THE ANCESTORS ABOVE, THE PEOPLE BELOW:

CEMETERIES, LANDSCAPE AND DUAL ORGANIZATION

IN LATE PRE-COLUMBIAN COSTA RICA

by

R. Jeffrey Frost

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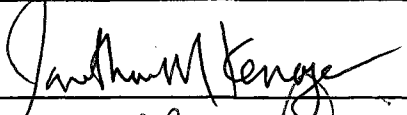
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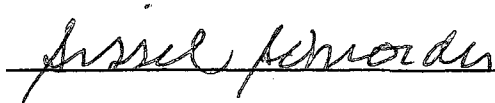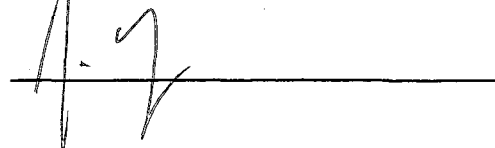
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CONTENTS

LIST OF FIGURES

LIST OF TABLES

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ABSTRACT

The purpose of this study is to investigate Chiriquí period (A.D. 750-1500) sociopolitical organization through an examination of the spatial organization of Chiriquí mortuary complexes. Adopting a direct-historic approach I draw heavily on the rich ethnographic, ethnohistoric, and archaeological data sets available for Lower Central America to demonstrate that dual organization was fundamental to indigenous societies of Greater Chiriquí, from pre-Columbian times to the recent past.

Through a comprehensive review of ethnographic sources, which describe communities from Costa Rica through northern Colombia as organized under systems of dual social and political institutions, I propose that pre-Columbian Chiriquí chiefdoms were organized as diarchies, in which the highest ranking leadership positions were held by one member from each moiety. I then examine evidence for similar forms of organization in sixteenth-century Costa Rica.

Contact and Colonial period Spanish documents from the region do not explicitly describe moiety organization or dual leadership but ethnohistoric sources include descriptions of high and low chiefs and supreme religious authorities that are consistent with the diarchic organization reported ethnographically. Furthermore, in a pattern consistent with expectations for dually organized societies, Spanish sources describe many sixteenth-century Costa Rican and Panamanian villages as paired or divided into two halves. These villages were often asymmetrical in size.

Archaeological research in the region has shown that many Chiriquí sites and cemeteries are also divided into two spatially discrete areas, often with internal subdivisions. As a case

study with which to further evaluate dual organization at the site level, I conducted excavations at the Panteón de la Reina, a large Chiriquí-period mortuary complex in southern Costa Rica. The results of my investigation demonstrate that the Panteón de la Reina and its adjacent and coeval residential site, Rivas, were constructed with strong dual patterns. Both sites are constructed in relation to a single, shared central axis, which bisects multiple paired sets of architectural features. I further demonstrate that similar spatial arrangements are also present at contemporary residential-ceremonial centers in the Atlantic Watershed region of Costa Rica.

1. INTRODUCTION

The region encompassed by the modern states of Nicaragua, Costa Rica, Panama and

Colombia has been the subject of archaeological attention for well over a century (e.g., Bovallius

1886; Hartman 1901, 1907; Holmes 1888) and is well known to scholars for its goldwork,

distinctive ceramics and stonework, and highly developed chiefdom societies, which included a

number of independent polities that comprised the cultures now known as Chiriquí, Veraguas,

Coclé, Tairona, Calima, Sinú, and others (Figure 1.1).
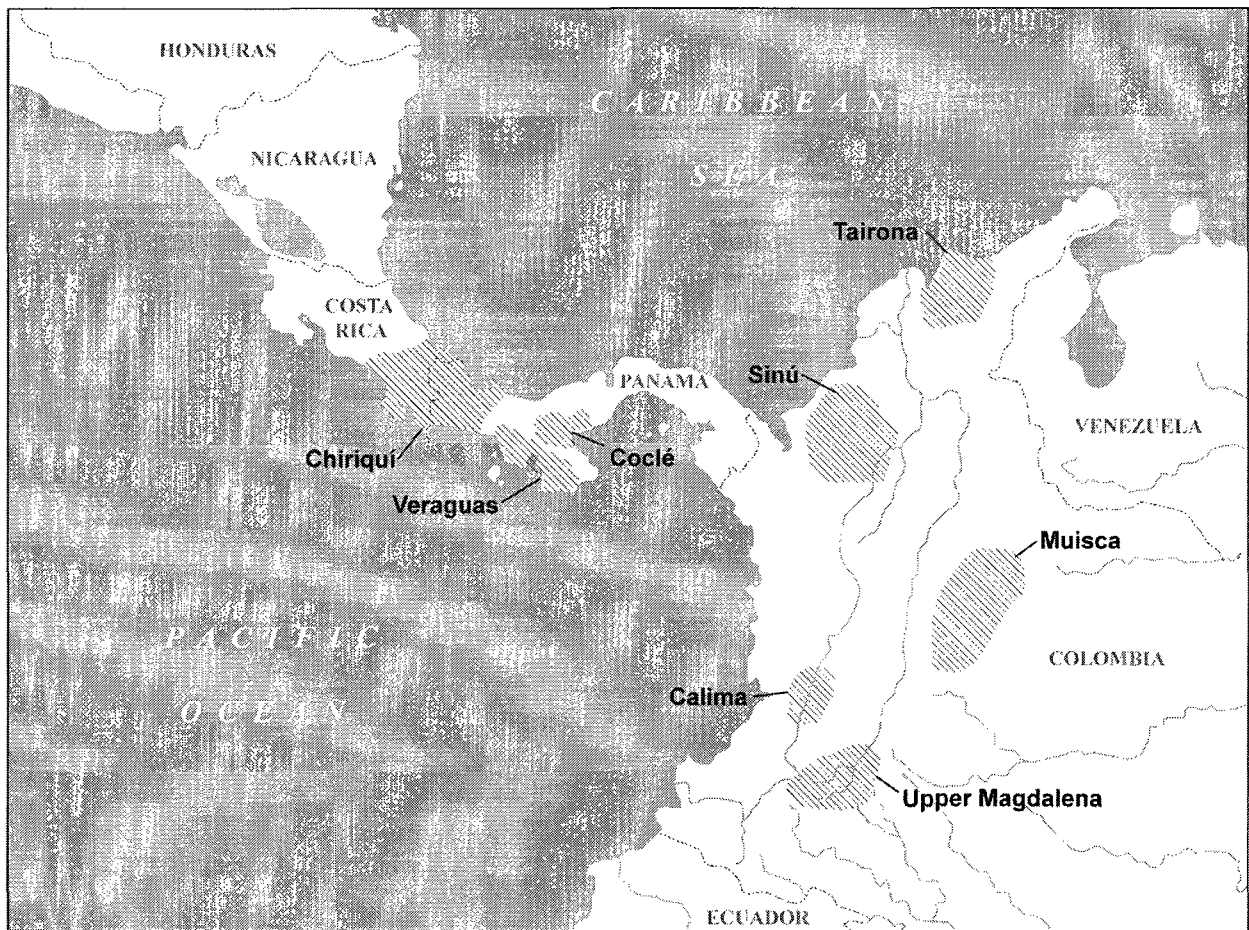
Figure 1. 1 Archaeological regions mentioned in text

Questions about the nature of social and political organization of these cultures have been among the primary research foci for scholars working in the region (Creamer and Haas 1985, Drennan 1995, 2008; Helms 1979; Linares 1977; Quilter 2004; Snarskis 1978). In this study, I address these questions in a zone of southern Central America known as "Greater Chiriquí," a region straddling the Costa Rica – Panama border. The term Chiriquí also refers to a pre-Columbian culture dated from about A.D. 750 until the arrival of the Spanish in the first half of the 1600s.

The prevailing models of the region's pre-Columbian chiefdoms have been largely based on sixteenth-century accounts written by Spanish eyewitnesses and chroniclers (Creamer and Haas 1985, Drolet 1992; Helms 1979; Lothrop 1950). The Spanish described a hierarchy of powerful hereditary chiefs who ruled over large agricultural villages. Chiefs maintained and enhanced their political positions though long-distance exchange networks and by exercising control over prestige goods. Chiefs also engaged in warfare against neighboring polities over access to land and resources.

Archaeological research corroborates these Spanish accounts that Chiriquí society was organized in a two–tiered system of nobles and commoners (Drolet 1992; Haberland 1984). However, after nearly a century of archaeological research in the region, pre-Columbian sociopolitical organization remains relatively poorly understood, principally because the majority of scientific research has concentrated on domestic sectors of sites where rank and status differences were minimally expressed (Drolet 1986b). Thus, among the most important questions facing scholars working in the region was how Chiriquí society was organized socially and politically and how its organization may have contributed to Chiriquí development.

In this study, I demonstrate that dual organization was fundamental to indigenous societies of Greater Chiriquí, from pre-Columbian times to the recent past. Through a comprehensive review of ethnographic sources for Costa Rica and Colombia, I propose that Chiriquí societies were dually organized into moieties, in which hereditary offices were divided between the two moieties. I then test the applicability of this ethnographically derived model of Chiriquí social and political organization to earlier times by examining evidence for similar forms of organization in sixteenth-century Spanish documents from the region and through an analysis of pre-Columbian Chiriquí period cemetery sites, which are commonly organized as two spatially discrete and effectively contemporary burial zones.

Chiefdoms

Most research on chiefdom societies has employed a neo-evolutionary framework, concentrating on defining the traits and characteristics of this stage of political development (Creamer and Haas 1985; Peebles and Kus 1977; Service 1971; Snarskis 1987; Steward and Faron 1959). As such, chiefdoms typically have been described as kin–based regional polities in which a person's status is reckoned according to genealogical distance from a shared mythical ancestor, resulting in ranked descent groups (Sahlins 1958; Service 1971). Those individuals more closely related to the apical ancestor and thus to the chief have higher status than those more distantly related. As chiefdoms develop, the divisions between chiefs and commoners can become more pronounced, as nobles claim separate genealogical origins, with themselves descended from deities but commoners descended only from other commoners (Marcus and Flannery 1996:242).

Significant variability in the economic, demographic, and political organization of chiefdoms has led some scholars to question the utility of grouping them all under a single label (Drennan and Uribe 1987; Earle 1978; Feinman and Neitzel 1984; Steponaitis 1981; Upham 1987). Accordingly, recent research has shifted to address organizational differences among chiefdoms (Beck 2003; Cobb 2003; Earle 1987; Redmond 1998; Spencer 1987) and the social dynamics of chiefdoms (Anderson 1994a, 1994b; Blitz 1999; Cobb and King 2005; Drennan 1991, 1995a; Earle 1991, 1997; Pauketat and Emerson 1997). One result of this new line of thinking has been an improved understanding of inter-elite power dynamics, power here defined as the ability of an individual or group to manipulate people or events through control over resources, including information.

A common characteristic of chiefdoms is intense competition between high-status rivals seeking to extend their political power (Anderson 1994a; Brumfiel and Earle 1987; Earle 1987, 1991, 1997). A strong political position brings many benefits to a chief and his supporters, including increased authority, prestige, personal wealth, and control over people and resources (Drennan 1995). Power struggles often intensify during the succession of a new chief, especially when the legitimacy of an individual's claims to the office is cast into doubt (Curet 2002; Drennan 1991, 1995; Helms 1980). Competition frequently occurs between lineages or functionally and structurally similar socio-political groups, which can be defined as factions (Brumfiel 1994:4).

These social and political dynamics are particularly salient in societies organized into moieties. The term moiety is used here in reference to any society in which a community is divided into two groups and each person belongs to one or the other (Levi-Strauss 1969:69; Murdock 1965:334). The term is often used synonymously with "dual organization". The

concept of the moiety has been discussed extensively in the anthropological literature (Forth 2001, Levi-Strauss 1969; Lowie 1947; Maybury-Lewis 1974, 1989; Murdock 1949, 1965; Olson 1933; White 1959). More recently, David Maybury-Lewis and Uri Almagor (1989) explored the many diverse forms that of dually organized societies adopt. There is no single criterion to classify all moieties, as they are highly variable in their organization and maintain complex relationships ranging from cooperative to hostile (Maybury-Lewis 1989; White 1959). While moiety rules regarding residence, marriage alliances, collective work obligations, and resource distribution often serve to maintain solidarity and cohesion, moieties also clash, usually when the interests of one oppose those of the other.

Moieties are commonly organized as a diarchy. This division of authority may result in a polity with two chiefs or with a secular chief from one moiety and a supreme religious authority from the other (Hornborg 1988; Leví-Strauss 1969; Maybury-Lewis 1989). Maybury-Lewis (1989:4) maintains that the existence of opposed sacred and secular authorities almost always leads to struggle between them. Such conflicts are common and often result in an asymmetrical balance of power (Jenkins 1998; Valeri 1989). Such arrangements are not fixed, but fluid, and can change over time as a moiety gains or loses members or the ability to maintain control over their sources of power.

Dual forms of social organization are common in cultures worldwide (Maybury-Lewis and Almagor 1989) but they are especially prevalent throughout the Americas. Although the moiety is one of the most ubiquitous social arrangements in the New World, it has rarely investigated archaeologically, largely because such systems can be difficult to identify through archaeological remains. Notable exceptions include work in the American Southeast (Blitz 1993; Knight 1998), the American Southwest (Fowles 2005; Lowell 1996), Mesoamerica (Becker

1975a, b), and the Andes (Burger and Salazar-Burger 1993; Cavallaro 1991; Moore 1995; Zuidema 1989). In this dissertation, I maintain that such forms of dual organization also operated within Chiriquí Period chiefdoms. Below, I explore how ethnographic and ethnohistoric descriptions of traditional forms of organization may be used to investigate dual forms of sociopolitical organization in southern Costa Rica.

Sociopolitical Organization in Greater Chiriquí

In recent decades, archaeologists working in southern Costa Rica have investigated the regional distribution of residential and cemetery sites (Drolet 1983, 1992, 1986a), the spatial organization of residential sites (De la Cruz 1986; Drolet 1986b, 1992, 1988; Quilter 2004), and numerous low-status cemeteries (Corrales 2000; Iwaniec 1986; Quilter and Blanco 1995; Quilter 2004). Consequently, we now have ample data with which to further refine and test models of Chiriquí social and political organization.

To understand Chiriquí social and political institutions, I draw heavily on the rich ethnographic, ethnohistoric, and archaeological data sets available for Costa Rica and Panama. Archaeologists working through the region have frequently looked to ethnographic and ethnohistoric descriptions for analogies in which to understand the past. Samuel Lothrop (1937, 1942), for example, analyzed contact-period documents from central Panama to interpret the richly furnished burials at Sitio Conte. Robert Drolet (1992) similarly utilized sixteenth-century descriptions of the contact-period village of Coctu in southern Costa Rica to understand village and regional settlement patterns in the southern Diquís. Quilter (2004) turned to William Gabb's (1875) detailed ethnographic descriptions of Bribri funeral practices to interpret a series of unique mortuary patterns at the Rivas site. Likewise, Linares and Ranere (1980) utilized the

extensive ethnographic data for the Guaymi Indians to draw inferences about archaeological patterns in western Panama.

My use of ethnographic materials differs from that of the previous scholars in two fundamental ways. First, instead of using ethnographic accounts to explain particular archaeological patterns, I am using ethnographic descriptions of social and political institutions of indigenous communities from the region to develop a model of Chiriquí society. Second, I evaluate the applicability of this model to earlier periods by examining sixteenth-century Spanish documentary sources and then Chiriquí-period archaeological data.

This method, by which one traces cultural patterns from the ethnographic present back to historically known cases and into sequentially earlier periods of the prehistoric past is commonly called the direct historical approach (Marcus and Flannery 1994; Steward 1942; Wedel 1938). The direct historic approach is considered most useful when there is a demonstrated continuity between the ethnographic present and the archaeological past. As one moves further back in time societies are increasingly different from historic accounts that the direct-historic approach becomes less applicable (Marcus and Flannery 1996:32).

Archaeologists have employed ethnographic observations and ethnohistoric records to interpret patterns at archaeological sites since the nineteenth century (Thomas 1894; Fewkes 1896), but the technique developed as a standard archaeological method in the American Southwest during the 1930s and 1940s (Heizer 1941; McKern 1942; Strong 1935; Wedel 1938). It also underwent further methodological refinements in the 1960s and 1970s with the development of processual archaeology and an increased emphasis on ethnographic analogy.

Archaeologists have successfully used the direct historical approach as way to build cultural sequences and enhance interpretations of archaeological patterns. However, it has also

been criticized for the inappropriate application of ethnographic data to prehistory (Stahl 1993; Upham 1987) and uncritical use of documentary sources (Galloway 1993; Wood 1990).

Scholars now recognize that there have been significant demographic, economic, and sociopolitical changes that have affected indigenous cultures during more than 500 years of European contact (Upham 1987:270). Thus, those who employ the direct historical approach now stress that we should not only use it to demonstrate continuities with the past, but to also identify and trace cultural changes through time (Lightfoot 1995; Marcus and Flannery 1994; Stahl 1993; 1994).

In this study, I begin with an analysis of ethnographic data from the descendant populations of the cultures that occupied the region prior to Spanish contact: the Bribri and Cabécar of the Talamanca region of Costa Rica and the Kógi of the Sierra Nevada de Santa Marta, Colombia. All three groups maintained dual social and political institutions understood in terms of greater dual divisions of the cosmos. Both the Bribri and Cabécar traditionally were organized into two moieties, each composed of several ranked kin-groups. Leadership positions were derived from the highest-ranking families in each moiety, with one moiety providing a religious leader and the opposite moiety supplying a secular chief. Similar arrangements are well documented throughout southern Central America and in South America and are still practiced today in some isolated communities. Based on these ethnographic patterns, I propose that that sixteenth-century and Pre-Columbian Chiriquí communities were not organized into a strict stratified hierarchy of high chiefs, low chiefs, and commoners, but as a diarchy, in which leadership was split between a sacred authority from one moiety and a secular chief from the other.

Evidence for the antiquity of dual social systems in Costa Rica is supported by ethnohistoric sources that provide descriptions of high and low chiefs as well as a position of high priest, which closely match patterns described ethnographically (Andagoya 1865; Martyr 1912). The proposition that contact-period Costa Rican villages were organized into dual divisions is further supported by sources that described sixteenth-century villages in Costa Rica and western Panama as divided into two spatially distinct halves (Ibarra 1985:80). In patterns consistent with expectations for villages organized into moieties, documentary evidence suggests that the two halves were asymmetric in their spatial extent and the size of their respective populations.

Moiety organization is best identified archaeologically through the organization of physical space. A common indicator of dual organization is the presence two sets of spatially distinct but functionally similar architecture (Lowell 1996:83; Netherly and Dillehay 1986:92). Results of previous archaeological work in the Chiriquí region has provided limited, though compelling, evidence for dual organization: Quilter (2004) identified two spatially distinct burial areas at Rivas-Panteón de la Reina site. These patterns matched Merritt's (1861) description of paired burial zones at the Huacal de Bugába in western Panama and results of Drolet's (1986, 1994) excavations at Murciélago, which identified a village divided into two distinct halves. Both Quilter and Drolet have suggested these patterns may be related to moiety organization. However, this proposal has not yet been tested archaeologically.

The fact that the Panteón de la Reina and other major Chiriquí-period sites are divided into two separate and effectively contemporary burial zones, each with smaller internal subsections, strongly suggests that a principle of dualism may have structured Chiriquí socio-political organization. Building on previous research, I tested the hypothesis that paired

interment zones of Chiriquí period cemeteries were a physical manifestation of dual social organization by conducting excavations at the Panteón de la Reina, a large Chiriquí-period mortuary complex in southern Costa Rica.

I chose the Panteón de la Reina for this study primarily because of its association with the Rivas site, a Chiriquí residential-ceremonial center excavated under Quilter's direction between 1992 and 1998 (Quilter 2004; Quilter and Blanco 1995). Quilter's work at Rivas was designed to investigate patterns in residential and ceremonial architecture in order to understand regional differences in site organization and chiefdom hierarchies. My study builds on Quilter's work by expanding mapping and excavations to the site's adjacent and contemporary mortuary complex, the Panteón de la Reina.

I proposed that if the Panteón de la Reina was divided into two social groups organized as moieties, an analysis of the site's paired cemeteries would demonstrate that they are both contemporary and constructed according to similar rules of organization. Furthermore, we might expect that there were additional sets of paired architecture at the site, possibly constructed in relation to a central axis.

Dissertation Outline

This dissertation is organized in the following way. Chapter 2 provides background information germane to this study. I describe the region's environment and geography and summarize its history. I also review the region's previous archaeological research.

Chapter 3 develops the model of Chiriquí social and political organization and addresses how that model can be evaluated through historic documents and the material remains of the archaeological record. It is divided into two parts. In the first, I use the ethnographic data to

develop a model for Chiriquí sociopolitical organization, drawing heavily on the social and political systems documented for the Bribri and Cabécar of Costa Rica and the Kógi of Colombia. In the remainder of the chapter, I examine how researchers have identified dual organization using ethnohistoric and archaeological evidence. This review draws heavily upon research in the Andes. Because dualisms are often expressed spatially, I focus on how dual concepts are materialized in the spatial organization of Andean archaeological sites. The material expressions of dualisms of Andean sites provide analogues for identifying dualisms at Chiriquí-period sites.

Chapter 4 presents an analysis of the region's ethnohistoric accounts of the region. Although most interpretations of these documents have suggested that indigenous societies were hierarchically organized (Helms 1979; Ibarra 2002), I argue that they provide two lines of evidence for diarchy. The first are descriptions of contact-period sacred and secular leadership positions, which closely match those described ethnographically. The second is based on Spanish accounts of several contact villages, which are described as organized into two spatially discrete residential areas.

In Chapter 5, I synthesize the archaeology of the region with an emphasis on the spatial distribution and internal organization of Chiriquí cemeteries. I demonstrate that Chiriquí cemeteries are often divided into multiple spatially discrete interment areas. At least nine cemeteries sites exhibit clearly defined dual spatial patterning.

In the following chapters, I turn to a focused case study at the Panteón de la Reina cemetery site in southern Costa Rica, where I investigated evidence of dual social organization at the site's paired interment areas. In chapter 6 I summarize previous research at the Panteón de

la Reina and its adjacent and coeval residential-ceremonial site, Rivas. I then detail my expectations and the methodology for my fieldwork at the Panteón de la Reina in Chapter 7.

Chapter 8 summarizes the results of my fieldwork at the Panteón de la Reina. I begin by describing the spatial organization of the cemetery complex and how the two cemeteries and associated mortuary architecture are defined. I then discuss the results of my excavations, which demonstrate that the two halves of the Panteón de la Reina are likely contemporary and remarkably different spatial organization but similar artifact inventories. In Chapter 9 I revisit the Rivas site by looking at Rivas and the Panteón de la Reina as a single complex. By doing so I am able to demonstrate that concepts of duality were integral to site planning and that patterns of dual spatial organization are not only present in the cemeteries but also in the layout of the Rivas site's residential-ceremonial zone.

In Chapter 10, I apply the concepts of dual social and spatial organization to the Atlantic Slope region of Costa Rica, located across the Talamancan Range. I demonstrate that the spatial patterns at Rivas are not unique to that site but may be based on a common template used at large ceremonial centers throughout Costa Rica. As an example I describe the site of Guayabo de Turrialba, Rivas-Reina and Guayabo are contemporary sites that maintain remarkably similar spatial organization.

Chapter 11 summarizes the study and provides some overarching conclusions.

2. ENVIRONMENT AND CULTURE HISTORY
OF GREATER CHIRIQUI

Introduction

The primary geographical focus of my study is Greater Chiriquí, an archaeological region that encompasses southern Costa Rica and western Panama. In this chapter, I present the geographical and historical context within which I conducted my study. In the first section below I outline the physical setting of Greater Chiriquí. I then follow with a brief culture historical overview of the region. I conclude with a history of previous research in Greater Chiriquí with an emphasis on the period from A.D. 750 to 1500.

Defining Greater Chiriquí

Archaeologists have subdivided Costa Rica into three regions, based on similarities in artifacts, artistic styles, and developmental sequences (Figure 2.1), which become particularly salient after A.D. 500 (Snarskis 1981:15; 1983:11). The Guanacaste-Nicoya region covers the northwest corner of Costa Rica and is part of the larger Greater Nicoya region, which includes part of western Nicaragua. The Central Highlands-Atlantic Watershed region includes most of central Costa Rica and most of its Atlantic slope and coast. The Diquís is located in southern Costa Rica and, until recently, was the least studied archaeological region in the country. While the precise geographical boundaries of the Diquís remain loosely defined, its northern boundary corresponds approximately with the Naranjo River, near Quepos, on the Pacific slope, and the Telire River on the Atlantic slope in central Costa Rica.
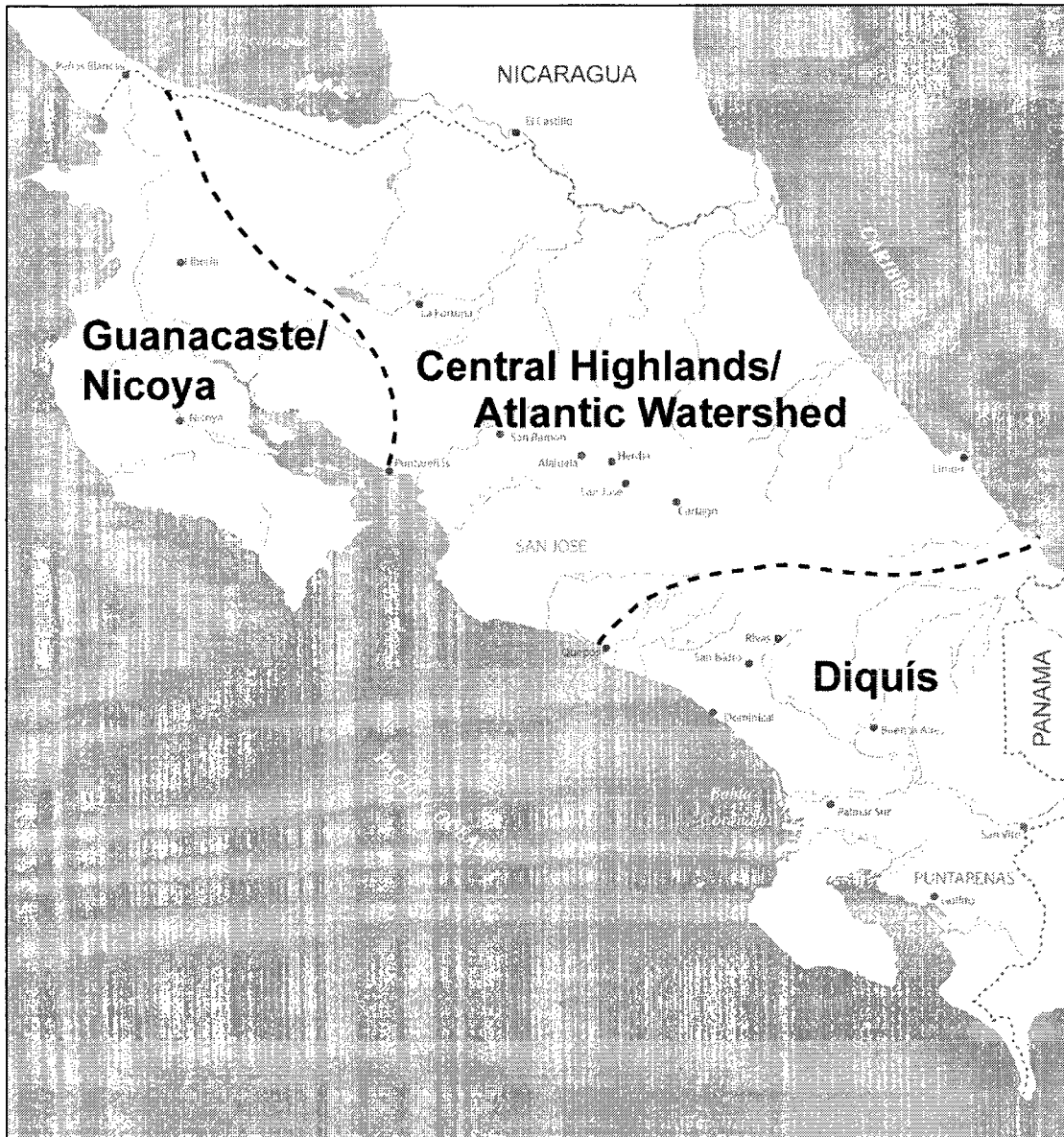
Figure 2. 1 Archaeological regions of Costa Rica

Archaeologically, the Diquís and a portion of western Panama, designated the western

Panama Sub-Region, comprise a larger archaeological region called "Greater Chiriquí" (Figure

2.2). As initially defined, its geographical limits included only those portions of the southern

Costa Rica and Chiriquí Province, located on the Pacific side of the Talamanca Range

(Haberland 1976, 1984; Lothrop 1948), but recent data from Panama's Caribbean coast are

expanding the region's boundaries. In particular, excavations in the Bocas del Toro region of Panama have identified Chiriquí-style architecture and ceramics (Wake, et al., 2004). While the precise boundaries of Greater Chiriquí remain loosely defined, we can confidently include all of the Diquís and the portion of Panama from the Costa Rica border to the eastern limits of the Laguna de Chiriquí on the Caribbean side and the Bahía de Muertos the Pacific coast. Throughout this dissertation I will use the term "Diquís" when describing events or sites on the Costa Rican side of the border and the term "western Panama" in reference to those on the Panamanian side.
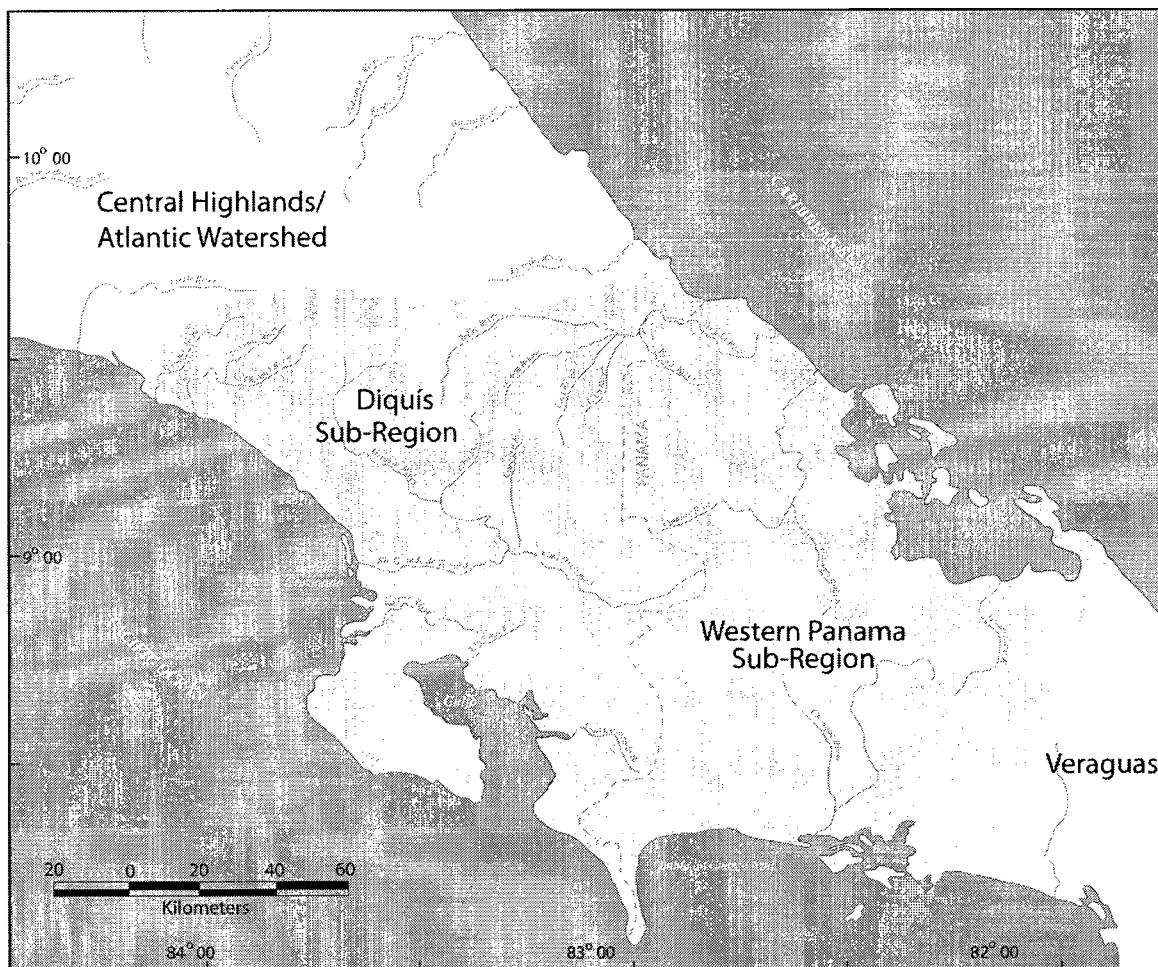
Figure 2. 2 Greater Chiriquí with sub-regions

Natural Setting

Although small in size, Costa Rica is highly variable, encompassing numerous geographical zones and geological features. The Talamancan Range (*Cordillera de Talamanca*) dominates the southern half of the country. It is the most mountainous region of Costa Rica, home to the country's highest peaks: Cerro Chirripó (3,819 m), Cerro Uran (3,800 m), Cerro Kamuk (3,549 m), and Cerro Durika (3,280m). The Talamancan Range extends into western Panama and includes the dormant Barú Volcano (3,474 m).

Located between the western foothills of the Talamancan slopes and Costa Rica's Pacific coast is the smaller Costeña Range. Though mountains of the Costeña Range seldom reach more than 1,000 m, it contains steep slopes, especially along the Pacific coast (Bergoeing 1998). Between the Talamancan and the Costeña ranges lies the General Valley. Mountain spurs gradually descend perpendicularly from the main axes of the Talamanca and Costeña ranges to the Central Highlands. Between these mountain spurs are deeply incised valleys cut by the numerous streams and rivers that flow year-round from the mountain slopes to the General-Coto Brus basin. At 5,077 km^2 it is Costa Rica's most extensive drainage system (Bergoeing 1998:50). Near its mouth the Grande de Térraba River joins the Sierpe River to form the Diquís Delta, which empties into the Pacific Ocean just north of the Osa Peninsula.

The climate of southern Costa Rica is characterized as tropical and subtropical. The region is subject to diverse weather patterns and great climatic variability on a micro-geographic level. These patterns are determined primarily by elevation and the orientation and location of mountain ranges and coastlines relative to airflow. They are particularly pronounced in southwestern Costa Rica, where temperature and rainfall can vary greatly within a few

kilometers. The Diquís region is subject to a distinct dry season between December and April, and a rainy season that runs from May to November. The heaviest rainfall occurs during September and October, and this short period produces a large share of the annual precipitation. Even with an extended rainy season, only a few rainy days (approx 15 in 365) can account for more than 70% of the total rainfall in Costa Rica. A short dry period occurs almost every year near the end of the rainy season, which is known locally as the *veranillo* or "little summer", named for the dry season (*verano*).

A Culture History of Greater Chiriquí

Although numerous scholars have attempted to synthesize the culture history for southern Central America, this task has proved difficult because of the minimal research throughout the region and a complete lack of knowledge about many areas (Lange 1984). Participants in a 1980 School of American Research seminar proposed a six-period chronology that applied to all of lower Central America (Lange and Stone 1984). Haberland (1984) loosely adopted this chronology for the Greater Chiriquí region, and several other scholars have since refined or reorganized the chronology to accommodate new data (see Corrales 1999; Drolet 1992). At its most basic level, the culture history of Greater Chiriquí can be divided into five chronological and cultural periods: Paleoindian, Tropical Archaic, Formative, Chiriquí, and Contact. Below, I briefly discuss each period, with emphasis on the late Formative (Aguas Buenas in the Diquís) and Chiriquí periods.

Paleoindian Period (11,000-8000 B.C.)

The first indisputable evidence for human occupation in southern Central America dates between 11,000 to 8000 B.C. The archaeological evidence for Paleoindian occupation in the region is sparse and known predominantly from surface sites including Madden Lake, Panama, (Bird and Cooke 1978) and an apparent lithic workshop at Turrialba, Costa Rica (Snarskis 1978). The most readily identifiable diagnostic Paleoindian chipped-stone tools include two projectile point types: a variation of the fluted Clovis point found throughout North America and the fishtail, or Magellan point, found at Paleoindian sites in South America. Although there is no evidence for Paleoindian occupation in Greater Chiriquí, coastal areas and several rock shelters hold promise for early sites.

Tropical Archaic Period (8000-1500 B.C.)

The onset of a Holocene climate and megafauna extinctions around 8000 B.C. mark the beginning of the Tropical Archaic. There are no known Archaic sites in the Diquís, but Archaic sites in western Panama include a series of rockshelters along the Chiriquí River. Based on lithic tool manufacture and use, Anthony Ranere (1980:28) has divided the Tropical Archaic into two phases, the Talamanca (5000-2300 B.C.) and the Boquete (2300-1500 B.C.). Securely-dated sites predating 5000 B.C. have not yet been identified.

Talamanca-phase sites are common in upland forest zones and are often in rockshelters that were used seasonally for up to several weeks each year. The presence of celt-like tools suggests heavy woodworking, such as tree felling or splitting logs. Flake tools include scrapers planes, choppers, knives, gravers, and burins. Non-flake tools including edge-ground cobbles

and milling stones suggest that these populations used simple stone tools to produce wooden implements for hunting and gathering activities (Ranere 1980).

The introduction of several new tool types, such as ground and polished tools, quartz crystals, and groundstone celts and mashers, mark the beginning of the Boquete phase. Linares and Ranere (1980; Ranere 1980) suggest that the celts and mashers of the Boquete phase mark a transition to root crop cultivation, supplemented by palm plant exploitation.

The Formative Period: (1500 B.C. – A.D. 750)

The beginning of the Formative is characterized by the introduction of sedentary farming villages, pottery technology, and developing social stratification. Despite minor differences between the Formative chronologies of western Panama and the Diquís, both regions exhibit similar developmental processes. In western Panama, Linares and Ranere (1980) divide the Formative period into two phases, the Early Formative (1500 B.C – A.D. 200) and the later Bugaba Phase (A.D. 200-600). The Diquís chronology begins with the Sinacrá period (1500 – 300 B.C.) followed by the Aguas Buenas period (300 B.C. – A.D. 800) (Corrales 2000).

Robert Drolet and his students conducted intensive surveys in the Upper General Valley and identified 49 Formative habitation sites and cemetery sites (Drolet 1986a, 1988; Drolet and Siles 1988). Limited testing and excavations at the Diquís sites of Sitio Monge, Sitio Quebradas, and Las Brisas suggest that Sinacrá sites were small villages (1-2 has) located on flat, elevated terraces close to secondary rivers or other water sources. These communities consisted of clusters of five to eight domestic structures. At Las Brisas, natural mounds served as platforms for houses (Drolet 1992). Household refuse included ceramics from utilitarian cooking and food

storage vessels and stone tools, including axes and flake tools. Las Brisas and Sitio Monge seem to have been production centers for specialty craft items such as stone axes (Drolet 1992).

Aguas Buenas Period (300 B.C. – A.D. 750)

The late formative Aguas Buenas period is characterized by a site hierarchy that seems to have two levels: small hamlets associated with larger regional centers. The small sites range from 1 to 2 has in area and exhibit few surface features. The second-tier centers range up to seven hectares in size and often include at least one rectangular mound with stone retaining walls. Like earlier Formative sites, Aguas Buenas settlements are typically located on river terraces (Haberland 1984), but they are also found in other upland zones (Drolet 1992). Artifact assemblages from these sites include utilitarian ceramics and stone tools, including scrapers and knives that were likely used in food production and woodworking. The presence of manos and metates at these sites suggests that a maize diet was becoming increasingly important (Linares, Sheets and Rosenthal 1975).

The Aguas Buenas period seems to have been a time of rapid social and technological change throughout Costa Rica and Panama (Hoopes 2005:11, 18). Survey data by Drolet (1988) and Sheets (1980) indicate rapid demographic expansion by agricultural groups throughout highland river valleys. There is also a marked increase in the number of settlements in alluvial zones, in secondary valleys, and on mountain ranges. Settlement data, site organization, and material culture strongly suggest the development of complex social organization, an issue that has not been fully evaluated.
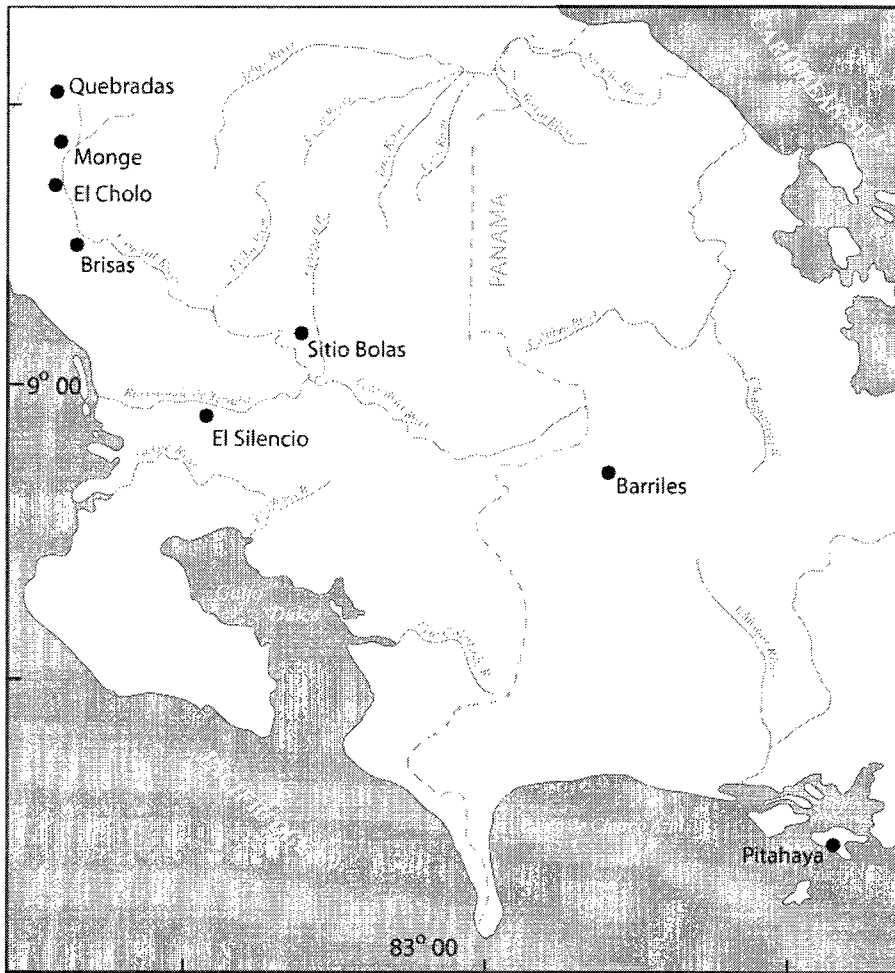
Figure 2. 3 Formative period sites mentioned in text

Hoopes (2005:17-25) has suggested that the period of A.D. 300-600 saw the development of a priestly elite tradition across southern Central America. These priests presided over ritual centers or mortuary complexes such as El Cholo, in the upper General Valley near San Isidro, Sitio Bolas in the central General Valley, and Barilles in western Panama (Figure 2.3). Sitio Bolas and El Cholo exhibit multiple mounds with stone retaining walls that probably served as platforms for residential structures. Burials were often placed in or around these mounds (Herrera 2006).

Throughout the region in the Aguas Buenas period, there is evidence for formal burials, including those of high-status individuals interred in special funerary zones with prestige items such as jade pendants, stonework, and elaborate pottery. One of the most impressive sites of the period is Sitio Barriles, located at an elevation of 1,300 m in western Panama. Excavations by Matthew Stirling in 1949 revealed a large platform mound, 30 by 50 meters in size, with a series of life-size stone statues around its perimeter. One depicts an individual seated on the shoulders of another person (Stirling 1950). The upper figure has been interpreted as a high-status leader based on its superior position and the conical cap it wears, a common indicator of high-status throughout southern Central America (Hoopes and Fonseca 2003). To this day Kógi priests (*mámas*) in Columbia wear conical hats as emblems of their position. The lower figure is interpreted as a slave or attendant. Other statues depict figures with axes and trophy heads who may represent warriors.

Changes in social organization, subsistence, craft production, and regional identity are clearly indicated by new classes of artifacts during this period. A formal artistic industry developed, which included carved stonework like the statues at Barriles and pendants of polished semi-precious stones found at Las Brisas, Sitio Monge, and El Cholo (Drolet 1992:213; Herrera personal communication, January 2008). Some objects seem to indicate the importance of maize agriculture. Jade axes, believed to serve as emblems representing corn in Mesoamerica, accompany the expansion of maize into the region (Hoopes 2005). Their forms suggest they may be copies of pendants from the Nicoya/Guanacaste area (Drolet 1992). Other jade objects include zoomorphic figurines and beads. To date such objects have not been found in western Panama.

Among the most distinctive and impressive stone objects of this period are the stone balls of the Diquís region. Evidence suggests that these objects are first made during the Aguas Buenas period and continue into the Chiriquí period. These stone balls are almost perfectly spherical and range in diameter from 50 cm to 2.5 m. The largest ball, from the site of El Silencio, is 2.54 m in diameter and weighs an estimated 16 tons (Quintanilla 2007). Their geographic distribution is confined to the southern Diquís at elevations of less than 600 m, but they are most common south of the Térraba River in the Diquís Delta. They are commonly associated with Aguas Buenas cemetery sites, but have been found on or near mounds interpreted as residential platforms. To date, archaeologists have documented 210 stone balls from 44 sites in Costa Rica and one in Panama (Fernandez and Quintanilla 2003:215; Quintanilla 2007).

Chiriquí Period (A.D. 750-1500)

The Chiriquí period (previously known as Chiriquí phase or Classic Chiriquí) represents a dramatic change from the Aguas Buenas period in terms of site organization, social organization, material culture, and mortuary practices (Drolet 1992). Sites increase in size and complexity, gold replaces jade as the preferred medium for the manufacture status objects, and polychrome pottery is introduced.

Rivas

PANAMA

Buenos Aires

Murciéligo

-9° 00

Curré
Palmar Sur

Bugaba

83° 00
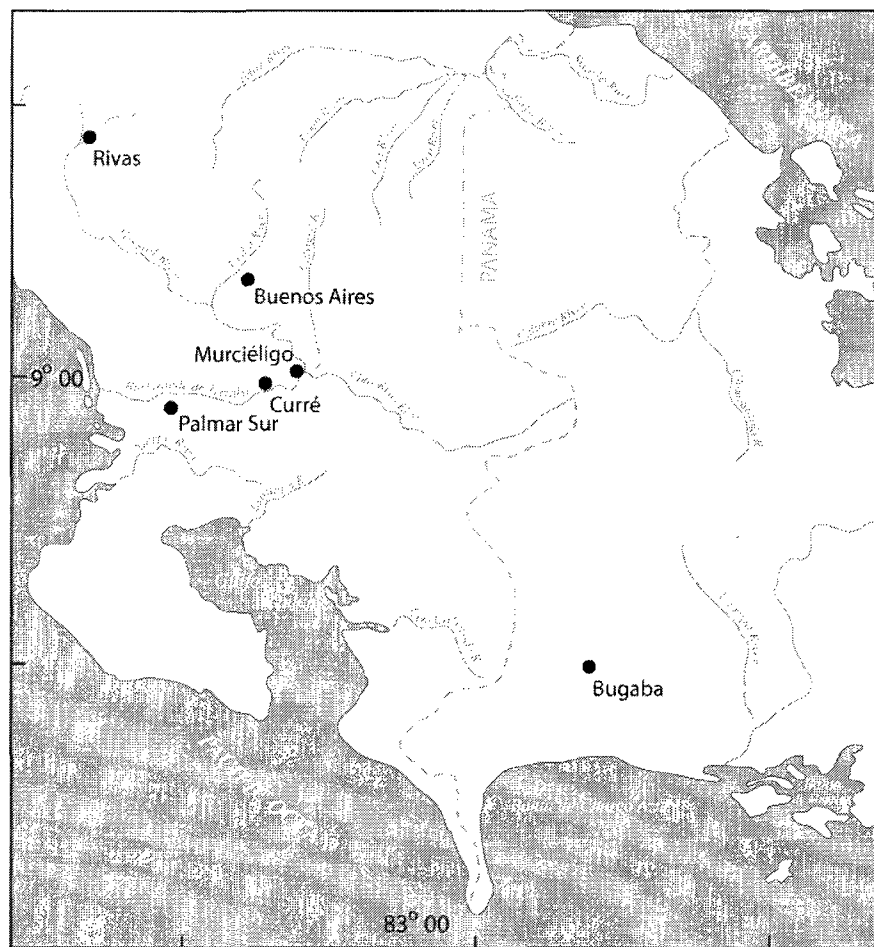
Figure 2. 4 Chiriquí period sites mentioned in text

Drolet reported a clear hierarchical ordering of Chiriquí villages based on a sample of over 200 Chiriquí sites identified during a regional survey (Drolet 1988, 1992). The largest sites were 15 large nucleated agricultural villages that formed a chain of communities along the banks of the Térraba, Coto Brus, and General Rivers spaced approximately five kilometers apart (Drolet 1983, 1988, 1992). These sites are typically located on river terraces or broad alluvial plains near major rivers and have as many as 50 circular houses measuring up to 35 m in diameter (Drolet 1992:224; Haberland 1984:258). They include both residential zones and cemetery areas (Drolet 1992, 1994). Two of these sites have been excavated extensively, Murciélago (Drolet 1988, 1992) and Rivas (Quilter 2004; Quilter and Blanco 1995; Quilter and

Frost 2007). Excavations revealed numerous cobble foundations for circular structures, ranging

from 10 m to over 30 m in diameter. Their size and form bears a strong resemblance to the

foundations of Bribri *u-suré*, large conical structures common in the Talamanca region until the

early part of the twentieth century (Figure 2.5). Sites often exhibit internal groupings of

residential structures, which may represent clans or lineages (Drolet 1992).
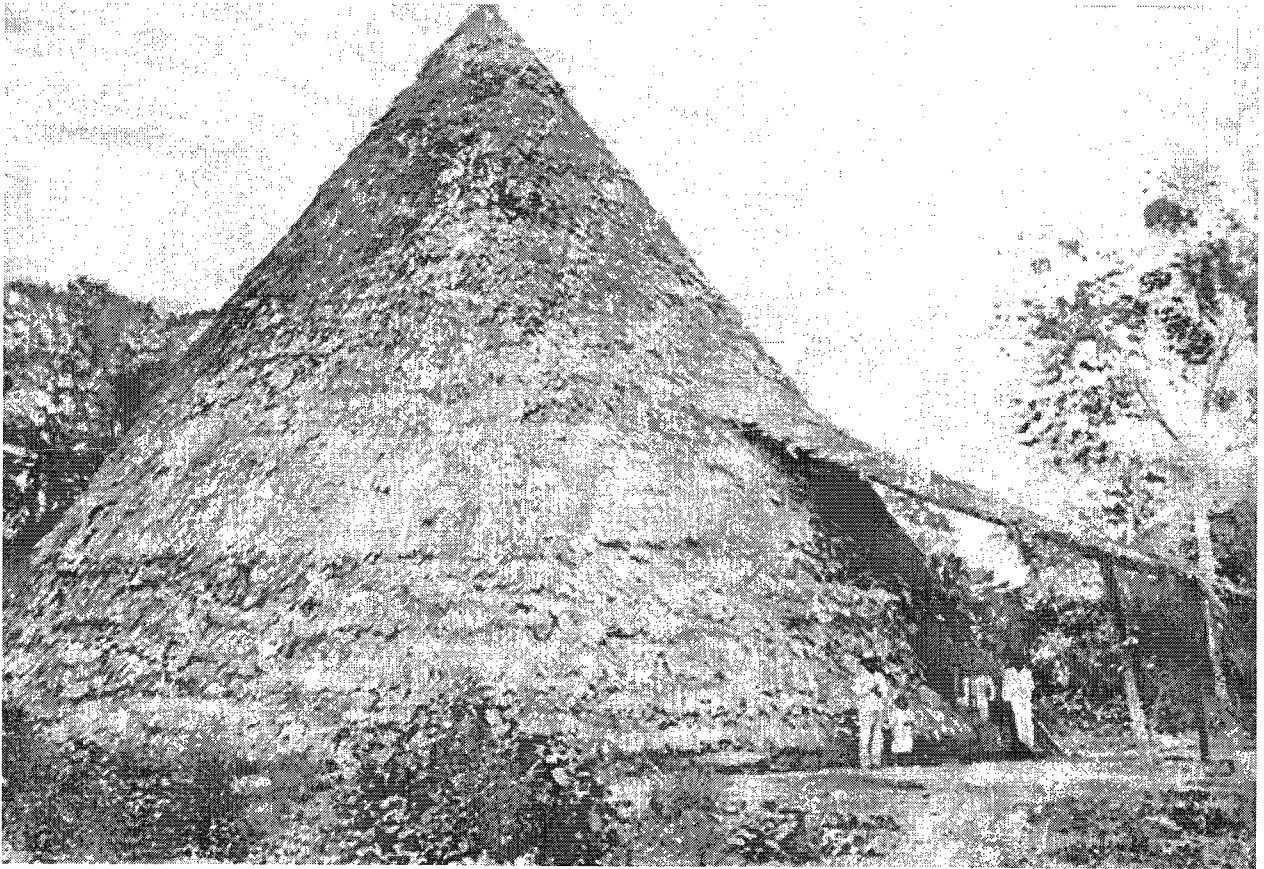
Figure 2. 5 Photograph of Bribri *u-suré*, c. 1900.

There was apparently a strong emphasis on social divisions within Chiriquí society,

which is most evident in the organization of cemeteries (Drolet 1992:229). Funerary zones had

been integrated with residential/ceremonial zones during the Aguas Buenas period, but by the

Chiriquí Period, villages maintained several cemeteries around their perimeter, often grouped as

funerary zones, which may have been associated with distinct residential zones (Haberland 1984).

There are also spatially discrete cemeteries known for their large size, architectural constructions, and rich graves that included great quantities of gold, tumbaga, and other prestige items such as carved metates and imported and elaborate ceramics. Within these cemeteries there appears to be a rather strict social ranking, with gold and fine ceramics concentrated among a small number of individuals. According to Drolet (1992:229), "These funerary divisions imply differential placement of domestic groups from within the village and a rather rigid system of social ordering for cemetery use paralleling the pattern of residential separations in the community."

Gold-working technology appears to have been introduced from northern South America around A.D. 650 and was quickly adopted as the preferred method for making prestige goods throughout Costa Rica, replacing lapidary technologies using jade and other semi-precious stones (Snarskis 2003). Gold, often mixed with copper to form *tumbaga*, was hammered or cast into a wide range of forms. Most artifacts take the form of cast-gold pendants (Figure 2.6). The iconography commonly includes forms from the natural world such as birds, frogs, spiders, snakes, and other animals. Human forms are also common, and many appear to depict shamans in states of trance or transformation (Quilter 2000). Some gold was hammered into sheets and used as headbands or breastplates.
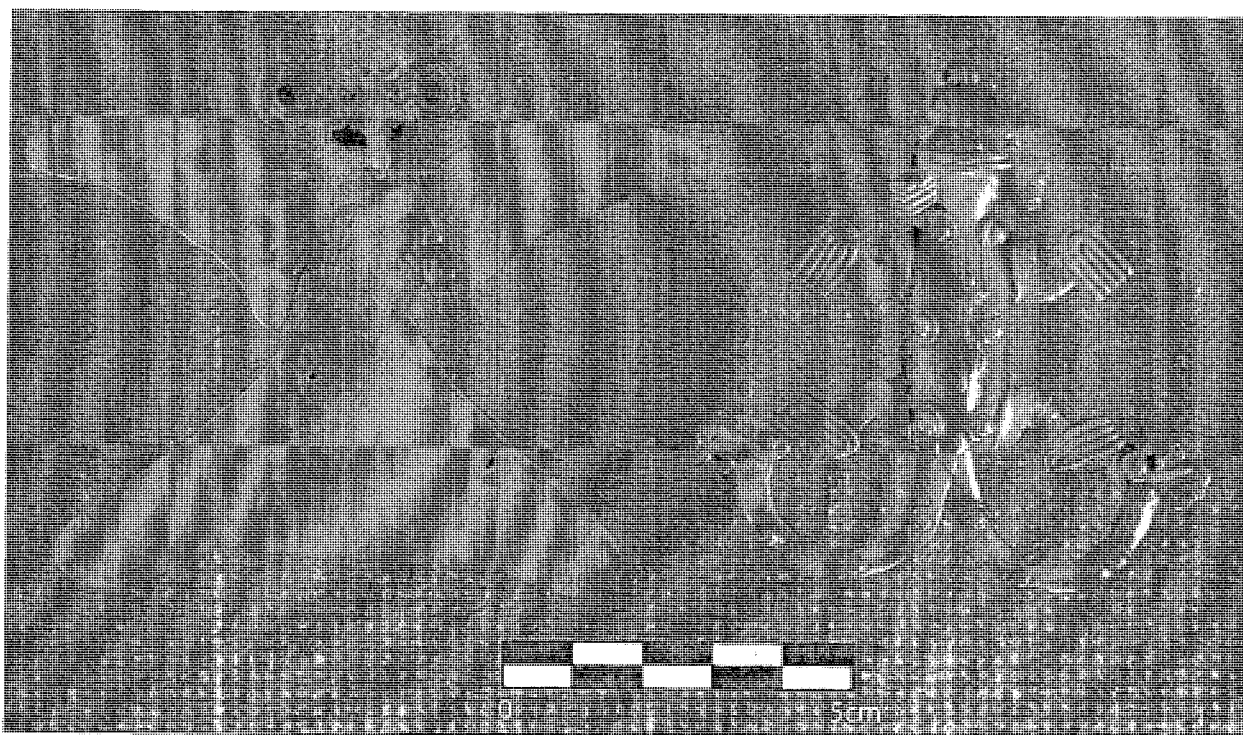
Figure 2. 6 Examples of Chiriquí goldwork, Panteón de la Reina (Ethnological Museum of Berlin)

Significant changes in pottery technology are also apparent. Polychromes are introduced and bichromes increase in frequency. In particular, Buenos Aries Polychrome is one of the most distinctive and variable of Chiriquí ceramics. Buenos Aires vessels are typically slipped white and painted with bold red and black geometric patterns. Other examples, particularly from Panama, exhibit highly stylized crocodilian motifs, which led Holmes (1888) to initially name the type "alligator ware." Common forms include globular jars, open bowls, and a wide range of figurines in human and animal form. Figurines commonly depict seated women, often holding a child or engaged in a domestic activity.

Another ceramic ware, Tarragó Biscuit Ware (alternatively, Armadillo Ware or San Miguel Biscuit) appears during this period. Simple globular jar forms with walls as thin as 3 mm are most common. Tarragó vessels are often decorated with one or two small zoomorphic or

anthropomorphic figurine appliqués. Petrographic studies of Tarragó vessels suggest a rather limited area of production near the Costa Rica–Panama border (Haberland 1984:263).

Stone sculpture is found throughout Greater Chiriquí during this period, but it is most common around the Diquís Delta, and it is commonly associated with mounds. Sculptures are found in both human and animal forms, and they often have peg bases that may have been placed in sockets in some perishable support (Lothrop 1963). Human forms include men and women, often with feline or crocodilian features. Some are depicted as prisoners and others as warriors with trophy heads (Lothrop 1963; Mason 1945). Sculptures range in height from approximately 30 cm to more than 2 m, but most are less than 1 m in height. Other stonework includes elaborately carved metates, often stylized felines (Figure 2.7). Such objects are common from the Central Highlands/Atlantic Watershed of Costa Rica through Veraguas, Panama (Lothrop 1950; Stone Miller 2002). Stone balls continue to be utilized at some sites, but only within a small area of southern Costa Rica (Quintanilla 2007).

Figure 2. 7 Diquís peg-based sculpture (left) and feline effigy metates (right). (Mason 1945)

Contact and early Colonial Period (A.D. 1500 – 1600)

The Spanish began exploration in Costa Rica in 1519 with the expedition of Hernán Ponce de León and Juan de Castañeda, who explored the Pacific Coast of Panama and Costa Rica (Fernández Guardia 1913:68-9). The expedition passed through the province of Burica, located in western Chiriquí Province, where it encountered four chiefs in well fortified villages, but recorded few other details (Andagoya 1859:22).

Between 1522 and 1523 Gil González Dávila traveled by land from Chiriquí, Panama, to the Nicoya Peninsula, encountering numerous villages. He was the first Spaniard to have direct contact with the indigenous people of the Greater Chiriquí. His reports of the region and its potential for development motivated subsequent expeditions to the zone, including those by Pedrarias Dávila (1526), Juan Vázquez de Coronado (1563), and Antonio Pereyra (1563). Collectively, the chronicles of these expeditions provide the primary sources of information for understanding native life at contact, as discussed in more depth in Chapter 4.

According to Spanish documents, the southern Pacific region of Costa Rica was divided into four territories that the Spanish called Quepo, Turucaca, Coctu, and Burica. Within each territory were a number of smaller territories, each controlled by a principal or secondary chief, each of whom had the role of redistributing goods (Ibarra 2002). Vazquez de Coronado reported that the southern Diquís region was a densely populated territory known as Coto, under the control of Coctu, a large fortified village, 10 Castilian leagues (44 km) inland of the Pacific coast.

The first attempt at permanent Spanish settlement in the Diquís began on March 6, 1561, when Perafán de Ribiera established Nombre de Jesús, a village located along what is now the RíoGrande de Térraba, "about five leagues from the village of Coto, eight from Ara, and ten

from the Bay of Coronado on the Gulf of Dulce." This attempt to found a permanent settlement in the Diquís was unsuccessful, and the village was abandoned within a year due to Indian attacks, lack of food, a harsh climate, and unreliable supply lines with the Caribbean coast (Fernández Guardia 1913:291-293). Other Spanish settlements were constructed elsewhere in southern Costa Rica and western Panama. These included the village of Badajoz and port of San Marcos (1541), on the Caribbean coast (Fernández Guardia 1913:140-141); and the village of Artieda de Nuevo Reino on the Almirante Bay, Panama (1576) (Fernández Guardia 1913:310). Archaeologists have identified evidence of Spanish contact and early settlement at several sites in the Diquís including Paso Real (Quintanilla 1986), Curré (Corrlaes 1985), Peñas Blancas (Corrales, Quintanilla and Barrantes 1988), El Sapote, and Changuina (Stone 1966). Typical European artifacts include glass beads, ceramic sherds, and iron knives, axes, spear points, stirrups, and bits. They are commonly found in graves with indigenous pottery (Corrales, Quintanilla and Barrantes 1988; Stone 1966).

History of Archaeology Research in Greater Chiriquí

The division of Greater Chiriquí into Diquís and western Panama is arbitrarily defined by the modern political border between Costa Rica and Panama and thus completely unrelated to the prehistory of the region. Regardless, it has served to restrict most modern archaeological research projects to working in one sub-region or the other. Therefore, while I will attempt to provide a synthetic and comprehensive background to the archaeological research of Greater Chiriquí, it is occasionally necessary to discuss the two sub-regions independently.

Western Panama saw intensive research early, particularly during the late 1800s, when it formed part of Colombia. Since that time, it has been the subject of minimal but sporadically intensive research. Chiriquí Province first gained widespread attention in 1858 when reports of pre-Columbian cemeteries bearing vast quantities of gold made their way back to North America (Bateman 1860; Bollaert 1863, 1869; de Zeltner 1866; Evans 1910; Meagher 1861; Merritt 1860; Otis 1859, 1860; Smith and McDowell 1884; Squire 1859; Taylor 1867). Thomas F. Meagher (1861:205), who wrote extensively about Chiriquí Province, provided just one example of the size of these cemeteries and the extent of the looting when he wrote, "All the way from David we had ridden through thousands of these disemboweled and ransacked graves, and in every direction, for leagues and leagues, from Térraba and Boruca to Santiago de Veragua, we might have seen tens of thousands more."

Descriptions like this stimulated a strong interest in the region and helped spark a period of intensive looting between the 1850s and the early 1900s. Details of these looting expeditions were seldom reported or published, but there are a few notable exceptions. J. King Merritt (1860), the director of a Veraguas Province gold mine, provided a relatively detailed description of a cemetery at Bugaba (near David) in a communication to the American Ethnological Society. Similarly, John F. Bateman (Bateman 1860-61) described several graves near Volcán Chiriquí in the highlands. More ambitiously, M. A. de Zeltner, French Consul to Panama, undertook the first systematic attempt to classify archaeological materials from Chiriquí. He published his results of his work in the Panamanian newspaper *El Fénix* in August of 1865. The following year, his report was published in French with illustrations (de Zeltner 1866).

Several Costa Rican large cemetery sites also were discovered and plundered during this gold-rush period, but because of their more remote locations and lower surrounding population

densities, few first hand reports of the sites were recorded. Those who did visit included several naturalists and explorers who, in the late 19th and early 20th centuries, provided the earliest descriptions of the region's archaeological sites. Writing about his visit in 1860, the German naturalist von Frantzius (1869) reported the looting of numerous tombs in the Buenos Aires region, many of which produced gold and ceramics.

The Chiriquí region also drew attention for its distinctive ceramic and stonework styles. Museums throughout the United States and Europe purchased large collections of gold, stonework, and ceramics. The most famous were those of the American railroad executive Minor Keith, which he bequeathed to the National Museum (Smithsonian) in Washington, DC, the Brooklyn Museum, and the Museum of the American Indian, Heye Foundation, upon his death in 1929 (Stewart 1964). Other significant collections of Chiriquian artifacts that were collected in these early decades are housed today at the Peabody Museum of Archaeology and Ethnology at Harvard, the University of Pennsylvania Museum, and the Peabody Museum at Yale (Lothrop 1948).

These collections from Chiriquian cemeteries served as the empirical basis for several early comprehensive studies. The first was William Henry Holmes' (1888) *Ancient Art of the Province of Chiriquí, Colombia*, based entirely on J.A. McNeil's collections from Chiriquí. Holmes attempted to classify and name the collection's pottery by defining several categories of pottery based on differences in raw materials and surface treatments.

In contrast, George Grant MacCurdy's primary interest involved the identification and interpretation of zoomorphic motifs on Chiriquian ceramics. He wrote articles on armadillos (1906), alligators (1908), and octopi (1913, 1916) but his most ambitious work was in 1911 with the publication of *A Study of Chiriquian Antiquities*, in which he provided a comprehensive

synthesis of Chiriquian cemeteries and graves. The majority of the work concentrated on an analysis of more than 1000 objects in the Yale University collection, which included pieces from J.A. McNeil and M.A. de Zeltner collections, both collections having been purchased in 1878 (MacCurdy 1911). The Yale collection included gold, polished and carved stone, and ceramic artifacts. MacCurdy built on the work of Holmes, maintaining many of Holmes' names for pottery styles and adding several more. To a significant extent, the Holmes/MacCurdy classification is still used today, although many of the names have been revised.

Cornelius Osgood (1935) also revisited the Yale Chiriquí collections. Unlike Holmes and MacCurdy, Osgood was able to visit sites, examine collections, and witness the excavation of several graves in Chiriquí. In an effort to do more than simply classify ceramic materials, Osgood attempted to understand the relations between the locations of cemetery sites and the distribution of their material contents.

Osgood (1935) compared the materials found in 117 Chiriquí graves from eight sites in the Boquete region. His conclusions were broad but they demonstrated that important spatial and cultural patterns could be identified by careful analyses of Chiriquí cemeteries and the contents of their graves. Subsequent investigations of Chiriquí cemeteries included limited research by Swedish archaeologists Sigvald Linné (1936) and Henry Wassén (1949).

