, eventually should be done. Petroglyph site recording should consider site geography, intrasite use and distribution, intersite comparisons, motif form and variety, subjects, manner and style, function, interpretation, and pertinent ethnic information. The problem of whether the painted and engraved art forms are related, and how, is a major question variously viewed by different researchers. A closely related problem is whether there is any evidence linking art forms with particular ethnic groups, particularly the major language families, and what implications these relations have on the culture history of northern South America.

### **Management Considerations**

There is a current trend toward active management of rock art sites, particularly with the recent (1994) acquisition of Cerro Pintado and Turtle Rock (Ataruipi) monuments into the National Park System (INPARQUES). This calls for

an evaluation of the effects of eco-tourism on the preservation of rock art sites as elements of national and cultural heritage and as important ritual sites still in use or considered important by indigenous groups. Conservation and management concerns can be considered during various phases of field recording and subsequent analysis.

### **Future Attention**

During this dissertation research, new interpretations, alternate points of view, and new ways to organize these data have continued to develop (e.g., Greer 1993, 1994, 1995). For the most part these variations center on an increased and changing understanding of the complexity of the art. This has led to a realization of the need for absolute dating, the integration of several kinds of diverse studies which have yet to be done, and more fieldwork in this area and beyond. Additional study of content and manner will contribute additional historical, cultural, and social information on this area. Such study should include better assemblage definition based on detailed attribute analysis.

Interpretative problems obviously exist at a number of levels, ranging from individual sites to time periods and geographical areas. Problems of seeming uniqueness of style or previously unrecognized content in the paintings at particular sites eventually may be clarified through additional study of content and manner of the various periods, thus resulting in better definition of character, content, and inventory of each period style.

It is expected that regional stylistic differences within periods will be better defined as the geographic range of the study is enlarged. This will allow considerations of time-transgressive geographic patterning, particularly as influenced by regional trade and intercultural contacts.

The stylistic chronology on the Parguaza obviously is confused, and more study must be done to work out problems of red monochrome stylistic variation, minor temporal styles, and geographic variation. With Parguaza style figures now showing up more in the Pozón area north of Puerto Ayacucho, the Cerro Pintado area to the south, and tentatively reported even further south, detailed comparison of content and manner may help better define the chronology and straighten out some of the problems beginning to be recognized. For the present, the originally proposed sequence is left to be tested further, but the possibility should not be overlooked that groups of figures may be recognized as distinctive through further analysis and may be reassigned to new periods, together with additional implications for other related or otherwise affected figures and sub-styles. Such is the case with the purplish fine-line figures — whether early Period 2, late Period 4, or transitional Period 5.

The most recent 1995 visits to new sites, not included here, reiterate problems already noted which need reevaluation. There is added evidence of interaction between late Period 1 orange (or Period 2 light red) and Period 6 black *caraña* overpainting. Late Period 1, Period 2, and Period 4 seem to form a continuum. The relation between Period 2 interior-line fish and Period 4 is becoming less clear, and in the south a separation between late Period 1 and Period 2 is difficult, at best. The relation between Period 5 (or southern late Period 4) monochrome red geometrics and northern Period 5 bichromes and polychromes needs better definition. The style cohesion of Period 3 bichrome fish and animals with other bichrome forms continues to be questioned. Period 4 art appears almost to dominate everything in the region, and its temporal or interactive relation with Periods 3 and 5 still is not clear.

Equally important is geographic information. It has become obvious that rock art exists throughout this region and beyond but that there are marked geographic differences in the art. Each area seems to have a kind of uniformity in the art, presumably over a considerable time span, which would suggest an artistic tradition related to a geographically stable population. Within each area, however, there are also sites or artistic content within sites that clearly break with local tradition, and in some cases the deviation is tentatively identifiable as related to the art of another recognized regional tradition. This is the case with the Parguaza river area north of Puerto Ayacucho and the Sipapo drainage to the south. When a Parguaza Period 4 wide-body human occurs south of Puerto Ayacucho it is recognizable, although the reason for its occurrence in a foreign area far from its point of origin is not known. It is not known what these geographic differences mean culturally, or how geographic conciseness or area distribution of period styles may vary through time. Likewise, geographic divisions within Period 4 art mostly have not been recognized but must surely exist.

Ethnographic potential is also dwindling. The indigenous Piaroa are quickly losing traditional knowledge pertinent to art studies due to changing cultural values, residence patterns, and economic orientation. Probably most of the information available 50 years ago from indigenous groups is now lost, since the information is not being passed down as it once was, and most of the remainder will be gone as the older generation dies. I have already seen this kind of knowledge loss during fieldwork in other areas; observations I made in the past are no longer possible, and the information is no longer available.

At the same time that site information and ethnographic potential are declining, there is a world-wide movement, especially evident throughout the

Americas and southern Venezuela, for indigenous peoples to regain their ethnic identity and cultural pride. The conservation of rock art sites is culturally necessary, since many are used today as cemeteries and all still are spiritually important due to their connection with ancient ritual. The management of these sites, as an active conservation mechanism, would be reasonably associated with indigenous people on whose land the sites are found and who are striving for greater recognition to control their lives and ancestral territory. Any resulting management considerations and approaches should be carefully integrated into the trend to revitalize cultural identity, pride, and rights within the single unified concept of cultural heritage and national patrimony.

## CHAPTER 11

# SUMMARY AND CONCLUSIONS

The following observations and projections summarize some of the main points of the study and are offered as suggestions to be considered during future work. These are stimulated from observations made of the rock art and from other lines of reasoning.

### **Project Overview**

This study contributes the first chronological framework for the painted rock art of southern Venezuela. It is also the most intensive study yet done on the painted art of the region. The purpose of the inventory, served by subsequent analysis, is an attempt to define as quickly and simply as possible, by inspectional means, an initial chronological sequence of occupational periods represented by temporal styles covering the history of painted rock art of the region. The chronology is considered the main component of a framework, based on both prehistoric and modern cultural information, for future study of rock art in this area.

Archeological fieldwork consisted of a preliminary, nonsystematic archeological reconnaissance to locate painted caves in a restricted geographical area of the middle and upper Orinoco drainage centered on Puerto Ayacucho in southwestern Venezuela. The informal, partial field inventory resulted in a sample of 38 painted caves. This sample provides information on site location,

site setting, intrasite characteristics, and artistic content. Visits also were made to numerous burial caves and petroglyph sites for comparison. Observations were made on geographic and ethnographic details which might be pertinent to future considerations of rock art. Informal discussions with indigenous informants covered a number of subjects related to rock art. Field information was augmented by published data.

### **Definition of Rock Art Periods**

Periods are identified and defined by superposition of art styles representing those periods. Styles cannot be described solely on the basis of either technology or content, and it is necessary to use both together, along with superposition, and to consider manner of application. Context should be used to the extent possible, such as geographic context to identify the primary zone of association relative to the Orinoco or uplands.

The study has defined seven primary periods of painted rock art. Periods are arranged chronologically by superposition. Absolute ages are tentatively suggested on the basis of ceramic cross dating (following the Rouse-Roosevelt model; [Figure 35](#)) and from other considerations. Periods 1 and 2 seem to pertain to local preceramic populations. Subsequent local development continued with an initial minimal — and later progressively increasing — influence from middle Orinoco ceramic cultures. The geographic distribution of site components by period is shown in [Figures 37-46](#).

**Period 1** may be preceramic. The earliest part may be early Archaic, presumably dating 4000 B.C. or earlier. The later part seems to begin a tradition continuing through Period 2 and into Period 4. Estimated age for the later part of the period is 3000-2500 B.C.

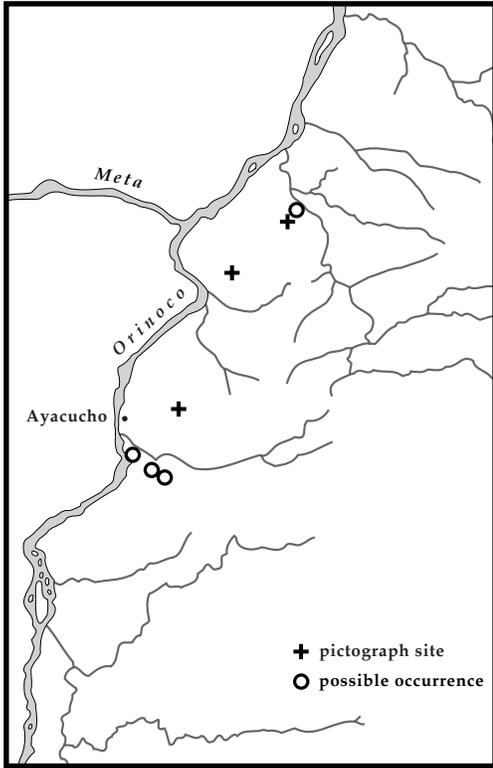


Figure 37. Period 1 sites.

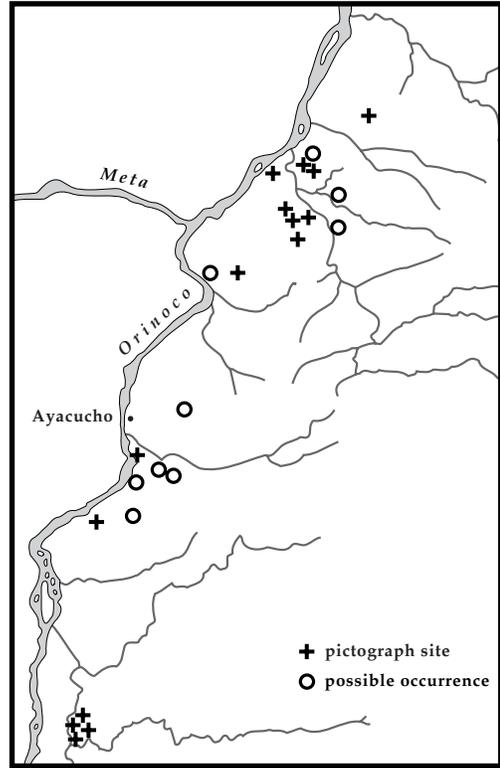


Figure 38. Period 2 sites.

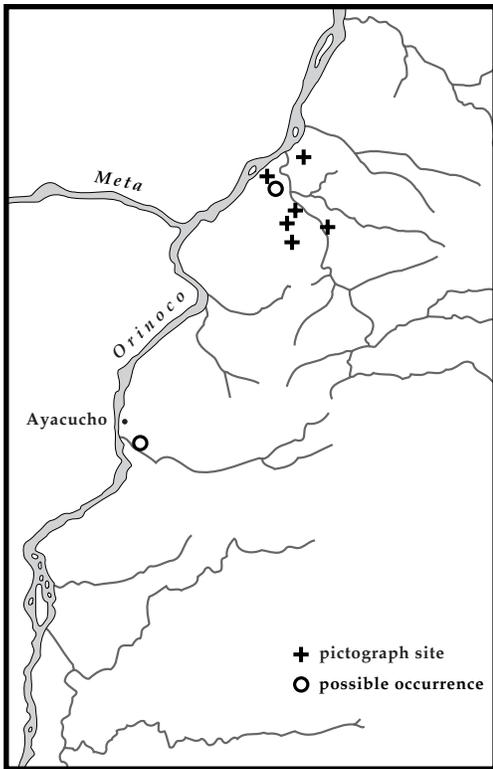


Figure 39. Period 3 sites.

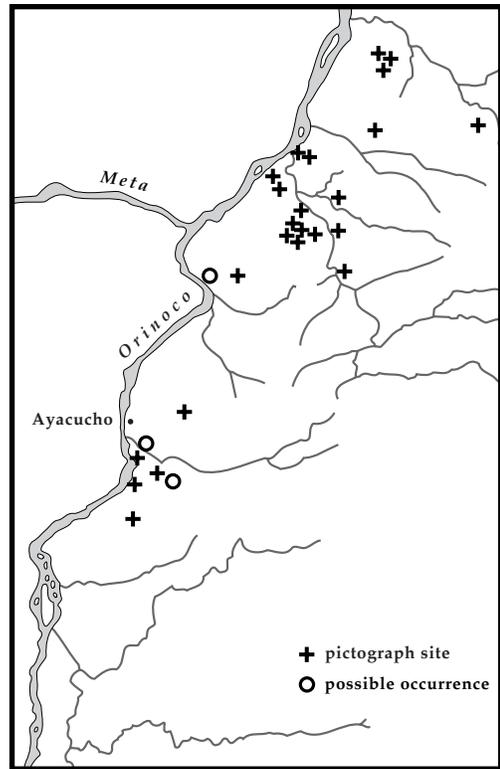


Figure 40. Period 4 sites.

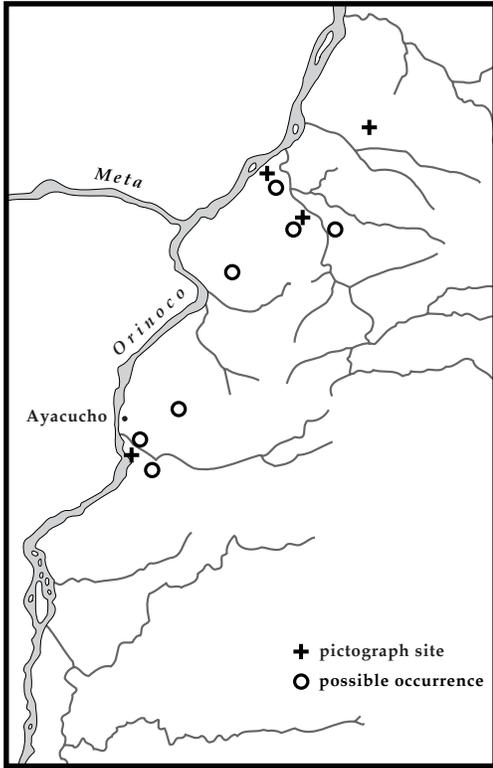


Figure 41. Period 5 (total) sites.

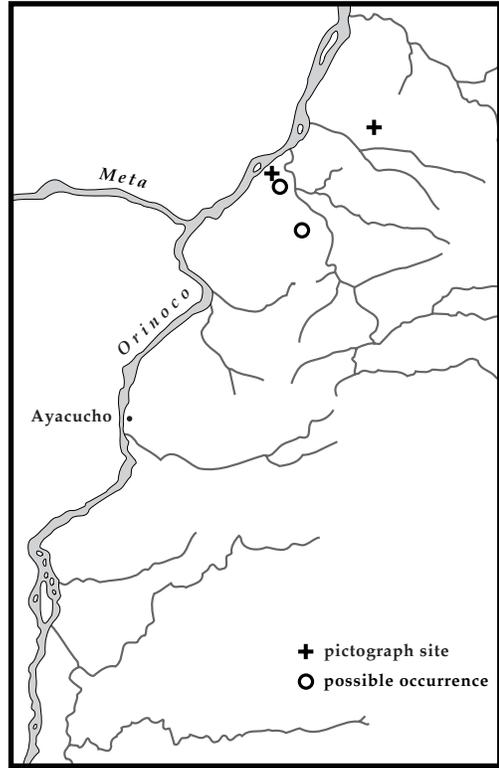


Figure 42. Period 5 (multicolor) sites.

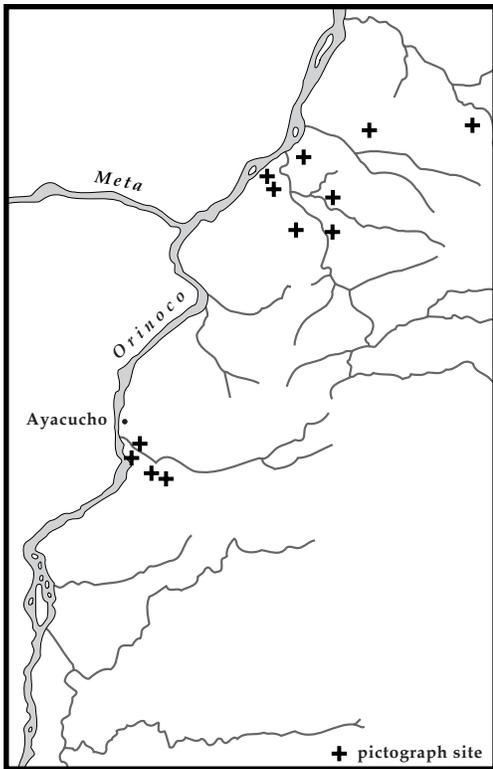


Figure 43. Period 6 sites (all).

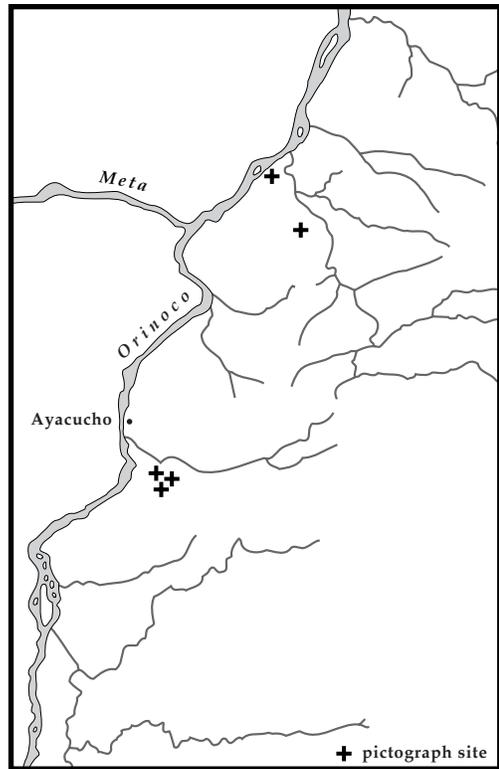


Figure 44. Period 6 sites with caraña.

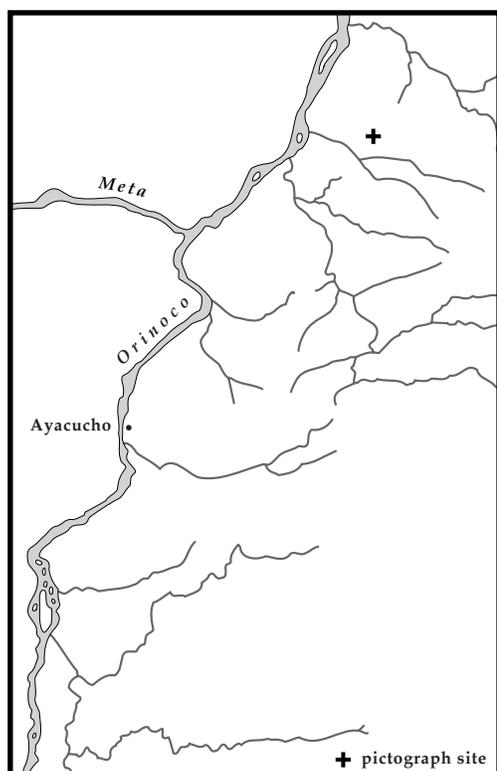


Figure 45. Period 7 site.

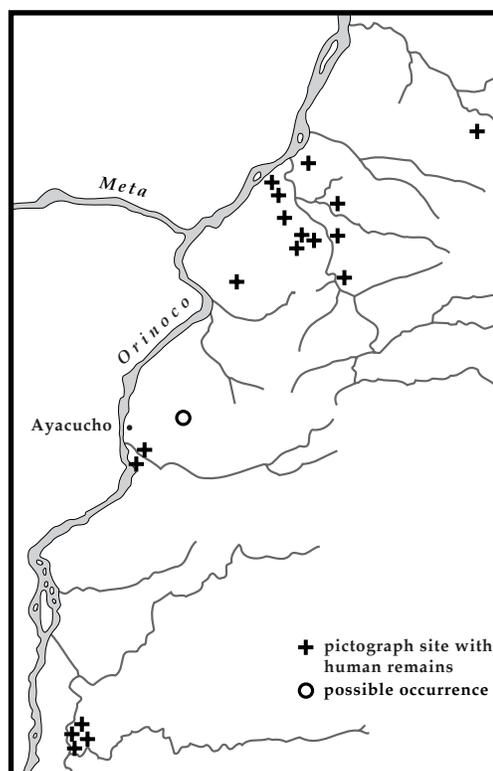


Figure 46. Sites with human remains.

**Period 2** appears to be a continuation of the preceramic hunter-collector tradition begun in late Period 1. It may date around 2500-2000 B.C.

**Period 4** seems to continue the resident hunter-collector tradition of Period 2 and continues into early Saladoid, with the beginning middle Orinoco developmental influence. The style is still basically local, but red-white bichrome and other Saladoid influences begin to be seen and probably increase through this period. Estimated age is about 2100-350 B.C.

**Period 3** is the main middle Orinoco Saladoid influence with its predominance of red-white bichrome, often white-on-red. The early part of the period appears to represent the initial entry of Saladoid Arawaks into the area, probably the La Gruta and Ronquín phases. The most recognizable motifs are humans and geometrics, some of which also occur in local Period 4 art. Estimated age is

about 1500-1000 B.C. The later part of the period appears to represent late Ronquín and Ronquín Sombra phases. This is seen as the continuation of classic Saladoid through the end of the period, the time of most intense Barrancoid influence. Estimated age is about 1200-350 B.C.

**Period 5** is seen as a continuation of both local development of Period 4 (Period 5 *monochrome phase*) and an intensification of the middle Orinoco influence (Period 5 *multicolor phase*) begun in Period 3. The Barrancoid-influenced late Saladoid seems to come to an end during this period and is replaced by Corozal as the beginning of Arauquinoid art. As such, this may be the beginning of Caribe entry into an area still controlled by local resident hunter-collector groups. Estimated age is about 350 B.C. to 600 A.D.

**Period 6** in the north is fully developed Arauquinoid (Caribe speakers) of the Camoruco phase. In the south the period also has some middle Orinoco influence, but new population changes are not yet fully understood. Overall, it appears that the Guajivo, Atures, Piaroa, Mapoyo, and other groups occupied at least parts of the area. Estimated age is about 600-1600 A.D.

**Period 7** represents the historic period, presently recognized at only one site with portrayals of European architecture and a historic Indian (or Spanish) house. They are believed to have been painted about 1735-1750 A.D. by Mapoyos living nearby.

### **Early Ceramic Development**

Traditionally it has been thought that Saladoid represents the earliest pottery on the Orinoco and that it came from the south as part of an early Arawak expansion originating somewhere between the mouth of the Río Negro and the

mouth of the Amazon. This study uses ceramic data, design elements, and rock art to propose a different scenario. This new explanation is a merging of the Rouse-Roosevelt and Sanoja-Vargas models, together with models and explanations from Zucchi and Tarble, ideas of Oliver and Lathrap, and various models presented in this study regarding the introduction and spread of ceramics and rock art in the Orinoco valley.

Early ceramic cultures were distributed along the coast during Formative times (about 4000-2000 B.C.), which must have been a period of wide-spread expansion of ideas and probably movements of people. It is proposed that the earliest ceramics on the Orinoco entered from the coast, either from the west from Columbia or from the east and south from the Guianas and Brazil, or both. From all indications, it seems most likely that ceramics entered with groups of people, not just as knowledge on pottery production introduced to local residents. Incoming groups presumably were proto-Arawak, and they entered somewhere in the Orinoco delta area and presumably began to settle on the lower river. Their proto-Barranoid pottery presumably was tempered with fine sand and decorated with broad-line curvilinear incision.

Some groups settled between the head of the delta and Angostura (now Ciudad Bolívar), while others continued up to the middle Orinoco around the mouth of the Apure. Groups remaining on the lower river were never culturally isolated and always maintained contact — and probably out-migration — with other areas along the coast and up the Orinoco. The new middle Orinoco settlers brought with them the ceramic tradition of broad-line curvilinear incision but acquired from people in the western *llanos*, up the Apure river, the tradition of complex painting of pottery. The nature of the Orinoco-*llanos* contact is not known, but it existed at an early date and continued to protohistoric times. The

resulting Saladoid pottery came into being as an admixture of proto-Barrancoid and perhaps proto-Osoid decorative traditions.

It presently is not possible to resolve the problem of whether Barrancoid or Saladoid was the first complex in the Orinoco valley. I am proposing that the two developed somewhat in unison — not totally independently — from a common precursor. Barrancoid certainly was a missionary society, and its stylistic influence is very strong in Saladoid and continued through Arauquinoid.

At the same time as this northern development, people or ideas were spreading from the south, presumably from the lower Negro area. These probably would be another Arawak branch of proto-Maipuran speakers. The associated ceramic tradition was based on the use of fine sand and *cariapé* temper, and the approach spread northward to a new culture area which seems to be centered at the mouth of the Ventuari, where it is known as the Nericagua complex. Nericagua ceramic influence appears on the middle Orinoco with *cariapé* temper in some of the early Saladoid and Cedeñoid pottery. The technology is poorly represented and seems to be strongest in the south and decreases northward, thus indicating a minimal influence and decreasingly limited contact downstream. Early Nericagua rock art appears to be best recognized by parallel wavy lines and figures formed by concentric lines, with the best examples in the Sipapo basin and rare occurrences north to the Parguaza river. Thus, the rock art distribution suggests the same implications as the pottery temper.

Nericagua and Cedeñoid ceramics are both coeval with Saladoid. Nericagua phases are defined here for the first time as making up the Nericagua complex of Brazilian origin and based on the use of *cariapé* temper. Development follows

some of the same general trends as the middle Orinoco Saladoid complex (sand temper), with early internal development and later Arauquinoid technological and stylistic influence. Cedeñoid is believed probably to be a Saladoid (and perhaps even Arauquinoid) technological or functional substyle or a social division based on specialist pottery production rather than representing a different ethnic group during early Saladoid or pre-Saladoid times. Cedeñoid may be the adoption by local hunter-collectors of selected ceramic traits from a Saladoid base.

The early cultures responsible for initial ceramics were those of the Formative occupying areas along the coast. Localized developments of these early enclaves, spreading inland along various routes, became the proto-Barrancoid and proto-Nericagua (*cariapé*) traditions, and presumably a similar development is responsible for proto-Osoid in the western *llanos*. As the influences and presumably people from those three secondary cultures expanded into the middle Orinoco, the new Saladoid ceramic tradition was formed. It appears that the main enduring contact for Saladoid was with Barrancoid, and Barrancoid stylistic influence is seen to have increased on the middle Orinoco through time. Perhaps slightly less contact was maintained with the western *llanos*; at least the earlier stylistic influence and maintained contacts are not as strongly evidenced. There is seemingly little indication for maintained contact with the upper Orinoco Nericagua.

From the rock art, it appears that the Saladoid development was north of the study area but that people with the Saladoid art tradition came south at least to the Atures rapids. The same seems to be the case with Barrancoid, although to me the separation between Barrancoid and Saladoid presently is not clear. There appears to be no well defined distinction of design elements or composition

between the two traditions, and one would be hard pressed to distinguish between painted Barrancoid pottery and unpainted, incised Saladoid. Indeed, it seems that Barrancoid designs continue throughout the sequence, at least coeval with Barrancas and Los Barrancos phases, with designs appearing in Saladoid and continuing with the sacred design aspect of Arauquinoid.

### **Local Indigenous Development**

Early development of the Orinoco valley — at least pertaining to this discussion — can be thought of as centered more-or-less on the Atures rapids at Puerto Ayacucho. Preceramic occupation of the valley is evidenced by early materials and dates in middle Orinoco sites, recent excavations around Puerto Ayacucho (Barse 1989, 1990), and other materials discussed in this study.

The Atures rapids area has served as a cultural boundary for at least 3000 years. Middle Orinoco expansion of Saladoid, Barrancoid, and Cedeñoid was mostly bounded upstream by the Atures rapids, and rock art from that period below the rapids seems mostly to be associated with the general Saladoid development, or with local groups. The upstream Nericagua complex is seen as having rather limited influence downstream from Atures, and rock art around and above Atures may be linked with Nericagua. The breach seems to have come most conspicuously with the Arauquinoid ceramic tradition representing Caribe expansion which extended both above and below the rapids.