Samuel K. Lothrop's 1926 publication, *Pottery of Costa Rica and Nicaragua* attempted for the first time to synthesize the little that was known about Costa Rican archaeology by combining both published materials and unpublished information gleaned from informants. Lothrop classified pottery and described the location and features of numerous sites throughout Costa Rica. Lothrop mentions several large cemeteries in the Diquís region including the Panteón de la Reina, then called "El General," but he often does not cite the sources of his

information. Although Lothrop did make a brief visit to Costa Rica in 1924, the same year he submitted his dissertation "The Ceramics of Northern Costa Rica and Nicaragua" to the faculty of Harvard University, there is no evidence that he visited the Diquís region until his work at Palmar Sur in 1948.

In 1938, the United Fruit Company expanded its plantations into 3000 acres of southwestern Costa Rica near the towns of Golfito and Palmar Sur. As rain forests were clear-cut to make way for banana trees and rail lines to transport fruit to coastal ports, workmen encountered archaeological remains such as stone sculptures, gold and pottery artifacts, and, most famously, the large Diquís stone balls. These sites drew the attention of Doris Zemurray Stone, daughter of United Fruit Company president Samuel Zemurray (Lothrop 1963). Stone developed an interest in the area's archaeology and subsequently conducted the first archaeological reconnaissance of the Diquís 1940 and 1941, publishing her findings in *American Antiquity* (Stone 1943). Stone was the first to publish on the Diquís stone balls, and she also reported sites with earthen mounds and large cobble foundations.

Scientific excavations began in the Diquís in 1948 with Lothrop's research at Palmar Sur, on United Fruit Company property. His research interests included the site's earth and stone mounds and its stone balls. He measured the balls and mapped their locations; recorded the site's other stone statues, ceramics, and metalwork; and conducted limited excavations. Lothrop worked for only brief periods of time, as his work often was interrupted by farming and irrigation of the crops growing on and around the site. Rather than broad, horizontal excavations, Lothrop opted to test several smaller locales between areas that had been severely disturbed. Lothrop's excavations were limited but his investigations within and around several Diquís

mound sites contributed much to the understanding of Chiriquí stonework, ceramic chronology, and the spatial distribution of stone balls.

Between 1953 and 1956, German archaeologist Wolfgang Haberland of the *Museum für Völkerkunder* in Hamburg conducted numerous excavations throughout southern Central America, concentrating on several Chiriquí cemetery-mound sites in both Panama and Costa Rica (Haberland 1957, 1959). His published work represents some of the most detailed descriptions and analyses of any mortuary sites in southern Central America. Unfortunately, they appear only in two obscure German publications, *Archäologische untersuchungen in der Provinz Chiriquí, Panamá* and *Archäologische untersuchungen in Südost-Costa Rica* (Haberland 1959, 1961). Haberland defined two cultural components in his excavations, the earlier Aguas Buenas followed by the Chiriquí.

Two Italian archaeologists, Laura Laurenchich de Minelli and Luigi Minelli, continued the tradition of cemetery investigations with extensive excavations at four cemeteries in the San Vito de Java region of southern Costa Rica. The Minellis excavated more than 400 burials, including every identifiable grave in one of the four cemeteries. Their excavations supported Haberland's cultural sequence and established a cultural continuity among the four cemetery complexes, which ranged from the Aguas Buenas period to the early Chiriquí period (Laurenchich de Minelli 1966; Laurenchich de Minelli and Minelli 1966). Unfortunately, details of their excavations, including maps, photos, grave descriptions, and materials recovered have never been published.

Almost no archaeological research was conducted in the Diquís region in the 1960s and 1970s, but western Panama saw brief periods of research through the 1960s. Olga Linares (1968) conducted important research on the coast of the Gulf of Chiriquí. She identified and mapped

several sites, made surface collections at many more, and produced a ceramic sequence. Several Panamanian archaeologists working in the region reported their research in the short-lived newsletter, *Boletín del Museo Chiricano*, published under the direction of Roberto de la Guardia.

In the mid-1970s, Olga Linares and Anthony Ránere initiated a multifaceted project to "…reconstruct a prehistoric example of adaptive radiation among human populations in the New World tropics and to evaluate divergent settlement and subsistence ecosystems resulting form different ecological and social conditions" (Linares and Ranere 1980:3). In their book, *Adaptive Radiations in Prehistoric Panama*, Ranere and Linares (1980) report on excavations at several sites from the Tropical Archaic through Chiriquí period. Linares and Ranere established a chronological sequence building on the work of Haberland (1959, 1961a) and Linares (1968), and they identified some of the earliest sites in Chiriquí.

In the early 1980s, Robert Drolet initiated the "Proyecto Arqueológico Térraba-Coto Brus" in the Diquís region of Costa Rica in response to a proposal by the Costa Rican government to construct a hydroelectric dam that threatened to flood much of the Térraba and Coto Brus valleys. In an intensive investigation of settlement patterns in the Térraba, Coto Brus and, General valleys, their tributaries, and adjacent uplands, Drolet (1983, 1988) located more than 250 residential sites. He also conducted test excavations at numerous sites including the Formative sites of Las Brisas and Sitio Monge, both located in the Upper General Valley (Drolet 1984a). Most pertinent to this study, Drolet conducted extensive excavations at Murciélago, a Chiriquí period site located near the confluence of Coto Brus and General rivers (Drolet 1986b, 1992). The results of this work are detailed in Chapter 5.

Drolet's research laid the groundwork for several large projects in the 1990s that made important contributions to refining chronologies, establishing regional differences in site

morphology and settlement patterns, and understanding the nature of Chiriquí social organization. These projects include the 1990 research by Claude Baudez and colleagues, who conducted stratigraphic excavations at the site of Palmar Sur, where Lothrop had excavated in the late 1940s. The results of their analysis were instrumental in refining the archaeological chronology for the Chiriquí period.

Between 1990 and 1992, John W. Hoopes conducted excavations at two shell middens near Golfito, on the southern Pacific coast (Hoopes 1994). Hoopes's investigations were the first to investigate marine resources in southern Costa Rica, and the results provided important data for comparison with sites such as La Pitahaya in Panama (Linares 1968; 1980) and others in the Nicoya Region of Costa Rica (Norr 1986).

A multi-year investigation under the co-direction of Jeffrey Quilter and Aida Blanco between 1992 and 1998 investigated Rivas, a large Chiriquí-period village site in the Upper General Valley. Quilter and Blanco's aim was to understand regional differences in chiefdom hierarchies. Their extensive excavations make Rivas an excellent point of comparison with Murciélago, located to the south. Details of the project and results of the excavations are available elsewhere (see Quilter 2004, Quilter and Blanco 1995; Quilter and Frost 2007), but information relevant to this study will be summarized in Chapter 6.

Today, archaeological research in Greater Chiriquí continues apace, and it appears to be expanding rapidly, particularly as Costa Rican scholars direct more projects. In the last decade, Oscar Fonseca and Sergio Chávez (2003) published the results of their investigations at Java, a residential-funerary site in the southern Pacific region, and Ifigenia Quintanilla (2007) published a multi-year study of the Diquís stone balls. In the Diquís, Roberto Herrera recently completed his dissertation fieldwork at the Aguas Buenas period site, El Cholo, located in the northern

General Valley near San Isidro. The site is now threatened by development and Adrián Badilla from the National Museum of Costa Rica is conducting salvage excavations. In western Panama, Karen Holmberg (2009) recently completed a dissertation that reassesses the eruption history of the Barú volcano and the use of volcanic materials by the occupants of western Panama. Scott Palumbo (2009) completed his dissertation research at Barriles in Chiriquí Province, building on previous excavations by Stirling (1950) and Martin Kunne. Tom Wake (2009) continues archaeological research at Sitio Drago on the coast of Bocas del Toro Province.

3. MODELING INDIGENOUS COSTA RICAN SOCIETY

Introduction

The nature of social and political organization of these cultures has been among the primary research foci for scholars working in Costa Rica (Drolet 199; Quilter 2004; Snarskis 1978). Thus, among the most important questions facing scholars working in the region has been how Chiriquí society was organized socially and politically and how its organization may have contributed to Chiriquí development. The rich ethnographic, ethnohistoric, and archaeological data sets available for the region offer an excellent opportunity to trace social and political systems back through time, beginning with recent ethnographic descriptions, back through Colonial and Contact period written records, and into the Chiriquí period.

Prior to European settlement, the modern states of Costa Rica, Panama, and Colombia were occupied by number of independent polities that comprised the cultures now known as Tairona, Sinú, Chiriquí, Coclé, and others. Regional similarities in village organization, material culture, and iconography of these cultures have been well established by archaeologists and art historians. Sites are commonly organized with multiple circular house foundations, often arranged around plazas and joined by cobble causeways (Snarskis 2003). Inhabitants of these sites manufactured gold and tumbaga objects using common methods and decorated them with similar iconography (Bray 2003; Cooke and Bray 1985). Similarly, figurative stone sculpture from the region has a "thematic homogeneity" (Bruhns 1992:332), and the widespread use of the crocodile-man and the double-headed saurian motifs in gold and stonework provides additional evidence of shared regional styles likely related to a common worldview (Hoopes and Fonseca 2003).

The contemporary descendants of these pre-Columbian cultures include the Kógi, Kuna, Guaymi, Cabécar, Boruca, Bribri, and others, who are linked by a common genetic, linguistic, and cultural heritage that likely had its origins thousands of years in the past (Hoopes 2005). In this chapter, I examine the social organization, political leadership, and cosmology of some of these descendant populations in order to develop a model of Chiriquí Period sociopolitical organization. In subsequent chapters, I assess the utility of this model for the region's indigenous society at the time of European contact and in the pre-Columbian Chiriquí period.

In the first half of this chapter, I develop a model of Chiriquí social organization and political leadership based on ethnographic observations about the Bribri and Cabécar of the Talamancan region of southern Costa Rica and the Kógi of northeastern Colombia. The Bribri and the Kógi represent two of the best documented but also the least acculturated indigenous groups in the Intermediate Area. I hypothesize that indigenous societies of Costa Rica at Contact and in pre-Columbian times were organized into two moieties, each composed of several ranked clans. The Bribri are also the modern indigenous group located closest to my area of study and could represent the descendants of the people who inhabited the General Valley during the Chiriquí period. The Kógi, while far removed geographically, share a number of common themes in their cosmology and social and political institutions with the Bribri. I include them in this discussion to illustrate the broad geographical distribution of dualistic concepts and institutions throughout the Intermediate Area and to serve as a second modern analogue in cases where data is unavailable for the Bribri and Cabécar.

In the second half of the chapter I examine the ways that dual organization is expressed archaeologically in the spatial arrangement of sites in order to develop expectations for how dual organization may be identified at Chiriquí archaeological sites. In the Andes, dualism often has

been expressed in architecture and town planning (Burger and Salazar Burger 1993, Netherly and Dillehay 1986; Moore 1995; Urton 1993), and case studies from the region demonstrate how dual organization is materialized in the spatial organization of archaeological sites. Because there are a limited number of ways to organize architecture into binary, opposing units, I expect that many of the material expressions of Andean dualism may be used to evaluate sites in other regions where dual forms of social organization are recorded ethnographically

The Bribri and the Cabécar

The indigenous people who today reside in southern Costa Rica include the Bribri, Cabécar, Teribe, Boruca, and Guaymi (Salazar 2002). All speak languages that belong to the Chibchan language family, which extends from central Colombia through northern Nicaragua. These five groups have been known since the Contact period, and the consensus is that they represent the descendants of the people that occupied the region before the arrival of the Spanish. Most now live in small isolated communities on both sides of the Talamanca mountain range in Costa Rica.

We have firsthand accounts of the Bribri and Cabécar written by scientists, explorers, and ethnographers. The first eyewitness descriptions of the Bribri date to the Colonial period, but they are few in number and tend to be brief since the Bribri and Cabécar communities did not permit missions or European settlements between 1709 and 1882. A gradual increase in European settlement and interaction began in 1882, with a significant increase after 1940 (Bozzoli de Wille 1975a:26). The early ethnographic accounts by Manuel Peralta (1892), William Gabb (1875), and Henri Pittier (1898, 1903, 1938) provide some of the most useful data on Bribri social organization and mortuary practices because their observations and informant

interviews were conducted before many traditional practices had changed significantly. Alanson Skinner (1920) wrote extensively on Bribri material culture but only briefly discussed social organization and cultural practices. Doris Stone (1959, 1961, 1962, 1964) provided the first comprehensive study of the Bribri and Cabécar, and María Bozzoli de Wille (1972, 1975a, 1975b, 1977a, 1977b, 1979; 1982) detailed Bribri concepts of birth, death by synthesizing earlier work and conducting fieldwork among the Bribri between 1966 and 1969.

While the Bribri and Cabécar are considered distinct ethnic groups based on their geographic locations and linguistic differences, they are virtually indistinguishable in terms of social organization, mortuary practices and subsistence. According to Talamancan oral histories, the Bribri conquered the Cabécar in an ongoing war that ended in the early nineteenth century. By the time of William Gabb's research, the Cabécar no longer maintained chiefs and were completely under the political control of the Bribri (Gabb 1875:488). The Bribri and the Cabécar maintain separate villages and their own languages, but interaction, including inter-marriage, is common. Because more information is available for the Bribri, I concentrate on their social organization but incorporate relevant information on the Cabécar when available.

The Bribri occupy two distinct areas in Costa Rica. On the Caribbean side of the Talamancan range they live in the southeastern portion of the Sixaola Valley along the eastern banks of the Coén, Uren, and Lari Rivers. On the Pacific side of the range they live in Salitre, near Buenos Aries. They were relocated there in 1709 by the Spanish colonial government in retribution for the murder of Franciscan priests and burning of their missions (de Granda y Balbín 1913 [1709]). A 1980 census estimated the Costa Rican Bribri population at 5000, making them the largest indigenous population in Costa Rica.

The Cabécar live in four regions of southern Costa Rica. They inhabit an area along the western side of the Río Coén River, the Río Chirripó Altántico, and the Upper Estrella valley. On the Pacific slope of the Talamanca Range, they also live at Ujarras, above Buenos Aires. They were relocated here for the same reasons as the Bribri.

The Cabécar and the Bribri live in small villages as subsistence farmers. Agricultural practices vary depending upon elevation and topography. Their diet is largely dependent upon rice, maize, beans, sweet manioc, and tree crops such as avocado and pejibaye (*Bactris gasipaes*, peach palm). They often raise pigs and chickens, but cattle are rare. Both groups supplement their diet through hunting and fishing (Salazar 2002).

The Bribri and Cabécar understand the universe to be a nine-level "cosmic house," which is symbolized as two traditional conical Bribri structures (*u-suré*) that meet at their bases (Figure 3.1). The cosmic house is divided into three primary zones: 1) the upper-world, inhabited by the god Sibú, 2) the natural world, inhabited by humans and all other living things, and 3) the underworld, where the souls of the dead reside along with various dangerous beings (González and González 2000:88). The Bribri and Cabécar worldview is strongly structured by dual categories, and they understand the world in terms of opposing but complementary principles such as good/evil, male/female, living/dead, and upper-world/underworld. Bribri religion focuses on finding a balance between these opposing concepts in order to maintain equilibrium between humans and the natural world.
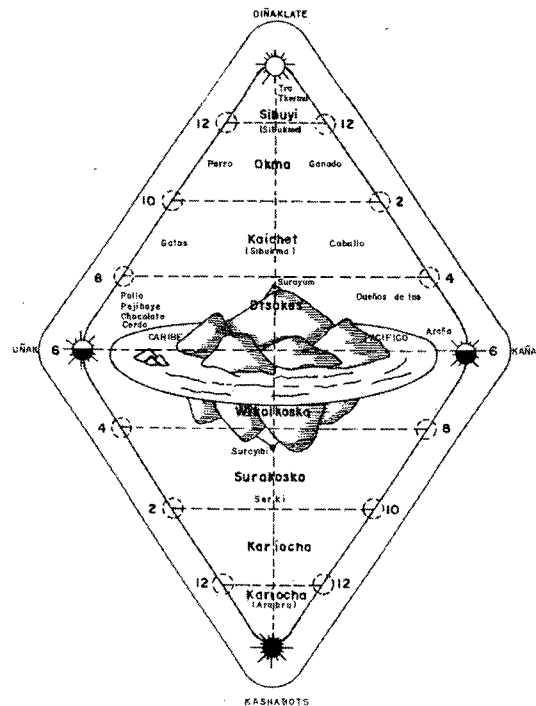
Figure 3. 1 Schematic of Bribri universe (after González and González 2000:154)

Dualism also strongly shapes Bribri and Cabécar social organization. Both groups are divided into two exogamous matrilineal moieties, each of which contains several named clans (Pittier 1895; Stone 1959, 1963; Bozzoli de Wille 1972). Bozzoli de Wille (1975a) identified 57 Bribri clans with 28 clans in one moiety and 29 in the other. Subsequent work has identified as many as 80 clans (Jara and García 2003). Numerous clans have disappeared due to warfare or disease, and new clans are sometimes formed to accommodate marriages outside of the existing system, usually to Cabécar or other non-Bribri partners.

The Bribri organize their clans according to degrees of kinship. The Bribri term for clan is *ditsö*, meaning "seeds that are saved for reproduction" (Bozzoli de Wille 1975a:29). Their creation narrative explains that all Bribri are descended from eight maize seeds planted by the creator god Sibú. Sibú named each seed, assigned each one a specific task, and then paired them as marriage partners (Jara and Garcia 2003:166). The Bribri imagine their clan system as a plant

with diverging branches. Adjacent branches are more closely related than those further away. From childhood, each person learns which "branches" of the opposite moiety are preferred for marriage partners for their clan (Stone 1969). Marriage within one's clan or moiety is strictly forbidden (Bozzoli 1972:555). Within each moiety, more closely related clans are often grouped into sets of two or more. Some of these clans are considered "good" and came from pure maize seeds. Other clans are considered "bad" and came from a maize seed mixed with a feline. At the time of Bozzoli's fieldwork, the clan system remained strong but the moiety affiliations were beginning to break down, particularly with members under 40 years of age. However, to this day, some Bribri still recognize and obey rules of moiety membership (Maria Bozzoli, personal communication 2005).

Until the beginning of the twentieth century, the Bribri recognized a strict hierarchy of clan organization and of many offices, professions, and trades that were passed down through clans (Stone 1962:36). Political and spiritual power was confined to a small number of high-ranking clans in each moiety. The highest ranked clans were collectively known as, *bLupawak*, literally "wealthy people's clan" or "owners of the wealth." These clans included the *túbolwak*, a clan associated with felines, especially the jaguar, and with war. They appointed the highest-ranking chiefs. Likewise, Bribri high priests, called *uséköl*[1], were appointed from only two clans, the *suwëutöwok* and the *koktuwak*. The *uséköl* clans were from the moiety opposite the *bLupawak* clans, and the two groups were linked as marriage partners (Bozzoli de Wille 1975a:43).

Members of lower ranking clans from both moieties assumed other hereditary privileges and positions including those of warrior chiefs, shamans (*awapa*), and roles related to mortuary

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1 *Uséköl* is the Bribri term for a single high priest. In Bribri the suffix –pa is the plural morpheme. The singular form of the Cabécar word for the same position is *UsegLa*. For this and all subsequent named positions I will follow Bribri terminology. I follow Jara and García (2003) when multiple spellings are available.

activities, including funeral singers (*tsököl*) and buriers (*ököm*) (Figure 3.2). Some clans were associated with certain craft specialties such as making pottery, dyes, hammocks, nets, or goldwork. Clan membership sometimes brought other rights and privileges; members of some clans were excused from food taboos or proscriptions on killing animals such as tapirs or certain birds, for example (Bozzoli 1975a:47; Stone 1959, 1963).

Bribri Political Organization

Moiety structure served to define Bribri political organization, which also followed a strict ranked hierarchy closely tied to the moiety and clan organization. At the top of the hierarchy were two principal authorities, the civil chief, called *bulu'* (or *bLu*), and the high priest, or *uséköl*. The Bribri term *bulu'* was often loosely translated to Spanish as *rey*, (king) or *cacique*[2] (chief) (Bozzoli de Wille 1975a:43). The *bulupa* were nominated from three high-ranking clans, the *sálkwak*, the *chëliwak*, and the *tukwak*. The roles of the *bulu'* are not fully understood since the position had largely disappeared by the early 1900s. In Bribri oral histories, some *bulupa* are described as warriors, shamans or both. In the late nineteenth and early twentieth centuries, they were responsible for organizing community projects, such as building bridges and cleaning roads (Jara and García 2003:36-37). They also settled disputes between individuals and acted as representatives to other communities on behalf of their own. *Bulupa* enjoyed certain privileges such as large houses, multiple wives, and access to luxury foods like chocolate. The *bulupa* also were permitted to use objects that served as emblems of their authority, such as gold jewelry, feathered headdresses, and a carved wooden staff. According to Gabb (1875:489), a *bulu'* was accompanied and assisted by his heir presumptive, who served as a secondary chief.

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2 Cacique is a Taino-Arawak word usually translated as "chief". It was adopted by the Spanish soon after contact and applied to high-ranking individuals throughout the Americas. For this discussion I use the term interchangeably with "chief".

Conflict between Talamancan chiefs was common, as were succession disputes between related individuals maneuvering to assume the high position. Disagreements often were settled with violence, including assassination. In the second half of the nineteenth century, at least three Talamancan chiefs lost their lives in these disputes (Bozzoli 1975a, Fernández and González 1997). William Gabb (1875:489-490) describes one vivid example that occurred during his residence among the Bribri. In 1871, the secondary chief and heir presumptive to Bribri chief Santiago conspired with members of Santiago's family to assassinate the chief, assuming that he would then ascend to the high position. Conspirators burned Santiago's home, confiscated his possessions, and captured his three wives. Santiago was later found dead from a gunshot wound. Ultimately, the secondary chief did not assume the chief's position. Instead, the eldest cousin in the line of succession, a co-conspirator in Santiago's murder, maneuvered into the position while another cousin was named secondary chief. The last Bribri chief was "Rey" Antonio Saldaña, who held that position from 1880 until his death on January 3, 1910. Saldaña died under suspicious circumstances, the victim of an apparent poisoning. His son, and heir to his position, died eight days later (Gólcher 1913 [1910]).

The position of *uséköl* was the highest-ranking and most important position in the nineteenth and twentieth century Bribri and Cabécar hierarchies. The *uséköl* was a full-time priest whose primary purpose was to maintain the delicate balance between the natural and the supernatural worlds. Their role was particularly important during natural disasters, famine, epidemics, and warfare (Stone 1962:117-121).

They were selected from only two clans, both within a single moiety, the *suwëutöwak* and the *koktuwak* (Jara and García 2003). His role was an exclusively male profession, and the office ostensibly went to the wisest and eldest man in the clan, but it often passed from father to son.

The position required many years of apprenticeship, which included mastering the secrets of the natural and supernatural worlds and learning the history of each clan.

The *uséköl* was adorned with gold jewelry and a feathered headdress, and he carried a small bag that contained objects used in his work, such as magical stones. He also carried a carved wooden staff as an emblem of authority. The last *uséköl* died of smallpox in the 1920s, but at least one of the two clans still existed as late as the 1970s (Bozzoli 1975a).

The *usékölpa* were both respected and feared for their power. They were said to have possessed extraordinary magical powers including the ability to transform into jaguars. Bozzoli (2006) writes that their power was so great that no member of the community, including their own family, was permitted touch, talk to, or look directly at them. All communication with an *uséköl* was conducted through the *bikili'*, an assistant and interpreter who served as an intermediary between the *uséköl* and the people. The *bikili'* was both a secretary who assisted the *uséköl* in all matters related to his work, and an interpreter who translated his words to the people or presented the concerns of the people or *bulu'* to the *uséköl*. The *bikili'* were appointed from a single high-ranking clan, the *salkwak*, one of three clans that also appointed the *bulu'* (Jara and Garcia 2003, Salazar 2002).

The final position in the political hierarchy of Bribri and Cabécar society was that of the war chief[3]. War chiefs were often associated with felines and monkeys and were appointed from several clans in each moiety (Bozzoli de Wille 1975a:31). War chiefs no longer existed in Bribri and Cabécar society by the time of William Gabb's fieldwork the late 1800s, and thus no

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3 The original Bribri and Cabécar terms for war chief are not known.

firsthand descriptions exist. Gabb (1875:488) states that the last Bribri warriors died in about 1860, but several clans still touted their history as sources of war chiefs.

The Bribri and Cabécar also maintained an equally important hierarchy of funeral specialists. While they possessed no political authority, the funeral specialists were considered essential to the maintenance of the natural order. Their collective role was to ensure the safe passage of souls from the world of the living to the realm of the dead while also protecting surviving members of the community from possible harm. Bribri funerals involved a number of elaborate rituals, each requiring trained specialists.

The *óköm* (alternatively *okab*, *okub*) presided over funerals. The Bribri consider dead bodies to be unclean and dangerous, and the specialized training of the *óköm* allowed them to handle the remains of the dead without danger. An *óköm* was called soon after someone died. They cleaned the corpse and wrapped it in cotton and bark cloth and then moved the body to a secluded location far from the village. After the body was allowed to decay for a period of a year, the *óköm* retrieved the remains and cleaned and wrapped them in cotton or bark cloth for the final funeral and burial in the clan cemetery (Bozzoli 1975a). Non-specialists who came in contact with a corpse were required to bathe their hands and arms in chocolate and undergo a period of period of cleansing under the supervision of the *óköm*.

Funeral specialists also included the *bikákala*, the "master of ceremonies" who organized the funeral. His role involved lighting a sacred funeral fire, preparing chocolate to be used during the ceremony, and distributing food and drink (Jara and García 2003). The *bikákala* assessed how many would attend, calculated how much food would be needed, and negotiated the cost for the required funeral services. Unlike other positions of authority, this was not

restricted to specific clans, but was open to everyone. Initiation to the position did require extensive training and apprenticeship, however (Pittier 1938).

Among other funeral specialists were the singers called *tsököl* (alternatively *stsukur*, *tsúku*), who were appointed from high-ranking clans in both moieties. The *tsököl* were responsible for the transmission of oral history and were of great importance in funerals. They sang or chanted a series of litanies that recounted the life and deeds of the deceased using a language that was unintelligible to the uninitiated[4] (Gabb 1875:508, Pittier 1938:17). According to Pittier (1938:17-18), assistants accompanied them during funeral ceremonies:

> Los stsukur son tratados con la mayor consideración. Cada uno de ellos tiene uno or varios asistentes llamados ko, los que tienen exactamente los mismos conocimientos sin poseer todavía el título official de cantor, y también alumnus o siní que los acomañan como los monaguillos acoompañan el clérigo en las ceremonias católicas.

> The *stsukur* are treated with the highest respect. Each one of them has one or more assistants called *ko* who have exactly the same knowledge but without the full official title of singer, and also students or *siní* who go along as the altar boys accompany the clergy in Catholic ceremonies (my translation).

Neither Gabb nor Pittier mention the sex of the singers, but one might infer that they were men, based on the comparison to altar boys. Stone (1962:30-31) states that by the time of her research in the 1950s there were no singers remaining among the Bribri and shamans (*awapa*) had assumed their responsibilities.

Bribri Clan and Moiety Organization

Figure 3.2 presents a reconstruction of the Bribri clan hierarchy based on ethnographic descriptions of 68 living and extinct Bribri clans compiled from several sources (Bozzoli de Wille 1972; Jara and Garcia 2003, Stone 1962). My goal is not to provide a complete

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4 However, Stone (1962, citing Lehmann 1920) states that the Bribri *tsököl* singers were actually from four Cabécar clans and may have sung in their native dialect.

reconstruction of the Bribri sociopolitical organization but to present a generalized description of

the Bribri hierarchy and internal divisions that can be used to model Contact-era and pre-Contact

societies in southern Costa Rica and elsewhere in southern Central America.

	Moiety I	Position		Moiety II
I	Suwëutöwak	Usékö̈l	Bulu'	Chëliwak
	Koktuwak	Bikili'	Secondary Chief	Sálkwak
				Túbolwak
II	Kólkwak	Tsokolpa		Kabékwak
	Sibawak			Ölóriwak
				Sulítsuwak
	Kúlsuwak	Additional high-ranking clans		Ñániwak
	Sebaliwak			Mojkwak
	Swëkolwak			
III	Tsinikichawak	War chiefs		Dútsuwak
	Tsiuriwak			Túbölwak
				Tuwariwak
				Ulëjkwak
IV	Áktërtowak	All other clans		ALáuwak
	Amukirwak			Bökirwak
	Amukwak			Búbulwak
	Bobaliwak			Dímatkwak
	Chamúkölwak			Dojkdiwak
	Dawëbaliwak			Dójkwak
	Díuwak			Dúriwak
	Diwówak			Kaboriwak
	Dójkwak			Kichökërwak
	Dóndiwak			Kumbuwak
	Inököldiwak			Mediwak
	Kichautöwak			Mekichawak
	Kipërjkwak			Mekichawak
	Kölkiwak			Muluriwak
	Kor'wak			Sinakwak
	Kóswak			Sináwak
	Nmeiriwak			Spakdiwak
	Shínúriwak			Sulájkwak
	Tkabëwak			Suláriwak
	Úniwak			Tanúkichawak
	Yabariwak			Tkíutöwak
	Yëyewak			Tkúgdiwak
				Ulitsuwak
				Ulúkichawak
				YeLiawak

Sources: Bozzoli 1972:555; Bozzoli 1975: 32-37; Bozzoli 1977a; Bozzoli 1977b; Bozzoli 1982; Jara and Garcia 2003; Pittier 1938; Stone 1962:36,

Figure 3. 2 Reconstruction of Bribri moiety system and clan hierarchy

As the moieties are not named, I have arbitrarily called them Moiety I and Moiety II. I have assigned each clan to one of four hierarchically ranked groups of clans within two moieties[5]. My divisions between grouped clans are somewhat arbitrary, as the complete Bribri moiety system is not well documented. However, Bribri society maintained clearly defined divisions between groups of clans that exchanged marriage partners, and it is these divisions that serve as the basis for my divisions, together with the offices that clan members could occupy. For example, members of the *suwëutöwak* and *koktuwak* clans traditionally exchanged marriage partners exclusively with members of the *chëliwak*, *sálkwak* and *túbolwak* clans but not with any lower ranked clans. As these five clans provide the only eligible members to the highest political and religious positions, they collectively represent the highest ranking clan group (Tier 1) and all other clans are ranked below them. Similar clan marriage rules applied to lower ranking clans. Below I discuss each tier in the Bribri system, working from the top down.

Tier I. Chiefs/Priests
The greatest political and religious authority was confined to the highest ranked Bribri clans, designated Tier I. These include clans in both moieties: the *suwëutöwak* and the *koktuwak*, the two clans from which the uséköl was chosen, and the *chëliwak*, *sálkwak* and *túbolwak*, the three clans from which the *bulu'*, secondary chief, and *bikili'* were appointed. The organization of the top tier of the Bribri hierarchy has several important characteristics.

First, leadership was divided so that one moiety held spiritual and religious authority, while the other moiety held secular political authority. Second, while leadership was split between the two moieties, the two highest-ranking positions were not always considered

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5 In compiling this chart I did not include clans whose moiety affiliation was uncertain. Clans whose moiety affiliation I knew but whose specific social position are unclear, I are grouped with Tier 4. Therefore some positions, such as the war chiefs, may include additional clans for each moiety.

political equals. In the late nineteenth century and into the twentieth century the *uséköl* was the highest-ranking member of Bribri society, with the chief's position ranked slightly lower. According to Bozzoli (1975a:54), a Bribri *bulu'* consulted with the *uséköl* before making important decisions.

The hierarchical relationship between the two halves of Bribri leadership may have been reversed before European contact, when Bribri chiefs maintained stronger regional power. European contact significantly reduced the political authority of the Bribri chiefs as they fell under increasing control of Spanish authority. Similar shifts in the importance and authority accorded to these two offices may have occurred in pre-Columbian times, depending upon the effectiveness of a given leader and the larger political climate in which the Bribri political system operated.

Tier II. Nobles

Tier II includes several high-ranking clans that, according to Stone (1962), could be considered the equivalent of Spanish "nobles". Members of Tier II are broadly defined as "nobles" but could be subdivided. The members of these clans were considered good candidates for all professions in Bribri society, except for those filled by members of Tier I. Some of the historically known clans from this tier (the *sibawak* and *kólkwak* clan from Moiety I and the *kabékwak*, *olöriwak*, and *sulítuwak* clans from Moiety II) had the privilege of appointing funeral singers (*tskolpa*), the third-highest ranking position in the Bribri hierarchy and the second-highest ranking religious leader in Bribri society, second only to the *uséköl*. The fact that the third-highest position in the Bribri hierarchy is a funeral specialist emphasizes the importance of mortuary activities and the proper treatment of the dead in Bribri society. It is unclear which

clans named the *óköm* but it is reasonable to suggest that they may have also come from Tier II clans.

In the past, many of these clans may have appointed assistants or advisors to the civil chief or *usékö̈l*, or served other important political, religious, or funerary functions. Members of Tier II clans were ineligible to assume the chief's position and therefore did not represent a direct political threat to the chief. In rare cases members of these clans were permitted to marry members of Tier I clans when more eligible partners were not available.

Tier III. War Chiefs
Tier III includes the war chief clans. As stated above, we know very little about the war chiefs and their roles. Members of these clans were considered powerful and were often feared by others in their own communities. In Bribri worldview, war chief clans are often associated with felines or monkeys. It is unclear why certain clans were able to appoint war chiefs and others were not. However, war chiefs did maintain higher authority than commoners (Tier IV) but not as much authority as the certain religious specialists and other members of Tier II. Their lower status in comparison to Tier II may have to do with the fact that their clans were considered more distantly related than the higher ranking clans (Bozzoli de Wille 1975a:30-31) and that their clans were conceived of as not originally springing from pure maize but were "mixed" (Bozzoli de Wille 1975a:31. Marriage partners of Tier III are also poorly defined.

Tier IV. Commoners
Tier IV includes all other clans and represents the bulk of the Bribri population. Commoners were food producers and craft specialists and, with training, they were able to fulfill certain religious or medical professions or healers (*awapa*).

In summary, both the Bribri and Cabécar traditionally were organized into two moieties, each with several ranked clans. Leadership was vested in two principal offices: the *uséköl*, a high priest, and the *bulu'*, a civil chief, each from the highest-ranked clans of their own moiety. Lower-ranking clans filled other leadership roles by appointing advisors, war chiefs, funeral specialists, and shamans. While leadership was divided between the two moieties, authority and power were not always shared equally. This created the possibility of a *de facto* hierarchical relationship between the moieties.

The Bribri-Cabécar system is not unique to the Intermediate Area. Societies with similar dual systems of organization were once known found throughout southern Central America and into northern South America. In particular, Kógi political structure and mythology are largely comparable to the Bribri-Cabécar system

The Kógi

The Kógi, Ica, and Sanhá are three groups that comprise the approximately 6,000 Chibcha-speaking Indians who live in the high mountain regions of the Sierra Nevada de Santa Marta in northeastern Colombia[6]. They all are believed to be the modern descendants of the Tairona Indians, who lived in the same region from A.D. 1000 until the Spanish Conquest (Bray 2003; Reichel-Dolmatoff 1974: 290). The Kógi remain the least acculturated of the three groups, and despite demographic disturbances and increasing contact, they have successfully maintained many traditional cultural practices. This is largely due to the fact that they live in a relatively barren, steep, and difficult terrain that most outsiders consider uninhabitable.

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6 Until the publication of Gerardo Reichel-Dolmatoff's 1950-1 publication, *Los Kógi: Una Tribu de la Sierra Nevada de Santa Marta, Colombia*, The Kógi were commonly known as the Cágaba. Reichel-Dolmatoff changed the name to the term used by the people. "Cagaba" is now frequently used as a term to refer to all Chibcha-speaking tribes in the Sierra Nevada de Santa Marta.

In Kógi cosmology, they live at the center of a nine-level "cosmic egg", the uterus of the Mother Goddess. According to their creation narrative, the Mother Goddess created the Kógi from the seeds of the ahuyama plant (*Cucurbita moschata,* a South American squash). The plant serves as a metaphor for a genealogical tree, the stalk representing the Mother Goddess and its spreading branches representing lineages, families, and individuals (Reichel-Dolmatoff 1984:150). More distant branches include other living creatures such as plants and animals.

Like the Bribri, the Kógi understand the natural world according to principles of dualism, expressed as "opposed complementary segments," and the Kógi religion centers on finding and maintaining equilibrium between humans and their place in the world (Reichel-Dolmatoff 1984, 1974). According to Reichel-Dolmatoff (1975:209-210):

> Los Kógi siempre operan con un concepto de oposiciones complementarias; cada fenómeno u objecto se cree tener su parte opuesta, invisible y negativa pero esencial, y esta division se establece casi siempre sobre un plano vertical de un 'arriba' y 'abajo', que corresponde a conceptos de luz y obsuridad y, finalimente del Bien y del Mal. Al tomar como modelo cósmico el huso de hilar, el disco del volante es el que divide las dos partes del cosmos, el iluminado de arriba y el obscuro de abajo, y que establece así dos mundos opuestos según el modelo bicónico, cada uno formando una escala de valores. Estos mundos se escalonan desde la luz cenital el sol hasta las tinieblas del nadir, cada uno representando una unidad en su propio derecho, pero pudiendo existir solo en función de su partipación en un todo que es, precisamente, este doble cono cósmico.

> The Kógi have always functioned with a complimentary opposition concept: each phenomenon or object is believed to have an opposite, invisible and negative but essential, and this division is established almost always on a vertical scale of "up" or "down" which corresponds to the concepts of light and darkness and finally of good or bad. Taking as a cosmic model the thread of a spindle, the spinning wheel is what divides both parts of the cosmos, the illuminated part above and the dark part below, and this way establishes two opposite worlds according to the biconic model, each one is formed according to a value scale. These worlds are scaled from the vertical light from the sun to the darkness of the nadir, each one represents a unit in its own right, but it could exist only in the function of its participation in which all is, precisely this double cosmic cone (my translation).

This dualism structures the layout of Kógi villages, which are divided into two parts, and the design of their temples, which are constructed in two halves with opposing doors (Reichel-

Dolmatoff 1974:295; 1975:202). Kógi dualistic concepts are also expressed socially in the Kógi *Túxe--Dáke* system. The Túxe are series of patrilines, membership in which passes from father to son, while the *Dáke* form a series of matrilines, membership in which passes from mother to daughter. Each Kógi man thus society belongs to only one *Túxe* and each woman to only one *Dáke* (Reichel-Dolmatoff 1950:154-5). Each lineage is associated with a totemic animal, and these lineage-totem pairs form the basis for *Túxe–Dáke* marriage rules. Reichel-Dolmatoff (1950:185) explains that each "member of a certain patriline must marry women whose matriline is associate with an animal that is the natural prey of the man's animal." Thus, men of the Eagle *Túxe* must marry a woman of the Snake *Dáke*, men of the Jaguar *Túxe* are paired with women of the Peccary *Dáke*, and so on. Marriage between close relatives is strictly forbidden. Some *Dáke* and *Túxe* are of higher status than others, depending upon their genealogical proximity to certain mythical fathers (Oyuela-Caycedo 1998:43).

In Kógi society, there are two principal authorities, the *máma*, a high priest, and the *makú*, the chief. Today, every Kógi village still maintains a makú, but the role has greatly diminished since the Conquest, while the role of the *máma* has grown in importance. The máma seeks to maintain order in the universe, serving as an intermediary between the Kógi people and the supernatural world. They advise in both personal and community decisions and ritual. Their duties are broad and include officiating at rites of passage and funerals, and receiving regular and mandatory confessions from each member of the community. The *máma* also treats illnesses.

Every *máma* appoints two assistants who accompany and assist him as he performs his duties. These assistants carry the title of *hukúkui*, meaning master or caretaker. In Spanish, the caretakers are frequently referred to as *cabo* (chief or headman) and a distinction is frequently

made between the *cabo mayor* (high chief) and the *cabos*. The assistants hold no authority

independent of that of the *máma*. They are occasionally replaced with new assistants, usually

high-status individuals selected by the *máma* (Reichel-Dolmatoff 1950:132).

Summary

The Bribri-Cabécar and Kógi represent Chibchan speaking populations who have

maintained many of their social traditions despite more than 500 years of European contact.

While details of the Kógi and Bribri-Cabécar socio-political systems differ, they are remarkably

similar in overall structure. Both groups share a cosmology with a nine-level universe in which

dualism is a central organizing principle. This dualism is expressed in both the social and

political spheres. In both groups, society is organized into two halves, moieties among the

Bribri-Cabécar and the matriline-patriline division among the Kógi, while political leadership is

shared between a religious and a secular leader.

Hierarchical ranking is also important, however. Clans in Bribri and Cabécar society and

matrilines/patrilines in Kógi society are ranked relative to one another. Political hierarchy is

embedded within this hierarchical kinship structure with political and spiritual leadership roles

reserved for members of certain high-ranking groups. Marriage rules, set firmly in mythology

and tradition, ensure that member of the most powerful clans would members of other high-

ranking clans, and thus members of lower ranking clans could not assume leadership roles

through marital ties.

Because the Bribri and Cabécar likely have their historical roots in the Chiriquí period,

their social and political organizations provide a useful model to trace social and political

systems back in time through Contact period written records, and into the Chiriquí period. In so doing, I assume that social and political institutions shared over a wide territory are likely to have deep historical roots. Thus, I expect to find the following elements of Bribri-Cabécar and Kógi social and political organization in those societies during early Spanish Contact and in the pre-Columbian Chiriquí period:

Dual Social Organization: First, I propose that Chiriquí society at and before Contact was divided into moieties. Here, "moiety" is used broadly to refer to any society that is divided into two groups so that every member belongs to one or the other. In the case of the Bribri and Cabécar, these groups were exogamous matrilines but a different system could have characterized Chiriquí culture, as illustrated by the Kógi. Archaeologically it may not be possible identify such distinctions.

Dual Leadership: I further expect that this dual social organization will have political expressions. I propose that Chiriquí leadership was in the form of a diarchy, with each moiety represented by one leader. I expect that leadership was divided between sacred and secular offices, with one moiety providing a secular chief and the other providing a high priest or other religious authority. As is common with such forms of organization, one office may have held greater status than the other.

Internal Ranking of Moieties: The ethnographic accounts summarized above lead me to expect that the kin groups comprising each moiety were ranked, with the highest-ranking groups tied to leadership positions. Higher rank may have also permitted preferential access to some resources,

as descriptions of Bribri clans indicate that the higher-ranking kin groups were wealthier than lower ranking ones.

Archaeology of Dual Organization

While dual social organization has been a topic lengthy discussion in the cultural anthropological literature (e.g. Lowie 1947; Levi-Strauss 1956; Maybury-Lewis 1960, 1989) and is recognized as one of the most ubiquitous forms of social organization in the New World (Hornborg 1988; Olson 1933), it has rarely been addressed archaeologically, largely because such systems can be difficult to identify through archaeological remains. Notable exceptions include research in the American Southeast (Knight 1998), the American Southwest (Fowles 2005; Lowell 1996), and the Andes (Burger and Salazar-Burger 1993; Moore 1995). In the remainder of this chapter I review previous research on dual organization, focusing on the Andes. Because Andean concepts of dualism are often expressed spatially I focus on how dual organization is materialized in the layout and organization of archaeological sites. I expect that material expression of dual organization at Andean sites will provide an analogue for how similar organizing principles may be expressed spatially at Chiriquí period sites in Costa Rica. From these Andean case studies, I draw a series of expectations that I will then apply to Contact-era and Chiriquí period societies of southern Costa Rica."

Andean Dual Organization

In the Andes, the division of people, villages, and political territories into opposed halves has been a primary organizing principle for centuries (Gelles 1995; Netherly and Dillehay 1986; Zuidema 1989). Throughout Ecuador, Peru, and Bolivia, highland populations continue to

organize labor, land, rituals, and resources according to dual systems and schema (Allen 1988; Palomino 1971; Urton 1993). Although Andean dualism is deeply rooted in a cosmology that likely has its origins thousands of years in the past (Burger and Salazar Burger 1993), it is perhaps best understood through the lens of Contact and Colonial period sources.

According to Tom Zuidema (1964, 1989, 1990), the first chronicle of Cuzco, written by Juan de Betanzos [1551] shortly after the conquest of Cuzco in 1533, described Inca society as organized between the *hanan* (upper) and the *hurin* (lower) moieties.

Throughout the empire, the Inca divided towns and provinces into dual divisions for political and administrative functions. Dual organization was clearly materialized at the Inca capital Cuzco, situated at 3,395 m near the confluence of the Tullumayo and Saphy rivers. The central sector of Cuzco was inhabited by members of ten royal lineages (*ayllu*), which were equally divided into the *hanan* and *hurin* moieties. Members of the *hurin* moiety resided in the southern part of the capitol, and those of the *hanan* moiety resided in the northern part. Although there was a spatial division between the two moieties, it does not appear to have been clearly marked architecturally (Hyslop 1990:62).

Near the center of the capital was a large plaza, divided into two parts by the Saphy River, which ran through a covered channel beneath it (Hyslop 1990:34, 37, 42). To the west of the Saphy River was the Cusipata plaza. This plaza was almost completely destroyed soon after Spanish conquest so its original size, features, and functions are poorly understood. To the east of the river was the Huakaypata plaza, which covered approximately 3 ha and was covered with a thick later of sand from the Pacific Coast (D'Altroy 2002:115). Near the center of the paired plazas was a large standing stone called an *ushnu*, which served as a shrine and platform on which sacrifices and other rituals were performed. Both plazas were surrounded by a series of

large walled compounds, which served high-ranking lineages of the *hanan* and *hurin* moieties.
The largest and most important compounds were located around the perimeter of the Huakaypata
plaza (Hyslop 1990:40).

The plazas would accommodate several thousand people during large social and political
gatherings held several times during the year. During some ceremonies the mummified remains
of Inca rulers were carried from the surrounding royal compounds and arranged in order of their
rule at the center of the Huakaypata plaza. Food was placed before each mummy and burned as
an offering. Funerary activities and other public performances within the dually divided spaces
would have helped reinforce the *hanan - hurin* social order.

John Murra (1968) described the central role of dualism in the political organization of the
sixteenth century Aymara kingdom of Lupaqa in Bolivia. According to documentary sources, the
Lupaqa were organized into two moieties and ruled by two "kings," Qari and Kusi. While both
maintained equal access to most resources and services, the former had a higher income, status,
and access to more land and labor than the other. Murra (1968:126) further states, "Each of the 7
provinces of the Lupaqa realm and the kingdom as a whole were divided into upper and lower
moieties; pairs of lords, subject to Qari and Kusi, ruled at the provincial level. Even low status
and subject population were fitted into this dual pattern."

A third example comes from Patricia Netherly's (1978) analysis of sixteenth and
seventeenth-century Spanish colonial records from the North Coast of Peru. Her work revealed
Contact and Colonial period system of upper and lower moieties ruled by a *cacique principal*
and *a cacique secundario*, respectively.

Thus, documentary sources from the north coast of Peru through central Bolivia concur that pre-Columbian and Contact-era polities were organized in halves, sometimes along moiety lines, and that the two halves were asymmetrical, with one half maintaining a slightly higher position than the other. This asymmetrical dualism, whereby a whole is divided into two unequal opposed complimentary units, is a common feature of Andean societies (Burger and Burger 1993; Urton 1993).

While dual organization in the Andes is well established ethnographically and ethnohistorically, its origins remain a topic of some debate among Andean scholars. Most arguments regarding the antiquity of Andean dualism are based in analyses of architecture and art. Social patterns are often manifested spatially, particularly in public architecture. For example, Michael Mosely (1993) suggests that the paired, monumental platforms (often called *huacas*) at many Moche (A.D. 100 - 800) sites throughout the North Coast of Peru may be architectural expressions of asymmetric dualism. Examples include the paired Huaca Cao Viejo and the Huaca Cortada at the El Brujo complex in the Chicama Valley and the paired Huaca del Sol and Huaca de la Luna in the Moche Valley. According to Moseley (1993:178), "It is difficult to prove but tempting to see the two great monuments as reflecting dual organization at the apex of rule, with a dominant imperial moiety operating from Huaca del Sol, and its counterpart from Huaca de la Luna." More robust testing of this hypothesis requires extensive excavations of two paired mounds from a single Moche site (Quilter 2002).

Richard Burger and Lucy Salazar-Burger (1993) present evidence for widespread pattern of dualism expressed in the organization of sites throughout the Andes dating to at least the first millennium B.C.: "... There is ample evidence to infer the centrality of dualism in Andean thought and behavior some 2500 years before the Incas" (Burger and Salazar-Burger 1993:106).

They suggest that the origins of Andean dualism may correspond with the appearance of U-shaped architectural complexes, which first occur in the Late Preceramic period (3000 - 1800 B.C) but become more common and elaborate during the early Initial period (1800 - 700 B.C.): "If one accepts the interpretation of U-shaped pyramid's layout as a cosmogram that expresses the mediation of opposing but complementary forces, then the central concept of dualism for structuring ceremonial behavior on the central coast must go back at least to the beginning of the Initial period (or Lower Formative) at 1800 B.C." (Burger and Salazar Burger 1993:110).

A prime example is the site of Cardal (c. 1150 - 800 BC), located in the lower Lurín Valley. Excavations in 1985 and 1987 by Richard Burger and Lucy Salazar-Burger documented a 20 ha complex of public and residential architecture (Burger and Salazar Burger 1991).

The public architecture, located at the core of the site, included three platform mounds arranged in a U-shape, which enclosed a large central plaza (Figure 3.3). The base of the U, located at the south end of the plaza, forms a central pyramid, which measures 130m x 45m x 17m and is constructed with stone retaining walls plastered with clay. The east and west boundaries of the plaza are enclosed by the arms of the U. The ceremonial complex was constructed along a north-south central axis of 17 degrees east of true North. Along either side of the central axis were paired causewayed plazas and paired circular courts. While architecture on both sides of the central axis of the site were largely symmetrical, arms of the U-shaped structure were constructed at different scales with dimensions of the east arm more than twice those of the west arm.

Burger and Salazar-Burger (1993:110) hypothesize that ceremonial processions began north of the site and moved south along the central axis, passing between the two causewayed

plazas, the paired circular courts, across the central plaza, and terminated at an enclosed atrium

on the top of the central pyramid.
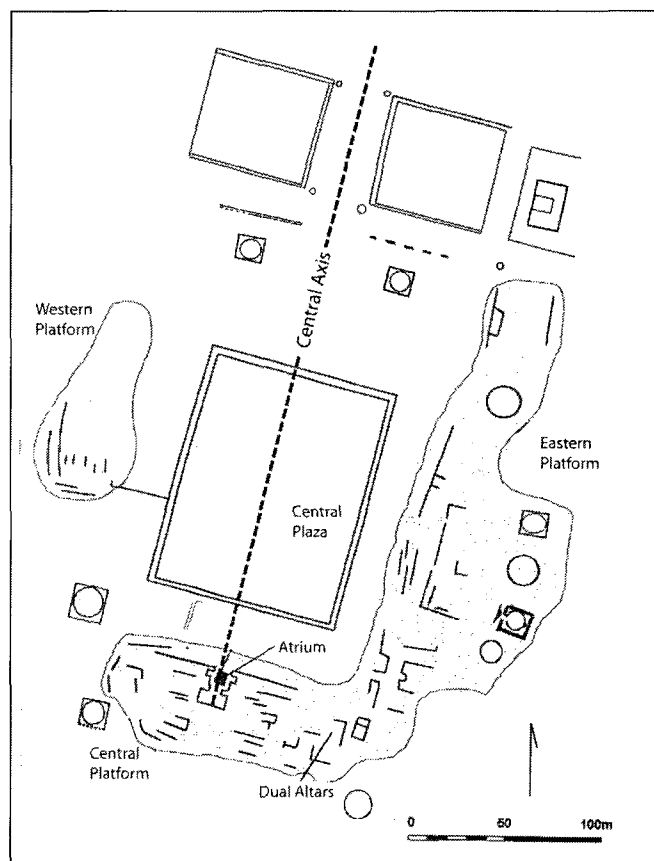
Figure 3. 3 Site of Cardal, lower Lurín Valley, Peru (after Burger and Salazar Burger 1991)

Also in the Lurín Valley is the site of Pampa Chica, dating to the late Initial Period and

Early Horizon (700-200 B.C.). Jalh Dulanto (2002) has argued that the site's architecture was

designed to process and store the remains of dead individuals and to accommodate gatherings of

large numbers of people to commemorate the dead. The site consists of two primary structures

located 140 meters apart. Both structures are internally subdivided into a series of distinct

sectors comprised of open and closed patios, terraces, and rooms (Figure 3.4). These sectors are

positioned on different levels to form upper and lower enclosed spaces.
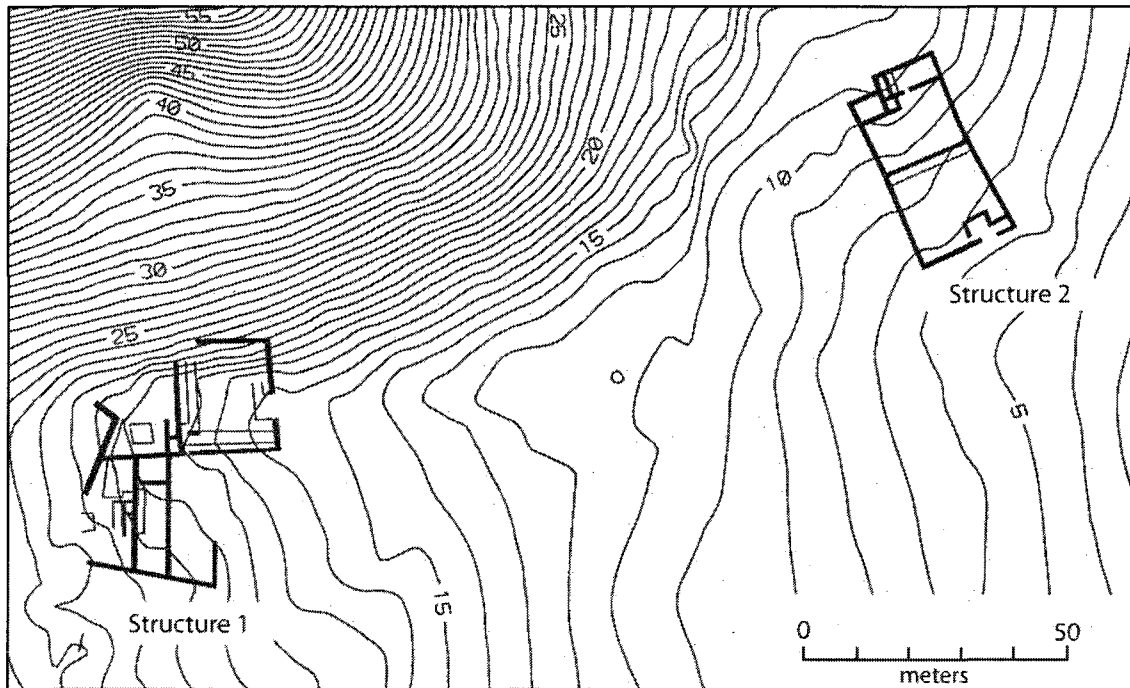
Figure 3. 4 Structures 1 and 2 at Pampa Chica. (Modified from Dulanto 2002:101)

Structure 1 is the larger of the two and is positioned 10 meters higher than Structure 2. It is

internally divided into two symmetrical halves, each with a lower open sector and an upper

closed sector. The lower sectors are two to three times the size of the upper sectors. The spatial

organization of the structure suggests that "...movement within Structure 1 could be

characterized as one marked by a transition from larger, more open spaces, located on the lower

terraced levels to smaller, more closed spaces, located on the upper ones, and the simultaneous

separation of the participants into two symmetrical groups" (Dulanto 2002:103).

Structure 2 is positioned on a lower and more accessible portion of the site. It is smaller than Structure 1 and contains fewer internal sectors. Like Structure 1, patios, rooms, and terraces in Structure 2 are arranged into two symmetrical halves of lower open and upper closed spaces.

Activities at the site included the manufacture, distribution and consumption of chicha beer; the preparation and interment of the dead; and the gathering of large numbers of people for the commemoration of deceased ancestors. Features and artifacts throughout the site showed specific sets of activities occurred within spatially defined areas of the site (Dulanto 2002:106). Large numbers of storage pits, large ollas, botanical remains, and animal bones within the upper rooms of Structure 2 indicated that activities in that area the storage and preparations of food and chicha beer. These food items seem to have been consumed by paired groups of people gathered in large opens spaces in the lower half of Structure 1. In the upper rooms of Structure 1 was evidence for the burial, removal and reinterment of human bones.

The presence of open and closed spaces indicates that some activities were open, public displays while others were closed and private. The paired symmetrical spaces within Structures 1 and 2 strongly suggest that participants were divided into two groups during these public gatherings. Dulanto makes the important point that although activities carried out in these areas appear to have been divided into two groups, it does not necessarily imply that the society as a whole was organized by dual divisions, only that those activities were.

Scholars have observed that representations of dual concepts are also manifested in ceremonial architecture and sculpture at the site of Chavín de Huántar. According to Burger and Salazar-Burger (1993:98), at Chavín de Huántar there is "...not only evidence that fundamental principle of 'dual opposition' existed but that it was used to structure the very basic notions of

cosmology, and, as a consequence, it pervaded multiple levels of Chavin religious worship, including ceremonial organization and religious ritual."

The site was established at approximately 900 B.C. along the eastern slopes of the Cordillera Blanca at an elevation of 3150 meters above sea level. Located near the confluence of the Huachecsa and Mosna rivers, Chavin de Huantar consists of a ceremonial complex constructed, expanded, and renovated over period of seven centuries (Burger 1995).

At the core of the site is the Castillo, a masonry construction encompassing two contiguous structures: the Old and New Temples (Figure 3.5). The Old Temple is a U-shaped construction, open to the east and surrounding a central courtyard, which contains a small sunken circular court upon the central site's central axis (Burger 1995:130). Like U-shaped structures elsewhere in the Andes, the form of the Old Temple is believed to represent "… a metaphor for the mediation of dual opposing forces" (Burger 1995:132).

Later modifications and architectural additions to the site were designed to maintain the spatial and symbolic principles of dual opposition within the complex. The construction of New Temple contiguous to the south side of the Old Temple created a second site axis, parallel to the first (Burger and Salazar-Burger 1993:102). This new axis corresponded with the main entrance to the New Temple and several sets of steps leading into a sunken rectangular plaza located to the east of the Castillo.

The axis also passes between several paired sets of architectural features. These include a pair of small buildings located on the summit of the New Temple and a pair of balconies on the east face of the structure (not show on Figure 3.5). Stairs on the north and south ends of the Sunken Court are a third example of symmetrically opposed architectural features.

The dual divisions along the south axis were emphasized though the use of exotic construction materials. The entrance to the New Temple was constructed with black limestone was utilized in the construction of the north half of a set of steps and jambs located on the north half of the axis. White granite was used to construct the features on the south half of the axis. A large stone stairway and a pair of stone columns located between this entrance and the sunken utilized the same black limestone on the north and white granite on the south.
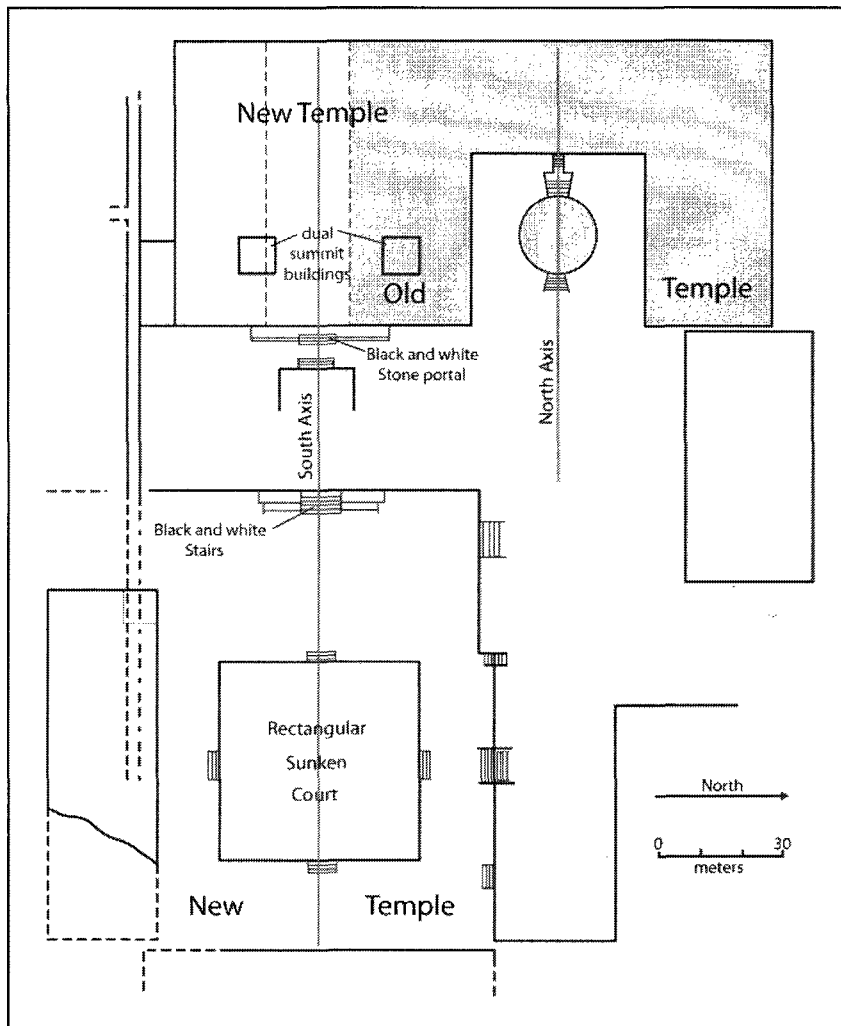
Figure 3. 5 The Old and New Temples at Chavin de Huantar. (Modified from Burger 1995:131)

Chavin sculpture provides secondary evidence for dual organization (Urton 1993:119). Located within the subterranean gallery of The Old Temple is the Lanzón, a carved granite stone, 4.53m in height. The image on the Lanzón depicts a fanged anthropomorphic deity, interpreted as "the mediator of the opposing forces symbolized and as guarantor of cosmic harmony" (Burger and Salazar Burger 1993:98). The image is largely symmetric with notable exceptions. The right arm is raised with the palm open while the other is lowered with the back of the hand facing out. Other sculptures throughout the site depict concepts of dual opposition by incorporating similar symbolic design conventions (Burger 1995:147; Burger and Salazar-Burger 1993:99).

Several patterns emerge from this review of dual patterns at Andean sites. Drawing largely from the excavated architectural features at Cardal, Pampa Chico, and Chavin de Huantar the following patterns reliably reflect dual organization and thus may be used to identify dual organization in Costa Rican sites.

Axial Symmetry: Sites are organized along a central axis with paired sets of functionally equivalent architecture opposed along the axis. The paired features are often joined (or separated) by a shared architectural space, typically a plaza, patio, mound, or terrace. In complexes that were designed to accommodate large numbers of people, movement was systematically channeled along the axis, diverging to enter paired spaces, and then rejoining in the shared spaces on the axis again.

Asymmetry: Although the paired features are similar in function and form, there is often a clear asymmetry in arrangement and size. Architecture on one half of the axis may be larger in scale (height, volume, and/or footprint) or positioned higher in elevation than its paired counterpart.

Asymmetry is clearly expressed at Cardal, where the east arm of the U-shaped structure is more than twice the size of the west arm. Similarly, paired spaces at Pampa Chico are constructed in unequal sizes. Asymmetry does not appear to be represented in the paired architectural spaces at Chavin de Huantar. However, this concept does appear to have been utilized in iconographic representations of mythical figures and deities, such as the opposed raised and lowered arms depicted on the Lanzón.

Public Architecture: The above examples also demonstrate that these patterns are most clearly expressed in public architecture, where public ceremonies were held that served to reinforce a social, political and cosmic order. Dual spatial patterns at these sites described above don't just passively reflect dual social structures, they were created specifically to provide venues for activities by dually organized groups, and that by engaging in those activities, those very dual divisions, membership within them, and the relationships between them could be contested, negotiated, and reproduced.

Spatial and Material Expectations

Dual principles are well defined ethnographically among the Bribri, Cabécar, and Kógi in the realms of cosmology, social organization, and political organization, and concepts of dualism are common more broadly among indigenous inhabitants in the Intermediate Area. Therefore, we can expect that similar forms of dualism may extend back to European contact and into the pre-Columbian past. I expect that the ways that archaeological sites in the Andes encode dual principles provide spatial and material expectations for identifying similar forms of organization in other regions. If the forms of dual organization that characterize contemporary Bribri,

Cabécar, and Kógi society extended back to the Chiriquí period, the following patterns should be apparent ethnographically and archaeologically.

First, sites may be geographically positioned in relation to paired elements within the natural world. Examples from the Andes illustrate that many sites are located at the junction of two rivers or with a river dividing two halves of a village. The locations of villages described in Contact era sources and archaeological sites in Costa Rica should be similarly positioned.

Second, spatial patterning of archaeological sites and Contact and Colonial era villages should demonstrate that sites are divided into two distinct halves. Dual spatial organization may be expressed with a village divided into to spatially discrete halves or with architecture organized into multiple paired sets constructed in relation to a central axis. The paired spaces along the axis would likely be linked or separated by large shared spaces able to accommodate groups of people.

Finally, if Chiriquí society was in fact a diarchy, architectural (and other) expressions of these social and political divisions may be materialized asymmetrically. In other words, one of the paired architectural elements should be constructed as significantly larger than its opposed counterpart. Asymmetric elements may be repeated throughout the site.

In the following chapter I present an analysis of the region's ethnohistoric accounts of the region. Although most interpretations of these documents have suggested that indigenous societies were hierarchically organized (Helms 1979; Ibarra 2002), I argue that they provide two lines of evidence for diarchy. The first are descriptions of contact-period sacred and secular leadership positions, which closely match those described ethnographically. The second is based on Spanish accounts of several contact villages, which are described as organized into two spatially discrete residential areas.

4. SOCIAL AND POLITICAL ORGANIZATION IN 16TH AND 17TH CENTURY COSTA RICA

In the previous chapter I used ethnographic descriptions of the Bribri of Costa Rica and the Kógi of Colombia to illustrate a widespread patterns of dual social organization and leadership, which stretches from central Costa Rica to Colombia. Based on the striking parallels in cosmology, social organization, and political organization throughout the region, I proposed that similar forms of dual social and political institutions might extend back to and predate Spanish contact, perhaps by centuries.

In this chapter I evaluate the evidence for dual social and political organization during the Contact and Colonial periods by identifying evidence for such organization in sixteenth and seventeenth century historic documents. Just as Contact period documents from the Andes present evidence of dual organization with descriptions of dual leadership and paired villages, territories, and architectural features, I expect that evidence of dual organization in southern Central American village organization and social structure may be found in Contact era descriptions of villages and social structure. In particular, I review Spanish descriptions of Contact period political hierarchies and the spatial organization of Contact period villages in southern Central America in order to evaluate the model of dual social and political organization. I present two lines of evidence that support the model presented in the previous chapter. First, Contact descriptions of political and religious leadership in Costa Rica and Panama closely match those described ethnographically for the Bribri and Cabécar moiety hierarchies Second, the Spanish described some large settlements in Costa Rica and western Panama as divided into two spatially independent halves.

The Contact-period in Costa Rica and Panama

The era of European contact and conquest began on September 25, 1502, when Columbus made landfall at Cariay (Cariari) on the Caribbean coast near what is today Puerto Limón, Costa Rica (Sauer 1966:125). Over the next century, Europeans would venture farther inland to explore and settle the region, describing the people, places, and events they observed. Letters and documents pertaining to sixteenth-century Spanish exploration and conquest of Costa Rica have been collected and compiled by numerous scholars including Manuel Peralta (1883), Ricardo Fernández Guardia (1913, 1964), and León Fernández (1882-1907). Similar documents for Panama and other regions of the New World were collected and recorded by several sixteenth-century chroniclers. In particular, the works of Gonzalo Fernández de Oviedo y Valdés (Oviedo 1959), Pascual de Andagoya (1865), and Peter Martyr d'Anghera (1912) provide some of the most comprehensive descriptions of the New World.

My primary interest concerns descriptions from the Chiriquí archaeological region, as defined in Chapter 1. The first Spanish forays into the region were the 1516 and 1520 expeditions of Gaspar de Espinosa, but these early accounts provide little detailed information of indigenous societies. The 1563-1564 expeditions of Juan Vázquez de Coronado were the first to record them in any detail. His descriptions are particularly useful because his explorations covered much of the region from the Central Highlands of Costa Rica to the modern Costa Rica-Panama border, and he frequently recorded detailed information on the locations of villages and their internal organization. Since a single individual recorded these descriptions over a relatively short period of time, they likely provide more consistency in terminology and detail than those gleaned from multiple witnesses.

The limitations of using Spanish sources to understand and reconstruct indigenous society during this period are well documented (Fowler 1992; Helms 1979; Wood 1990). They are often vague, incomplete, and difficult to fully comprehend. Because recorded events were witnessed and recorded often decades apart and by many individuals, they do not provide a complete set of documentary information for any particular village, ethnic group, or region. As they are written from the point of view of an invading culture, they lack objectivity. Chroniclers were selective about the topics they discussed and the information they included or omitted. Descriptions of places and events are often vague; and because many of these accounts were recounted and recorded years after the events occurred, many details likely were forgotten, changed, or omitted. Despite these limitations, scholars working in Lower Central America have used early historical documents extensively to reconstruct Contact and pre-Contact social organization, political interactions, regional exchange, settlement patterns, and mortuary practices (see Abel-Vidor 1981, 1986; Ferrero 1981; Helms 1979; Ibarra 1985, 1999, 2002; Linares 1977; Lothrop 1937, 1963; Sauer 1966).

Social and Political Organization

The Spanish attempted to understand political structure and territorial organization of indigenous groups throughout the Americas, but they often lacked the interest or knowledge needed to examine the details of the structure of the social, political, and religious systems they encountered and described. Throughout the Americas, the Spanish applied European and local terminology to describe indigenous leaders and other high-ranking members of social and political hierarchies. Martyr (1912:1:313) explains that "… from one shore to another the names of the chiefs and principal inhabitants differ. In one place they are called caciques…in another

quebi, and further on tiba. The principal natives are sometimes called sacchus and sometimes jura." The term most commonly used by the Spanish is the Taino word, *cacique,* which was adopted during Columbus' first voyage to the New World and subsequently applied to high-ranking members of indigenous political hierarchies across the New World, regardless of their political position or local terminologies. The title *cacique* was often applied indiscriminately to any individual above commoner status. Thus, it is not uncommon to encounter descriptions of villages with as many as seven, eight, or more caciques. Some documents distinguish levels of caciques, describing some as high chiefs (*caciques mayores, caciques principales*) and others as low chiefs (*caciques secundarios, caciques menores*).

Though social and political organization in Costa Rica and Panama seem to have been very similar, the Spanish often used different terms to describe the hierarchies they encountered. According to documentary sources, Contact period chiefdom societies were divided into elites and commoners. Elites included high chiefs (quevís or caciques mayores) and low chiefs (sacos, caciques principales, or caciques secundarios). One's relation to the high chief determined his or her position within the hierarchy. Those most closely related maintained certain privileges and often assumed leadership roles. Commoners were members of the community who were the most distantly related to the high chief.

At Contact, the southern Central American landscape was divided into a number of *provincias*, the Spanish term for province, which in this context denotes an alliance or federation of villages under the control of a primary village and governed by a single high chief (queví or cacique mayor) (Helms 1979; Ibarra 2002). Each provincia included numerous villages, often dispersed throughout alluvial zones in major river valleys. Villages consisted of groups of circular or elliptical structures that served as multi-family houses, temples, and storage facilities.

Other architectural features included causeways and plazas. In southern Costa Rica and western Panama, many villages were heavily fortified with multiple palisades and deep defensive trenches. The inhabitants of the different villages comprising a provincia were linked through political alliances, kinship ties, and exchange relations.

Villages were under the authority of sacos or caciques secondarios who were subordinate to a queví. While the political power of a queví or cacique mayor extended throughout a province, the influence of a saco and other lesser chiefs was confined to a single village and its immediate territory (Ibarra 2002; Fernández Guardia 1964). According to Oviedo (1959:28) sacos were "…something like gentlemen or grandees, separated from the common people, and are superior to others of the ordinary people who they command."

The kin relations between quevís and sacos are not clear and were likely highly variable. In some accounts sacos are described as the sons or brothers of the queví who controlled the primary village and the larger territory. During a Spanish attack on the southern Costa Rican settlement of Coctú, located at the center of the Coto province, Vázquez de Coronado's soldiers learned from a prisoner that villages and provincias in southern Costa Rica were under the control of related groups of fathers, sons, and grandsons (Lothrop 1963). For example, brothers Penonomé and Tacacuri were chiefs of two neighboring polities in eastern Panama (Martyr 1912:1:406). Similar arrangements seem to have operated as far south as the Zenú province, Colombia, which was under the political control of a single family. Finzenú, its primary center, was governed by a female chief and her husband, while her brothers governed smaller villages and their surrounding territories (Hernández 1948:334-5; Helms 1979:158). It also seems that some sacos were unrelated to quevís but were defeated caciques, who maintained authority in their own villages but relinquished larger territorial control to a more powerful ruler, who served

as queví. One example, provided by Martín Carlos de Mencos (de Mencos 1913[1662]:1:265), describes the chiefs of several villages in the Talamanca territory of Costa Rica who were all under the leadership of a single chief: "[T]he territories of the River Tarire and adjacent territories, which are inhabited by various tribes of unsubjected and unconquered Indians called Urinamas, Siruros, Moyaguas, and others, with seven Caciques, all subject to one chief called Cabsi, and had subjected and conquered them." In central Panama, Cutacura, cacique of Paris, gained control over four neighboring provinces through conquest (Andagoya 1865:30).

Provincia boundaries were likely fluid and varied as political alliances shifted with changes in leadership, military activities, and other factors. Quevís and sacos attempted to maintain and expand their political influence through military force, marriage ties, control over the production and exchange of utilitarian and exotic products, and the maintenance of important regional centers.

Relations between villages and between provincias were often strained, and warfare was common. Disputes arose over territorial boundaries and access to resources, and expeditions were mounted to obtain slaves and women (Andagoya 1865:17). Warfare also provided opportunities for a commoner to improve his social position by becoming a çabra. Oviedo (1959: 28-9) explains:

> An Indian who is one of the common people may rise to be a çabra and attain this name or rank in the following fashion: When in some battle of a cacique or lord against another, an Indian fights bravely and is wounded, then the lord calls him çabra and gives him people to command, and he also gives him land or a wife and does him some signal favor for what he did in battle. From then on he is more honored than the others, and lives separate and apart from the common people.

The position and title of çabra was hereditary, passed from father to sons (Oviedo 1959:29). Like the Bribri war chiefs, çabras lived apart from the community and enjoyed certain privileges such multiple wives and control over land. It is not clear from the documents if both quevís and sacos

were able to name çabras or if that was a privilege reserved for only the quevís. I expect these rules differed throughout the region depending upon the political relations between the various ranks of caciques. The position likely provided mutual benefit for both chiefs and commoners. It ensured commoners a path to higher status, and it encouraged their loyalty to the cacique, thus strengthening the cacique's position by building a faction politically and militarily aligned with him.

Marriages between high chiefs and high-ranking women from defeated villages or distant territories were common and possibly served an opportunity for a high chief to expand his political control by creating immediate and future genealogical ties to the land and resources of the defeated territory. In central Panama, the queví of Escoria married the sister of the defeated chief of Parita (Helms 1979:58). In southern Pacific Costa Rica, warfare broke out between two provincias when the high chief of the Coto province captured the sister of the high chief of Quepo (Fernández Guardia 1964). Although the reasons for her capture are not recorded, it may have been for the purpose of marrying her to a high or subordinate chief within Coto in order to establish genealogical links with a competing chiefdom.

Religious Leadership

The Spanish had little interest in local religious beliefs and rarely recognized the importance of indigenous religious leaders within native societies. Spanish documents from Panama do, however, include some descriptions of religious specialists. Like the Bribri bulu'/uséköl division and the Kógi máma/makú division, there is evidence of similar religious/secular divisions in contact-period chiefdoms. At the top of the religious hierarchy was the *tequina* (alternatively, *tecuria*). Although not described as possessing significant political

authority, these priests often advised high chiefs on matters of importance. According to Oviedo

(1959:33):

> This tequina speaks with the devil and receives replies from him. He then tells the Indians what they must do, and he predicts the future. Since the devil is an old astrologer, he knows what the weather will be, and he knows the outcomes of things and how nature rules them. And thus, by the result that naturally is to be expected he informs them of the future and gives them to understand that through his deity, or as lord of all and mover of everything that is and will be, he can foresee things of the future and what will come to pass, and that he causes thunder, and makes the sun and rain, that he rules the weather, and that he gives or deprives them food.

Andagoya (1865:14) provides a similar description:

> The people had chosen certain men called *Tecuria*, who were said to converse with the devil, whom the called *Turia*. The *Tecuria* had a very small hut with no door, and no covering overhead. The chosen person went there at night, and talked with the devil, who conversed in diverse tones; and the chosen person told the chief with he pleased afterwards, saying that the devil had given him such and such answers.

And finally, in a 1610 letter to the king of Spain, Fray Agustín de Ceballos (1913 [1610]:1:212-213) provided a description of Talamancan priests that closely resembles the descriptions of

Panamanian tequinas and tecurias:

> They have idols and priests appointed and designated for the administration of religion; these are wizards, to whom very often the devil gives replies in matters wherein they consult him, and they give them to the people, wherefore they are held in great veneration, it being believed that they have some divine quality as prophets who predict future events and what will happen; and they give news of what happens in other places, distant and remote from where they are.

The above descriptions closely match ethnographic descriptions of Bribri usékölpa. Like

usékölpa, tequinas are described as powerful priests, who predicted the future and intervened in

natural events, such as weather or famine. Also, usékölpa and tecuria worked in isolation in a

small hut at a distance from the community. Andagoya's statement that tequinas "conversed in

diverse tones" is unclear, but he may be making reference to a special language like that which

the Bribri usékölpa spoke, which was unintelligible to all but those initiated into their ranks.

The importance of the priestly hierarchy is evident in the fact that some Contact-period villages served as important regional funerary and pilgrimage centers. In Panama, the village of Dabeiba was well known as a major religious center where "great popular meetings are also held from time to time" for caciques of "even the most distant countries" (Martyr 1912:1:318-9). One of the most striking examples of a Contact-period pilgrimage center is the village of Finzenú, located at the center of the Zenú province in the Sinú River valley, Colombia. Finzenú specialized in religious rituals, particularly funerals for high-ranking individuals from throughout the province and beyond. The Spanish conquistador Alonso de Heredia visited Finzenú in the early 1530s and reported orderly streets arranged around a central plaza. At one end of the plaza stood a large temple complex divided into three naves and large enough to accommodate 2000 people (Reichel-Dolmatoff 1965:128). Inside, temple priests received instructions from deities who revealed themselves in animal form, often jaguars. The bodies of recently deceased high-ranking individuals from throughout the Zenú province were carried to the site for an annual funeral ceremony and interment in a large necropolis composed of numerous artificial burial mounds, which surrounded the village. The size of each mound corresponded to the wealth of the individual interred within. Some mounds were so large they could be seen from more than a league away (Falchetti 2000:144-145; Oyuela-Caycedo 2008).

The Spanish recorded considerable information on mortuary customs throughout the isthmus, beginning with Columbus' fourth voyage. Near the modern town of Limón, Costa Rica, Columbus ordered a party to inspect an inland village. Columbus' son Fernando returned with a description of a large wood and cane structure containing embalmed bodies wrapped in cotton cloth and adorned with gold (Colón 1959). The description is consistent with Martyr's description of chief (queví) Comogre's "palace" at Comogra, located in Central Panama, which

included a large room where he stored and displayed the desiccated remains of his ancestors (Martyr 1912:1:218). Similarly, Gaspar de Espinosa [1519] reported the desiccated and wrapped body of chief Parita and two other caciques (Cooke and Bray 1985:36; Linares 1977: 76). It is likely that the bodies preserved at these sites may have been in storage for eventual burial in distant cemeteries dedicated to high-status individuals, like the one at Finzenú.

Archaeologists have identified several large pre-Columbian cemetery complexes throughout Costa Rica and Panama that likely served as burial locations for elite individuals. These sites include Sitio Conte (Lothrop 1937, 1942), Huacal de Bugába (MacCurdy 1911; Merritt 1860), and the Panteón de la Reina (Quilter 2000, 2004; Quilter and Frost 2007). These and other pre-Columbian cemetery complexes are discussed in more detail in the following chapter.

Though well documented ethnographically, detailed discussions of funeral specialists are nearly absent from Contact-period documents. Given the emphasis on funeral customs at Finzenú, Comogra, and other locations throughout southern Central America, it is likely that there were specialists trained in mortuary tasks. That many of the mortuary customs described at Contact closely match those described by nineteenth-century witnesses (see Angulo 1913 [1862]; Gabb 1875) suggests that many of these practices remained stable, despite the significant that followed European Contact with southern Central American societies.

Commoners and Slaves

Contact-period documents contain very little discussion of commoners and their roles. We know almost nothing about how they lived and how they were organized. We can assume they comprised the majority of the population and engaged in activities such as farming, hunting,

cooking, and village maintenance. Spanish descriptions of indigenous trade goods also provide evidence of specialized craft activities of commoners. Commonly traded goods included shell work, salt, pottery, dyes, and finished products from exotic animals. That commoners could be promoted to higher rank through bravery in warfare indicates that commoners had roles and perhaps obligations during military conflicts.

An account by Lionel Wafer, who spent several years living with Indians in Panama in the 1680s, provides some pertinent information. He describes a division of labor along gender lines in which men cleared fields and engaged in woodworking, hunting, and basketry, and women were responsible for planting and harvesting crops, cooking, and spinning and weaving (Wafer 1903 [1699]:150, 153).

Documentary sources also discuss a social position not described ethnographically: slaves. According to Oviedo (1959), captives taken during warfare were returned to the village of the victors and kept as slaves to serve the highest-ranking chiefs. Slaves were often marked with tattoos on the face or the removal of teeth. They were commonly sacrificed upon the death of a chief so that they could serve him in his afterlife (de Ceballos 1913 [1610]:I, 215).

Although the indigenous groups that occupy Costa Rica, Panama, and Colombia have undergone dramatic changes in their social and political organization since European contact began in the early 1500s, the ethnohistoric descriptions of the social hierarchy and political leadership show strong parallels to those of the ethnographic Bribri and Kógi. In particular, the Bribri system with its ranked clans and two moieties serves as a model that can be posited for the Contact period and evaluated using the descriptions in historical documents.

To review, the Bribri are organized into two exogamous matrilineal moieties, each composed of multiple ranked clans. Members of the highest-ranking clans of one moiety

nominate a high chief, called a bulu', to serve as the political leader. The opposite moiety

provides a high priest, or uséköl from its highest-ranking clans. Other high-ranking members

from both clans fill other leadership positions including interpreters, advisors, and sub-chiefs.

Lower ranking clans from both moieties provide war-chiefs, funeral specialists, healers, and

other positions. Table 2 lists some of the named positions among the Bribri, as described

ethnographically (Bozzoli de Wille 1975, Gabb 1875; Pittier 1902; 1938), and their possible

associations with the terms recorded by the Spanish in early sixteenth-century Panama. I include

high and low chiefs, war chiefs, priests, and commoners, who are all recorded ethnographically

and at contact.

Table 4. 1 Possible correlations of terms used at Contact and more recently

Ethnographic Bribri	Contact Panama
Bulu'	Queví
2nd Chief, "nobles"	Sacos
War chiefs	Çabras
Uséköl	Tequina
Commoners	Commoners
Not present	Slaves

Sixteenth-century documentary sources concur that Contact-period leadership included

one achieved (çabras) and two ascribed (quevís and sacos) high-status groups. These positions

largely conform to those reported for the nineteenth and twentieth centuries by Gabb (1875),

Pittier (1898), and Stone (1962) among the Bribri. As described above, at the top of the Contact-

period political hierarchy was the queví, who governed a village and an extensive surrounding

territory. This position corresponds well with ethnographic descriptions of the Bribri bulu', who

was also at the top of the political hierarchy and governed a large territory.

Below the queví were the sacos, who functioned as subordinate chiefs. Sacos were commonly brothers, sons, or otherwise closely related to the queví. The most closely related sacos, such as sons or brothers, were eligible to assume the position of queví upon his death. More distantly related sacos, although ineligible to ascend to the position of queví, assumed positions of leadership, governing outlying villages within the queví's territory and filling other administrative roles.

The Bribri hierarchy included similar positions but on a smaller scale. The most obvious corollary was the secondary chief to the bulu'. While the secondary chief maintained no official political power, he accompanied the bulu' and was considered the heir to the position. Members of slightly lower ranking clans, which Bozzoli de Wille (1975a) refers to as "nobles," assumed other official duties.

Similarly, Spanish descriptions of çabras closely match those of the Bribri war chiefs. Like war chiefs, the çabras were ranked above commoners but below the lowest ascribed chiefs. At Contact and ethnographically, these positions were hereditary and carried similar benefits and obligations.

I have already noted the similarity between the Bribri uséköl and the sixteenth-century high priests (tequinas) described by the Spanish. Unfortunately, the Spanish did not describe how the priests fit into the indigenous political hierarchy. That quevis are reported to have consulted with tequinas in matters of importance implies that the latter ranked high in the social and political hierarchies.

Some positions described ethnographically are not described in documentary sources. As noted above, we have no descriptions that match those of people with tasks related to the mortuary process in more recent times, like funeral singers and specialists who cleaned and

prepared dead bodies. Similarly, an equivalent to the bikili, who served as an interpreter for the uséköl, is not recorded. It is possible that Spanish witnesses did not observe exchanges between priests and chiefs, and, given their unfamiliarity with the local languages, they might not have recognized an interpreter. If the Spanish did witness such exchanges, it is likely that they went unnoticed or unrecorded.

Finally, most of the population at Contact were commoners, similar to the fourth tier in the Bribri system. Slaves are not present ethnographically.

A comparison of the roles and offices described in Spanish documents closely matches the expectations based on my ethnographically derived model, and thus supports the model's applicability at this time. Following the Bribri-Cabécar diarchy system, in which one moiety provided political leadership and the other moiety provided religious leadership, I suggest that the political hierarchy of contact-period groups may have been arranged in a similar way. Table 4.2 provides a simplified and conjectural reconstruction of contact-period socio-political organization based on the Bribri-Cabécar system. Like the Bribri-Cabécar system, the secular high chief (queví) and the high priest (tequina) would have shared the top tier. Sacos, Çabras, and commoners would have filled out the remaining positions in the hierarchy.

While Spanish sources do not explicitly describe moiety organization or dual divisions of society, there is indirect evidence for them in the some Contact era descriptions of settlement patterns in Costa Rica and western Panama.

Table 4. 2 Possible reconstruction of contact-period organization based on Bribri moiety system

	Moiety I	Moiety II
Tier 1	Tequina	Queví
Tier 2	Sacos	Sacos
Tier 3	Çabras	Çabras
Tier 4	Commoners	Commoners

Pueblos, Palenques, and Dual Organization

Contact-period descriptions of the Central Valley, the southern Pacific region of Costa Rica, and western Panama offer compelling evidence that many villages were spatially organized into two distinct halves, implying that the society as a whole was similarly divided into to two groups. Descriptions of these villages, though typically scant, imply that there were at least three spatial arrangements: those consisting of two fortified villages (*dos palenques*), those organized as two unfortified villages (*pueblos juntos*), and those that consisted of a one fortified and one unfortified village (*pueblo y palenque*) (Table 4.3, Figure 4.1). Descriptions of these villages are recorded in letters and other documents written by Juan Vázquez de Coronado, who conducted extensive explorations of Costa Rica and western Panama between approximately 1560 and his death in 1566. One of the advantages of Juan Vázquez de Coronado's letters and reports is his descriptions were recorded by a single person over a period of ten years. There is thus no possibility of inter-observer differences confounding our interpretations, and they offer more consistency in terminology than many contemporary descriptions.

Table 4. 3 Settlements described by Vázquez de Coronado

Settlement	Location	Description	Year	Source
Atirros	Central Valley	"pueblos juntos"	1563	Fernández 1882-1907 II: 176, V: 24
Cia	General Valley	"dos palenques"	1569	Fernández 1882-1907 V: 24
Coctú	Guaymi Valley	"dos palenques'	1563	Fernández Guardia 1964: 32, 34
Cot	Central Valley	"pueblos juntos"	1569	Fernández 1882-1907 V: 26-7
Coxerín-Ducagua	Panama border	"pueblo y palenque"	1568	Fernández 1882-1907 IV: 477, V: 128
Cutcurú	Atlantic Slope	"pueblo y palenque"	1564	Fernández 1882-1907 IV: 298-9
Quepo	Pacific slope	"dos palenques"	1563	Fernández Guardia 1964: 31-41
Quequexque & Taranca	Almirante Bay	"pueblo y palenque"	1564	Fernández 1882-1907 IV: 298, 303
Turrialba	Central Valley	"pueblos juntos"	1569	Fernández 1882-1907 V: 26-7
Yara & Quircó	Central Valley	"pueblos juntos"	1569	Fernández 1882-1907 V: 26

Vázquez de Coronado's description of Coctú, one of five principal settlements in the province of Coto, located in southern Pacific Costa Rica, is one of the most complete and detailed descriptions of a Contact-period settlement in Costa Rica. Coctú was a heavily fortified hilltop settlement located at the confluence of two rivers, 10 Castillian leagues (44 km) inland from the Pacific coast. The village was divided into two halves, one large and one small, each surrounded by multiple defensive trenches and palisades of thorny trees, probably the peach-palm (*Bactris gasipaes*), which is native to Costa Rica. A deep ravine ran between the two halves (Fernández Guardia 1964:48). Vázquez de Coronado reported 84 circular houses within the larger fort and twelve houses within the smaller one. Houses were arranged in groups of three or four and opened onto shared rectangular courtyards. According to Coronado, "...in each of the houses live twenty-five Indians, with their wives and children, in some there are more or less, according to the numbers in the family, but in every house there is room for four hundred persons" (Fernández Guardia 1964:34). He estimated the combined village population at 1600 people. Vázquez de Coronado similarly described the settlements of Quepo, located on the central Pacific slope, and Cia, located in the middle General Valley region between Quepo and Coctú, as divided into dos palenques, but provided few additional details of their spatial organization.

Eugenia Ibarra (1985) investigated a pair of settlements that the Spanish described as pueblos juntos in the Central Valley of Costa Rica. Spanish reports of the paired villages of Turrialba la Grande and Turrialba la Chica, located near the modern Turrialba, are short but revealing. According to Spanish descriptions recorded between 1540 and 1569, the settlement consisted of two parts, Turrialba la Grande, located on the north side of the Turrialba River, and Turrialba la Chica, located south of the river. The northern half was larger in area and

population. Other paired villages included Atirros, located south of Turrialba; Cot, in the central part of the valley; and the paired villages of Yara and Quircó, located near the present day city of Cartago.

There is a slightly different pattern of dual spatial organization in the Atlantic slope region near the Panamanian border. While the Central Valley settlements were pueblos juntos and those of the Pacific slope were dos palenques, those on the Caribbean side of the Talamanca Range were pueblo y palenque combinations, comprised of a village and a fort, constructed as two spatially discrete entities but linked socially and conceptually as a single unit. One example is Juan Vázquez de Coronado's 1564 description of the villages of Quequexque and Taranca, situated on the Almirante Bay, Panama. Coronado's description is vague but he does state that he, " Took posession of the said village and palenque of Quequexque and Taranca, which are together and are on the North Sea, in the region of the islands of Çorobarú, and with a sword in his hand, cut branches in a sign of posession, and the said General commanded that a cross be erected in said villages" (Vázquez de Coronado 1913[1564]:113). The brief description provides no information on how the two parts were spatially arranged or internally organized, nor is there any information pertaining to residential arrangements or the political organization within the paired settlement but his description does make clear that there were two distinct villages that were located in close proximity to one another.

Also near the Atlantic coast was Cuturú, another paired settlement recorded as a pueblo y palenque (Fernández 1882-1907:IV:298-299). A third similarly described paired settlement is Coxerín-Ducagua, whose location is not well established but was probably positioned on the southern side of the Talamanca Range near the modern Costa Rica-Panama border (Barrantes and Bozzoli 1986:12; Ibarra 1985:80). These three paired settlements stand in contrast to the

many others that Vázquez de Coronado described simply as "pueblo" or "palenque," perhaps indicating that they exhibited a unique spatial arrangement compared to other villages and forts he visited throughout the region.
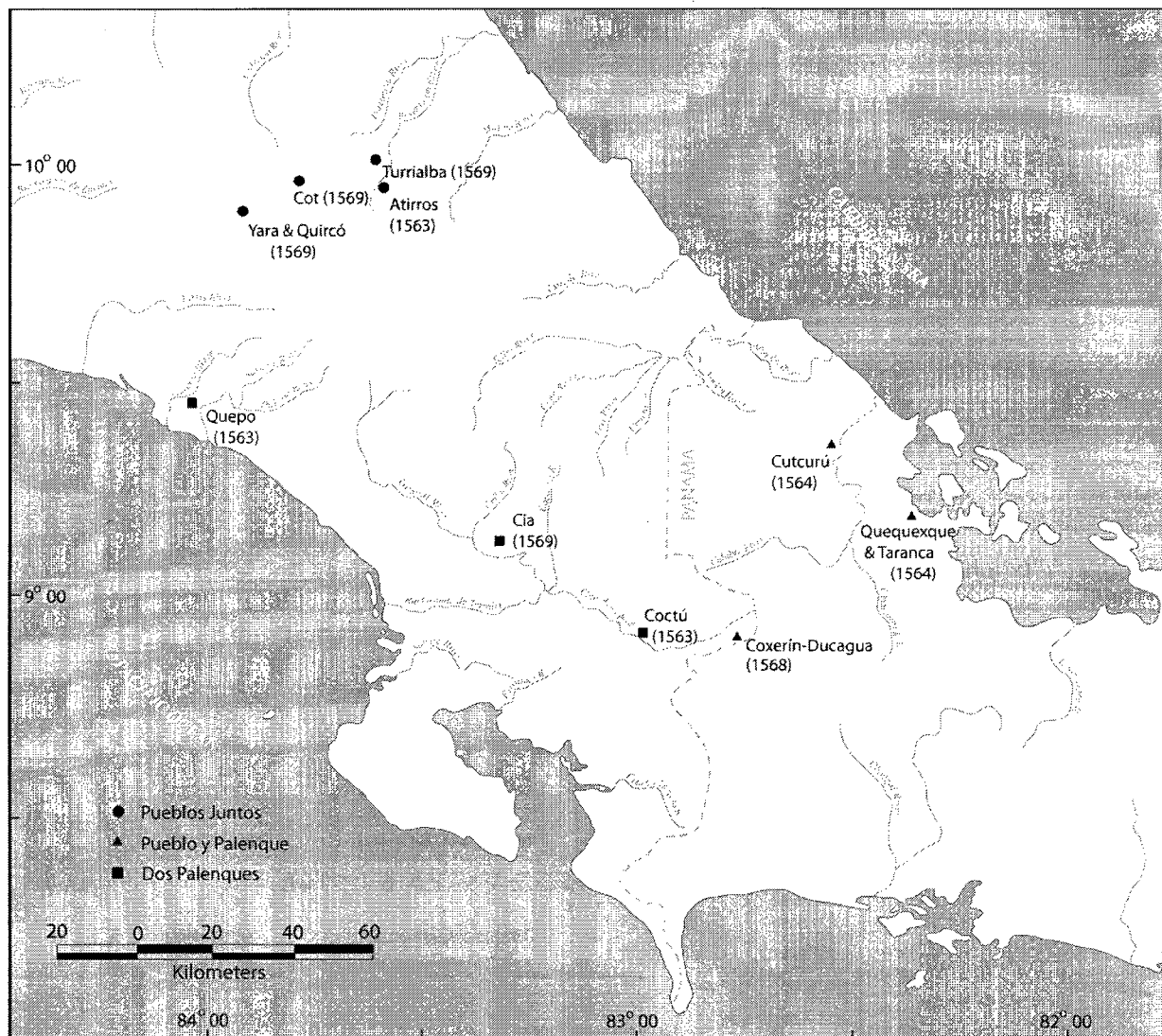
Figure 4. 1 Approximate locations of sixteenth-century paired and dually organized settlements

In her study of pueblos juntos in the Central Valley, Ibarra (1985) identified several common features. First, many are organized so that one half is considerably larger than the other in terms of spatial extent or number of inhabitants. As an example, she provides sixteenth-

century population figures that recorded the size of Turrialba la Grande at 1800 inhabitants (85.7 percent of the total) and Turrialba la Chica at only 300 (14.3 percent). As noted above, similar asymmetry is present at Coctú, which was divided into fortified enclosures of 84 and 12 dwellings. If we assume that each house contained an equal number of people then approximately 87.5 percent resided in the larger enclosure and 12.5 percent were in the smaller. We lack population estimates for the remaining paired settlements but available information implies size differences between the two halves of at least two more Central Valley pueblos juntos. In 1569, one half of Atirro was reported to have had "mucha gente" in relation to the other, though population figures are not provided (Fernández 1882-1907:5:24). In the case of Yara and Quircó, Gagini (1917:170) notes that the prefix *quer-* denotes "big." Quircó is alternatively spelled Quercó, suggesting it was larger than Yara.

Ibarra also notes the roles of natural features and landscape positioning in distinguishing the two pueblos joined as pueblos juntos. A river or other body of water usually separates the two halves, and one of the paired villages was usually positioned at a higher elevation. This is clearly the case at Turrialba la Grande, which was located on elevated topography on the north side of the Turrialba River, while Turrialba la Chica was situated on lower land south of the river. At Coctú, Vázquez de Coronado reported a deep *quebrada*, or ravine, between the two forts. The positions of the two forts are not described in terms of elevation.

These ten examples of paired settlements strongly suggest that some form of dual social organization, perhaps moiety divisions, was in practice at Contact. Differences in the size, elevation, and fortification of the two halves suggest that at least some were asymmetrically organized. Coctú, with its groupings of three and four houses, further suggests that each half may have also been further divided into smaller socio-spatial sectors, perhaps representing clans

or other kin groups. That only ten villages are described using these paired terms, while dozens more villages are described using the singular "pueblo" or "palenque" likely indicates that only certain large settlements exhibited dual spatial organization, while smaller settlements were constructed without such obvious divisions. The lack of observable dual patterning within the smaller communities does not necessarily mean that it did not exist. Just as modern Kógi settlements are divided into two "invisible" halves, members of Contact-era villages may have understood less visible clues to these divisions.

Summary

In summary, Spanish documentary sources do not explicitly describe dual societal divisions or diarchic rule among of Contact and Colonial period Costa Rican societies but they do provide indirect evidence that societies there may have been dually organized and maintained diarchic leadership. The strongest evidence for dual organization is Juan Vázquez de Coronado's descriptions of paired villages and divided settlements in Costa Rica and western Panama. Such spatial patterns are consistent with expectations for dually organized societies, as outlined in Chapter 3.

The Spanish descriptions of paired or divided villages provide an example of a pattern that can be identified archaeologically at villages used prior to Spanish contact. In the following chapter, I investigate the spatial distribution and internal organization of Chiriquí sites. I demonstrate that, while there is evidence of paired or divided villages, dual spatial patterning is most clearly visible archaeologically at several large Chiriquí cemeteries.

5. CHIRIQUÍ PERIOD CEMETERIES

Introduction

The focus of this study is to understand Chiriquí period social organization and political leadership. Using the ethnographic examples from Costa Rica and Colombia, I proposed that Chiriquí organization might have operated according a dual system in which the society was divided as moieties and leadership was diarchic. In the previous Chapter, I demonstrated that dual organization is supported by Spanish accounts of Contact and Colonial era villages, which were divided into two clearly defined halves. I expect that expressions of dual social and political organization may also be visible archaeologically through the spatial and architectural organization of Chiriquí period sites.

In this chapter, I utilize published accounts, unpublished reports, and my own observations to investigate the variation of the internal organization of Chiriquí cemetery sites throughout southern Costa Rica and western Panama. My primary objective is to understand how Chiriquí cemeteries were internally organized and how spatial units within them relate to social units within Chiriquí society.

There are several reasons that I choose to focus on Chiriquí cemeteries rather than residential sites. Principally, few Chiriquí residential sites have been mapped and investigated in sufficient detail to accurately characterize their internal spatial organization. Clearly identifying paired features within Chiriquí residential sites requires extensive horizontal excavations and only two sites, Rivas and Murciélago, have been the subjects of such investigations. By contrast,

divisions within many Chiriquí cemetery sites are easily identified by the presence of surface features such as walls, mounds, stone columns, and the horizontal extent of looting.

Moreover, some of the largest cemeteries and may have been associated with important Chiriquí political centers and it is these sites where social and political divisions are most clearly materialized (Drolet 1992:229, 232). The results of previous work at several cemeteries suggest that a system of dual organization may have been in operation during the Chiriquí period (Drolet 1992; Merritt 1860; Quilter 2004).

Previous Research on Chiriquí Cemeteries

Cemeteries have served as a primary source of information for understanding Chiriquí culture since their discovery in the 1850s (Haberland 1959; 1961a; Stone 1963; Iwaniec 1986; Corrales 1999; Quilter 2004). Objects derived from mortuary contexts including gold, stonework, and ceramics have received significant attention by archaeologists and art historians (Bray 1981; Katz 1986; Quilter 2000; Stone-Miller 1986). Likewise, monuments associated with these cemeteries, such as peg-based statuary, stone balls, and petroglyphs have also garnered much attention by scholars (Graham 1981, 1985; Lothrop 1963; Mason 1945; Fernández and Quintanilla 2003). To date archaeologists have identified dozens of Chiriquí period cemetery sites throughout southern Costa Rica and western Panama (Figure 5.1), many with multiple discrete burial zones and architectural features. However, despite nearly a century research on Chiriquí cemeteries there has been almost no discussion of the internal organization and spatial patterning of large mortuary complexes. Archaeologists have largely ignored these sites in favor of small cemeteries or residential areas, due to the massive looting to which the larger complexes have been subject.

Chiriquí cemeteries are often very large, covering several hectares, and overgrown with trees and thick groundcover, making it difficult to move across them and nearly impossible to distinguish surface features. At many sites, the effects of looting are extreme, with thousands of looters pits marring the landscape, some with mature trees growing from them, indicating the antiquity of activity by the *huaqueros,* the Spanish term for people who loot archaeological sites for profit. Other pits, exhibiting freshly cut edges and modern trash, serve as reminders that looting remains a threat to archaeological sites. Graves are not the only features lost through looting. Non-grave features such as pavements, walls, paths, and stairs were often mistaken for tombs and destroyed as looters dug though them. Features not destroyed through looting are often obscured by spoil heaps from looted graves.

Archaeologists who have reported or conducted excavations at Chiriquí cemeteries have done so with variable skill and attention to detail. Many reports from cemetery excavations, both published and unpublished, fail to provide even the most basic information necessary for a comparative analysis of site location, size, and internal organization, or of the types of grave construction, and some do not even report the number of burials excavated (e.g. Bozzoli de Wille 1962; Haberland 1961a, 1961b; Lothrop 1963; Minelli and Minelli 1966; Stone 1963, 1977). There are equally few detailed descriptions of grave construction, arrangement, context, and content. Photographs and maps from excavations of large Chiriquí cemetery complexes are almost non-existent.
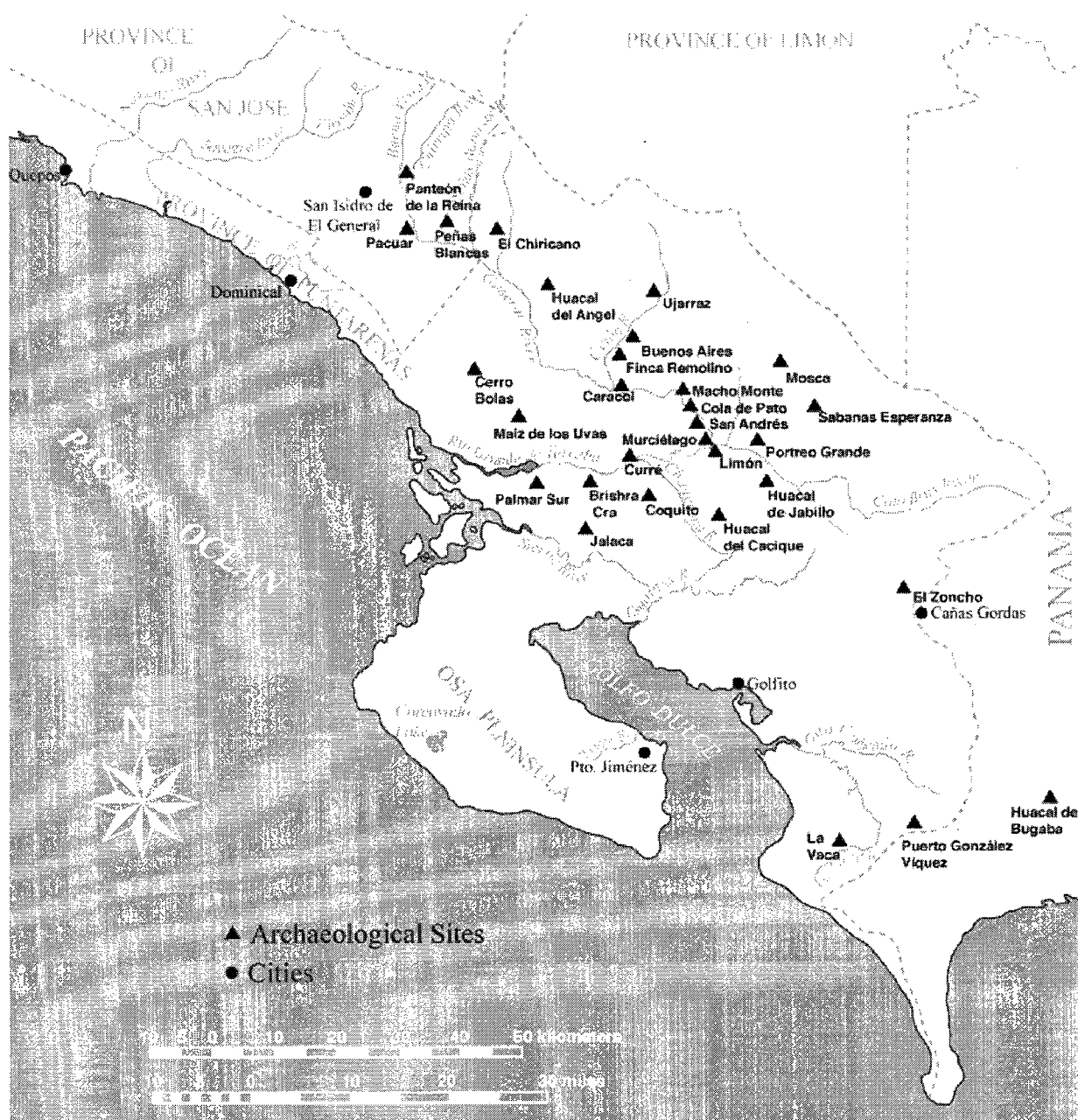
Figure 5. 1 Large Chiriquí period cemetery sites

Numerous descriptions of Chiriquí cemeteries appeared in various publications soon after

their discovery in western Panama (Anonymous 1859; Bateman 1860–1861; Bollaert 1860a,

1960b, 1863; Lothrop 1919; Meagher 1861; Merritt 1860; Otis 1859, 1861; Squire 1859) and

Costa Rica (Lothrop 1926; Pérez–Zeledón 1907–1908; Pittier 1892), but few accounts provide

detailed descriptive information, particularly related to their geographical locations, physical conditions, or spatial organization. Several of these accounts do, however, provide information on grave construction and contents, especially in reference to quantities and forms of gold and ceramics. Merritt's (1860) description of the Huacal de Bugába in western Panama provides a rare description of the size and spatial organization of a major Chiriquí cemetery.

Below, I evaluate spatial patterns within Chiriquí cemetery complexes based on published accounts, unpublished reports, and my own observations. While these descriptions provide a comprehensive overview of Chiriquí period mortuary practices, my primary objective is to use this information to understand how cemeteries were internally organized and how spatial units within Chiriquí cemeteries may relate to social units within Chiriquí society. In the model I presented in Chapter 3, I proposed that Chiriquí sites should be divided into two contemporary halves, which may be asymmetric in their spatial extent or in their relative positions on the landscape. The organization of sites described by the Spanish in the sixteenth and seventeenth centuries confirms that such patterns were present during the Contact and Colonial periods and suggests that they similar spatial organization may predate Spanish contact.

One of the challenges with this study is that Chiriquí cemetery sites have been severely looted. Cemeteries are cumulative constructions; that is, they grow and expand over the life of the cemetery. Therefore, the site plan for a cemetery at the time it was established may be very different from its appearance at the time when it is abandoned. Cemeteries are generally subject to minimal alteration. Grave features are typically left as they were constructed, though may be altered slightly with grave reopening or commemorative events.

Chiriquí Period Cemeteries

Archaeologists distinguish two kinds of Chiriquí cemeteries, simple and complex (Drolet 1983, 1988, 1992). Simple cemeteries are generally located immediately adjacent to residential areas on low terraces or mounds (Haberland 1984). They contain fewer than 50 individual graves, which are capped with pavements of flat river cobbles. Graves are generally shallow, ranging from 20cm to 1.5m in depth (Corrales 1999; Iwaniec 1986; Quilter 2004). Grave walls exhibit no finishing and are often difficult to define. Offerings are sparse, generally consisting of a few utilitarian pots and an occasional ground stone celt (Drolet 1983, 1992; Quilter 2004; Quilter and Blanco 1995; Stone 1977). Most residential sites are associated with two or more such cemeteries around their perimeter, and archaeologists propose that they were used by multiple low or middle-status social groups within the region's ranked societies (Drolet 1986, 1992; Quilter 2004). Due to poor preservation and the narrow range of materials and variation in grave form in these cemeteries, it is difficult to draw further conclusions about social organization.

In contrast, complex cemeteries are located on prominent topographic features such as high river terraces and hilltops overlooking major rivers (Drolet 1986, 1992; Haberland 1984). Drolet reported that many of these cemeteries are associated with 15 large nucleated villages that formed a chain of communities along the banks of the Térraba, Coto Brus, and General rivers, at intervals as close as five km. Complex cemetery sites are frequently divided into discrete interment zones by architectural features such as walls, mounds, and pillars, which serve to divide cemeteries into smaller internal units (Bozzoli de Wille 1966; Frost 2003; Haberland 1984:251, 261).

Various forms of stonework are commonly associated with these cemeteries, including balls, free-standing statuary, stone pillars, and petroglyphs. The association of these objects with some cemeteries and their complete absence in other areas may help provide clues to understanding regional and diachronic variations in cemetery organization, design, and group affiliation.

Sculptures are rarely found *in situ* today, but they have been reported in association with burial mound sites in the Diquís Delta region of Costa Rica (Lothrop 1963; Stone 1943, 1977; Mason 1945; Fernandez and Quintanilla 2003). To date, none have been reported outside of this region. The most common forms are male and female anthropomorphic peg-based statues with relatively flat features and narrow peg-like projection below the feet, from which they derive their name. Arms and legs are indicated by slits in the rock.

From Buenos Aires to the Diquís Delta, stone spheres are reported to be associated with mortuary zones. These spheres are almost perfectly round and range in size from 15 cm to larger than 2 m in diameter, weighing up to 15,000 kg (Lothrop 1963:24; Stone 1943, 1977). Other fixed monuments associated with these cemeteries include petroglyphs and stone pillars. Petroglyphs are abundant throughout the Térraba basin (Stone 1977), and many are believed to be associated with mortuary complexes (Zilberg 1986:344), though this association has not yet been systematically investigated.

Stone pillars are one of the most distinctive elements of Chiriquí cemetery complexes and have been reported at cemetery sites as far north as San Isidro de El General (Lothrop 1926; Pittier 1892; Quilter 2004) and as far south as western Panama (Linares 1980). Despite their ubiquity in the region, only recently have they been subject to a systematic study (Schumacher n.d.). Many pillars, as n the case of stone balls, have been removed from cemeteries to display in

parks or in front of homes, so understanding their distribution within cemeteries is difficult. Furthermore, looting activities have likely buried many pillars. However, published accounts reveal some general patterns.

The length of pillars usually varies from less than 1 m to more than 2 m, although pillars up to 4 m have been reported (Bozzoli de Wille 1966; Drolet 1986b; Haberland 1984:251, 261; Quilter 2004). Throughout the Diquís, pillars are typically oval or circular in cross section, and their surfaces typically exhibit slight modifications to one or both ends. They are modified using a variety of fine- and coarse-grained materials, and it is unclear if they are naturally occurring forms or if they were worked into their current shape. Pillars do not exhibit any clear signs of working except for slight modification to one end to form a distinct projection.

Pillars have been found arranged in straight lines, often associated with architecture defining the boundaries of cemeteries or boundaries between groups of graves (Linares 1977; Lothrop 1926; Pittier 1892; Quilter 2004). Haberland (1984:251) indicated that basalt pillars were abundant within large mortuary contexts north of Buenos Aires, but absent to the south. While this may be true in the Diquís Delta region, where stone balls and, perhaps, peg-based statuary is found, it is not true in western Panama, where pillars are abundant at Chiriquí cemetery sites. However, use of stone pillars in these cemeteries appears to be significantly different than in the northern Diquís. At cemetery sites in western Panama, pillars were commonly utilized in the construction of stone lined graves (de Zeltner 1866; Linné 1936; Wassén 1949), especially around the Boquete region. Wassén (1949) identified the source of these pillars as Los Ladrillos, a formation of columnar basalt located approximately 3.5 km northwest of Boquete.

Stone pillars are not unique to Chiriquí cemeteries, but appear to have been an important architectural element of cemeteries and sacred spaces in central Panama. Lothrop (1937) reported several pillars up to two meters in length arranged in two lines at Sitio Conte. Verrill (1927a, 1927b) similarly reported several rows of stone columns arranged in a quadrangle at El Caño, a site several kilometers north of Sitio Conte.

There seems to have been great variation in the wealth displayed in complex cemeteries. Burials include a wide range of offerings, including simple and fancy pottery, elaborate stonework, and objects made of gold and gold–copper alloy (Haberland 1961a, 1961b, 1984; Lothrop 1963; Stone 1958, 1963). Some sites are reputed to have contained many rich graves. According to oral traditions, sites that yielded the highest quantities of gold and other prestige goods include the Panteón de la Reina, Puerto González Víquez, and Coquito in Costa Rica, and the Huacal de Bugába in western Panama (Holmes 1888; Lothrop 1926; MacCurdy 1911:218-19; Stone 1977:129). Other cemetery sites, such as those at Murciélago, seemed to have been the burial locations for groups without significant access to gold or other prestige goods (Drolet 1992).

Archaeologists have identified more than two dozen complex cemeteries in Costa Rica and western Panama (see Appendix A, Tables 1 and 2) and have conducted limited excavations at six of them: Jalaca (Stone 1963, 1977), Palmar Sur (Lothrop 1963), Murciélago (Drolet 1994; Iwaniec 1986), Caracol (Haberland 1957, 1961a, 1961b), Buenos Aires (Haberland 1957, 1961a, 1961b), and Panteón de la Reina (Bozzoli de Wille 1966; Quilter 2000, 2004; Quilter and Frost 2007). In the early 1960s Laura Laurenchich de Minelli and Luigi Minelli dug nearly 400 graves at El Zoncho, near San Vito in southern Costa Rica, but the results of their work have not been adequately reported. Additional sites are known only through surveys and site visits. A review of

available data indicates that there are two primary layouts of cemetery sites: multiple-mound and dual organization. Both site types have variations.

Multiple-mound Cemeteries

Multiple-mound cemeteries are organized as a series of rectangular or oval mounds, each containing numerous graves. These mounds are typically between .75 m and 2 m tall earthen features faced with stones. They are located on hilltops away from residential areas. Haberland first identified multiple-mound cemetery organization at several sites in the middle General Valley near Buenos Aires during investigations in the region between 1955 and 1958 (Haberland 1959, 1961a, 1961b). These sites include San Andrés, Buenos Aires, Caracol, Potrero Grande, and Quebrada Grande.

Haberland identified "several" burial mounds within the town of Buenos Aires, each of which he estimated contained approximately 150 graves. He tested two mounds. In Mound I, he confined his excavations to a 5 m wide, 18 m long trench, which exposed 26 rectangular shaft tombs dug into the mound's surface and capped with pavements of smooth flagstones. None of the graves included human remains, but this is not unusual, given the region's climate and soil chemistry. Their dimensions (between 60 cm and 220 cm in length) suggest that that the cemetery included individuals buried in both flexed and extended positions (Haberland 1959:4-6). Haberland (1961) also suggested that the smaller graves might indicate that secondary burial was practiced. Twenty-five of the graves were oriented east-west; one was oriented north-south. In Mound II Haberland excavated 18 graves. Grave construction was similar but, in contrast to Mound I, graves in this mound demonstrated no clear orientation.

Grave goods in both mounds were sparse, as each grave contained between zero and five objects. The most common ceramics were Ceiba Red-Brown ceramic jars or bowls but

Haberland also recovered polychrome, incised, and biscuit ware vessels. One grave included a small gold pendant located approximately where he expected the neck of the interred individual to be. During a visit to Buenos Aires in 2000, I confirmed that all mounds within the town have been completely destroyed subsequent to Haberland's excavations.

The site of Caracol is located at an elevation of 284m upon the Loma Cambute hill immediately south of the junction of the Ceibo and General rivers. The site consists of a series of seven rectangular mounds raised 35 to 70 cm above the ground and faced with vertical stone walls made from river cobbles. The largest mound appears to have been reinforced with stone slabs set upright into its corners. Stone pillars, in excess of 2.5 m in length were placed at the corners of some mounds, though Haberland does not indicate which ones. Also, a large stone ball was located to the south of the cemetery, below the terrace containing the mounds. Haberland (1961, 1984) conducted limited excavation at the site in 1959 and reported that the mounds contained hundreds of "tombs". Reporting a pattern similar to that of Buenos Aires, he noted two grave types among the 15 graves excavated in Mound I at the site. The first was a simple rectangular grave covered with stone slabs like those found at Buenos Aires. The second type was shallower and constructed with vertical slabs capped with horizontal slabs to form a box. The latter type was a more common. There was no apparent pattern to the orientation and organization of the burials and some graves intruded upon others. Skeletal remains were present but rare (Haberland 1961).

Drolet identified multiple-mound cemetery organization at the sites of Potrero Grande, Finca Remolino, Peñas Blancas, Cola de Pato, Macho Monte, and San Andrés (Haberland 1984:261). Each site contained several stone-faced mounds that presumably served as burial areas. Only the first three have been described in sufficient detail to draw comparisons.

Source: Corrales U. 1986: 60 (fig. 4)
Portrero Grande P-184-PG
Puntaraneas Province. Diquis, Costa Rica
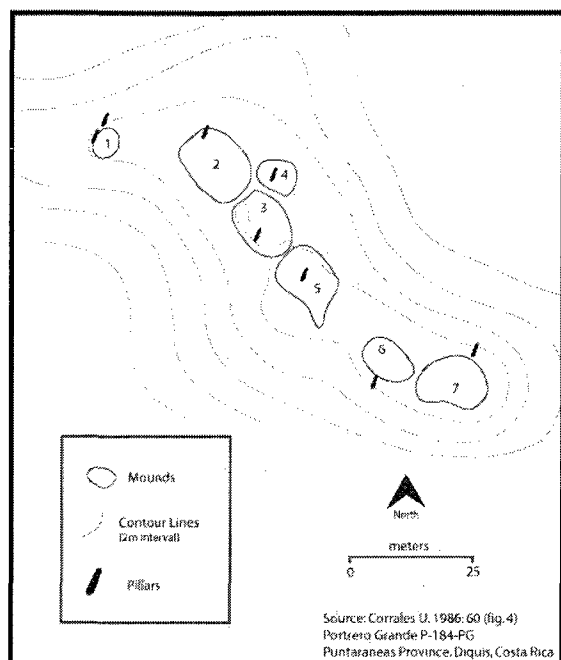
Figure 5. 2 Multiple-mound site of Potrero Grande, Costa Rica

Potrero Grande is located 2.75 km east of the town of Potrero Grande. The site covers 1500 m^2 at 220 m above sea level, 250 m south of the Quebrada Potrero Grande and 1 km north of the Quebrada Quijada, both tributaries of the Coto Brus River. The cemetery consists of seven earthen mounds with stone retaining walls. Each mound is associated with one or two stone pillars (Figure 5.2). Walls and graves at the site are constructed with round river cobbles. The site is heavily looted but retains its general form (Corrales 1986:59). A residential site is located 0.5km south of cemetery.

Finca Remolino is considered one of the largest and richest multiple-mound cemetery sites in southern Costa Rica. The site is located on a prominent hilltop 0.5 km east of the Ceibo River, near the town of Buenos Aires. Drolet (1983:60, 1992:233) mapped the site but conducted no excavations. He reported 13 mounds. Three are square, and the others are oval or irregular in shape. Like other multiple-mound sites, mounds are constructed with mounded soil and faced

with stone river cobbles. The site includes at least 13 pillars ranging in length from 1m to more than 4m. Two mounds had one pillar each, two had three pillars, and one mound had seven pillars (Figure 5.3). No residential area has yet been identified but if present, it is likely to be on the east side of the site on the adjacent wide alluvial plain.
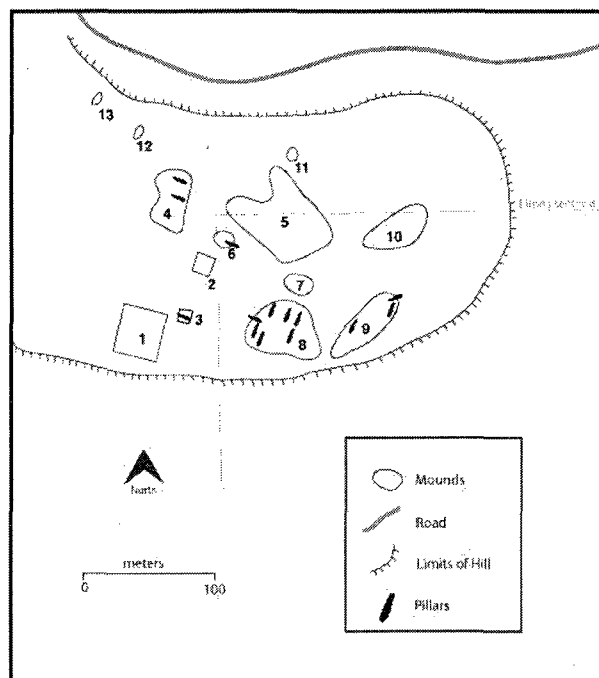
Figure 5. 3 Multiple-mound site of Finca Remolino, Costa Rica (after Drolet 1983)

A final example of multiple-mound cemetery organization is Peñas Blancas, located on a high hill between the General and Pacuar rivers. According to Rago (1988) the site includes nine cemeteries, ranging in size from 236 m^2 to 1413 m^2, each containing between one and nine burial mounds constructed with river cobbles. Each mound is "generally oval in shape" and 1-2 m tall (Rago 1988:54). Lothrop (1926:444) states that the mounds were marked with large stone columns. The site remains unmapped and unexcavated.

Dually Organized Sites

At least nine Chiriquí cemetery sites in southern Costa Rica and western Panama exhibit patterns of dual organization. These sites are organized into two primary interment zones, often subdivided into smaller spatial units. This pattern is clearly exhibited at the site of Murciélago, located along the west banks of the General and Térraba rivers in the southern Diquís. The site was the subject of intensive study between 1980 and 1985. Drolet described Murciélago as a large site covering approximately 30 ha that includes both residential and cemetery zones. The site was occupied for 200-300 years shortly before Spanish contact (Drolet 1986:182). The residential portion of the site is positioned upon a terrace of rich alluvial land and includes 39 house foundations organized into two residential zones, north and south. The east-west running Quebrada Murciélago and a 150-m wide vacant area serve to demarcate the north and south halves of the site (Figure 5.4). The north zone contained four residential sectors, each between 1 and 10 ha in area. Each residential sector contained several house foundations measuring between 15 m and 30 m in diameter. The south zone contained only one residential sector of 13 ha and included 24 house foundations, which were similar in shape and size to those in the north sector (Drolet 1984a, 1984b, 1986, 1992). According to Drolet, Murciélago exhibited a homogeneity of ceramic and lithic material throughout the site, indicating that both halves were occupied at the same time. Further, domestic refuse was found in very thin deposits, ranging from 5 to 10 cm thick, suggesting to him a relatively short occupation (Robert Drolet, personal communication 2008).

The site of Murciélago, with its paired residential areas, closely matches the ethnohistoric description of Coctú, visited by Juan Vázquez de Coronado in 1563. Like Coctú, the site is positioned in southwestern Costa Rica at the junction of two major rivers and includes the

remains of numerous circular structures arranged in groups. Also like Coctú, the site is divided into two unequal halves, with one half significantly larger than the other. Drolet (1986b:70-71) doubts that Murciélago is the same location described by Vázquez de Coronado, as the site appears to have been abandoned before European Contact.

The site also included two funerary zones, positioned on river terraces above the residential zones. Both consisted of multiple cemeteries, some containing clusters of graves. Cemetery Zone 1 is located west of the northern residential sector. Cemeteries within this zone are small, each containing between five and 15 interments. All graves were looted but ceramic evidence indicated that the graves were contemporary with the residential zone. Cemetery Zone 2 is located to the southwest of the southern residential zone and contains six cemeteries. All are larger than those in Cemetery Zone 1. Each cemetery includes multiple grave clusters, some located on low mound features.

Excavations at La Pista, one of the cemeteries located in Cemetery Zone 2, provide further evidence of how Murciélago residents were organized in death (Drolet 1994:21). Within the La Pista cemetery, graves are organized into three mounded grave clusters and 28 non-mounded grave clusters. Iwaniec (1986) cleared and excavated one of the non-mounded clusters (Tomb Cluster 15). Tomb Cluster 15 produced 16 graves, each containing a single individual buried 1m to 1.5m below the surface.

Osteological analysis indicated that both extended primary inhumation and secondary burial were used. The graves contained five children and 11 adults but sex could not be determined due to poor preservation. Each grave contained a rather limited range of grave goods. Children's graves contained exclusively tripod vessels but graves of adults exhibited a wide range of ceramic forms, lithics, or no artifacts at all.
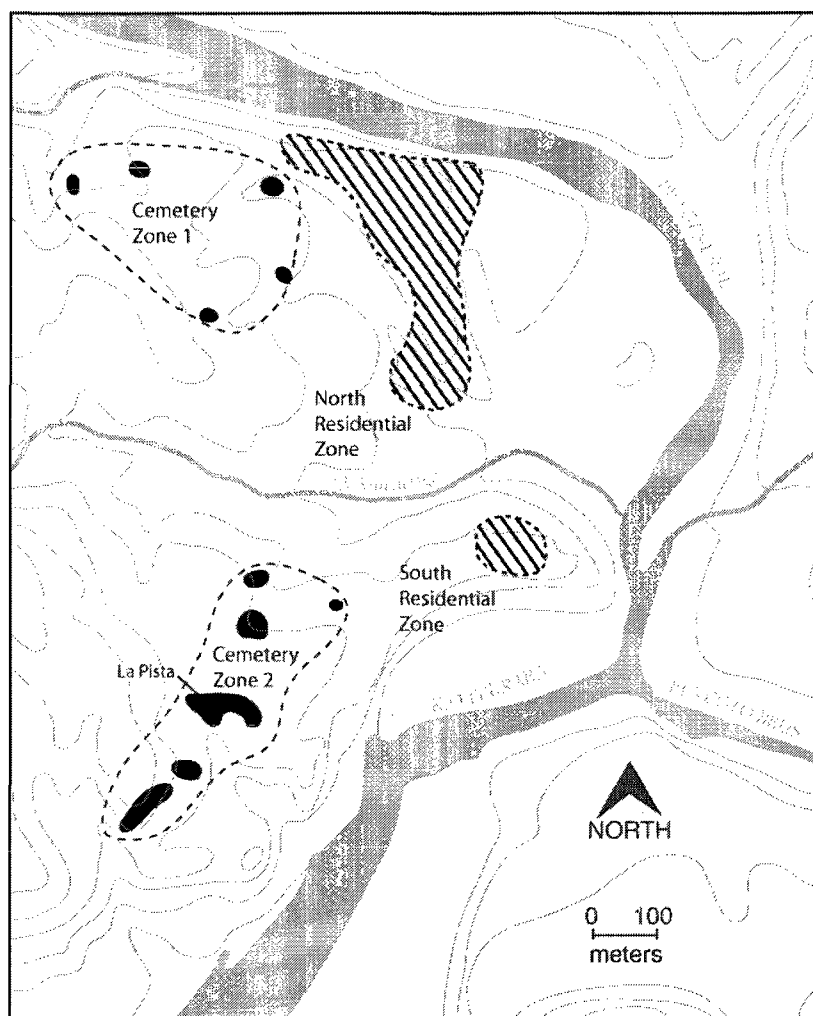
Figure 5. 4 Map of Murciélago illustrating dual divisions of residential and cemetery zones

Taken as a whole, the division of the Murciélago village into two contemporary halves, and the location of a cemetery zone adjacent to each village half suggests that the Murciélago population was divided into two principal social groups, both in life and death. Smaller spatial groupings within both the residential and cemetery sectors may correspond to distinct social units, such as clans or other kin groups, within the larger dual division.

Quilter (2004) identified a similar pattern at Rivas. Panteón de la Reina, Rivas' primary mortuary facility, is organized into two spatially distinct interment zones, a 5900 m² northern

section (La Reina Norte) and a 6200 m² southern section (La Reina Sur). A 250-m wide gap

containing no burials separates the two halves. An 18-m wide stone staircase links the Rivas site

with a low platform mound located between the two burial zones (Figure 5.5). As at Murciélago,

two spatially distinct interment zones occupy a ridge top overlooking the residential sector and

each zone is further subdivided into smaller internal areas. At Murciélago, both cemetery zones

are composed of several spatially distinct cemeteries, each containing several clusters of graves.

In contrast, Panteón de la Reina cemetery zones appear to contain a continuous distribution of

graves, but these graves are subdivided into clusters by walls and stone pillars. Early

descriptions of the site note the presence of stone retaining walls defining sections of the

cemetery (Pérez-Zeledón 1907-1908), and interviews with huaqueros who looted graves at the

site in the 1940s confirmed the presence of walls (Blanco, personal communication) Internal

divisions at the Panteón de la Reina also appear to have also been marked with stone pillars, up

to 2 m in length. During initial work at the site in 1998, Quilter identified pillars along the

staircase, within the southern cemetery, and around portions of its perimeter. My work at the

Panteón de la Reina in 2003 and 2004, described in more detail in Chapter 8, identified both

internal walls and numerous stone pillars. The pillars define not only the boundaries of

cemeteries but also divisions within them. Thus, instead of vacant space, inhabitants at Rivas

apparently used architectural features such as walls and pillars to create spatial zones within a

cemetery. While the result was the same at both Panteón de la Reina and Murciélago—to create

separate zones for different members of the population—the means by which this was done were

different.

A significant difference between Rivas and Murciélago's residential area is that the Rivas

site is not divided into two spatially distinct residential zones. However, Rivas does exhibit clear

evidence dual spatial organization, with paired architectural entities constructed on either side of

a central axis, as defined by the central staircase (see Chapter 9). This organization supports the

suggestion that the apparent dual spatial patterning present at many Chiriquí sites represents two

spatially distinct yet contemporary spaces.
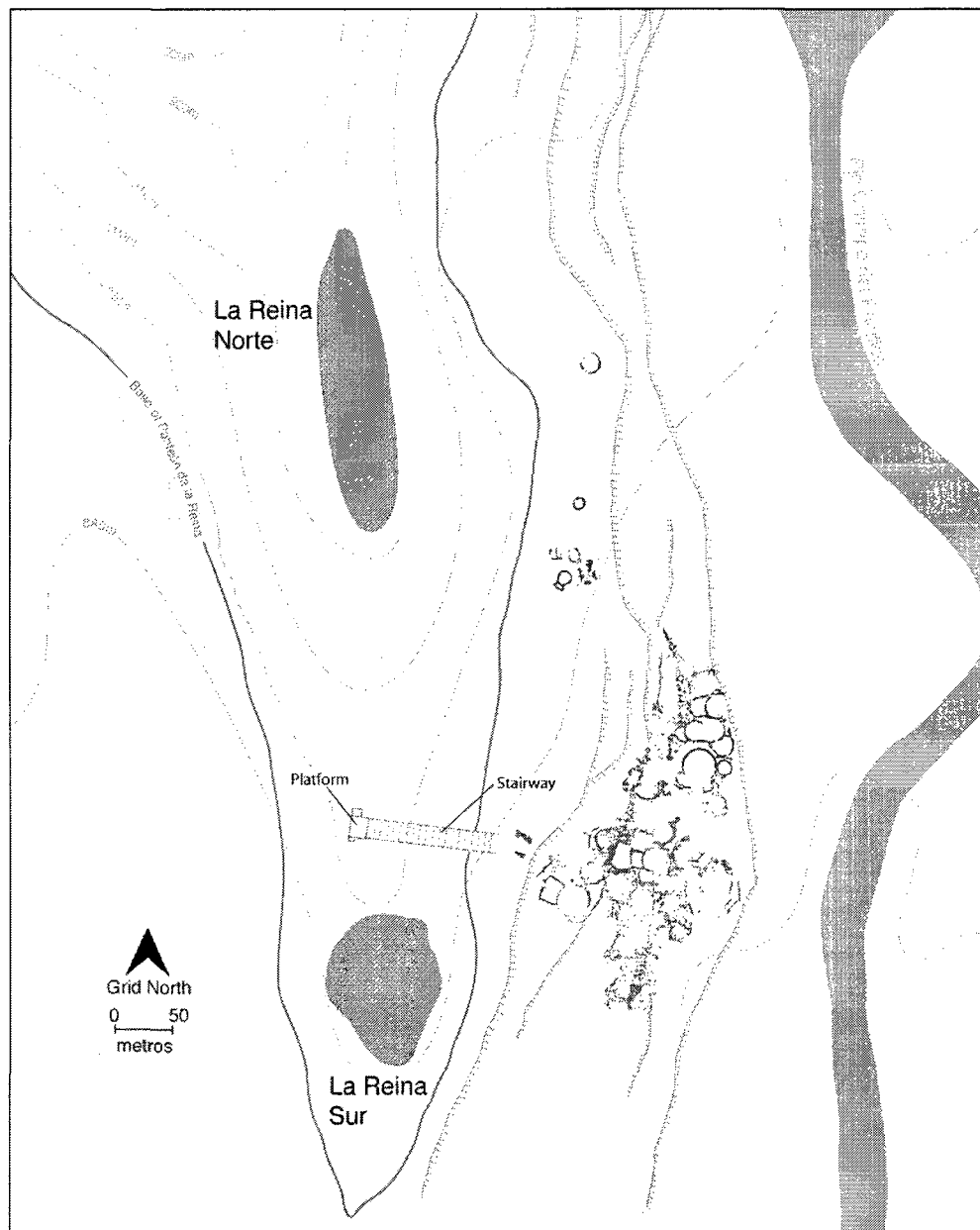
Figure 5. 5 Map of Rivas-Reina site illustrating dual division of Panteón de la Reina Cemetery

In a pattern similar to the Panteón de la Reina, the Huacal del Angel is organized into two spatially independent burial zones separated by a central architectural feature. The site is located approx 2.5 km northeast of the town of Volcán and 11 km northwest of Buenos Aires, positioned on a prominent rise at an elevation of approximately 560 m between the Quebrada Maura (2.0 km to west) and Quebrada Angel (1.0 km to east). Both quebradas are tributaries of the Volcán River. The site is very large, but its exact size remains unknown, as it is still unmapped. Based on a one-day visit to the site in February 2001, I estimated its size to be at least 10 ha. The site is still the scene of much looting, including burning away the forest cover to clear large areas for extensive illegal excavations.