This boundary is important to evidence of the origin of ceramic cultures and can be viewed relative to rock art distributions. The origin of Saladoid is not known, but its developed art style spread from a middle Orinoco homeland upstream into the resident hunter-collector population at Atures. Its main strength, as evidenced by rock art, did not reach much past the mouth of the

Parguaza. Thus, Saladoid, at least after its development in the area, clearly spread from north to south and not south to north down the Orinoco from the Río Negro as has been previously thought. It is known from other sources that Barrancoid and Arauquinoid spread upstream from middle and lower valley political centers, but their influence also is seen to have extended only to the southern part of the Atures area.

The early introduction of Saladoid, Barrancoid, and Nericagua ceramics into the area north and south of Atures presumably was accompanied by new immigrating populations with new technology. During this influx of people and ideas, a well established local culture was in control of the area from Atures to the Suapure. These people, presumably hunter-collectors or early horticulturists, were here before the introduction of Barrancoid and Saladoid pottery, and they maintained control throughout the Saladoid occupation of the middle Orinoco. Local groups appear to have been fairly well and uniformly organized, with communities constantly in contact with each other. Throughout Saladoid development, these local groups retained their cultural identity and sacred-ritual culture, as evidenced by a degree of developmental uniformity in their complex painted rock art over a large area. They maintained their established art tradition and accepted only limited influence on their art. The population had manioc, at least by Period 4, but it is not certain whether they had it before the arrival of ceramics or got it only after entrance of Saladoid into the area.

Local residents at the time of ceramic introduction during Period 4 were fairly well organized and occupied a recognized area, formally defined through acknowledged territoriality, formal territorial control, or regional ownership. This is evidenced by the continuation of the original resident rock art, mostly with relatively minor stylistic and technological influence from entering ceramic

groups, plus the limited penetration of ceramic group iconography into this area, particularly above the Parguaza. This rock art study provides the first indication of the early indigenous political entity, and its nature is not known.

Some early hunter-collectors believed related to Period 4 rock art may be proto-Sáliva. This is suggested somewhat by the extensive range of Sálivan speakers during historic times from above the Atures rapids to the mouth of the Apure. The historic and modern distribution of Sálivan speakers is widespread, but the various factions (e.g., Piaroa, Sáliva, Pumé, Atures, Macu) are mainly split apart by Arawak and Caribe groups, suggesting an in-place group divided by immigrating peoples.

### **Arauquinoid**

The Arauquinoid ceramic tradition appears to have both secular and sacred ceramic art, as described by Tarble (1991). The sacred substyle is the most represented in rock art and appears to be heavily influenced by Barranoid decorative elements and approach. General appearance of the art suggests decreased control of ritual painting by specialists and a concomitant increase in painting associated with heavy drug use not obvious before this. Part of the decline in artistic care of ceramics may be due to increased mass production for nonlocal use. A further implication of decreased care in rock art of Periods 5 and 6 might be increased social factionalism, probably village and ethnic fissioning, with more and more small groups developing their own cultural identity and political control. There probably was a parallel trend toward decreased cultural cohesion, perhaps due to or resulting in the increased number of small political groups.

The Valloid ceramic complex should be considered a phase or substyle within the Arauquinoid ceramic tradition. Although Valloid was originally discussed as representing a distinct group of Cariban speakers during late times (Tarble and Zucchi 1984), distribution of the ceramic complex suggests that consideration also should be given to its possible correlation with early Sáliva occupation on the middle Orinoco (Morey and Morey 1980) due to the nearly identical distributions of Sáliva and Valloid. Thus, it is possible that not all middle Orinoco Arauquinoid ceramics and sites are Caribe, but some might be early Sáliva.

### **Modern Ethnographic Considerations**

Nearly all rock art appears to pre-date modern local populations of hunter-collector agriculturists although there must have been some association between the latest rock art of Period 6 and historic Period 7 and ancestors of some of these groups. If we assume that rock art was done up to 1500 A.D., and we calculate overlapping lifetimes at 50 years per individual (assuming the passing on of cultural information at puberty to 15-year-old initiates by male instructional members 65 years old), this indicates only ten lifetimes of orally transmitted historical information from 1500 to the present. Considering that local cultures have a strong tradition of formally passing down ritual or sacred information verbally, from one generation to the next, it seems odd that we are not able to find at least some remnant information on previous painting of rock art. No groups seems to retain direct information on the painting of rock art, although they can still help identify elements in the art and give insights into its use and referents. In regard to a historical connection, I suspect we simply have not asked the right questions in the right way to the right people at the right time. Such

information may be explained in terms of mythological beings and may be difficult to interpret.

There is a relation between modern wooden body stamps and Arauquinoid ceramic roller stamps, as seen by a similarity of designs and presumed use for placement and display of standardized body emblems. Many designs seem to extend back to an early Barrancoid influence which pervaded the middle Orinoco during late Saladoid times and was again felt late during the Arauquinoid development.

### **Rock Art Function**

Nearly all rock art viewed during this study is considered to be sacred art, meant to accompany ritual or pertain to spirit contact, ancestor reference, or mythology. Secular art appears to be rare, and nothing appears to be biographic or refer to daily events or things. Nothing is interpreted as specifically hunting magic, and all animals are believed to represent various kinds of totems or spirit beings. Of course, at this time such interpretations cannot be supported.

Considering that populations were mostly unclothed, and fertility is a major preoccupation in local cultures, the lack of gender indication and sexual activity is noteworthy. In this regard, the art complex seems almost unique on a world level.

### **Final Remarks**

The study area contains numerous sites representing a long tradition of cave painting. There are more sites and a greater diversity in site form, location, and setting than previously considered. Likewise, the art is more abundant and diverse than previously believed. The duration of the rock art sequence is also

greater than previously thought and likely lasts several thousand years. Actual age will not be known until absolute dating of the pigments.

This study contributes no new information on disagreement between the Rouse-Roosevelt and Sanoja-Vargas models for the introduction of ceramics and subsequent chronological development on the middle Orinoco. It appears likely that the beginning of Saladoid (including Cedeñoid) in this area dates somewhere around 1000-1500 B.C. There presently is very little support for Roosevelt's age of 2100 B.C. for the La Gruta phase. Suggestions that earlier ceramics at Agüerito date back to 4000 B.C. are reasonable within the context of early ceramics sites on the coast of South America, and the suggested middle Orinoco age may turn out to be correct. An intensive program of dating of carbon within potsherds from all cultural phases is necessary to resolve the problem.

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# GLOSSARY

The following terms and abbreviations mostly are arranged by subject, with similar terms together. Several terms are further discussed in the text.

## Abbreviations

**DCN: División de Cartografía Nacional.** The government agency (within MARNR) responsible for producing maps of the country. Topographic and other maps from DCN are used in this project (see **Site Locations** in **Chapter 4**).

**INPARQUES: Instituto Nacional de Parques.** The department within MARNR generally responsible for field operations of the parks. The Puerto Ayacucho field office is in charge of new parks which include Roca de Tortuga (Atarupe cave, JG-31) and Piedra Pintada (the Cerro Pintado and Cerro Pintaito sites).

**MARNR: Ministerio del Ambiente y de los Recursos Naturales Renovables.** The government agency responsible for overseeing a wide variety of activities regarding the environment. DCN, SADA-Amazonas, INPARQUES, and many other departments fall under the direction of this agency.

**IVIC: Instituto Venezolano de Investigaciones Científicas,** Caracas. A government sponsored research agency with a Department of Anthropology.

**UCV: Universidad Central de Venezuela,** Caracas. The main university whose faculty and students occasionally conduct archeological and ethnographic work in and around the present study zone.

**SVE: Sociedad Venezolano de Espeleología,** Caracas. A private club whose interest is the exploration and study of caves. The most noteworthy individuals who have made archeological contributions in this area include Miguel Perera and Franz Scaramelli.

**CEN: Catastro de Espeleología Nacional.** An in-house cave listing of the SVE which includes archeologically utilized overhangs and rockshelters. Most information is published in the annual SVE *Boletín*.

**UTM: Universal Transverse Mercator.** A locational measurement system for precise designation of any point on the earth, with measurements based on the metric system (see **Table 6**, and **Site Locations** in **Chapter 4**). The study area is in zone 19.

**GPS: Global Positioning System.** A constellation of satellites constantly emitting signals that a receiver interprets to determine positions anywhere on the earth. The receiver (GPS unit) displays any given location according to a number of locational systems, such as the UTM (metric) and Latitude-Longitude (English) systems used here (see [Table 6](#), and **Site Locations** in **Chapter 4**).

### Local Terms

**Criollo.** Non-Indian residents of the area (cf. Zent 1992:51-52; Conaway 1984:8; Schwerin 1966:17; Henley and Mattéi-Muller 1978:30).

**Capitán.** The term by which village headmen are referred and addressed in most indigenous groups in the region. Apparently in the past the head shaman<sup>57</sup> was also the *capitán* (Comité 1945), but now the offices are usually split. The role of the government appointed commissioner also is gaining in authority, at least in the more acculturated areas around Puerto Ayacucho.

**Piaroa.** The main ethnic group in the study area. They are known also as *Wóthuha* and a number of other terms (see **Chapter 9**).

**Pintadera.** Wooden plaque used as a stamp for application of paint to the body ([Figure 34](#)). Stamps may be circular or rectangular, depending on the ethnic group and the part of the body to be painted. One or two flat faces are carved with standard designs according to a number of factors.

**Puya.** Small stick or sliver of palm wood, frayed slightly on one end and used as a fine paint brush, usually for application of paint to the face (see Valles 1993).

**Yopo.** A local tree (*Anadenanthera peregrina*) and the powdered drug produced from its bean. The seed of this mimosa-like legume is finely ground, and a mixture is ingested nasally to produce a number of physical and psychological effects, including mild hallucinations. Use of the drug is widespread across South America and is accompanied by standard paraphernalia which varies in style between cultural groups. This is only one of many kinds of drugs used in this and other parts of Amazonas.

### Piaroa Words

**Idora.** Piaroa term for “cemetery cave” on the Parguaza river and other areas. Informants from other areas occasionally use the word to refer to caves in general, or caves which are suited for burials.

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<sup>57</sup> This study follows the newer trend to refer to the plural of shaman as shamen rather than shamans.

**Inawa** (*inäwa, inäwä, inahua, inävä*). Piaroa term for bedrock exposure, including both low areas extending into a river and exposed bare mountainsides (cf. Zent 1992:168). The term *susudé inawa* (house of stone) was reported by Crucent (1946) as the Piaroa word for rockshelter.

**K'eräü**. See paints, below.

**Warime**. A Piaroa ritual dance festival, held every three years, in which dancers with painted masks dress in draping palm-leaf costumes pointed at the top (Vicariato 1988:68-69). In this study *warime* is used in descriptions of the art to refer to the form of the costumed dancer and intends no implication of ethnic affiliation.

### General Terms

**Art**. Synonymous with **rock art** to indicate the physical remains of a figure or design drawn onto or into a nonportable rock surface. The concept refers to the physical remains and does not insinuate function or aesthetic properties of those remains.

**Paintings, pictographs, and painted rock art**. Paint or similar material of colored pigment applied to a nonportable rock surface apparently for the purpose of attempting a depiction of a figure or design. The terms themselves do not insinuate personal intention or purpose of the artist, or associated or intended aesthetic properties of the remains.

**Superposition**. Synonymous with **superimposition** (unless otherwise clarified) to indicate layering of paint or figures. This follows the general definition (Webster 1983) of both **superpose** and **superimpose**: to lay, place, or impose on, over, above, or on top of something else. Similarly, no distinction is made in geology, where both terms refer to the order in which strata are placed one above the other. In geometry, however, **superpose** (and similarly **superposition**) means to place one thing upon another exactly so that every part of each coincides exactly with every part of the other. In this study the geometric distinction is specified as "superimposed exactly," such as the case of *caraña* overpainting of early orange figures at JG-15 and JG-58.

**Private art**. Art placed in an area of restricted visibility, seeming so placed to be viewed only by the individual painter or singly by other observers, one at a time (see **Chapter 5**).

**Public art**. Art placed on an open wall easily viewed by the public, seeming placed so as to be viewed by several people at one time or to be viewable from a distance (see **Chapter 5**).

**Entoptics**. Perceived images imagined to be seen from inside the head (*entoptics*, "inside the eyes") as the result of physical or chemical optical nerve

stimulation.<sup>58</sup> **Phosphenes** are entoptic designs, patterns, or colors caused by stimulation, pressure, or light on the eyelid or by natural body chemistry (such as accompanying headaches or physical pain). **Hallucinations** are entoptics caused by externally induced chemical stimulus to the brain. The distinction between phosphenes and hallucinations caused by natural body chemistry is not clear, such as “visions” accompanying headaches, physical pain, hunger, or other discomforts. For the most part, these terms are not used in this study, except for hallucinogenic response to nasal ingestion of yopo.

**Period.** A unit of time; in this study, a *stylistic period* unless otherwise noted, designated by superposition and recognized by its style content.

**Subperiod.** Temporal subdivision of a period; in this study, an early or late phase within a period.

**Style.** A configuration of attributes which occurs during a particular period, as indicated by superpositional relationships with other styles, and which is thus distinguishable from other such configurations (see **Chapter 5**).

**Substyle.** A stylistic subgrouping of some kind that occurs within a particular style or over a shorter period of time, as recognized on the basis of technology, content, geography, or a combination of the three. Examples are the *monochrome phase* and *multicolor phase* of Period 5 art.

**Artistic expression.** The way in which people’s beliefs or observations are recorded on a stone wall. This includes what kind of paint they used and how they mixed it (*technology*), what shapes they drew and what those forms were intended to portray (*content*), the way the artist portrayed those shapes as reflecting both intention and skill (*personal manner of execution*<sup>59</sup>), and the placement of those figures within sites and the relations between them (*context*).

**Technology.** The physical characteristics of the paint itself including components, appearance, and application methods.

**Content.** That portion of art represented by figures drawn on the wall, with attempts to interpret what those figures were intended to portray, realistically or metaphorically.

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<sup>58</sup> These definitions generally follow current usage in rock art. Webster (1983) defines **entoptic** (adj) as, of or related to the interior of the eye, and **entoptics** (n) as the science of the internal phenomena of the eye. **Phosphene** is a bright visual image produced by mechanical stimulation of the retina, as by pressure on the eyeball through the closed eyelid. **Hallucination** is the apparent perceptions of sights, sounds, etc., that are not actually present.

<sup>59</sup> Webster (1983) defines **manner** in art as a characteristic style or method based on personal expression.

**Figure.** A complete individual element in art, such as an individual drawing of a rabbit or a geometric design.

**Motif.** A recurring, relatively standardized form in art, such as the widespread portrayal of rabbits, with all their variations in shape and personal manner of execution; figure forms repeated within or between sites.

**Personal manner of execution.** Synonymous with manner as that characteristic of art relating to the personal way something is done or drawn.

### Paint Products and Kinds of Paint<sup>60</sup>

**Onoto.** Fine seeds of the spiny pods of the *onoto* tree (*Bixa orellana*), ground and cooked with *seje* oil, and occasionally fire ashes, to produce a light to dark red paint.

**Chica.** Leaves of the *chica* vine (*Arrabidaea chica*), dried, ground, and boiled with resin and possibly other products to produce dark red *k'eräü* paint.

**Caraña.** Resin from the *caraña* tree (*Protium carana*), mixed with color pigments to produce a paint that adheres well to stone. It may be cooked alone as a medicine or used as a dark brown to black paint.

**K'eräü.**<sup>61</sup> A dark red paint made by cooking a mixture of *chica* and *caraña*, usually with some *seje* palm oil, often with added fire ashes, and occasionally with added *onoto*. The term is used by some researchers to refer to a mixture of *onoto* and *caraña*, or *onoto* and *seje* oil. The term sometimes is used also for the deep, bright red color since the color is assumed generally to be produced by *k'eräü* paint.

**Redaca.** White earth, such as kaolinite obtained from the river banks around the village of Tierra Blanca on the Parguaza river, used as a pigment.

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<sup>60</sup> See Table 20 for alternate and scientific names.

<sup>61</sup> Alternate spellings in the literature include *ke-rau*, *kereu*, *'këräü*. Literate Piaroa also have written this for me as *'keräü*, *'que-räo*, and *ke'räo*.

## APPENDIX

# CONTENT AND PERIOD ASSESSMENT BY SITE

The following information concerning stylistic periods represented at sites and the superpositional relations between figures and periods is taken mostly from reviews of color slides. Some information is from field notes.

This appendix is considered part of the dissertation and not a separate document; numbering of pages and other document contents continues from the main document text, and all references are included in **References Cited**. Sites included here are only those pictograph sites which are used in this dissertation study ([Table 2](#)) and do not include all known pictograph sites in the area, other kinds of rock art sites, or non-rock art sites which have been visited. Sites are arranged numerically by temporary survey number as *JG-xx*, followed by the suggested formal site name ([Table 4](#)).

**Site Details** presents only basic details for each site. Site names are those listed in [Table 4](#). All sites listed here are located in the states of Bolívar and Amazonas. Additional UTM and map information is given in [Table 6](#). The main publications for each site are referenced here. Site type information is summarized in [Table 3](#). Site location and description information includes only basic discussion to orient the reader.

**Periods** which appear to be present are listed after the subheading. Usually only a few of the figures are included in the tabular listing (also see [Table 2](#)). This information is not redundant with periods listed under **Superpositioning**.

**Superpositioning** lists a sampling of some of the observed overpainting. An attempt is usually made to include examples of each relationship between periods, although not all redundant examples of each relationship are itemized.

## JG-01 — Cerro Iguanitas 1

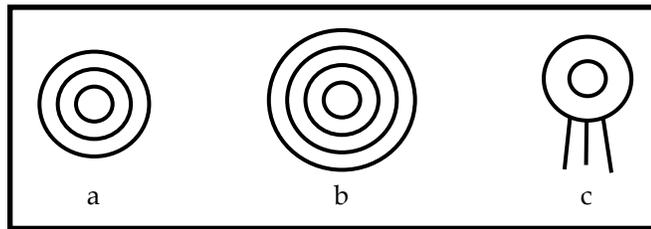
### Site Details.

Other site names	Susudé Inava; Susude Inava; Cueva Susude Inava; Casa de Piedra; Casa de Piedra Sur; El Carmen; Cueva del Carmen; Iguanitas; Tiger Cave; Deer Cave.
Other site numbers	CEN Bo.52; FGS-4; JSV-50; Bo.27-B of Scaramelli and Tarble 1993.
State	Bolívar.
Map	6734-I-SE (25k)
UTM ( map location)	N 687.815, E 709.410
References	Cruxent 1946; Perera 1983b, 1988a, 1988b; Perera and Moreno 1984; Tavera-Acosta 1956; Delgado 1976; Colantoni and Delgado 1992 (photo, p. 5); Sujo 1975; de Valencia and Sujo 1987; Sujo 1975 (Fig. 52); Scaramelli 1992, 1993; Novoa 1985; Sanoja and Vargas 1970; Bastidas 1970; Sujo's personal files in Caracas; Scaramelli and Tarble 1993; Greer 1994 (p. 51, fig. 10, d, e).
Location	In the middle Parguaza river valley, hill due west of El Carmen and about 2 km west of the river. The cave is at the base of the southeast side of Cerro Iguanitas, next to the dry creekbed. Only about 5 m separates this shelter from JG-02 just around the corner to the north.
Site type	Medium rockshelter.
Site description	Southern of two large shelters often combined as Casa de Piedra (Perera and Moreno 1984). The main shelter is a high overhang with a yellowish wall and extensively painted. Near the center is a trough in the bedrock that goes back into an interior room and enlarged horizontal crack. At the north end is a low shelter or alcove with burial remains and some paintings. See more detailed discussion below.
Rock art	Paintings cover the rear wall of the main shelter, and many symbols are on the south end of the ceiling in the burial alcove.
Cultural deposits	Very shallow (see below). Grinding facets and anvil cut markings on bedrock (see below).
Artifacts	Prehistoric potsherd (see discussion following).
Human remains	Yes (see below).

**Site Description.** This is the southern of two contiguous rockshelters. This southern overhang has most of the paintings (JG-01) and is separated from the northern more enclosed shelter (JG-02) by a projection on the cliff face. The main portion of the fairly high bluff overhang is about 16 m long, with a total length of about 22 m and a maximum overhang of about 6 m. The usually dry creekbed is 7 m east of the drip line.

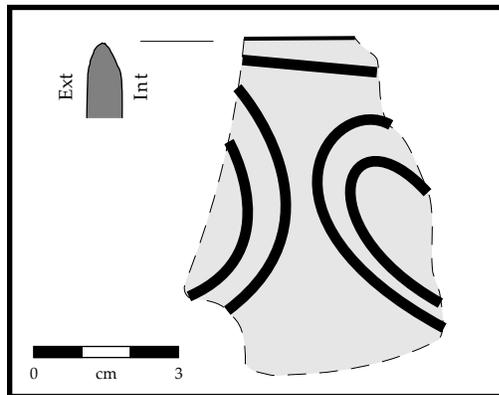
Near the north end is a wide crack in the floor which runs back into a small interior room formed along an enlarged horizontal crack (which runs along the base of the shelter wall). The passageway and room contain no cultural materials or paintings.

At the upper part of the right end of the shelter is a deepened low room which has served as the burial chamber. The horizontal crack at the north side of the room joins the south end of JG-02, just around the corner to the north; it is not possible to pass through from one cave to the other. The cane *cacure* remains of a recent burial and portions of older *cacures* are in this low room. The burial (human remains have been removed) is accompanied by a modern 20 cm green enameled tin plate (presumably once contained food). The *cacure* is the usual elongated twined reed burial sheath made of longitudinally placed narrow reeds held in place with 4-5 cross ties of twisted wrappings (1-2 outside wrappings and 3-4 over-under twine wrappings, all of thin vines). Originally the bundle was placed on the floor generally parallel to the cave mouth, then covered with large flat granite slabs. Just above the burial are distinctive linear pictographs (Figure 47), possibly in association. The burial presumably is Piaroa from the nearby village of Tierra Blanca or one of the outlier hamlets.



**Figure 47.** JG-01, sample of pictographs above burial in the northern alcove (field sketch, 1990).

In the rear of the flat burial room are scattered cane remains from another previous burial, but now there are no good indications of a body. The cane appears to predate the existing reed burial sheath. The low crack-type room extends back about 4.5 to 5 m and has a very low ceiling of about 30-50 cm. A local guide collected a decorated rimsherd from an incised olla in the rear of this room in 1991 (Figure 48). Another plainware sherd with sand temper was also observed at that time.



**Figure 48.** JG-01, incised olla rimsherd from the burial alcove (field sketch, 1990).

Bare bedrock is exposed throughout most of the shelter, and there appear to be no cultural deposits in the main shelter. Minor deposits are in the small eastern room with the burial.

Grinding facets are in the bedrock, especially at the south end of the shelter. Much of the polished bedrock near the left end of the shelter is covered with fine anvil scratches.

On the north end of the floor, beside the wide vertical crack, is a small series of seven wide grooves (Figure 49). They are not sharpening or ax shaping grooves, and their function is unknown. They cover an area 70 cm wide, and each groove is 12 cm long.



Figure 49. JG-01, parallel grooves in bedrock. Each is 12 cm long (field sketch, 1990).

Pictographs cover most of the rear wall from the base (a horizontal crack at the base of the wall) up to about 2.5 to 4.0 m to the highest figures (south end). The highest paintings probably were done with wooden scaffolds or access logs, (pole brushes are not considered likely). Some light gray to whitish water marks descend from high on the rear wall down into the area of the paintings; most paintings seem to be in reasonably good condition, with no major water damage. Bird and insect nests are common at the intersection of the curved rear wall and flatter curved ceiling, and some paintings have been affected.

**Periods.** Periods 1, 2, 3, and 4.

Period	Description
Period 3.	humans (Figure 8, a). warime-deer scene (Cruxent 1946: fig. 22; Scaramelli 1992).
Period 4.	animals, etc. (Santa Fe JG-19 style).

**Superpositioning.**

Top	Bottom
early Period 2 fine-line lizard, bird, etc.; figures are dark, clear, in good condition (Figure 6, b, d, e). [after study these figures may be reclassified late Period 4 or <i>monochrome phase</i> Period 5	bright red figures; faded and runny; possibly Period 1 or late Period 2 This is a confusing panel needing intensive work.
late Period 2 medium red	(?) = early Period 2 dark red
Period 3 shield	Period 2 medium red figures
Period 3	late Period 2
Period 3	early Period 2 fine-line elongated man (Figure 6, d)
possible Period 3 geometric band (like on banded pottery) (Figure 9, c)	Period 2 red figures
Period 4 fine-line fish (like interior-line fish at Pozón JG-20)	Period 3 <i>warime</i> dancer

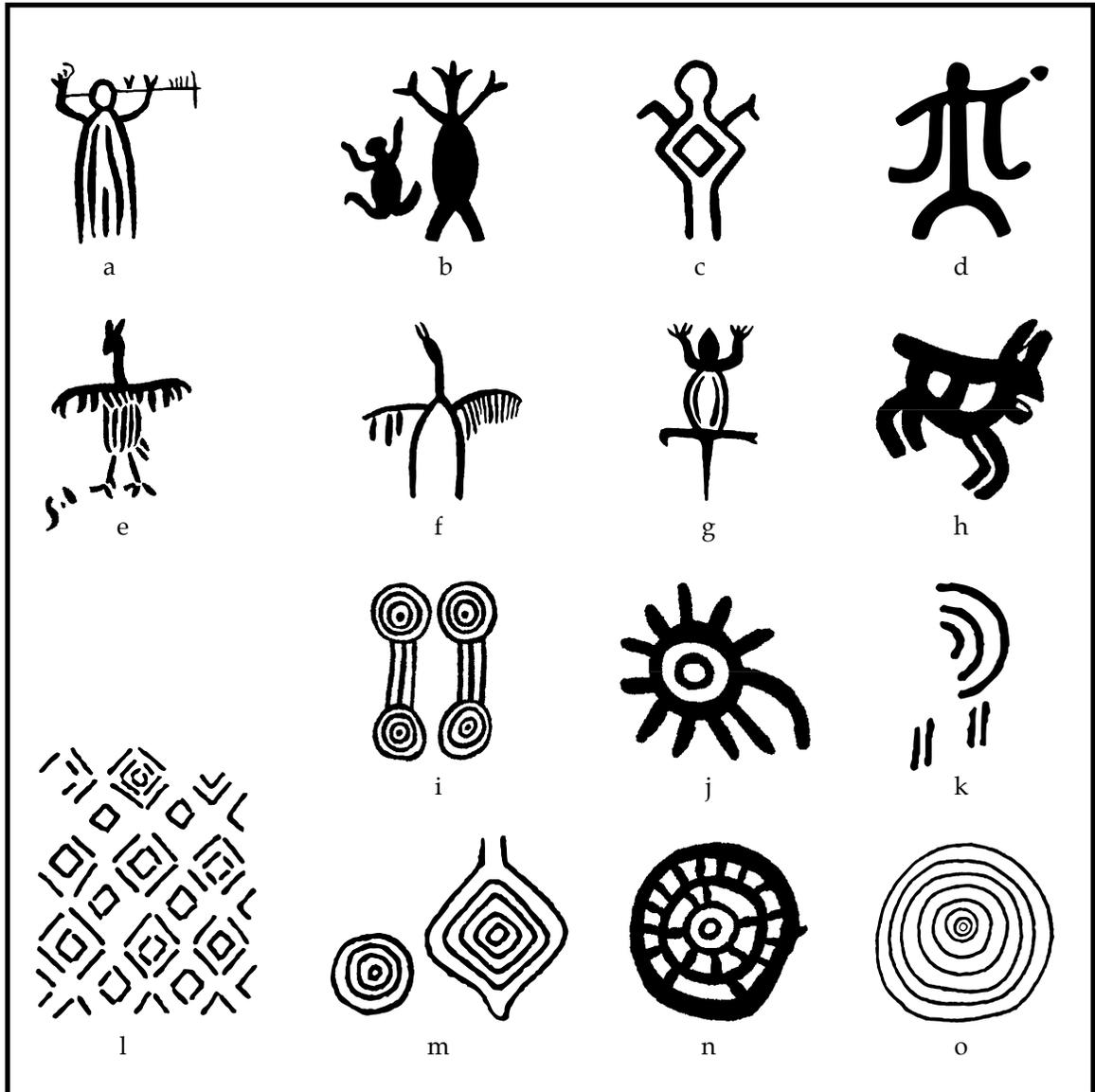


Figure 50. JG-01, figures in the main shelter (from Cruxent 1946).