In an area devoid of burials between the two cemeteries is a large truncated mound, 78 m long, 14 m wide, and approximately 3 m tall. An 8-m wide and 21-m long ramp provides access to the mound on its north side. The position of the ramp is offset to the east of the center of the mound. The top of the mound was heavily looted and littered with flat river stones, like those used for pavements on the tops of graves at other sites. I also noted two stone pillars, approximately 3 m long, south of the mound. Limited time and difficult field conditions did not permit us to measure the size of the interment areas but the east burial zone appeared considerably larger than the west. Drolet described a similar feature at the site of Limón, located 5 km south of Murciélago. There he identified a 12-ha hilltop cemetery complex with a single large mound at its center (Robert Drolet, personal communication 2001). The site remains unmapped and uninvestigated.

Also exhibiting dual patterns is the Diquís Delta ceremonial-mortuary site of Brisha' Cra, previously called Alto de Soledad and known to local residents as Huacal de Ceibo (Sol 2001). The site consists of a series of residential mounds located on either side of a central causeway,

which runs east-west (Figure 5.9). The causeway seems to serve as a central axis, separating paired sets of architecture. Two primary mounds are located at the center of the site, one on either side of the causeway. Mound 1 measures approximately 22 m in diameter and reaches a maximum height of 4 m. Mound 2 is 22 m in diameter and 3 m tall. Both mounds are defined by stone retaining walls. Other features similarly appear on both sides of causeway axis including two stone balls, two mounds (M4 and M7), and two petroglyphs. The site also appears to have two funerary sectors, one located at the northwest end of the site and one at the southeast corner of the site, although Sol did not conduct excavations in the funerary sectors and provides little detail about them.
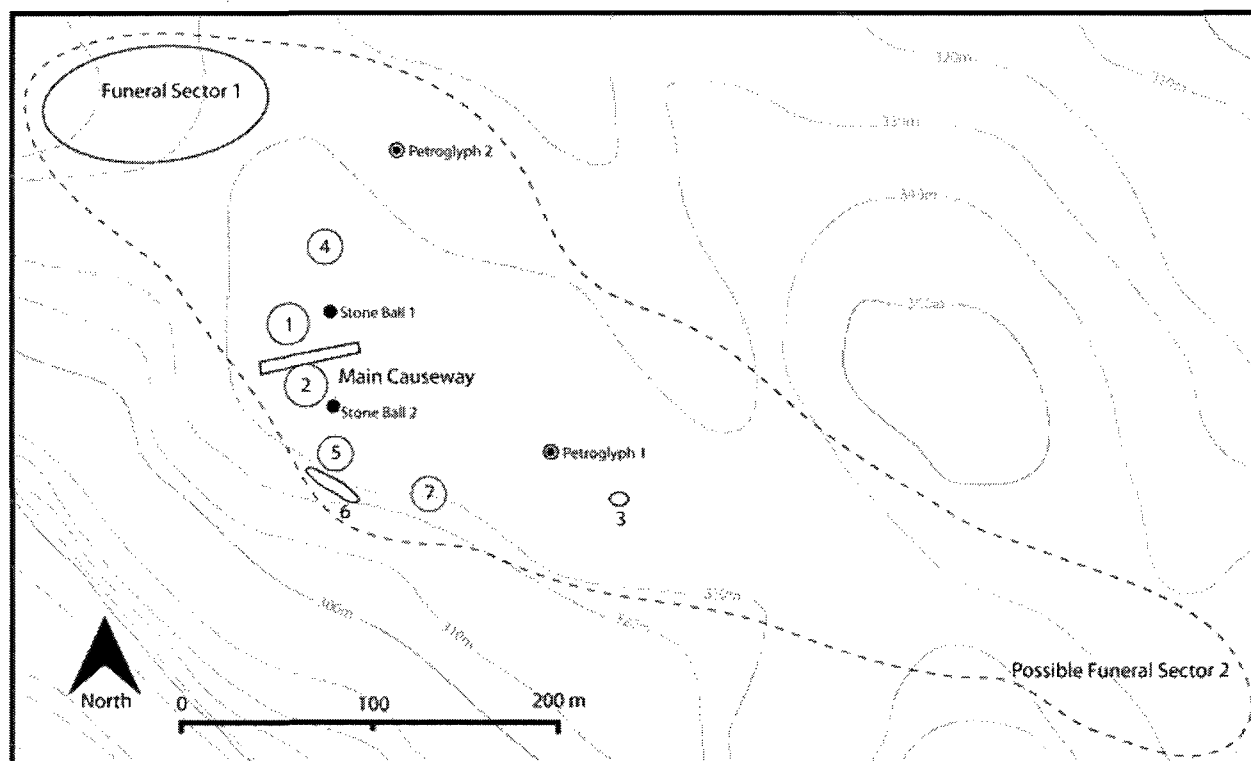
Figure 5. 6 Map of Brishaᵛ Cra (P-673Bc). Modified from Sol 2001:130

A slightly different dual pattern is present at the cemetery site of El Chricano, located 0.5 km northeast of the town of Cajón between the Quebrada Cajón (1.0 km to the west) and the

Quebrada Guaro (1km to east). The site was described by Pérez-Zeledón (1907-1908:24) as one of the richest in the region. The site exhibits two zones. The first is a large oval mound, which has been largely destroyed through looting and the construction of a road along the north and east sides of the site. Remnant walls suggest the mound measured at least 30 m on a side and over 1 m in height. The walls consist of six courses of river-worn stones, each approximately 30 cm long. Adjacent to the west side of the mound is a larger oval burial zone. No professional excavations have been conducted at the site, but the landowner described differences in the grave assemblages between the two sections. He claimed that graves within the raised mound contained numerous large objects of gold while those in the lower area contained only small gold objects. He was unable to describe other materials or features at the site.

Similar patterns also characterize large Chiriquí cemetery sites in western Panama where at least sites have some form of dual organization: Huacal de Bugába, Sitio Siogui, Paraíso Abajo, and El Paso. The Huacal de Bugába is probably the most famous of the Panamanian sites and is considered to have been one of the largest and richest in Chiriquí. Local farmers discovered the site in June of 1858 when they found gold objects protruding from the roots of a fallen tree. It is rumored that they collected more than 150 pounds of gold over a period of several weeks before their activities became public. Within days more than 1000 people were digging up graves, and an estimated $50,000 worth of gold was excavated. Most of the gold objects were sold and melted down (Otis 1859). Several pieces that escaped destruction were exhibited in New York, Washington, and London (Bollaert 1863). A number of these were later melted as well (MacCurdy 1911).

While rumors of the site and its riches are abundant, there is only a single first-hand

account of the organization of the cemetery and descriptions of graves, written by J. King

Merritt, the director of a gold mine in Veraguas, Panama, who spent several weeks visiting

Chiriquí cemeteries and observing the looting. Merritt provided the following description in a

presentation to the American Ethnological Society in 1860:

> The Huacal of Bugába embraced an area of twelve acres [5 ha], but was divided into two
> sections– by a slight depression extending in an east-and-west direction– in which not a single
> grave has been encountered. This depression of the surface varied in width from eighteen to ten
> yards, toward the east. The two sections were respectively five and seven acres, and were located
> on slightly elevated eminences, about four hundred yards [376 m] from a small river, the course
> of which is northeast by east at this point. The rise from the river banks to the Huacal is very
> gradual except at the northern boundary, which is somewhat abrupt, and around which the river
> turns toward the east. The general direction of the Huacal is north and south; and the greater
> portion of the graves were found on the western and southern slopes. There did not appear to be a
> general regularity in the position of the Huacas, or graves, but frequently there would occur side
> by side. The distance between the grave pits varied from nine to fifteen inches [23-38 cm] at the
> more crowded portions of the Huacal. The universal direction of the quadrangular Huacas is
> north and south by the polar star.

This description provides some useful information. Like sites in the Diquís, Huacal de

Bugába is located on a hilltop overlooking a river. In pattern consistent with Rivas-Reina,

Murciélago, and Potrero Grande, a residential site may be located on alluvial terrace below. That

most of the graves were located on the west side of the cemetery, overlooking the river, supports

this assumption. Merritt provides some rather precise measurements of the cemetery. He does

not indicate how he arrived at the dimensions but he was likely experienced at accurately

estimating distances and areas given his work in mining. Like many other dually divided sites,

the two burial zones are spatially distinct and separated by a vacant zone. Merritt does not

specifically describe subdivisions within each half nor does he mention stone pillars, walls, or

any other architectural constructions. He does, however, describe three grave forms, one round

and two rectangular. The three forms were not randomly placed throughout the cemetery but

clustered within distinct sections and, in general, corresponded with particular classes of material remains.

According to Merritt, the oval graves were between 4.5 ft (1.4 m) and 6 ft (1.8 m) deep and constructed with a wall of small, round river cobbles. These graves were located near the edges of the northern and western sections of the cemetery and tended to contain the most gold and the finest pottery. The second grave type was larger than the oval graves and was quadrangular in plan view. Like the oval graves, these had walls constructed with river cobbles and were also rich in gold and pottery. According to Merritt these graves "were in juxtaposition with the oval graves, occurring interspersed with them in the northern and western sections of the Huacal, but abounding principally in the southern portion of the ground." The third grave form was also quadrangular but had a more elaborate construction. These graves were "located mostly on the more elevated portion of the Huacal, and in the southern and eastern sections." While these were the most elaborately constructed of the graves they yielded the fewest grave goods and the least amount of gold.

The locations of the different grave forms suggest that the site maintained some internal organization within the two halves, though it is unclear if the three grave forms represent contemporary or sequential differences. That the oval graves were located on the edges of the cemetery perhaps suggests that they were constructed later, as the cemetery reached its maximum dimensions. In this case, the three grave forms may represent a transition of grave construction over the use life of the cemetery; perhaps beginning with elaborately constructed quadrangular graves with small quantities of grave goods, including gold. Through time the rectangular graves were simplified in construction but grave goods increased in quantity. Near the end of the cemetery's use life the graves changed again in form to a simpler oval form but

objects interred with the deceased did not change significantly. While it may be reasonable to suggest that the cemetery was established on the highest portions of the hilltop and expanded down towards the site, the growth of the cemetery may have increased in any direction.

The other possibility is that the cemetery maintained three distinct grave forms throughout its occupation and that each grave form represented a distinct social group. That grave types seemed systematically clustered into distinct sections may indicate group separation related to social grouping or ranking. Merritt's description implies at least two sectors within each cemetery half, an elevated portion located to the east and south, and a lower area located to the north and east. According to Merritt, the more elaborate rectangular graves were located predominantly in the elevated portions of both halves of the cemetery. Oval graves and the simpler quadrangular graves were found most commonly in the north and west portions of the two cemetery halves. He does not describe clear divisions between these sectors but he does mention that some areas of the site were more crowded with graves than others. Given the severely looted condition of the site at the time of his visit, it would have been difficult for Merritt to accurately determine the spatial organization of the cemetery and its graves, especially since many would have been covered by spoil heaps or remained buried.

The Huacal de Bugába is often confused with the site of Bugabita and the names are sometimes used interchangeably. MacCurdy (1911), for example, describes the site of Huacal de Bugába in detail but refers to it as "Bugabita". Bollaert (1863:153) discusses both sites independently, and his brief description of Bugabita differs significantly from Merritt's description of Bugába:

...in the center there is a mound of stones, thought to be artificial, four to five yards high, and all around it are the "huacas de deposito," or tombs containing gold. Outside are the "huacas de sepultura," or huacas without gold; these are covered with flat stones. The others are marked with stones laid on the surface, in the form of circles, crosses, five stones, one at each corner and one in the centre, half-circles, three horizontal lines, and circles with four stones equidistant on the outside of the circle.

A brief description by Otis (1859) describes Bugabita as composed of "little burial mounds." Bollaert makes no mention of such features so it is unclear if Otis is describing the same cemetery or features that Bollaert overlooked. It is difficult to visualize the site based on the vague description but the concentric organization of a raised mound containing graves with gold and an external sector without gold is reminiscent of the organization at El Chiricano in the General Valley, Costa Rica, with its raised internal sector and lower external sector. The mound is also an interesting feature. He describes no grave features associated with the mound nor does he describe its full dimensions, but a single mound associated with two interment areas is similar to the features present at both the Panteón de la Reina and Huacal del Angel.

One of the challenges with interpreting descriptions of the Huacal de Bugába and Bugabita is that the locations of the sites are unknown. While there are several reports detailing the sites' features and grave goods, none reveal their precise locations. Unfortunately, scholars working in the region more recently have not made attempts to locate or further document either site.

The sites of Siogui and Paraíso Abajo are also described with patterns that resemble dual patterning at other sites but no information is available about the size of each section or additional internal pattering within them. Siogui is located an elevation of 300 m near modern town of Siogui Abajo, 5.3 km southwest of Concepción, Panama (de la Guardia 1967) and Paraíso Abajo is located near Boquerón (Esquivel 1967). Like the two cemetery zones at Murciélago, the sites are located on two hills separated by a stream. A possible fourth example

of a dually organized cemetery site is El Paso, which Joyce (1916:108) describes as "two cemeteries forming regular hills, faced with river-stones." Unfortunately, he provides no more explicit information and does not identify the location of the site.

Within the paired cemetery mode, a wide range of variation and patterns are apparent. Dual divisions appear in two basic forms. In the first pattern an area without burials separates the two halves of the cemetery. This area is often includes a "shared space" such as a vacant area, mound, or some kind of natural barrier, such as flowing water or a ditch. In the other pattern, the two halves are adjacent but the parts are distinguished by differences in elevation, such as at the sites of Pueblo Nuevo and Chiricano.

The dually organized cemetery organization appears independent of the size and wealth of the cemetery. The pattern is identified at large cemetery complexes such as the Panteón de la Reina, Murciélago, Huacal de Bugába. It is also present at much smaller cemeteries such as Pueblo Nuevo, located in the northern General Valley (Bozzoli de Wille 1961). At the largest sites, the two principal interment areas appear to have been divided into smaller internal parts. This is most clear at the site of Murciélago, which has two burial zones, each containing multiple cemeteries, grave clusters, and individual graves. This pattern parallels the residential sector of the site, which was similarly divided into two habitation zones, each with residential groupings and individual structures.

Summary of Chiriquí Patterns

Two primary organizational patterns, each with variations, characterize Chiriquí cemetery complexes: dually organized and multiple-mound. The presence of several examples of each type raises the question of why two clearly different mortuary patterns are found throughout

Chiriquí. Two explanations are possible. The first is that the two designs represent two distinct burial traditions that existed largely contemporaneously throughout Chiriquí, perhaps tied to regional variations in social organization and differing concepts of death and burial. The other possibility is that the two patterns represent a diachronic shift in mortuary practices, with one cemetery form replacing the other. We currently lack adequate regional survey coverage, detailed site descriptions, and fine-grained temporal resolution to fully address this question. However, several lines of evidence strongly support the latter explanation.

The walled cobble platform mounds at some Chiriquí sites are similar in size and construction to the mounds found at large Aguas Buenas sites. For example, the Chiriquí cemetery sites of Potrero Grande and Finca Remolino follow site plans almost identical to the Aguas Buenas sites of Sitio Bolas, Animas, and El Cholo, all sites with walled mound constructions. Sitio Bolas, for example, is a 5-ha complex of rectangular mounds, some with ramps and graves on the interior. In terms of size, construction, and organization it is virtually indistinguishable from multiple-mound Chiriquí sites.

Recent excavations at El Cholo by Roberto Herrera (2006) confirm that Aguas Buenas mound constructions were likely multi-use facilities, serving residential, ceremonial, and mortuary functions. The fact that internal patterning of multiple-mound Chiriquí cemeteries so closely resembles that of Aguas Buenas sites may indicate a continuity of mound use from Aguas Buenas into Chiriquí, with a shift away from residential use of mounded structures, and towards exclusively mortuary purposes. The continued use, or perhaps reuse, of Aguas Buenas mound sites during the Chiriquí period is supported archaeologically by the presence of both Aguas Buenas and Chiriquí sherds at some Chiriquí multi-mound cemeteries. According to Haberland (1984:251), "Chiriquí-phase graveyards sometimes cut into or through these older

sites, and Aguas Buenas sherds might be found in the fill." All of Haberland's cemetery excavations were conducted at multiple-mound sites.

Likewise, stonework associated with some Chiriquí multiple-mound cemeteries includes stone balls and peg-based statues, both of which have their origins in the Aguas Buenas period but persist into Chiriquí at a small number of sites in the Diquís Delta region (Fernandez and Quintanilla 2003). To date, neither stone balls nor peg-based statuary have been identified at any dually organized cemeteries.

In respect to the later use of dually organized cemeteries, the presence of paired Contact period and Colonial villages like Turrialba la Chica and Turrialba el Grande described in the previous chapter, and the late-Chiriquí site of Murciélago, with its paired residential and funerary zones, demonstrate that the spatial expression of dual concepts was a pattern that was present in late Chiriquí and into the Contact period. These concepts are likely linked to some form of dual social organization, as later used by the Bribri, Cabécar, Kógi, and other Intermediate Area groups. Rivas, the only other firmly dated site exhibiting dual spatial patterns, was occupied from *ca.* A.D. 900 through 1300, suggesting that the paired cemetery pattern was perhaps established by the end of the first millennium A.D. However, the paired Panteón de la Reina cemeteries may post-date the earliest phases of Rivas residential occupation.

Patterns and dates from the sites of Rivas and Murciélago, when combined with regional patterns of cemetery organization, lead to the inference that multiple-mound cemeteries began during the Aguas Buenas tradition and persisted through the first two or three centuries of the Chiriquí period before being replaced by larger dually organized cemeteries sometime around A.D. 900 and then persisted until Contact. The evidence also indicates that from Aguas Buenas through the development of Chiriquí there was a shift toward spatially distinct residential and

cemetery locations. Cemeteries became more formalized and were separated from villages both horizontally and vertically. Cemetery locations remained on high hilltops or terraces while villages developed and grew on lower terraces, directly above rivers. Confirmation of this hypothesis requires excavations and multiple radiocarbon dates from several multi-mound and dually organized Chiriquí cemetery sites.

Summary and Conclusions

Archaeologists have identified two kinds of Chiriquí cemeteries, simple and complex. A close analysis reveals that that latter type can be subdivided into those that are organized with multiple-mounds and those that are organized into two discrete burial areas. Although we lack the necessary radiocarbon dates to organize them chronologically, several lines of evidence suggest that multiple-mound cemeteries are earlier and dually organized sites are later, with the transition from one type to the other occurring around A.D. 900. The presence of dually organized cemeteries and residential sites throughout southern Costa Rica and western Panama supports the proposition that a system of dual organization existed in the region from at least A.D. 900 until contact.

Within several of these cemeteries, the dual divisions appear have been constructed to appear unequal, with one half larger than the other, one half positioned higher than the other, or both. These patterns are most apparent at the sites of Bugába, Panteón de la Reina, and Pueblo Nuevo. Bollaert noted that one half of the Bugába cemetery was five acres while the other was seven, a 30 percent difference in size. There are also clear differences in the sizes of the Murciélago cemeteries, with the north cemeteries clearly fewer in quantity and smaller in extent than the south cemeteries. A different pattern is apparent at the Panteón de la Reina where

asymmetry was not expressed with differences in the spatial extent of the cemeteries but with differences in their elevations. The north cemetery, while 10 percent smaller in area than the south cemetery, is positioned 30 m higher. These patterns are consistent with those in the Andes, where architectural features are frequently organized as a pair of similar but unequal halves.

Another pattern is the presence of shared space within some sites. The Panteón de la Reina, Limón, and the Huacal del Angel all have an architectural feature that sits between the two cemetery halves. At the Panteón de la Reina, this feature is a paved platform at the top of a staircase linking the residential and mortuary zones. Limón and Huacal del Angel exhibit a single large mound feature between the two burial zones. These features have not yet been fully evaluated archaeologically, but their central and elevated positions between the two cemeteries and away from residential zones implies that they served mortuary-related functions, including those carried out prior to burial and those commemorating the dead.

Bribri social organization and funerary practices may provide analogues that can be broadly applied to understand spatial organization and other patterns at dually organized mortuary facilities. The fact that the Panteón de la Reina and other major cemetery sites of the later Chiriquí period are divided into two separate burial zones, often with smaller internal subsections and groupings of graves strongly implies that a principal of dualism may have structured Chiriquí socio-political organization, with each moiety subdivided into clans, lineages, or other kin-based groups.

One way to visualize Bribri organization is as sets of increasingly larger social groups, beginning with the individual. Every individual is a member of an extended family. Each family is affiliated with a clan. Multiple closely related clans form "clan groups" or "clan clusters",

which are considered, in Bribri terms, to "share the same branch". Clans and clan clusters comprise each moiety, and the two moieties constitute the Bribri community. If we apply these Bribri social groupings to spatial patterns of dually organized Chiriquí cemetery complexes, there is a close fit between social and spatial units. Table 5.1 illustrates a generalized model of Bribri sociopolitical organization may be applied to the funerary organization of Chiriquí cemeteries.

Table 5. 1 Possible association of mortuary zones with social divisions

Community	→	Village Cemetery (-ies)
Moiety (Two in each community)	→	Cemetery Half/ Cemetery Zone
Clan clusters (3-4 in each moiety)	→	Subdivision within half/Cemetery
Clans (3-4 in each clan cluster)	→	Grave clusters
Individual (many in each clan)	→	Individual grave

These patterns may be further informed by patterns of Bribri burial. Ethnographically, there is some information regarding how groups of people were buried. Bozzoli de Wille (1975a:115) states: "Each clan had its own bone repository about fifty meters from the neighbor's... Each clan was closest to that which was more related. They are arranged in rows" and "...the cemetery had a square shape but extended over irregular terrain, not flat. Each clan's *apú* was facing that of the clan in which the clan members were supposed to marry. The bone bundles were placed so as to turn their backs on the in-laws" (Bozzoli de Wille 1975a:118).

Applying Bribri social units to Chiriquí cemetery units, such as those at Murciélago and Rivas, suggests the following organization: The community as a whole maintains a series of cemeteries for its dead. They are reflected in a single defined cemetery zone. Each moiety was buried in one half of the cemetery zone. At Murciélago, these halves are two spatially defined

cemetery zones, each with multiple individual cemeteries within larger spatially defined cemetery zones. At Rivas they are two burial zones within the Panteón de la Reina mortuary complex.

Other architectural features including walls, vacant spaces, and stone pillars, groups of graves, and the surface shape of graves may have served to define socio-spatial divisions within cemeteries. Individuals are represented by individual graves. The presence of two different grave forms (oval and rectangular) within a single cemetery is more difficult to understand in the context of the Bribri system.

In following chapters, I explore these concepts of dualism, asymmetry, and group differentiation by testing the model of Chiriquí moiety at the site level. I investigate these questions at the Chiriquí period cemetery complex, Panteón de la Reina, located at the northern end of Greater Chiriquí. In the next chapter, I present an overview of previous research at the Panteón de la Reina and its adjacent and coeval residential-ceremonial site, Rivas.

6. PREVIOUS INVESTIGATIONS AT THE RIVAS-PANTEÓN DE LA REINA COMPLEX

The focus of my field research was the Panteón de la Reina, a large Chiriquí Period site located near the northern limits of Greater Chiriquí. My decision to work at the Panteón de la Reina was based on a number of factors. The primary among them were the previous research at the Panteón de al Reina and the intensive multi-year investigations at its adjacent residential-ceremonial site, Rivas. As one of the most intensively studied sites in Costa Rica, we already knew a great deal about Rivas and the Panteón de la Reina. My work would therefore benefit from the much that was know about Rivas and I expected that I could add much to what was already known about Rivas. In this chapter I briefly discuss the previous research at the Rivas site and the Panteón de la Reina to provide contextual background for my own fieldwork.

Rivas-Panteón de la Reina

Rivas-Panteón de la Reina complex is located in the northeast portion of the General Valley at 9°24'51" North latitude and 83° 39'19" West longitude between 840 and 880 m above sea level in the province of San José, *cantón* of Pérez Zeledón, district of Rivas, and barrio of Guadalupe. As discussed in the previous chapter, the site consists of two components: Rivas, the residential-ceremonial zone of the site, and Panteón de la Reina, the large, specialized funerary complex and cemetery. Together these two sites form a single site complex of at least 60 ha, hereafter referred to as Rivas-Reina.

Rivas presents a dense concentration of dwellings, ramps, stairs, plazas, drains, walls, and other architectural features. The site's features were built on the third and fourth terraces above

the west bank of the Río Chirripó Pacífico, approximately 0.5km northwest of the confluence where the Chirripó and Buenavista rivers meet to form the General River (Figure 6.1).

The Panteón de la Reina lies on a ridge just west of Rivas. This cemetery complex has been known since the late 1800s, when it was severely looted by local huaqueros looking for gold. The site suffered heavy looting from its discovery through the first three decades of the twentieth century. During this period the Panteón de la Reina developed the reputation as one of the richest gold-bearing cemeteries in southern Central America (Bozzoli de Wille 1966; Lothrop 1926; Pérez-Zeledón 1907-1908; Pittier 1892). Henri Pittier (1892:72), who explored southern Costa Rica in the late nineteenth century, provided the first published reference to the site, which by the time of his visit was already heavily looted: "En el ángulo que resulta de la junta de los Ríos Chirripó y Buena Vista, existía un vasto cementerio, cuyas tumbas han sido abiertas casi todos. De ellas se sacaron muchos muñecos de oro y piezas de alfaría" (At the angle formed by the confluence of the Chirripó and Buenavista rivers, there was a vast cemetery, whose tombs had almost all been opened. From these were taken many figures of gold and pieces of pottery). Most of the gold objects were melted down, but several examples survived and are now in the possession of museums in Costa Rica, the United States, and Germany (see Quilter 2000).

Rivas

Robert Drolet identified the Rivas site in the late 1980's and conducted limited testing there (Drolet 1992, 1994). Between 1992 and 1997 Jeffrey Quilter carried out intensive research at Rivas including survey, testing, and excavation, which revealed large-scale architecture (Operations D, D-94, and E), small-scale architecture (Operations A and J), two small

cemeteries (Operations C and K), a petroglyph (Operation B), and other architectural features

(Figure 6.2). In 1998, Quilter conducted initial mapping and test excavations at the Panteón de la

Reina. Below, I briefly summarize results of Quilter's research within these operations, as I

make specific references to them in subsequent chapters. My summary of the previous work at

the Rivas-Panteón de la Reina is summarized from Quilter's 2004 book, *Cobble Circles and*

Standing Stones: Archaeology at the Rivas Site, Costa Rica.
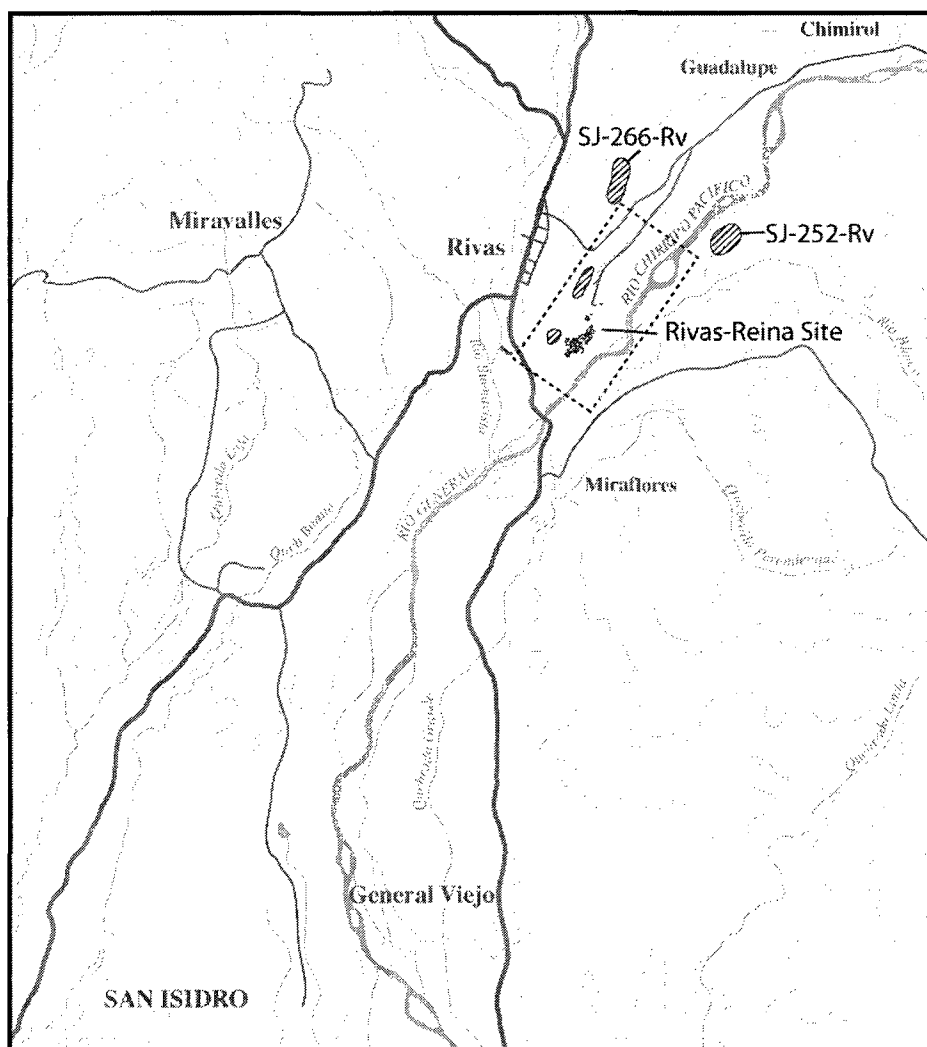
Figure 6. 1 Location of Rivas and Panteón de la Reina. Dotted box represents limits of Figure 6.2

Drolet (1986) and Quilter (2004) agree that the occupation of Rivas begins by at least the Aguas Buenas phase (500 B.C.-A.D. 700), based on small, localized distributions of Aguas Buenas sherds, often along terraces edges and near petroglyphs. Their investigations did not identify any residential areas associated with Aguas Buenas materials, but two large, yet unnamed Aguas Buenas mound sites are located on hilltops on either side of the Chirripó River. SJ-252Rv, on the east side of the Chirripó River, consists of at least a dozen circular mounds on an elevated plain. The other, SJ-266Rv, is located on the west side of the Chirripó River, 1.5 km up-valley from the Rivas-Reina site (Figure 6.1). This site, located at an elevation of 1200 m, includes at least fifteen conical mounds ranging from 10 m to over 40 m in diameter (Quintanilla 1995). Larger mounds are defined by stone retaining walls. Neither of the sites has been scientifically investigated but interviews with local landowners and looters indicate that both have produced jade beads and pendants, carved slab metates, and incised pottery, all of which are common in the Aguas Buenas period. Fragments of the metates and pottery are found in abundance on the surface around the looted mounds.

Quilter's radiocarbon dates (see Appendix B) indicate that the Chiriquí component at Rivas was established by around A.D. 900 and that the site was inhabited continuously until sometime after AD 1300. Quilter's investigations did not identify any evidence of occupation after A.D .1300, although the possibility exists that small remnant populations inhabited the site.
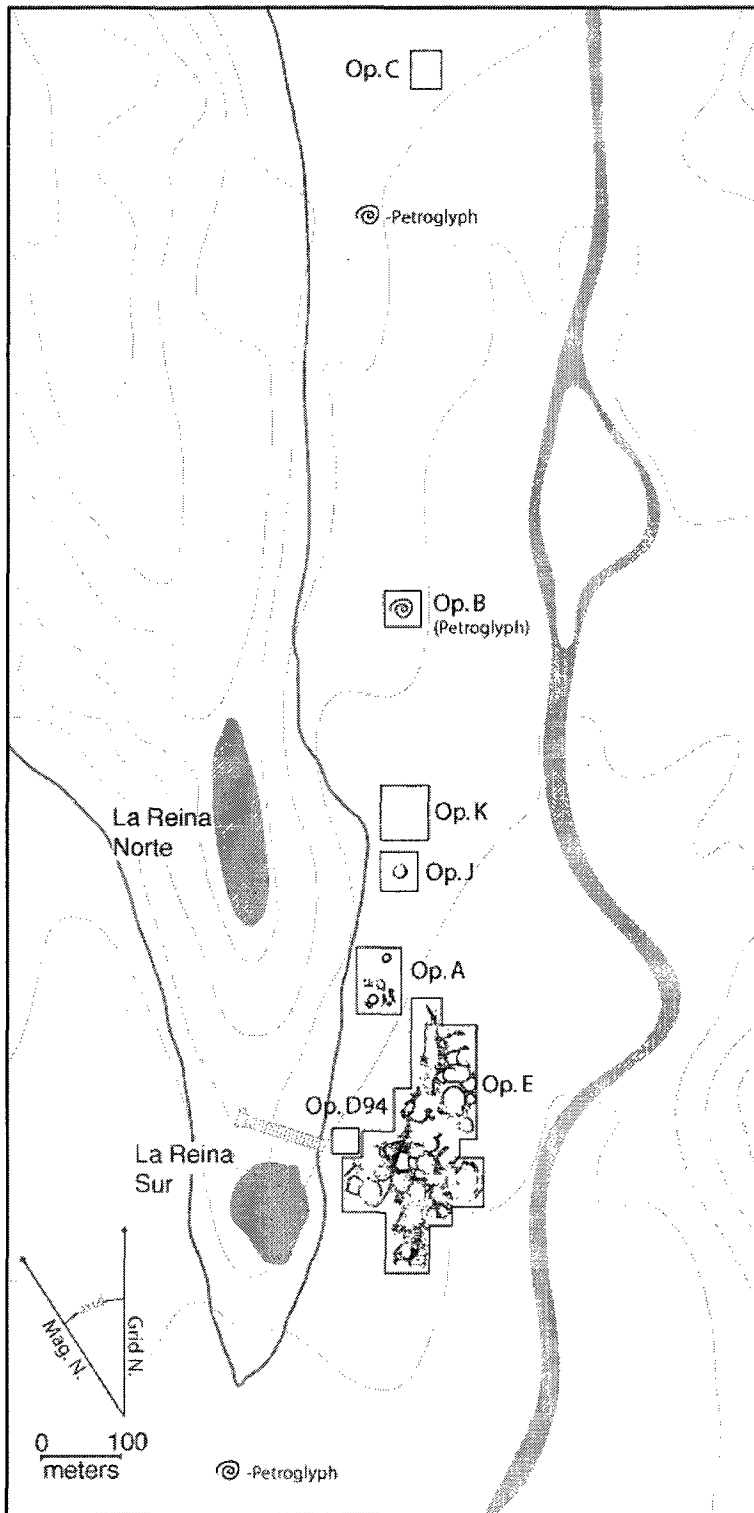
Figure 6. 2 Map of the Rivas-Reina with operations indicated

Small-Scale Architecture: Operations A and J

Quilter investigated two areas of small-scale architecture, Operations A and J. Both are located on the fourth terrace above the Río Chirripó and below the La Reina Norte. Operation A revealed at least four circular residential units, each measuring approximately 10 m in diameter (Figure 6.3). Three structures are grouped in the south end of the Operation, while the fourth is located about 30 m to the north. One of the structures (Structure I) is unique in that it includes a roughly trapezoidal shaped addition to the southwest side of its stone foundation. This projection likely represents the base of a covered entrance to the structure. Comparisons with traditional Bribri houses, called *u-suré*, suggest that conical structures of perishable materials once stood above these circular foundations. Today, these structures often include a covered but open-sided annex or ramada in front of the main entrance, similar in size and shape to the foundation in Operation A (González and González 2000:36).

Excavations in January 1992 recovered dense accumulations of artifacts around the perimeters of these structures, but few artifacts within them. Artifacts consisted mostly of domestic refuse, including fragments of ceramic cooking and storage jars and bowls for consumption of food and beverages. Chipped stone artifacts included scrapers and manufacturing debitage. Quilter and Blanco also identified non-utilitarian objects such as an eroded feline effigy head carved from volcanic stone, probably once part of a metate; a ceramic peccary figurine; and several fragments of stone sculpture. On the west end of Structure II was a small petroglyph carved upon one of the cobbles defining the foundation (Quilter 2004:32).

Quilter interpreted the three stone foundations as a compound for an extended family. He suggested that Structure I may have housed the head of the group, given its better construction and the porch on its southwest side.
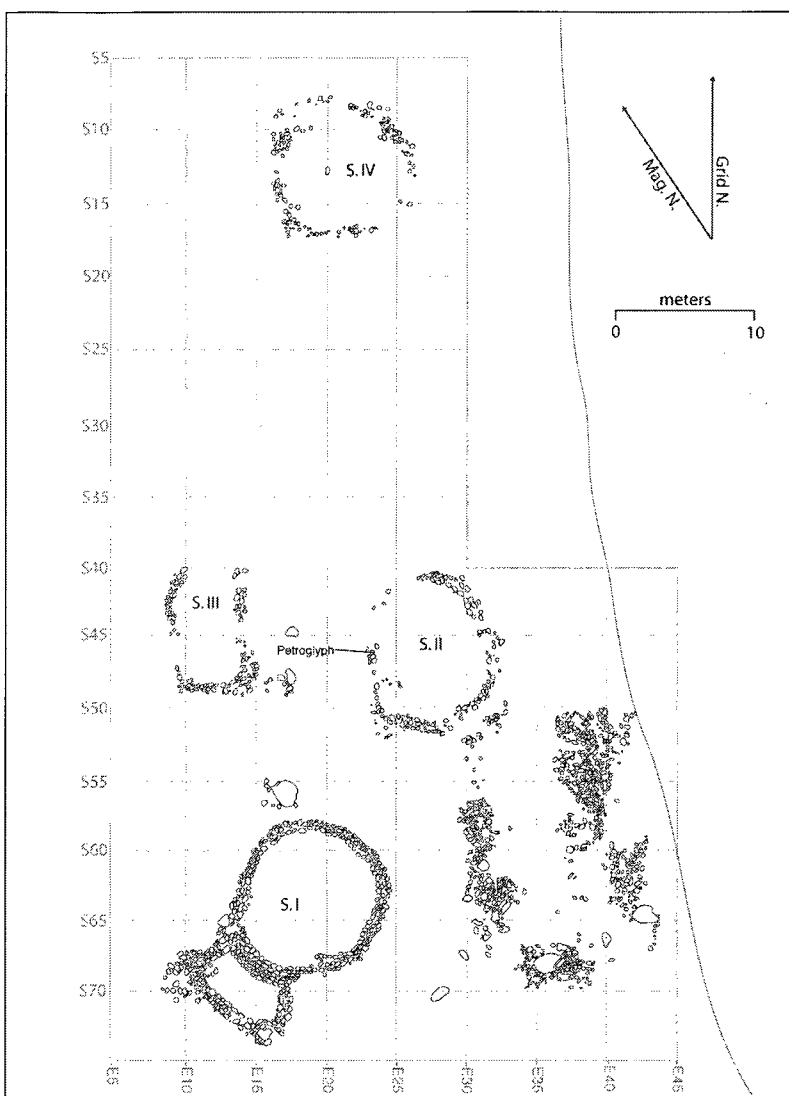
Figure 6. 3 Operation A

Another circular foundation, within an area designated Operation J, is located 100 m north

of Operation A and 40 m south of Operation K, a cemetery. An intensive shovel test survey

between Structure IV in Operation A and the structure in Operation J revealed no architecture,

suggesting an open space between the two (Frost and Ringberg, n.d.). The structure in Operation

J is 17 m in diameter, defined by carefully placed and well-preserved arrangements of stone

cobbles (Quilter 2004:126). The dense accumulations of refuse associated with this structure are similar to those found in Operation A, suggesting that this structure was also residence.

Large-Scale Architecture: Operations D and E

I discuss Operations D and E together, as they sampled the same complex of architecture (Figure 6.4). The division between operations is an arbitrary one, based on modern property lines, changes in crops, and the field seasons in which the two areas were investigated. Quilter directed excavations in Operation D during the 1992, 1994, and 1995 field seasons, and in Operation E in 1993 and 1994.

Operations D and E are separated by a 70 m-wide grove of mature coffee trees. No excavations were conducted in this area, but we did attempt to map all architecture visible on the ground surface. The resulting features allow us to link the architecture in Operations D and E together into one larger complex, but we almost certainly missed a significant portion of architecture, particularly that which is deeply buried or constructed from smaller stones. This is reflected in the final map of the Rivas site, which appears to have wide gaps between the architecture of Operations D and E.

Together Operations D, E, and the intervening coffee field include more than 30 ha of large-scale architecture. In this zone, the residents of the Rivas site used large boulders to construct the foundations of circular structures much larger than those described above, measuring up to 30 m in diameter. Throughout Operations D and E, foundations intersect to form a continuous patchwork of circular foundations and roughly quadrangular spaces between them. Additional architectural features including steps, causeways, ramps, walls, and drains help to define transitions between structures and changes in elevation. Some of the larger round

structures exhibit upright stones set at regular intervals around their perimeter, perhaps foundations for wooden posts that supported roofs. Other spaces appear to have been unroofed and may have served as courtyards or plazas shared by multiple structures. Like Structure I in Operation A, many of the structures in Operations D and E include trapezoidal additions on one side. In Operations D and E, these porches invariably face west, towards the Panteón de la Reina. I return to this fact below.

The large size and irregular shape of one oval structure in Operation E suggest that it served a special function and may have been one of the unroofed spaces. Within the structure, Quilter (2004:70) identified a layer of bright reddish-orange soil, one of the few clearly defined occupation surfaces at the site. This prepared surface suggests that the structure may have been a public space for dances, ceremonies, or other public performances, with the bright soil used to help create a colorful and visually pleasing platform on which to perform.

Along the south wall of this large oval structure, Quilter and his crew identified a concentration of at least five broken ceramic vessels (2004:71). The position and distribution of sherds from these vessels seemed to indicate that the pots had not broken naturally in-situ but may have been purposefully smashed along the perimeter of the structure. Further evidence that these ceramic vessels may have been deposited as part of some special activities is the fact that they exhibit some of the most unusual designs found in the site's pottery assemblage, including supports in the form of mythological creatures or masked people. Quilter (2004:105) also identified a similar pattern in Operation D where he excavated large quantities of smashed "fine quality" ceramics at the base of a set of steps positioned on the west end of small plaza.
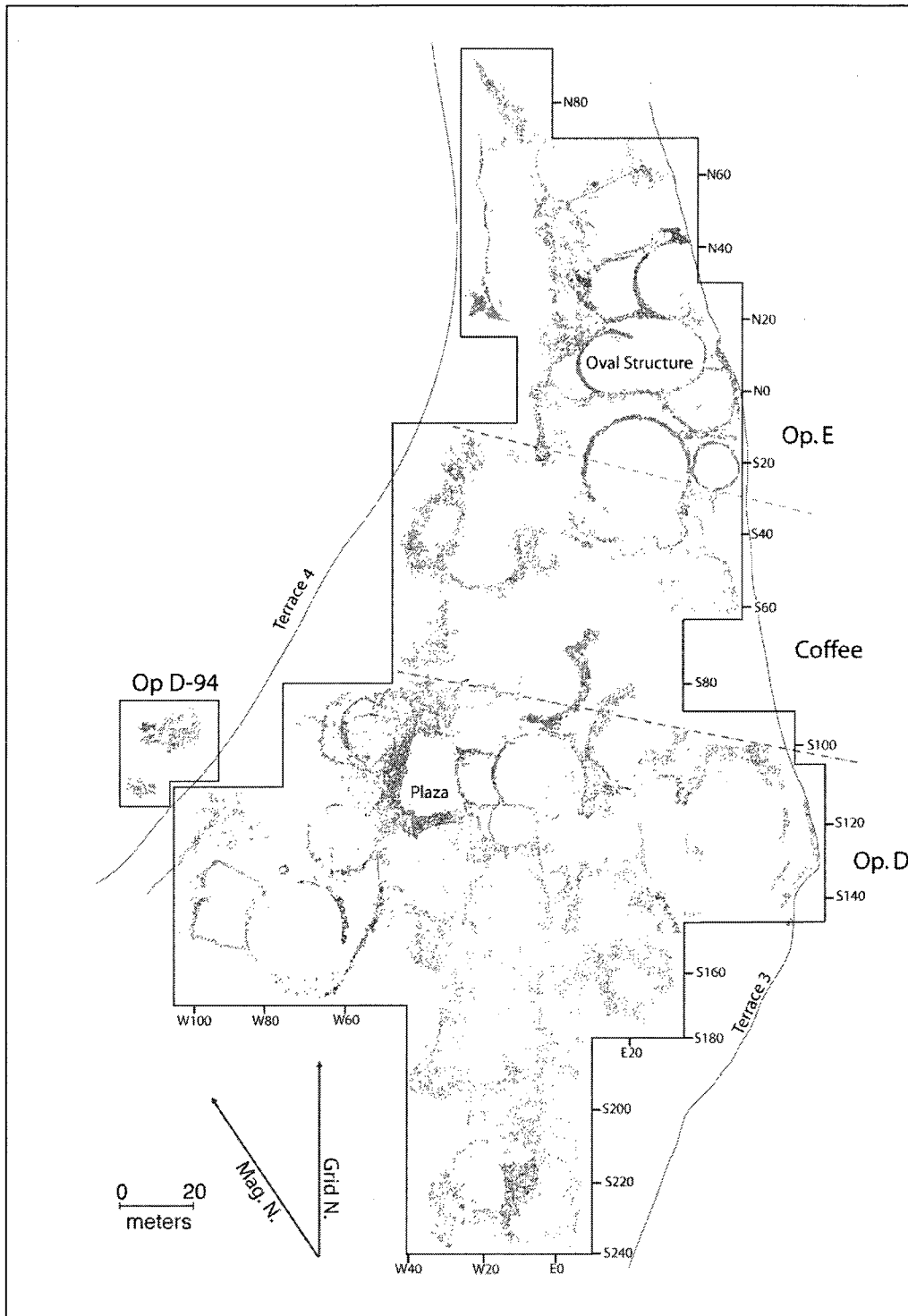
Figure 6. 4 Operations D, D94, and E

Excavations in Operations D and E identified evidence of two construction phases. A stratigraphically lower construction phase associated with numerous ceramic artifacts and organic-rich soils was overlaid with a sterile layer of reddish-orange laterite, approximately 30 cm thick (Quilter 2004:53, 70). The local name for this is *piedra muerta* (dead rock), named for the small fragments of heavily weathered rock it contains. Piedra muerta is not found on the river terraces where the Rivas site is located, but it is the predominant soil type in the surrounding hills, including the area of the Panteón de la Reina. It seems that piedra muerta was brought in to bury earlier architecture and fill low areas in order to construct a level base for the second phase of architecture. It is difficult to characterize how the later phase differs from the earlier phase because Quilter was only able to expose small sections of the lower levels. It does seem that the upper architecture was constructed on a larger scale than the lower, and that it is oriented with the porch-like additions oriented towards the Panteón de la Reina. Elsewhere in Operations D and E, some lower structures appeared to have been partially disassembled, perhaps to obtain building materials for newer constructions. Radiocarbon dates indicate near contemporaneity for the two building phases suggesting that the fill and second building phase occurred during a relatively short period of time (see Appendix B).

As was the case in Operation A, Quilter identified dense deposits of ceramic and lithic artifacts around the perimeter of these structures and low densities within them. Ceramic analyses by Quilter and Doonan (Quilter 2004; Quilter and Doonan n.d.) identified the most common Chiriquí ceramic types: Buenos Aires Polychrome, Papayal Engraved, Ceiba Red-Brown, and other redwares were the most common. Tarrago Biscuit ware was present but in very small quantities. Quilter also identified small quantities of fragments of vessels from the Atlantic Watershed and Central Valley regions of Costa Rica, Guanacaste, in northwestern Costa

Rica, and from Central Panama. Other artifacts include fragments of freestanding stone sculpture, several celts, two adzes, and numerous stone scrapers (Quilter 2004).

Petroglyphs

At least four petroglyphs are associated with the Rivas site. I previously mentioned the small petroglyph associated with Structure II in Operation A. It was the smallest petroglyph at Rivas and the only one clearly associated with architecture.

A second petroglyph, revealed in Operation B, lies 300 m north of Operation A. The petroglyph is an eroded spiral design carved upon the upper surface of a large boulder. The boulder is surrounded by small cobbles that could be the remains of some associated feature, but this is unclear. The boulder is positioned on a slight rise that runs the length of the terrace, 19 m west of the terrace edge and 100 m east of the base of the hill where the Panteón de la Reina sits. The location of the petroglyph roughly corresponds with the northern limits of the La Reina Norte. A third petroglyph, approximately 250 m south of Operation D, is similarly positioned south of the southern limits of La Reina Sur. Landowners reported a fourth petroglyph approximately 300 m north of Operation B. This petroglyph is a well-preserved spiral carved upon a boulder that also sits on a distinct rise on the terrace edge. Shovel testing and testpits around this petroglyph recovered dense concentrations of sherds, including numerous Aguas Buenas types (Frost and Ringberg n.d.).

The locations of the three boulder petroglyphs along raised areas near terrace edges suggest that they may have been associated with formal paths extending from the north and south ends of the site. The Operation B petroglyph and the petroglyph at the southern end of the site may have served as boundary markers, signaling the limits of the Rivas-Reina complex.

Simple Cemeteries: Operations C and K

Quilter excavated two small cemeteries associated with the Rivas site. Operation C sampled a small cemetery located at the far northern end of the Rivas site along the edge of a terrace. Quilter (2004:42) estimates the size of the cemetery at 200 m^2, but he limited excavations to a group of seven graves within a 40 m^2 area (Figure 6.5). Rows of upright cobbles defined the perimeter of each grave, and the surface within that perimeter was paved with cobbles laid flat. The stones used for grave pavements were consistent in size, generally between 20 and 25 cm in diameter. The finished grave pavements were roughly rectangular or oval in shape. At least three of the graves were slightly disturbed on their surface, but the placement of cobbles on the remaining graves suggested that all were oriented east-west.

A highly disturbed concentration of cobbles and the presence of several looters holes to the southwest of the graves suggested the presence of additional graves or some other mortuary features but these were not investigated. To the northwest, Quilter mapped a 5-m long line of stones set on edge that appeared to have defined the northern limits of the cemetery.

Graves measured between 1.0 and 1.5 meters in depth. In most cases the maximum depth of the grave corresponded to the surface of the soil's parent material, a deposit of tightly compacted sand and pebbles laid millennia earlier when this terrace was the active riverbed (Lawrence Conyers, personal communication 1992).
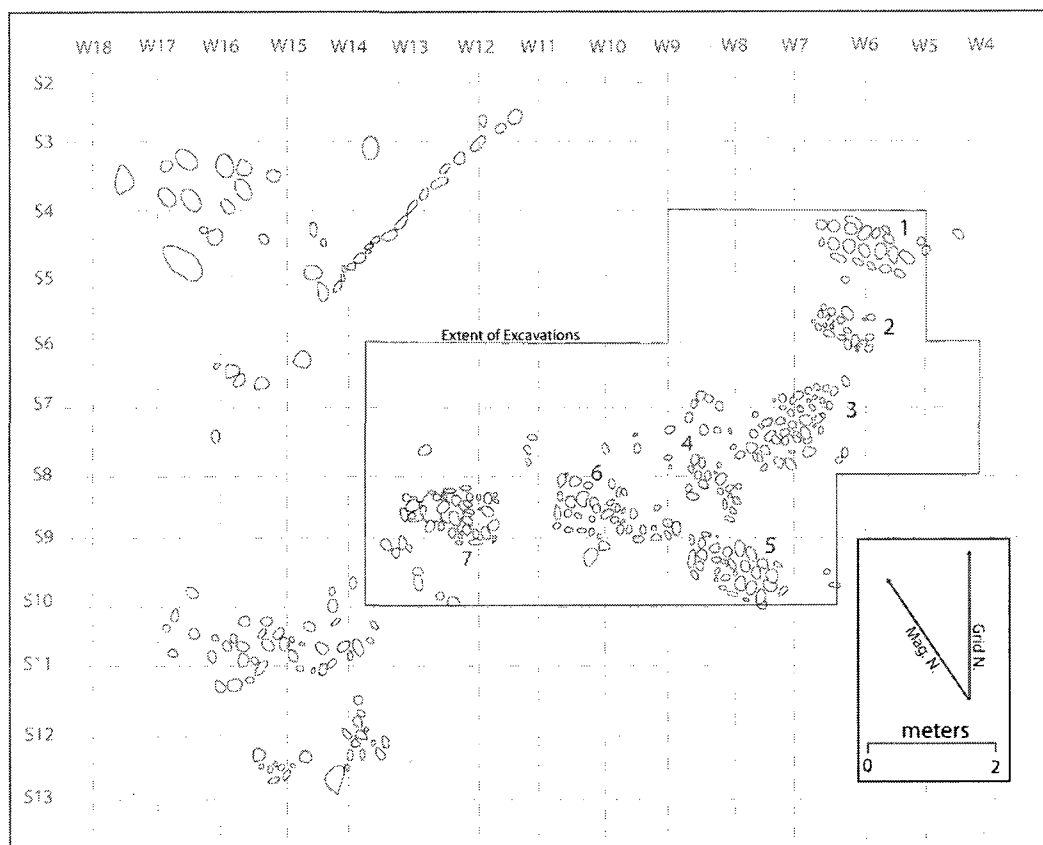
Figure 6. 5 Excavations in Operation C

The walls of graves were difficult to define, as soil colors and textures of the surrounding matrix and the grave fill were virtually identical. In most cases the location of the burials could only be inferred through the position of grave goods and what Quilter terms "shadow corpses," dark stains remaining in the soil after the bodies—including the bones and teeth—had decomposed entirely. The placement of grave goods in relation to the stains indicated that grave goods were placed near the heads and feet of the deceased. Quilter notes that the position of grave goods did not always align with the position of pavements capping the grave (Quilter 2004:44). Instead, grave pavements were placed slightly off-center, suggesting they may have been placed some time after the construction burial, when the exact position of the grave was

difficult to identify. Iwaniac (1986) reported similar patterns at La Pista, one of several cemeteries associated with Murciélago.

While all seven graves shared similar construction, one was unique. Grave 7 had two levels separated by a layer of three round *lajas*, or flagstones. Like the pavement above, these stones were oriented east-west. Grave goods were positioned below the lajas, suggesting that this was also where the body had been placed.

The graves in Operation C included between one and 24 non-perishable objects. With only one exception, grave goods were positioned on the floor of the grave. In Grave 1, a small ceramic vessel was placed directly under the stone pavement. The remaining eight vessels in this grave were placed at the base of the grave, presumably with the body.

Ceramic objects found in the graves included several jar and bowl forms, a rattle in the form of a bottle gourd, a small whistle in the form of a trophy head, small clay beads, a spindle whorl, and a tapir figurine. The number of miniature vessels is notable. Overall, the assemblage is restricted to the five most common Chiriquí ceramic types. Most common are Turucaca White-on-Red and Sangria Fine-Red, together referred to as "redwares." Present in much lower frequencies were Ceiba Red-Brown, Buenos Aires Polychrome, and Papayal Engraved. There were no examples of Tarragó Biscuit ware. The only other grave goods Quilter recovered were two stone celts, both from the same grave.

According to Quilter (2004:47), the grave goods suggest that the Operation C cemetery served a middle to low status social group. The ceramic forms and types are among the most common in the region, and the grave goods included no gold or tumbaga ornaments, elaborate stone metates, or other high status objects. The cemetery also exhibited very little architectural elaboration, lacking the walls, mounds, stone pillars, and other common features of Chiriquí

cemeteries. Two radiocarbon dates from the cemetery suggest that it dates to near the end of the Rivas occupation, between AD1200-1400. A third sample provides a much earlier date, between AD 890 and 1020 (see Appendix B).

Another simple cemetery was investigated in Operation K, located on a prominent rise between a terrace edge and the base of the Panteón de la Reina ridge. At the time of the 1996 excavations, the cemetery had been severely damaged due to coffee farming and sporadic looting by local farmers. Landowners admitted that several years earlier, they regularly opened graves as they encountered them during agricultural activities. Most of the artifacts they collected had been sold or otherwise dispersed. Those that were still in the possession of the local families included several small, undecorated jars, a small Papayal Engraved constricted rim tripod bowl, a large Turucaca White-on-Red tripod bowl, and a crude and highly eroded stone sculpture in roughly human form.

Quilter excavated six graves in a 4-m by 6-m area. In contrast to Operation C, there were few surface indications of graves, probably because most grave pavements had been removed to accommodate rows of coffee. The graves were also deeper than in Operation C, reaching up to 2 m below ground surface. As in Operation C, the base of the graves seems to have corresponded with the top of the soil's parent material, in this case heavily weathered bedrock.

Graves 2 and 5 in Operation K were constructed in two levels separated by several overlapping lajas, as in Grave 7 in Operation C. All of the associated artifacts were located below the lajas. In Grave 5, three of the four lajas were flat slab metates placed upside-down. Although it was difficult to determine accurately the orientation of graves in this cemetery, these two features, like graves in Operation C, were oriented east-west. While we found no skeletal remains in Operation K, the "shadow corpses" imply an east-west orientation.

In general, grave goods were similar to those in Operation C, consisting of a few ceramic vessels or celts per grave.

"False" Cemetery: Operation D-94

Operation D-94 is located on the fourth terrace above the Río Chirripó, one terrace above the architecture revealed in Operations D and E, directly west of Operation D and east of the base of the Panteón de la Reina (see Figure 6.2, above). Excavations in this area in 1994 sought to investigate features resembling the grave pavements in Operation C. These pavements covered and area of at least 20 m by 20 meters. The pavements were constructed in two sets, one to the north and one to the south, separated by a slight depression approximately 5 m wide, which contained no apparent architectural features (Figure 6.6). Due to time constraints and restrictions by the landowner, Quilter was only able clear, map, and excavate the northern set of pavements. A surface inspection of the southern pavements determined they were similar in form and organization to the northern pavements, but covered an area of approximately half the area. I will come back to this point in Chapter 9.

As in Operations C and K, the pavements in this area were formed by creating an oval or rectangular border of upright stones that was filled with small flat rocks. Three important facts distinguish this zone from the cemeteries in Operations C and K, however.

First, the pavements did not apparently cover graves. Quilter excavated below six pavements and found no evidence of grave shafts. Instead there was only a uniform layer of the same red piedra muerta soil used for the remodeling in Operations D and E. Associated artifacts were limited to low quantities of sherds mixed throughout the fill. He found no "shadow corpses" or grave goods that would indicate that these features were intact graves.
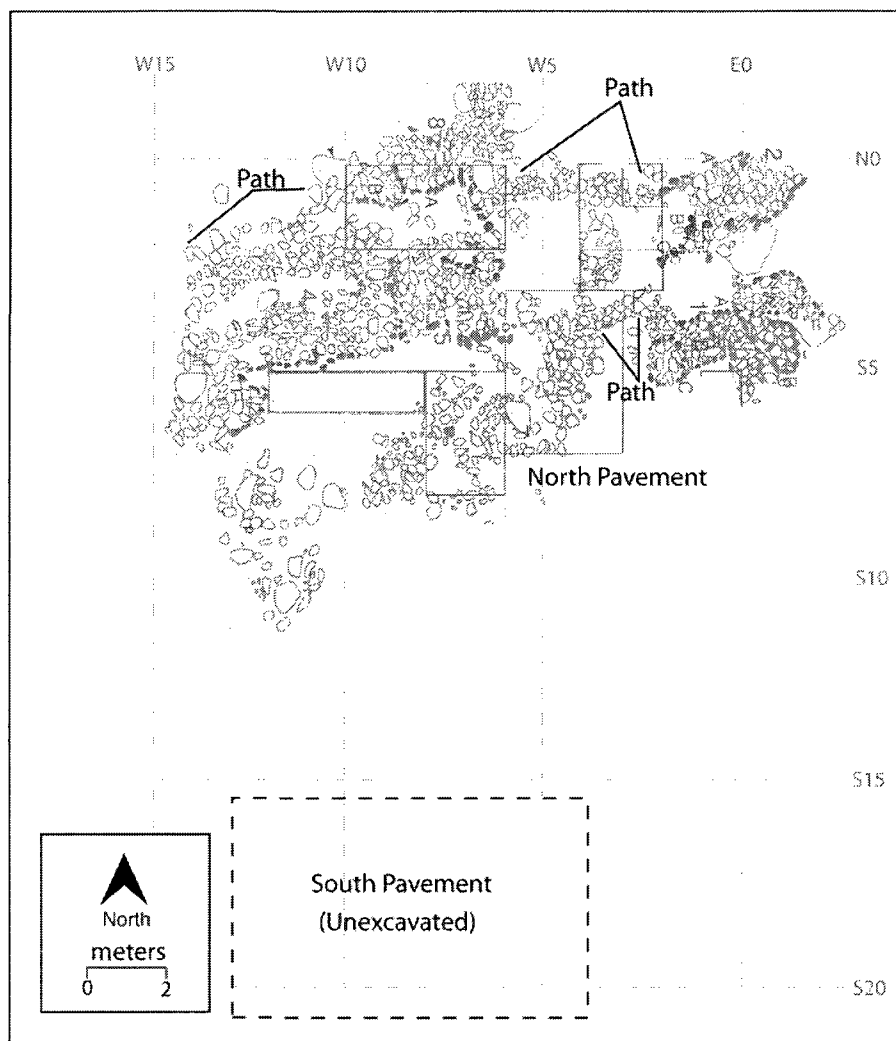
Figure 6. 6 Operation D-94

Second, unlike the grave pavements in Operations C and K, there was little space between these pavements. In some areas, narrow strips of pavement form what may be paths between the larger oval and rectangular pavements.

Finally, Quilter identified five complete or fragmented stone pillars in this area. Two of the pillars were less than 50cm tall and found on the west end of individual pavements. Larger pillars, over a meter in length, were located near the perimeter of the Operation D-94 pavements.

The larger pillars were similar in form and size to those that are commonly found in Chiriquí cemeteries, including the Panteón de la Reina.

The shape and size of pavements presented strong parallels to cemetery pavements, and the presence of the pillars and the location of the pavements on a terrace overlooking the habitation site more specifically suggested links to the specialized funerary sites where high-status individuals were buried. The parallels were so strong that our excavations here began with the premise that this was a high-status cemetery.

This enigmatic zone presents interesting questions. The pavements and pillars suggest a mortuary function. Although the absence of human remains or grave goods shows this was not a cemetery per se, the zone's placement in the larger site plan further points to funerary functions. It is located directly in front of the large stone stairway that leads up to the Panteón de la Reina, a feature identified two years after the Operation D-94 excavations. The zone's position between the residential-ceremonial architecture of the Rivas site revealed in Operations D and E and the principal access to the Panteón de la Reina lead Quilter (2004:94-95) to suggest that these grave-like features were part of an elaborate staging area for the ritual preparation of the deceased. He believes that remains of the deceased, perhaps wrapped bones for secondary burial, may have been placed on the pavements prior to interment in the Panteón de la Reina. Secondary burial practices are well established ethnographically in Costa Rica (Bozzoli de Wille 1975a, Gabb 1875) and may have been practiced during the Chiriquí period. The division of the pavements into a northern and southern zone, the latter smaller than the former, also recreates the dual spatial organization of the Panteón de la Reina, described below and discussed in more detail in Chapters 8 and 9.

Sadly, this zone was recently completely destroyed by the construction of a house on the terrace edge. This is particularly unfortunate, given that we were only able to map and excavate the northern half of the architectural features. Characterizing the differences in size, construction, and artifact distribution between the two sets of pavements would have been an important contribution to themes explored below.

Panteón de la Reina

One of Quilter's primary research goals was to understand the relationship between the large-scale architecture in Operations D and E and the activities that occurred in Rivas' primary mortuary facility, the Panteón de la Reina (Quilter 2004:54). In particular, Quilter was interested in the Panteón de la Reina's spatial organization and how its artifact assemblage compared with those in the Rivas site.

As part of the Rivas Archaeological Project, Jeffrey Quilter initiated a formal investigation of the Panteón de la Reina in December 1997. Using 50-m tapes and a compass, we produced a map of the Panteón de la Reina. The distribution of surface features and looted graves clearly demonstrates that the cemetery was divided into two interment areas of roughly equal size, approximately 5000 m² each. These are separated by a space of approximately 300 m, free of graves. A heavily looted rectangular mound, located at the top of the monumental stone stairway mentioned above, sits in this space. The mound measures approximately 20 m by 20 m and 1 m in height, but its precise dimensions were difficult to discern due to the severe looting in the area. These three looted areas—the two cemetery zones and the mound between them—likely correspond to the three areas that Bozzoli de Wille identified during her visit to the site in 1966.

We identified and mapped the locations of nine stone pillars, eight in La Reina Sur and one near the top of the staircase. Despite concerted efforts, we were unable to identify any stone pillars in or around La Reina Norte. Based on their size and weight, we assumed that none had been moved more than a few meters from their original location and, thus, that their locations approximated the original distribution on the Panteón de la Reina. One pillar was located at the north end of La Reina Sur, perhaps marking the north boundary of the cemetery. The seven other pillars in La Reina Sur were dispersed throughout the area but in some cases were found within a few meters of one another, perhaps indicating that they were grouped near or around clusters of graves.

Quilter also tested backdirt from 23 looted burials in both La Reina Norte and La Reina Sur. He recovered one complete ceramic vessel, 728 diagnostic sherds, 1137 non-diagnostic sherds, 31 lithic artifacts, one celt, and several small metate fragments. The diagnostic sherds all dated to the Chiriquí period and suggested that the two Panteón de la Reina cemeteries were contemporary. The assemblage included both utilitarian and fancy wares but Quilter noted a "...consistent high number of fine-quality ceramics" (Quilter 2004:141). Overall, the Panteón de a Reina assemblage was richer in fine-quality ceramics than graves in Operations C and K. Quilter was unable to identify unlooted graves or other architectural features within the two cemeteries.

The Rivas Site in its Regional Context

At the time of its occupation, between A.D. 900 and 1300, the Rivas-Reina site was almost certainly one of the largest settlements in the northern Diquís, and perhaps one of the largest village-cemetery complexes in Greater Chiriquí. It is unclear how far the site's social and

political influence extended, but Rivas-Reina would have been a large regional center of significant importance.

Situated at 900 m in the foothills of the Talamanca Mountains at the confluence of the Chirripó and Buenavista rivers, Rivas-Reina maintained a prominent location at the north end of the General Valley. The site is located in the Tropical Premontain Wet Forest ecological zone and is within a day's walk of at least two other ecological zones: Tropical Moist Forest and Tropical Sub-alpine Rain Páramo (Tosi 1969). The site is also positioned along one of the traditional footpaths across the Talamanca range, which runs north-south following the Buenavista River; a route that probably also served pre-Columbian populations (Quilter 2004; Skutch 1971).

Thus, residents of the Rivas site were well positioned to obtain a wide range of raw materials including tropical hardwoods, feathers, exotic animals, and plants, as well as travel to, and trade with, populations on Caribbean side of the Talamancas. Following a northern route across the mountains, travelers would have encountered the contemporary settlement of Ta'lari or, a bit further north, the site of Guayabo de Turrialba, within a few days walk. The latter site is discussed in more detail in Chapter 10.

Within the Upper General Valley, Rivas was not an isolated community. Although we currently lack sufficient survey coverage to fully assess the Rivas site's position within the larger social and political geography of regional Chiriquí societies, the available information allows us to make a few generalizations about the site and its relations to neighboring sites. Existing settlement data seems to indicate a pattern of major village centers, each with large hilltop cemeteries, spaced at intervals of approximately 12 to 20km (Drolet 1995).

Settlement data also indicate numerous roughly contemporary sites including small hamlets, simple cemeteries, and rock art clustered within a 5km radius of Rivas-Reina (Frost 2003; Quilter 2004; Quintanilla 1995). Several scattered Chiriquí hamlet sites are dispersed across the landscape along natural terraces along the General and Buenavista rivers and their tributaries. To date none of these neighboring sites have been investigated or sufficiently described but available information on the construction, size, and spatial arrangement of the structures within them seem to suggest that, like Operation A, they consist of small residential units of one to four circular structures up to 10m in diameter. Similar residential groupings on lower terraces have almost certainly been washed away as river course changed over the past 700 years.