Figure 51. JG-01, deer panel on the right side of the main shelter (from Cruxent 1946).



Figure 52. JG-01, figures in the burial alcove (from Cruxent 1946).



**Figure 53.** JG-01, figures in the main shelter (from Scaramelli 1992), a, right side; b, central area. The two illustrations overlap slightly.



Figure 54. JG-01, deer panel on right side of main shelter, field sketch by artist Warren Cullar 1991.

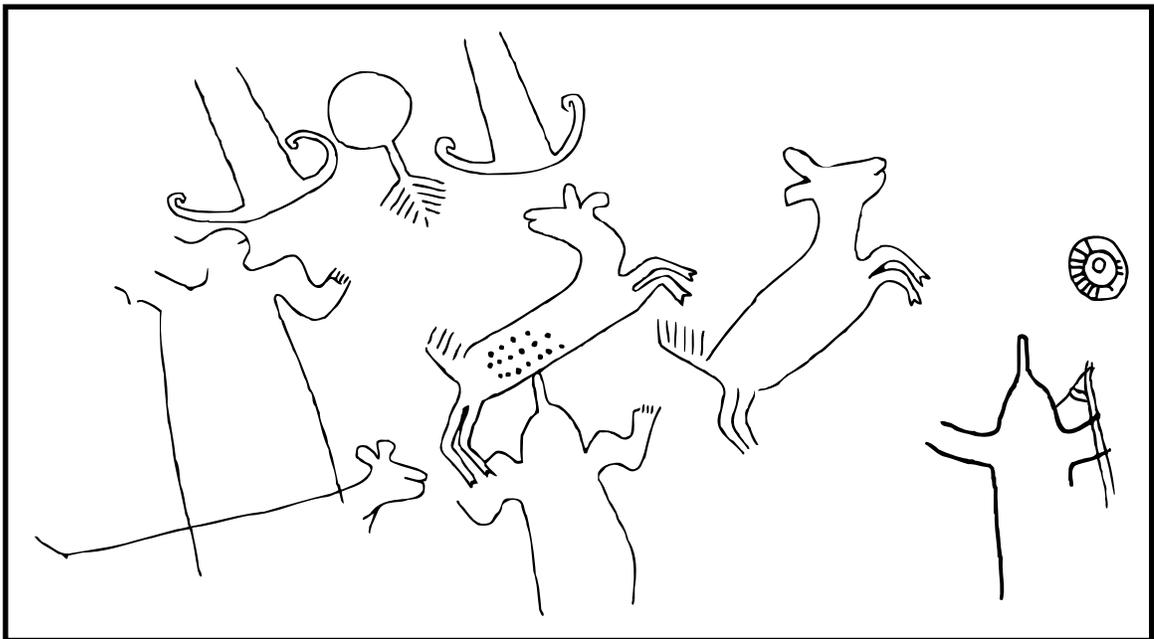


Figure 55. JG-01, deer panel on right side of main shelter, from watercolor by artist Warren Cullar 1991.

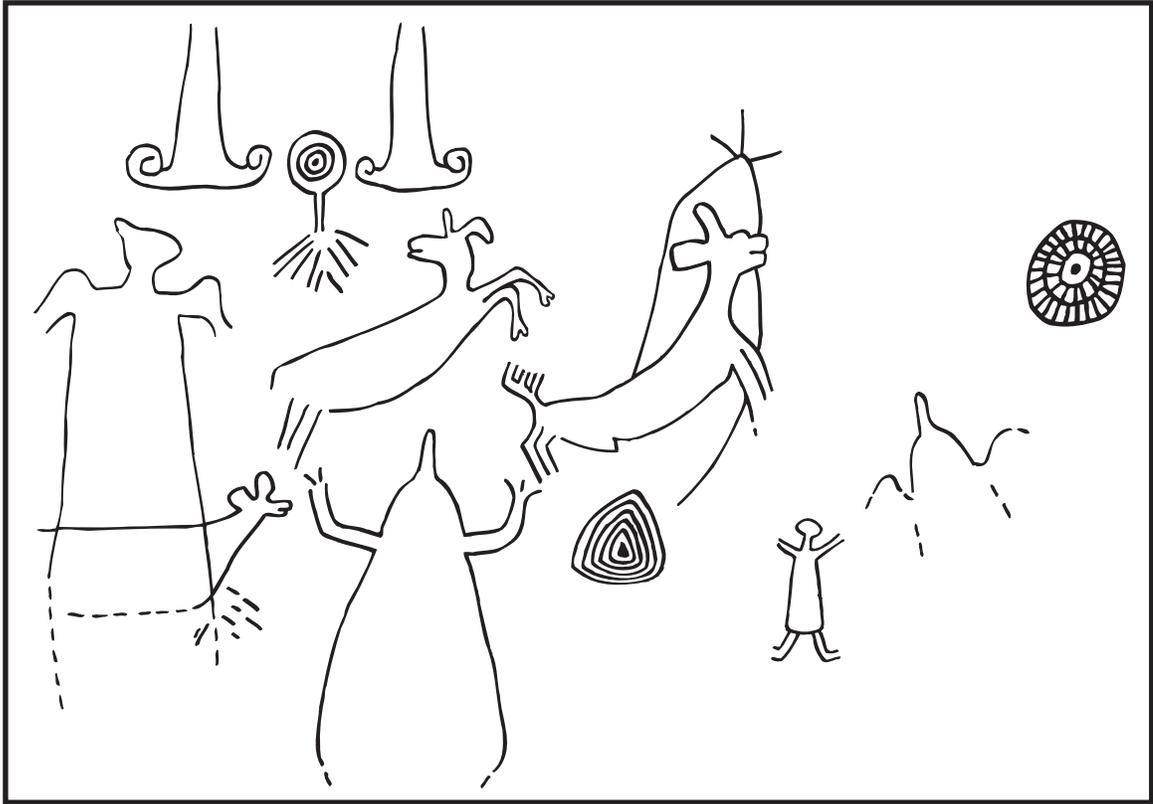
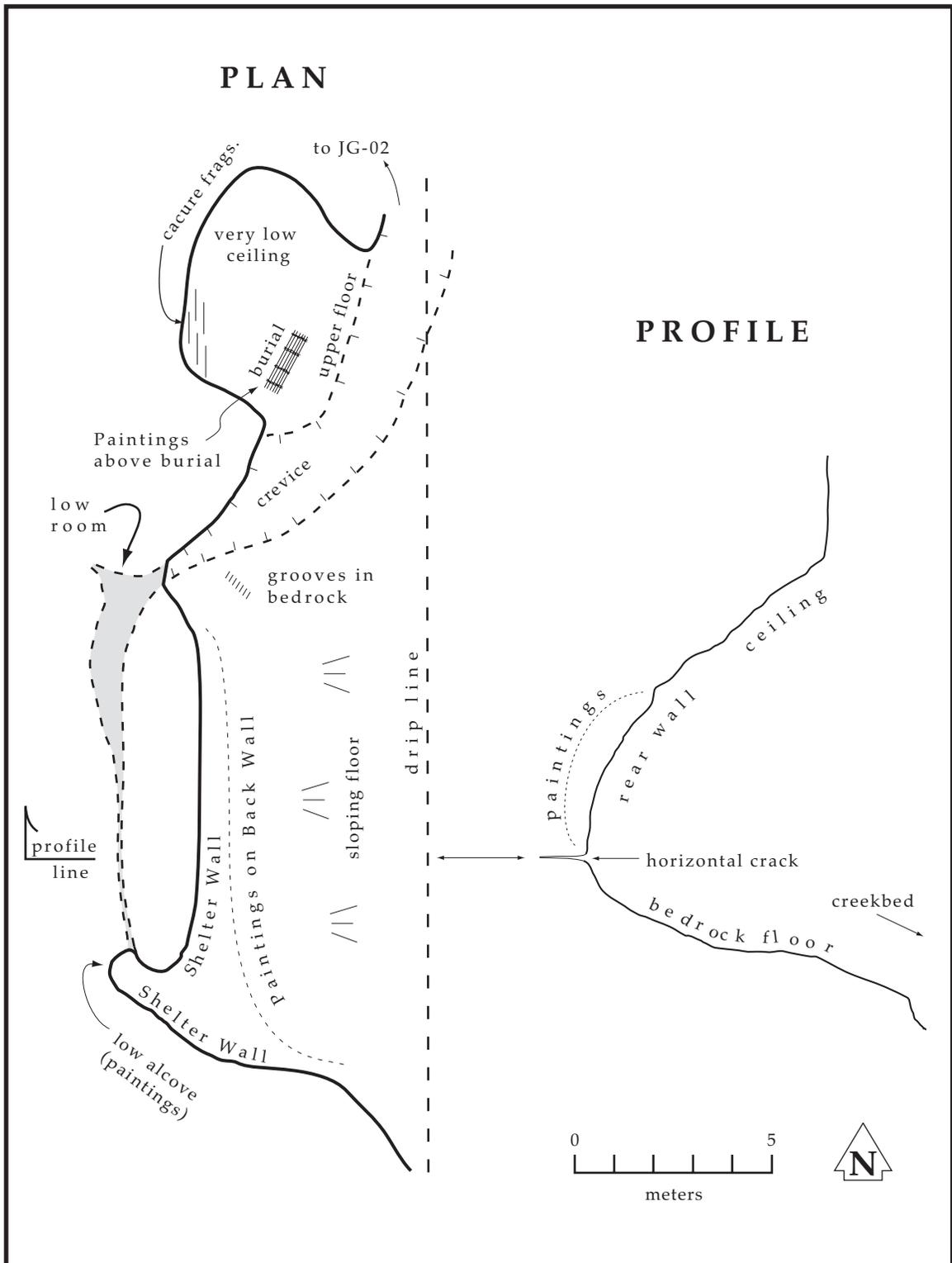


Figure 56. JG-01, deer panel on right side of main shelter, rough sketch from color slide by Greer 1994.



Figure 57. JG-01, deer panel on right side of main shelter from watercolor by artist Mark Charleville 1990.



**Figure 58.** JG-01, site plan and profile (field sketch, 1990). Plans also are published by Perera and Moreno (1984) and Scaramelli (1992).

## JG-02 — Cerro Iguanitas 2

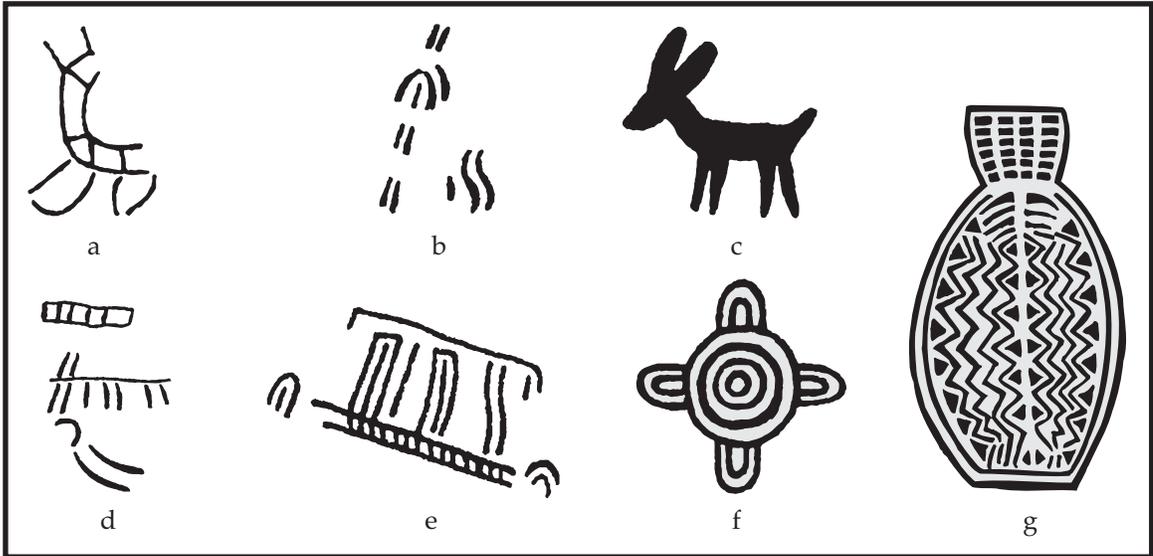
### Site Details.

Other site names	Susudé Inava; Casa de Piedra; El Carmen; Casa de Piedra Norte; Tiger Cave.
Other site numbers	CEN Bo.52; FGS-4; Bo.27-B of Scaramelli and Tarble 1993.
State	Bolívar.
Map	6734-I-SE (25k)
UTM ( map location)	N 687.865, E 709.405
References	(see JG-01); Colantoni and Delgado 1992 (photo, p. 5); Cruxent 1946 (drawings, figures 15, 16, 21); Tarble and Scaramelli 1993b; Scaramelli and Tarble 1993.
Location	In the middle Parguaza river valley, hill due west of El Carmen and about 2 km west of the river. The cave is at the base of the southeast side of Cerro Iguanitas, next to the dry creekbed. Only about 5 m separates this shelter from JG-01 just to the south.
Site type	Medium rockshelter.
Site description	Northern of two large shelters often combined as Casa de Piedra (Perera and Moreno 1984). The shelter is a high overhang, deepest at the southern end and nearly reaching the level of the sandy creekbed at the northern end. A huge elongated roofall boulder occupies most of the front of the shelter.
Rock art	Paintings are in the middle of the rear wall and at the north end.
Cultural deposits	Buried deposits are shallow and occupy the southern half of the shelter; all appear to be disturbed.
Artifacts	A local tourist guide from Puerto Ayacucho in 1990 removed a large sample of artifacts including sherds (Saladoid, Barrancoid, and possibly later), at least one early Saladoid-type zoomorphic adorno, chipped stone (quartz), and ground stone. Ceramics have been collected by Cruxent (1946) and Perera and Moreno (1984). Tarble and Scaramelli (1993b) report that they collected prehistoric sherds from Susude Inava, presumably from this shelter.
Human remains	None. Probably all bodies would be placed just around the corner in the JG-01 northern alcove.

**Periods.** Periods 1 (?); 2, 3.

### Superpositioning.

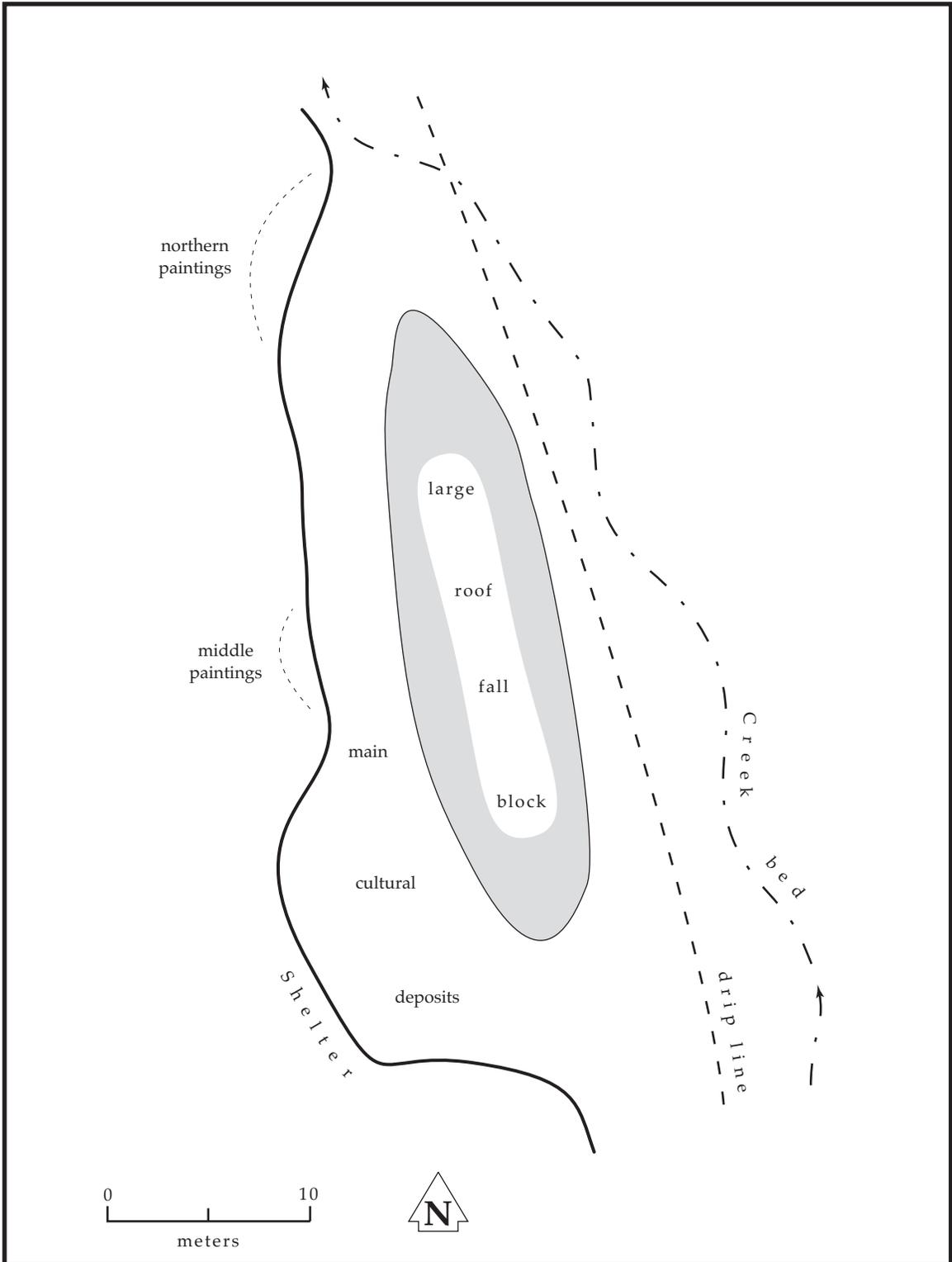
Top	Bottom
Period 3 decorated jar (tinaja) (see Scaramelli 1992; Colantoni and Delgado 1992:5; Cruxent 1946: Fig. 21)	Period 2 animals and geometrics



**Figure 59.** JG-02, figures in the center of the shelter (from Cruxent 1946).  
 a-e, red monochrome. f, red-white bichrome (red-on-white?). g, white-on-red.



**Figure 60.** JG-02, eroded panel at the north end of the site (from Cruxent 1946).



**Figure 61.** JG-02, site plan (field sketch, 1990).  
 Plans also are published by Perera and Moreno (1984) and Scaramelli (1992).

### JG-03 — Cerro Iguanitas 3

#### Site Details.

Other site names	Cueva Iguanitas.
State	Bolívar.
Map	6734-I-SE (25k)
UTM ( map location)	N 688.720, E 708.965
References	None known.
Location	Middle Parguaza river valley, hill due west of El Carmen and about 2 km west of the river; on the north side of the base of Cerro Iguanitas. The cave is far around the northeast side of the hill from sites JG-01 and JG-02, and somewhat above the base of the hill.
Site type	Medium rockshelter.
Site description	This is a large deep rockshelter and overhang. The upper eastern end is a protected rockshelter overhang with a bedrock floor. The lower eastern end is more cave-like, enclosed with a huge roof-fall block in front, and appears to be filled with silt from periodic runoff water; this area should be tested for deeply buried cultural deposits.
Rock art	The main pictographs are on a clean yellowish wall in the upper northwestern end of the shelter. Others are scattered along the rear wall, and a cluster is in a low alcove in the center of the site.
Cultural deposits	There are seemingly deep deposits in the lower main cave-like room. No artifacts or other features were observed.
Artifacts	None noted.
Human remains	None are still present although it is believed that the shelter previously was used for burials. One such alcove (ideal for placing burial sheaths) is in the center of the shelter and contains associated pictographs on the wall of the nook.

#### Periods. Periods 4 and 5.

Period	Description
Period 4	Multiple outlined crosses (of two or more crosses)
	panel of falling human figures (like <a href="#">Figure 11</a> , b; and <a href="#">Figure 13</a> , dd-hh)
	single falling figure (similar to <a href="#">Figure 13</a> , ii)
	circle with 9 rays; like Santa Fe JG-19 ( <a href="#">Figure 10</a> , g)
Period 5	use of fine-line dark red to purple (similar color and application to the early Period 2 fine-line lizard and bird at JG-01)
	fine-line dark red single line of five connected circles ( <a href="#">Figure 19</a> , b)
	fine-line dark red connected circle grids ( <a href="#">Figure 19</a> , a, c)

**Superpositioning.**

<b>Top</b>	<b>Bottom</b>
Period 5 dark purple fine-line figures (e.g. <a href="#">Figure 19</a> , a, c)	Period 4 lighter red figures

## JG-04 — Cerro Muertos 1

### Site Details.

Other site names	Cementerio Piaroa; Cueva Cementerio Piaroa de El Carmen; Cementerio Piaroa del Carmen; Cueva Cementerio Piaroa; Mountain of the Dead.
Other site numbers	CEN Bo.52; FGS-3; JCS-7(2); Bo.27-A of Scaramelli and Tarble 1993.
State	Bolívar.
Map	6734-I-SE (25k)
UTM ( map location)	N 686.865, E 710.175
References	Perera 1983, 1988a, 1988b; Scaramelli 1992; de Valencia and Sujo 1987; Christie-Shults 1992; Scaramelli and Tarble 1993.
Location	Middle Parguaza river; hill southwest of El Carmen; top of east rim of Cerro de los Muertos; overlooks the village of Tierra Blanca.
Site type	Boulder rockshelter.
Site description	Boulder shelter and overhanging boulders within a group of large boulders on the crest of the hill.
Rock art	Pictographs are in four principal zones and mainly are groups of red geometric and animal figures. All pictograph panels face east and overlook the lower savanna.
Cultural deposits	None.
Artifacts	Modern materials associated with recent burials only.
Human remains	At least six modern burials in <i>caures</i> , partially disintegrated.

**Periods.** Period 2, possibly 4.

Period	Description
Period 2	fine-line figures, humans (Figure 6, i)
Period 2 or 4	leaf or fish; interior lines
	fine-line fish, interior lines, medium dark red

### Superpositioning.

Top	Bottom
Period 4 dark medium red small burial figures (like in JG-01, JG-10)	Period 2 light red. This relationship is not clear.

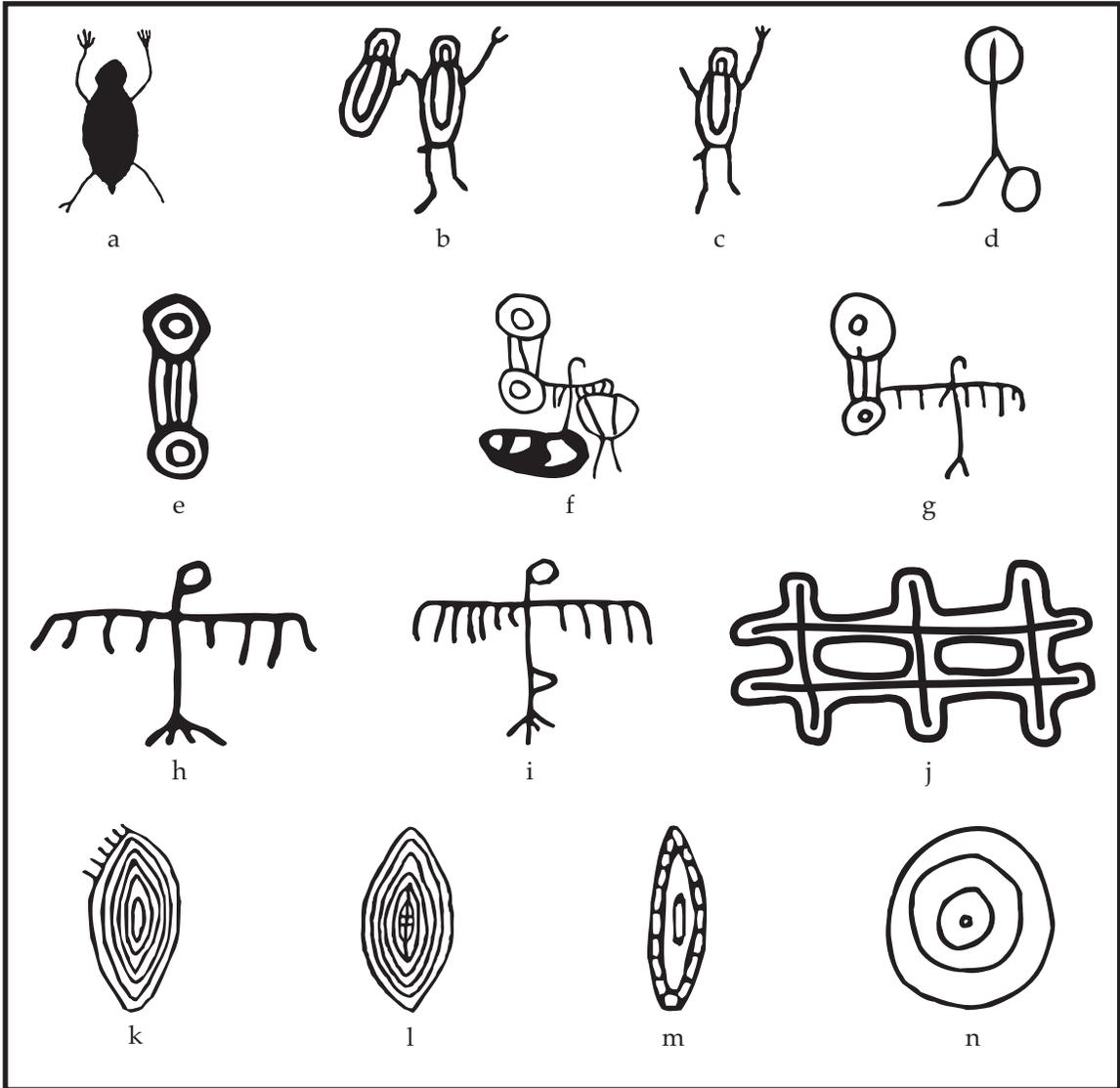


Figure 62. JG-04, figures from several panels, red paint (from Scaramelli 1992).

## JG-05 — Cerro Muertos 2

### Site Details.

Other site names	El Carmen 3; Cave of the New Burials.
Other site numbers	CEN Bo.54; FGS-21; JCS-7(1); Bo.26-B of Scaramelli and Tarble 1993.
State	Bolívar.
Map	6734-I-SE (25k)
UTM ( map location)	N 686.960, E 710.070
References	Scaramelli 1992; Colantoni and Delgado 1992 (photos, pp. 4, 6, 8, 20, 26); Scaramelli and Tarble 1993.
Location	Middle Parguaza river; hill southwest of El Carmen; high on west side of Cerro de los Muertos; about 100 m north of JG-04; overlooking Cerro Iguanitas to the northwest.
Site type	Medium rockshelter.
Site description	The cave measures about 46 m wide at the mouth 2.5 m high, and extends back 20 m. The ceiling is flat and low.
Rock art	Most paintings cover a 22 x 6 meter area of the ceiling. Paintings also are on the wall and ledges at both ends of the cave.
Cultural deposits	None noted. Some grinding facets in the bedrock occur on the flat floor in the front of the shelter (which the Piara here say were used in the past for grinding yopo).
Artifacts	None observed. A few prehistoric sherds have been reported in the front of the shelter.
Human remains	The cave presently is used by the Piara of Tierra Blanca as a cemetery for primary burials. Three recent burials in wooden caskets date 1988 or later. A new burial was reportedly added in late 1994. Caskets are covered with rock slabs to protect the remains from animals. The ledge and floor in front of the burials have a polished, stained appearance from the blood and fluids from the cadavers.