Small simple cemetery sites are scattered on hilltops throughout the region. Like the graves in Operations C and D, these cemeteries are small, each consisting of fewer than 100 graves marked by oval cobble pavements. In some locations these cemeteries appear to be grouped into sets of two or more spatially discrete interment areas. Most have been severely looted so it is unlikely that future investigations will reveal much about them.

Quilter (2004:145-150) previously commented on the numerous petroglyphs and carved boulders in the vicinity of the Rivas site. Petroglyphs are found on isolated rocks along the upper terraces along the Chirripo and Buenavista rivers, and may have been used to mark paths between Rivas and surrounding hamlet sites. The carved boulders, locally known as *piedras del indio*, are are large isolated stones that appear to have been modified to mimic the features of surrounding mountains. Some of these carved boulders also include one or more petroglyphs on their surfaces.

Reina site is positioned approximately 16km north of Peñas Blancas, a large Chiriquí

Period cemetery complex located at the confluence of the Pacuar and General rivers. (Rago

1988) In a pattern similar to that around Rivas, scattered cemeteries, hamlets, and petroglyphs

cluster within 3 km of the site (Frost 2002). To date, none of these sites, including have been the

subject of significant professional investigation.

Summary of Rivas Work

After six field seasons of research at Rivas-Reina, Jeff Quilter provided a number of

conclusions about the sites. The Rivas site was established along the west bank of the Chirripó

River during the Aguas Buenas phase. The site flourished between approximately A.D. 900 and

1300 and fell into disuse shortly after that time (Quilter 2004:157). Rivas underwent at least two

building phases but it was unclear when these occurred.

Quilter (2004:183) interpreted the Rivas site as a specialized ceremonial center devoted to

mortuary activities for the interment of the dead on the Panteón de la Reina. Most of these

activities occurred in the Operation D and E sectors of the site, where architecture was oriented

to face the Panteón de la Reina. He also established that the Panteón de la Reina was divided

into two spatially discrete interment areas, separated by a large area without burials. This form

of cemetery organization was consistent with what had been previously been identified at El

Chiricano and Murciélago (Quilter 2004:145).

Quilter's work also helped to identify some important regional differences in Chiriquí

culture. For example, ceramic analyses demonstrated that Buenos Aires Polychrome was the

most common fancy ware among the assemblage, but Tarragó Biscuit was found in only low

quantities. This pattern is the reverse from those found in the southern Diquís and in Western Panama (Quilter 2004:180).

In the following chapters, I present the results of my focused case study at the Panteón de la Reina site. I lay out my expectations and the methodology for my fieldwork at the Panteón de la Reina in Chapter 7 and then summarize the results of that fieldwork in Chapter 8.

7. THE 2003 AND 2004 INVESTIGATIONS AT THE PANTEÓN DE LA REINA

Introduction

In Chapter 3, I proposed a model of Chiriquí Period social organization and political leadership based on ethnographic descriptions of the Bribri and Cabécar of Costa Rica and the Kógi of Colombia. I hypothesized that indigenous societies of Costa Rica at Contact and in pre-Columbian times were organized into two moieties, each composed of several ranked clans. I further argued that leadership positions might have been split between the highest-ranking clans in each moiety, with one moiety providing a religious authority, and the highest-ranking clans from the opposite moiety supplying a secular chief.

As presented in the same chapter, archaeologists have identified several spatial correlates of dually organized societies (Burger and Salazar-Burger 1993; Fowles 2005; Lowell 1996; Moore 1995). Common indicators of dual organization include multiple paired sets of spatially distinct but functionally similar architecture, often arranged on either side of a central axis. These sets of paired architecture are frequently separated (or joined) by shared public spaces such as plazas or courts. Paired sets of architecture are sometimes constructed asymmetrically, with one half larger, or positioned on higher terrain, than its counterpart.

In Chapters 4 and 5, I analyzed Contact-period sources and existing archaeological data from southern Costa Rica and western Panama to show that spatial patterns at both Contact-era villages and earlier Chiriquí-period sites can be interpreted as the product of dual social organization, although the patterns are distinctively different in the two time periods. For the Contact period, many villages across Costa Rica are described as paired or divided into two halves. These halves were typically asymmetrical in their spatial extent, number of inhabitants,

or both. Asymmetry may have also been expressed by the relative position of these two halves on the landscape, with one positioned higher than the other.

In the Chiriquí period, dual spatial organization is only rarely reflected in residential sites (e.g. Murciélago). It is, however, common in mortuary complexes. The Panteón de la Reina, the Huacal de Bugába, Sioguí, Paraíso Abajo, and possibly Brisha^V Cra are divided into two spatially discrete interment areas. At Murciélago, both the residential and mortuary zones are divided into two asymmetric halves separated by a stream, as is often the case in Contact-period paired villages.

Unfortunately, the lack of detailed spatial information from any single site or Contact-period village limits our ability to evaluate the strength of these patterns and to understanding how the inhabitants utilized these spaces. Furthermore, we lack adequate data to firmly establish that paired areas were contemporary and to characterize differences in artifact assemblages.

Panteón de la Reina: Research Questions

To further evaluate this model of dual organization at the site level, I directed new excavations at the Panteón de la Reina. As described in Chapter 6, Quilter's investigations in the 1990s produced important data about the site's size, organization, and condition. They demonstrated that the Panteón de la Reina follows a dual spatial organization, with two discrete interment areas separated with an open space containing a large earth and stone platform that sits at the head of a monumental stairway leading down to the residential-ceremonial sector. Based on his survey, Quilter suggested that the spatial arrangement of features associated with the platform and Stairway also might be organized as paired sets. With the paired pavements at the

base of the stairway and the two cemeteries positioned on the top of the hill, the stairway appears

to serve as a central axis for the larger mortuary complex.

Quilter's investigations at Rivas-Reina represent a quantum leap in our understanding of

the internal organization of a Chiriquí site complex and Chiriquí culture. They also raised a

number of important questions, three of which I address in this dissertation.

The first question follows from the presence of two discrete cemeteries, La Reina Norte

and La Reina Sur, as described in the previous chapter. Why are there two spatially distinct

cemeteries? I suggest three possibilities, each with distinct archaeological expectations. First,

burial locations could reflect a hierarchical division within Chiriquí society, with higher status

people interred in La Reina Norte, which is positioned higher on the landscape. A second

possibility is that the two cemeteries served as repositories for deceased members of two clearly

defined social groups such as moieties, living in the Rivas community and perhaps the larger

region. A third possible explanation is that there was a chronological difference between the two

cemeteries, one being used before other. My research design, described below, was structured to

obtain data to address these alternative hypotheses, as well as to identify and address the nature

of smaller divisions within each cemetery.

The second question addresses the relationships between the Rivas site and the Panteón

de la Reina. Quilter argued that Rivas was a specialized settlement dedicated to mortuary

activities that ultimately resulted in burial of individuals in the Panteón de la Reina. The large-

scale architecture at Rivas, particularly the complex revealed in Operations D and E, suggests

that the site was not a typical Chiriquí residential-agricultural community. Furthermore, the

specialized architectural features such as causeways, steps, and plazas located directly below the

stairway and false cemetery may indicate that these features were related and utilized for

mortuary activities (Quilter 2004:190). Finally, Quilter (2004:190) also noted the strong similarity of the material remains at Rivas to the early ethnographic descriptions of Bribri funerals as described by William Gabb. I structured my excavations to obtain new data to further evaluate the activities that occurred on the Panteón de la Reina, particularly in the architectural spaces that connected it to the Rivas site below.

Third, does the dual organization of the Panteón de la Reina extend to the Rivas site? Quilter did not identify paired residential areas like those Drolet (1992, 1994) identified at Murciélago, nor did the detailed maps of his excavations reveal axial symmetry within the residential-ceremonial sectors of the site. My excavations in the mediating spaces associated with the stairway between Rivas and the Panteón de la Reina sought to identify patterns that could shed new light on the spatial organization of architecture in Operations D and E.

These three questions led me to pursue several lines of lower-level empirical inquiry in my 2003 investigation of the Panteón de la Reina. These addressed the Panteón de la Reina's organization and layout, its chronology, and the different burial practices and grave goods found in different sectors of the Panteón de la Reina.

1) How is the Panteón de la Reina organized spatially?

As described above, previous research demonstrated that the Panteón de la Reina was possibly organized into a series of nested spatial units. Individual interments were grouped into grave clusters, and multiple grave clusters comprised each of the two primary cemetery divisions, La Reina Norte and La Reina Sur. These two cemetery divisions shared the large platform and associated stairway in the grave-free zone between them, and the whole complex constitutes the Panteón de la Reina.

In 2003, I initiated an intensive re-survey and began excavations at the Panteón de la Reina to understand in more detail its spatial organization. This included defining the horizontal extent of each cemetery, identifying any size or compositional differences between the two cemeteries, and documenting how their boundaries were architecturally defined. Previous investigations (Bozzoli de Wille 1966; Pittier 1907-08) reported stone retaining walls around and within the Panteón de la Reina, and remnants of stone walls are present at other cemetery sites including Huacal del Angel, El Chiricano, and an unnamed site further up-valley from the Panteón de la Reina designated Sj-266-Rv.

I also sought to more precisely identify the internal divisions in each cemetery and document the kinds of architectural features—pillars, walls, and other features—used to demarcate those divisions. At finer levels of spatial analysis my excavations aimed to understand variation in the construction of individual graves and the spatial organization of any grave clusters I could define.

Finally, I conducted excavations in the space between the two cemeteries to examine the architectural features that mediated the two cemeteries. Quilter identified asymmetrical paired pavements in the "false" cemetery at the base of the stairway (Operation D-94), and my excavations were designed to assess whether similar patterns were true in the mound and associated features at its summit. I also sought to identify differences in the size or quality of construction that might indicate asymmetrical differences between the two cemeteries.

2) How do the two halves of the Panteón de la Reina relate chronologically?

The small sample of diagnostic sherds that Quilter collected from looters' backdirt on the Panteón de la Reina during his 1998 investigations did not show a significant difference in

ceramic styles and forms between the assemblages of La Reina Sur and La Reina Norte, suggesting that the two cemeteries were contemporary. Given that the Chiriquí period lasted for 700 years, however, it is possible that even large cemeteries like those of the Panteón de la Reina were established, used, and abandoned more quickly than changes in ceramic styles indicate. Also, considering that the Aguas Buenas period cemetery (SJ-266-Rv) is positioned higher along the same landform, it is a reasonable hypothesis that a series of cemeteries were constructed on the Panteón de la Reina hilltop in chronological succession, beginning with an Aguas Buenas cemetery at the highest point followed by two successively later Chiriquí cemeteries on lower sections of the ridgetop closer to the Rivas site. Quilter's work, summarized in the previous chapter, demonstrated that the Rivas residential site underwent two major construction phases. The rebuilding episode that separates them could have coincided with the abandonment of one cemetery in the Panteón de la Reina and the establishment of the other.

I sought to evaluate the contemporaneity of the two cemeteries in two ways. The first was through the excavations in the zone between the two cemeteries. If the stairway and the two cemeteries were all contemporary, I would expect coeval and similar architectural features leading from the platform at the top of the stairway toward each of the cemeteries. I expected that these could be in the form of steps off the platform and/or cobble paths or causeways leading from the platform toward the cemeteries.

The second way was via a suite of radiocarbon dates obtained from both cemeteries. Calibrated radiocarbon dates from the residential sector of the Rivas site and its low-status cemeteries fall predominantly between A.D. 1000 and 1300, with some dates as early as A.D. 900 and others extending as late as A.D. 1400 (Quilter 2004:204-205). If the two halves of the

Panteón de la Reina were utilized contemporaneously then calibrated dates from both cemeteries should provide similar dates of use.

This issue of contemporaneity is critical to my larger questions. Although the dual spatial organization of the Panteón suggests a moiety organization, that model is supported only if both halves of the cemetery were contemporary.

3) Are there differences in burial practices and grave goods between the various spatial subdivisions that suggest differences in group affiliation and/or status?

Regardless of the chronological relationship between the two cemeteries, a comparison of their graves and other architectural constructions and the goods found in graves constitutes an important study. A comparative analysis of the two contemporary cemeteries could demonstrate how social groups within the Rivas community differed in wealth, status, and group affiliation. If the cemeteries were used consecutively, the comparison would provide important information on changes and continuities in mortuary practices, material culture, and group identity.

The spatial units identified by past research and during my 2003 and 2004 fieldwork provide valid units for comparative analyses of burial practices and grave goods. The spatial separation of the Panteón de la Reina into two halves and their internal sub-divisions provide an opportunity to compare how members of the Rivas community were organized at several scales: between the two primary halves of the cemetery, between cemetery subsections, and between individual graves. I worked under the assumption that the two cemeteries that comprise the Panteón de la Reina each represented one moiety. Smaller spatial units within each cemetery then represented smaller social units, such as clans or "clan clusters," as defined in Chapter 5.

My research design approached these issues in two steps. First, my crew and I systematically collected ceramic artifacts from throughout each cemetery in the Panteón de la Reina by randomly sampling backdirt piles left by looters. While looters took metals, they discarded large quantities of pottery, stonework, and other grave goods in the backdirt they left adjacent to the looted tombs. These included complete and mostly complete vessels (Frost 2005; Quilter 2004). Because looters tend to tunnel from one grave to another, a single pile of their backdirt can represent the fill and contents from more that one tomb, but one can assume that backdirt was not moved more than a couple meters. Thus, while these artifacts cannot be used effectively for reconstructing the contents of individual graves, they do serve as a useful means to compare the range of ceramic styles and other artifact types between subsections within each cemetery of the Panteón de la Reina and between the two halves.

I also attempted to sample unlooted or partially looted graves from both cemeteries in order to identify variations in grave construction and contents between La Reina Norte and La Reina Sur and their respective subsections. I expected that graves would also provide undisturbed contexts from which to obtain radiocarbon samples.

The purpose of these excavations was to evaluate any differences in material culture that might distinguish the people buried in the two cemeteries and their various subdivisions. Ethnographic descriptions of contemporary indigenous social organization in Costa Rica led me to expect that the different nested levels of grave groups represent different people who belonged to distinct kin groups that were grouped into higher-order groups.

Indicators of Moiety Affiliation

I hypothesized that the paired cemeteries of the Panteón de la Reina were burial grounds for two different moieties. Social groups often express their social affiliation or membership stylistically though material symbols (Cohen 1969; Vincent 1978). Such displays are especially important during ritual activities when people emphasized their social identities and affiliations, particularly those that allowed some to maintain positions of power (Earle 1990; Neitzel 1995; Schortman et al. 2001). Highly visible material objects, such as ceramics, metals, and stonework, are ideally suited for displaying coded information (Carr 1995). Funerals offer an especially salient opportunity to express identities, of the deceased and by extension, his or her descendents.

Thus, I expected the grave goods found in the two halves of the Panteón might reflect a shared identity among the individuals buried in each cemetery. Indicators of group identity or affiliation could include unique emblematic motifs on ceramics like those identified within high-status cemeteries in Panama (Briggs 1989). They could also be emblematic designs painted or incised on pottery, or animal or mythological effigies in three-dimensional carved stone, cast gold, ceramic figurines, or appliqués on pottery vessels (Briggs 1989). To be identifiable as a marker of affiliation, a design or motif would have to be exclusive to and repetitive within each cemetery. Such symbols are also likely to be shared by high and low-status groups and to be found on artifacts from a variety of contexts (Schortman et al. 2001:314).

Status Differentiation

If the model of social organization and political leadership developed in Chapter 3 holds for the Chiriquí period, I would expect each moiety to include both high and low ranking clans. This expectation can be tested by comparing grave goods found in different grave clusters in each cemetery.

Quilter's previous research within the Panteón de la Reina burial complex identified a range of grave goods including both fancy and utilitarian ceramics, but he noted a "consistent high number of fine quality ceramics" (Quilter 2004:140-141). The high numbers of fine ceramics throughout the cemetery and in the domestic sectors of the Rivas site may indicate their important role in the display of status and social competition. Gold and stonework are also generally considered markers of status in Chiriquí society.

Thus, I expected to be able to define a range of status positions based on a hierarchy of grave goods. Higher status individuals and groups would be represented by larger quantities of the rare prestige goods including imported wares.

Following the Bribri/Cabécar ranked clan organization, the patterning of ceramics and other grave goods by subsection may indicate multiple elite social groups, each with different levels of wealth and status. I expected that some cemetery subsections were composed of members who, by way of genealogical relations, maintained membership in higher-ranking clans but did not possess significant material wealth. Other subsections may represent groups where almost all individuals were politically powerful and exhibit large quantities of restricted grave goods. An alternate pattern may demonstrate a high degree of variation in grave wealth within each subsection, with some individuals buried with high quantities of prestige goods adjacent to other graves with very low quantities of grave goods.

If there are strong differences in status between the La Reina Norte and La Reina Sur, then the dual cemetery division may represent a different form of political organization other than a moiety. For example, if Panteón Norte contained twice the quantity of prestige wares as Panteón Sur then it may indicate the two social groups were organized hierarchically, as suggested by some interpretations of ethnohistoric sources.

I also recognized that artifact analysis might reveal no discernable status differences between cemetery subsections. A uniform pattern of ceramic distribution throughout the site could be the result of other possible factors. First, it could indicate that ceramics were not used to differentiate status in cemeteries. This pattern seems unlikely since simple cemeteries are clearly dominated by a small range of simple, utilitarian wares and do not include the more exotic types already identified on the Panteón de la Reina. Furthermore, status differentiation has been identified within cemetery sites in Panama (Briggs 1989:152), and I expected similar patterns would be present in Costa Rica. A second possibility is that there was such a high degree of trade and exchange between social groups and individuals that the material remains of these interactions would reveal a pattern of artifact uniformity across the site.

Fieldwork Methods

I divided the fieldwork component of the project into three phases: 1) Intensive survey and mapping of the Panteón de la Reina complex; 2) excavations of the architectural features located at the top of the stairway between the two cemeteries, excavations in La Reina Norte and La Reina Sur; and sampling of looters' backdirt in the two halves of the cemetery; and 3) laboratory analysis of the recovered materials.

I supervised all three phases of fieldwork, but friends and fellow graduate students assisted throughout the project. James Schumacher assisted with excavations during the 2003 field season and served as a field supervisor during that time. Roberto Herrera joined me in both 2003 and 2004 to assist with mapping and site preparation.

Survey and Mapping

Phase one of the project consisted of laying a grid across the Panteón de la Reina, conducting survey of that area, and mapping all identified surface features. The purpose of this phase was to define the project area, assess condition of the site, prepare the site for excavation, and decide where to place excavation units. Among my goals for this phase was to determine the differences in extent and elevation between La Reina Norte and La Reina Sur and to use topographic mapping to define internal variations in each half of the Panteón de la Reina. I mapped all surface features including mounds, areas of looting, vacant areas, lines of stones, pillars, and any other natural and artificial topographic features.

Mapping began on 11 June 2003 with Roberto Herrera, Laura Brodie, and Gerardo "Lato" Mora. We established a horizontal grid across the site using an optical transit and 50-meter tapes. This task was complicated by the fact that most of the Panteón de la Reina was overgrown with thick vegetation. Approximately one half was forested, and the other half was abandoned coffee farms and other overgrown fields known as *monte*. In order to accurately place grid lines over long distances, we cut transects through this thick vegetation.

We assigned grid coordinates around the main site datum, located at the approximate center of the mound at the top of the stairway. It was given the coordinates N1000, E1000, elevation 1000 m, guaranteeing that the entire site would fall within the NE quarter of the grid

system, thereby ensuring that all grid coordinates would be referenced with only positive north and east coordinates. I chose the arbitrary 1000-meter elevation for two reasons. The first was to avoid negative elevation values, which could become potentially very confusing. Second, we knew 1000 meters was close to the actual elevation. Using a global positioning system, we later more accurately fixed the location of the site datum at N09°24'56.6", W83°39'27.4", and 907 m above sea level, with approximately 8 meters of error, but maintained the original arbitrary elevation for all recording and descriptive purposes.

We established the primary site datum near the top of the stairway for two reasons. First, the exposed architecture in this area would make it easy to relocate the datum stake. Second, by placing the datum in the middle of the Panteón de la Reina we could easily distinguish where coordinates were located. Coordinates greater than N1000 likely corresponded with La Reina Norte; those below N1000 corresponded with La Reina Sur.

Using a transit, we laid a primary baseline north from our datum through La Reina Norte and south through La Reina Sur. This baseline, and thus the entire site grid we used, was not oriented to true north or magnetic north. Instead, I chose an orientation of 33°03' east of magnetic north because it corresponded closely to the topography of the Panteón de la Reina hill. This enabled us to maintain a greater accuracy in our grid, as we could extend our baseline over long distances from a single transit station. This arbitrary orientation became our "grid north," and all of our subsequent mapping, excavations, descriptions, and maps utilize this orientation when north is indicated. All references to north will be in reference to our grid north unless otherwise indicated.

We laid wooden stakes along our baseline every 10 m or 20 m and labeled them with bright pink or orange flagging tape to indicate their exact coordinates (e.g. N1020, E1015). We

subsequently extended the grid from the baseline by laying lines at right angles from each baseline stake to the edges of the Panteón de la Reina hill. Within La Reina Norte, La Reina Sur, and on the stairway, we defined the vertices of the grid at 10-m intervals. Outside of these areas we did not place stakes every 10 m, but we did record elevations at least every 20 m in order to raise an accurate topographic map of the Panteón de la Reina. We calculated the elevations of each stake in reference to the site datum using an optical transit and a stadia rod and recorded the coordinates in a field notebook.

During our survey and excavation, we mapped all architecture and other cultural features on millimetric paper. We utilized several scales of detail depending on the features we were recording. The master map of the entire Panteón de la Reina complex is at a scale 1:1000; most architecture such as walls, paths, and cobble floors was recorded at 1:50; and plan views and profiles of features, such as graves, were drawn at 1:20.

Excavation

The heavy disturbance of Panteón de la Reina significantly affected the excavation strategy. More than 100 years of looting have obscured all surface features, making it difficult to decide where to excavate based on surface features alone. I used our maps of surface features to develop a sampling strategy. I assumed that areas of looting also corresponded to locations of surface features (graves, pavements, walls, etc) that had been identified by looters. Thus, we placed initial test pits and trenches so that they spanned both looted and non-looted areas, where we might find walls or other architectural features that defined the edges of graves and grave clusters. Likewise, abrupt changes in topography within looted areas could represent boundaries of internal divisions in each cemetery.

This strategy worked particularly well on the stairway, along the south boundary of la Reina Norte and the north boundary of La Reina Sur, all areas where we found walls and other architectural features. Once we identified architectural features, we followed them with additional excavation units. These units ranged in size from 1 m to 3 m on a side, depending on the size and orientation of the architecture.

My excavation crew included nine workmen from Rivas, all of whom had worked with me in previous years. Several of these men were already highly skilled excavators, as they had been excavating since the inception of Jeff Quilter's Rivas Project in 1992. Others had only one or two field seasons of experience. I paired up less experienced workers with more experienced crewmembers so that they could learn to recognize and properly excavate archaeological features. In general, excavation teams consisted of three workers; two excavating and one screening soil through quarter-inch (6 mm) mesh screens. We screened all soil from all contexts, with two exceptions. First, if we were re-excavating an area that we had previously excavated and screened, we did not re-screen the soils. Second, if we were excavating soil that we were certain was sterile, we did not screen. An example of the latter would include the excavation below the base of a unit to expose a deeper natural soil profile. Such cases were quite rare.

We conducted all excavations between the months of July and October of 2003 and 2004. Although this is the height of the rainy season, we were able to schedule our work during non-rainy times of the day and never worked while it was raining. At Rivas, it typically does not start raining until 2:00 p.m. By beginning work at 6:00 a.m., we were generally able to complete a full eight-hour day of fieldwork before the rain began. Occasionally we were forced to quit early due to an unexpected or early downpour. Only twice did we have to cancel work for an entire day due to rain. Working during the rainy season presented certain advantages. One

benefit was that soils tended to remain damp, which greatly enhanced color and texture differences in soil profiles. Soils were rarely too wet, except immediately after a heavy rain in areas with poor drainage. A second advantage was the milder temperatures, as it tends to be much cooler than in the dry season. This made working conditions much more comfortable for the entire crew.

Excavation tools typically included shovels or trowels, depending on the contexts we were excavating. In most cases, we began with short-handled shovels and skimmed the surface of the ground to clear living plants and leaf litter. We then shovel skimmed soil across an entire excavation unit, taking it down evenly. Around architecture such as walls, floors, and other large features, we would switch from shovels to trowels. Likewise, we used trowels for other delicate work such as cleaning excavation sidewalls and floors. When we encountered features such as complete ceramic vessels or concentrations of carbon, we would switch from metal trowels to small plastic painting spatulas. Their smaller size permitted finer excavation, and they did not scratch artifacts or remove paint.

Our excavation units followed natural stratigraphy, but we often subdivided thicker stratigraphic layers into 10 cm arbitrary levels. In some cases we excavated using thicker levels. For example, in looter backdirt piles that were more than 1 m in height, we subdivided our excavations into 20 cm levels to increase the speed at which workers could excavate. We would return to natural levels with 10 cm divisions once we reached intact archaeological deposits.

We collected the cultural materials from each level in cloth or Tyvek bags. We labeled bags according to their horizontal and vertical provenience, by unit number and level. Bag information also included the site name (Panteón de la Reina), site number (SJ-109-Rv), operation (La Reina Norte, La Reina Sur, or Stairway), the date on which we excavated the

materials, and the initials of the excavators. We bagged complete artifacts, such as ceramic vessels, stone tools, or other materials separately in clear plastic bags that included their point-plot coordinates. Complete artifacts and features were also point-plotted on plan maps.

We collected all charcoal with clean plastic spatulas and placed each piece in folded aluminum foil packets, which were then put in Ziploc bags. We labeled all carbon samples according to their exact horizontal and vertical location and plotted their positions on excavation maps.

Artifact Analysis and Curation

All artifacts recovered during the excavations were returned to our field laboratory in Guadalupe de Rivas. Artifacts were washed, labeled, bagged, and boxed in accordance with standards set by the National Museum of Costa Rica. After analysis all artifacts were submitted to the National Museum of Costa Rica for permanent curation.

We washed all materials by hand with water to remove soil adhering to their surfaces. We avoided cleaning artifacts with bushes since my previous experience showed that even light brushing could remove all traces of paint or other surface treatment from the pottery. When necessary, we carefully washed the broken edges of sherds with a soft bristled toothbrush.

Once artifacts had dried completely, we sorted them into two primary material classes: stone and ceramic. We further sorted ceramics into diagnostic and non-diagnostic categories. Non-diagnostics generally included undecorated or eroded body sherds, which were counted, weighed, and set aside. Diagnostic ceramics included rims, supports, handles, sherds with surface decoration (paint, incising, appliqué), or any sherd that we could identify to type. We classified ceramic artifacts according to surface treatment, decoration, paste texture, and vessel

part (i.e. rim, support, handle, neck, body, etc.). This information was then used to assign these artifacts to regionally acknowledged types (Baudez et al 1993, 1996; Corrales 1999). Diagnostics were further classified to subtype, or variety when possible. The most common ceramic types included Buenos Aires Polychrome, Papayal Engraved, Turucaca White-on-Red, Ceiba Red-Brown, Sangria Red-Fine, and Seúl Engraved, though less common Chiriquí types were also present. More detailed information on the ceramic analysis is provided in the following chapter.

8. FIELDWORK RESULTS

I initiated mapping and excavations at the Panteón de la Reina in June through August of 2003 and September through October 2004. As described previously, Quilter's work at the site had identified a pair of large cemeteries, La Reina Norte and La Reina Sur, on a hilltop adjacent to the Rivas site. An additional dually organized space (D-94) was located at the base of a stairway located between the two cemeteries. My investigations were designed to better understand the spatial organization and artifact patterning with the two cemeteries, La Reina Norte and La Reina Sur, and the architecture located at the top of the stairway. The primary objective was to identify and assess the spatial and material correlates of dually organized societies, as outlined in the previous chapter.

This chapter summarizes the results of my fieldwork, concentrating on the spatial organization and the patterning of artifacts. I discuss the spatial organization of the Panteón de la Reina as revealed through survey, and the results of excavations and artifact analysis. I begin with a discussion of the geographic positioning, geology, and the general spatial arrangement of the Panteón de La Reina. I then present the results of my mapping and excavations along and at the top of the Stairway. I follow this with discussions of the spatial organization of the two cemeteries and the results o f my excavations in each one, including the burial excavations. I end with a discussion of the analysis of materials from the two cemeteries. Because this chapter is intended to be a summary of spatial and material patterns at the Panteón de la Reina, I do not present detailed descriptions of excavation units and stratigraphy.

Panteón de la Reina Location

The Panteón de la Reina cemeteries occupy a prominent ridge west of the Rivas site. The hill is the remnant of a Pleistocene-age sedimentary alluvial fan at the base of the Talamanca range. Geologically, the hill is composed of poorly sorted and deeply weathered sand and gravel with some boulder-sized semi-rounded clasts of dark gray andesite (Conyers n.d.). Soil profiles on this and other local ridges show thin, organic-rich topsoil overlaying several meters of reddish-orange laterite, up to several meters thick. Lateritic soil is a typical end product of the intense weathering and leaching that occurs in neotropical regions with high rainfall. Laterite is rich with aluminum and iron but is low in silica (Easterbrook 1999).

The ridge slopes steeply on its east and west sides but rises gradually from south to north in a series of natural terraces of flat topography connected by gradually sloped scarps. Three spatially independent areas of mortuary construction (La Reina Sur, the Stairway and platforms, and La Reina Norte) coincide with the first three zones of level topography (Figure 8.1).

In the southernmost zone, the ridge expands to form a broad, flat area approximately 220 m on its north-south by 100 m on its east-west axis, located approximately 20 m above the valley floor. The La Reina Sur cemetery is positioned in the northeastern corner of this area, overlooking the Rivas site.

At the northern boundary of La Reina Sur, the ridge rises gradually, climbing 10 m over a distance of 70 m. At the top of this rise, the topography levels off for a distance of 80 m. This area is only 30 m wide at is southern end, but widens to approximately 100 m at its northern limits. In the narrow area at the extreme southern extent of this flat terrace is a series of walls and pavements that comprise a single architectural construction. They are located at the summit of a monumental stairway that leads down to the Rivas site. There are no indications of pre-

Columbian graves in this area, but a modern Christian cemetery occupies the remaining level portion of the hilltop, north of the stone platforms.

At the north edge of the Christian cemetery, the ridge rises 20 m in elevation over a distance of 160 m. As the topography rises, the ridgetop narrows and levels off. The La Reina Norte cemetery is positioned on a 40 m wide and 225 m long area of level topography at the top of the rise.

At the time of my fieldwork, the Panteón de la Reina was covered in mature forest and abandoned coffee fields. Most of the sloping east and west sides of the ridge were covered with agriculturally productive but mature coffee. Areas too steep for agriculture were wooded. According to local landowners, the ridge was clear-cut in the 1930s and 1940s, but trees have since been allowed to grow back in La Reina Norte and the northern half of La Reina Sur. The southern half of la Reina Sur was planted in coffee in the 1960s, but the trees have been abandoned for more than twenty years.

The southern half of the Panteón de la Reina, from the south end of La Reina Sur to the southern boundary of the Christian cemetery was wooded, though the maturity and density of trees varied as different sections had been logged off at different times. Groundcover was dense and included small shrubs and plants up to a meter in height. Vegetation along the stairway and platforms consisted of mature abandoned coffee interspersed with large mature trees and scattered pineapple plants. Like the northern half of La Reina Sur, La Reina Norte was covered in mature forest, lianas, and dense groundcover, though a small portion of the southwest quarter of the ancient cemetery was in pasture with grass up to a meter tall.
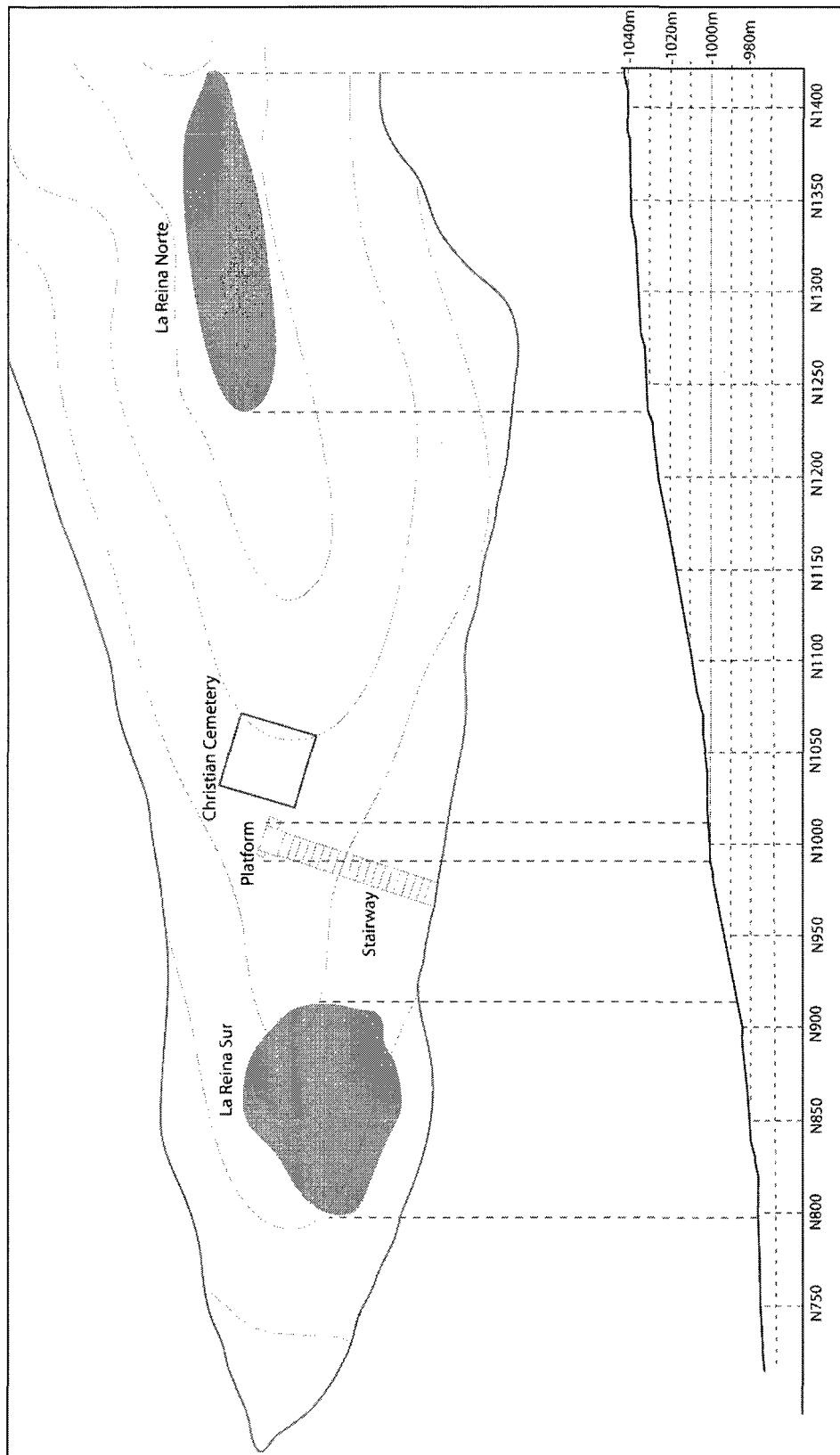
Figure 8. 1 Plan and Profile of Panteón de la Reina. Shaded areas indicate areas of pre-Columbian graves.

Excavations

I directed excavations within the Panteón de la Reina's three spatially discrete areas, La Reina Norte, La Reina Sur, and the platforms and other features that lay between them. Although I conducted investigations in all three areas in both 2003 and 2004, the 2003 field season concentrated on mapping the site, defining the south ends of La Reina Norte and La Reina Sur, and excavating two graves in La Reina Norte. During the 2004 field season, I concentrated on excavating features at the top of the stairway, defining architecture at the north end of La Reina Sur, and expanding areas of excavations around a group of burials in La Reina Norte.

The scope of my investigations was determined in part by restrictions imposed by landowners. Although all landowners granted permission to map and inspect surface features, I was unable to obtain permission to excavate on the west half of the ridge, including areas of La Reina Sur, La Reina Norte and the platforms at the top of the Stairway. In addition, I was unable to excavate within northernmost 60 m of La Reina Norte. In the case of La Reina Sur and the Stairway platforms, the land was for sale and the owners were concerned that archaeological investigations could discourage potential buyers who might fear that the National Museum or some other government entity would impose restrictions on land development if archaeological materials, particularly cemetery remains, were discovered. In La Reina Norte, the landowner was out of the country and could not be reached. His immediate family granted permission to enter the property for mapping and surface inspection, but they were unwilling to allow excavations.

Stairway and Platforms

A monumental stairway, 18 m wide and approximately 100 m long, runs down the east slope of the Panteón de la Reina ridge (Figure 8.2). The effects of looting, erosion, and more than 50 years of agricultural activities have severely disturbed the bottom fourth of the feature, making an accurate measurement of its length difficult. The Stairway begins on the fourth terrace above the Chirripó River, approximately 35 m west of the pavements that comprise the "false cemetery" in Operation D-94 and directly above the large-scale residential-ceremonial sector of the Rivas site revealed in Operations D and E. From there, it rises to a narrow saddle on the crest of the Panteón de la Reina ridge. The Stairway's upper terminus ends in a complex set of architectural features including steps, pavements, walls, and stone columns.

Like other architectural features at the Rivas-Reina site, the Stairway is constructed with unmodified flat river cobbles. These cobbles, ranging from 20 cm to more than 50 cm in diameter, were set in the soil to create a series of risers and treads. Risers were constructed with larger cobbles set upright in straight rows that run perpendicular to the slope of the ridge. Three or more rows of smaller cobbles were then laid flat behind each riser to form that step's tread. The heights of risers and the depths of treads varied to accommodate changes in the ridge's slope, but in general, the steps were 20-30 cm high and 1 m to almost 3 m deep (Figure 8.3).

At the time of my investigations, the lower, eastern half of the stairway was in an active coffee field and the upper, western half of the stairway ran through mature and abandoned coffee in excess of 2 m tall. The upper half of the stairway is better preserved, but heavy vegetation and erosional deposition obscured most surface features.
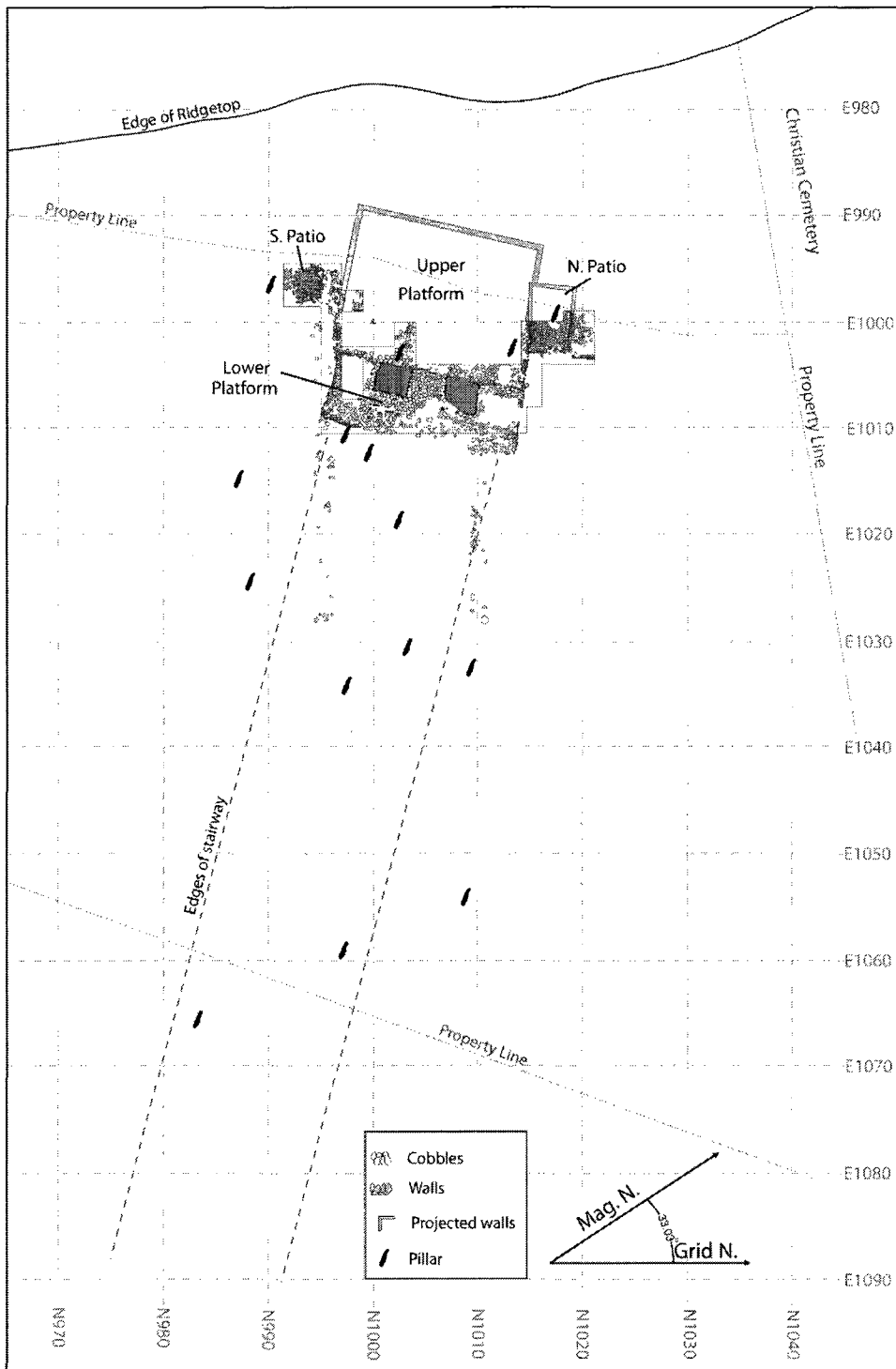
Figure 8. 2 Planview of Stairway, platforms, and patios
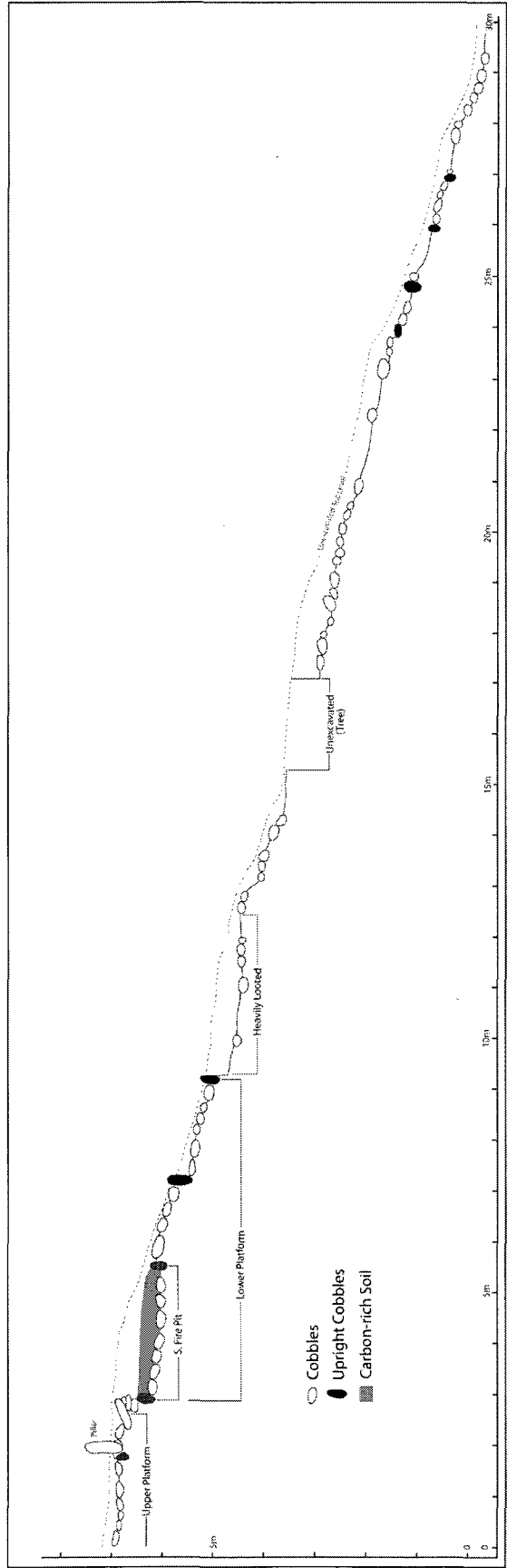
Figure 8. 3 Profile of Platforms and portion of Stairway. (View to grid north)

We identified 11 stone pillars associated with the stairway. Some lay along its edges, others along its centerline. None appeared to be in their original location but their large size and weight suggests that most had not been moved far from where they originally stood. These stone pillars are discussed in more detail below.

The Stairway ends in a rectangular platform. It appears that this section of the ridge was leveled and the soil mounded to form a rectangular platform measuring 18.5 m (north-south) by 20 m (east-west), and approximately 1 m high. The platform has two levels, called the Upper Platform and the Lower Platform, and two large rectangular fire pits are present on the Lower Platform. Flanking the Upper Platform are two walled patios, one on each side (Figures 8.4 and 8.5). The platform was severely disturbed with numerous deep looter pits that created large backdirt piles. Some of the looters' pits were in excess of 1 m deep and over 2 m in diameter. While there is no evidence to suggest that the top of the stairway ever contained burials, looters apparently mistook the extensive cobble pavements for the tops of graves. Despite the extensive disturbances to the platform, enough of it remained intact to accurately measure its dimensions and characterize its construction.

Excavations on the platform and adjacent patios primarily entailed clearing soil and loose rocks to reveal intact features. Disturbed matrix was excavated in a single layer, and undisturbed strata were excavated in natural levels. We attempted to leave all artifacts from undisturbed contexts in situ so that their positions could be plotted.

Figure 8. 4 Planview of architecture at the top of the Stairway
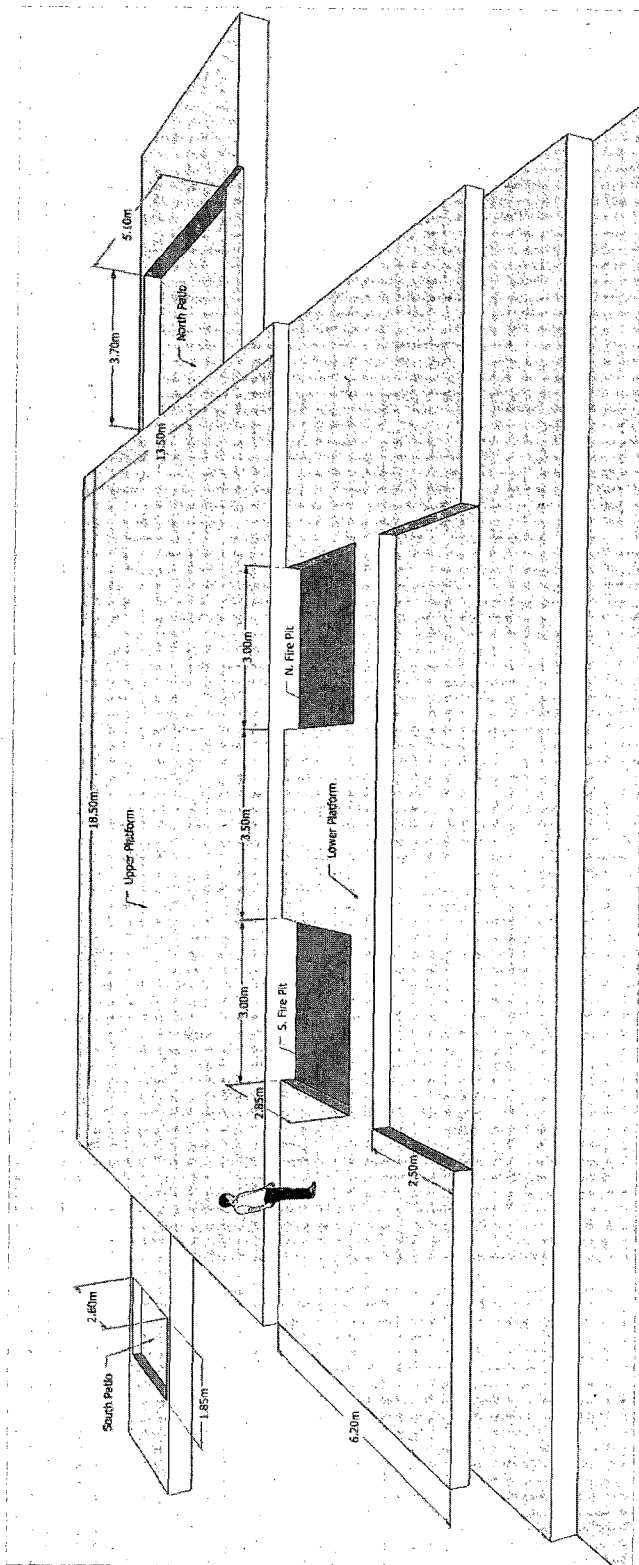
Figure 8.5 Isometric reconstruction of platforms and associated features. View to west

Lower Platform

The Lower Platform consists of a cobble pavement measuring 18.5 m north-south by 6.2 m east-west and 40 cm high. Looting had severely damaged large portions of the northern half of the pavement, but the little that remained intact matched the architecture of the southern portion, suggesting that the two halves were constructed symmetrically. The north and south faces of the Lower Platform were constructed with large stone cobbles laid two to four courses high, forming retaining walls up to 40 cm tall. Upright stones placed along its west edge formed a 35 cm tall step to the Upper Platform. The Lower Platform was paved with large flat river cobbles between 20 cm and 30 cm in diameter.

The Lower Platform is dominated by two stone lined fire pits that abut the step up to the Upper Platform. The North Fire Pit was heavily disturbed by looter activity in its southeast corner but enough of the feature remained to accurately determine its full dimensions. Unlike other architectural features associated with the top of the stairway, the paired fire pits show no significant differences in size or construction. Both are rectangular in plan and measure 3.00 m (north-south) by 2.85 m (east-west). The floors of the fire pits are set approximately 20 cm below the paved surface of the Lower Platform and lined with large flat cobles. A border of small cobbles, placed upright, defines their north, east, and south edges. Both hearths were filled with charcoal-rich matrix up to 30 cm thick (Figure 8.6). We removed a 20-liter sample of soil from each hearth for flotation but none of the samples contained any botanical materials. I did obtain a charcoal sample from the floor of the South Fire Pit, which I submitted for an AMS date (See Sample AA65275, Appendix B).

Figure 8. 6 Profile of South Fire Pit showing charcoal-rich soil. View to south

Along the front (east side) of the Lower Platform, the surface is recessed 30 cm to form a step down to the stairway. Looting destroyed most of the pavement of the step, but a small intact portion, 2 m by 3 m, remains intact at its south end. Upright cobbles along the south and west sides of preserved portion form a step to the paved summit of the Lower Platform. The position and arrangement of this lower paved area indicates that this pavement extended for 9.5 m (East-West) by 2.5 m (North-South) with the North and South boundaries of the pavement lining up with the outer edges of the fire pits.

Ceramics were abundant in the two fire pits and on the surrounding pavement. From the South Fire Pit, we recovered rim fragments and a support from a single shallow bowl. Of the sherds found here only 19 could be identified to type. Of these, 18 sherds are from Papayal Incised bowls and one sherd was from a redware vessel of an unidentified type. We also

recovered four supports from four different tripod vessels. Three of the supports were hollow and saurian in form. The fourth was a solid, crescent-shaped support with a simple face incised into its concave side.

Upper Platform

We excavated very little of the Upper Platform for several reasons. First, a large portion of the platform was in a field that we did not have permission to excavate. Second, the Upper Platform was severely looted and the surface indicators did not suggest the locations of any intact features. The Upper Platform's pavements are so severely damaged that there seemed to be nothing left except for piles of stone and occasional arrangements in-situ cobbles. For these reasons, we only cleared and excavated enough of the Upper Platform to understand its size and the way it articulated with adjacent features.

An alignment of stones in a 2 m x 2 m unit (N1002-3, E1000-1) suggests that, like the Lower Platform to its east, the Upper Platform included multiple architectural elements. In the eastern half of the unit, we exposed an intact portion of cobble pavement. The size of the cobbles and their arrangement matched those of the Lower Platform. In the southwest corner of the unit was a recessed area defined by the remnants of a 25-cm high stone retaining wall, constructed with three courses of flat river cobbles. Its top course was even with the summit of the Upper Platform, thus forming a sunken space to its west. The pavement at the base of the wall had been looted and time did not permit us to follow the wall or conduct excavations to better understand the extent of the wall or identify the locations of similar features. It is difficult to characterize the entire Upper Platform from our minimal excavations but it appears that it consisted of expansive areas of flat cobble pavements interspersed with recessed areas defined by cobble walls and that

damage done by looting may not be as severe as it appears. Understanding the architectural arrangement of the Upper Platform should remain a priority for future research.

Patios

The Upper Platform is framed on its north and south sides by walled patios. We partially excavated the North Patio because its west emd extends into a property on which I did not have permission to excavate. We excavated only its eastern half and then estimated the patio's full dimensions using surface indications, confirmed by probing with a metal rod. It measures 3.7 m (north-south) by 5.1 m (east-west). The floor of the patio is paved with flat, oval, river-worn cobbles arranged in 14 rows running east-west. The cobbles are almost all placed with their long axis oriented north-south. The largest cobbles are oriented east-west to maintain a uniform width for each row.

The three patio walls that we excavated were each built to different heights, ranging from 30 cm to 65 cm, and with different construction techniques. The east wall was partially destroyed by looting but enough remained to characterize its construction. It is a 1-m wide and 30-40-cm tall freestanding wall constructed with two parallel rows of stacked flat cobbles with earth and rock fill between them. The wall was constructed with two and three courses of stones but numerous scattered cobbles in the immediate area suggest that it was originally two or three courses higher.

The north and south sides of the patio were constructed with multiple courses of flat stone that retained mounded and packed soil. The south wall measured between 51 and 57 cm in height and was constructed with six courses of stones. The stones in this wall were stacked in a

running bond. That is, each stone was placed to overlap the gap between two stones in the previous course. The top of the sixth course was level with the summit of the Upper Platform.

The north wall of the patio was constructed with seven courses of cobbles laid horizontally (Figure 8.7). The total height of the wall, measured from the patio surface to the top of the sixth course of stones, ranges from 56 cm to 67 cm. The construction of the north wall differs from the south wall. The bottom course is constructed with the largest cobbles, each 25-30 cm in length and 15 cm in height. The second course is constructed with smaller stones laid in a running bond in relation to the first course. The second through fifth rows are arranged in a stacked bond, with the cobbles forming columns. These columns tilt slightly to the east, although it is difficult to determine if this was intentional or if the cobbles have shifted position over time. The stones in the sixth course appear to have been chosen for their slightly triangular cross section. They were laid in a running bond in relation to the previous course, oriented with the flat side up and the pointed side positioned in the space between two rocks in the fifth course. The top course is constructed with smaller flat rocks placed at irregular intervals.

The sixth and seventh courses are positioned above the level of a paved platform located directly to their north to create a slight raised edge or lip. As mapped, this platform measures 2 m (north-south) by 4.5 m (east-west). Test excavations show that the platform did not extend farther north. We were unable to excavate the pavement's westward extension, but probing suggested that it may have extended the full length of the walled patio.

The height of the North Patio's north and south walls would have made movement between the patio and the adjacent platforms difficult, especially on the north side where the extra course of stones is present. In fact, the extra course of cobbles seems to have been in place for the purpose of inhibiting movement between the two features. For this reason I suspect that

an entrance or passage between the patio and the platforms may be located further to the west in the unexcavated area. Completing excavation on this feature will be a priority in future investigations.

Figure 8. 7 North wall of north walled patio. A worker cleans a cobble pavement to its north.

A second, smaller walled patio is located south of the Upper Platform. Severe looting complicated excavations in this area. Two large looters pits, each in excess of 2 m in diameter and 1.5 m deep were located immediately south of the Upper Platform. Looters destroyed portions of the four walls that formed the South Patio, but they completely missed the pavement.

In general, the South Patio follows the same construction techniques as the North Patio, but it was built at a smaller scale. Measuring 1.85 m (N-S) by 2.60 m (E-W), its dimensions are almost exactly half those of the North Patio. The floor is paved with flat river cobbles arranged in neat rows. Low walls of flat cobbles piled two and three courses high define the north and south ends. Their heights range from 24 cm to 32 cm, also approximately one half those of the North Patio (Figure 8.8).

Like the North Patio, the South Patio abuts a pavement of equal height to the Upper Platform on its outermost (southern) edge. This pavement was severely disturbed by looter activity and an accurate measurement was not possible. A large stone pillar was located immediately to the south of the pavement.

Figure 8. 8 South walled patio. View to west.

Construction Episodes

We found convincing evidence that the architecture at the top of the stairway was built in at least two construction episodes. At N1006, E1006.70, looting through the summit of the Lower Platform between the two fire pits exposed a second lower pavement, separated from the upper pavement by 15 cm of red-brown earth (Figure 8.9). The lower cobbles were similar in arrangement to those of the upper pavement but smaller in size. While the upper stones measured between 25-30 cm in diameter, the lower cobbles were a maximum of 15 cm in diameter. Time did not permit us to fully investigate the extent to which the lower pavement continues under the surrounding pavements but probing between the intact cobbles between the two fire pits indicated that the lower pavement continues west at least 1 m. Areas of looting within the North Fire Pit and around its perimeter show no evidence for two construction phases. We did find, however, a similar sequence of a pavement of smaller cobbles covered by a pavement of larger cobbles associated with the top tread of the Stairway at N999.5, E1012.

These two construction phases may be related to the two building phases that Quilter identified in Operations D and E in the Rivas site (Quilter 2004:53, 69-70). At both the Rivas site and at the top of the Stairway, the earlier features were constructed with smaller cobbles. Due to the lack of absolute dates associated with either the earlier constructions in the Rivas site or those of the Stairway, it is not clear if the reconstruction episodes are related. However, a carbon sample from the surface of the lower pavement, which has not yet been submitted for dating, may help clarify when this change occurred.
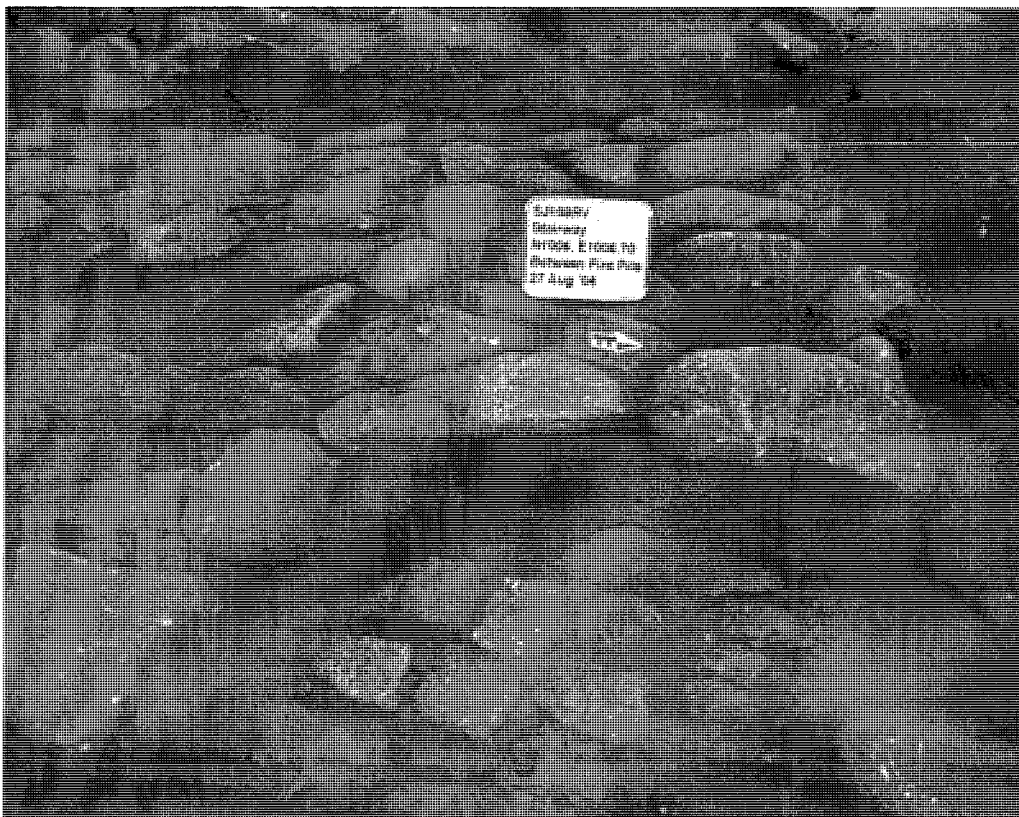
Figure 8. 9 Two phases of construction between two fire pits

Stone Pillars

In the course of our mapping and excavations, we also investigated another common element of Chiriquí cemeteries, stone pillars. Pillars are one of the most distinctive and characteristic features of Chiriquí cemetery complexes, but their spatial distribution within a single mortuary complex has never been investigated systematically. Our work concentrated on identifying patterns of pillar morphology, distribution across the Panteón de la Reina landscape, and possible function.

We found a total of 15 pillars in association with the Stairway and the architecture at its summit (see Figure 8.2). They were positioned near the edges and centerline of the stairway or near the boundaries of the Upper Platform. Lengths ranged from 65 cm to 115 cm. Our

examination of the pillars from the Stairway and elsewhere at the Panteón de la Reina concluded that while some pillars were little modified from their natural state, most were substantially altered. The most common alteration was a peg-like projection at one end. A few pillars preserved distinct flaking scars around this notch, demonstrating that the pillars were modified through direct percussion. Following Lothrop (1963:28) we referred to this feature as a "tenon". Thirteen of the 15 pillars from the Stairway and Platform have distinct tenons.

We also excavated three in-situ pillars associated with the Stairway and Platform (Figure 8.10). Excavations on the Upper Platform, directly west of the South Fire Pit, uncovered a pillar, 81 cm in length. The base, or non-tenoned end, of the pillar sat on bare soil surrounded by a small circle of five flat cobbles. The tenoned end was resting on a large flagstone. The position of this pillar indicates that it was originally positioned vertically with the tenoned end pointed upright and the opposite end buried in the ground. Excavations on the Upper Platform behind the opposing North Fire Pit identified a flagstone but no pillar. However, two large pillar fragments located within 5 m may be fragments of a pillar originally set in this location.

The two other *in-situ* pillars were located along the south side the Stairway, east of the platform. Both were similarly positioned with the proximal end resting on a pavement and the distal end surrounded by a small circle of flat cobbles, and with concentrations of charcoal near their base.

The three pillars found *in-situ* on the Stairway and Upper Platform provide clues as to how the other pillars may have been positioned and used. While these three pillars represent a small sample of the assemblage of Panteón de la Reina pillars, the evidence of burning in front them suggests that other pillars, particularly those along the stairway may have also had small fires in front of them. All three pillars appear to have been positioned with a notched end up, thus

suggesting other pillars were displayed in the same manner. Pillars from La Reina Sur and La

Reina Norte are discussed within those sections, below.
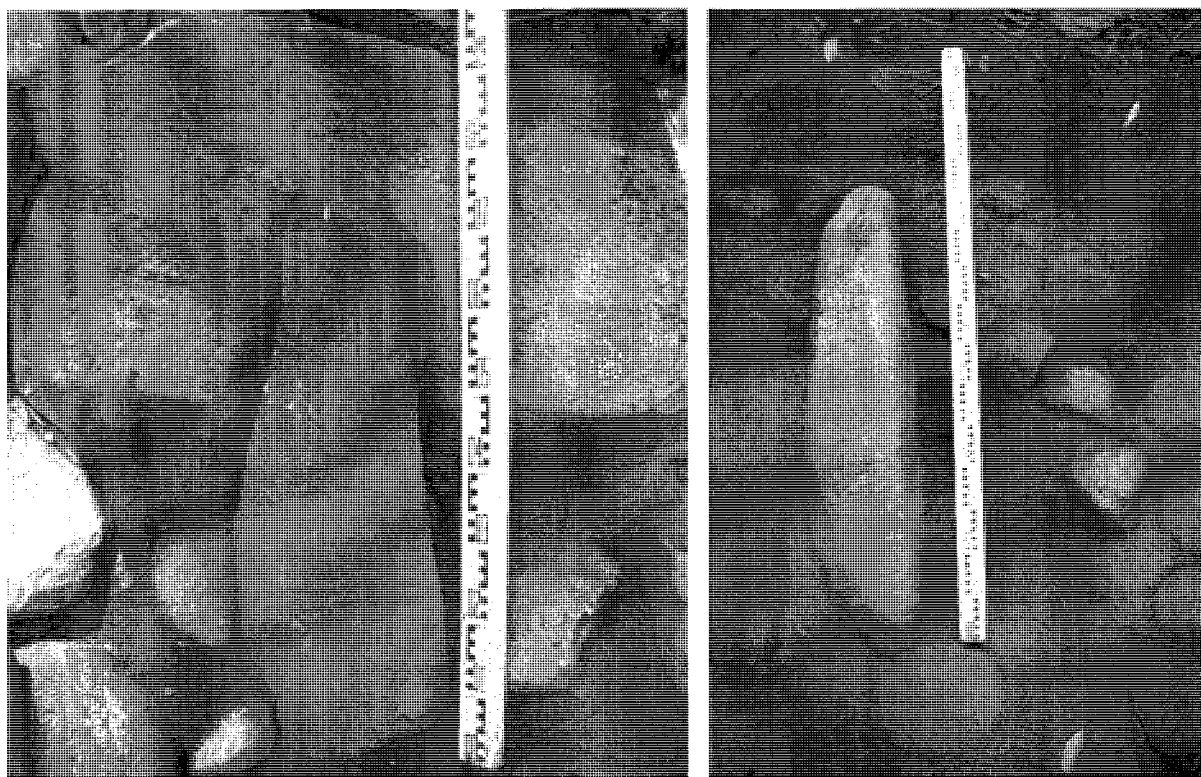
Figure 8. 10 Photo of in situ pillars. Above South Fire Pit (left) and on Stairway pavement (right)

Artifact analysis

The artifacts recovered at the top of the stairway suggest that an unusual suite of activities

occurred in this area of the Rivas-Reina site. Of the 577 ceramic sherds recovered, we were able

to identify 121 to type. Of these 54 (44.63 percent) are Ceiba Red-Brown or other undecorated

types, 35 (28.93 percent) are Papayal Incised, Redwares accounted for 15 sherds (12.40 percent),

and nine (7.44 percent) are Carbonera. Buenos Aires Polychrome accounted for only eight

sherds, or 6.61 percent of the assemblage. Of the 102 sherds identified to vessel form 94 (92.16

percent) are from open bowls and eight (7.84 percent) are from jars. Of those identified as

bowls, 55 (58.51 percent) were undecorated, 37 (39.36 percent) were Papayal Engraved, and two

(2.13 percent) were Buenos Aires Polychrome. All jars were either plain or decorated with

plastic adornments, suggesting they were either Ceiba Red-Brown or Carbonera. Support and

adornment effigies were rare but those present appear to be saurian or piscine in form and were

found predominantly on the Lower Platform near the two fire pits.

The relative frequencies of ceramic types in this assemblage contrast significantly from

what Jeff Quilter identified within the Rivas Site (Table 8.1; Figure 8.11). Ceiba Red-Brown,

was the most common on the stairway, accounting for nearly 45 percent of the assemblage but

was the least common type in the Rivas site, comprising slightly over 2 percent of ceramic

material. This pattern is reversed with Buenos Aires Polychrome, which is the most common

type in Rivas at 72.27 percent, but accounts for just 6.61 percent of the ceramic material on the

Stairway platforms.

Table 8. 1 Comparison of ceramic types between Rivas and the La Reina Platforms

	La Reina Platform		Rivas	
Identified Sherds	Quantity	Frequency	Quantity	Frequency
Ceiba Red-Brown	54	44.63%	26	2.09%
Papayal Incised	35	28.93%	137	11.01%
Redwares	15	12.40%	32	2.57%
Buenos Aires Polychrome	8	6.61%	899	72.27%
Others	9	7.44%	150	12.06%
Total identified	**121**	**100.00%**	**1244**	**100.00%**
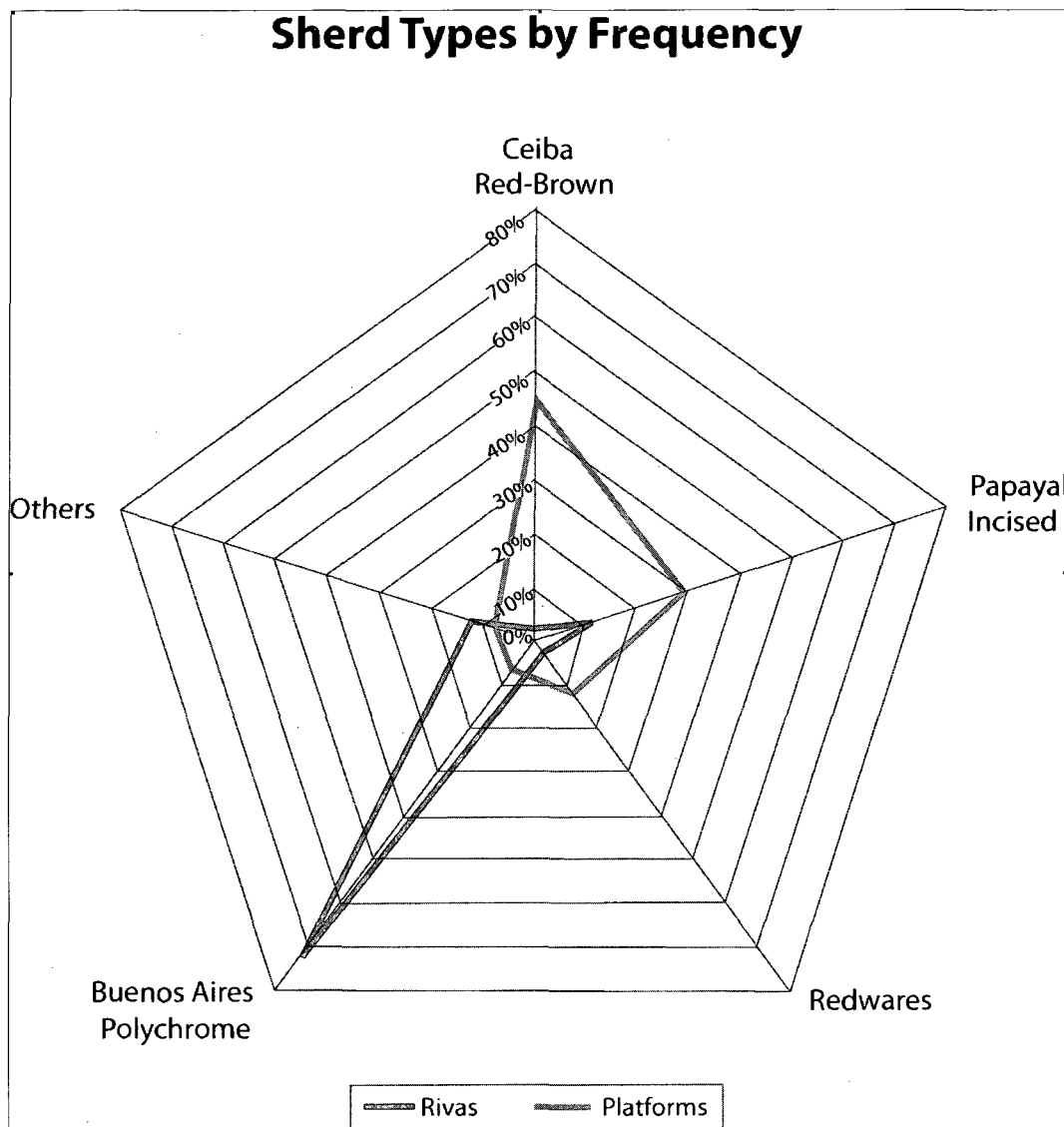
Figure 8. 11 Frequencies of sherd types in Rivas site and on the Stairway platforms

The assemblage from the platforms also differs significantly from that in the Rivas site in terms of vessel forms (Table 8.2). In a sample of 1002 rim sherds from the Rivas site, jar forms comprised more than half (53.59 percent) and bowls accounted for 46.41 percent. On the platforms, bowls comprise 88.89 percent of the rims identified to type and jars only 11.11 percent. The 22 rims identified to form represent a maximum of seven vessels.

Table 8. 2 Comparison of jar and bowl frequencies between Rivas and the La Reina Platforms

	La Reina Platforms		Rivas	
Vessel Forms	Quantity	Frequency	Quantity	Frequency
Bowls	120	88.89%	465	46.41%
Jars	22	11.11%	537	53.59%
Total identified	**142**	**100.00%**	**1002**	**100.00%**

Among the unique vessel forms on the platforms were fragments from at least four *sarténes* or *braseros*, shallow frying pan shaped vessels, usually interpreted as incense burners. The first example is an almost complete handle found at the base of the south wall of the Upper Platform (N996.20, E1000.95). The handle of the vessel is hollow and depicts a simple zoomorphic form, possibly a crocodile or other saurian form (Figure 8.12). Two hollow eyes are depicted with a small open mouth with exposed teeth. Among the Rivas ceramic assemblage, there was only a single complete sartén, a Redware found in Operation C.
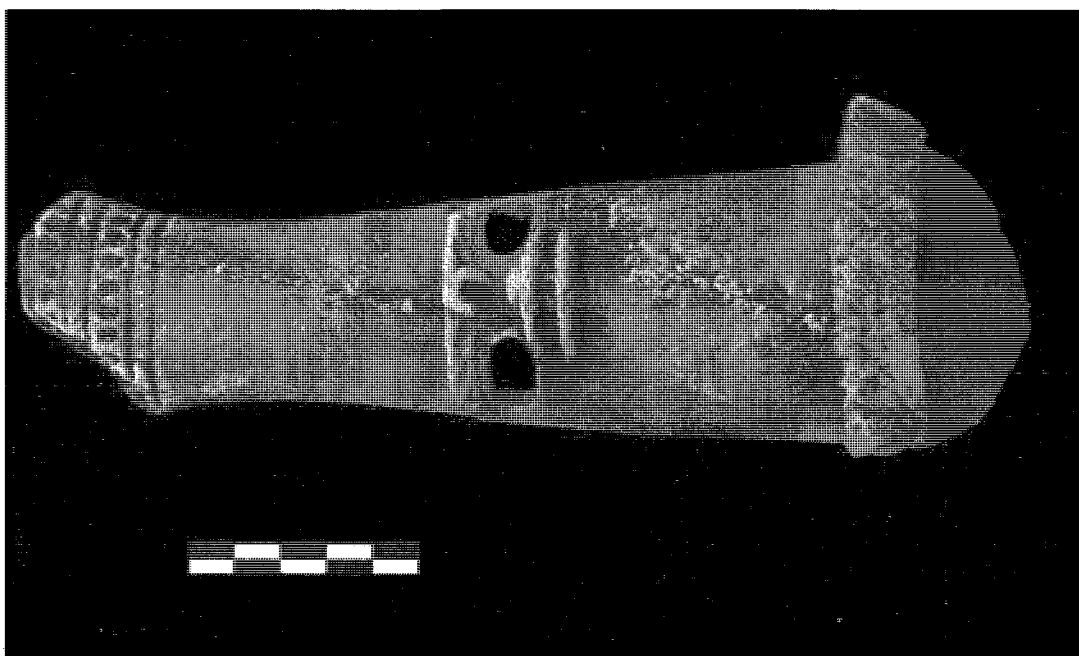
Figure 8. 12 Sartén handle (N996.20, E1000.95)

A second is a plain-handled red slipped sartén found inverted and broken on the north side of the Stairway (N1014.45, E1005.70) with great amounts of carbon directly beneath it. We collected the carbon but have not yet submitted it for dating or paleobotanical analysis. Given that these two sarténs were found at the base of the walls of the Upper Platform, it is plausible that they were originally placed along the edge of the Upper Platform and fell to the lower positions where we recovered them. Fragments of a third sartén were located on the Lower Platform directly east of the North Fire Pit.

We also found unusually high frequencies of chipped stone tools, cores, and debitage on the Platform, around the fire pits, and in the walled patios. All of the finished tools are unifacially flaked scrapers that display a steep edge along one lateral margin. All are manufactured from fine-grained basalt and are similar in form to the scrapers we found in the Rivas site (Figure 8.13). Of the 17 scrapers found on the top of the Stairway, seven from the North Patio and four from the South Patio, and six from the surface of the sunken pavement within the Upper Platform. We also found a total of 112 flakes on the platforms and the patios but all were severely weathered and thus it was impossible to determine if any exhibited evidence of use.

Figure 8. 13 Profile view of three scrapers from the platforms. Scraping edges on left.

The ceramic assemblage is quite unusual, dominated by small bowls (of a form useful for drinking). The lithic assemblage is equally unusual, dominated by one particular tool form. This may indicate that these assemblages were the product of a relatively narrow range of activities that required very specialized material culture. The location of this excavation area—at the point of access from Rivas to the two cemeteries of the Panteón de la Reina, and the last place before moving into those cemeteries—suggests strongly that those activities have to do with funerary or mortuary practices. Historic accounts of Bribri funerals describe practices that would have utilized a similar range of ceramic vessels and stone tools. Witnesses to Talamancan funerals describe the consumption of chocolate or chicha during funeral ceremonies (Bozzoli de Wille 1975a; Gabb 1875; Skinner 1920; Stone 1962). Defleshing bodies was also an essential part of the funerary process in Bribri society, and the scrapers and flakes found associated with the Platform may have been used to clean bones to prepare them for secondary burial.

Unfortunately, this assemblage is not suitable for edge-wear analysis, as natural chemical weathering has eroded edges and obliterated traces of use wear.

Finally, it is worth considering the artifacts we did not find associated with the Stairway and Platforms. In the southern Diquís (Lothrop 1963; Mason 1945) and elsewhere in Costa Rica, such as the site of Las Mercedes in central Costa Rica (Hartman 1901), freestanding and peg-based stone sculpture is commonly associated with funerary mounds. However, despite clearing more than 200 square meters around the top of the stairway we found no evidence of stone sculpture. Freestanding and peg-based sculptures are common elements of Chiriquí mound sites and sacred spaces. Their complete absence at the Panteón de la Reina provides further evidence that such sculptures are not found at Chiriquí dually organized cemeteries and are not found in association with pillars.

The paucity of polychrome sherds is also noteworthy. Of the 577 sherds from the stairway platform, only eight sherds representing two Buenos Aires Polychrome vessels were present. Although Buenos Aires Polychromes were abundant throughout the Rivas site (72.27 percent of the assemblage) and the Panteón de la Reina (40 percent of the assemblage), polychromes were apparently not a significant part of the ceramic assemblage during funeral ceremonies.

It is important to note, however, that very few artifacts were found in this location and the assemblage may not be representative of all funeral events held at the Panteón de la Reina. As a sacred space, the area may have been periodically cleaned, perhaps after every ceremonial event. Thus, the materials present may only represent the assemblage used during a single event, perhaps the last event held in this locale, and may not be representative of funerals as a whole.

La Reina Norte and La Reina Sur Cemeteries

In this section I discuss the results of the fieldwork in La Reina Norte and La Reina Sur cemeteries. I begin with a discussion of the spatial arrangement of the two cemeteries, emphasizing the architectural features that define their boundaries and subdivide interior space.

During the 2003 and 2004 field season, I sought to identify and map the cemetery boundaries and associated features to demonstrate how each cemetery is spatially and architecturally defined in order to characterize differences between the two. Work on the Stairway demonstrated that South Patio was constructed at a much smaller scale than the North Patio. I was interested in identifying similar asymmetries between La Reina Sur and La Reina Norte.

Chiriquí cemeteries often can be identified through the presence of looters pits, broken pottery, and the small flat cobbles that once capped the now looted graves, and that edge of that detritus roughly indicates the edge of the ancient cemetery. This is particularly true of cemeteries like the Panteón de la Reina, which have been subject to severe looting for more than a century. By mapping the boundaries of the looting, one can estimate the size and form of a cemetery with a fair degree of accuracy.

Changes in topography and the presence of certain architectural features can also be used to identify cemetery boundaries. Cemeteries often are positioned on natural rises or constructed with mounded soil and stone retaining walls (Haberland 1984). These rises and walls are commonly less than a meter high and can be difficult to identify, especially if the ground surface is covered with thick vegetation, the topography eroded, or both. Stone columns are also common markers of cemetery boundaries and interior spaces (Lothrop 1926; Pittier 1892). In the

section below, I use these kinds of features to reconstruct the spatial organization of the Panteón de la Reina's two cemeteries.

La Reina Norte

The boundaries of La Reina Norte are defined primarily by the topography of the ridgetop, which reaches a maximum width of 40 m in this area. The east edge follows a rather irregular boundary, defined by the edge of the slope. Looter pits and associated materials (cobble paving stones, smashed pots, etc.) extend from east and west edges. The east-west dimensions of the hill range from 30 m on its southern end to 45 m near northern end of La Reina Norte. In total, the area of the Panteón de la Reina cemetery was approximately 5900 m^2 (Figure 8.14).

Although now only 45 m wide, La Reina Norte may have originally been slightly larger in its east-west dimensions. There is some evidence that portions of the eastern edge of the hillside have collapsed due to mass wasting, the movement of rock or soil downslope under the influence of gravity with the aid of other media such as water, air, or ice (Daniels and Hammer 1992:185; Selby 1993:249). Mass wasting is a major process in the development of landforms in the humid tropics, where water infiltration rates are high and deep weathering produces a thick zone of incoherent materials with large voids, high clay content and a low shear strength (Thomas 1974). Downslope mass movement off the Panteón de la Reina is usually in the form of slumps or slides. ((Daniels and Hammer 1992; Easterbrook 1999:75). Both kinds of mass movements are often triggered by tectonic events such as a tremor or earthquake when steep hill
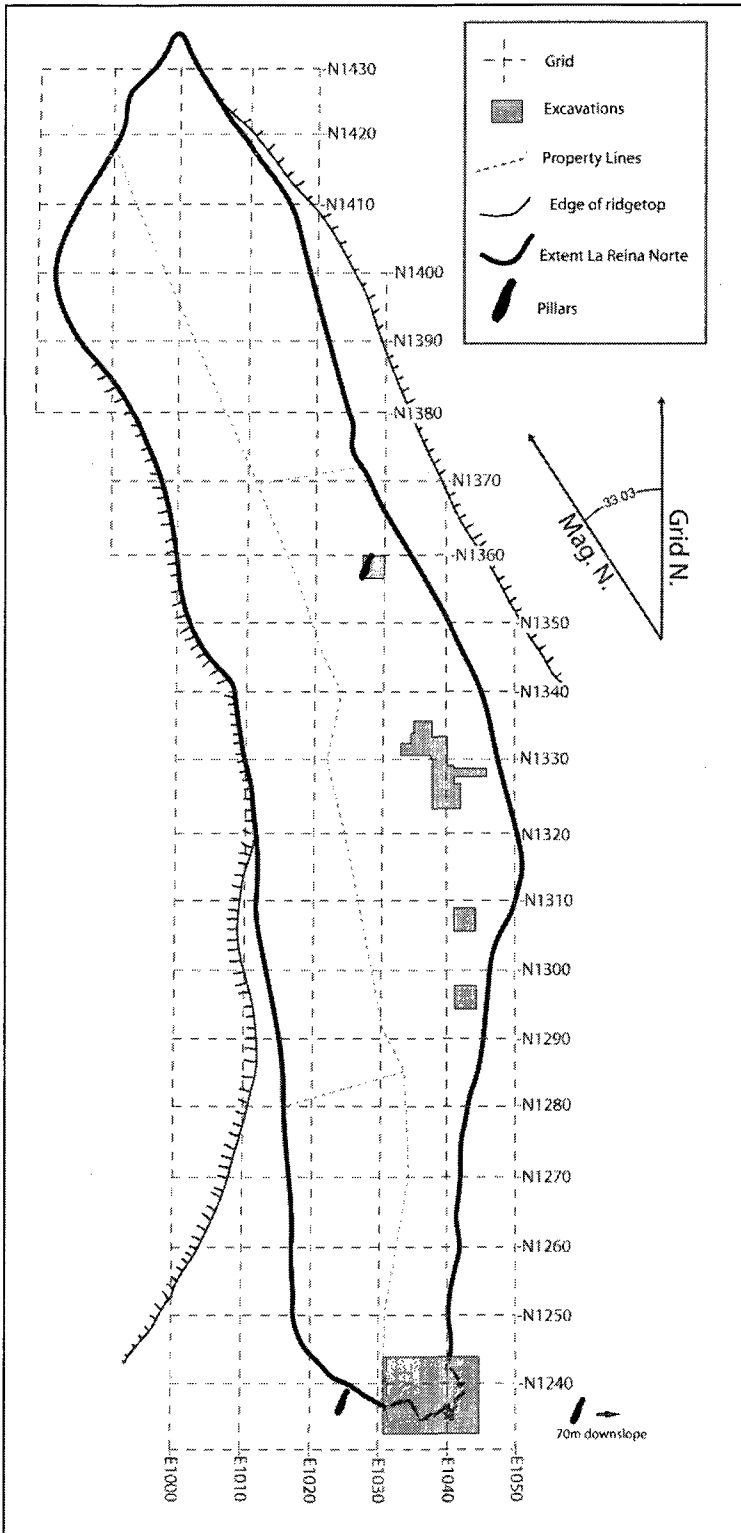
Figure 8. 14 Map of La Reina Norte with excavated areas indicated

slopes are at excessive pore pressures. At Rivas, periodic mass wasting has occurred in the past and continues today due largely to human alteration of the environment. Clear cutting protective vegetation from hill slopes for timber or to replant with seasonal crops is the primary cause of these events.

One example of such an event is at the eastern edge of La Reina Norte between approximately N1245 and N1315. There, the hill slope exhibits a steep but slightly concave scarp, characteristic of a mass-wasting event. Approximately 70 m down the east slope from this point we identified a large fragment of a stone pillar, which had apparently tumbled down the hill. The landowner later reported a second pillar that he removed from the same general area to use as a lawn ornament. With current information, it is unclear when this wasting event may have occurred but the mature trees along the east slope of the hill indicate that any such event happened more than 50 years ago, perhaps when the site was first deforested.

Walls

We began excavations at the south end of La Reina Norte (approximately N1237, E1025-1040), at an abrupt 1 m rise in elevation. The higher northern side of the rise was heavily looted, but fewer than ten looter pits were located on the south of the rise. Excavation of a series of 1 x 2 m and 2 x 2 m units placed across this rise revealed a stone retaining wall, 60 cm high, constructed with between six and eight courses of flat cobbles. The top two courses contain the largest stones, measuring between 35 and 40 cm across their exposed face and between 10 and 20 cm tall. Cobbles in the lower courses are consistently between 15 and 20 cm across their exposed face and are approximately 5 to 10 cm tall. The wall is battered slightly to retain the higher ground (Figure 8. 15).

Figure 8. 15 Photograph of wall on south end of La Reina Norte. View to north.

Excavations exposed 20 linear meters of the wall, which was constructed with a series of

four straight walls meeting at right angles forming an 8.5 m wide by a 4 m deep projection out

from the cemetery (Figure 8.16). The projecting portion of the feature is oriented south to face

the Operations D and E sector of the Rivas site. On its east end, the wall terminates at the east

edge of the Panteón. It is unclear if this was the original termination of the wall of if erosion and

mass wasting have obliterated portions of the wall to the east. The latter seems likely due to the

steepness of the hill slope and the abruptness with which the wall terminates. To the west the

wall crossed into a property I did not have permission to excavate. However, through surface

indications and probing the soil, we were able to determine that the wall continues west for a

distance of 12 m, at which point it changes direction and runs north for at least another 40 m.
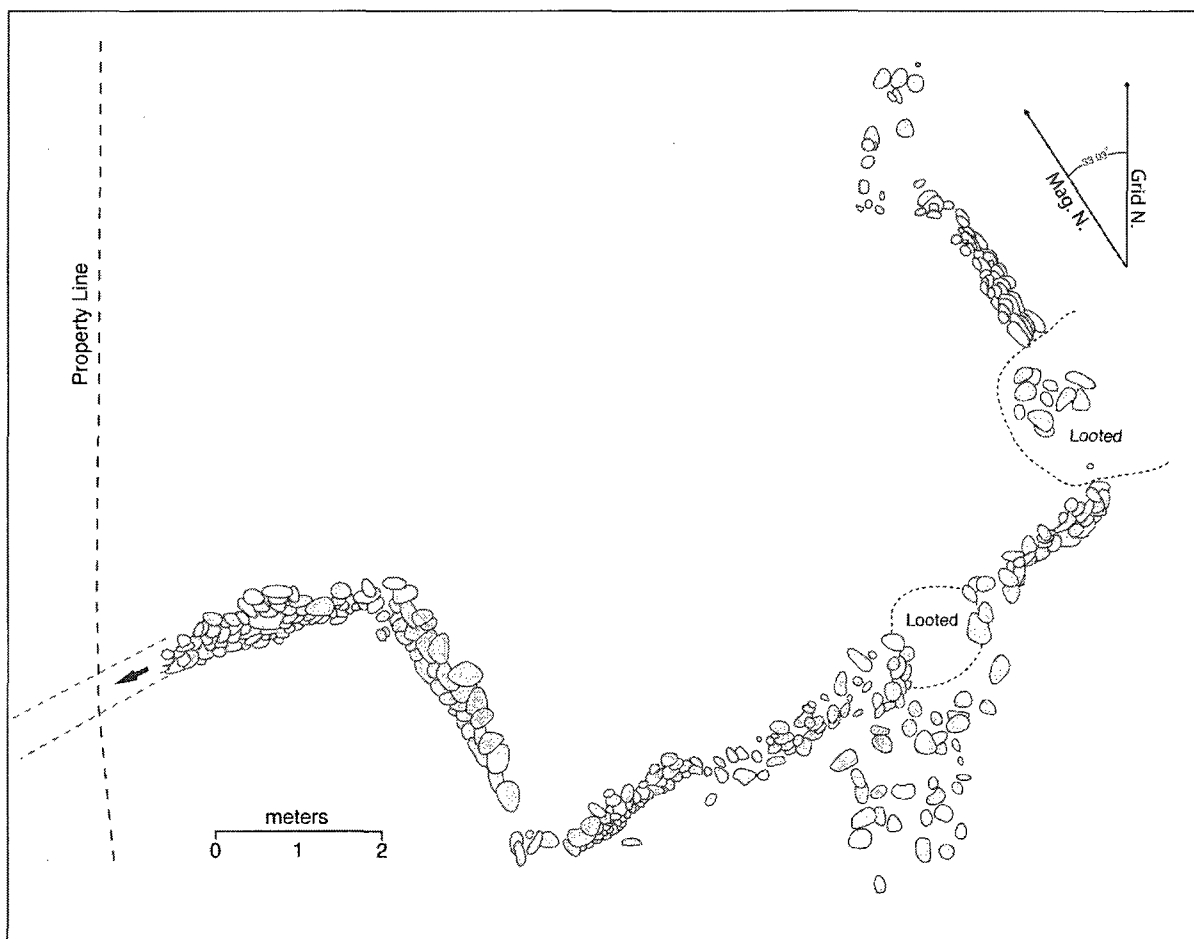
Figure 8. 16 Planview of wall, south end La Reina Norte

The excavated portion of the wall is consistently 60 cm in height, too high for a

comfortable step. Therefore, any entrance to La Reina Norte would require a stairway. Given the

presence of the Stairway and the traffic flow it indicates, I suspect the main entrance was located

on the west end of the cemetery, probably oriented toward the Platform at the top of the

Stairway. Identifying an entrance remains a priority for future research, as it would help to

understand the movement of people through the landscape during funeral activities.

Once the wall was completely exposed we cleared the entire upper portion of the platform with a series of 1 x 2 m and 2 x 2 m units. Each unit was excavated in a series of uniform 10cm levels, and the units reached depths between 30 and 40 cm in an attempt to identify any remnant surface or subsurface features. Unfortunately, the area was severely disturbed by looting, and we were unable to identify any intact features. Looter pits tended to be shallow, most under a meter in depth. We found low quantities of ceramic sherds but high quantities of paving stones that are frequently associated with grave construction.

It is unclear what purpose the projecting area served. The shallow looter pits and low quantities of sherds in combination with the large numbers paving stones may indicate that, like the D-94 False Cemetery and the platforms and patios at the top of the stairs, the area immediately inside the stone wall had pavements but lacked formal burials. That the area extends outwards and is oriented to face the Rivas site could indicate that it served as a platform for display of bodies during funerals prior to their burial in graves further to the north. Its close proximity to the east edge of the hill and southern orientation provided a clear viewshed to the entire Rivas site below, and vice versa. Thus events in this location could have been witnessed, though with minimal detail given the distance of 400 m, from people at Rivas.

In an attempt to locate additional walls within La Reina Norte we placed a series of 21 1 x 1 m test units and four 3 x 3 m units in areas that appeared to exhibit changes in elevation. None of the units recovered any evidence of walls or other architectural features. We did, however, identify eight unlooted and partially looted graves as a result of these excavations. These graves are described in more detail in the "Burials" section below.

In La Reina Norte and the adjacent ridge, we identified only four pillars. Three were apparently associated with the wall at La Reina Norte's far southern end. Two pillars, mentioned above, were found down the east slope, directly below the wall. The third was pillar was found partially buried in a pasture approximately five m south of the cobble wall. The fourth pillar found in La Reina Norte was at the bottom of a looters pit, buried by more than one meter of spoil. We identified it during the excavation of a 3 x 3 m test unit (N1358, E1327) at the northern limit of the area we had permission to excavate.

Its position gave little indication of how it may have originally been displayed, but its location within the center of the La Reina Norte cemetery suggests that it may have been used to mark a particular grave or set of graves, or to demarcate some division within the cemetery. It is likely that other pillars exist in La Reina Norte, hidden by spoil piles.

La Reina Sur

Excavations in La Reina Sur concentrated on its eastern half. We were unable to obtain permission from landowners to excavate in the western half. We were allowed, however, to map the extent of the cemetery and search for surface features in that area. In general, La Reina Sur was more heavily looted than la Reina Norte but its boundaries were more difficult to define. As defined, the size of the cemetery is approximately 6200 m^2. The eastern edge of the cemetery is clearly defined by the steep hill slope that overlooks Rivas and the Chirripó river but along the southern and western edges of La Reina Sur, the density of looter pits gradually decreases with no clear final boundary. Mature forest and dense undercover added to the difficulty of identifying ground features and changes in topography.

We initially conducted excavations on the northern edge of the La Reina Sur in an attempt to identify formal boundary features (Figure 8.17). I expected to find architecture of a similar style and organization as the architecture that defined the south end of the La Reina Norte.

The northern limits of looting in La Reina Sur were well defined. There, the density of looter pits changed from very dense to none within a distance of approximately 10 m. This transition zone also corresponded with the location of two stone pillars on the ground surface. We began by excavating a 10-m long, 1-m wide trench running north-south across this change in looting density and immediately identified cobbles arranged in an arc. We followed the path of the cobbles, revealing what appeared to be the foundation of a slightly oval structure (10.5 m on its east-west axis and 9 m on its north-south axis). The construction of the foundation was identical to those found in the Rivas site and similar in size to those in Operation A. The structure lacked the porch-like projection commonly found on the structures below and did not include a defined entrance. The area within the structure was heavily looted and no intact features were identified, making it difficult to understand the purpose of the structure. At the center of the structure we found a 135 cm long stone pillar at the bottom of a looter pit.
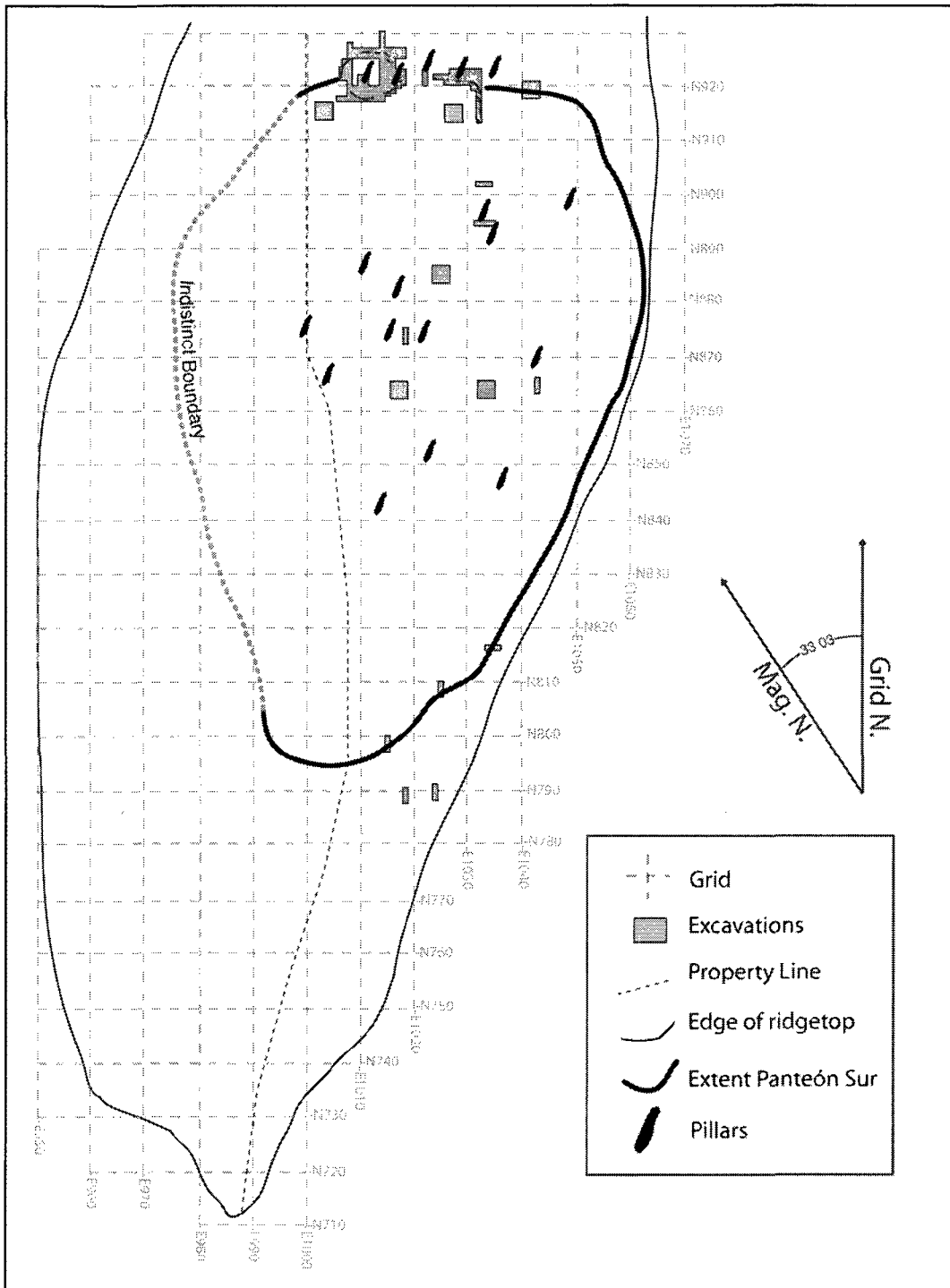
Figure 8. 17 Map of La Reina Sur

Excavations east of the circular structure revealed remnants of a stone retaining wall,

which defined the north end of the La Reina Sur cemetery (Figure 8.18 and 8.19). It was

constructed with three courses of cobbles laid in a running bond. The total height of the wall was a maximum of 30 cm, approximately half the height of the equivalent feature in La Reina Norte. It is interesting to recall that one of the differences that defined the asymmetry between the North Patio and the South Patio was that the former was twice the height of the latter, and we find the same relationship between the retaining walls of the two cemeteries. The arrangement of the wall also differs from the wall in Norte. In particular, the wall in La Reina Sur one does not change directions with walls meeting at right angles. Instead, the wall curves gradually around the northeast corner of La Reina Sur and then runs north-south.

We also found five stone pillars on the north side of the wall. These include the pillar found in the center of the arrangement of circular stones, one on the east edge of the circular arrangement, two directly north of the wall, and one positioned northeast of the point where the wall turns to the south. The placement of these stones suggests that they could have been positioned originally at regular intervals of approximately 6-7 m along the north side of the wall and within the circle of stones. The arrangement of these stone pillars located directly outside of the boundary to the cemetery precinct in La Reina Sur is similar to the pattern in La Reina Norte where at least three pillars lay just outside its southern wall. Unfortunately, none of the pillars in La Reina Norte or La Reina Sur were found in situ, so it was not possible to determine if there was evidence for burning at their bases, as was present among the three in situ pillars associated with the Stairway and Platform, discussed above.
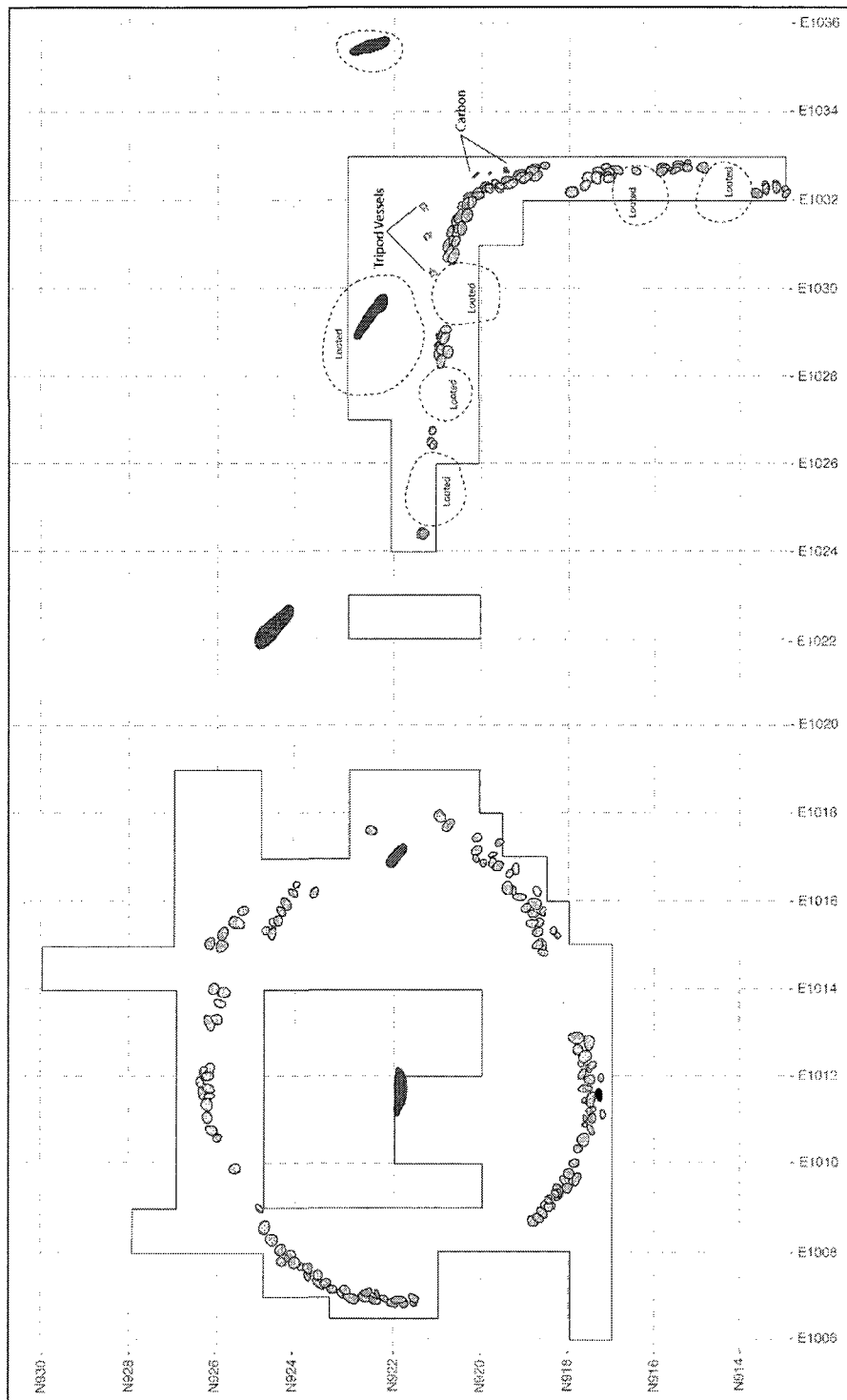
Figure 8. 18 Architecture at North end La Reina Sur (under revision)

Directly north of the base of the northeast corner of the wall we excavated three complete but broken Foncho Red tripod vessels. All were found at the same stratigraphic level in

undisturbed contexts. Their positions suggest that they may have originally been positioned on the top of or at the base of the wall. Also at the base of the wall was a dense scatter of small flecks of charcoal. The lack of a clearly defined hearth, discolored soil, or fracturing of the stones in the wall seemed to indicate that the charcoal may not have been in a primary context.
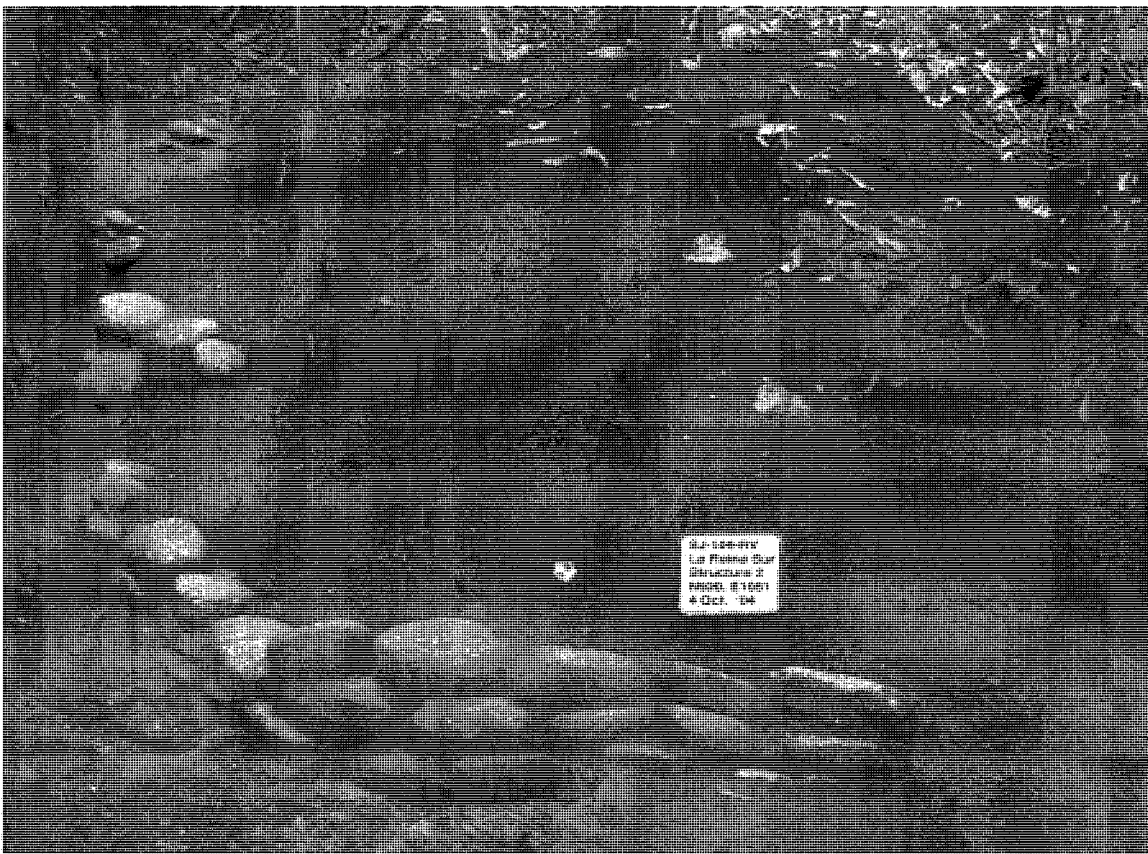
Figure 8. 19 Wall at north end La Reina Sur. View to South

We also investigated the south end of La Reina Sur to try identify how the cemetery's southern limits were defined. At approximately N800, the level topography of La Reina Sur abruptly drops off to the south. Looters pits were sparse on both sides of this change in elevation, but somewhat denser to the north. We placed a series of three 1 m by 3 m trenches across this elevation change in an attempt to identify walls. None of the trenches revealed formal

cobble walls like those found elsewhere. Instead, we identified remnants of a wall crudely constructed using large slabs of fractured rocks and chunks of decayed bedrock, locally known as piedra muerta, piled to a height of between 30 and 40 cm. The wall was most prominent at the southernmost extreme of La Reina Sur where it runs east-west. At the southwest corner of the cemetery, this crude wall, as defined by the change in elevation, curves to the north but disappears after approximately 15 m along the west edge.

We were unable to clearly define the western boundary of the cemetery. Unlike La Reina Norte, La Reina Sur does not extend the full width of the hill but terminates at least 15 m east of the western edge. The distance between looter pits gradually increased to as much as 10m, and despite an intensive surface investigation we were not able to locate any pillars, architecture, or changes in topography that would suggest a definite western boundary.

With current information it appears that only the northern, southern, and eastern boundaries were clearly defined: the eastern hill slope serves as the east boundary and walls or a change in elevation mark the north and south boundaries. This may indicate that towards the end of the use of the cemetery residents of the Rivas site had clearly defined the north and south limits of the cemetery but left the west end undefined in order to direct and encourage cemetery expansion in that direction. We were unable to test this, however, as we were not permitted to excavate in the west half.

Based on available data, I suggest that the La Reina Sur was internally subdivided with cobble walls and stone pillars. We identified a total of 18 pillars in this cemetery: the five previously mentioned pillars along the north end of the cemetery and 13 in the interior of the cemetery. All were complete and ranged in length from 70 cm to 175 cm. All of the pillars exhibited the characteristic tenon on one end. None of the pillars were indisputably in situ, but

their large size and weight and lack of economic value lead me to believe that most pillars were not moved more than a few meters of their original locations. The line of five pillars positioned at regular intervals at the north end of la Reina Sur supports this inference. Additional pillars in La Rena Sur exhibit similar standard spacing. The arrangements of pillars may have formed lines, possibly indicating divisions between other subunits of the cemetery, despite the excavation of several test units between them we were unable to identify associated walls (See Figure 8.17).

Elsewhere within La Reina Sur, we identified the remnants of a cobble wall, six courses and 53 cm tall, 55 m to the south of the northern boundary of the cemetery (N867, E1044).
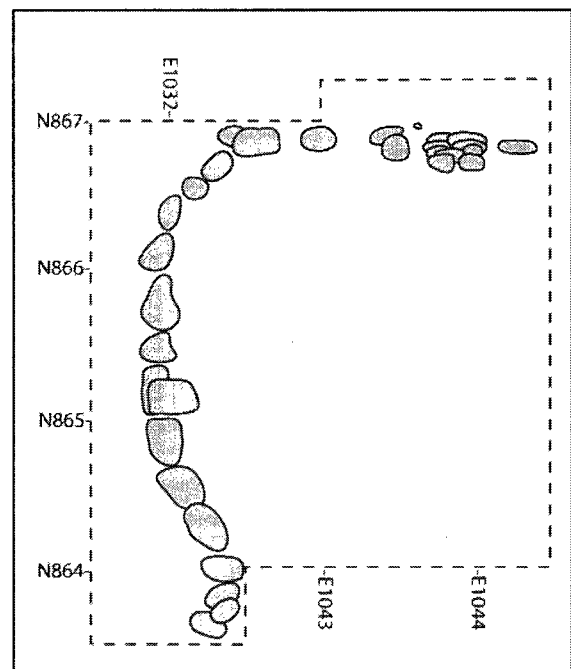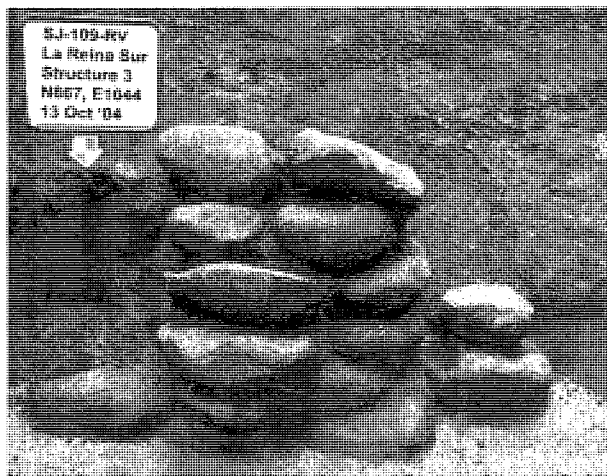
Figure 8. 20 Photo and illustration of wall within La Reina Sur

The excavated portion of the wall runs east-west for a distance of at least 2 m and then curves toward the south and runs for a distance of 3.5 m (Figure 8.20). Unfortunately, time constraints did not enable us to follow the full extent of this feature. The fact that the wall rises

to the south is interesting. The natural elevation of La Reina Sur decreases towards the south. That the wall rises to the south indicates that spatially defined areas within the cemetery did not necessarily follow the natural decrease in elevation. Instead, sections of La Reina Sur may have been built up artificially, perhaps to create platforms or mounds. It is unclear at this time if graves were placed within the mounded area, as the area is severely looted, and we were only able to excavate a small portion of the raised feature.

Panteón de la Reina Graves

We excavated a total of nine graves or partial graves, eight in La Reina Norte and one in La Reina Sur. Because of the high rainfall and high acidity of the soil, none of the graves contained human skeletal remains. We photographed all grave features with still, digital, and video photography and mapped all the cobbles and surrounding features. We excavated matrix by stratigraphic levels when possible, but it was often difficult to distinguish changes in soil texture and color. We also found it very difficult to distinguish the boundaries of the grave shafts. We piece-plotted, individually bagged, and numbered all cultural material from graves.

La Reina Norte Graves

Soil profiles in La Reina Norte consisted of five primary levels. At the top of the profile was a 1-10cm thick humus layer, consisting of partially decayed leaves and other organic material. This was followed by a layer of heterogeneous matrix of secondary context created by looting, that ranged from 30cm to over 1m in depth. In most cases, this layer consisted of looted backdirt in piles or dispersed between looted burials. This layer was generally dense with potsherds, carved stone fragments, and occasional complete vessels. The majority of artifacts

collected from La Reina Norte came from this disturbance layer and thus were out of their primary contexts. I feel comfortable that the distribution of artifacts in this secondary context does not deviate significantly from their original distribution in primary context, because they were likely not discarded far from the graves in which they were initially deposited and later removed and discarded by looters.

The third stratum is a thin layer of loosely compacted, very dark brown (10YR 2/2) matrix. It is between 3 and 10 cm thick where present, but much if it was highly disturbed due to looting. The stratum contained few artifacts but had remarkable quantities of charcoal. In some excavations, we documented that this layer is stratigraphically superimposed directly over the surfaces of undisturbed grave pavements. Many of these grave pavements also had evidence for intense burning directly on their surfaces. In several cases we identified dense deposits of carbonized material on the pavement. With one grave (Grave 1 in La Reina Norte) there was clear mixing of grave fill and carbon, where the grave had been reopened to place an offering beneath the pavement. For this reason I believe that this dark stratum represents the living surface at the time of occupation. The high quantities of carbon throughout this level suggest that burning was common in La Reina Norte. While we have documented small areas of confined burning associated with graves (described below), the amount of burned material is too abundant to be explained by small hearths or burned offerings. The density of burned material dispersed over such a broad area may indicate that large areas of the cemetery were occasionally burned, perhaps to reduce ground cover. The soil appeared to have good potential for the analysis of botanical remains in order to understand the vegetation of the Panteón de la Reina at the time of occupation. We collected samples of this dark brown matrix but did not conduct flotation as part of our research, however.

The fourth stratum consists of tightly compacted clay loam subsoil, approximately 1.5 to 2 m thick. The soil is dark yellowish brown (10YR 4/6) that shifts to strong brown (7.5YR 3/4) with depth. This is the stratum into which graves were dug. Grave fill is largely composed of this same matrix, occasionally mixed with small amounts of matrix from the second stratum, which complicates identifying the edges of the grave shafts, as mentioned above.

The fifth stratum is dense reddish brown clay composed entirely of weathered parent material. In places, the outlines of boulders and rocks, weathered to clay, are visible. The depth of this stratum limits the maximum depth of graves. As this entire soil horizon is sterile, it also formed the base of our excavations.

Most of the graves we excavated in La Reina Norte (Graves 1-7) were located in a 12 m (north-south) by 8 m (east-west) area near the center of the cemetery (Figure 8.21). We initially chose to excavate in this area for two reasons. First, it was an expansive area with few large trees that would inhibit our ability to expand our excavations over a broad area. Second, the area included an abrupt 50 cm change in elevation running north-south, with the higher side to the west. This elevation change appeared very similar to the one we had identified on the south end of the cemetery, and I suspected that it might indicate a similar stone retaining wall, separating two internal portions of the cemetery. I planned to verify the presence of the wall and its extent and then conduct test excavations on each side to compare burial assemblages.

We placed a 4-m long and 1-m wide trench across this elevation change at (N1324, E1039-42) but failed to identify architecture. Instead we came down directly upon a burial pavement 90 cm below the ground surface. The pavement had been protected by 80 cm of tightly compacted clayey soil, dense with broken pottery from surrounding looted graves and a 10 cm thick layer of the loosely compacted dark soil covering a pavement of river cobbles (Figure 8.22). Once we

located the grave, we excavated it and then followed the extent of the dark soil to the north and south to identify additional burials. It was my intention to use graves found in this area to understand the distribution of graves and the range of grave goods and grave construction.
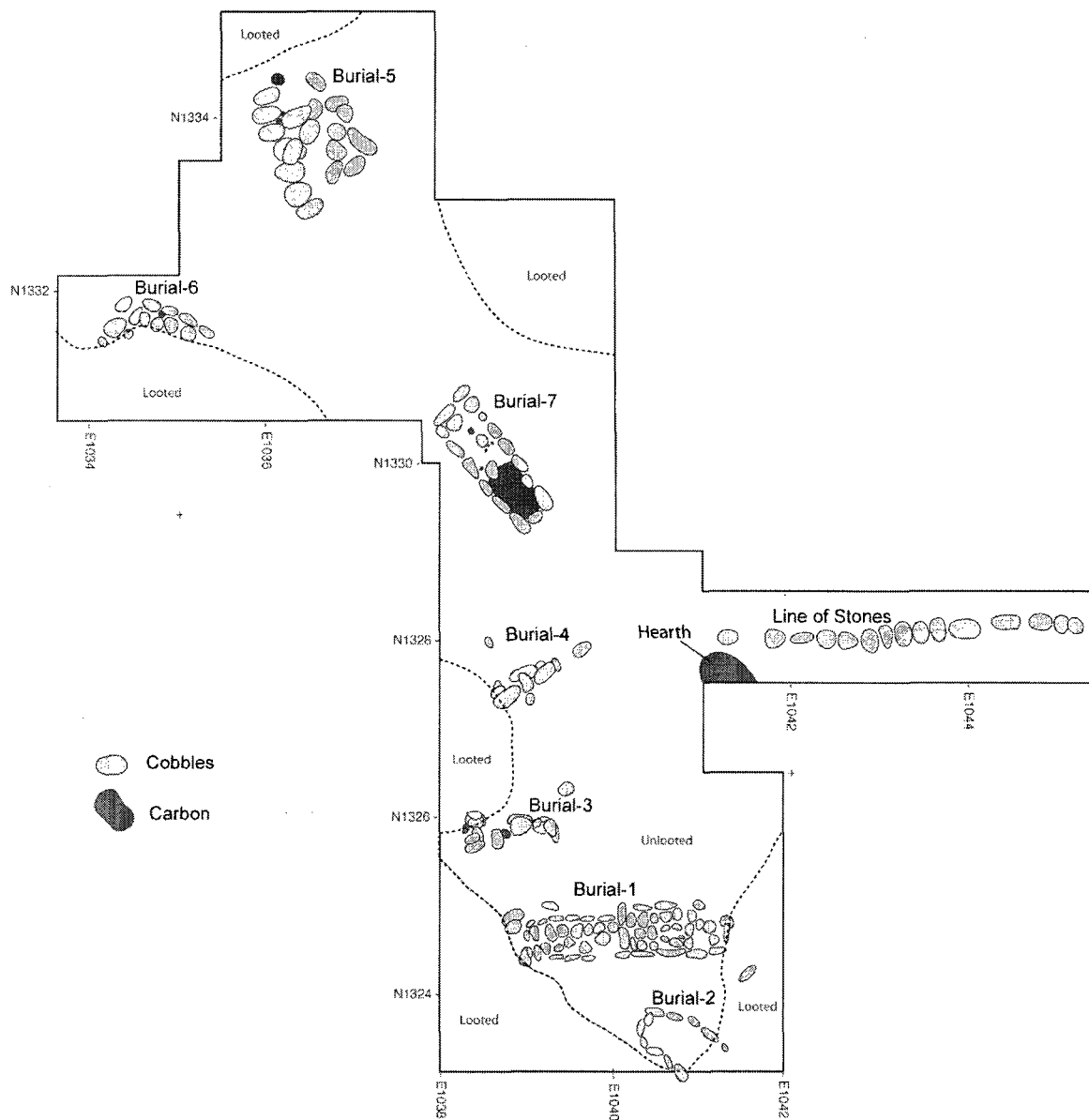
Figure 8. 21 Graves 1-7 and associated features, La Reina Norte

Grave 1

The surface of Grave 1 was a rectangular arrangement of 57 flat, round river cobbles, 220 cm long (east-west) by 70 cm wide (north-south) (Figure 8.23). Cobbles forming the pavement of the grave measured between 10 and 20 cm in diameter and were uniform in size, shape, weight, and material. Eighteen of the stone cobbles were on edge around the circumference of the pavement. The majority of these were around the southern, western, and the northern half of the burial. It was unclear if the lack of upright stones on the east edge of the grave meant that they had been removed or were never present. The two largest stones on the pavement, measuring 30 cm by 12 cm each, were positioned upright along the midline of the short axis of the pavement, dividing it into two halves.
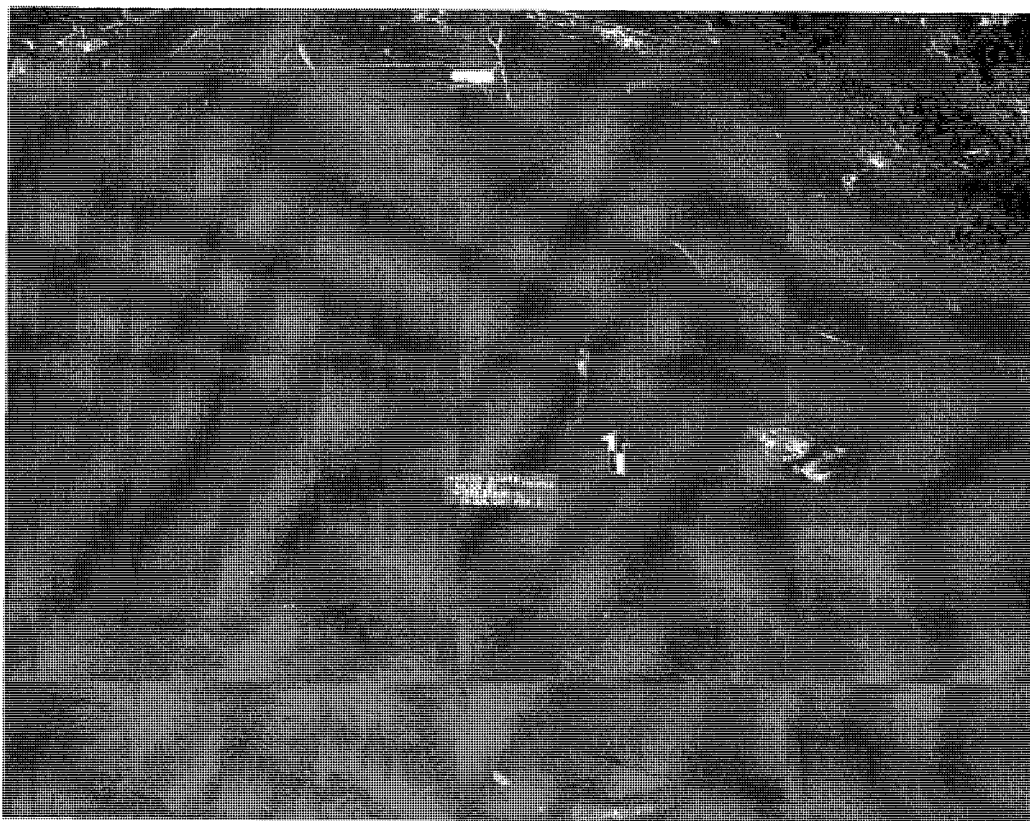
Figure 8. 22 Profile of stratigraphy over Grave 1. Note darker matrix directly above pavement.
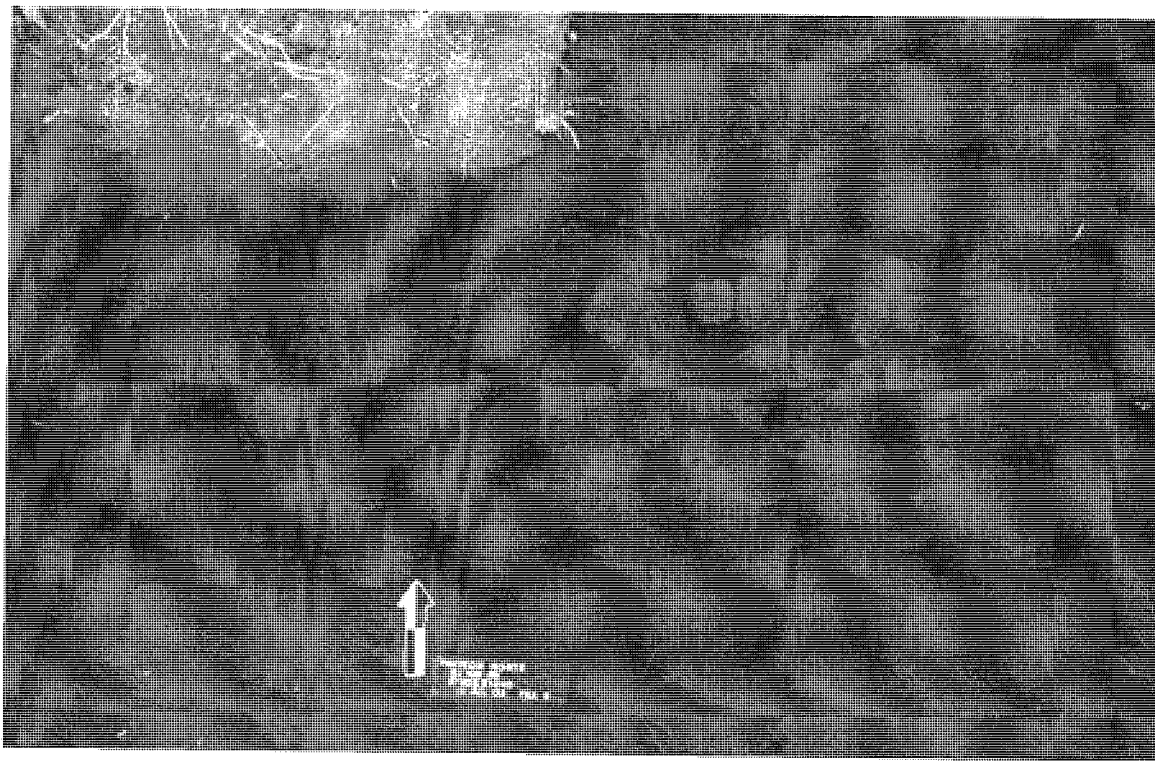
Figure 8. 23 Plan view photograph of Grave 1

Based on surface features, we assumed that the grave was completely intact. The surface pavement appeared undisturbed and the dark matrix covering the pavement extended fully around its perimeter and beyond. There were several looters pits within 5 m of the grave, but none appeared to be in close enough proximity to suggest they were used to loot this grave. However, excavations confirmed that looters had entered the grave from another grave to the east, tunneling slightly downward from the foot of the grave and under the pavement downward to the bottom of the grave. The looting was severe, destroying most of the bottom half of the grave, including most of the north wall. The top half of the grave was intact, such that we could reconstruct is dimensions, construction, and a portion of its contents.

In cross section the grave shaft measured 50 cm wide and 130 cm deep. The shaft was

uniform in width from top to bottom with relatively vertical sidewalls. The grave shaft was

positioned slightly to the south of the pavement. The pavement exceeds the north edge by 15 cm.

The south edge of the pavement is located 5 cm north of the edge of the burial shaft. Quilter

(2004) identified a similar pattern among graves in Rivas's Operation C cemetery, where grave

pavements were often out of alignment with the grave shafts, suggesting that the exact location

of the grave shaft was not clear at the time the pavement was constructed.
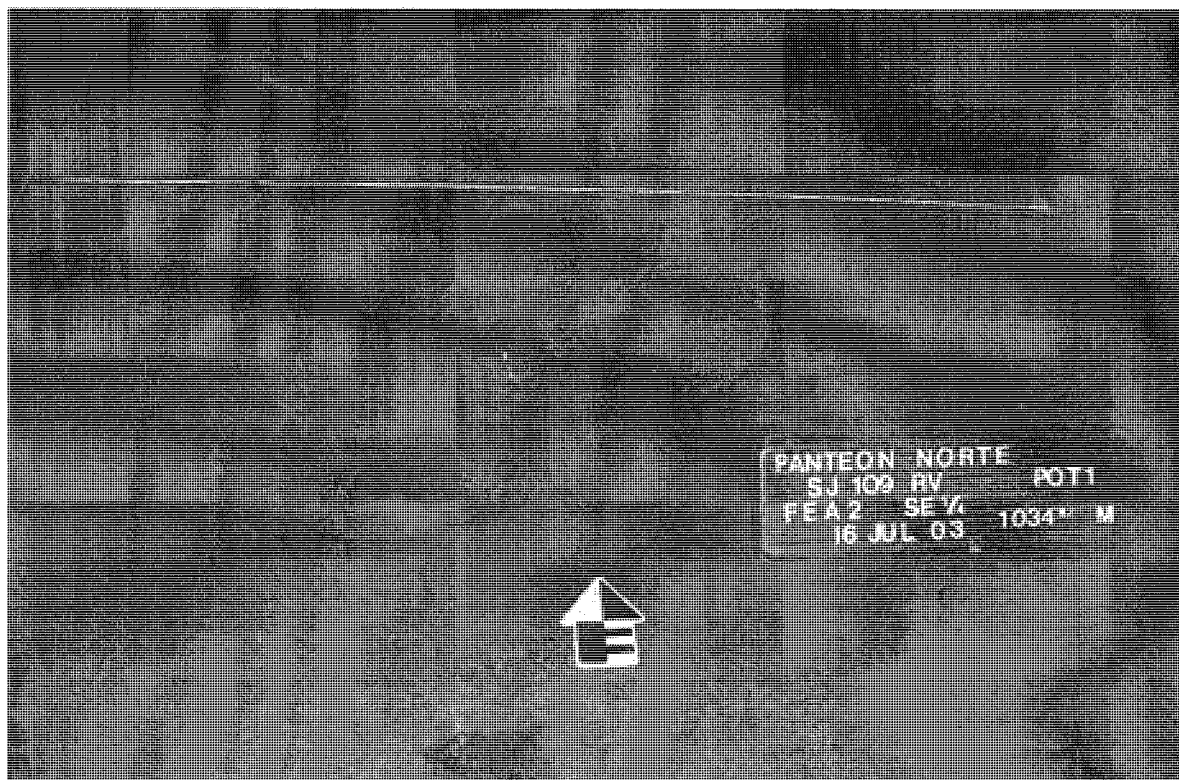
Figure 8. 24 Photograph of vessels below pavement of Grave 1. Note darker soil and disturbed cobbles above the vessels.
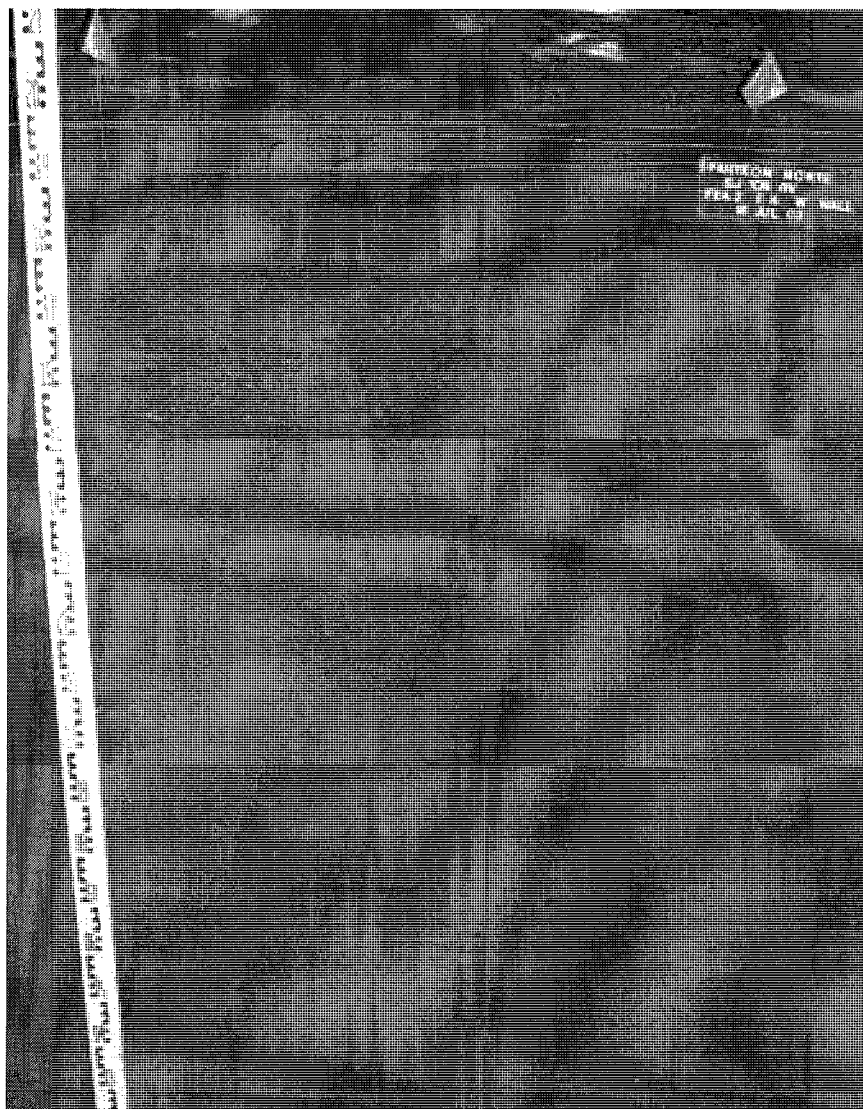
Figure 8. 25 Profile Grave 1. A looter pit intrudes on the lower right corner of the grave. View to West

Along the midline of the grave's longest axis in the east half of the grave (N1324.6, E1040.45) and 20 cm below the pavement, we identified a small Ceiba Red-Brown constricted rim bowl with a single handle along its rim. On the interior of the vessel was a smaller Sangria Red Fine tripod bowl in an inverted position (Figure 8.24). Four paving stones above the vessel appear to have been disturbed, as they were not laying flat but were positioned at a slight angle in relation to surrounding cobbles. Soils around the vessel and between the vessel and the

pavement were darker than the surrounding matrix and contained small amounts of carbon, presumably from the surface of the grave. The disturbed soils surrounding the vessels and the disturbed pavement above the vessels were strong indications that the grave goods were placed under the pavements after the grave was constructed. We found a third vessel 116 cm below the pavement in the southwest quarter of the grave. It was a Ceiba Incised globular jar with a flared neck and thick sooting on the base.