**Periods.** Periods 3, 4 (?), 5, 6.

Period	Description
Period 3	nearly everything is red-white bichrome, white bodies outlined in red; red often considerably eroded; thick white paint obviously painted after the red and on top of it, sometimes nearly totally covering the red; thus clearly white-on-red
	some concentric circles of thick white lines bordered on the outer edge by red, which is bordered on the outer edge by plain (which extends to the next white ring); thus white-red-on-plain
	red monochrome symbols in the same characteristic orangish-dark red as the bichrome (some could be Period 5)
	bichrome bowlegged men (several)
	bichrome spider, tapir, armadillos, anteater, fish, snake, lizard, deer
	bichrome segmented concentric circles or <i>segmented sun</i> (Figure 9, b) (like in JG-01, JG-52)
Period 4 (poss. 5)	red deer (Colantoni and Delgado 1992:4)
	red variant crosses
Period 5	red geometric figures (see possible Period 5 Arauquinoid band, Figure 9, c)
	red multiple outlined cross (of three crosses) on white background
	red multiple cross with 4 vertical lines across one horizontal line
Period 6	white birds, circles
	white stick human
	dark brown to black waxy <i>caraña</i> fish, bird, dot pattern

**Superpositioning.**

Top	Bottom
Period 3	Period 3 overpainting (lots)
Period 4 bipointed ovals (arrow points?), fine-line; one interior line style	Period 3 eroded figures
Period 4 red man	Period 3 white background
Period 4 multiple outlined cross with three crosses (Figure 12, g)	Period 3 large white background (possibly prepared); may be a new kind of Period 3 wall treatment (also like at JG-58) [Logically this relationship seems more congruent with Period 5 geometrics or symbols, including the outlined cross, on a plain painted background.]
Period 6 geometric	Period 4 birds
Period 6 figurative	Period 3 animals

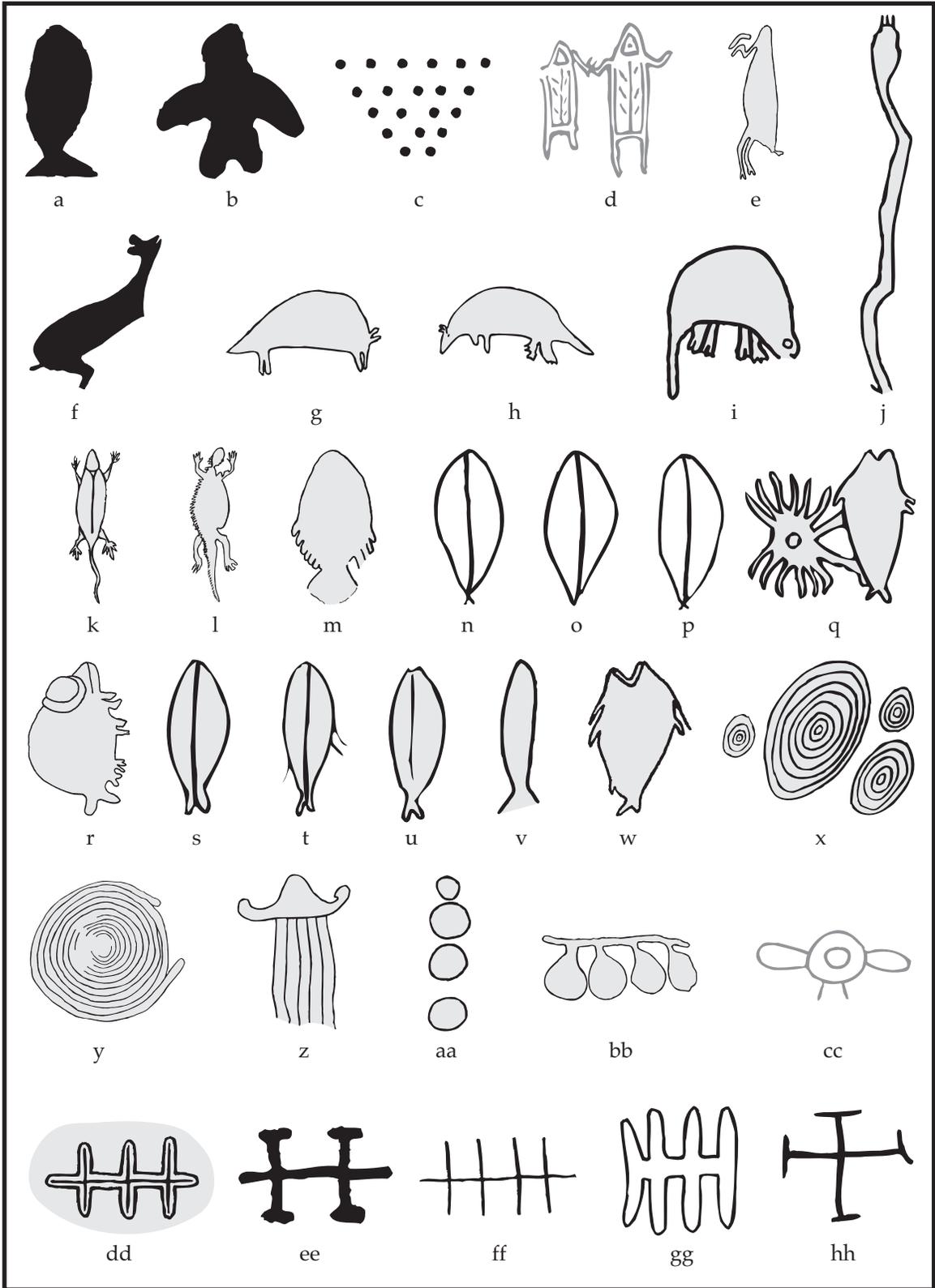


Figure 63. JG-05, figures (after Scaramelli 1992). Shaded is white; solid is red. a-c, *caraña*.

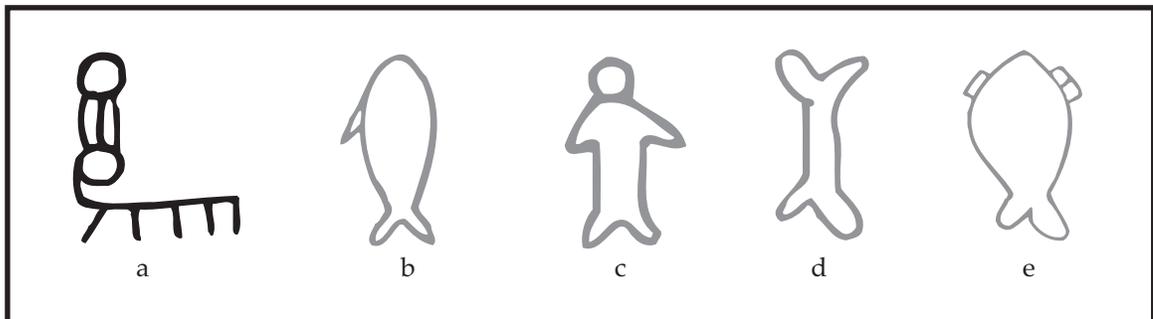
## JG-07 — Cerro Muertos 3

### Site Details.

Other site names	Sitio El Carmen 2; Roca Arriba.
Other site numbers	CEN Bo.53; FGS 23; Bo.27-C of Scaramelli and Tarble 1993.
State	Bolívar.
Map	6734-I-SE (25k)
UTM ( map location)	N 686.955, E 710.130
References	Scaramelli 1992; Scaramelli and Tarble 1993.
Location	Middle Parguaza river; hill southwest of El Carmen; high on west side of Cerro de los Muertos; about 50 m northwest of JG-04; just above the northeast end of the long deep shelter of JG-05; overlooking Cerro Iguanitas to the northwest.
Site type	Perched boulder.
Site description	Large overhanging boulder about 9 m across with an overhanging shelter area on the southwest side.
Rock art	A few pictographs are on a 3.5 x 1.5 meter area of the ceiling.
Cultural deposits	None.
Artifacts	None observed.
Human remains	None.

Periods. Period 4 (two geometric symbols).

Superpositioning. None.



**Figure 64.** JG-07, figures (after Scaramelli 1992). Shaded is white; solid is red.

## JG-08 — *Laja Parguaza 1*

### Site Details.

Other site names	Cueva Boulton; Cueva del Santo; Santo 1.
Other site numbers	CEN Bo.46; FGS-10; Bo.31-A of Scaramelli and Tarble 1993.
State	Bolívar.
Map	6735-II-NO (25k)
UTM ( map location)	N 713.460, E 704.260
References	<p>Cruxent and Rouse 1961:238; Scaramelli 1992; Zucchi and Tarble 1984.; Perera 1988a; Perera and Moreno 1984; Tarble and Scaramelli 1993b; Scaramelli and Tarble 1993.</p> <p>Most of the map in Cruxent and Rouse 1961 (175; Fig. 173) is incorrect, including Cueva Boulton and the Parguaza river.</p> <p>There is no published report on testing or excavations.</p>
Location	Laja del Parguaza, large mountain at the mouth of the Parguaza; about halfway up the east side of the hill.
Site type	Medium rockshelter.
Site description	This is a prominent cave about 35 m wide and 20 m deep; ceiling height is about 2 m.
Rock art	Most of the ceiling is covered with paintings, and figures also are on the southwest well and the front ledge.
Cultural deposits	<p>Most of the cave is full of thin cultural deposits about 30 cm thick. Most are now disturbed, but undisturbed deposits continue down under the large slab in the middle of the cave.</p> <p>Grinding facets on are the flat rock in front of the cave.</p>
Artifacts	<p>I have seen Colonial period glass bottle fragments and prehistoric plainware sherds collected from the deposits.</p> <p>Cruxent collected sherds (apparently now at the Natural Sciences Museum in Caracas).</p> <p>From Perera's discussion (1988a), it appears that he also collected at least 15 sherds which he says are of the Saladoid, Cedeñoïd, and Valloid ceramic series. He gives no count of sherds collected or observed, or where sherds were collected from.</p> <p>Scaramelli (personal communication 1991) reports that numerous ceramic figures previously have been found in the cave and down the bare rock slope below the site. He also reports Saladoid and Arauquinoid sherds in the shelter, as well as grinding stones and lithics.</p> <p>Tarble and Scaramelli (1993b) report prehistoric sherds that they apparently collected.</p> <p>Scaramelli and Tarble (1993) report that ceramics in this site include Saladoid, Cedeñoïd, Barrancoid, Arauquinoid, and Valloid series. They state this is unusual, since most sites have few sherds, and Saladoid and Arauquinoid are the most common ceramics in painted sites.</p>

Human remains	Modern burials were here previously, at least on top of the flat slab in the middle of the cave. All human remains have now been removed, but parts of the <i>cacure</i> still are present. Scaramelli (1992) reports that Mapoyo previously used the cave as a cemetery.
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**Periods.** Periods 3, 4, 6.

Period	Description
Period 3	geometrics, mostly on ceiling; large patterns
Period 3 (possibly Period 6)	complex bichrome figure of red and white lines and dots separately making up the figure — not usual white fill with red outline or simple alternating red-white
Period 4	geometrics interior-pattern lizard small fish miscellaneous figures hollow crosses multiple stick crosses (not outlined) (Figure 10, s)
Period 4 (or possibly 2)	lizard, small fish, and other figures to left on vertical face
Period 6	symbols, geometrics large red disk with negative large dots (Figure 20, a), or instead possibly a grouping of encircled negative dots like an add-on aggregate (Figure 20, d) red monochrome symbol (Figure 20, g) red-black bichrome geometrics

**Superpositioning.**

Top	Bottom
Period 6 monochrome white	Period 3 geometric patterns

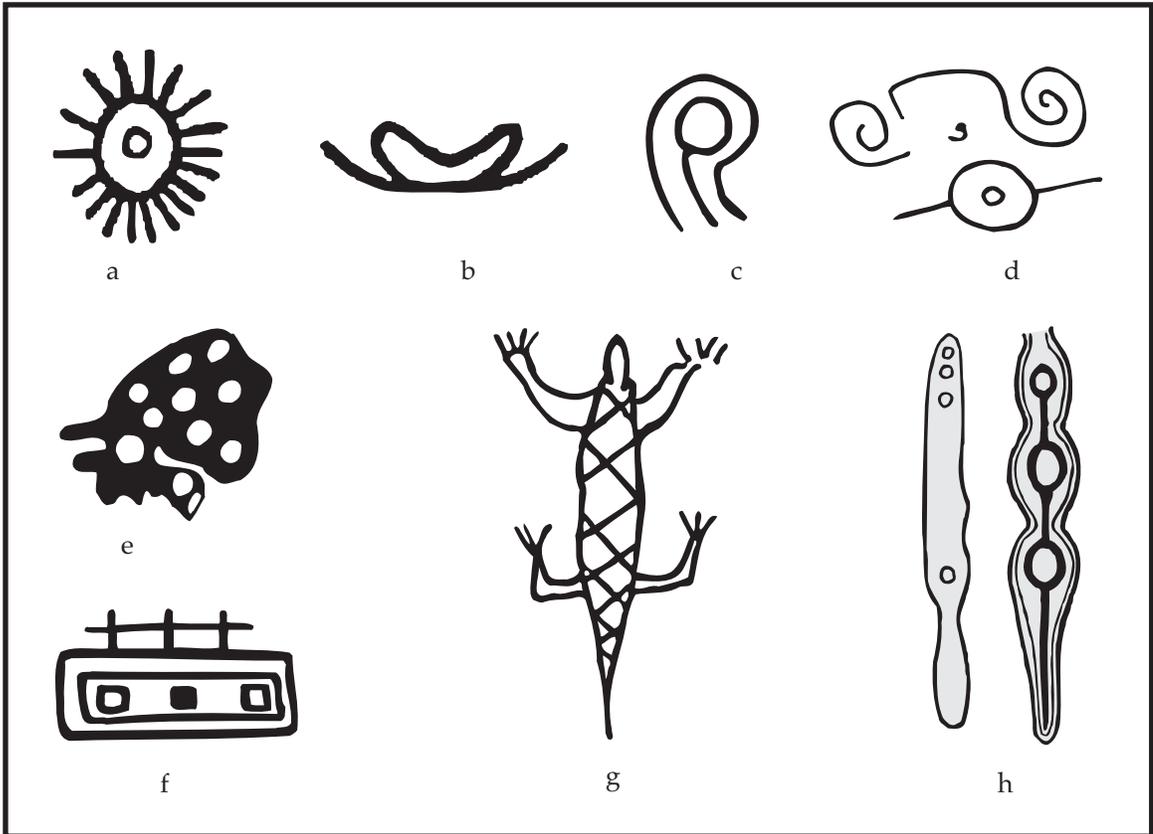


Figure 65. JG-08, figures (after Scaramelli 1992). Shaded is white; solid is red.

## JG-10 — Laja Parguaza 4

### Site Details.

Other site names	Cueva de Luís; Cueva de la Tinaja.
State	Bolívar.
Map	6735-II-NO (25k)
UTM ( map location)	N 713.205, E 704.165
References	None known.
Location	Southeast side of Laja Parguaza (Marimarota), the high hill at the mouth of the river; about 300 m south of JG-8; in the first small “valley” west of the valley containing the tinaja cave; just inside the valley mouth and on the east side, just above the vegetation.
Site type	Small rockshelter.
Site description	Small cave with low ceiling height.
Rock art	Red pictographs are on the rear ceiling.
Cultural deposits	Appear to be thin deposits in front of shelter; gravely deposits in the shelter, very thin.
Artifacts	Plainware sherds noted in front of the shelter; several collected 1990 by Puerto Ayacucho tourist guide.
Human remains	None present now; likely to have been present previously.

### Periods. Periods 3, 4.

Period	Description
Period 3 ?	geometric, possibly bichrome
probably Period 4	geometrics

### Superpositioning. None.

## JG-11 — *Cueva Iglesias*

### Site Details.

Other site names	Cueva Iglesia; Cueva del Cerro de las Iglesias; Mapoyo Cave.
Other site numbers	FGS-6; JSV-327; JCS-9; Bo.29 of Scaramelli and Tarble 1993.
State	Bolívar.
Map	6734-I-SE (25k)
UTM ( map location)	N 683.340, E 717.000
References	de Valencia and Sujo 1987; Perera 1986a:18-19, 1988a, 1988b; Scaramelli 1992; Christie-Shults 1992; Tarble and Scaramelli 1993b; Scaramelli and Tarble 1993; Greer 1994 (p. 51, fig. 11; p. 53, fig. 13, a).
Location	Middle Parguaza valley, northeast edge of valley, base of main ridge, northwest of Tierra Blanca, about 1.5 hours walk from river. Located at white scar on bluff which is clearly visible for a great distance to the west and south.
Site type	Large rockshelter.
Site description	Very long, high rockshelter, with a small enclosed cave near the center. The bluff is at least 250 m long (east-west). Medium-sized shelters at both the east and west ends do not appear to contain rock art but have not been closely checked.
Rock art	Profuse pictographs occur along the back wall.
Cultural deposits	Possibly some minor localized deposits in some areas. Small grinding facets are present along the bedrock and boulders in some areas.
Artifacts	Only modern materials associated with the burials. Tarble and Scaramelli (1993b) report that no prehistoric sherds were collected here, but they did not visit the site.
Human remains	A modern burial (from about 1990) in a wooden casket is said to be an important shaman. There are profuse older skeletal remains in the central part of the shelter (probably representing at least 150 individuals), though some have associated modern type tinware utensils. Some burials probably are early historic or earlier. Most of the bones are somewhat to considerably scattered to clustered. Scaramelli (1992) and Perera (1988a) report that several skulls were noted with painted fingerpaint red lines on the forehead; Scaramelli removed at least one. Perera (1986a:19) says that several skulls and other bones were painted with onoto. Local mythology explains that the cave was previously used by the Mapoyo as a cemetery cave, but it is still used today by the Piaroa for burial of special persons. Perera (1986a) likewise refers to this as a Mapoyo cemetery cave with the remains of over 100 individuals.

**Periods.** Periods 3, 4, 6.

Period	Description
Period 3	dark yellow clay solid bodies outlined in dark red; bowlegged man light yellow clay paint with no outlining; unidentified figures
early Period 4?	monochrome red bowlegged men fish (like Period 3) interior-line wide-body human dancers (like Period 6)
Period 4	at least two single outlined crosses (one cross each) at least two multiple outlined cross (each with three crosses) (Figure 12, g) basket-tray (or Mapoyo facial stamp?) (Figure 10, i) animals and humans with interior dots (cf. Figure 15, h) shaman-dancers row of 4+ deer (long neck out at an angle) <i>wasp nest</i> pattern (Figure 10, k) segmented sun with dot interior (Figure 10, h) humans with very narrow elongated bodies (nearly identical to JG-15) tapir fish large open-body lizard with open fingers in Period 3 style dark red bowlegged man with large rayed headdress (Figure 13, g) Somewhat in style of Period 3, but other Period 4 headdresses are very similar to this.
Period 6	runny white figures rabbit long stick human

**Superpositioning.**

Top	Bottom
Period 3 medium yellow human (no outline)	Period 3 style open-body human
Period 3 bright white with red outline	Period 3 light yellowish smear, same as light yellow fill in other Period 3 figures here
Period 3 wide-body bichrome dancer (Figure 8, h); possibly Period 5	Period 4 dark red human of same style-shape (Figure 14 style) <sup>62</sup>
Period 4 vertical multiple outlined cross (with four crosses) (Figure 12, h)	Period 3 plain yellow smear
Period 4 humans, animals, symbols	Period 3, almost all old light yellow figures
Period 4 monochrome red	Period 3 large bowlegged man with cream-white body with red outline
Period 4 dark red humans, concentric circles	Period 4 light red open-bodied animals
Period 4 animals and symbols	Period 3 (?) pink broad-line symbols; like pink as JG-54; may be Period 6? like light yellow smear here
Period 4 miscellaneous red figures	Period 3? yellow-body men outlined in red
Period 4 red humans, etc.	Period 6? plain light yellow
late Period 4 dark red	Period 3 cluster of six light pink clay dots, loosely spaced
late Period 4 dark red falling person (Figure 13, ii)	Period 3 light pink random dots
late Period 4 (?) dark red; outlined cross, large lizard, elongated body humans	early Period 4 (?) light red figures <sup>63</sup>
Period 6 white rabbit	Period 3 plain yellow clay unidentified figure
Period 6 interior-line wide-body dancer (similar to Figure 14, f)	Period 4 humans
Period 6 small figure	Period 4 outlined cross
Period 6 white stick human	Period 4 unidentified red figures
Period 5 (?) monochrome bright red stylized human	Period 4 animal, dull darker rusty red
Period 6 humans, animals	Period 4 animals, humans, other unidentified figures
Period 6 white stylized human	late Period 4 dark red figures and early Period 4 light red figures
Period 6 white stick man	Period 6 (?) pink (like at JG-54); may be Period 3?

<sup>62</sup> This could indicate any of the following: (a) Period 3 contains some use of monochrome red; (b) there is some minor overlap of Period 3 technology with Period 4; or (c) the bichrome is instead associated with Period 5. This is part of a panel of at least 4+ such dark red figures.

<sup>63</sup> There is obvious difference in color and style, with good superposition, but period age is not clear.

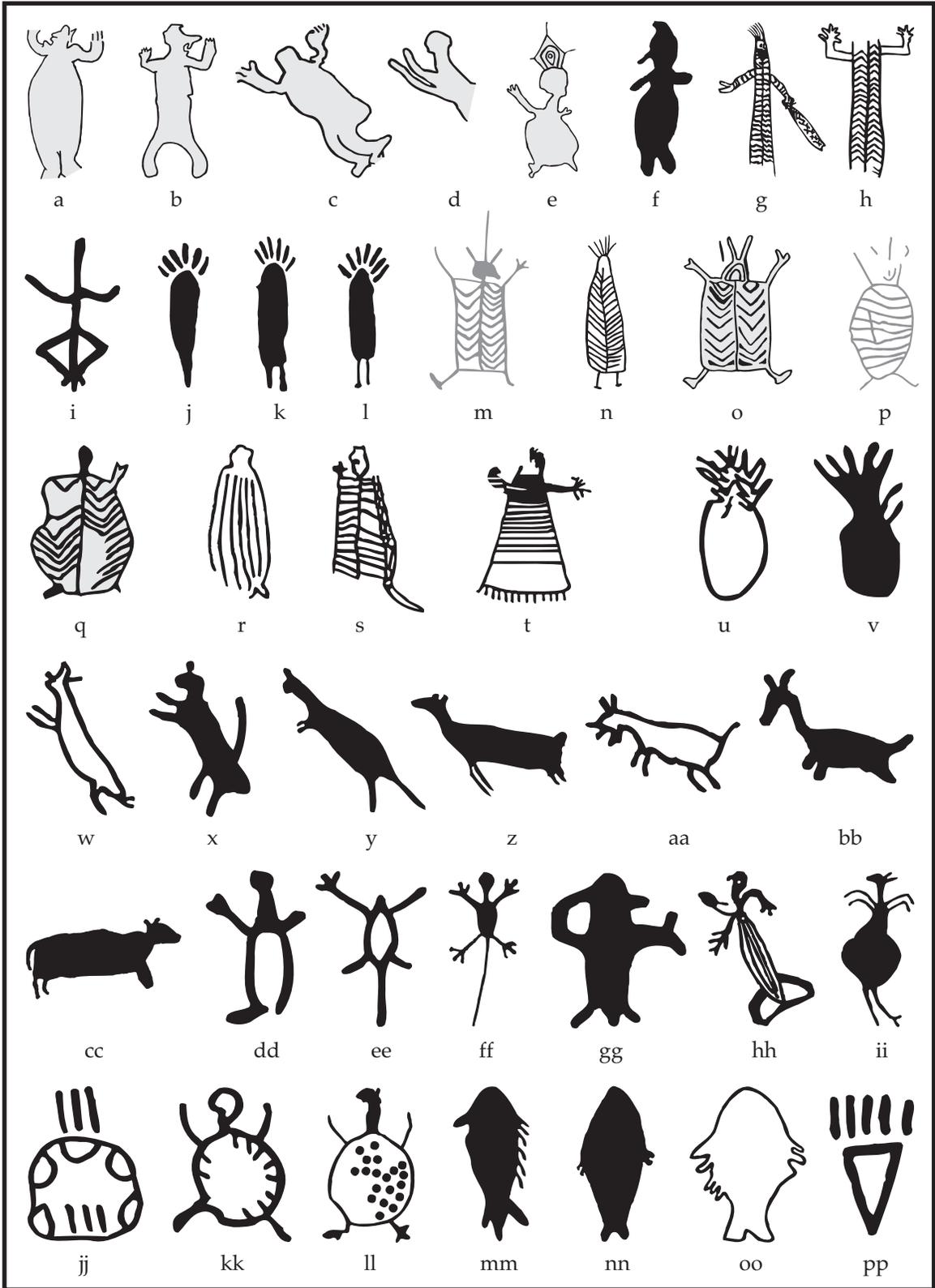


Figure 66. JG-11, figures (after Scaramelli 1992). Shaded is white; solid is red.

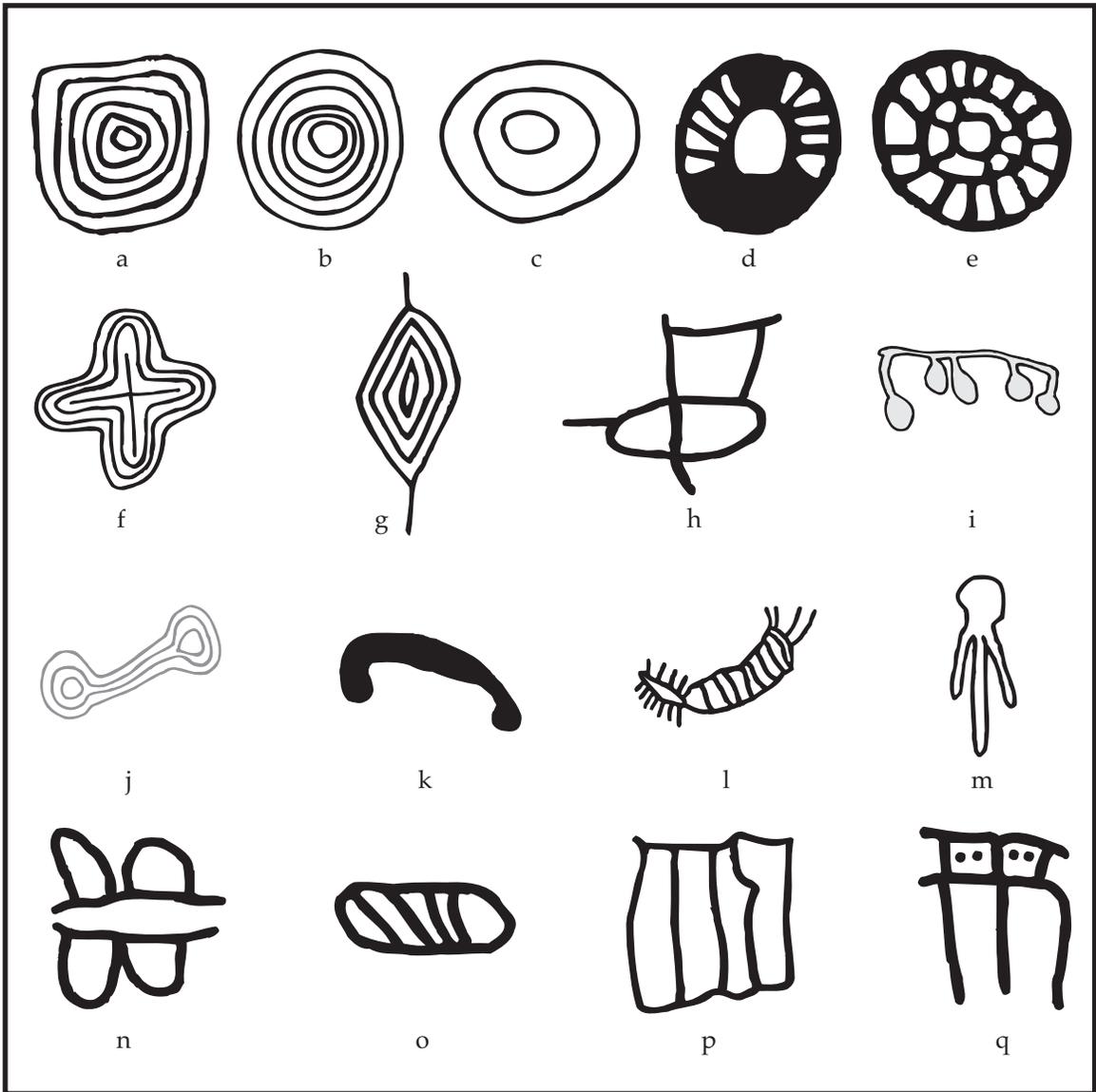


Figure 67. JG-11, geometric figures (after Scaramelli 1992).  
Shaded is white; solid is red.