Grave 2

Grave 2 was located approximately 60 cm to the south of Grave 1. The surface of the grave was not paved but comprised solely of an oval ring of stones measuring 60 cm wide and at least 100 cm long. A large tree intruded into its east end and prevented us from exposing its full extent. The same layer of dark brown matrix that covered Grave 1 extended over the surface of the west half this Grave. The grave was so severely damaged from looting that it was not possible to obtain profiles of a burial shaft.

The only object we recovered in Grave 2 was a Sangria Red Fine constricted rim bowl with three hollow animal effigy rattle supports, found along the midline of the grave's longest axis and 10 cm below the pavement. We also collected a small fragment of carbonized wood located adjacent to the ceramic vessel.

Grave 3

Grave 3 was positioned parallel to Grave 1 and 1 m to its north. Looting was so severe that we were unable to determine the size or arrangement of its surface pavement with certainty. At the time of our excavations only 15 surface cobbles appeared to be *in situ*. Their placement suggested that the pavement was originally rectangular in form, similar to Grave 1.

We excavated the south half of the grave along the east-west axis of the pavement but the west end and the north half of the burial's interior were so severely damaged that we were unable to make accurate measurements of its horizontal dimensions. However, based upon the location of the in-situ paving stones and the positions of grave goods at the base of the grave shaft, I was able to establish that the depth of grave at 175 cm.

We recovered two artifacts, both of which were positioned along the north wall on the floor of the grave at a depth of 160 cm below the pavement. The first was a Ceiba Red-Brown globular jar positioned upright. The second was a large, shallow Papayal Engraved bowl placed in an inverted position. Scars on the base of the bowl indicated that it had originally been a tripod vessel but the supports had been broken off prior to interment. Quilter (2004:44) noted that large tripod bowls in the cemetery in Operation C were often placed in an inverted position, often over another vessel.

Grave 4

Grave 4 was located approximately 1.5 m north of Grave 3. This grave was almost completely destroyed by looting, and the remnant grave pavements provided only a rough approximation of the position and orientation of the grave. We were unable to determine the horizontal dimensions or depth of the burial. No grave goods or carbon were identified.

Grave 5

Grave 5 was covered by a pavement of large flat cobbles (35-30 cm in diameter) with no clear arrangement except for seven cobbles in a north-south line along its west edge. A large looters pit was located immediately north of the grave, but it did not intrude on the burial. We

collected two carbon samples from the surface pavement of this grave, one from a dense concentration of charcoal at its north end (N1334.4, E1036.15) and another from a smaller concentration of charcoal between two cobbles near the north end of the grave. Neither sample has been submitted for dating.

The grave was very different in construction than others in the area, measuring only 43 cm deep. Directly under its pavement was a thin (2-4 cm thick) but distinct layer of red matrix with high amounts of piedra muerta. Below the piedra muerta, we identified a 10cm thick dark brown/black layer of soil, containing numerous broken sherds but no carbon. The remainder of the grave fill was a moderately compacted brown soil with some piedra muerta inclusions. Across the floor of the grave was a light scatter of carbon, which we collected but have not submitted for dating.

Even though there was no evidence of looting, the burial contained no grave goods. This suggests that the minimum number of grave goods in a burial in the Panteón de la Reina is zero. This is surprising, especially because burials in the Rivas site cemeteries (in Operations C and K), usually inferred to be low-status cemeteries, always contained at least two ceramic vessels. We cannot know whether Grave 5 represents a burial that contained no durable grave goods, or whether it was not a grave at all. The shallow depth of the feature, its large pavement, unique stratigraphy, and lack of grave goods raises the possibility that it was some other mortuary-associated construction.

Grave 6

Grave 6 was the remain of approximately one half of a pavement oriented east-west. Looting had destroyed the south half of the grave but left most of the north half and a portion of

its west end intact (Figure 8.24). Four upright cobbles defined its north edge and a single upright

cobble marked its southwest corner. The remnants of the grave enabled us to infer that the grave

pavement was a rectangular construction 40 cm wide and at least 140 cm in length. A small

concentration of carbon was located on the surface of the grave just inside its northern boundary.

Figure 8. 26 Surface pavement of Grave 6

The grave reached a maximum depth of 56 cm. Grave fill consisted of a loosely compacted dark brown (10YR 3/5) matrix with a 7-cm thick layer of dark brown 10YR 3/3 matrix approximately 30 cm below the pavement. This thin layer was limited to the north half of the grave but extended to the north wall. The east and west walls were not well defined, but a profile of the north wall of the grave demonstrated that it was not vertical but is slightly bell-shaped, bowing out in the bottom 20 cm (Figure 8.25). The grave contained only a single artifact, a Sangria Red Fine open tripod bowl in an inverted position on the floor in the northwest corner. The vessel is similar to one found in Grave 7.
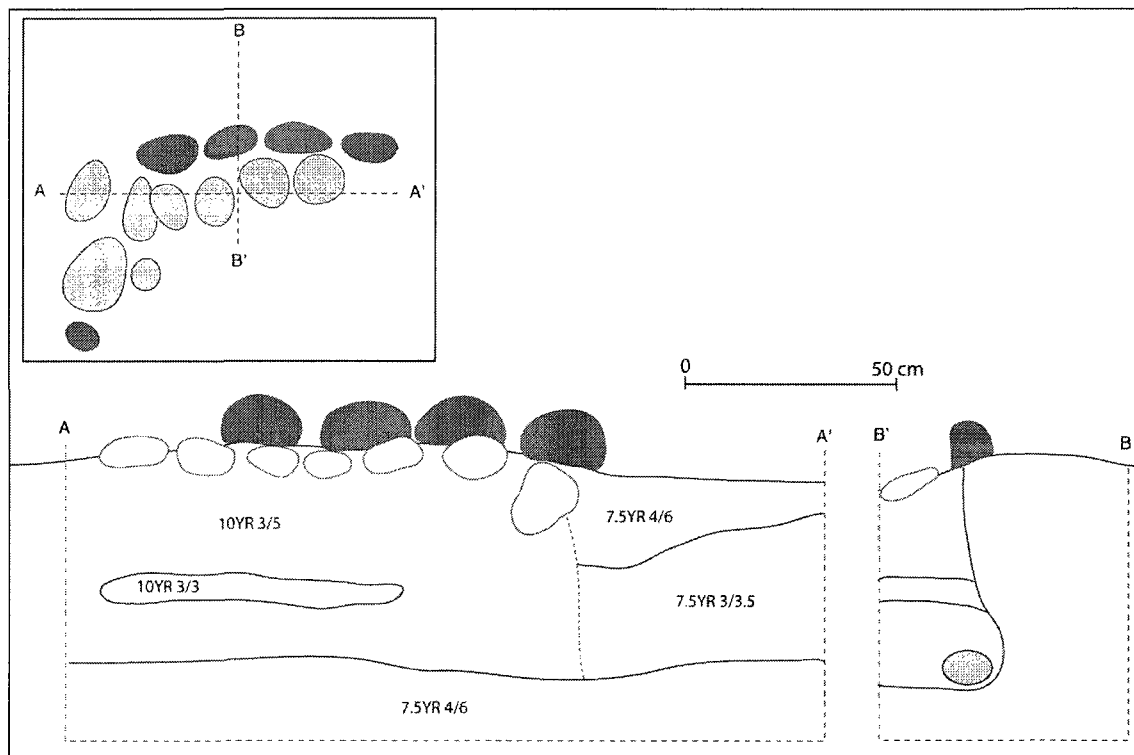
Figure 8. 27 Profiles of Grave 6

Grave 7

Grave 7 was the second unlooted grave we excavated in La Reina Norte. This burial was located at approximately N1329-30, E1038-39. It was oriented slightly west of north-south. The

grave pavement was 175 cm long and 55 cm wide and was constructed with a rectangular border

of upright stones surrounding a pavement of stones laid flat. Two parallel lines of stones defined

the long axis of the burial. A single stone marked its southeast end. Two upright stones marked

its northwest end. The stone positioned on its northwest corner was heavily eroded (chemically

weathered) and had the consistency of tightly compacted wet sand. There were only two stones
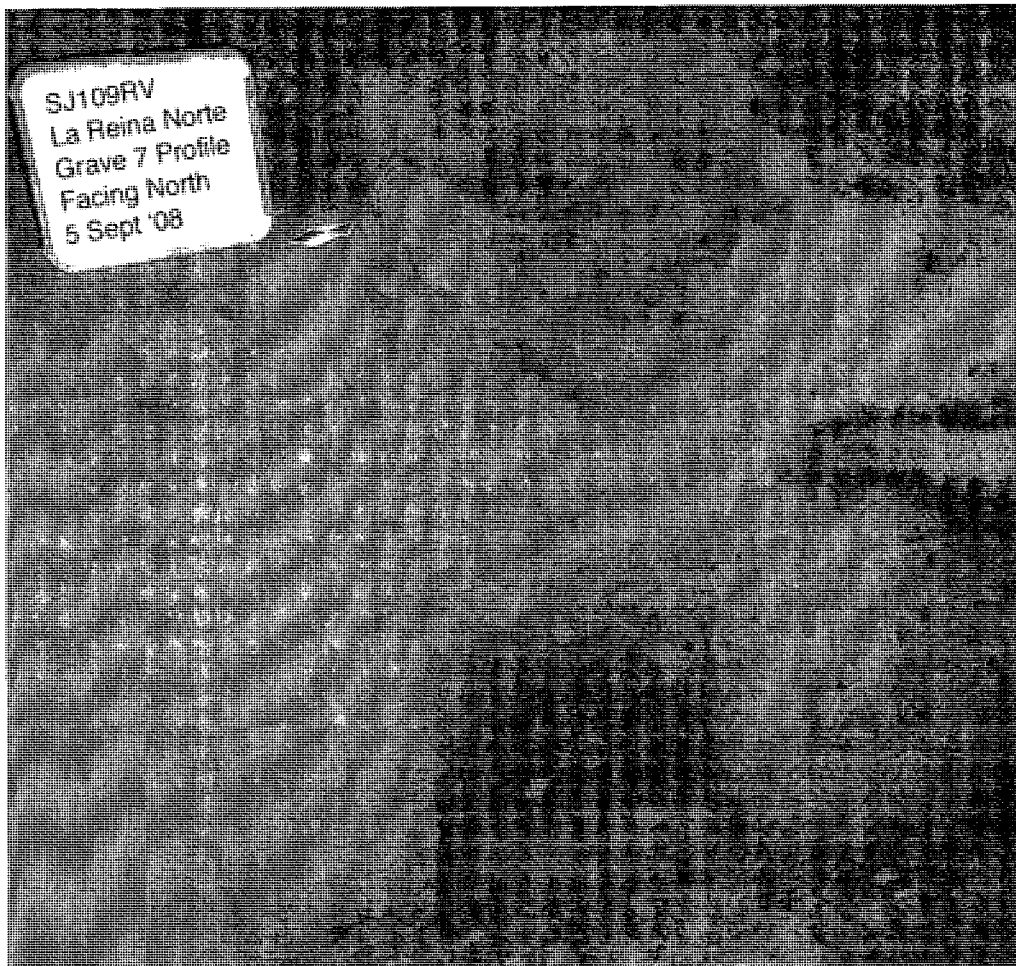
Figure 8. 28 Grave 7 profile. Note deep deposits of dark soil within pavement. View to north.

within the cobble border; both were round and flat. Also within the pavement was a carbon-rich

dark black/brown matrix, from which we took three small carbon samples. The charcoal-rich soil

within the pavement is significantly darker than the surrounding matrix, suggesting that burning

was carried out within the boundaries of the pavement (Figure 8.26). We found concentrations of carbon on the top of other burials (1, 2, 5 and 6) but not with this density.

The burial fill consisted of a loosely compacted strong brown (7.5 YR 4/6) soil, which transitioned to dark brown (7.5 YR 3/3) with depth. Throughout the interior fill there were several small pieces of *piedra muerta*. Unlike other burials, grave walls were well defined. At its surface the grave measured 88 cm wide but gradually narrowed in its upper half to a width of 40 cm. The floor of the grave was excavated to the weathered clayey parent material.

Despite the fact that the entire burial was completely intact with no evidence of looting, the burial contained only a single offering, a complete constricted rim Sangria Red Fine tripod bowl with small supports. The position of the bowl corresponded to the west edge on the north half of the burial next to where we assumed the head and shoulders of the individual were located.

The grave is intrusive to a layer of very dark brown (10 YR 2/2) soil containing large amounts of charcoal, which lies 28 cm below the surface of the grave. This layer is most visible to the east of the grave, where more carbon is present, and fades slightly to the west of the grave (see Figure 8.26). This same layer extends to the south and the southeast and extends over the line of stones, described below.

Line of Stones

Approximately 2 m east of Grave 4 we identified a line of 15 flat rocks between 20 and 30 cm wide forming a straight line 4.5 m long and oriented grid east-west. The east end of the feature terminates approximately 1 m west of the edge of the hill. The feature appears

completely undisturbed and I believe that the rocks represent the complete feature as originally constructed. Directly to the south of the last rock on the west end of the line we identified an oval feature comprised dark gray matrix and large pieces of charcoal. We did not identify any artifacts directly associated with either the line of stones or the feature, but macrobotanical analyses identified two carbonized cottonseeds within the feature.

I am uncertain of the purpose of this feature. The line runs perpendicular to the east edge of La Reina Norte, perhaps suggesting a path or a division between two groups of graves. However, this feature lies stratigraphically below the pavements to the west. The feature is capped by 24 cm of light brown clayey matrix, upon which lies the loosely compacted layer of dark matrix that directly overlies the grave pavements. The stratigraphy here indicates that the line of stones predates the construction of the graves in this area and may be associated with an earlier set of graves or grave features in the area. To date we have not identified any graves that are associated with this level of stratigraphy. It is possible, however, that the line of stones is contemporary with the buried matrix of dark brown soil located adjacent to Grave 7. This layer did not extend to the line of stones, however.

Grave 8

Grave 8 was the only grave in La Reina Norte that we found outside of the central group of graves just discussed. We identified this partially looted grave while excavating a 3-m by 3-m test unit (N1306-8, E1041-3). A large looters pit was located on the west end of the grave and two looters tunnels ran parallel to the grave on its north and south sides. Looters apparently entered the burial by tunneling from the southwest and into the north end of this one (Figure 8.29). The grave was severely damaged on its surface and in much of its western end but most of

the interior remained undisturbed. Remnants of the surface pavement consisted of 11 cobbles

positioned in an arc around the perimeter of the west end. Seven of the stones were positioned on

end and the remainder were laid flat. Three larger stones were located on the interior of the arc

but did not appear to be formally arranged. The position of the stones around the perimeter

suggests that this grave was marked with an oval ring of stones, similar to the surface of Grave

2. However, given the extensive looting in the vicinity of this grave, it is not possible to

determine the original arrangement with certainty. Like the graves to the north, the surface of

this grave was covered with a with a layer of dark brown soil mixed with charcoal.

The grave was the largest that we identified. It measured 270 cm on its east-west axis and

90 cm deep (Figure 8.27). Based on the remains of the grave it was at least 140 wide, but we

were not able to accurately determine its width due to the looter damage on the south end. The

burial is so large that it may have accommodated multiple individuals. The interior of the grave

was constructed in two distinct levels, each with a group of offerings. The first group (Group 1

in Figure 8.29) was positioned 28 cm below the pavement in the west half of the grave and

consisted of five ceramic vessels (a Ceiba Red-Brown tripod jar, two Ceiba Incised jars with two

loop handles, and two Sangria Red Fine tripod open bowls) and a polished stone celt arranged in

an east-west line. The second group of artifacts was found approximately 50cm below the first

group but positioned farther north and east. This group included a large Ceiba Red-Brown bowl,

an incurved Sangria Fine Red effigy tripod bowl with small solid supports, and five Ceiba Red-

Brown jars. To the south and east of the second group of grave goods was a line of six stones,

each between 15 and 25 cm in diameter, placed in a 115 cm line running east-west. On the north

side of line were two smaller stones positioned upright. I am unsure of the purpose of this line of

stones but it may have been a place to lay out the body. However, at only a 115 cm long it would

probably not be long enough for an adult, unless secondary burials were used. I am unaware of

similar features within other Chiriquí graves. Alternatively, the body may have been positioned

with the head near the west end of the burial where the looting was most intense. The two looters

tunnels that encroached upon that end, one in the upper layer and one in the lower, suggest that

looters may have targeted those portions of the grave, perhaps knowing where gold was most

likely to be located.
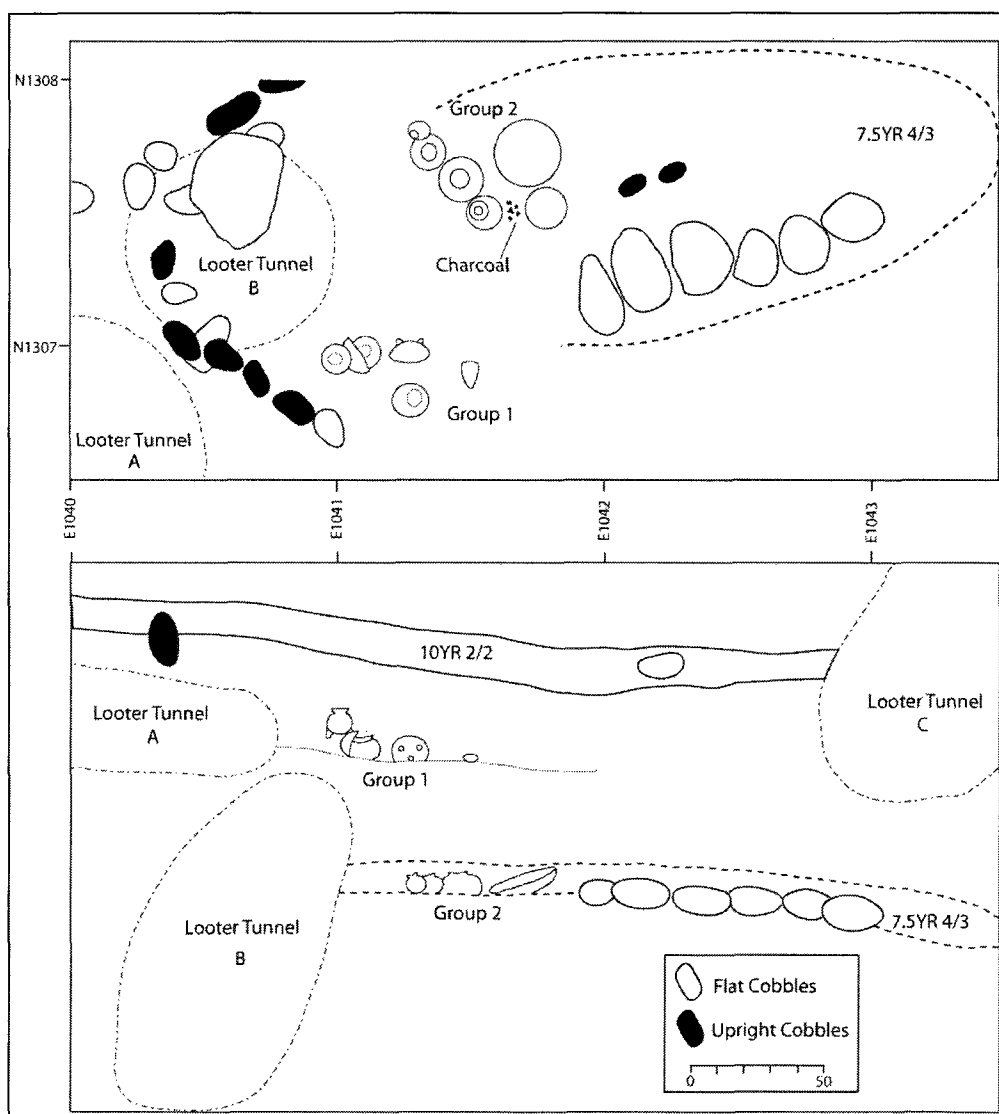
Figure 8. 29 Grave 8 planview (top) and profile (bottom)

La Reina Sur Graves

In La Reina Sur, we found remnants of only one grave, although many more likely lie under the looters spoil heaps. In contrast to the graves in La Reina Norte, we found no stone pavement associated with this grave. I suspect that it was removed during the heavy looting that the Panteón de la Reina suffered in the early 1800s. The grave was located at the northern end of the cemetery, approximately 5 m southwest of the stone circle described above. The form of the grave was difficult to determine as surface stones were missing and grave walls were poorly defined due to extensive looting. The depth of the grave was at least 90 cm judging by the undisturbed portion of the sidewalls. We recovered three vessels on the floor of the grave: an undecorated Ceiba Red-Brown globular jar, a Buenos Aires Polychrome globular jar with an "alligator" motif painted on one side, and a small jar of unidentified type. The small jar was dark gray in color with a geometric pattern painted in two different shades of red. Within the Ceiba Red-Brown jar we found an additional ceramic artifact, a small Buenos Aires Polychrome female figurine. We recovered a small sample of carbonized wood in the area between the pottery vessels on the floor of the grave. The sample (AA69760) produced an AMS date of calAD 726 ± 38. This date is early for the Chiriquí period and roughly 150 years earlier than the Quilter's earliest dates for the Rivas site but it still falls within the early Chiriquí period.

Summary of Panteón de la Reina Grave Features

Based on the small sample of graves excavated, a few patterns emerge. First, our excavations seem to indicate that there were two basic pavement forms, rectangular and oval. Graves 1, 5, 6, and 7 were all roughly rectangular, but they were different in the construction.

Graves 2 and 8 were both likely oval. The pavements of the remaining graves were too damaged to determine their original form. The oval and rectangular forms are consistent with those Merritt (1860) described at the Huacal de Bugaba in Panama. Unfortunately, illustrations of those graves do not exist and more detailed comparisons of grave forms between the cemeteries are not possible. Even with two basic forms, there was considerable variability among the Panteón de La Reina grave pavements. Unfortunately our sample size was too small to determine the range of variation within each type.

There was also a significant variation in grave depths, which ranged from 43 cm to 130 cm. One possibility for this range in depths may be related to the season when the grave was constructed. We found that while excavating during the wet season, units that were more than about a meter deep would quickly fill with water after even moderate rainfall. Water would sit for several days before it eventually percolated through the ground. This was particularly true when we reached parent material, piedra muerta. Shallower units would drain quickly, sometimes within a few hours. Therefore, perhaps shallow burials were dug during rainy months so that bodies and grave goods could be buried above the level of ground water. A second explanation would correlate grave depth to the age, sex, or status of the individual. Without full material assemblages and human remains from these burials it is difficult to test this hypothesis.

Artifacts recovered from burials included ceramics and polished stone. If the feature that I have designated Grave 5 contained a burial, then the minimum number of durable grave goods was zero, although we cannot dismiss the possibility of perishable materials. The maximum number of objects we recovered was 12, from Grave 8. However, this burial was partially looted and may have contained more. All of the grave goods in La Reina Norte appeared to have been standard utilitarian wares and none would have appeared out of place in the graves excavated by

Quilter in Operations C and K in the Rivas site. In fact, Quilter found a significantly higher percentage of redwares in those cemeteries than we identified in the La Reina graves. It thus appears that many of the graves in La Reina Norte, and likely La Reina Sur, were for individuals without access to gold or prestige pottery wares. However, sherds of such prestige wares were found in the looted backdirt above and around Graves 1-7 in La Reina Norte indicating that burials containing these items were likely interspersed with the graves that did not contain them.

Panteón de La Reina Artifacts

We collected a total of 24,415 artifacts from the Panteón de la Reina's two cemeteries, 13,870 from La Reina Sur and 10,545 from La Reina Norte All artifacts were washed, sorted by analytical and functional groupings according to provenience, and cataloged. The materials recovered from the two cemeteries are summarized below.

Ceramic materials

Ceramic materials recovered from the site provide the overwhelming bulk of cultural materials recovered at the Panteón de la Reina. We collected a total of 24,331 ceramic artifacts, 13,816 from La Reina Sur and 10,515 from La Reina Norte. Of these, 50 were complete or nearly complete ceramic vessels, and the remainder (24,284) were ceramic sherds (Table 8.3).

Of the 24,284 ceramic sherds, 4718 (19.47 percent) were identified to type. The others were too small, eroded or lacked sufficient diagnostic features for a positive identification. The most common ceramic types included Buenos Aires Polychrome, Papayal Incised, Ceiba Red-Brown, Sangria Fine Red, and Turucaca White-on-Red, Foncho Red, and Carbonera

Engraved. All were abundant in both halves of the Panteón. In addition to the common

Chiriquí types we also found several examples of less common types including Rivas Red

Incised, Seúl Engraved, Chánguena Black-on-Red, and Tarrago Biscuit Ware.

Table 8. 3 Quantities of sherd types by cemetery

	La Reina Norte		La Reina Sur		Totals	
Identified Sherds	Quantity	Frequency	Quantity	Frequency	Total	Frequency
Sangria Fine Red	1184	40.38%	707	39.59%	1891	40.08%
Buenos Aires Polychrome	1105	37.69%	782	43.78%	1887	40.00%
Papayal Incised	219	7.47%	153	8.57%	372	7.88%
Turucaca White-on-Red	240	8.19%	32	1.79%	272	5.77%
Ceiba Red-Brown	146	4.98%	78	4.37%	224	4.75%
Carbonera Engraved	18	0.61%	17	0.95%	35	0.74%
Foncho Red	14	0.48%	14	0.78%	28	0.59%
Seúl Engraved	3	0.10%	0	0.00%	3	0.06%
Tarrago Biscuit Ware	0	0.00%	3	0.17%	3	0.06%
Rivas Red Incised	2	0.07%	0	0.00%	2	0.04%
Chánguena Black-on-Red	1	0.03%	0	0.00%	1	0.02%
Total identified	**2932**	**100.00%**	**1786**	**100.00%**	**4718**	**100.00%**
Unidentified to type	7552		12,014		19,566	
Total	10,484		13,800		24,284	

There were several factors that complicated the identification of the Panteón de la

Reina sherds. The first is that it is often difficult to distinguish Chiriquí types based on body

sherds. This problem is especially troublesome with sherds from Ceiba Red-Brown vessels.

Despite being one of the most common of Chiriquí Period ceramic types, it is probably the

most poorly defined. Pastes and surface treatments vary widely, and vessels are found in a

wide variety of sizes and forms. As initially defined this type included vessels both red and

brown slips and plastic decoration (Haberland 1976; Lothrop 1963), but the type has since

been revised to include almost all undecorated vessels, while splitting off several distinct

varieties into new types (Baudez et al. 1993:81-85; Corrales 2000:344). In its broadest

definition, the designation "Ceiba" has included almost all undecorated vessels plus all tall

tripods and red or brown slipped vessels. Even when adopting a broad definition, sherds of Ceiba Red-Brown can be especially difficult to positively identify, as it is virtually impossible to know if a red-slipped, brown-slipped, or undecorated body sherd is from a Ceiba vessel or from another type (e.g., Foncho, Carbonera, redware) with similar surface treatment. As a result, Ceiba Red-Brown is almost certainly under-represented in Table 8.3.

Quilter (2004:160) previously noted a related problem in distinguishing Sangria Red Fine from Turucaca White-on-Red. The only difference between the two types is that the latter has a single band of white paint around its body or rim. Fragments of Turucaca vessels that do not include the white band are indistinguishable from Sangria. Fragments of Seúl Engraved and Chánguena Black-on-Red can similarly be mistaken for Sangria Red Fine. Consequently, these types are frequently combined into the larger category of "Redwares" (Lothrop 1963; Quilter 2004). Because of the problems associated with distinguishing Turucaca White-on-Red sherds from Sangria Red Fine, I have combined them into the single category of "redwares" in Table 8.4 and discuss them as such in the discussion that follows.

Table 8. 4 Quantities of identified sherd types by cemetery, redwares combined

Type	La Reina Norte		La Reina Sur		Totals	
	Quantity	Frequency	Quantity	Frequency	Total	Frequency
Redwares	1428	48.70%	739	41.38%	2167	45.93%
Buenos Aires Polychrome	1105	37.69%	782	43.78%	1887	40.00%
Papayal Incised	219	7.47%	153	8.57%	372	7.88%
Ceiba Red-Brown	146	4.98%	78	4.37%	224	4.75%
Carbonera Engraved	18	0.61%	17	0.95%	35	0.74%
Foncho Red	14	0.48%	14	0.78%	28	0.59%
Tarrago Biscuit Ware	0	0.00%	3	0.17%	3	0.06%
Rivas Red Incised	2	0.07%	0	0.00%	2	0.04%
Total	2932	100.00%	1786	100.00%	4718	100.00%

Of the 4,718 sheds identified to type, redwares and Buenos Aires Polychrome dominated the Panteón de la Reina assemblage, collectively comprising almost 86 percent of the materials collected. Papayal and Ceiba Red-Brown were found in significantly lower frequencies. The two cemeteries had very similar assemblages (Table 8.3; Figure 8.30). Redwares were the most common ceramic type in both La Reina Norte and La Reina Sur but they were found with a slightly higher frequency in La Reina Norte (48.70 percent) than La Reina Sur (41.38 percent). The lower frequency of redwares in La Reina Sur was made up for by higher frequencies of Buenos Aires Polychrome (43.78 percent vs. 37.69 percent in Reina Norte) and Papayal incised (8.57 percent vs. 8.47 percent).

Sherd Types by Cemetery
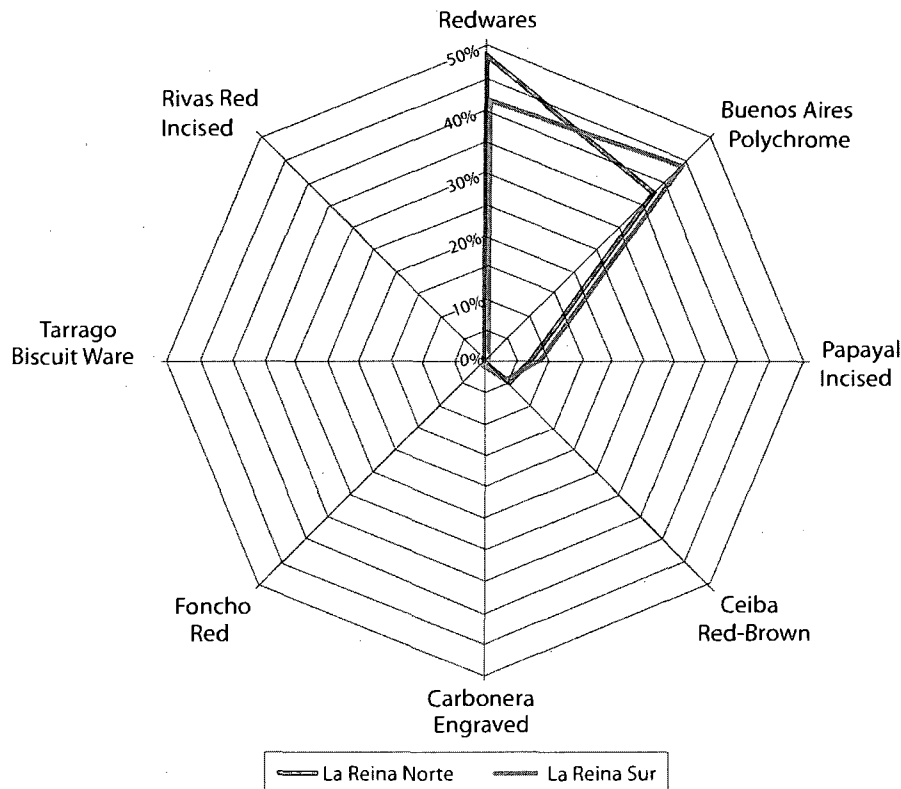
Figure 8. 30 Frequencies of sherd types by cemetery

There appeared to be no clear patterning in the distribution of any particular type based on our limited excavations. The relative frequencies of ceramic types did not seem to vary between test units throughout either cemetery, though a more detailed analysis than we were able to conduct might identify distinct patterns in the distributions of ceramic types, vessel forms, or decorative motifs. For example, a fine-grained analysis of vessel form or decorative modes (e.g., projected rim bowls vs. flared lip bowls, variations in zoomorphic handles, or the distribution of support styles) might indicate variations in the distributions of these variables. Similarly, there is a wide range of decorative patterns among Buenos Aires Polychrome vessels, which has not yet been fully investigated.

The only area where there was a clear concentration of a single ceramic type was on at the north end of La Reina Sur where we found the three Foncho Red vessels at the base of the wall. Supports representing two additional Foncho vessels were found in stone circle at the north end of the cemetery. Thus, it appears that Foncho Red tripod vessels may have been used not only as grave goods but also as functional items related to the mortuary process in the Panteón de la Reina cemetery. Residue analysis from the interior walls of the vessels may help determine what these jars contained and provide insight into how they may have been utilized. At this time such analyses have not been conducted.

Typological analysis and the relative percentages of each ceramic type suggest that La Reina Norte and Sur were largely contemporaneous, although our current typology of Chiriquí ceramics provides only minimal temporal information. We identified no Aguas Buenas types, suggesting that both cemeteries were established and used exclusively in the Chiriquí period. This must remain tentative, however, as large areas of both cemeteries remain untested. Given the presence of a large Aguas Buenas cemetery further up the Panteón de la Reina ridge

(Quintanilla 1995) and Aguas Buenas occupation in the valley below (Quilter 2004), it would not be surprising to find that either one of the La Reina cemeteries were utilized prior to Chiriquí.
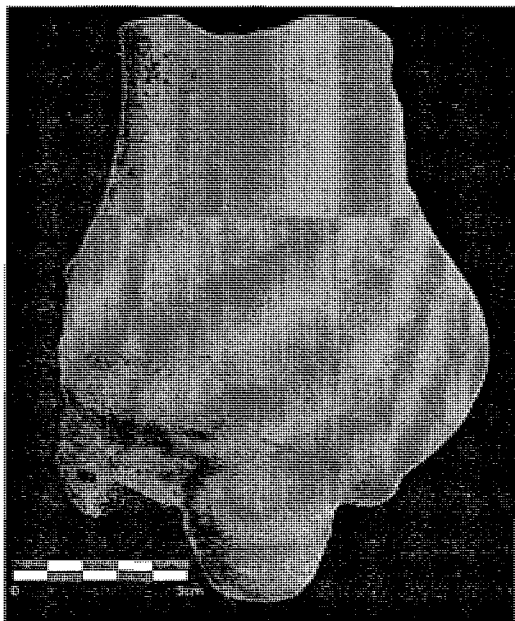
Figure 8. 31 Gilen Black on Tan tripod jar. La Reina Norte

Contrary to my expectations, exotic pottery imported from beyond Greater Chiriquí was rare. We identified only a single artifact that was clearly of non-Chiriquí origin. This was a nearly complete Gilen Black-on-Tan (*Guillén Negro Sobre Bayo*), pear shaped, tripod jar from looters backdirt less than 1 m west of Grave 5 in La Reina Norte (Figure 8.31). The fine black lines, often in a *guilloche* pattern, on a tan, light brown, or red-orange slipped background, are characteristics of this type (Day 1982; Snarskis 1983). Gillen Black-on-Tan is a temporal marker for the transition from the Middle to Late Polychrome period, (A.D. 1200-1350) from the Tempisque River region in Guanacaste Province, Costa Rica, and is rarely found outside of that area (Day 1982:45).

Several other artifacts may have been imported from long distances. All are Chiriquí in origin but are atypical of local ceramics. As mentioned above, both of the Buenos Aires Polychrome vessels from Grave 1 in La Reina Sur are more characteristic of western Panama styles than of those found in the northern Diquís. The first vessel is a large globular jar with a stylized "alligator" motif (Figure 8.32A). The other is a Buenos Aires Polychrome small jar with two solid handles and red geometric design painted on one side (Figure 8.32B). I am not aware of any Buenos Aires Polychrome vessels like either of these from the Rivas site.

The third possible import was a sherd from looted backdirt in La Reina Norte. The sherd is of an unnamed type with horizontal incisions separating zones of red lines and two rows of v-shaped punctuations (Figure 8.32C). A similar sherd was found on El Caño Island off the Pacific coast of Costa Rica (Francisco Corrales, personal communication 2009). Three sherds of Seúl Engraved pottery were found on the surface in the northern end of La Reina Norte (Figure 8.32D). This type is common in the Diquís Delta Region but is rare in the northern Diquís (Baudez et. al. 1993; Corrales 2000).

To this list we can also add the three sherds of Tarrago Biscuit ware found in la Reina Sur (Figure 8.33A). This type is a common grave good in western Panama but is rarely encountered in the northern Diquís. Finally, the one sherd of Chánguena Black-on Red, found in La Reina Norte, is almost certainly an import (Figure 8.33B). This type was previously found only in the Térraba watershed of the southern Diquís (Corrales 2000:365).
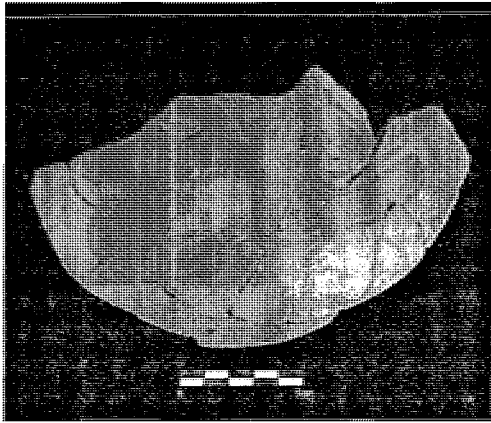
A Buenos Aires Polychrome. La Reina Sur Grave 1. (N917.30, E1002.35)
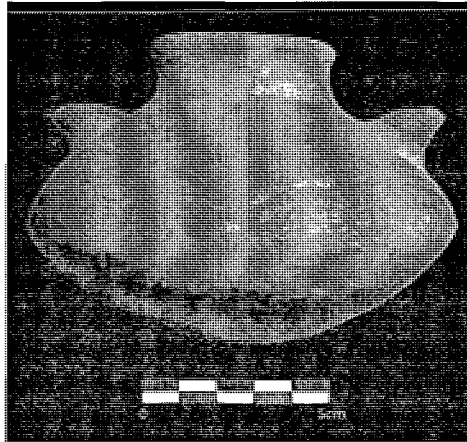
B. Buenos Aires Polychrome. La Reina Sur. Grave 1. (N917.30, E1002.35)
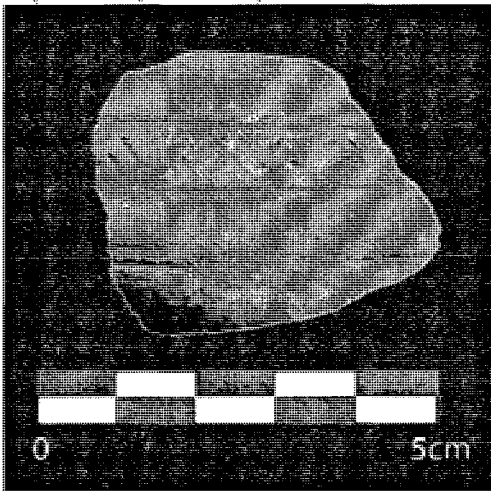
C. Unnamed type. La Reina Norte (N1325-37, E1038-40)
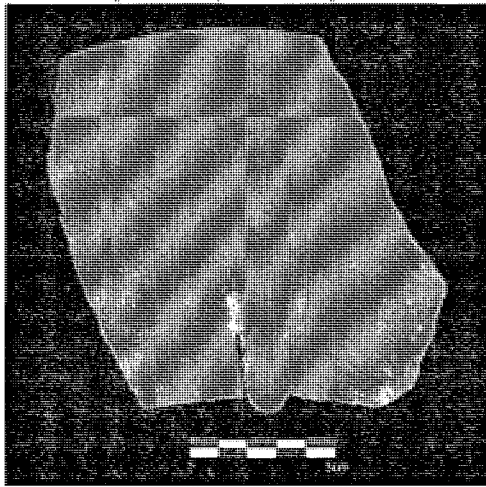
D Seúl Engraved La Reina Norte (N1420, E1009)

Figure 8. 32 Non-local Chiriquí ceramics
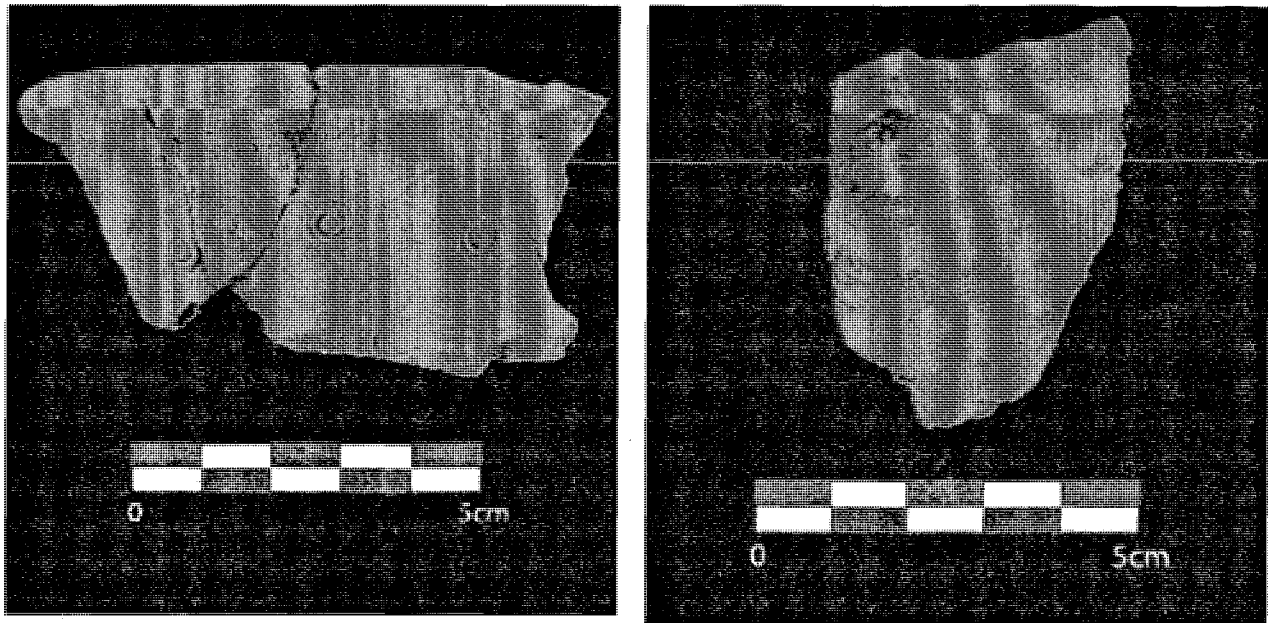
A. Tárrago Biscuit Ware. La Reina Sur   B. Chánguena Black-on-Red. La Reina Norte

Figure 8. 33 Non-local Chiriquí ceramics

Imported ceramics were similarly rare in the Rivas assemblage (Quilter 2004:163). Among the imported ceramics from the Rivas site were several sherds of vessels from the Atlantic Watershed or Central Valley, and one sherd each from Panama and Nicoya. Quilter notes that most of the Rivas imports appear to be coming from across the Talamanca Range. By contrast, I identified no examples of Atlantic Watershed or Central Highlands sherds, although at this time I cannot fully discount the possibility that there are materials from those areas among the unidentified sherds.

Lithic materials

Lithic materials were rare, totaling only 84 items (30 from La Reina Norte and 54 from La Reina Sur), or 0.34 percent of the entire Panteón de la Reina cemeteries artifact assemblage. The majority of the lithic assemblage (72 artifacts) was chipped stone debitage, composed entirely of weathered fine-grained basalt. Twenty were from La Reina Norte and 52 from La

Reina Sur. All were found in looters backdirt or grave fill. For this analysis I did not subdivide lithic debitage into flake types or other categories.

Finished stone tools included two celts and a chisel from La Reina Norte and a celt from La Reina Sur. One celt was found in Grave 8, and the other artifacts were surface finds, presumably also grave goods discarded by looters. We also recovered seven fragments of feline effigy metates from La Reina Norte and one from La Reina Sur (Figure 8.34). All were recovered from looter backdirt. Stylistically, all are very similar and match those found elsewhere in the Diquís, western Panama, and the Atlantic Watershed regions. A flat, oval grinding surface represents the body of the animal. The head, usually baring teeth, projects from one end and the tail extends from the other end and connects with one of the rear legs. Commonly, legs, the tail, and the top of the head are carved with geometric patterns. Feline effigy metates appear to have been very common in mortuary settings (Lothrop 1963; Mason 1945) but fragments are also found in residential areas. Quilter's excavations at the Rivas site found a highly eroded feline head associated with Structure 1 in Operation A. In Operation D/E, excavations recovered one tail fragment and three leg fragments (Quilter 2004:176, 178).
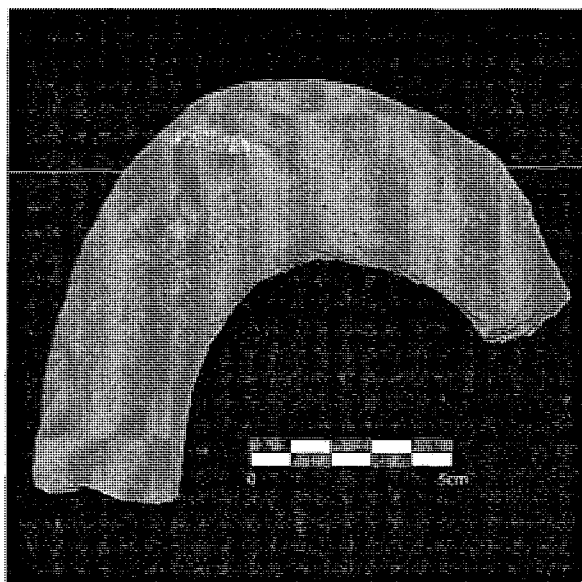
Tail of feline metate La Reina Norte
(N1326.5, E1041)
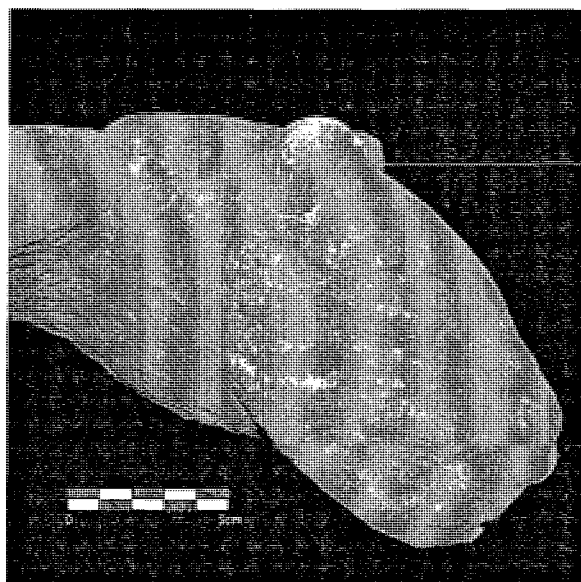
Front half feline metate. La Reina Norte
(N1340, E1040

La Reina Norte (N1330.5-32.5, E1030-35)
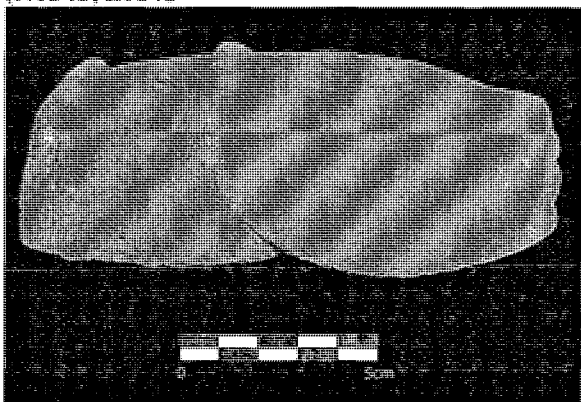
La Reina Norte (N1324, E1030)

Figure 8. 34 Fragments of feline effigy metates from la Reina Norte

Metals

Although the Panteón de la Reina is well known for the large quantities of gold looted

from its graves in the early twentieth century, we found no gold or tumbaga artifacts during the

2003 and 2004 field seasons. To date no precious metals have been found during scientific

excavations at Rivas or the Panteón de la Reina. However, nearly 300 gold and tumbaga objects

looted from the Panteón de la Reina are now found in museums in Costa Rica, the United States,

and Germany. A comprehensive technical and stylistic analysis of these objects still needs to be

completed but two studies provide some insight. In 2004 Sondra Schlosser completed a technical analysis of 44 objects from the Panteón de la Reina that are now housed at the Ethnological Museum of Berlin (*Ethnologischen Museum Berlin*). Schlosser's study demonstrates that all 44 pieces were made in a similar style and using similar materials and technical methods, leading her to suggest that they may have all been produced at the same workshop within a short period of time (Schlosser 2004:1). These results imply that the gold objects in the Berlin collection may have all been derived from a single grave or a small number of graves representing a narrow span of time.

Quilter (2000) conducted a stylistic analysis of 196 gold objects from the Panteón de la Reina that were originally from the Minor Keith collection but are now divided between the Brooklyn Museum and the American Museum of Natural History. In contrast to the assemblage from the Berlin Museum, the objects from the Keith collection showed a wide range of variation in size and form. More than half of the collection (121 pieces) consisted of bells. There were also 27 examples of hammered sheet gold including disks and armbands. Other common objects include cylindrical and lenticular beads and cast figures in human, avian, feline, and arachnid forms.

Although there is a wide range of variation in the form of the Panteón de la Reina goldwork, there appears to be a high percentage of pieces that depict dual or paired imagery. Of the 44 known Panteón de la Reina specimens from the Ethnological Museum of Berlin, 12 carry dual representations (Figure 8.35). Paired figures seems to be common in the iconography of Chiriquí goldwork but the frequency and subject matter of dual imagery remains a topic for future investigations.
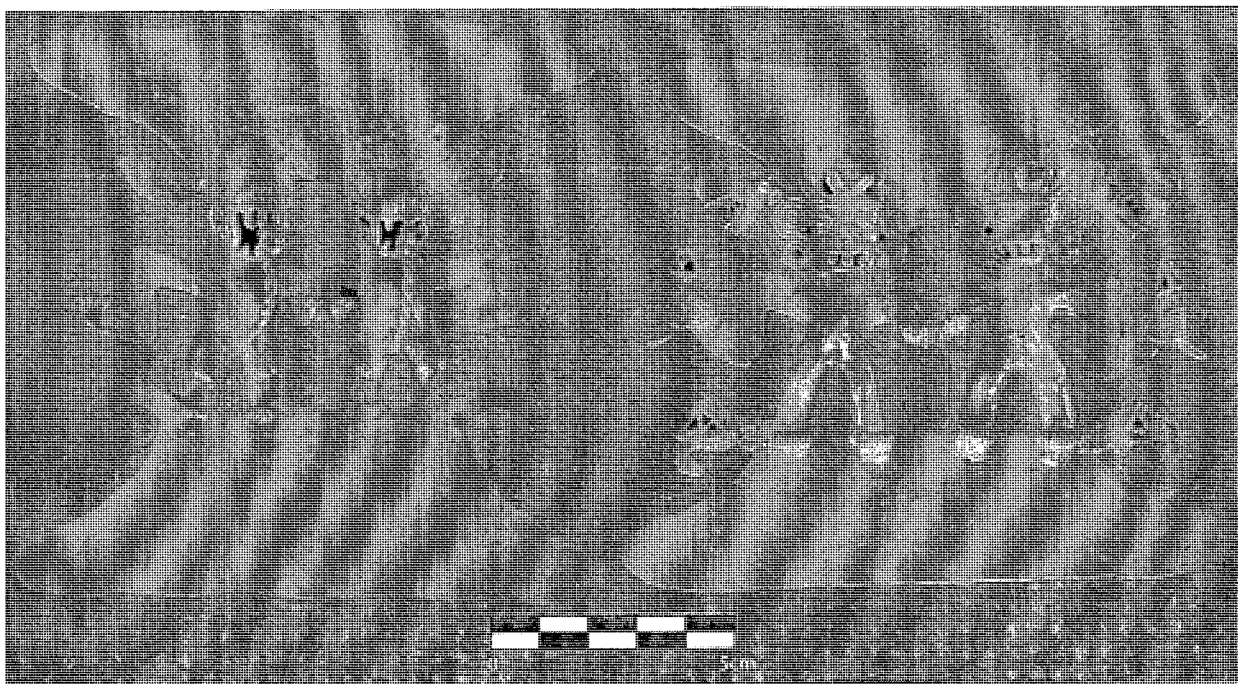
Figure 8. 35 Two gold objects from the Panteón de la Reina exhibiting paired imagery (Ethnological Museum of Berlin)

Reports from local people state that some Panteón de la Reina graves had gold and others did not, and this appears to be a pattern in other Chiriquí cemeteries as well. This allows us, at least, to infer that the use of precious metals was restricted to a limited sector of the population. Nevertheless, the quantities of gold reported to have been taken from ridge-top cemeteries suggests that those who had gold possessed substantial amounts of it and that it was not widely distributed beyond a few individuals.

Chronometric Dating

My 2003 and 2004 excavations at the Panteón de la Reina produced 16 carbon samples suitable for dating. Of these, seven were submitted for radiocarbon analysis. These derived from a variety of primary and secondary contexts in La Reina Norte, La Reina Sur, and the Stairway.

All samples were analyzed using accelerator mass spectrometry (AMS) at the AMS Laboratory

of the University of Arizona, Tucson. Below I briefly discuss the context of each sample.

Field Number: Sur-1
Sample: AA69760
La Reina Sur. N917.37, E1002.70. 110cmbs

This sample was recovered from a group of three pots and a figurine in the bottom of

Grave 1 in La Reina Sur, the only non-disturbed grave we identified in this operation. This was a

one of several small fragments of burned wood found in the soil matrix between Pots 2 and 3 at

the base of the grave. The carbon was in secondary context, presumably having been burned

someplace else and deposited here at the same time as the grave goods. During excavation we

identified no additional carbon fragments in the grave fill or immediate area that may have

represented "old carbon" that could have fallen into the grave during construction. The vessels

associated with this carbon sample include a small, unidentified short neck polychrome jar, a

complete but broken Buenos Aires Polychrome constricted rim bowl, a large Ceiba Red-Brown

flaring neck jar, and small Buenos Aires Polychrome figurine located inside the undecorated jar.

Field Number: Sur-2
Sample: AA69761
La Reina Sur. N890, E1022, 90cmbs

This sample was a large fragment of burned wood in a 3 cm thick layer rich in

carbonized material located at 90 cm below the surface in La Reina Sur. The layer represents the

lowest level of burned material in La Reina Sur. Below was a thick layer of undisturbed soil

comprised almost entirely of tightly compacted red clay and piedra muerta. The layer above was

a highly mottled mixture of reddish-orange clay and carbon fragments. At the time of excavation

I interpreted the burned layer as evidence of an early episode of slash and burn activities on the

south end of the Panteón de la Reina, perhaps representing the period when the Panteón was first cleared to establish the cemetery. I submitted this carbon sample to try to establish when this area of the Panteón de la Reina was established. I expected an early date, pre-dating all others from the Panteón de la Reina.

Field Number: Stair-1
Sample: AA65275
Stairway. N1003.04, 1006.05, (South Fire Pit) 40cmbs

The material for this sample was a small fragment of burned wood found in a primary deposit in the bottom 10 cm of fill in the South Fire Pit on the Lower Platform. The fire pit was filled with approximately 40 cm of dark gray to black fine matrix. The dark color is likely due to high carbon content. Rocks lining the floor and the west wall of the fire pit are fire-reddened and cracked, indicating intense heat. Despite the high carbon content, there were very few fragments of burned wood and no carbonized organic material was found during flotation. This sample was one of the few charred wood fragments we found.

I chose this sample for several reasons. First, it was from a primary context within a feature I inferred to be associated with the burial process. A date from this feature would provide an accurate measure of when these activities occurred. I assume that the fire pits were cleaned regularly, perhaps after each use. Therefore, any carbon in this context likely represents one of the last, if not the last, burning events associated with funeral activities at the Panteón de la Reina cemetery complex. Thus, a date derived from this context should provide a very accurate estimate of when the Panteón de la Reina was abandoned. Second, as such, this date would serve to bookend the use of the Panteón de la Reina when coupled with the date from Sample AA69761, which I believed represent the establishment of the Panteón de la Reina cemetery.

Finally, one of my primary goals of radiocarbon dating was to assess the contemporaneity of La Reina Sur and La Reina Norte. Dates derived from the Stairway and associated features would be critical to relating the Panteón de la Reina's three zones chronologically.

Field Number: Norte-1
Sample: AA65276
La Reina Norte. N1330.25, E1338.50

This sample is from a dense concentration of charcoal located on top of the pavement of Grave 7. The sample appeared to be a primary context based on the large concentration of burned wood and discoloration of the pavement cobbles. While the sample does provide a date from a primary context, it is not clear when the burning occurred in relation to the construction of the grave. Burning directly upon the grave surface, however, suggests a close association between the person or persons conducting the burning and the individual interred in the grave. Such activities may have occurred many years after the initial burial. I expected that a date from this sample would provide an estimate of the latest possible date for the construction of the grave and would provide a good estimate for when activities associated with grave visitation occurred.

Field Number: Norte-2
Sample: AA65277
La Reina Norte. N1330.20, E1038.30. Elev: 1033.62

This sample was recovered from the base of Grave 7, along with the grave goods. Like Sample AA69761, this sample is from a secondary context, as it is not the product of in situ burning. Despite that fact, I chose to analyze this sample because two dates from a single grave (AA65276 and this one) would provide a stronger basis with which to evaluate the age of the grave and its contents. This sample would provide the earliest date at which the grave could have been constructed.

Field Number: Norte-3
Sample: AA69762
La Reina Norte. N1307.58, E1041.70, Elev: 1033.72cm

This sample is from a concentration of carbon located on the pavement of Grave 8. Like Sample AA65276 from the surface of Grave 7, this carbon is derived from a burning event that occurred an undetermined time after the construction of the grave. I selected this sample for dating because it is from a primary context and that it would provide an estimate of the latest date of construction for the grave.

Field Number: Norte-4
Sample: AA69763
La Reina Norte. N1327.60, E1041.20, Elev: 1027.60

This sample is from the feature at the west end line of stones located one meter to the east of Grave 4. The feature was a small pit filled with burned wood mixed with light brown clay. I chose a single small fragment of burned wood for radiocarbon dating. Stratigraphically, this feature is contemporary with the line of stones but predates the grave pavements. A thin layer of loosely compacted black soil lies directly upon the grave pavements and extends in all directions around the group of graves. In the location of the line of stones and the associated feature, at least 1.40 m of a moderately compacted brown soil separates the top of the stones from the black soil horizon. We found no artifacts associated with this feature but we did recover two charred seeds identified as cotton (Blanco, personal communication).

Sample Results

The two-sigma calibrated dates for four of the seven samples group within the expected

cal A.D. 900 to 1300 for the Rivas site (Table, Appendix B). These include three samples from

La Reina Norte and one from La Reina Sur.

Table 8. 5 Panteón de la Reina radiocarbon dates

Field No.	Lab No.	Provenience	Uncorrected 14C BP	Calibrated age (AD)	1 sigma range (AD)	2 sigma range (AD)
Sur-1	AA69760	La Reina Sur Base of Grave 1	1273 ± 33	710, 750, 780	680-770	670-780
Sur-2	AA69761	La Reina Sur Charcoal strat.	905 ± 32	1160	1050-1090 1130-1140 1140-1170	1040-1210
Stair-1	AA65275	Lower Platform South fire pit	335 ± 37	1520, 1590, 1620	1470-1640	1450-1650
Norte-1	AA65276	La Reina Norte Grave 7 surface	957 ± 38	1040	1020-1060 1080-1150	1010-1170
Norte-2	AA65277	La Reina Norte Grave 7 base	3127 ± 41	1410 B.C.	1440-1390 B.C.	1490-1360 B.C. 1350-1310 B.C
Norte-3	AA69762	La Reina Norte Grave 8 Surface	1010 ± 32	1020	1010-1030	980-1040
Norte-4	AA69763	La Reina Norte Small hearth	875 ± 32	1170	1160-1210	1040-1100 1120-1220

The La Reina Norte samples from the pavements of Graves 7 (Norte-1 [AA65276]) and 8

(Norte-3 [AA69762]) fall within a less than 200-year span between approximately cal A.D.

1000-1200, and are consistent with the expected range for the cemetery. That both samples are

derived from post-burial burning on the surfaces of the graves indicates that the actual ages of

the graves are earlier than these dates. Unfortunately, neither grave contained carbon from

reliable contexts to be able to estimate the construction of the graves. A charcoal sample from

the floor of Grave 7 (Norte-2 [AA65277]) appears anomalous and should be discarded. The date

of cal B.C. 1410 falls at least 2000 years before the earliest dates for the Chiriquí period. I

attribute the date to "old wood" which may have been mixed with grave fill when Grave 7 was constructed.

The La Reina Sur Sample, Sur-2 (AA69761), from the undisturbed stratum of carbon located below looted graves, dates to cal A.D. 1040-1210. Although comfortably within the expected dates for the Panteón de la Reina cemetery, this range represents a later date than I expected for the context. If this date range is correct it would indicate that the looted graves above this layer of charcoal were constructed sometime after cal AD 1040. This still represents a fairly early date in the occupation of Rivas and the use of the cemetery. A full interpretation of this date is not possible until the context from which it was derived is better understood.

A second sample from la Reina Sur (Sur-1 [AA69760]), associated with grave goods on the floor of Grave 1, dates to cal A.D. 670-780. This date correlates with the early Chiriquí period but slightly predates the earliest established dates of Buenos Aires Polychrome (A.D. 800-1000) (Baudez 1993; Corrales 2000; Haberland 1976). The sample also predates all but one of the radiocarbon dates for the Rivas site. However, neither of these facts threatens the validity of the date. The results of surveys from the valley below the Panteón de la Reina indicate that the area was populated since the Aguas Buenas period so it is likely that there was also an early Chiriquí occupation, which has not yet been firmly established. The single pre- cal A.D. 900 date from Rivas (Quilter 2004:204-205) is from a deep context within the architecture in Operation E and may represent early Chiriquí occupation at Rivas.

The sample from the South Fire Pit (Stair-1 [AA65275]) dated to cal A.D. 1450-1650, a date overlapping the end of the Chiriquí period and the beginning of the Contact and Colonial periods. The minimum age of the sample is approximately 150 years later than the majority of dates from the Operations D and E sectors of the Rivas site but it does overlap slightly with two

dates from Operation C, one date from Operation A, and one date from Operation E. These later dates suggest that remnant populations continued living at or near the Rivas after the decline of the Rivas site in approximately cal A.D. 1300 and that they may have continued to utilize the Stairway platforms, and possibly La Reina Norte and La Reina Sur, for funerals or commemorative activities until the Contact period.

It is difficult to make generalizations on the age and development of the Panteón de la Reina based on only six dates. However, they seem to indicate that the first burials on the Panteón de la Reina may have been located near the north end of La Reina Sur and correspond temporally with the initial Chiriquí occupation at Rivas. Subsequent burials in Sur were located to the south and to the west. Contrary to what Haberland's (1984) observations at several Chiriquí multiple-mound cemeteries in the Diquís, there are no indications of earlier Aguas Buenas burials at the Panteón de la Reina. It is unclear when the first graves were dug in La Reina Norte but the radiocarbon dates indicate that by cal A.D. 1000 to 1200 there were a number of graves and mortuary features located near the center of that cemetery. The use of the Panteón de la Reina as the primary mortuary facility for the Rivas site likely continued past the decline of Rivas in approximately cal A.D. 1300 and may have continued until into the Contact period.

Summary

The results my investigations provided several conclusions about the spatial organization of Panteón de la Reina that are consistent with the expectations for moiety organization. Mapping and excavations demonstrated that the site was organized with axial symmetry and

several sets of paired architectural features are arranged along the axis. Some of these paired features are constructed asymmetrically.

Dual spatial patterns were most clearly visible along the stairway located between the two cemeteries. There, the centerline of the stairway serves as an axis that extends between paired sets of architecture located immediately beyond its east and west ends. On its east end the axis passes between the opposed Operation D-94 grave-like pavements. At the opposite end the axis divides two fire pits and the two walled patios, associated with the Lower and Upper Platforms. Additional paired features may have included the many stone pillars, which seem to have been placed on either side of the stairway. A more prominent example of spatial pairing are the two cemeteries, La Reina Norte and La Reina Sur, which are also positioned on opposite sides of the Stairway axis.

Some of these architectural features were constructed asymmetrically, with one half clearly larger or higher than its opposed partner. These include the paired grave-like pavements at the base of the Stairway (Operation D-94) and the north and south walled patios. In both cases, the north feature was constructed at nearly twice the dimensions of its southern counterpart. Also, although the two cemeteries are approximately the same size, La Reina is positioned noticeably higher than La Reina Sur. I discuss the asymmetry of the two cemeteries in more detail in the following chapter.

Architecture defining the paired cemeteries also seems to have been constructed asymmetrically. The wall bounding the south end of La Reina Norte was constructed at twice the height of the northern wall of La Reina Sur. The construction of the walls around the boundaries of the cemeteries had other significant differences. Of particular interest is the construction of architecture within la Reina Sur, which appears to differ from all other Panteón de la Reina

architecture. Along the stairway and within La Reina Norte architecture is constructed with straight walls that meet at right angles. By contrast, walls in La Reina Sur are commonly curved. The south cemetery also lacks the prominent rectangular projection like the one on the south end of La Reina Norte, but does exhibit a circular construction along its north boundary.

My excavations were also designed to try to understand divisions within Chiriquí society by identifying subdivisions within the Panteón de la Reina's two cemeteries. We obtained only minimal information on the internal organization of the two cemeteries. It appears that walls and stone columns were used to demarcate subsections of each cemetery. If the patterns of stone pillars from the Stairway and the north end of La Reina Sur apply to the interiors of the cemeteries, then the pillars may have been placed at regular intervals in straight lines, and perhaps associated with walls.

Among my expectations was that walls at the Panteón de la Reina would serve to define divisions between subsections of each cemetery. The remnants of one wall on the interior of La Reina Sur indicate that such features did exist and may have been used to divide space, however, the remnant wall is so small and so poorly preserved that it is difficult to characterize how it may have functioned for this purpose or how great of an area it may have defined. We were thus unable to make meaningful comparisons between spatially defined grave lots within each cemetery. Hopefully future investigations in both cemeteries will help clarify this issue.

We also found only minimal, though intriguing, information about the patterning, construction, and contents of graves. The Panteón de la Reina graves were constructed in a wide range of sizes and forms but rectangular and oval arrangements of stone cobbles appear to have been the basic shapes for surface markers. Our excavations demonstrated that there was also a wide variation in quantities and types of grave goods, perhaps indicating a wide range in status

and wealth of the deceased, with many individuals buried with few or no non-perishable grave goods and a fewer number interred with greater numbers of materials.

Even though there appeared to have been significant asymmetry in the geographic positioning of the two cemeteries and the construction of architecture within and related to them, it does not appear that there was a significant disparity in the access to resources between the two groups represented. Frequencies of ceramic types were virtually the same, and both cemeteries and both assemblages included pottery that could be considered rare or exotic.

Based on my analysis of pottery sherds from both cemeteries it appears that most grave goods were simple and common wares. Of the sherds identified to type, redwares were the most common in La Reina Norte and only slightly less common than polychromes in La Reina Sur. By comparison, Redwares were the most common ceramic type in Rivas' Operation C and K cemeteries but polychromes were rare.

Exotic ceramics were found in low numbers in both cemeteries and it appears that these goods were from graves interspersed with graves containing more modest grave goods. I was unable to identify clear indicators of group affiliation. The artifacts from both cemeteries demonstrated no clear indicators of group identity. We found feline metates in both cemeteries and ceramic types and emblematic designs, such as paint schemes and zoomorphic representations, appeared to be shared between cemeteries, However, a more thorough analysis of such materials might allow for the discernment of differences that I was unable to identify in my initial analysis of these materials.