## JG-12 — Cueva del Caño Ore

### Site Details.

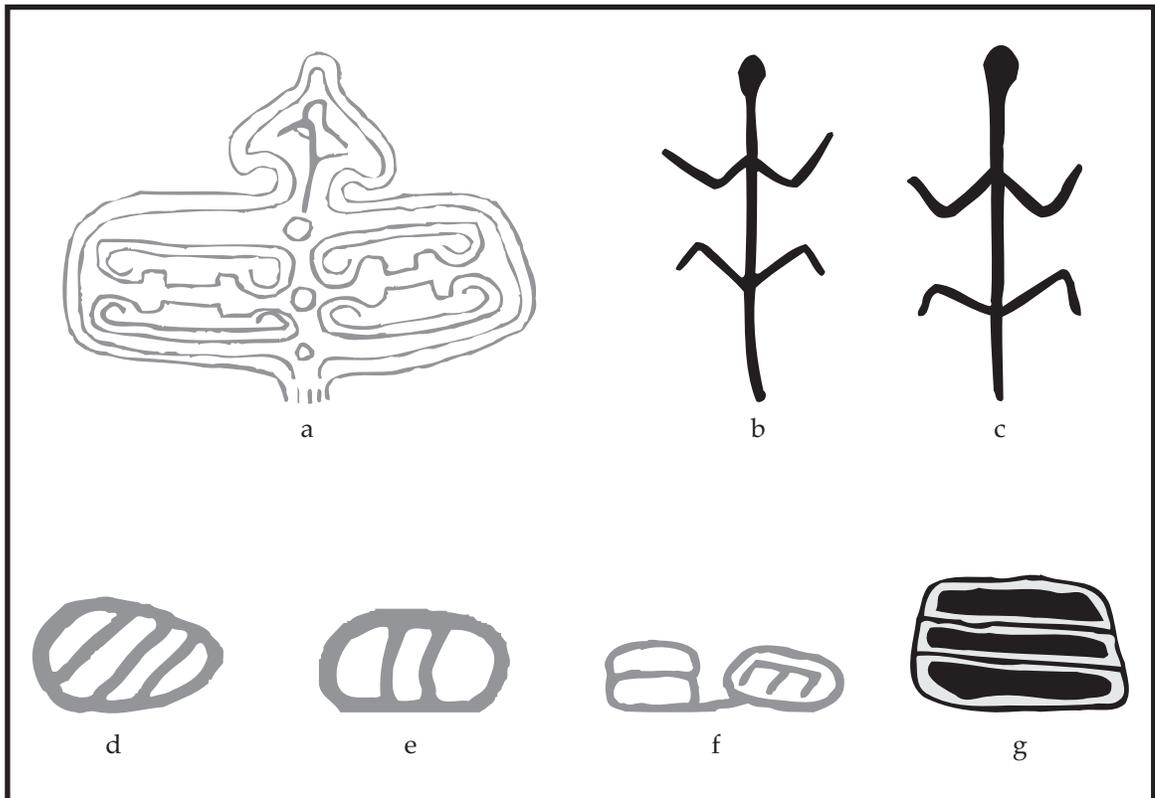
Other site names	Cueva del Chamán; White Shaman Cave.
Other site numbers	CEN Bo.51; FGS-22; JCS-8; Bo.37 of Scaramelli and Tarble 1993.
State	Bolívar.
Map	6734-I-NE (25k)
UTM ( map location)	N697.770, E 710.130
References	Scaramelli 1992; Colantoni and Delgado 1992 (photo, p. 3); Tarble and Scaramelli 1993b; Scaramelli and Tarble 1993; Greer 1994 (p. 53, fig. 14, c).
Location	High on the middle hillside east of paved highway; on Caño Ore a few kilometers northeast of the new Parguaza bridge; easily visible from the highway.
Site type	Medium rockshelter.
Site description	Elongated rockshelter about 58 m long and 2.5 m high; the floor slopes back downward about 3-12 m. The main room with burials is at the east end.
Rock art	Paintings are on the ceiling and along the rear wall along much of the shelter.
Cultural deposits	None noted, but materials would be likely in the eastern room, among the large rocks. Small grinding facets are on the bedrock and some of the boulders.
Artifacts	None noted. Scaramelli (1992) reports ceramics and lithics. Tarble and Scaramelli (1993b) report both prehistoric and modern sherds that they apparently collected.
Human remains	In the eastern room are at least 3-6 modern burials, bones from other individuals, and remains of woven <i>catumares</i> for carrying bodies to the cave.

### Periods. Periods 2 (?), 4, 6.

Period	Description
Period 2? (possibly Period 4)	red monochrome lizards, symbols
Period 4	outlined cross multiple outlined crosses (of 3-4 crosses) other figures; all red monochrome
Period 6? (looks more like Period 6 than Period 3)	red-white bichrome symbols; red outline with white dashes; white outline with red interior diagonal lines; no white with red fill or red-white alternating
Period 6	white figures large complex white figure Said to represent a shaman (Colantoni and Delgado 1992:3).

Superpositioning.

Top	Bottom
Period 6 white	Period 4? monochrome red



**Figure 68.** JG-12, figures (after Scaramelli 1992).  
Shaded is white; solid is red.

## JG-15 — Cerro Pintado 1

### Site Details.

Other site names	Cerro Pintado Abrigo 3 (Novoa); Cueva Pintado (Perera).
Other site numbers	JSV-346 and possibly 258.
State	Amazonas.
Map	6632-I (50k)
UTM ( map location)	N 611.725, E 661.064 ( <a href="#">Figure 69</a> )
References	de Valencia and Sujo 1987; Novoa 1985:40; Perera 1988b; Colantoni and Delgado 1992 (photo, p. 25); Greer 1994 (p. 49, fig. 8; p. 53, fig. 14, b; p. 54).
Location	On the south end of Cerro Pintado, above the Guajivo cemetery; about half way to the crest of the southern end ( <a href="#">Figure 69</a> ).
Site type	Perched boulder.
Site description	Pointed overhanging boulder on a bare steep hillside. Faces east and overlooks the savanna. Shelter is about 7 m wide and 4 m deep; the front is about 2 m tall.
Rock art	Pictographs are mostly on the ceiling; some are on the rear wall and the floor.
Cultural deposits	None (bare bedrock).
Artifacts	None noted.
Human remains	None still remain here, but the site is believed previously to have been used as a cemetery.

### Periods. Periods 1?, 2?, 4, 5?, 6?

Period	Description
Period 1?	light orange; narrow humans with body stamp torsos. Similar to some Iglesias (JG-11) figures; concentric diamonds look like some Parguaza fish (Pozón JG-20) and Period 5 fine-line figures.
Period 2?	slightly darker red, fine lines; small outlined cross; other geometrics Similar to late orange but larger and fine-line; darker red paint, geometrics, and outlined cross suggest Period 4.
Period 4	row of five red dancers
Period 5?	series of vertical connected winged concentric circles Look like some Period 5? art on the Parguaza.

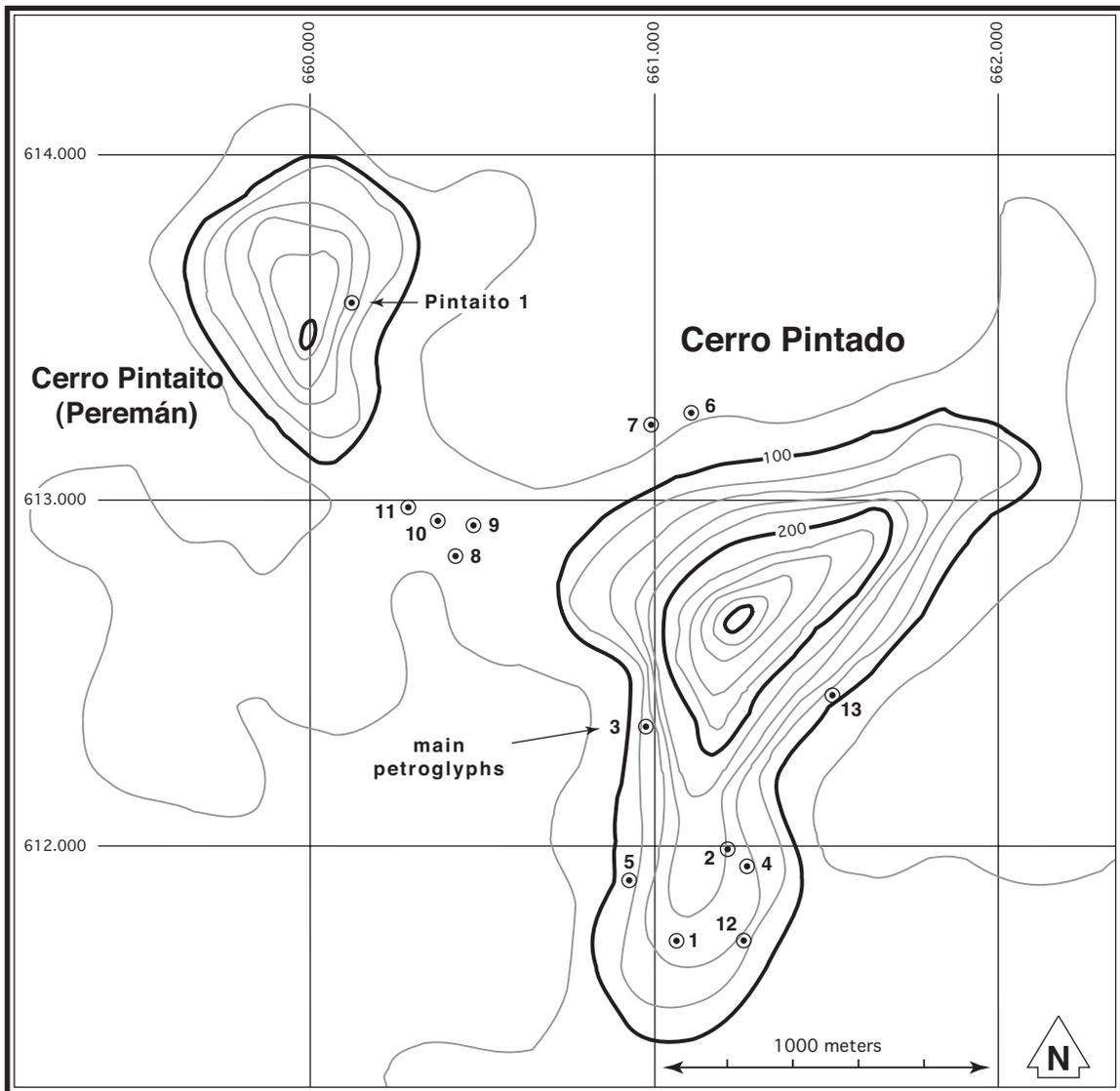
**Periods** (continued)

Period 6?	dark brown and black; presumably all <i>caraña</i> ; most black looks like charcoal mixture, but thick paint
	black long vertical snake with zigzag body and triangular head
	most common is for brown <i>caraña</i> to be placed over the top of early orange fine lines. It is not clear how different these two colors are in time, if at all. In no case is orange over black, but physical characteristics of the materials are very different. Both may appear separately or together; when separately they have different motifs or kinds of figures.
Modern	some bad overpainting with modern graffiti from large white paint initials painted on the floor and ceiling

**Superpositioning.**

Top	Bottom
Period 6? black <i>caraña</i> (see <b>Discussion</b> below)	Period 4? medium red rectangular body stamp (like Gavilán 1, JG-58; or Iglesias JG-11); clearly over top of Period 1? early orange
Period 6 black bird of <i>caraña</i>	Period 4 medium dark red human?

**Superposition discussion.** It appears that the red and orange represent two different painting periods, but this is not certain. The orange seems earlier than the red, but orange and black are closely related in use (not necessarily in age). Black is clearly over the top of medium red in several cases. In one case (see **Superpositioning** above) black *caraña* is over the top of a medium red stamp, which is drawn over the top of an early orange figure. There are several cases of black over medium red in superposition of figures, but black over orange is almost always tracing or exact superimposition (see Colantoni and Delgado 1992:25). Thus, the relationships are Bl/Or, Bl/R, R/Or, and Bl/R/Or with a presumed sequence of Period 1 orange to Period 4 red to Period 6 black, but the ages are not clear. It should be noted that the same relationship of Bl/R/Or is also present in the recently discovered nearby Cerro Pintaito 1 (JG-67), where the black *caraña* appears to be latest. *Caraña* figures are also present at Cerro Pintado 5 (JG-47) [see Table 11].



**Figure 69.** Map of the Cerro Pintado area showing recorded archeological sites on Cerro Pintado, Cerro Pintaito, and the rocky rise between. Painted caves include Cerro Pintado 1, 2, 5, 6, 7, 8, 9, and Cerro Pintaito 1. Open hillside petroglyph panels are sites Cerro Pintado 3, 4, and 12. Cemetery caves are sites Pintado 10, 11, and 13. Cerro Pintado sites 1, 2, and 5 are included in this study, and other sites are mentioned in comparison. This map was prepared for INPARQUES from DCN topographic map 6632-I (50k).

## JG-16 — Cerro Pintado 2

### Site Details.

Other site names	Cerro Pintado Abrigos 4 and 5 (Novoa); Arriba de Pintado (Perera).
Other site numbers	JSV-347 and possibly 358.
State	Amazonas.
Map	6632-I (50k)
UTM ( map location)	N 611.991, E 661.210 (Figure 69)
References	Novoa 1985; Perera 1988b); de Valencia and Sujo 1987.
Location	On the crest of the southeast side of Cerro Pintado, just above a small petroglyph panel (Cerro Pintado 4, JG-28, which is high on the hillside).
Site type	Boulder overhangs.
Site description	Two contiguous large blocks with slightly overhanging faces, facing southeast across the savanna. The panels total 4 m wide.
Rock art	Monochrome red figures, mostly faded, are on both faces.
Cultural deposits	None; mostly bare bedrock.
Artifacts	None noted.
Human remains	None.

**Periods.** Period uncertain, possibly 1, 2, or 4.

Period	Description
Period unknown (1?, 2?, 4?)	light medium red monochrome
	distinctive human form with three fingers and a cross-shaped head
	human with three-prong hands
	pattern, like a body stamp
	concentric circles (4-5 rings)

**Superpositioning.** None certain.

## JG-18 — *Alta Carinagua 1*

### Site Details.

Other site names	Wueyuhuari (according to Christie).
Other site numbers	JCS-1.
State	Amazonas.
Map	6633 (100k)
UTM ( map location)	N 629.070, E 660.900
References	Christie-Shults 1992; Greer 1994 (p. 49, fig. 5; p. 50, fig. 9, b).
Location	Northeast of Puerto Ayacucho, up the Caño Carinagua. About 1 hour walk northeast from the Piaroa school at Alta Carinagua.
Site type	Medium rockshelter.
Site description	Long overhang with a mostly exposed wall on the north end and more of a room-like shelter in the southern portion.
Rock art	Profuse paintings cover the wall and ceiling at the north end of the shelter.
Cultural deposits	None noted, but some minor soil accumulation in front of the cave.
Artifacts	None noted; sherds reported.
Human remains	None now, but previously reported.

### Periods. Periods 1, 2?, 4, 5?

Period	Description
Period 1 (possibly 2?)	mostly medium orange to light red stamp designs (Figure 4, a)
Period 4	mostly medium red outlined cross other crosses arrows
late Period 4 or 5	row of dark red symbols; look brighter and darker than adjacent Period 4 figures

### Superpositioning.

Top	Bottom
Period 4 outlined cross	Period 1 stamp designs (Figure 4, a) and early orange smears
late Period 4 or 5 dark red symbols	Period 4 (or perhaps Period 2) medium red figures
Period 4 (or perhaps Period 2) medium red crosses	Period 1 (or early Period 2) early orange stamp-like designs (Figure 4, a)

**Age discussion.** There appear to be two and probably three periods represented here. Light and medium orange figures are earliest, most notably parallel-line stamp-like figures (presumably Period 1). These are superimposed with a wide variety of medium and dark-medium red figures, especially outlined crosses and other kinds of crosses in the central part of the panel; these presumably are Period 4, but some figures could date from Period 2. The most recent figures are fairly small dark red geometric figures on top of the earlier medium red; they presumably are Period 5 *monochrome phase* but possibly could be late Period 4 .

## JG-19 — *Idora de Santa Fe*

### Site Details.

Other site names	none; eventually may be changed to <b>Cerro La Guaca 1</b> due to several other known caves on this hill, or to <b>Santa Fe 1</b> due to others also in surrounding lower areas away from the hill.
Other site numbers	Bo.43 of Scaramelli and Tarble 1993.
State	Bolívar.
Map	6834-III-SO (25k)
UTM ( map location)	N 665.205, E 728.095
References	Hernández 1992; Scaramelli and Tarble 1993; Greer 1994 (p. 48, fig. 4; p. 53, fig. 13, b).
Location	Upper Parguaza, high on the western side of Cerro La Guaca (map name) or Cerro Maraca (local name); a little over an hour walk northwest from the Piaroa village of Santa Fe.
Site type	Large rockshelter.
Site description	A long rockshelter about 96-120 m long with a deep overhang extending back 15-20 m. At the southern end is a small, profusely painted enclosed room (which is also connected to the main shelter by way of a horizontal crack).
Rock art	The ceiling and walls of the southern half of the site are covered with profuse paintings. Additional paintings are also at the northern end.
Cultural deposits	None noted, but there is some soil accumulation within the lower (northern) part of the site and on the bedrock in front of the shelter. There are numerous shallow grinding facets in the bedrock and on the large boulders.
Artifacts	None noted. During this visit historic ceramic burial offerings were noted in the central area of the cave mouth, out in front of the skulls. There are several fragments of 19th century blue-on-white whitepaste earthenware with blue decoration, probably small cups or small bowls. Some green-on-white whitepaste earthenware and green edgeware seems to be post-1920 but could be earlier. Prehistoric sherds reportedly collected previously. Tarble and Scaramelli (1993b) report both prehistoric and modern sherds that they apparently collected.

Human remains	<p>There are dense accumulations of human bones and <i>catumares</i>. There are remains of at least 21 <i>catumares</i>. Skull count by quick inspection in the central part of the site indicates 8 males and 12 females, with ages ranging about 18-50+; there appear to be no juveniles. Inspection indicates two distinct populations.</p> <p>All burials were brought to the cave in <i>catumares</i>. Presumably all were wrapped in hammocks and white cloth. There are no indications of <i>cacures</i> (wooden, strip-bark, or cane).</p> <p>There are no modern burials and no undisturbed bodies. Some yellowish bones indicate burial probably less than 50 years ago; one with skin and hair probably less than 10 years ago.</p> <p>Some Piaroa inhabitants at Santa Fe say that all bones are from previous Mapoyo burials, while others say they are old Piaroas who used to have a village about where Santa Fe is today.</p>
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**Periods.** Period 4.

Period	Description
Period 4 (early ?) (front panel)	<p>main front panel looks different (thinner lines, lighter paint) than southern alcove dark bright red <i>k'eräü</i></p> <p>Iglesias (JG-11) style triangular humans</p> <p>stylized tapirs</p> <p>fish</p> <p>animals (deer, monkeys)</p> <p>baskets</p> <p>lots of <i>arracones</i> (Figure 10, t)</p> <p>multiple outlined cross (with two crosses)</p> <p>vertical lines of connected circles (similar to Figure 10, n)</p> <p>complex square body stamps</p>
Period 4 (late ?)	<p>dark bright red (<i>k'eräü</i>?) in southern alcove and nearby</p> <p>wide humans</p> <p>late human dancers</p> <p>pair of dancing or combating humans</p> <p>bowlegged man</p> <p>men with three-prong hands (like JG-16, JG-18, etc.)</p> <p>triangular humans with three loops on each leg (like Figure 16)</p> <p>triangular human with one leg band on each leg</p> <p>other humans</p> <p>birds</p> <p>butterfly ?</p> <p>fish</p> <p>beetle</p> <p>small animals (deer or dogs?); deer</p>

**Periods** (continued)

Period 4 (late ?), cont.	curved body animal (Figure 11, f)
	llama pens, camelids
	manatee
	other animals
	baskets and bags
	lots of dot infill on bodies and solid objects (e.g., baskets)
	<i>arracones</i> (beads dangling from horizontal line; see Figure 10, t)
	round spiral
	horizontal lines of connected circles
	vertical lines of connected circles (several figures) (Figure 10, n)
	band patterns
	segmented concentric circles (like Figure 10, b)
	connected concentric circles and square

**Superpositioning.**

Top	Bottom
Period 4 dark red <i>k'eräu</i> camelids	Period 4 lighter red fine-line square compounds (llama pens?)

**Period discussion.** There is relatively little superpositioning. There are two episodes or two kinds of painting, but with many of the same symbols. The two areas could be related to gender (light red = male, dark red *k'eräu* = female), but there is no firm evidence for this.

## JG-20 — Cueva Pozón

### Site Details.

Other site names	None.
State	Amazonas.
Map	6734 (100k); should be available on 6734-III-SO (25k)
UTM ( map location)	N 667.920, E 675.850
References	None.
Location	A short distance southwest of the Pozón school (present ranch residence of Sr. Barrios). On the higher piedmont area which overlooks the Orinoco not far to the west.
Site type	Perched boulder; small rockshelter.
Site description	Large boulder with an overhanging face above a small undercut shelter. The adjacent large boulder also has a prominent undercut shelter, but no paint. A smaller perched boulder on top of the larger boulder also has a very low undercut shelter with paintings.
Rock art	Red pictographs are on the vertical face and the lower ceiling of the main lower block. Red fish are on the ceiling of the overhang formed by the upper block. Ceiling height is only about 30 cm. The two painted panels do not appear to be related. A small zigzag petroglyph is on the boulder just in front of the main boulder face.
Cultural deposits	There is considerable soil accumulation in front of the site.
Artifacts	None noted.
Human remains	None.

### Periods. Period 2 or 4.

Period	Description
Period 2 or 4	all monochrome red
	medium red: segmented oval, interior-line fish, man (Figure 12, a)
	large dark red figures on vertical face: possible bundle burial

### Superpositioning. None.

## JG-21 — Cerro La Vaca 1

### Site Details.

Other site names	Cueva Grande del Cerro La Vaca; Cueva del Cerro La Vaca; Cueva La Vaca.
Other site numbers	FGS-30; JSV-299.
State	Amazonas.
Map	6734 (100k)
UTM ( map location)	N 674.650, E 678.275
References	Perera and Moreno 1984; Scaramelli 1992; Perera 1983:35, 1988b; de Valencia and Sujo 1987; Tarble and Scaramelli 1993b; Greer 1994 (p. 50, fig. 9, a; p. 51, fig. 10, a).
Location	In the Pozón area of the Orinoco plain north of Puerto Ayacucho. On the south side of Cerro La Vaca, near the east end; about a third the way up the cliff face. Easily visible from a distance.
Site type	Large rockshelter.
Site description	Long shelter 70-150 m long and with a high curving overhang. The lower area is undercut up to 20 m deep, forming an area with a low flat ceiling.
Rock art	Several areas of the vertical face are painted, and portions of the low flat ceiling also contain small figures and figure clusters.
Cultural deposits	Most of the central deposits are badly disturbed. There appears to have been about 30-50 cm of dark gray ashy cultural deposits of ash, burned rock, animal bones, human bone fragments, and ceramics; some deposits may still be undisturbed. Beneath this is a lighter material of yellowish gravelly clay which could conceivably contain early materials, although close inspection did not recognize anything definitely identifiable as cultural. Grinding facets occur in several areas, and some of the boulders contains anvil cut grooves.
Artifacts	Saladoid ceramics and lithic flakes observed. Perera and Moreno (1984) report mostly Saladoid ceramics. Tarble and Scaramelli (1993b) report prehistoric sherds that they apparently collected.
Human remains	A few scattered bones in disturbed deposits only. No modern burials or remains. It is believed that this site previously was well used as a cemetery, but today there are no remains.

**Periods.** Periods 1, 2, 4, 5?

Period	Description
Period 1	row of camels (Figure 4, c) [also listed under <b>Superposition</b> ]
Period 2	dark fine-line concentric circles fine-line lizard
early Period 4	light red, weathered, rougher rock row of six dancers panel of handprints interior-line fish (main panel)
late Period 4	medium to dark red segmented boxes (like Figure 10, g) other symbols figurative art, humans triangular dancer (like Figure 17) interior-line fish lizard with large toes
Period 5?	some very dark red-purple fine-line symbols All are symbols and geometrics. Color contrasts with adjacent medium red, but does not particularly look more recent.
modern	interior-line fish in orangish-red crayon (above potholes)

**Superpositioning.**

Top	Bottom
Period 2 large fine-line, interior-line fish of very dark red-purple (Figure 6, a)	Period 1 line of camelids in light medium red (Figure 4, c)

## JG-23 — Cerro Mohetico 1

### Site Details.

Other site names	None
State	Bolívar.
Map	6734-I-SO (25k)
UTM ( map location)	N 690.160, E 707.190
References	None.
Location	Middle Parguaza, 4 km northwest of El Carmen; at the head of a vegetated low area about half way up southwest side of the hill.
Site type	Medium rockshelter.
Site description	This is a prominent, unimpressive overhang about 80 m long. At the west end is a fairly large, low cave-like room extending back about 15 m or more.
Rock art	The central 60 m or so of the shelter is heavily painted. Most figures are on vertical faces and are easily seen from a distance.
Cultural deposits	There is some soil accumulation across the front of the shelter and in room-like areas. Thin cultural deposits are expected.
Artifacts	None noted.
Human remains	The remains of at least 4 adult males are in wide-strip bark <i>cacures</i> . At least three are on ledges in the central part of the shelter, one is in the western cave. The <i>cacures</i> now are coming apart.

### Periods. Period 4.

Period	Description
Period 4	all medium red
	various humans
	round interior-line humans (similar to JG-56)
	elongated human (Figure 13, a). Almost identical to fine-line dark red elongated man in JG-1 (Figure 6, d), but with no body design.
	rows of dancers
	butterflies or shrimp?
	turtles with dot body
	fish
	lizards
	other animals
	outlined cross
	segmented boxes
	large square stamp design (similar to pattern on ceiling of JG-08)
	other squarish stamp designs

### Superpositioning. None.

## JG-24 — Cerro Mohetico 2

### Site Details.

Other site names	None.
State	Bolívar.
Map	6734-I-SO (25k)
UTM ( map location)	N 690.240, E 707.345
References	None.
Location	Middle Parguaza, 4 km northwest of El Carmen; near top of southwest side of Cerro Mohetico; about 250 m northeast of Cerro Mohetico 1 (JG-23).
Site type	Small rockshelter.
Site description	Long very shallow shelter about 25-30 m long and with a maximum overhang of about 1.0-1.5 m.
Rock art	Several small red fish in a small portion of yellowish bare wall in the central part of the shelter, near the floor. The yellow wall is 1 meter wide; the painted panel is 45 cm wide and 40 cm tall.
Cultural deposits	None noted. Very little shallow soil accumulation in the front of the shelter.
Artifacts	None noted.
Human remains	None. There are some rocks piled up in one area which look like an old <i>cacure</i> covering.

### Periods. Period 2.

Period	Description
Period 2?	interior-line, fine-line, dark red fish

### Superpositioning. None.

## JG-31 — *Cueva Ataruipe*

### Site Details.

Other site names	Cueva Ataruipe; Atarhuipa; Cerro Papelón; Cerro de los Muertos; Roca de Tortuga; Cabeza de la Tortuga; Turtle Rock.
Other site numbers	JSV-85; JCS-2.
State	Amazonas.
Map	6632-I (50k)
UTM ( map location)	N 615.170, E 656.100
References	Cruxent 1960; Perera 1983, 1986a, 1986b, 1988b; Delgado 1977:41; Novoa 1985; Humboldt 1821, 1956 [1824]; Crevaux 1988 [1883]; Chaffanjon 1986 [1889]; Marcano 1971 [1890]; de Valencia and Sujo 1987; Colantoni and Delgado 1992 (photo, p. 21). See Perera 1986 for main historical discussion of the site and previous references to it, beginning with Humboldt's initial visit and description of the cave and its contents in 1800.
Location	Orinoco river valley 8 km south of Puerto Ayacucho. South side of small offset hill at the base of the south side of the mountain.
Site type	Large rockshelter.
Site description	Large room-like shelter of two levels. The lower main room occupies the eastern two-thirds of the shelter. The west side of this ascends to a smaller cave within the sheltered area.
Rock art	Figures cover the eastern wall of the main room and the eastern side of the mouth of the upper cave. Some figures are also on the ceiling of the upper cave.
Cultural deposits	None known.
Artifacts	None known still to remain. Historical accounts describe numerous urns and other objects. Perera 1986a reports having collected 21 sherds and a bowl fragment. He reports on historic collections of urns (1986a, 1986b).
Human remains	Modern burials in wooden caskets and bark-strip <i>cacures</i> are in the upper low cave area. Apparently before 1800 the site was a major cemetery, but all old remains have been removed by various collectors (scientific and otherwise).

**Periods.** Periods 1?, 2, 4, 5?, 6.

Period	Description
Period 1?	several small light to medium orange figures — geometric or symbols, stylized (not interpretable)
	dark orangish-red stamp pattern

**Periods** (continued)

Period 2	concentric circles
	unidentified figures
	humans
	fish
	lizards; one with six legs
	ladder (two vertical lines, with parallel diagonal lines between) (Figure 6, h)
Period 4	humans
	<i>propeller</i>
	fish
	birds
	signs, symbols
	outlined crosses
	red right hand print
	starbursts (Figure 10, d)
	vertical row of connected circles, no connecting vertical line (Figure 10, l)
	group of small birds in flight
	square-body humans with dot body and long ears (like Iglesias JG-11) (cf. Figure 14, a)
barred line with foot (Figure 10, o)	
crescent (Figure 10, r)	
Period 5?	medium red concentric half circle (Figure 19, i). The color is medium red, like Period 4. The design is very similar to late (late Period 4 or Period 5) dark red figures at Alta Carinagua (JG-18). group of dark red lizards?
Period 6	red dot pattern (essentially the same as the black <i>caraña</i> dot patterns at JG-15)
	red line and dot pattern (Figure 20, h)
	crisscross white patterns (Colantoni and Delgado 1992:21)
	white patterns (similar to JG-08)

**Superpositioning.**

Top	Bottom
Period 4 bright red stick human	Period 2 dull light-medium red lizard

**Discussion.** On same small wall of the upper cave are figures of Period 2 (concentric circle), Period 4 (outlined cross, handprint), and Period 5 (group of dark red lizards).



Figure 70. JG-31, figures (after Cruxent 1946).

## JG-32 — Cueva Cataniapo

### Site Details.

Other site names	Casa Antigua de Cataniapo; Cataniapo; Cueva Gavilán.
Other site numbers	JSV-344.
State	Amazonas.
Map	6632-I (50k)
UTM ( map location)	N 620.120, E 656.550
References	Novoa 1985:41; de Valencia and Sujo 1987.
Location	On the edge of the Cataniapo valley, near the community of Apure. Overlooks and is just northeast of the junction of the Samariapo and Gavilán roads; overlooks the Cataniapo river and Atures; on edge of the hillcrest.
Site type	Perched boulder.
Site description	Large boulder shelter with a room-like overhang, near vertical walls and a flat ceiling. A narrow crevice in the rear of the room is between support blocks.
Rock art	Multiple layers of paintings on the ceiling and walls.
Cultural deposits	None known. A large prospect hole in the middle of the floor indicates dense decayed angular granite gravel deposit at least a meter thick; there is no evidence of cultural deposition.
Artifacts	None known. Novoa reports that the site is still visited by the Piaroa, and the remains of recent offerings still are found around the edge of the shelter. <sup>64</sup>
Human remains	Presently only pieces of <i>cacures</i> . In the recent past at least an adult and a child (est. 6 years) were placed here in bark-slat <i>cacures</i> .

### Periods. Period 5?, 6.

Period	Description
Period 6	some segmented white figures (reminiscent of JG-52)
	white miscellaneous geometric figures, designs
	white concentric circle designs; lots with interior dots
	monochrome red concentric line patterns (10+ concentric lines); otherwise this looks like it should be Period 3
Layer A	monochrome white small figures (stars, etc.)
	monochrome white concentric designs or patterns, other geometrics and designs, lots of interior dots
Layer B	red-white outlined cross
Layer C	monochrome medium red concentric patterns; some red-white alternating (may be same age as Layer I)

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<sup>64</sup> I have never seen this sort of thing at any site or heard of the practice from anyone else.

**Periods** (continued)

Layer D	monochrome medium red broad messy cross
Layer E	red-white bichrome concentric pattern of alternating lines; two lobes = one a concentric square, the other a diamond spiral; both connected together into same pattern; superposition is not clear
Layer F	medium red large smears and unidentified figures
Layer G	red-white bichrome; vertical chain of open white ovals bordered by double red lines, with double connecting red lines between (Figure 20, k)
Layer H	red-white bichrome book-like pattern (like Caño Ore, JG-12); three contiguous rectangular patterns with white exterior border lines and vertical dividing lines, interior diagonal lines are alternating red-white (Figure 20, j)
Layer I	monochrome red large concentric circular area (may be same age as Layer C)

**Superpositioning.**

Top	Bottom
late Period 6 red concentric pattern	Period 6 white concentric pattern
Layer A spider-lizard	Layer F large red smears (figures)
Layer C concentric	Layer A concentric
Layer C concentric	Layer B outlined cross
Layer D wide sloppy red cross	Layer C concentric
Layers E, G, H	no direct superpositioning

**Periods Discussion.** This site does not follow any previously recognized sequence. The site is just south of Puerto Ayacucho, and it may be that the southern region has a different set of chronological criteria. It appears that several cultural groups probably utilized the cave over what seems like a fairly short length of time. White monochrome figures are covered with various patterns, but then come out again on top. The outlined cross (which usually dates to Period 4) is in the middle of the sequence here. Most of the middle series is red-white bichrome in patterns of concentric lines alternating in color. Other forms of red-white bichrome also occur. These kinds of red-white bichrome, at other sites in the Parguaza area, usually are believed to date to Period 5 or Period 6. If so, it would seem to indicate that the stratified layers at this site (JG-32) all date within Period 6.

Using the above individual *Layer* references (which may refer to individual figures or groups of similar figures which appear to be related), the following temporal relation is suggested (Figure 71). There is no indication of episode duration, time between episodes, or total elapsed time. From most recent to oldest, the order is **Layer E** (complex white concentric patterns), possibly over **Layer A** (monochrome white small figures, stars, etc.), over **Layer D**

(monochrome medium red broad messy cross), over **Layer C** (medium red monochrome concentric patterns, some alternating red-white). **Layer C** and also **Layer I** (large red concentric circular area) are above **Layer A** (white concentric designs), although there is no direct superpositional relationship between **Layer C** and **Layer I** (C and I may be the same layer). **Layer C** is over **Layer A** and also **Layer B** (red-white outlined cross), although there is no direct superpositional relationship between **Layer A** and **Layer B**. The layering here is very complex, and the various relative positions of Layer A presently are unexplained.

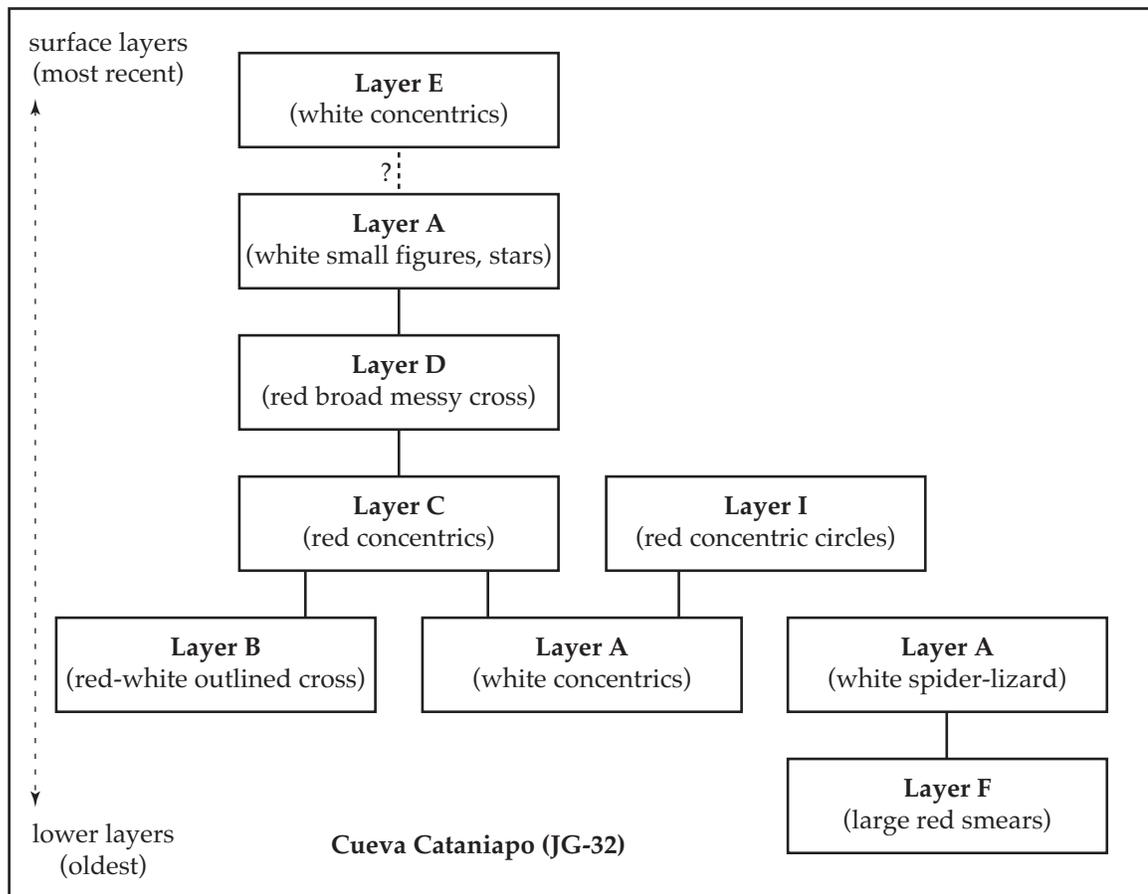


Figure 71. Superpositional relations at JG-32 (Cueva Cataniapo).

## JG-33 — Cueva Coromoto

### Site Details.

Other site names	Cavirroboto (Novoa); Cueva de Coromoto; Cueva Piedra Indio Coromoto (Perera).
Other site numbers	JSV-344.
State	Amazonas.
Map	6632-II (50k)
UTM ( map location)	N 598.855, E 654.935
References	de Valencia and Sujo 1987; Novoa 1985:41; Perera 1988b; Greer 1994 (p. 49, fig. 7).
Location	On the gentle exposed bedrock hillslope just north and above Caño Paria Chica; just north of the Guajivo village of Coromoto (about 15 minutes walk).
Site type	Perched boulder.
Site description	The entire isolated boulder overhangs on most sides, with the main shelter on the south side measuring about 12 m wide and 3 m deep.
Rock art	The main pictographs are on the ceiling, floor, and ledge face in the southern shelter. A few paintings are also in the northern shelter.
Cultural deposits	None in the shelter. Some thin deposition on the north side of the rock.
Artifacts	None known.
Human remains	None now.

### Periods. Periods 2?, 4.

Period	Description
Period 2?	fish
	concentric interior-line fish
	concentric circles
	patterns
Period 4	wide-body man with interior cross-hatching
	single outlined crosses (several)
	multiple outlined crosses (with two crosses)
	rectangular repeating blanket pattern of contiguous boxes of concentric squares
	lizards
	quadrupeds
	onoto pods
	stick humans (male and female?)
segmented circles (Figure 10, c)	

### Superpositioning. None.

## JG-43 — Laja Tinaja 1

### Site Details.

Other site names	Cerro Tinaja 1; Laja Tinaja; Sipapo Cave.
Other site numbers	JSC-3.
State	Amazonas.
Map	6630 (100k)
UTM ( map location)	N 531.220, E 641.010
References	Christie-Shults 1992.
Location	Right bank of Sipapo, between Laguna Tonina (Piaroa village of Tonina) and Cerro Pelota. This is the first painted boulder coming up from the river, and just off to the left; about two-thirds the way up the hillside.
Site type	Perched boulder.
Site description	Two large contiguous boulders with overhanging sides and an open cave-like area between.
Rock art	Red pictographs are mainly on the ceiling of the east side of the boulders, away from the river. There are 8+ figures in one group and two other isolated figures.
Cultural deposits	None noted; possible thin soil accumulation on east side of boulders, in flat area front of paintings.
Artifacts	None noted (other than recent materials associated with the burial).
Human remains	Two modern burials (one adult, one juvenile) in <i>cacures</i> . The juvenile (est. 8-10 years from protruding pieces of skull) was wrapped in palm leaves and then a cane <i>cacure</i> ; there are blue and white seed beads from a necklace and an accompanying old suitcase. The adult is in a wooden strip <i>cacure</i> placed on a slab platform in the bottom of a crack beneath the western boulder. Neither burial is covered with slabs.

### Periods. Periods 4?

Period	Description
estimate Period 4 (maybe Period 2)	fine-line concentric figure (believed to be a female human?) (Figure 13, k)
	other dim figures; light red, eroded
	elongated human with interior chevrons (like JG-15), light orangish-red

### Superpositioning. None.

## JG-44 — Laja Tinaja 2

### Site Details.

Other site names	Laja Tinaja; Cerro Tinaja 2.
Other site numbers	JCS-4.
State	Amazonas.
Map	6630 (100k)
UTM ( map location)	N 531.200, E 641.110
References	Christie-Shults 1992.
Location	Right bank of Sipapo, between Laguna Tonina (Piaroa village of Tonina) and Cerro Pelota. This is the second painted boulder coming up from the river, and just off to the left; on an almost isolated hillcrest on the way up to the top, but not yet to the highest point. Excellent view of the Sipapo and surrounding country.
Site type	Perched boulder.
Site description	Large boulder about 10 m wide, 21 m long, 6 m tall; sitting on irregular-shaped bedrock. The main shelter is on the south side.
Rock art	Estimate about 22 figures in two areas along the southwest and west sides of the rock; face toward the river. Figures are placed especially in limited white clean areas of the wall surrounded by black weathered areas. Figures in the overhang are on sloping wall; those in the shelter are on the ceiling (above the modern burials).
Cultural deposits	None.
Artifacts	None noted.
Human remains	There are 9 wooden caskets (one is a small <i>curiara</i> , canoe) and 5 bark-strip <i>cacures</i> ; apparently people of all ages. Burials fill the southern shelter and the overhang. All are modern burials, some here less than a year. All local Piaroa villages in this area use the cave.

### Periods. Periods 4?

Period	Description
estimate Period 4 (maybe Period 2)	dim fingerline figures, medium red
	large square boxes with interior divisions, complex large bounded patterns (look a lot like Period 4)
	concentric circles; possibly fish-sun symbols
	patterns of parallel-concentric wavy lines
	stamp-like design
	fringed designs

### Superpositioning. None.

## JG-45 — Laja Tinaja 3

### Site Details.

Other site names	Laja Tinaja; Cabeza del Mono; Cerro Tinaja 3.
Other site numbers	JCS-5.
State	Amazonas.
Map	6630 (100k)
UTM ( map location)	N 531.175, E 641.190
References	Christie-Shults 1992.
Location	Right bank of Sipapo, between Laguna Tonina (Piaroa village of Tonina) and Cerro Pelota. This is the highest painted boulder and is on the hilltop at the <i>cabeza del mono</i> rock on the skyline. Excellent view of the Sipapo and surrounding country.
Site type	Perched boulder.
Site description	Two large boulders
Rock art	On SE-facing overhang of southeastern boulder. Now about 4-5 faded and exfoliated figures; originally probably about 10.
Cultural deposits	None.
Artifacts	None noted.
Human remains	A baby burial in a small wooden casket in a horizontal crack on the northwest side of the same (SE) boulder. Just below the paintings is another area of old body fluids, but the burial has been removed.

### Periods. Periods 4?

Period	Description
estimate Period 4 (maybe Period 2)	light orangish-red
	square-body man (?) with rectilinear grid partitions (Figure 15, k)
	snake
	other figures

### Superpositioning. None.

## JG-46 — Cerro Pelota 1

### Site Details.

Other site names	none.
Other site numbers	JCS-6.
State	Amazonas.
Map	6630 (100k)
UTM ( map location)	N 527.020, E 642.140
References	Christie-Shults 1992.
Location	Right bank of Sipapo, about an hour upstream by bongo from Laguna Tonina (Piaroa village of Tonina). Over half way up narrow finger ridgecrest from lagoon. Excellent view of Sipapo and all surrounding country.
Site type	Perched boulder.
Site description	Large boulder about 10-15 m across, 6 m tall; sitting on bedrock, undercut on three sides (most of the circumference). Two undercut areas have paintings, the other contains the burials.
Rock art	Pictographs in all three undercut areas nearly around the circumference of the boulder. No paintings in the area of the burials (largest shelter). Paintings overlook the Sipapo (although there is also a good view of the Autana mountain).
Cultural deposits	None.
Artifacts	None noted.
Human remains	Two moderately recent burials are in the largest-deepest overhang on the southeast corner of the rock. One is in a wooden <i>curiara</i> (boat) cut in half and covered with a board as a casket; the other is an old wood-strip bark-strip <i>cacure</i> with the bones now coming out.

**Periods.** early and late Period 2? (or Periods 2 and early 4?) [nonsuperimposed listed here].

Period	Description
early Period 2? (possibly Period 2)	mostly medium red
	vertical pair of concentric circles (like double fish); medium red
	other medium red figures
	large unidentified areas of medium red paint
late Period 2? (possibly Period 4)	mostly dark red
	other medium red figures

**Superpositioning.**

<b>Top</b>	<b>Bottom</b>
late Period 2? (poss. Period 4) dark red parallel-concentric oval pattern of concentric lines crossed by parallel diagonal lines; could be a stylized fish (Figure 6, g)	early Period 2? medium red parallel wavy lines (Figure 6, f)
late Period 2? (poss. Period 4) several sets of dark red parallel wavy lines	early Period 2?, medium red thin wavy lines
late Period 2? (poss. Period 4) dark red parallel wavy lines, ending in concentric circles	early Period 2?, medium red unidentified smeared figures

**Periods Discussion.** All the paintings seem to be from the same tradition (especially the medium red and dark red wavy line patterns) even though there is superposition between the two colors. It is assumed that the earliest figures (medium red) could be attributable to Period 2 (possibly early), while the later dark red figures could be late Period 2 or Period 4.

## JG-47 — Cerro Pintado 5

### Site Details.

Other site names	None.
Other site numbers	None.
State	Amazonas.
Map	6632-I (50k)
UTM ( map location)	N 611.902, E 660.920 (Figure 69)
References	Greer 1994 (p. 53, Fig. 14, a).
Location	Southwest side of Cerro Pintado, about one-third way to the southern crest; about 300 m south of the main petroglyphs (Cerro Pintado 3, JG-27).
Site type	Medium rockshelter.
Site description	Long narrow slit-like shelter, shows as white scar on hillside. Faces northwest. Sloping bare bedrock floor; low flat ceiling.
Rock art	Small black figures on the ceiling of lower west end. Two human males, one lizard-frog, 2+ unidentified incomplete figures.
Cultural deposits	None.
Artifacts	None.
Human remains	None.

### Periods. Period 6.

Period	Description
Period 6	black wax-like <i>caraña</i> only (no red or white)
	man with necklace of two pig teeth, genitals or <i>guayuco</i> (Figure 21, j)
	man with small necklace, pants, Y-shaped genitals or <i>guayuco</i>
	lizard
	several of remnant figures, including pieces of humans

### Superpositioning. None.

## JG-48 — Cerro Tigrito 1

### Site Details.

Other site names	Cueva de Manuelito.
Other site numbers	None.
State	Amazonas.
Map	6632-II (50k)
UTM ( map location)	N 594.360, E 646.800
References	Greer 1994 (p. 46, fig. 2).
Location	About half way to top of hill, near south end of hill. Overhang faces east with excellent view of the wide valley.
Site type	Perched boulder.
Site description	Very large boulder sitting on bedrock. Overhang about 6 m wide, 6 m deep, 0.5-5 m high. Uneven sloping bedrock floor. About 40 m up the hill is a large boulder cave with a wide entrance room about 40 m deep; interior ceiling height is about 10 m. There is modern trash indicating considerable use, but no rock art was recognized.
Rock art	Wall and ceiling are covered with about 40 red paintings.
Cultural deposits	None noted; some deposition possible in vegetation area just below overhang.
Artifacts	None noted. Cave reportedly at one time contained tinajas (according to two questionable local Indian informants). Moderns cans are at bottom edge of the shelter.
Human remains	None.

### Periods. Periods 2?

Period	Description
Period 2?	faded light medium red
	geometric symbols, thick finger lines
	finger dot patterns (Figure 6, l)
	vertically segmented box (Figure 6, k)
	lots of old faded painting areas, now mostly seen as discolorations on the rock face
	concentric line pattern; possibly circle or fish; partially covered with lichen (looks similar to JG-46)
	fragments of two small men (together) of medium bright red

Superpositioning. None.

Periods Discussion. All paintings look like a single period.

## JG-49 — Cerro Gavilán 2

### Site Details.

Other site names	Cueva Gavilán.
Other site numbers	None.
State	Bolívar.
Map	6734-I-NO (25k)
UTM ( map location)	N 698.465, E 697.555
References	Colantoni and Delgado 1992 (photo, p. 31); Greer 1994 (p. 49, fig. 6).
Location	Base of south side of Cerro Gavilán (Cerro Iguanitas on topo map); just to left (west) of large white scar on tall bluff. First big hill east of Orinoco and south of Parguaza, just south of where Parguaza turns north toward its mouth.
Site type	Large rockshelter.
Site description	Deep rockshelter, the main part of which is estimated 50 m long, 13 m deep, ceiling height about 22 m just in from the mouth.
Rock art	The rear wall is fairly densely covered with paintings, with some suggestion of horizontal distributional differences by relative age. Painting occur along 38 m of wall, with the main dense panel along 11 m. Estimated 300+ figures. Recent mud dauber wasp nests seem to be made out of the same color yellow fine clay as the paint. The landowner-guide confirms yellow and white colors are mineral (earth) pigments.
Cultural deposits	Estimate at least 3 m of mounded cultural deposit in the middle of the shelter; dark gray ashy soil with artifacts, human and animal bones, etc. Alternating layers of white ash, dark gray ash; brown ash at 40-50 cm down to bottom of pothole at about 60-70 cm. Relatively minimal disturbance by a few small potholes. Much of the central part of the mound has been disturbed to about 30 cm looking for pots and bones. The deepest pothole is about 70 cm deep. Most of the surface both on and off the mound appears to be undisturbed. Lots of mortar holes and shallow grinding facets on the surface of at least three low boulders.
Artifacts	Bones, potsherds, grinding stones, chipped stone flakes, good vegetal preservation, etc. Some polished buff sherds with fine temper.
Human remains	Bone fragments in pothole backdirt. No modern burials are still in the cave. No <i>cacure</i> fragments were noted at this time.

**Periods.** Periods 3, 4, 5, 6.

Period	Description
Period 3 or 5	concentric boxes of red lines bordered on inside by white
Period 4	dark medium red human, open body pattern
Period 6	rectangle filled with connected circles — bichrome dark-medium red and beige clay (not bright white); looks like red border, then red fill, then beige border inside red border, then beige division lines to made a <u>negative red</u> look like disks or eggs <sup>65</sup>
	two white connected circles of a <i>circle grid</i> motif (Figure 20, i); like Period 5

**Simple Superpositioning.**

Top	Bottom
Period 4 red symbol	Period 3 animal, white body outlined in red (may be Period 5)
Period 6 white	Period 4 medium red, bright
Period 6 brownish-yellow lizard	Period 4 older red smeared wall
Period 6 dull yellow smears	Period 4 medium red small humans
Period 6 large white smears, messy, thick paint	Period 4 dark medium red unidentified figure
Period 6 white body stamp, star <b>and</b> Period 6 dark yellowish clay lizard (Colantoni and Delgado 1992:31).	Period 4 large dark medium red painted area, probably body of large animal (deer?)
Period 6 white figures	Period 4 dark medium red circles, etc.
Period 6 complex red-beige bichrome <i>egg</i> pattern (see Period 6 above)	Period 4 red figures and smears <b>and</b> Period 6 white meandering line
Period 6 bright yellow	Period 6 white
Period 6 yellow and gold	Period 6 white animals, etc.

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<sup>65</sup> It is possible that circle-like objects such as these which appear in baskets, on square mats, or on stamps may represent turtle eggs.

**Multiple Superpositioning.**

Top to Bottom (stratigraphic position)	
Period 6 dark golden concentric circles and meanders	
Period 6 medium-dark red meanders	
Period 6 white sloppy unidentified figures	
Period 6 dark gold	
Period 6 bright red	
Period 6 yellow	
Period 6 white lines	
Period 6 bright yellow	
Period 6 white boxes and geometrics	
Period 6 yellowish-beige clay (Iglesias JG-11 type paint)	
Period 6 white sloppy geometrics, meanders, and lined figures	
Period 6 bright red unidentified figures and meanders	
Period 6 white meanders	made at same time
Period 6 yellowish-beige clay (Iglesias JG-11 type paint)	
Period 6 white sloppy geometrics, meanders, and lined figures	
Period 6 bright red unidentified figures and meanders	
Period 6 white meanders	
Period 6 bright light yellow bird	
Period 6 white man and segmented box (symbol set)	
Period 6 dull medium red (almost pinkish) unidentified figures (color like JG-52)	
Period 6? = complex set of four figures (A over B1+B2; B2 over C):	
Figure A (above B1+B2) = white deer body with red outline; other white figures	
Figure B1 = large bichrome basketry tray ( <i>guapa</i> )	
<b>and</b>	
Figure B2 = red square around a set of segmented concentric circles with white fill	
Figure C (beneath B2 only) = segmented bichrome box (cream lines over red fill), with bichrome wing (alternating red and cream lines) [partially shown in <a href="#">Figure 20, f</a> ]	
Period 6 large sloppy white figure	
Period 6 dark yellow man	
Period 6 white line figures	

## JG-50 — *Laja Parguaza 2*

### Site Details.

Other site names	Cueva 2 del Santo; Cueva del Santo 2; Santos 2; Cueva al lado del Santo (Perera).
Other site numbers	CEN Bo.47; FGS-11; Bo.31-B of Scaramelli and Tarble 1993.
State	Bolívar.
Map	6735-II-NO (25k)
UTM ( map location)	N 713.300, E 704.235
References	Scaramelli 1992; Perera 1988a; Scaramelli and Tarble 1993.
Location	Just above the lower slopes on the southeast side of Laja del Parguaza, the large mountain at the mouth of the Parguaza About 150 m south of Cueva del Santo 1 (JG-8).
Site type	Boulder shelter.
Site description	A cavity is formed under a large boulder sitting on bedrock and some smaller blocks. The large boulder is about 25 m across and 4 m high. The opening with the paintings is an enclosed room about 4 m wide and 1 meter high. Cave faces SSW.
Rock art	Several figures are on the ceiling of the mostly enclosed room under the boulder.
Cultural deposits	None.
Artifacts	None.
Human remains	None.

### Periods. Period 4?

Period	Description
probably Period 4 (possibly Period 2)	dark medium red circles
	rayed circle (Figure 10, f)

### Superpositioning. None.

**Periods Discussion.** Figures are very dim. Nothing seems distinctive, and age is not known. These look more like Period 4 symbols than anything else.

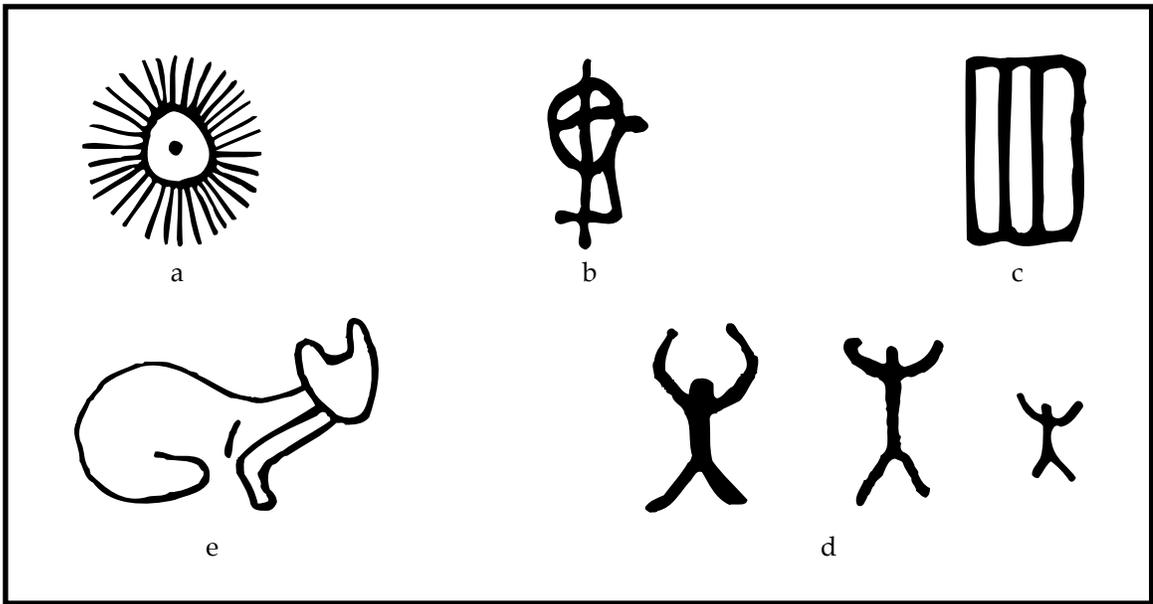


Figure 72. JG-50, figures (after Scaramelli 1992).

## JG-51 — Cerro Secreto 1

### Site Details.

Other site names	Cueva del Golpe, Castillos 1.
Other site numbers	None.
State	Bolívar.
Map	6735-II-NO (25k)
UTM ( map location)	N 712.075, E 705.200
References	None.
Location	<p>Just south of the mouth of the Parguaza is a low, prominent line of hills, which separate the Parguaza from the Castillos uplands to the east. Just east of this ridge is a low valley-like area which separates the low ridge from the Castillos. Between the ridge and the valley is a small hill, locally called Cerro Secreto; the cave is on the northeast corner of this hill, near the top.</p> <p>This is approximately southeast of the crest of the Laja de Parguaza hill (with the Spanish ceramics on the crest). The Cerro Secreto cave is almost due south (or SSW) of the impressive face at the end of the Castillos-León.</p>
Site type	Perched boulder.
Site description	<p>Large boulder about 20 x 20 m sitting on a bedrock exposure. The sides of the rock overhang, with the most undercut area at the northeast side (where the painting is) only about 65 cm high.</p> <p>The cave faces east or southeast toward the Castillos, which the local guide says is called Cerro (or Serranía) de León.</p>
Rock art	One figure on the ceiling; apparently dim remains of others.
Cultural deposits	None.
Artifacts	None.
Human remains	None (although this is an excellent place to put bodies).

### Periods. Period 2?

Period	Description
Period 2?	monochrome red symbols, line figures

### Superpositioning. None.

Periods Discussion. There is nothing distinctive, and art could be Period 2 or 4.

## JG-52 — *Cueva Pintada*

### Site Details.

Other site names	None.
Other site numbers	FGS-2; JSV-48; Bo.26-B of Scaramelli and Tarble 1993.
State	Bolívar.
Map	6835-IV-SO (25k)
UTM ( map location)	N 719.250, E 725.865
References	von der Osten 1946; Novoa 1985; Sanoja and Vargas 1970:1; Perera 1986a, 1988a; Colantoni and Delgado 1992 (photos, pp. 10-11, 22-23, 25-26, 30); Scaramelli 1992; de Valencia and Sujo 1987; Sujo 1975 (Fig. 54, misnumbered Fig. 55, with multiple figures); Tarble and Scaramelli 1993b; Scaramelli and Tarble 1993.
Location	Southeast of the Mapoyo village of Palomo.
Site type	Boulder rockshelter.
Site description	A very large, impressive rock approximately 25 m long, and 12+ m high, sitting on top of another rock and undercut on all sides. The general appearance is similar to a giant mushroom. The ceiling and floor are relatively flat. Next to the main rock are two smaller boulders. The south side of the southwestern boulder also is undercut and contains paintings.
Rock art	The roof and upper walls of the main rock are painted with an estimated 400+ figures and approximately 50 m (by 3-5 m deep) of running panel space.
Cultural deposits	The floor is a fairly coarse gravely material, but it would be reasonable to find shallow cultural deposits here.
Artifacts	None noted. Scaramelli (1992) reports ceramics. Tarble and Scaramelli (1993b) report that they collected modern ceramics only.
Human remains	None now (almost certainly used as a repository in the past).

**Periods.** Periods 4, 6, historic.

Period	Description
Period 4	red men (similar to Iglesias JG-11)
	symbols
	lots of other symbols
	outlined cross
	stick humans
	turtles
	line of six dancers, red

**Periods** (continued)

Period 6	almost equal use of white and red; some negative red designs
	several white connected circle patterns (cf. <a href="#">Figure 20, n</a> )
	white connected circles; central circle plus two rings of six circles each (all connected) ( <a href="#">Figure 20, m</a> )
	connected circle pattern, white lines on red background; central circle plus two rings of six circles (cf. <a href="#">Figure 20, m</a> )
	connected circle pattern, bichrome red-white
	connected circle pattern, white with red fill
	circular grid patterns with internal divisions ( <a href="#">Figure 20, c</a> )
	different white parallel line patterns with red fill or red background
	white complex cross (deviant outlined cross?)
	other white symbols
	other white patterns
	red dot patterns ( <a href="#">Figure 20, e</a> )
	red dots encircled with red line ( <a href="#">Figure 20, b</a> )
	other red-white bichrome figures
	white pineapples
	several basketry trays ( <i>wapas</i> ), white
	white lizard, etc. (Colantoni and Delgado 1992:22)
white stylized humans	
Period 7	church, light cream ( <a href="#">Figure 22, a</a> ) (Colantoni and Delgado 1992:10; von der Osten 1946)
	rectangle (almost trapezoid), light cream ( <a href="#">Figure 22, b</a> )
	white connected circle pattern; central circle plus one ring of four circles ( <a href="#">Figure 20, n</a> ) (von der Osten 1946)

**Superpositioning.**

Top	Bottom
Period 6 pink ax	Period 4 monochrome red figures

**Periods Discussion.** Period 4 is all red. Period 6 has lots of different kinds of designs in white, red, and red-white bichrome; there is seemingly almost equal use of white and red, and some negative red designs.

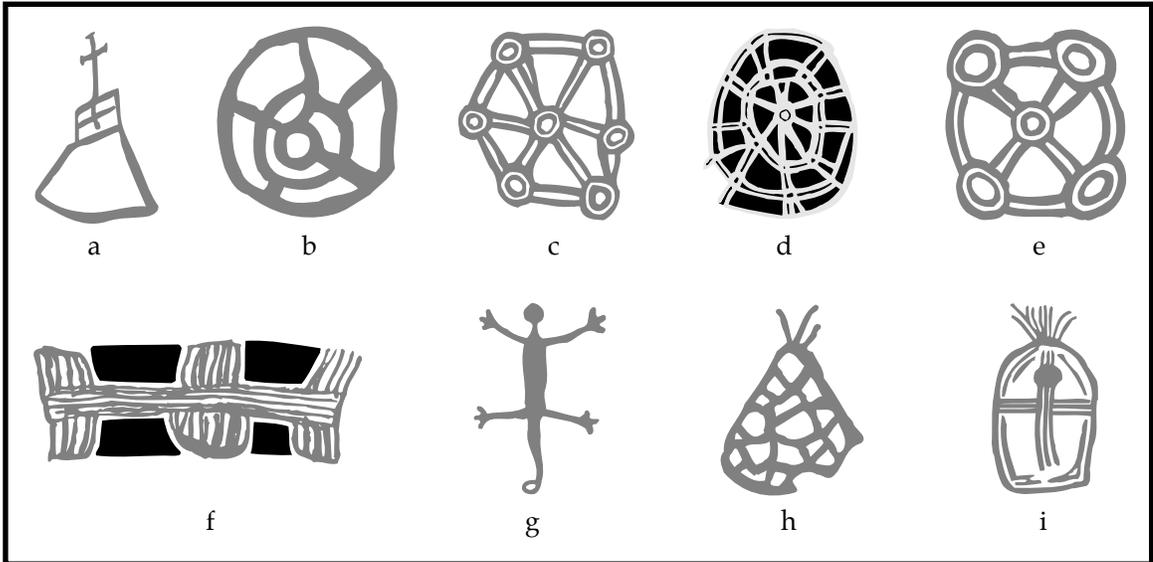


Figure 73. JG-52, figures (after von der Osten 1946).  
Shaded white; solid red. a, light yellow.

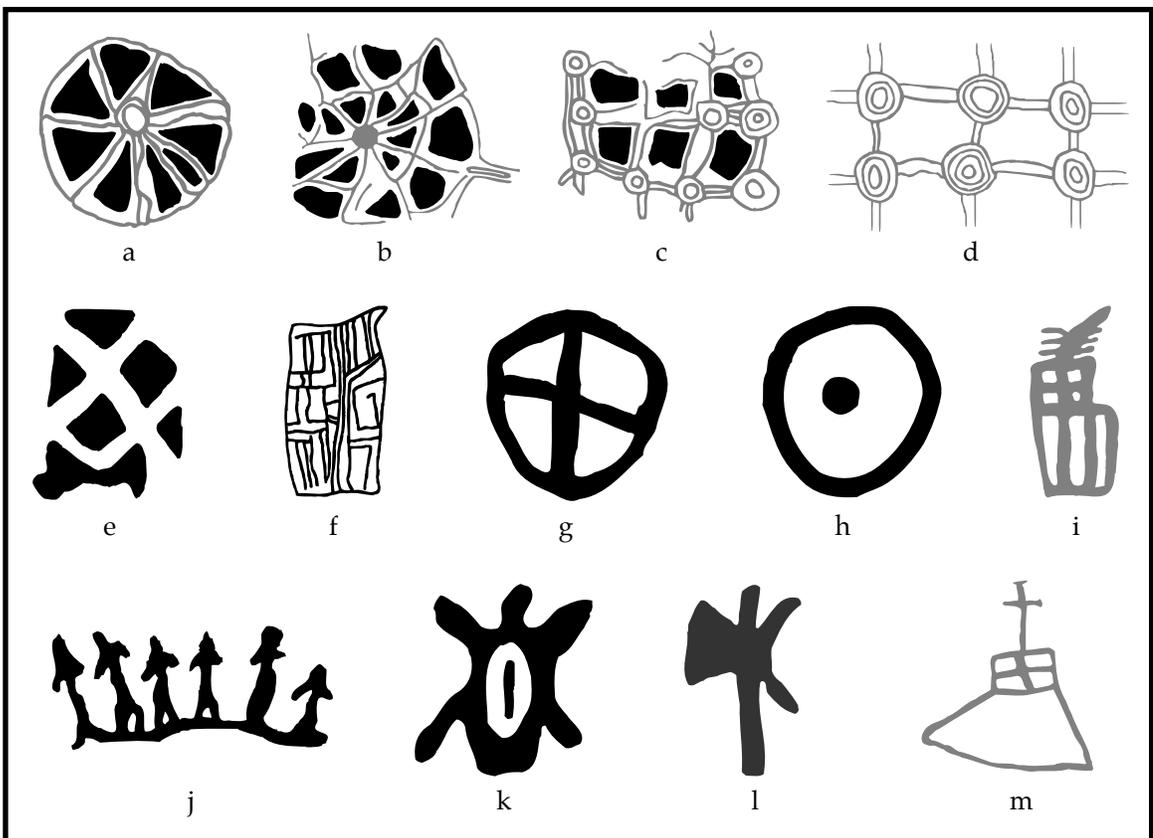


Figure 74. JG-52, figures (after Scaramelli 1992).  
Red solid; white shaded. l, pink; m, light yellow.

## JG-53 — *Cuevita Pintada*

### Site Details.

Other site names	None.
Other site numbers	FGS-1; JSV-83; Bo.26-A of Scaramelli and Tarble 1993.
State	Bolívar.
Map	6835-IV-SO (25k)
UTM ( map location)	N 719.740, E 725.540
References	von der Osten 1946; Perera 1986a, 1988a; de Valencia and Sujo 1987; Sanoja and Vargas 1970; Scaramelli 1992; Scaramelli and Tarble 1993.
Location	Southeast of the Mapoyo village of Palomo; about 250 m NNW of Cueva Pintada (JG-52).
Site type	Boulder rockshelter.
Site description	Two large blocks are sitting on top of other smaller rocks, on a bedrock platform. The main block is about 10 m wide. These together form an overhanging shelter and enclosed room. The total overhang is perhaps 14 m wide and 8 m deep. The cave opens up inside, and there is a similar cave in the contiguous rock.
Rock art	Paintings occur on the white surface of the front of the lower blocks and the walls and ceiling of the upper block. The painted area is about 4 m wide and 2.5 m deep.
Cultural deposits	None noted, but variable gravely deposition is on the slopes in front of the site.
Artifacts	None noted.
Human remains	None now; excellent location for placement of burials inside the two interior rooms.

Periods. Period 2 and/or 4.

Period	Description
Period 2 (possibly Period 4)	small red figures
	wide-bodied human
	concentric circles
	interior-line fish
	quadruped animal
	symbols

Superpositioning. None.

Periods Discussion. Paintings seem probably to be Period 2; but at least some could be Period 4, as suggested particularly by the wide-bodied human and the quadruped. All are red.

## JG-54 — *Idora de Punta Brava*

### Site Details.

Other site names	None. This cave only is known as <i>Idora</i> (cemetery cave); other burial caves have individual names, such as <i>D'ul</i> and <i>D'a'</i> (according to the Piaroa guide from Punta Brava).
Other site numbers	None.
State	Bolívar.
Map	6835-I-SO (25k)
UTM ( map location)	N 722.000, E 755.510
References	Greer 1994 (p. 53, fig. 14, d).
Location	South side of the Suapure; southeast of the new Piaroa village of Punta Brava; about 1 hr walk from the village. In an alcove-like area on the south side of a prominent hill (enter from the north and east).
Site type	Medium rockshelter.
Site description	Room-like shelter about 10 m wide and 5 m deep; sloping ceiling about 1-3 m high. Shelter faces southwest.
Rock art	Paintings cover the western wall and nearly the entire ceiling. Now being affected by wasp nests, termite trails, and root molds.
Cultural deposits	None.
Artifacts	None noted.
Human remains	Previous burial remains have been removed; now there are only the poles 2-2.25 m long and 10-12 cm in diameter; apparently these were used to bring the bodies to the cave. Bones are said to have been removed by the Panare.  Previous use is said to be Panare. Said that Piaroa have never used this cave for burials. Other caves in the general area have been used by Piaroa in the past and are still used today.

### Periods. Periods 4, 6.

Period	Description
Period 4	all figures monochrome red
	animals, stick humans, rectangular and triangular body humans, lots more figures (all like at Santa Fe JG-19)
	wide-body humans (like at Iglesias JG-11 and Santa Fe JG-19)
	complex multiple rows of stick humans (legs, arms, heads, etc.) (dancers?)
	another double row of dancers
	line of short vertical finger lines; possibly long line of dancers
	other double line of short finger lines (dancers?)
	other pair of opposing short vertical finger lines (dancers?)

**Periods** (continued)

Period 4 (continued)	various other humans
	birds
	monkeys
	lines of monkeys (?)
	other animals
	outlined cross
	rayed concentric circles (Figure 10, d)
	vertical chain of contiguous circles (Figure 10, m)
	parallel vertical wavy lines
	other small symbols
Period 6	pink stick humans
	white upside-down human

**Superpositioning.**

Top	Bottom
Period 6 dark red (this is dated as Period 6 because it is above another Period 6 figure; otherwise it would be dated as Period 4 because of the red)	Period 6 pink
Period 6 white humans, fish	Period 4 dark red wide-body humans (Iglesias JG-11 style); (this could be Period 4 or dark red of Period 6; see above)

**Multiple Superpositioning.**

Top to Bottom (stratigraphic position)
Period 6 white humans
Period 6 dark red wide-body humans with rayed headdresses; look like Period 4 but darker red than most Period 4 humans of this style on this wall
Period 6 pink dancers, combatants
Period 6 white sloppy line figures, humans, etc.
Period 4 medium red figures, humans, etc.

**Periods Discussion.** All Period 4 figures are monochrome red; most look generally like Santa Fe (JG-19) style, with some similarity to Iglesias (JG-11). There are several superimposed layers of Period 6 figures in white, pink, and dark bright red. The Period 6 dark red figures are so designated because of their superpositioning above Period 6 white or pink.

## JG-55 — Cerro Morrocoy 1

### Site Details.

Other site names	None.
Other site numbers	FGS-27; BO-12 of Tarble 1990b and Scaramelli and Tarble 1993 (all four painted sites on this hill have the same number).
State	Bolívar.
Map	6835-IV-NE (25k)
UTM ( map location)	N 731.025, E 745.930
References	Tarble 1990b; Scaramelli 1992; Scaramelli and Tarble 1993.
Location	South of the Suapure and 4 km west of the highway; on the crest of the north end of the hill, beside the saddle.
Site type	Boulder rockshelter.
Site description	This is a fractured boulder outcropping with a very slightly protected face looking north to the adjacent saddle. Excellent view of the saddle and surrounding country.
Rock art	Several paintings on small area of vertical face.
Cultural deposits	None noted; thin deposition in saddle area in front of shelter.
Artifacts	None noted.
Human remains	None.

### Periods. Period 4.

Period	Description
Period 4	all figures are dim light-medium red, faded
	outlined cross
	lizard
	symbols
	bird

Superpositioning. None (there is very little art).

## JG-56 — Cerro Morrocoy 2

### Site Details.

Other site names	None.
Other site numbers	FGS-27; BO-12 of Tarble 1990b and Scaramelli and Tarble 1993 (all four painted sites on this hill have the same number).
State	Bolívar.
Map	6835-IV-NE (25k)
UTM ( map location)	N 730.820, E 746.095
References	Tarble 1990b; Scaramelli 1992; Scaramelli and Tarble 1993.
Location	South of the Suapure and 4 km west of the highway; about halfway up the middle of the east side of the hill. The site is about 50 m SSE of Cerro Morrocoy 1 (JG-56) and about 10-15 m lower in elevation.
Site type	Boulder rockshelter.
Site description	A small narrow enclosed shelter formed by large boulders on the hillside. There is a partially overhanging vertical face just on the north side of the shelter. The vertical wall faces ESE.
Rock art	A few figures on the vertical face on the north end of the protected area, but outside the main shelter.
Cultural deposits	None noted. The cave has no floor (only cracks between boulders).
Artifacts	None noted.
Human remains	None.

### Periods. Period 4.

Period	Description
Period 4	all dark red
	two wide humans, interior-line squared bodies (very large)
	quadruped animal
	lizard

Superpositioning. None (single panel).

## JG-57 — Cerro Morrocoy 3

### Site Details.

Other site names	None.
Other site numbers	FGS-27; BO-12 of Tarble 1990b and Scaramelli and Tarble 1993 (all four painted sites on this hill have the same number).
State	Bolívar.
Map	6835-IV-NE (25k)
UTM ( map location)	N 730.715, E 746.080
References	Tarble 1990b; Scaramelli 1992; Scaramelli and Tarble 1993.
Location	South of the Suapure and 4 km west of the highway; at the base of the south end of the hill. Estimated about 100 m south of Cerro Morrocoy 2 (JG-57). <sup>66</sup>
Site type	Boulder rockshelter.
Site description	Very large boulder with overhang facing southeast. Fairly long overhang, deepest at the west end.
Rock art	Painted figures are on the rear wall; lots of smears and smeared figures. Estimate originally about 30 figures (or perhaps up to 70 if all smears represent previous figures).
Cultural deposits	Considerable deposition in the shelter. There is a 1x1 meter test pit about 70 cm deep in the center of the shelter (not excavated by Tarble).
Artifacts	None noted (previously recorded by Tarble).
Human remains	None.

### Periods. Period 4.

Period	Description
Period 4	all medium to dark red
	two wide-body humans, interior lines
	wide-body human, interior lines, with tail
	other figures
	long curved line with multiple legs and trident feet
	segmented concentric circles (Figure 10, a)

### Superpositioning. None.

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<sup>66</sup> Tarble's shelter #4 is just west of #3 (JG-57) and is not included in the present sample.

## JG-58 — Cerro Gavilán 1

### Site Details.

Other site names	Cueva Colantoni; Cueva Gavilán.
Other site numbers	Bo.35 of Scaramelli and Tarble 1993.
State	Bolívar.
Map	6734-I-NO (25k)
UTM ( map location)	N 698.800, E 696.900
References	Tarble and Scaramelli 1993a, 1993b; Scaramelli and Tarble 1993; Greer 1994 (p. 51, fig. 10, b, c; p. 52, fig. 12).
Location	East of the Orinoco and south of the Parguaza (at the point where the Parguaza turns northward toward its mouth). South side of the main crest of the hill. Hill shows as Cerro Iguanitas on the topographic map (Gavilán is the local name).
Site type	Large rockshelter.
Site description	An impressive cliff probably over 200 m long and 40 m high; faces south. This main, upper shelter is about 60+ m long and with an overhang about 8-10 m deep. The lower painted wall is below and just west of the upper shelter. The face is barely overhanging and is about 20 m long. Other shelters are just to the west (not checked at this time).
Rock art	Paintings occur along the back wall and ceiling of the upper shelter. The most elaborate art is in a room-like area at the western end. Estimate 2000+ figures in this shelter. Estimate 600+ paintings in the western room (area ±40 sq. meters) next to and above the burials. A few more figures are on about 10 m of the vertical face of the lower shelter, next to and behind some large boulders. These seem to be mostly earlier than many of those in the upper shelter.
Cultural deposits	Only a thin veneer of gravel-dirt accumulation is in the shelter, along the bedrock floor and along the rear wall. Good possibility for deposits in front of the lower shelter. Lots of shallow grinding facets all along the bedrock floor of the upper shelter.
Artifacts	Prehistoric sherds noted in upper shelter. Tarble and Scaramelli (1993b) report prehistoric sherds that they apparently collected.
Human remains	Two modern Piaroa cane <i>cacures</i> with offerings (aluminum dipper, large cooking pot, enameled cup); both on ledge at west end of upper shelter. Appear to be fairly old (not recent).

**Periods.** Periods 2, 3, 4, 5, 6.

Period	Description
Period 2	birds birds with interior-line bodies (like fish from this period)
late Period 2?	alignment of 5+ light orangish-red figures (fish?)
Period 3	large red-white bichrome deer, realistic, running, facing left <sup>67</sup>
Period 3?	bichrome red-white body stamp designs (similar to Piaroa stamps) stylized man with solid red body outlined in white
Period 3 or 5	pattern of alternating red-white wavy lines
Period 3 or 5?	several red-white bichrome symbols <sup>68</sup>
Period 4	red monkey with baby on its back; solid body dog (?) with solid body other small animals with solid bodies <sup>69</sup> vertically segmented oval with 9 vertical segment lines (Figure 75, n) <sup>70</sup> red fish with solid body line of at least 5 monkeys on a horizontal line, facing right simple outlined cross (single cross), red small group of six falling humans (Figure 13, dd-hh) human male (with phallus) with torso covered with a large disk (Figure 75, j) <sup>71</sup> birds stylized animals medium red unless otherwise noted upside-down animal monkeys symbols multiple outlined cross (3 crosses) fine-line red figures (like at JG-11 or JG-19)

<sup>67</sup> This style of deer, in nearly identical form and detail, is present in the *warime* ghost panel at Cerro Iguanitas 1 (JG-01); another example was recently found at Sierra San Borja 1 (JG-62).

<sup>68</sup> Some of these red-white symbols seem like they should be affiliated with Period 3, others with Period 5.

<sup>69</sup> Small red animals and other similar realistic figures with solid red bodies may serve as the best indicators for the main temporal-cultural-functional phase of Period 4. The figures seem to be the key markers at such sites as JG-1, JG-3, JG-11, JG-19, JG-23, JG-54, JG-58, and others.

<sup>70</sup> This appears similar in basic design to the segmented boxes in Cerro La Vaca 1 (and other sites) and may be a variant of that motif (or a closely related motif).

<sup>71</sup> This is similar to the *shield-bearing warrior* motif of the Northern Plains of North America.

**Periods** (continued)

Period 4 (continued)	solid-body red animals, realistic (like at JG-19); appear to be armadillos
	red bird
	simple outlined cross (single cross)
	red fish
	unidentified zoomorphs (lizard-frog-human)
	multiple outlined cross (3 crosses)
	small figures solid figures, of a kind often referred to as <i>burial figures</i> , low on the wall beside a ledge perfect for placement of human burials
	more small <i>burial figures</i> in the main burial area, at the base of the wall immediately beside the ledge containing the <i>cacures</i>
	multiple outlined cross (2 prongs)
	multiple outlined cross (2 prongs)
Period 4?	multiple outlined cross (2 crosses)
Period unknown (poss. Period 4; poss. Period 5 or 6)	circular basketry tray ( <i>guapa</i> ) or body stamp with Piaroa-type design; orange paint (similar to <a href="#">Figure 10, i</a> )
Period 4 or 5	red geometric, two concentric circles with four single loop rings ( <a href="#">Figure 75, m</a> ) <sup>72</sup>
Period 5	dark red symbols and designs; lines finger width Look like band stamps, or perhaps extended roller stamps.
	red-black-white circle grid (3 x 3) of connected concentric circles; each circle and the connectors made up of at least 4-5 lines of alternating colors; color alternation not consistent
	black-white bichrome symbol, a vertical elongated mace-like object with a point at the top and four sections of paired lateral curved <i>wings</i> ; made up of a black outline, white fill, and an interior black dot in the slightly widened area between each pair of wings ( <a href="#">Figure 75, q</a> )
	red rectangular stamp design with some <i>caraña</i> still adhering as enhancement
	white multiple cross (3 crosses) with no outline ( <a href="#">Figure 75, h</a> ; also partially shown in upper right of <a href="#">Figure 76</a> )
Period 5?	red-black bichrome symbol similar to a variant multiple outlined cross (2 crosses) with alternating red and black lines
	black animal figures, fish, bird
	stylized square tortoise ( <i>morrocoy</i> ); mostly red but with some white enhancement ( <a href="#">Figure 76</a> ; also see <b>Discussion</b> )
	red variant multiple outlined cross (3 crosses); two different versions beside each other ( <a href="#">Figure 75, a-b</a> )

<sup>72</sup> This is the same motif class of [Figure 9, a](#), and probably is affiliated with Period 5.

**Periods** (continued)

Period 5? (continued)	multiple outlined cross (5 crosses); two of these figures, side-by-side
	red geometric figure outlined in beige or white
	simple outlined cross, red lines and white fill
	complex linear monochrome red design
Period 5 or 6	geometric designs
	dark bright red ( <i>k'eräü?</i> ) rectangular geometric symbol with red interior lines and white area-fill between the lines
Period 5 or 6?	circular turtle/tortoise shell with interior shell design (Figure 75, k); circular figure with red double lines making up the border and the interior irregular division lines; all interior area (including between the two border lines) filled with orangish clay
Period 6	white variant simple outlined cross (single cross); discontinuous outline (Figure 75, g)
	dark pink to orangish clay figures <sup>73</sup>

**Simple Superpositioning.**

Top	Bottom
Late Period 4 or Period 5 dark fine-line figures	period uncertain (probably Period 2); faded medium red; no identified lower figures <sup>74</sup>
Period 6 dark pink to orange clay figures	Period 4 dark-medium red
Period 6 pink clay symbols	Period 4 dark-medium red figures
Period 6 light beige to pink	Period 4 medium red
late Period 4 dark red ( <i>k'eräü?</i> ) thick-line figures (like in the JG-19 southern alcove)	Period 2 light red smeared wall
Period 6 white symbols (Figure 75, r)	Period 4 red figures
Period 6 pink	Period 4 red
Period 5 or 6 white multiple outlined cross (2 crosses) painted on prepared background surface of beige clay	Period 3 bichrome fish
Period 6 white figure; possibly variant multiple outlined cross (2 crosses)	Period 4 (?) red figures
Period 6 (?) large smear or attempted figure	Period 4 (?) red figure <b>and</b> Period 3 bichrome
Period 5 or Period 6 red-white bichrome symbol or complex design	Period 4 red

<sup>73</sup> Period 6 (?) pink color is the same shade and appearance as used at Punta Brava (JG-54).

<sup>74</sup> Period designation is uncertain. This could be early Period 2 over late Period 1, late 4 over early 4, late 4 over 2, or early 2 over 1. Of interest is the dark fine-line style on top of lower faded medium red figures, a relationship to be tested in other areas.

**Simple Superpositioning** (continued)

Period 3 bichrome zoomorphs	Period 2 smears and unidentified figures of light orangish-red paint
Period 5? black fish, solid body (otherwise same general shape as Period 3)	early Period 2 large lizard
Period 5 red symbols	Period 3 bichrome fish
Period 6 white geometrics	early Period 2 unidentified animal figure
Period 6 white geometrics	early Period 2 figures
Period 3 fish and animals	Period 2 figures (many)
Period 3 bichrome fish	early Period 2 interior-line fish
Period 6 white zoomorphs	late Period 4 geometrics, etc.
Period 4? red smear	Period 2 dark red interior-line fish
Period 5 or 6 white multiple outlined cross (2 crosses), stylized variant of this motif (Figure 75, d)	Period 5 or 6 bichrome stylized outline cross?; the main lines (center, cross lines, outline) are dark red and are bordered both on the interior and exterior sides with beige-orange clay lines (Figure 75, e) <sup>75</sup>
Period 4 or 5 (probably Period 5) line with 4 descending balls <sup>76</sup>	Period 3 bichrome figures
Period 5 red geometrics, four dumbbell-like figures (Figure 75, o; also one pictured as Figure 19, g)	Period 3 bichrome fish
Period 4 large open-bodied birds	Period 3 bichrome fish and deer
Period 5 monochrome red chains of winged circles	Period 3 bichrome zoomorphs
Period 5 red variant multiple outlined cross (4 crosses) with circles in the center (Figure 75, f)	Period 3 bichrome fish
Period 4 (or possibly Period 3) red birds with a wide hollow body and legs just off to one side (Figure 75, i). Top of each wing is a solid horizontal line; the bottom is a row of short vertical hash marks. <sup>77</sup>	Period 3 bichrome animals and a monochrome white deer

<sup>75</sup> Part of the figure is covered with another possible outlined cross (red). Another portion appears to be covered slightly by a solid red fish.

<sup>76</sup> This is the *arracones* motif, common at JG-19 and other sites. What it portrays is not known.

<sup>77</sup> This very distinctive form has been noted at other sites. Some of its characteristics are reminiscent of Period 3 (leg attachments, general body shape, wing pattern). Three birds are in this group, all red though possibly red-white bichrome (which would suggest Period 3 affiliation). All have slightly different form from each other. A black bird, of a slightly different form next to this group, is not overpainted and is believed to date to Period 5 (like other black animal figures in this area).

**Simple Superpositioning** (continued)

Period 5 (or Period 6?) white geometric symbols	Period 2 and/or Period 4 red figures <sup>78</sup>
Period 4 zoomorphs and basketry tray ( <i>guapa</i> ); dark bright red ( <i>k'eräu?</i> ); figures look similar to JG-19	Period 3 red-white bichrome and white monochrome figures
Period 5? red-white bichrome rectangular stamp design, similar to a Piaroa body stamp; enhanced somewhat with <i>caraña</i>	Period 3 red-white bichrome animal
Period 3 bichrome fish (and possibly the Period 5? black fish)	Period 2 figures = 3 lizards (interior-line bodies), 1 quadruped (tapir?), fish (interior-line bodies)
Period 5 white multiple outlined cross (4 crosses)	Period 4? red-stained wall (stained from previous, now unidentified figures)
Period 5 white variant multiple outlined cross (2 crosses), symmetrical, small circles in the center, bordered by discontinuous border, which is completely surrounded by continuous outline border (Figure 75, c)	Period 4? red figures

**Multiple Superpositioning.**

Top to Bottom (stratigraphic position)
Period 3 red-white bichrome realistic fish
Period 3 monochrome white highly stylized linear fish (no outlined body, no fill)
Period 2 red figures
Period 4 multiple outlined cross (4 crosses)
Period 3 bichrome animal
Period 2 figures
Period 5 red geometrics
Period 3 red-white bichrome fish
early Period 2 tapir (Figure 6, j)
Period 5 red geometrics. One is a series of concentric circles with four double concentric wings in 90-degree directions (Figure 75, l). <sup>79</sup>
Period 3 bichrome animals
Period 2 figures

<sup>78</sup> Period 5 (or possibly Period 6) white geometric symbols are in the same area as symbols and circle grids in monochrome red, black-white bichrome, and red-black bichrome. They occur mostly on top of Period 2 (?) and Period 4 (?) red figures.

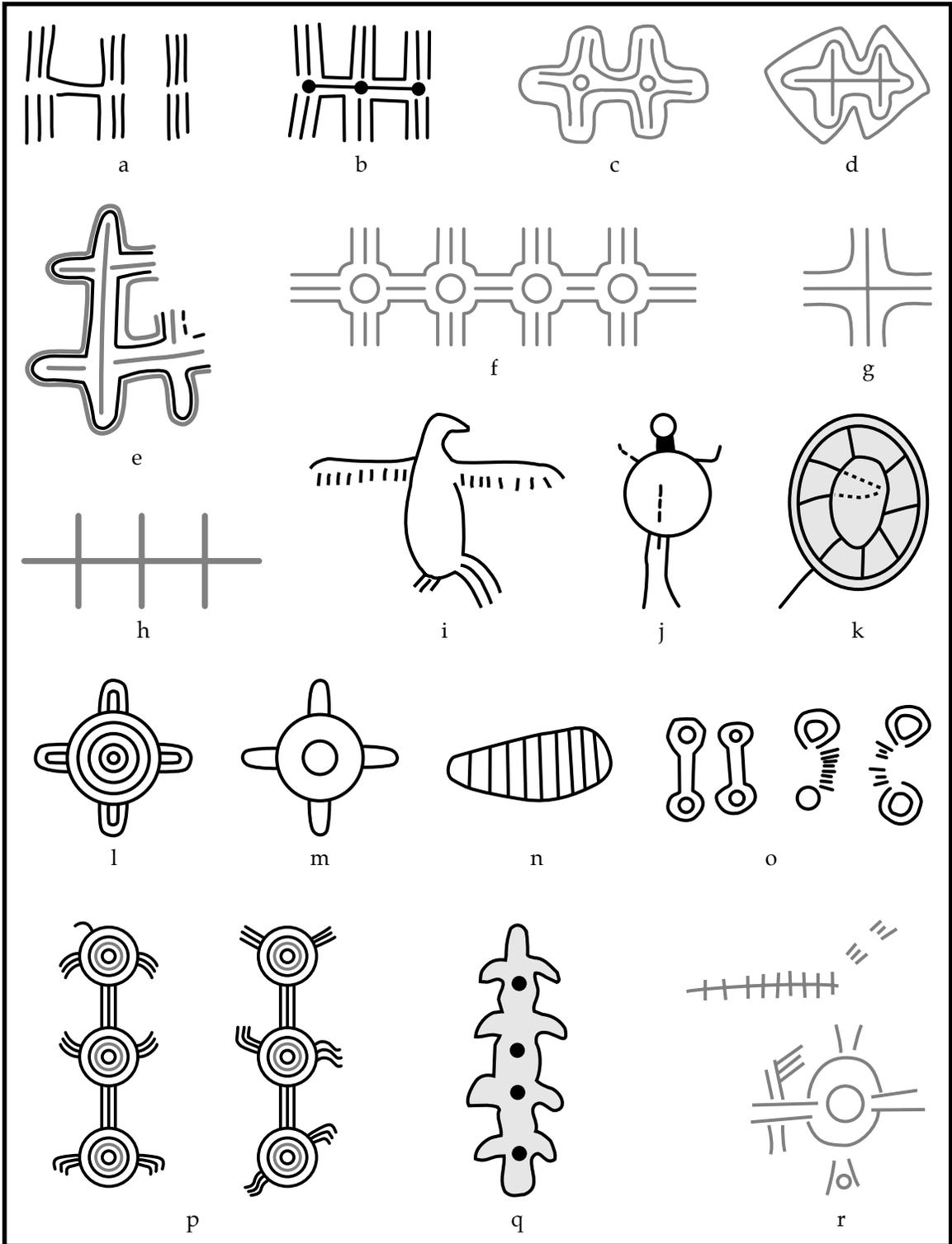
<sup>79</sup> The general appearance is red-white bichrome, with red lines and white (actually clear) fill. Many of these occur in this cave, all in the same general context of probable Period 5 (e.g., Figure 75, m). Another variation is at JG-03 (Figure 9, a). The motif, with its variations, may turn out to be a period marker.

**Multiple Superpositioning** (continued)

Period 5 red-white bichrome
Period 3 red-white bichrome fish
Period 2 red figures
Period 5 red geometric
Period 3 bichrome fish
Period 2 red figures
Period 5 black-red bichrome <i>chains of winged circles</i> consisting of two unconnected parallel vertical chains of three circles each (Figure 75, p). Each circle consists of four concentric lines colored (from interior to outside) black-red-black-black. Circles in each chain have <i>wings</i> (of variable shape) of three short parallel wavy lines each. Circles in each chain are connected by three straight lines. <sup>80</sup>
Period 3 bichrome zoomorphs
Period 2 red figures
Period 6 white geometric figure
Period 5 red geometrics
Period 3 bichrome fish
early Period 2 figures
Period 6 red geometrics
Period 6 white geometrics
Period 3 bichrome fish
Period 2 red figures
Period 6 red-white bichrome stamp design <sup>81</sup>
Period 6 white lizard
late Period 4 bright red unidentified figures
Period 6 red geometric figure
Period 6 pink clay
Period 4 red figures

<sup>80</sup> Other figures of this motif, but of monochrome red, occur on the same wall. They also are considered probably Period 5 (and are itemized separately on the **Superposition** list).

<sup>81</sup> This looks like it should be Period 5, but it is red-white bichrome (which is seemingly rare in Period 5) and it is on top of what appears to be a Period 6 white figure.



**Figure 75.** Late figures from JG-58. Solid lines and dots are black on items p and q; red on all others. Shaded lines and fill are beige-orange clay on item f, orangish clay on item k, red on item p, and white on the others.

**Discussion.** The following comments are mostly the result of intensive viewing of slides to determine periods and superpositional relations at this site. Comments pertain mostly to JG-58 and secondarily to other sites as referenced.

**Changing Views.** Prior to looking at this site, it was assumed that the chronological ordering of periods was numerical — that is how periods were recognized and defined in the first place. With this site, the concept of coeval interaction between Periods 3 and 4 came about, and the relation between late Period 3 and Period 5 became apparent. This, in turn led to a reevaluation of the temporal uniformity of the Period 3 art style and the possible existence of two lines of artistic development (1-2-4 and 3-5-6-7). This revamping helped explain stylistic similarities between Periods 2 and 4 and the general trend of Period 3 leading into *multicolor phase* Period 5, which in turn is seen here as closely related to the art of Period 6. Likewise, the multicolor nature of some Period 5 art, with the same motifs that occur in other sites in dark monochrome red geometric figures which consistently overlie Period 4, led to the proposition that Period 5 had two phases which are now thought to be closely related but probably represent different cultural entities — the roles presently are not understood. Thus, this site has been the most influential not only for revising the sequence but, more importantly, for recognizing relations between period styles.

**Complexity.** The superposition and arrangement of art here is complex, with hundreds of overlapping figures. Period 3 zoomorphs (some shown in [Figure 7](#)) occupy a complex wall and are partially superimposed over large Period 2 animals and humans (like the anthropomorph of [Figure 6, c](#)) and many other elements, and in turn are painted over by other elements such as Period 5 geometrics ([Figure 19, f-g](#)). Most periods seem to be represented (some perhaps with multiple phases). The site must be studied in detail before a full evaluation can be made, and an intensive recording project planned by Kay Tarble and Franz Scaramelli (of the Universidad Central de Venezuela) and has been approved by CONICIT (Kay Tarble, personal communication 1994). The sample itemized here is intended only to indicate the kinds of information at the site.

**Similarity of Periods 5 and 6.** Many symbols and designs could be either late Period 5 (*multicolor phase*) or Period 6. At least some of the complexity here (and possibly at Cueva Pintada, JG-52) could represent temporal, multi-ethnic, or functional complexity, but this presently is not understood. The result is that the estimated period affiliation for much of the later art (which overlies and sometimes interacts with Period 3 animals) vacillates between these two periods.

**Relative Position of Periods 3 and 4.** Period 3 can be considered as representing three main motif categories:

- a. fish and animals
- b. geometrics
- b. humans
  - square dancers
  - warime ghosts
  - bowlegged men.

In several cases it looks like Period 3 bichrome fish and animals are on top of Period 4 monochrome red. This superposition supports the suggestion that Periods 3 and 4 are somewhat coeval styles from different lines of development, with the latest figures of Period 3 overlying somewhat earlier figures of Period 4.

It is reasonable to ask, where do good Period 4 figures — like at Santa Fe (JG-19), Iglesias (JG-11), Cerro Iguanitas 1 (JG-1), Cerro Iguanitas 3 (JG-3), and others — occur superimposed over good Period 3 bichrome realistic figures — like those at Cerro Muertos 2 (JG-5), Cerro Gavilán 1 (JG-58), and possibly Cerro Iguanitas 1 (JG-1). Iglesias mostly has red-white humans in superpositional relationships. There appear to be few examples with clear temporal separation between Periods 3 and 4, although it is perhaps suggested at five sites (Table 8).

Considering period content, there is a possibility that different sites, or even different parts of sites, have different distributions of kinds of motifs (e.g., animals and humans) which may reflect temporal differences rather than simple use of wall space. At Iglesias (JG-11) and Santa Fe (JG-19), for example, it seems that wide-body humans mostly occur in areas apart from the main animal portrayals, and this could indicate that the humans belong to a slightly different time period (or ethnic tradition) and not just a slightly different functional orientation (as previously assumed, since the technology of the two form classes appeared to be similar).

There is the possibility that Period 4 animals are early, and Period 4 humans late. Previously it was assumed that the portrayal of wide-body humans may have begun in Period 3, with the use of bichrome (seen mostly at Iglesias, JG-11), and continued and developed fully in Period 4. Instead, it seems more likely that Periods 3 and 4 overlap, and the sharing of forms represents early Period 3 influence into local Period 4 art. Bichrome bowlegged men at Iglesias are beneath clear Period 4 animals, and monochrome red square dancers are beneath the red-white bichrome square dancers.

**Relative Position of Periods 5 and 3.** Period 5 geometrics (mostly bright red figures of the Period 5 *multicolor phase*) are painted directly on top of Period 3 fish and animals. In several cases, it appears that the overpainting was done carefully in such a way that there was planned interaction between geometric figures (often bichrome) and bichrome animals. Although the manner (execution) of the two styles appears to be radically different, the colors are similar (similar shades and textures of red and white), and evidence of interaction is strong. This suggests that the two styles are closely related and could be nearly the same age. Period 3 is considered to be in the same line of development as Period 5 *multicolor phase* (which includes the monochrome bright red overlying Period 3 fish).

A direct interaction between the two styles is suggested by their content. It seems that geometrics are almost never associated on the same physical level with the figurative art. Instead, geometrics usually seem to occur isolated from figurative art, or geometric symbols are painted over the top of realistic animals (see *morrocoy* discussion below). Specifically, what is left when red-white animals and fish are removed from Period 3? The result would appear to be Period 5 geometrics — red with hollow interior, and bichrome. This suggests that the artists may have used the two categories at the same time but with specific rules for their use, and the complementary relation between the two styles could be more functional than temporal. Study of the panels at this site could help determine the relation between these categories.

A good example of interaction involves a Period 5 stylized tortoise (*morrocoy*) placed on top of two Period 3 quadrupeds, one above the other and facing opposite directions. The tortoise is almost entirely deep red (with some white outlining, see below). The Period 3 animals are painted as usual in red-white bichrome, with white bodies outlined in dark bright red. Both animals are male, as indicated by a short phallus on each. There appears to be redundancy in the areas and kinds of interactions between the tortoise and the underlying animals.

Most of the tortoise shell is on top of the lower animal (facing left), and in width the shell edge and the animal almost coincide. The right side of the shell is on the rear of the animal, and the left side is at the end of the animal's nose. The lower right corner of the shell crosses the rear legs, while the edge of the lower left corner is at the front feet.

Interior red spots on the shell coincide with body parts of the animal. There are four primary dots: the upper left is at the ears, the lower left is in the chest, the lower right is in the abdomen, and the upper right is on the back. The two lower dots (coinciding with internal torso parts) are connected. There are two opposing minor dots: one on the animal's face (specifically over the eyes and nose), and one on the rear of the animal. Two lower minor dots are associated with the legs: one on a rear leg, the other beside the front legs.

The two upper primary spots (which are between the animals) and the lower left dot are encircled with prominent white lines. The left-hand encircling lines are also connected with 1-2 white lines. The white connecting and encircling lines easily fade into the body fill.

At the center of the lower edge of the shell are two circular red dots. These occur under the belly, essentially on either side of the animal's short phallus.

The upper part of the tortoise interacts with the upper animal (facing right). The tortoise head is over the lung or chest area. The upper left corner of the shell just enters the abdomen, just in front of the phallus (almost touching). The upper right corner of the shell crosses the front legs. The upper right primary dot on the shell covers the front feet.

Consistent interactions between the shell and anatomical features of both animals include the front feet, knees (crossing two legs approximately midway), penis, chest (or heart/lungs), and abdomen. Interaction with only one animal occurs at the ears, face (nose, eyes, and mouth), and heart. One animal is clearly *trapped* by the shell. The correspondence appears to be planned and not random or haphazardly executed.

Many Period 5 monochrome red or red-white bichrome symbols are placed directly on top of the Period 3 fish and animals. Many seem to be specifically placed relative to the underlying animal as if in a specific relation of interaction with the animal, its spirit, or power. No attempt has been made to determine what kinds of animals or fish are associated with seemingly later symbols.

**Possible Revisions to Period 3.** Relative to the above discussions, it is likely that the Period 3 style should be split according to element classes. There may be some undefined early phase represented by the bowlegged man, possibly some other human forms, and maybe some geometric patterns. The later phase presumably would include the realistic zoomorphic figurative art containing the bichrome fish and animals, and some of the associated white realistic and stylistic figures.

This division is suggested by the lack of clear Period 4 figures painted over the top of the Period 3 fish and animals. Instead, presumed Period 5 symbols and geometrics are painted over Period 3 fish and animals, sometimes in a way that suggests direct interaction. Thus, there appears to be a possible development of Period 3 bichrome (fish, animals, etc.) into the Period 5 symbols and geometrics (including the use of bichrome) and into Period 6 symbols and geometrics (including the use of bichrome in various ways). This appears to be a technologically reasonable line of development.

**Correlating Rock Art with Ceramic Periods.** If we consider the possibility that most of the Period 3 style is late (rather than early pre-Period 4), as pointed out above, then the sequence of Periods 3-5-6 closely reflects the proposed ceramic development for the middle Orinoco. By comparing the La Gruta ceramic sequence with the rock art at this site, it would seem that Period 3 probably represents the sudden introduction into the area of the La Gruta phase of the Saladoid series (about 2000 B.C.). Period 5 probably represents the introduction of Arauquinoid influence during the Corozal phases with the strong emphasis on geometrics and the beginnings of multiple colors. It is assumed that this development reached its culmination in Period 6. Considering published descriptions of ceramic decorations, however, which state that the Camoruco Arauquinoid ceramics had very little painted decoration, it is not clear if the rock art elaboration of Period 6 is associated with a developed Corozal intensification (750 B.C. to 500 A.D.) or if Period 6 is associated with the fully developed Camoruco tradition (500-1500 A.D.). It is believed that the entire Saladoid and Corozal developments are clearly represented at JG-58, and it is assumed that the developmental extension of Period 5 into Period 6 geometrics and more elaborate use of paints could be equivalent with the same kind of development of Corozal (as incipient developmental Arauquinoid) into Camoruco (as fully developed Arauquinoid).

With Period 3 bichrome associated with the initial La Gruta phase of Saladoid, the previous, superimposed paintings would be considered associated with resident preceramic groups in the area at the time of the Saladoid entry. This certainly would be Period 2, with its use of monochrome reds. If Period 4, or at least part of it, precedes Period 3, as weakly suggested by JG-58, then it would mean that the monochrome red animals and geometrics of Period 4 might also be preceramic in age.

It is assumed that such comparisons will be enhanced through future study. Absolute dates on the art will also assist in correlating the art with ceramic periods.

**Black Figures as Possible Period 5.** Figures painted in black liquid paint (not *caraña*) include at least the following:

- 3 realistic fish;
- 1 bird;
- 1 turtle;
- 2 quadrupeds, realistically portrayed, with long tail, ears, and possibly hoof-like feet;
- geometric symbols (black-red bichrome chains of concentric circles; same form as monochrome red chains on the same panel).

It appears that all black liquid paint dates to Period 5. Most is painted on top of Period 3 and therefore post-dates Period 3. The black fish may not be painted specifically over Period 3, but it is still the same style, technology, and appearance as other Period 5 black figures.

**Caraña Overpainting.** Fine black lines of what appears to be *caraña*, and possibly dating from Periods 5 or 6, are placed on top of previous lines, presumably for enhancement. The enhanced underlying red figures are post-Period 3 and could be Period 4 or Period 5. Their form is not identified, but they may be stylized zoomorphs. Some *caraña* also is placed directly on top of rectangular to squarish Period 5 (?) monochrome red and red-white bichrome stamp designs. One of these bichrome designs overlies a Period 3 red-white bichrome animal. Some *caraña* lines appear likely to be placed independently of underlying figures.



Figure 76. Superimposed figures at JG-58. A possible Period 5 tortoise (*morrocoy*) is painted over two Period 3 bichrome animals.

## JG-60 — *Piedra Tiburón*

### Site Details.

Other site names	None.
Other site numbers	None.
State	Amazonas.
Map	6632-I
UTM ( map location)	N 609.810, E 654.600
References	None.
Location	Orinoco river drainage, south of Puerto Ayacucho. From the Samariapo highway south of Garcitas, turn into the Canturama entrance, go through the gate, then turn north on the garbage dump road, go a short distance to the rock outcroppings.
Site type	Boulder rockshelter.
Site description	The large <i>laja</i> slopes gently east, with several low fractured boulders clustered on top in an area about 20 m across. This is a moderately low area with view restricted by surrounding vegetation; there is no good distance view.
Rock art	Paintings are in at least four stations around the circumference of the main boulders, with figures in low overhangs, on one ceiling, and one rock face. In the field, the very weathered art was estimated as old, perhaps Period 1 (with stamp designs), but with dark-medium red paint and no orange.
Cultural deposits	None.
Artifacts	None.
Human remains	None. It is a good places for burials, but there are none now.

### Periods. Period 4?

Period	Description
Period 4?	interior divided circle; possible turtle nest (Figure 10, j)
	concentric circles
	lots of figures made of meandering lines
	rectangle with interior elongated dots (Figure 10, p)

### Superpositioning. None.

**Periods Discussion.** Paintings all are orangish-medium red and are terribly eroded. All look the same age and could be Period 2. However, the rectangle with interior elongated dots looks more related to Period 4 wide-body humans to the north, and therefore all figures are assumed to be Period 4.

### **VITA: John W. Greer**

John Greer was born in 1942 in Austin, Texas, and received his BA (1965) and MA (1968) from the University of Texas–Austin. Archeological and ethnographic experience since 1959 includes fieldwork and research on prehistoric and historic sites in North America (most states from Missouri to California and Alberta to Texas), Latin America (Peru, Venezuela, Guatemala, Belize, and Mexico, including Baja California), and Europe (Germany, Spain, Portugal). Speleological exploration and study since 1961 (with archeological and ethnographic recording) includes horizontal and vertical cave systems in North America, Central America, and Europe. Archeological and speleological publications since 1963 have appeared in national, regional, and local professional journals, newsletters, and other outlets. Thousands of archeological contract reports are on file with state and federal agencies in most western states, Missouri, Texas, and Guatemala. Since 1978 he co-directs with his wife Mavis an archeological consulting company in Wyoming, with most commercial work in the northwestern plains. Their present attention is toward rock art in several areas.