In the following chapter I look at the dual spatial patterns in the larger context of the full Rivas-Panteón de la Reina complex. I utilize the results of my work at the Panteón de la Reina to investigate how the Rivas site was spatially and socially organized. In particular, I look at the

evidence for axial symmetry and asymmetry within the Operation D/E sector of the site. The centerline of the stairway serves as a central axis for the Panteón de la Reina, but does this centerline also extend in the opposite direction, into Operation D/E and similarly divide the residential-ceremonial architecture into two halves? If so, are the paired halves constructed equally or is there a clear disparity in size? I will also look at how the architectural and spatial patterns at Rivas-Reina site may have been utilized to help guide participants thorough the funeral and other ritual performances that took place there.

9. DUAL SOCIAL AND SPATIAL ORGANIZATION AT THE
RIVAS-PANTEÓN DE LA REINA COMPLEX

In this chapter I extend my investigation of dual spatial organization to include the Rivas site in order to better understand how the spatial and architectural organization of a large Chiriquí residential-ceremonial complex contributed to conveying the social and political organization of Chiriquí culture. I synthesize the data presented in previous chapters to argue that the Rivas-Reina complex was designed and constructed for two primary purposes. First, to materialize a system of dual organization in the built environment of the Rivas-Reina site through clear spatial and visual indicators; and second, to guide funeral participants through a series of active multi-phase ritual performances, which helped to reproduce and reinforce the dual social structure and the hierarchies within it.

Dual Organization of the Rivas Site

The sector of Rivas excavated in Operations D and E is a single contiguous expanse of architecture that does not follow a clear organizational plan at first view. It includes structures and other architectural features of varying sizes, shapes, and construction techniques. Each structure connects with neighboring structures, often joined by walls, steps, drains or other features, making it difficult to clearly define the precise boundaries of any individual structure. Inhabitants of Rivas also utilized and modified natural features such as rock outcroppings, alluvial terraces, and changes in topography to create a complex landscape of structures and associated architecture. Finally, Rivas was not the result of a single construction episode but the product of approximately 400 years of construction and remodeling, including at least two major construction episodes. Thus, the site plan we see today represents a palimpsest of centuries of

construction, modification, and occupation. However, the final plan of the site is not the result of a series of randomly placed structures, but was a highly organized site designed and constructed in accordance with concepts of dualism.

Duality within the Natural World

The landscape surrounding the Rivas site provides at least two striking examples of paired elements within the natural world. As mentioned previously, the site is positioned along the Chirripó River, approximately 0.5 km southwest of where it converges with the Buenavista River to form the General River. Only the Chirripó River can be seen from within the Rivas site but both the Chirripó and Buenavista are visible from the summit of the Panteón de la Reina. In particular, the Upper Platform at the top of the Stairway provides an unobstructed view of the two rivers and the Rivas site. If trees were cleared from La Reina Sur, the confluence of the two rivers would be clearly visible from this location. In fact, there is probably not a spot on the Panteón de la Reina where the meeting point of the two rivers would not be visible if modern vegetation did not inhibit the view.

Directly up valley from Rivas is Cerro Uran, Costa Rica's second tallest peak (3,800 m) and the highest point visible from Rivas-Reina. From the vantage point of the Rivas site, lower peaks obstruct the view of Cerro Chirripó. Uran is easily identified by the twin peaks at its summit, which appear almost perfectly mirrored from the Rivas site (Figure 9.1).

Both Cerro Uran and the two rivers exhibit elements of asymmetry. For the rivers, the Chirripó is significantly larger than the Buenavista. The twin peaks of Cerro Uran are almost identical. However, a ridge to the right of the peaks forms a prominent bump. The ridge on the opposite side of the peaks seems to form a dip or depression. The natural topography of Cerro

Uran may have been mimicked upon the landscape of the Panteón de la Reina, where the two

cemeteries are positioned on high and low areas of topography flanking central paired features.

Thus, it appears that the Rivas-Reina complex was constructed upon the axis between the

dual peaks of Uran and the convergence of the Buenavista and Chirripó rivers. The symbolic

significance of the site's position in relation to these natural elements was certainly quite

powerful.

Figure 9. 1 View of the dual-peaked Cerro Uran, as viewed from the Rivas site

Duality in the Built Environment

As demonstrated in the previous chapter, the monumental stairway linking Rivas and the

top platform is not only an access to the Rivas site's primary mortuary precinct, but also serves

as an axis, dividing the Panteón de la Reina's two cemeteries and its associated architecture into two asymmetric halves. At its summit, the Central Axis bisects the Upper and Lower Platforms and its associated paired features (two large fire pits and the walled patios). At the base of the stairway, the Central Axis continues eastward between the two sets of grave-like pavements in the False Cemetery, and then beyond into the residential-ceremonial sector of Rivas.

By extending the Central Axis as defined by the centerline of the stairway into Operation D in Rivas, it becomes clear that this same axis bisects several paired architectural units into two equal halves, passing between multiple sets of paired architectural features. Some of the architecture along the axis is unique at the Rivas site, including a trapezoidal plaza, paired causeways, and a set of steps (Figure 9.2). The axis has its eastern terminus in Structure 1, a circular construction located at the approximate center of Operations D and E. Structure 1 is 28 m in diameter, the second largest structure in Rivas. This structure appears to have at least two access points, defined by the use of smaller, flatter cobbles than those utilized in the construction of its perimeter. The first access falls where the Central Axis crosses the western edge of the structure. There, an arc of three rows of stones slopes downward to the outside of the structure, producing slight ramp into a smaller, lower, rectangular annex, Structure 1a. This feature likely served as a covered entrance similar to the roofed but open sided entrances on traditional Talamancan houses (*u-sure*). The second access is located on the northeast side of the structure, leading to a corridor formed by the convex arcs of two adjacent structures. There is no evidence of an access point on the east end of structure; the foundation there is constructed with large rocks positioned above the ground surface, inhibiting movement to and from the east. This further supports the interpretation that Structure 1 represents the endpoint of the site's Central Axis. A possible third access is located on the southeast edge of the structure, where no cobbles

are present. There, the structure appears to open into a roughly rectangular space, though no

excavations were carried out in this area to confirm this possibility.
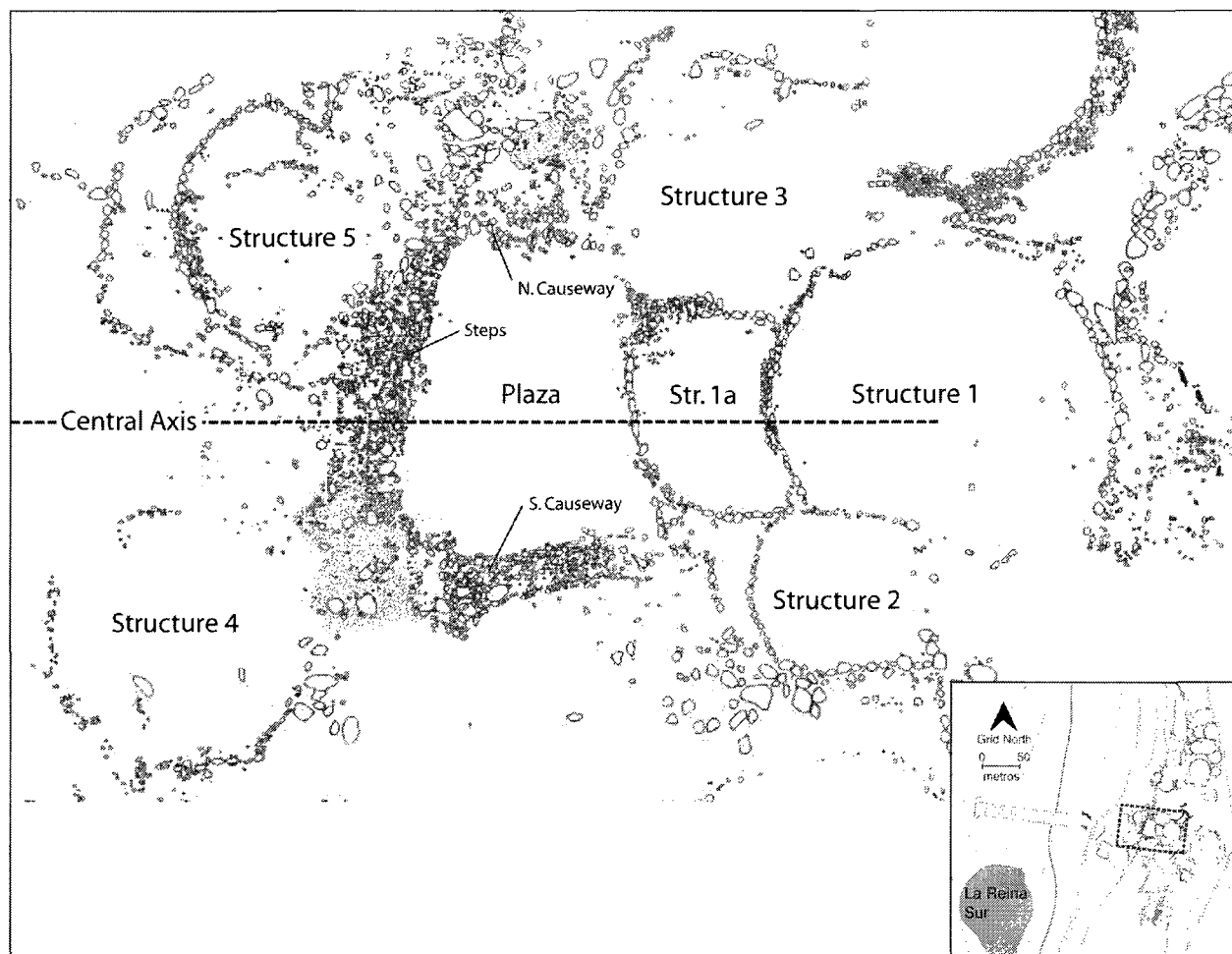
Figure 9. 2 Detail of Op. D architecture along Central Axis

The position of Structure 1 directly opposite the stairway platform along the centerline of

the site strongly suggests that this structure may have served important ritual functions, probably

related to mortuary activities. Its western access offers an unobstructed line of sight directly

down the Central Axis to the Upper Platform at the summit of the Stairway and the events that

occurred along this path. No other structure in the site offers this unique view.

Two additional structures (Structures 2 and 3) sit adjacent to Structures 1 and 1a on their north and south sides. Both structures are constructed with straight parallel walls on their north and south sides and a curved wall on the east, facing the Panteón de la Reina. A few isolated stones define the east walls of these structures. Their slightly rectangular shape, resembling that of Structure 1a, perhaps suggests that they may have also been roofed but lacked exterior walls. At 21 m across, Structure 3 is nearly twice as large as its southern counterpart, which measures only 12 m.

To the west, Structure 1a opens into a large, somewhat trapezoidal, plaza, defined by a pair of raised cobblestone causeways to the north and south. On its west end a 20-m wide stairway leads up to a higher terrace (Terrace 3). At approximately 270 square meters, it is one of the largest open spaces in Rivas. The causeways defining the north and south sides of the plaza are among the largest architectural constructions at the site. The south causeway measures approximately 3 meters wide by 15 meters long and is raised approximately 1 meter above the plaza. The north causeway was not fully excavated or mapped but the distribution of rocks visible from the ground surface indicated that it was of similar dimensions and construction to the south causeway. Both causeways slope gradually upward to form ramps that provided access to a shared pavement on the higher Terrace 3 to the west.

The steps defining the west end of the plaza consist of two risers and two broad treads with an additional small pavement at the base. Quilter's 1995 excavation of these steps found large quantities of "fine quality" ceramics including complete, though smashed, vessels, and the foot of a ceramic figurine (Quilter 2004:105). The steps and the two causeways terminate at the top of the Terrace 3, where they meet the north and south ends of a single large pavement constructed along the terrace's eastern edge.

Structures 4 and 5 are located on Terrace 3, which is also the uppermost terrace of the Rivas residential-ceremonial zone. Each structure measures approximately 20 m in diameter, and they are separated by a 15-m gap along the axis. Structure 4 was only minimally cleared, and no excavations were conducted on its interior. Though they are separate structures, the paved surface of Terrace 3 links them architecturally. The pavement seems to lead directly into the west sides of the structures, suggesting entrances. This is clearer on Structure 4 where a thin layer of small pebbles is distributed along the west side of a gap in the circular construction. Excavations in 1992 and 1995 within and around Structure 5 provided only minimal indication of use. As was the case elsewhere in the site, artifact densities were low within the structure and dense around its perimeter. Materials consisted primarily of sherds and small chipped stone tools. No carved stone was found but a cache of three small polished pestles was recovered from inside the north wall of Structure 5.

Architectural Organization along the Central Axis

The architectural spaces located along the Rivas Central Axis were constructed in sets of singular and paired architecture, as shown on Figure 9.3. Multiple sets of contiguous paired and shared spaces form two spatially primary discrete sets of architectural features corresponding with the residential/mortuary divisions of Rivas-Reina. Between them the paired pavements that comprise the False Cemetery serve as a mediating place between the residential architecture of the living and the mortuary architecture of the dead.
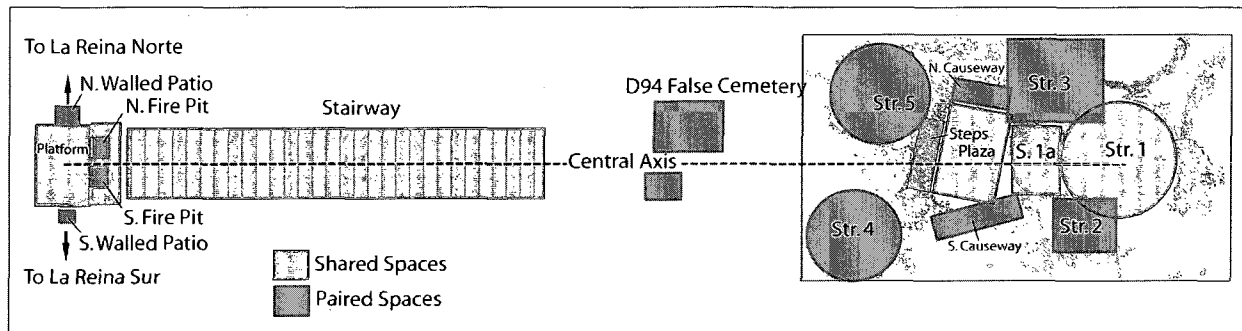
Figure 9. 3 Singular and paired architecture along Central Axis. Features in blue represent singular spaces along the axis; those in red are paired features located on opposite sides of the axis. East is to right.

The Central Axis bisects at least seven shared architectural features: Structure 1, Structure 1a, the Plaza, the steps and associated pavement, the Stairway, and the Upper and Lower Platforms at its summit. These singular spaces are complemented by paired architectural features positioned along the Central Axis: Structures 2 and 3, the north and south causeways, Structures 4 and 5, the two sets of pavements that comprise the False Cemetery, two rectangular fire pits, and the north and south walled patios. In addition to these six paired features, La Reina Sur and La Reina Norte serve as a seventh example of paired constructions at Rivas-Reina. Additional paired features may remain unidentified. For example, I mentioned above the possibility of an additional access point on the southeast side of Structure 1. Their symmetrical positions would imply that they were paired features or led to paired structures. A common attribute of the paired features is that none are contiguous with their counterpart but are linked by one of the singular spaces along the centerline.

Architectural units along the Central Axis appear to have included both covered and open spaces. Covered spaces likely included Structures 1, 2, 3, 6, and 7. Open spaces include the plaza, the False Cemetery, the Stairway, and the Upper and Lower Platforms at its summit. In

general, shared public spaces are open and located along the axis, while covered spaces are paired and located to its north and south. The construction of open spaces suggests activities that included public gatherings (Plaza), movements of people, perhaps during funeral processions (the paired causeways, steps, and the Stairway), and public performances (Platform). The placement of these spaces in relation to the Central Axis suggests that activities along the axis were generally public, while those in paired spaces were often restricted and out of public view.

Asymmetry

Asymmetric pairing, whereby one architectural or spatial element in a pair is significantly larger than its counterpart, is a common structuring principle in dually organized sites. At Rivas-Reina, asymmetry is present in four of the seven paired architectural features. Within the Rivas sector of the Central Axis, the only clear differentiation between paired features is the size difference between Structures 2 and 3, whereby Structure 3 is constructed approximately 9 m larger than Structure 2 on both is north-south and east-west dimensions. The precise differences in size are difficult to measure since neither structure was fully cleared around its perimeter.

The maps of Operation D also show an apparent size disparity between the north and south causeways, but I am reluctant to designate them as asymmetrical paired features for two reasons. First, only the south causeway was fully excavated, so it is much more clearly defined. By contrast, only portions of the north causeway were cleared and mapped, so accurate measurements are not possible. Second, it is difficult to determine where the causeways begin and end in relation to adjacent features. In particular, the boundary between the causeways and the pavement to their west is not well defined.

The remaining paired features in Operation D, Structures 4 and 5, appear to have been symmetrical. Both are 20 m in diameter and both were constructed at the same elevation. Although Structure 5 looks as if it was constructed with larger stones around its perimeter and with an additional interior wall, this is likely the result of the more intensive clearing and excavation of Structure 5. Structure 4 was only minimally cleared and was not excavated (Quilter 2004:105-107).

Asymmetric construction of paired features is most apparent in the mortuary zones of the site, beginning with the False Cemetery. There, the north set of pavements was constructed significantly larger than the south set. Unfortunately, the lack of extensive clearing and excavation of the south pavements precludes a more detailed analysis of the differences between these paired features.

A second example of asymmetric pairing along the site's Central Axis is the pair of rectangular walled patios located on either side of the platform at the top of the Stairway. Each consists of a pavement of flat river stones arranged in neat rows and surrounded on all four sides by a stone retaining wall (Figure 9.4). The tops of these walls correspond with the elevation of the Upper Platform and the pavements were constructed below that level. I was unable to excavate the entire North Patio but was able to determine its dimensions using a soil probe. The north pavement is significantly larger than its southern counterpart. At 3.70 meters on its north-south axis by 5.10 meters on its east-west axis the north patio was constructed at almost exactly twice the scale of the south patio in its north-south (1.85 meters) and east-west (2.60 meters) dimensions. The size disparity of these features is even more striking when comparing the horizontal area of the two spaces. At 18.87m^2 the north pavement covers nearly 4 times the area of the south pavement. The north pavement also exhibits taller walls. Walls surrounding the

northern pavement range from five courses, along its south wall, to seven courses along its north

wall. By contrast, the walls around the south wall are a minimum of two courses and a maximum

of four.

Figure 9. 4 South (left) and north (right) walled patios adjacent to Upper Platform

A second example of asymmetric pairing along the site's Central Axis is the pair of

rectangular walled patios located on either side of the platform at the top of the Stairway. Each

consists of a pavement of flat river stones arranged in neat rows and surrounded on all four sides

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The most striking example of asymmetric pairing at Rivas-Reina is the difference in elevation and the apparent disparity in the length of the Panteón de la Reina's two cemeteries (Figure 9.5). Both sit well above the Rivas residential/ceremonial sectors, but La Reina Norte is positioned at least 45 m higher than La Reina Sur. Additionally, while both cemeteries encompass a similar spatial extent ($5900m^2$ in la Reina Norte and $6200m^2$ in La Reina Sur), suggesting that they served and contained similar sized populations, visual differences exist. La Reina Norte is constructed so that it is considerably narrower than the south in its east–west dimensions but it is twice as long as La Reina Sur in its north–south dimensions.

From the vantage point of the those in the residential sector, only the north–south dimensions of each cemetery would have been visible along the east edge of the Panteón de la Reina, thus giving the appearance that the north cemetery was not only significantly higher than the south cemetery but also nearly twice its size.
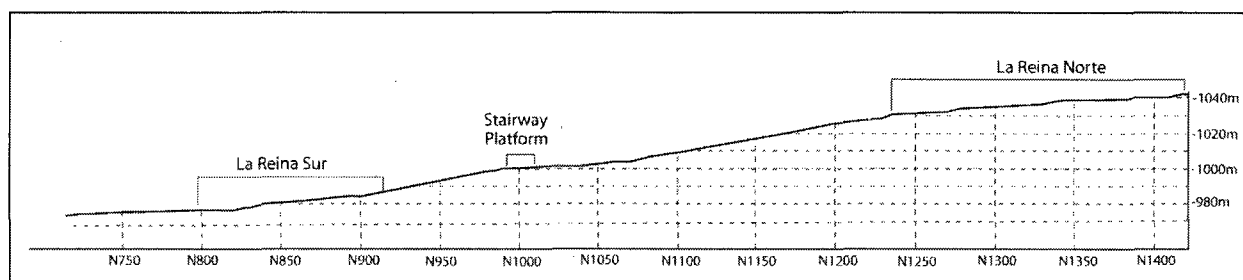
Figure 9. 5 Profile of the Panteón de la Reina, as viewed from the Rivas site

Significantly, the Stairway and the features at its summit are not located equidistant from each cemetery but are positioned much closer to La Reina Sur. The elevation of the platform is approximately 15 m higher than the highest point in La Reina Sur and 30 m lower than the lowest point in La Reina Norte. Thus, movement from the Rivas site to La Reina Sur would have required participants to ascend to the top of the stairway and then descend to the southern cemetery. By contrast, those destined for the north cemetery would have ascended the stairway to the Upper Platform and then ascended further to La Reina Norte.

That asymmetry between La Reina Norte and La Reina Sur is displayed at all is particularly remarkable given that their spatial extents represent the final limits in the growth and development of the two cemeteries, which were likely utilized over a period of several hundred years. Unlike the architectural features along the Central Axis, which had predetermined and permanent boundaries, the spatial limits of the two cemeteries would have expanded as new graves were added. As discussed in the previous chapter, the boundaries of these cemeteries were somewhat constrained by the natural landscape, particularly in La Reina Norte where the east and west boundaries of the cemetery correspond with edges of the ridge. In La Reina Sur, however, the cemetery growth was less confined by the natural topography, particularly on its south and west, where extensive areas of level ground remain unused. It appears that in the case

of the south cemetery, a conscious effort was made to direct cemetery growth to the west, rather than to the south in order to maintain asymmetry.

Moiety Organization at Rivas-Reina

The spatial organization of the Panteón de la Reina's two cemeteries and the multiple paired elements along the Central Axis are strong indicators of a site organized and ordered according to principles of duality. As demonstrated above, the architectural layout at Rivas-Reina was constructed in relation to a central axis with architecture along it constructed in both singular and paired entities. This bilateral symmetry suggests that ritual activities along the axis were also paired, with participants repeatedly dividing into two groups, probably along moiety lines. The paired Panteón de la Reina cemeteries are probably the strongest indicator of a society divided into two clearly defined social groups by demonstrating that dual divisions in society extended beyond ritual activity.

Asymmetry was also clearly expressed in the built environment of the Rivas-Reina complex, particularly among the mortuary architecture of the false cemetery, walled patios, and the La Reina Norte and Sur cemeteries. This clear asymmetry strongly indicates a system of a dominant and a subordinate moiety. Although the asymmetric spatial patterns at the site strongly imply that the two moieties were perceived as unequal, the material evidence collected from the two cemeteries does not appear to indicate significant status differences between them. The frequencies of pottery types are virtually equal and there appears to be no difference in access to exotic or prestige vessels. If we believe reports of those who looted graves at the Panteón de la Reina, gold was abundant in both cemeteries, but the amount of it varied by grave.

It is more difficult to infer the form of political organization that operated at Rivas-Reina based on the spatial and material patterns. We found no material indications of clear religious or political identities in the Panteón de la Reina cemeteries. At this time it is not possible to determine if Rivas was organized as a diarchic system based on two chiefs or opposed political and religious authorities. However, if we follow the historically documented examples of the Bribri, Cabécar, and Kógi, it is reasonable to suggest that a diarchic system of chiefs and priests may have operated in prior to Spanish contact.

Dual spatial patterns do not just passively reflect dual social structures, they were constructed to provide venues for activities by dually organized groups, and by engaging in those activities, those very dual divisions, membership within them, and the social relationships between them were all negotiated, contested, and reaffirmed (Almagor 1989:144; Urton 1993:118, 121). In Costa Rica, funerals in Talamancan communities were particularly powerful venues for such interactions because the transition from life to death was understood as one of the most dangerous periods in the life cycle of a human being, and a potentially dangerous time for the entire community. Mortuary rites had to be properly conducted to ensure safety for everyone involved (Bozzoli de Wille 1975a). In the next section I draw upon historically documented funerary events to interpret how the spaces described above may have been utilized during ritual activities and how such activities would have contributed to maintaining and reinforcing moiety membership and group cohesion.

Rivas-Reina as a Mortuary Complex

The Rivas-Panteón de la Reina architecture attests to the complexity of the events that occurred at the site. From the center of Structure 1 to the top step of the stairway is a distance of 270 meters. The route followed a complex path that diverged and merged along an alternating series of shared and paired spaces organized into orderly sets arranged along a central axis. From origin to end, participants passed through a series of sequentially ordered single and paired spaces, open public spaces, and restricted areas.

Although it is premature to fully reconstruct the sequence of events that occurred within Rivas-Reina's various spatially defined spaces with current archaeological data, historically documented funerals from the Talamancan region and elsewhere in the isthmus suggest that they corresponded with a series of events necessary for the successful transfer of the body and spirit of the deceased from the world of the living to the realm of the dead. These documents also provide clues to the events that may have occurred at Rivas-Reina during these public gatherings. Below, I provide a brief overview of Talamancan burial practices based on several eyewitness accounts from the late seventeenth century through the mid-twentieth century. I do not aim to present a comprehensive treatment of the material, as thorough reviews of these practices are presented elsewhere (see e.g. Bozzoli de Wille 1975a, 1979). Instead, I outline the elements of Talamancan funerals that may be present archaeologically. I then attempt to correlate these recorded events with the field results from excavations in the four zones described above.

Eyewitness accounts of Central American mortuary practices were recorded as early as Columbus' fourth voyage to the New World in 1508, but detailed descriptions tend to be rare, as witnesses and chroniclers were rarely present from the time of death through the end of the long

post-mortem funerary and burial process. Talamancan funerals occurred in multiple stages, each lasting several days and, often, spaced months or years apart. It also is difficult to generalize from these accounts, since funeral practices may have varied considerably depending upon the age, gender, status, and social identity of the deceased. Nonetheless, several sources describe indigenous mortuary practices in Costa Rica and Panama. Collectively, they provide an opportunity to reconstruct Chiriquí mortuary practices, especially in the context of the Rivas-Reina site and its well-documented architectural layout.

In the Talamanca region of Costa Rica, early descriptions are scare, but the accounts by Fray Francisco de San José (1913 [1697]), Manuel de Urcullo (1913 [1763]), and Captain José Antonio Angulo (1913 [1862]) provide useful information. The American geologist, William Gabb, provides the most complete and detailed description of indigenous Costa Rican funerals (Gabb 1875). His descriptions are important because he not only witnessed the treatment of commoners in death but he also witnessed and recorded the events that occurred in a two-week period prior to the burial of Bribri chief Santiago. Subsequent accounts of Talamancan burial practices include those by Alanson Skinner (1920), Henri Pittier (1938), and Doris Stone (1962). In addition, Maria Bozzoli de Wille (1975a, 1979) presented thorough reviews of Talamancan burial practices based on fieldwork she conducted among the Bribri in the late 1960s.

Talamancan funerals are described as complex multi-stage events, conducted by a hierarchy of trained funerary specialists (Bozzoli de Wille 1975a; Gabb 1875). According to Bozzoli de Wille (1975a:9, 127, 194), the Bribri envision the passage of soul from the world of the living to realm of dead as a difficult one, requiring a defined series of events under the direction of trained funeral specialists to ensure a safe journey. If the rituals are not conducted

properly, the soul will not be purified and will not successfully complete its journey to the underworld.

Documentary accounts concur that immediately after death the bodies of the deceased were cleaned, anointed with oils or aromatics, and wrapped in leaves or cloth (Angulo 1913[1862]; Bozzoli de Wille 1975a, 1979; Francisco de San José 1697; Gabb 1875 Pittier 1938; Skinner 1920; Stone 1962; Urcullo 1913[1763]). Some accounts, particularly those from central Panama, describe slowly drying the wrapped bodies over a fire to preserve the remains for a secondary funeral ceremony to be held at future date (Andagoya 1865[1517]:15-16). Bodies of the deceased, whether wrapped or desiccated, were publicly displayed by suspending them from ropes within a house (Andagoya 1965:15; Pittier 1938; Urcullo 1913[1763]) or placing them on a scaffold in public view (Angulo 1913[1862]; Bozzoli de Wille 1975a; Gabb 1875; Skinner 1920).

Once the body was prepared, funeral specialists lit a sacred funeral fire, which burned for the duration of time that the body was displayed (Bozzoli de Wille 1975a; Gabb 1875; Pittier 1938; Skinner 1920; Stone 1962). Gabb, Skinner, and Bozzoli de Wille each describe funeral fires that burned for nine days after the death of the deceased, but the significance of the nine-day period is never mentioned. During this period, the community mourned, feasts were held, and the property of the deceased was redistributed (Gabb 1875; Bozzoli de Wille 1975a; Pittier 1938).

Sources concur that the wrapped bodies then went though a period of physical transition lasting from a few months to several years. The body was placed in a special location away from the village until the soft tissue completely decayed (Gabb 1875:499). Pittier wrote that bodies decayed for only three to four months, while Skinner reports a five-year period between death

and burial, and Bozzoli de Wille states that among the Bribri the intermediary period could last from one to ten years. While the body decayed, arrangements were made for the funeral. Food was prepared, the costs of the funeral were negotiated, and the date of the funeral was set (Gabb 1875).

According to Gabb's account a funeral specialist retrieved, cleaned, and repackaged the bones into a bundle wrapped with painted bark cloth at the end of the intermediary period. The wrapped bones were then placed on public display above a fire. Gabb (1875:500) describes these events and the beginning of the feasting that followed:

> A little rack, made of wild cane was tied up to the sloping side of the house, about eight feet from the floor, and on this was laid the bundle containing the disjointed skeleton of the murdered chief. At a given signal, the principal singer or priest took his position on a low stool, flanked by the other priests and some volunteers. All were regaled with chocolate served in little gourds. The priest began a low chant and two men started twirling the stick to light the fire. As fast as one tired, another took his place until the sparks glowed in the pit bored in the lower stick. A yell from the priest announced this, and a piece of cotton wool was ignited from the burning dust; with this the firewood, previously prepared, was lighted and the fire placed under the remains. Here it was kept up until the end of the feast. After the lighting of the fire, singing and dancing began in earnest, interrupted occasionally by eating and drinking. The lit fire signaled the beginning of a funeral ceremony that lasted several days or weeks.

Gabb's description of the funeral ceremony closely matches the events outlined in other accounts, which document several days or weeks of feasting and dancing, usually with the consumption of chicha and chocolate (Angulo 1913[1862]; Skinner 1920; Stone 1962).

The final disposal of the dead varied according to local custom. Andagoya (1865:16) states that the remains of the deceased were "burned to ashes." Skinner (1920:98) makes reference to a "dead-house, situated far off in the mountains" where the Bribri stored the remains of the deceased, though for how long is not stated. His account is reminiscent Peter Martyr D'Anghera's description of Chief Comogre's charnel house, where he is reported to have stored and displayed the desiccated remains of his ancestors (Martyr 1912:II:67). Ferdinand Columbus

observed a similar structure in a village near the Caribbean coast of Costa Rica during Christopher Columbus' fourth voyage (Colón 1959). Most funeral descriptions describe burying the dead in family cemeteries away from the village, though the placement of these cemeteries on the landscape and in relation to the village and cemeteries is not reported (Angulo 1913[1862]; Bozzoli de Wille 1975a; Gabb 1975; Pittier 1938; Stone 1962).

Transporting the dead to the cemetery often included a formal procession (Bozzoli de Wille 1975a; Gabb 1875; Pittier 1938), though various sources differ on who participated in this stage of the burial process. Bozzoli de Wille (1975a:119) reported that only the funeral specialist and the funeral singers would go to the cemetery for the burial but clan members could enter the clan's cemetery for visits and offerings: "[A]ccess to the cemeteries themselves was highly restricted. Entry was granted only to trained professionals and certain family members, and then only under certain circumstances." Gabb's (1875:502) funeral account of a Bribri chief describes a large procession that included all members of the community, led by the priests, chiefs, funeral singers, and then followed by the widows of the deceased and the rest of the community.

The internal organization of cemeteries and the arrangement of graves are rarely discussed; their sizes, spatial relation to the village, and the internal organization of cemeteries remain unreported. Stone (1962:29) reports that among the Bribri and Cabécar, custom demanded adherence to kinship rules even after death, so the deceased were buried in clan cemeteries called *pu* (alternatively, *pö'* [Margery Peña 2003:231]). Bozzoli de Wille (1975a:115, 118) witnessed that each clan had its own "bone repository about 50 meters from the neighbor's" and that each clan's designated burial area was positioned to face the clan in which its members were supposed to marry.

There is only minimal information about the activities that occurred in cemeteries between funerary events. As stated above, it seems family members were permitted to enter the cemeteries to visit the graves of their deceased ancestors. On some occasions, the Bribri exhumed the bones of the dead relatives and then returned them to their graves the next day (Bozzoli de Wille 1975:119).

Synthesizing the above accounts, we can derive a hypothetical sequence of funerary activities, which would have occurred in the following order:

1) The initial preparation of the body of the deceased
2) Display of those remains
3) The lighting of funeral fires that burned for days or weeks
4) Housing the bodies as they decomposed for weeks or years
5) Preparation of bones for secondary burial
6) Final funeral services, including processions
7) Burial in cemeteries associated by kin group
8) Subsequent visits and, in some cases, temporary exhumation of remains

These diverse activities would have required distinct facilities and spaces, and in some cases would have entailed distinct artifact assemblages. If Chiriquí-period funerary rituals and burial practices were similar to those reported historically, we should expect artifactual and architectural evidence of this sequence of activities. Below, I argue that paired and shared spaces associated with the Central Axis of the Rivas-Reina complex described above served just those purposes.

The Rivas-Reina Central Axis is organized into four zones (Figure 9.6), each consisting of a set of spatially discrete architectural features. As I described for the internal organization of the Panteón de la Reina, the boundaries between these zones were defined by vacant spaces and distinct changes in elevation. Though spatially discrete, the four zones are united by the Central Axis.

These four zones and the architectural features that comprise them likely served to help structure funerary activities and channeled the movement of living people and dead bodies through groups of sequentially ordered architectural features, each associated with activities and participants during the funerary/burial process. From east to west, the zones are as follows:

> Zone I: The residential-ceremonial area at the east end of the Central Axis, on Terraces 2 and 3.
>
> Zone II: The False Cemetery, located on Terrace 4.
>
> Zone III: The Stairway, Upper and Lower Platforms and adjacent walled patios.
>
> Zone IV: The La Reina Sur and La Reina Norte cemeteries (not shown on Fig. 9.6).
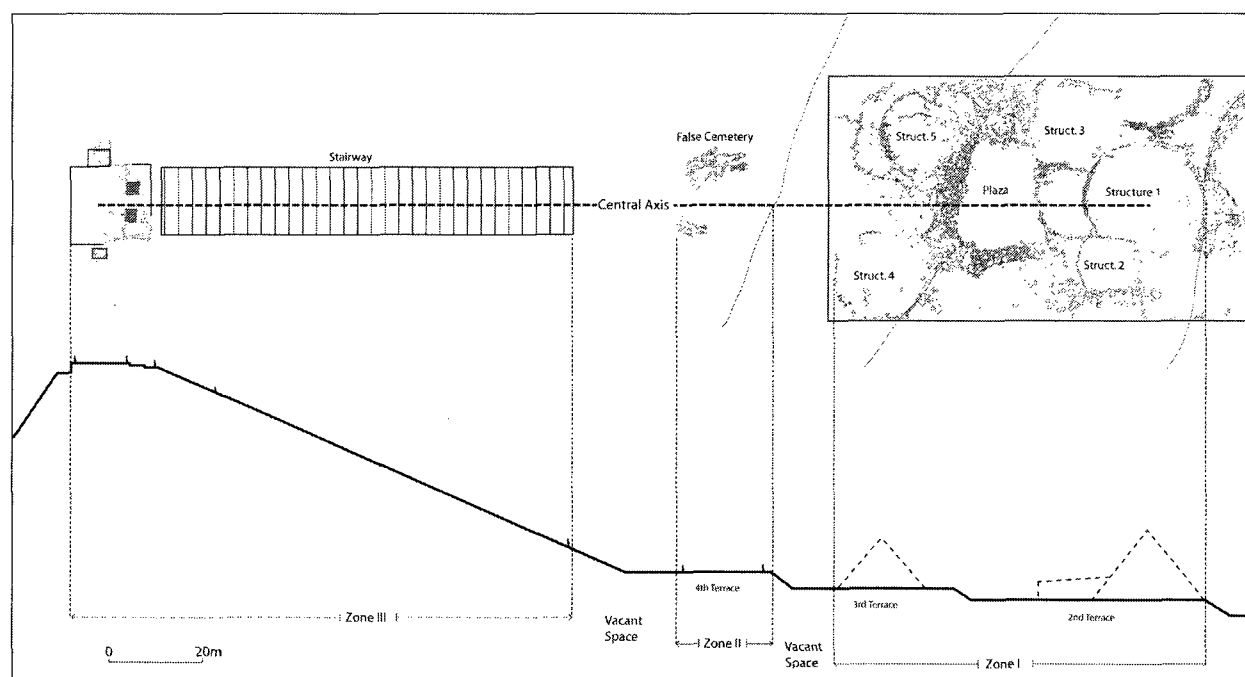
Figure 9. 6 Zones I through III of Central Axis architecture in plan and profile; Zone IV lies north and south of Zone 3.

The spatial organization, architectural spaces, and material remains from these zones are consistent with the material and spatial expectations for the sequence of funerary events described above. The layout with four spatially distinct zones implies that the events in the

mortuary process may have been similarly divided. Table 9.1 presents hypothesized associations between the ordered series of funerary events and the four spatial zones just defined. In the paragraphs that follow, I justify those inferences through a discussion of the archaeological record.

Table 9. 1 Hypothetical relation of historically documented funerary sequence to locations at Rivas-Reina

Stage in Funerary Sequence	Suggested Location
Initial preparation of body	Zone I: Possibly Structures 1-3
Body displayed	Zone II: Paired pavements of False Cemetery
Lighting & burning of funeral fires	Zone III: Paired fire pits
Body allowed to decompose	Zone III: North and south walled patios
Bones prepared for burial	Zone III: North and south walled patios or adjacent pavements
Funeral procession to cemeteries	Zones III-IV: From walled patios to La Reina Norte or La Reina Sur
Burial	Zone IV: La Reina Sur or La Reina Norte
Subsequent commemoration	Zone IV: La Reina Sur or La Reina Norte

Zone I: Residential-Ceremonial

Mortuary activities likely began in Zone I soon after death. The Bribri considered dead bodies unclean, and thus their handling and preparation was the purview of specially trained funeral specialists. Documentary sources state that funerary specialists anointed, cleaned, and wrapped bodies in a house, likely because of the unclean or contaminating nature of the corpse. The only similarly enclosed structures along the Central Axis are Structures 1, 2, and 3. Furthermore, these are all found within Zone I, and lie at the origin point of the Central Axis, where it articulates with the larger Rivas and regional living communities. Thus, it is the parsimonious place to expect the deceased to begin their ritual, metaphorical, and physical journey into the afterlife and the Panteón de la Reina cemeteries.

Zone II: D94 False Cemetery:

Once properly cleaned, dried, anointed and wrapped, the corpse was considered safe for public view and display. Documentary accounts describe the display of wrapped remains suspended from a rope within a structure or on a scaffold in public view. Although such displays could have occurred in one of the structures or open spaces of Zone I, three reasons lead me to suggest that this stage of the funerary sequence occurred on the asymmetrical pair of pavements that comprise Zone II, located at the top of Terrace 4.

The broader layout of Zone I and the pattering of artifacts throughout that zone implies movement, gatherings, processions, and the repeated splitting and joining of groups of participants. In contrast, the simpler layout and features that comprise Zone II suggest a space with less movement, amenable to longer-term placement and display of bodies. But two other characteristics of Zone II support my inference that it was constructed specifically for the display and housing of bodies.

Zone II is distinguished from Zone I by the presence of two architectural characteristics that evoke the cemeteries that served as the final resting places of the deceased. First, several stone columns lie around its perimeter. As noted in Chapter 5, stone columns are found only within mortuary settings in Chiriquí sites. Second, Zone II contains pavements that so closely resemble those that were used to cap graves that it was first mistakenly identified as a cemetery. Quilter (2004:94) interpreted the pavements as a "staging area" where bodies of the deceased may have been displayed publicly before being carried to the top of the stairway to the Panteón de la Reina. The location of these pavements in relation to the Central Axis supports this interpretation.

An additional observation that supports the interpretation of Zone II as an area for storage and display of bodies is its intermediary location, midway between Zones I and III. This is a well-suited liminal space for wrapped bodies in a liminal state, undergoing the transformation from living to dead (Hertz 1960; Van Gennep 1960).

Zone III: Stairway and Platform

The third stage of the burial process began with the lighting and maintenance of funerary fires. Although this plausibly could have been carried out anywhere, we recovered evidence of sustained burning in three locations: at the bases of three *in situ* stone pillars, in the two fire pits on the Lower Platform, and on the top of five grave pavements in the Panteón de la Reina. Although all of these fires were likely part of mortuary activities and commemoration, the fires in the first two locations are more likely to have been associated with the display of prepared bodies.

The three pillars found *in situ* along the Stairway had concentrations of charcoal at their bases. The evidence of burning in front of them is a strong indication that other pillars along the stairway may have also had fires burning at their bases. Such fires would have illuminated the pillars and marked the boundaries of the Stairway and the platforms even at night. Jim Schumacher (2007) recently argued that the stone pillar was not the primary element of display, but functioned as a pedestal, with the peg-like "tenon" on its upper end facilitating the attachment of carved or pained statues of perishable materials. At night the light and shadows from the fires at the base of each pillar would have imparted a sense of movement to each figure along the stairway.

The most dramatic evidence of intense fires comes from the two fire pits on the Lower Platform, which were the first features one would encounter upon climbing the stairway. The large size of these hearths and the deep black soils within them suggest that they contained intense fires that burned for long periods of time. The large hearths are consistent with reports of Talamancan funerals that describe a sacred funeral fire that burned for days or weeks.

All of the structures in Zone I were oriented to face the Platform at the Stairway's summit, fires and other public performances there would have been visible to spectators in the site below. Given that 270 meters separate the Platform from the structures below, however, many of the details of those performances could not have been appreciated. Perhaps most obvious would have been the fires burning in the two fire pits. The flames and smoke would have indicated to those in Rivas and in surrounding communities that a funeral was in progress.

Following their display, the prepared bodies were allowed to decompose, a process that went on for years according to some ethnographic accounts. Two locations seem likely candidates for this stage of the funerary process: the False Cemetery in Zone II and the walled patios along the north and south sides of the Platform in Zone III. The spatial logic of both Zones II and III differ from that of Zone I and the rest of Rivas, suggesting that it was a different kind of place, one built for the slow transformation of a living being into a dead ancestor. The structures throughout Rivas, including those of Zone I, are invariably round or curved, and they often appear somewhat random in their organization as they were built through accretion. In contrast, the architecture of Zones II and III is highly ordered and rectilinear, constructed with straight walls and rectangular pavements. The clear difference in architectural design signals a difference in the function of the architecture and the activities that occurred there.

The bodies of the deceased likely spent a period of time in the display and decomposition stages, and this could have been split between Zones II and III. Although the proximity of the False Cemetery to Zone I and the rest of Rivas made it an ideal location for the display of the dead, the olfactory effects of the decomposition of human flesh may not have made this location, close to the residential sectors of Rivas, suited for the longer-term housing of dead bodies. In contrast, the walled patios in Zone III would have held several advantages. They were out of visual and olfactory range of the residential sectors of the site, and they were relatively easy to cover in order to ward off scavengers. Ethnographic accounts agree that this process occurred some distance from the village, usually covered by a wooden rack to keep animals away.

After the body had decomposed, it was further processed prior to final burial. To date there has been little archaeological data to corroborate documentary accounts of secondary burials in Greater Chiriquí. In the Nicoya Peninsula, however, there is evidence of secondary burial in the form of bone bundles at La Regla. Analysis of bones from the site showed no evidence of cut marks or scraping, suggesting that soft tissue had decayed completely prior to preparing the bundles (Guerrero, Vazquez, and Solano 1992). We have no direct evidence of secondary burial from the Panteón de la Reina. Grave forms and sizes seem are consistent with expectations for extended burials.

Supporting the inference of secondary burial is the unusual artifact assemblage found on the Lower Platform and within the walled patios. As noted in Chapter 8, we recovered 17 stone scrapers and associated debitage. Such tools could have been used to scrape residual flesh from bones and to disarticulate bones. Unfortunately, the poor preservation of these tools precludes edge wear analysis that might provide evidence for their use on bone.

Documentary reports of Bribri funerals also describe a procession to carry the body of the deceased to its final resting place. Gabb (1875:502) described the funeral procession from the village to the cemetery for Bribri chief Santiago as follows:

> A procession was formed. First came the priests with the rattles, Next the chorus singers with their drums, Next the corpse, borne by two men, and preceded by the two widows, each holding the end of the cotton strings, leading the dead, as it were, to his final resting place. Next ourselves, as the most distinguished persons present, and escorted by the two chiefs. Behind us came the older men, and following them the usual rag, tag, and bob-tail of young men, women, boys, and some persons of no account generally...As the procession field out of the house, some old chicha jars were carried out and ostentatiously broken.

The Central Axis from Structure 1 to the top of the stairway would have served as an obvious route for a procession. Members from the Rivas community likely conducted processions and funerary activities similar to those described above in the areas between the Rivas site and the Panteón de la Reina cemeteries. The physical layout of Rivas suggests that such events began at or near Structure 1 and passed through the architecture along the Central Axis through the village and up the stairway. Complete but broken pots found on the steps at the west end of the plaza suggest that the smashing of pottery vessels was conducted as part of this event. At 18 meters across and nearly 100 meters long, the stairway could have easily accommodated processions that included hundreds, or even thousands, of people.

It is unclear from archaeological and ethnographic evidence if burials for members of both moieties were conducted simultaneously. If so, we can assume that the procession then divided at the top of the Stairway with half the group moving south and half moving north. In their procession, the now transformed bodies of the deceased would have left the platform and walled patios of Zone III and passed though a vacant space between the stairway platform's sunken patios and the north or south cemetery. Excavations along the perimeters of La Reina Norte and

La Reina Sur demonstrate that access to both cemeteries required passage thorough a zone devoid of burials prior to reaching the cemetery.

Zone IV: La Reina Sur and La Reina Norte (not shown on Figure 9.6)

The dual cemeteries represent the final venue in the funerary process. We have no documentary data about the excavation of grave pits but, as discussed above, there is some information about the size and placement of grave features. According to Gabb (1875:503):

> The final disposal of the remains is matter of great care. The whole tribe goes to the district of Bri-bri for this purpose. The receptacle is a square pit, about four feet deep and ten feet square. This is paved on the bottom with stones, and is roofed over from the weather, by a series of heavy hewn slabs of very durable wood, open on the front and ends, and sloping to the ground at the back. Each family possesses one of these pits and here, after the funeral feast, the bundle of bones is carried and deposited. After the rest, the remains of Santiago were carried to the "royal" pit and deposited without further ceremony.

The grave construction Gabb described is different from what I identified at the Panteón de la Reina. Gabb's description seems to imply that multiple individuals were placed in a common grave and that the grave was left open to accommodate future burials. That it was a "'royal' pit" suggests that the grave was intended only for the interment of members of a particular high-ranking family or clan, or for members of particular political offices.

Most of the Panteón de la Reina graves appear to have been meant for single interments. The construction of Grave 8 in La Reina Norte may be an exception. This grave was constructed in two distinct levels, each with a set of grave goods. It is possible that the grave held the remains of two individuals, perhaps interred at different times. Unfortunately, the severe looting to the grave and the lack of preservation of human remains makes it difficult to interpret the reasons for the two layers.

The Panteón de la Reina graves appear to have been arranged in groups, likely representing kin groups, divided by lines of stones, walls, changes in elevation, and stone pillars. Even within a single group of burials, graves differed, with depth and the arrangement of paving stones being the most obvious variables. Grave goods were also variable and included pottery, stonework, and metals.

Although the burial in the cemetery marked the formal end of the long transformation of a body from a living person to dead ancestor, it did not necessarily mark the social death of that individual. Many people buried in the Panteón de la Reina were venerated and commemorated after their interment. We identified evidence of intense burning on the surface of three grave pavements, and we found a small hearth near a group of burials in La Reina Norte. Two graves, one with burning and one without, also contained small ceramic vessels directly under the pavements. In one instance, the stratigraphy documents that the vessel had been placed after the grave and been filled and capped with the pavement. Thus it appears that members of the Rivas community commemorated their deceased ancestors in a variety of ways, as was documented among the Bribri.

Conclusions

The architectural and spatial patterns at Rivas-Panteón de la Reina are consistent with the expectations for dual organization that I outlined in Chapter 3. The multiple paired architectural elements arranged along Rivas-Reina's Central Axis and the two contemporary Panteón de la Reina cemeteries are strong indicators of a site organized and ordered according to principles of duality. In addition, many of the paired elements in the built environment of the Rivas-Reina were designed and constructed asymmetrically. These paired and asymmetrical spaces would have served as a striking and unmistakable comment on the social order of the community

especially during the course of mortuary ritual events. Thus, movement through the built environment at Rivas-Reina served to remind and reinforce the cosmic social and political order.

The sequentially arranged architectural elements along the Central Axis were not passive spaces but were utilized and experienced by living members of the Rivas community as they engaged in highly structured ritual activities, which moved from the living community on the valley floor to the community of ancestors on the Panteón de la Reina ridgetop. That the architectural spaces along this route are constructed in singular and paired entities indicates that ritual activity likely involved the repeated splitting people into paired groups, probably along moiety lines, and then joining them as a single social unit in open plazas and other shared spaces.

The participation in these ritual activities within the built environment of the Rivas-Reina landscape served to reproduce both the unity of the society and the asymmetric dual divisions within it by providing a tangible dimension to dual cosmological beliefs and, thus, strengthening the "collective identity" of the individual parts (Almagor 1989: 114).

In the following chapter I look beyond the limits of Greater Chiriquí to the site of Guayabo de Turrialba, located across the Talamanca Range in the Central Valley/Atlantic Watershed region, to demonstrate that patterns of dual organization are not unique to Rivas Reina but may have been a central organizing principle at major residential-ceremonial sites throughout Costa Rica in the period A.D. 900-1300.

10. BEYOND CHIRIQUÍ: DUAL ORGANIZATION
ACROSS THE TALAMANCA RANGE

Introduction

In this chapter, I extend my interpretations about the centrality of dual social organization and its spatial expression through site plans and mortuary practices in the Chiriquí region to the other side of the Talamanca Range. A reevaluation of existing data from Guayabo de Turrialba indicates that strong dual patterns are present there, too. As at Rivas-Reina, I infer dual social organization through the presence of multiple paired sets of architectural features positioned on either side of a central axis. The strong similarity in architectural patterns suggest that groups on both sides of the Talamanca range shared a system of dual sociopolitical organization, perhaps rooted in a common cosmology

Dozens of sites throughout Costa Rica exhibit large-scale ceremonial-residential architecture, including circular foundations, causeways, mounds, large plazas, and other specialized features (Figure 10.1). In the Diquís region, these include the Rivas-Reina complex (Quilter 2004; Quilter and Frost 2007), Palmar Sur (Lothrop 1963), Limón (Drolet 1989, 1992), Curré (Corrales 1986), Java (Fonseca and Chavez 2003), and Grijalba II (Fernández and Quintanilla 2003). In the Central Pacific region, Pozo Azul (Corrales 1990; Corrales and Quintanilla 1996) and Lomas Entierros (Solís de Vecchio and Herrera 1991) exhibit similar organization. Across the Talamanca Range in the Central Valley/Atlantic Watershed region, La Cabaña (Snarskis 1978, 1980), Ta'lari de Pacuar (Hurtado and Gomez 1985, 1986) Las Mercedes (Hartman 1901; Skinner 1926), Anita Grande, Costa Rica Farm (Skinner 1926; Stone 1977), and Guayabo de Turrialba (Aguilar 1972, Fonseca 1979, Hurtado 2004, Troyo 2002) are

among the largest and most architecturally impressive sites. In this latter region, most sites have

been severely damaged or completely destroyed by looting and development. To date, only

Guayabo and La Cabaña have been extensively excavated and mapped.
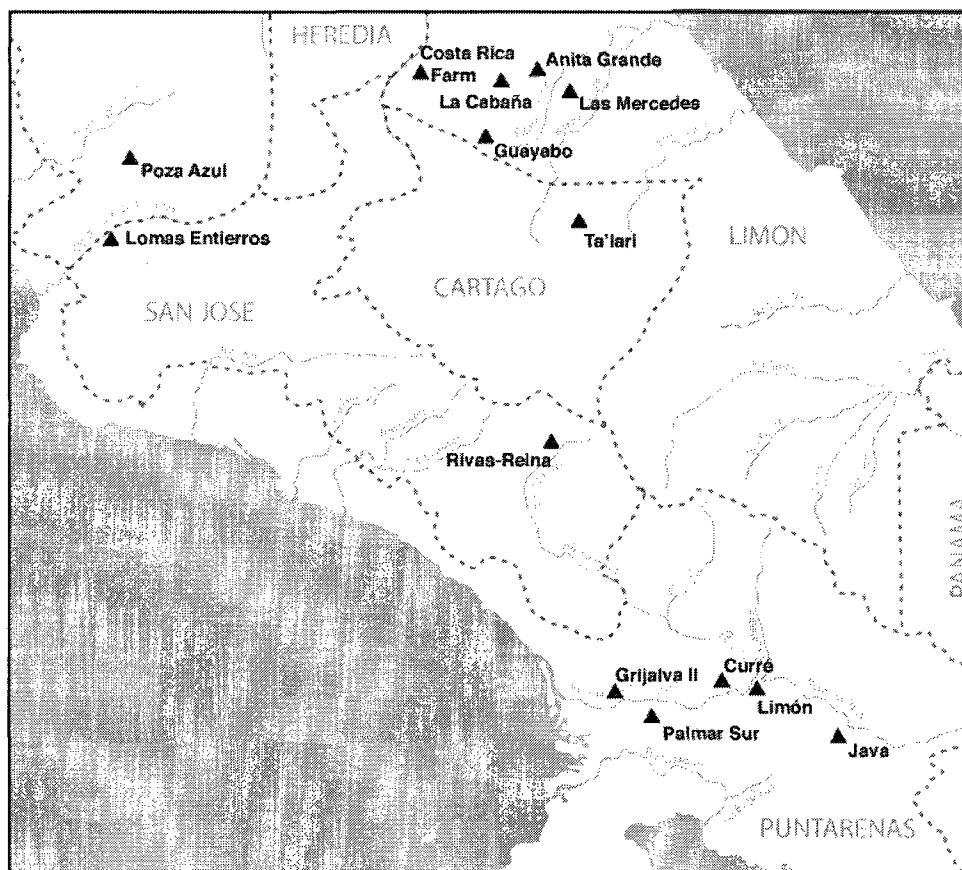
Figure 10. 1 Large ceremonial-residential sites mentioned in text

Guayabo de Turrialba

The site of Guayabo de Turrialba—hereafter called Guayabo— is located at an altitude

of 1100 m, approximately 9 km northeast of the modern town of Turrialba. The site is positioned

on a high ridge between the Lajitas and Guayabo Rivers, which flow south from the slopes of the

Turrialba Volcano (3300 m). Archaeologists have known of the site since 1891, when the

Director of the Costa Rica National Museum, Anastasio Alfaro, excavated several tombs to

collect pieces for an exposition in Madrid commemorating the 400th anniversary of Columbus' arrival in the New World (Peralta and Alfaro 1893). Since his goals were primarily to obtain objects for museum display, the results of his work have limited scientific value. Research within a more formal scientific paradigm began in 1968 with the investigations directed by Carlos Aguilar (1971, 1972) of the University of Costa Rica, who interpreted Guayabo as an important regional center. His excavations were largely exploratory. He cleared mounds, excavated graves, and exposed other architectural features. Aguilar also developed a ceramic chronology. His work remains influential and is widely cited. In 1973, the Costa Rican government declared Guayabo de Turrialba a National Monument and opened it to the public. The site has since received sporadic scientific investigation and ongoing conservation (Fonseca 1979, 1980; Troyo 2002).

The core of the site consists of more than fifty architectural features including mounds, plazas, house foundations, a central causeway, and other features spread over 2 ha (Figure 10.2, 10.3). The principal access to this central zone was via a cobblestone causeway that extends out to the east. A pair of rectangular structures (Mounds 36 and 37) at the east terminus of the formal causeway may have served as guardhouses, restricting access to the site (Snarskis 2002).

Among the site's most impressive features is a system of exposed and subterranean aqueducts that channeled fresh water from nearby steams to pools located throughout the site. Other underground aqueducts carried wastewater away from the site. Bridges made from single slabs of rock, weighing several tons, serve to connect different sectors of the site that are separated by moving water. Circular foundations between 10 and 30 m in diameter are spread throughout the site's core and on surrounding hills slopes. These are interpreted as the bases of residential buildings (Fonseca 1980; Hurtado de Mendoza 2004; Troyo 2002). The largest

foundation is Mound 1, a platform measuring 28 m in diameter and 3 m tall. It is located at the

center of the site and is commonly interpreted as the residence of a paramount chief, who

controlled Guayabo and surrounding communities (Fonseca 1980; Snarskis 2002).
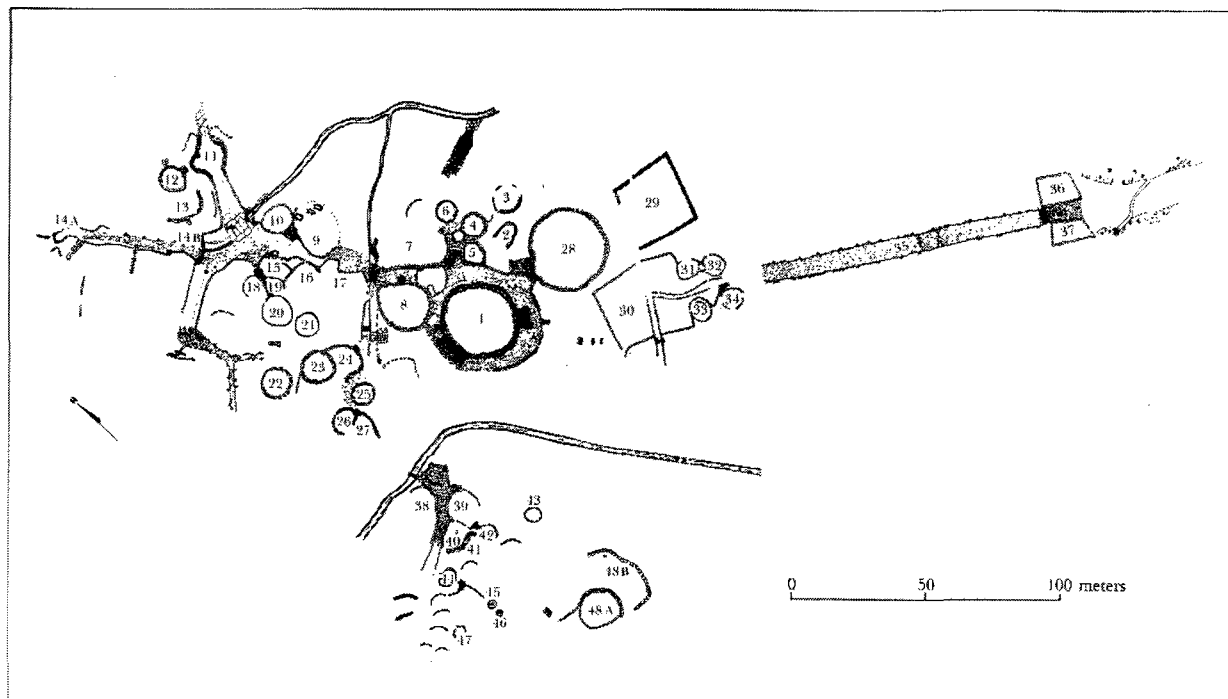
Figure 10. 2 Map of Guayabo de Turrialba (Fonseca 1978)

Like Rivas, Guayabo is not the result of a single construction event, but the outcome of

approximately 1000 years of building and remodeling that began during the El Bosque-La Selva

Phase (200 B.C. – A.D. 800) and continued into the La Cabaña phase (A.D. 800–1500).

Guayabo was abandoned for unknown reasons around A.D. 1300 (Garnier and Troyo 2002;

Hurtado de Mendoza 2004).

The principal obstacle to understanding the spatial organization of Guayabo was the

limited availability of accurate maps. The most complete map of the site was published in 1978

following Fonseca's investigations (see Fig 10.2). At that time, it was the most complete map of

any archaeological site in Costa Rica, and thus it played a central role in interpretations of pre-Columbian site organization and the use of space. There are some limitations to Fonseca's map, however. Many areas that are illustrated were either incompletely excavated or not excavated at all, and the locations, orientations, and sizes of many structures are inaccurate.

Over the past decade, fieldwork at Guayabo has concentrated on restoring, reconstructing, and preserving exposed architecture, but it has not included significant testing or excavation of new areas. Although this fieldwork has identified new features and improved our understanding of features on Fonseca's map, a new site map has never been made to replace it. In a recent publication on the conservation efforts, Elena Troyo (2002) reproduced a number of detailed and accurate maps of previously undocumented architectural features at Guayabo, particularly within and surrounding the central quadrangular plaza and the main causeway. She did not synthesize these new results into a revised map of the entire site, however.

To accomplish this, I compiled elements from Fonseca's original map with four excellent maps produced by Troyo to create a new composite map of the site (Figure 10.3). I began by scanning all of the available maps and adjusting them to the same scale and orientation. I then combined detailed individual maps of the central plaza (Feature 50), the causeway, and the paired rectangular mounds (36 and 37) from the Troyo publication. I prioritized these more carefully mapped features over those represented on Fonseca's map. I then added all of the additional features on Fonseca's 1978 map, integrating them spatially by using Troyo's site grid and features present on multiple maps to properly align architectural elements. I omitted Feature 29, a rectangular construction located to the northeast of the rectangular plaza on Fonseca's map. It is a remnant of a nineteenth-century corral constructed with stones from the site (Snarskis, personal communication, 2007).

The resulting new map dramatically changes our perception of the overall layout of Guayabo, particularly the zone between the central Mound 1 and the paired rectangular Mounds 36 and 37 at the opposite end of the causeway. The central plaza is now depicted in its correct dimensions and is properly positioned in relation to the causeway and Mounds 1 and 28. The following discussion concentrates only the architecture on the southeast end of the site, from Mound 1 to Mounds 36 and 37.
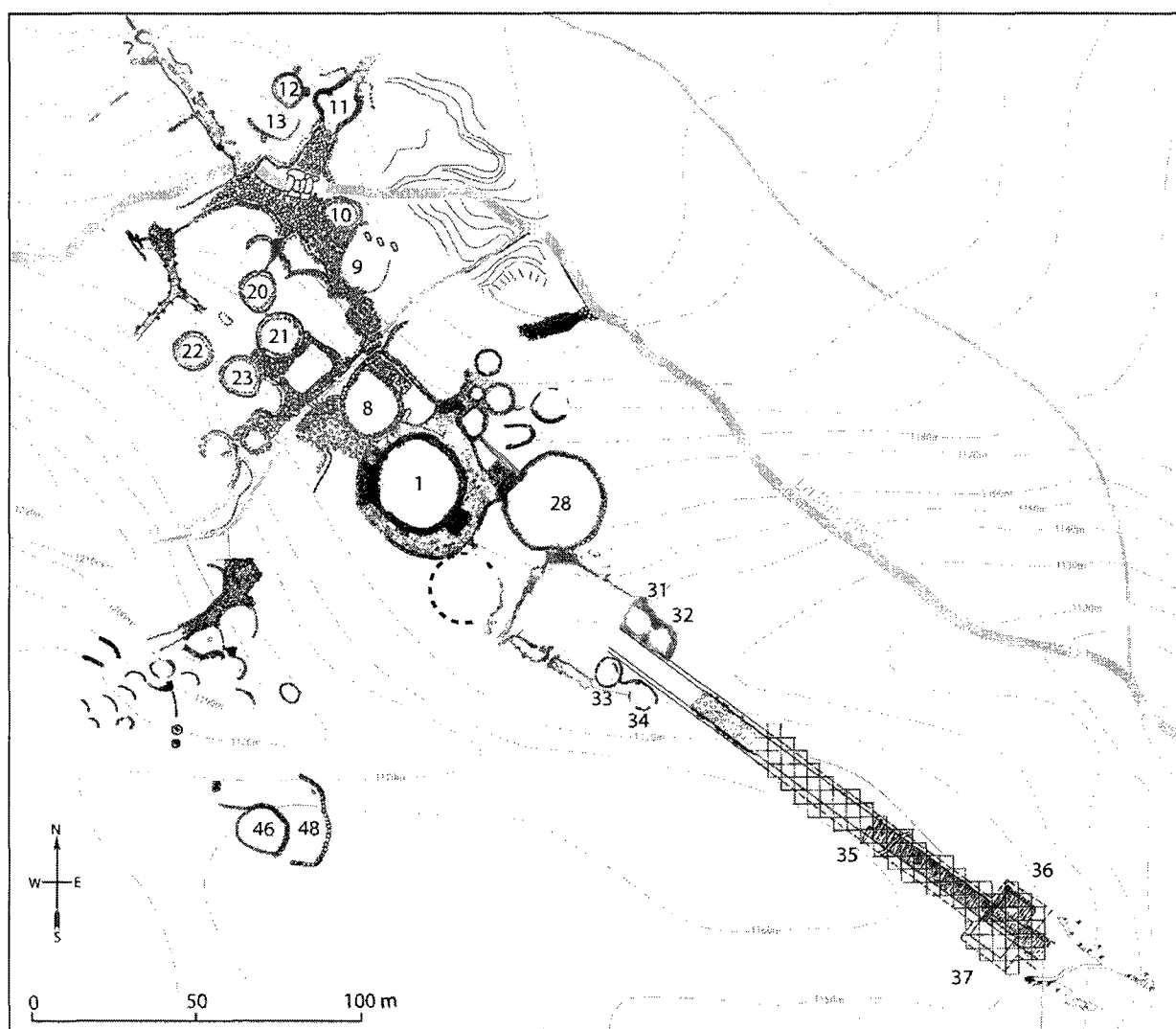
Figure 10. 3 Revised map of Guayabo de Turrialba

Guayabo Organization

Like Rivas-Reina, Guayabo was constructed in relation to a central axis, in this case defined by an 8-m wide cobblestone causeway. As currently mapped, the causeway's eastern terminus is a pair of rectangular structures, Mounds 36 and 37, one on each side of the causeway. Archaeologists have traced the causeway 1 km farther east, however, where it ends in another pair of mounds, each 7 m in diameter. From there, several smaller paths extend outward to link Guayabo to distant sites (Fonseca 1980:106).

Despite this longer extension, Mounds 36 and 37 seem to mark a more formal entrance into the central precinct of the site. Those mounds restrict the causeway, creating a passageway less than 1 m wide that would have permitted passage only in single file. Traffic ascended a stairway into the narrow passageway, and upon leaving the passageway, a second set of steps ascends to the 8-m wide causeway. At its western end, 150 m distant, the causeway opens into a large rectangular plaza, the site's central plaza. The causeway's northwestern terminus is flanked by two pairs of structures shaped like figure-eights, named the *Montículos Gemelos* (Mounds 31-32 and Mounds 33-34). Their form suggests that they supported roofed structures. Although their function is unknown, they did contain several stone box tombs, which had been looted before they could be scientifically evaluated, suggesting some mortuary functions. Based on materials from controlled excavations in Mound 33, archaeologists estimate its construction to A.D. 900–1000 (Troyo and Garnier 2002:102).

The central plaza is a rectangular construction measuring 30 m by 50 m. Its northeastern and southwestern boundaries were 6-m wide raised walls, which possibly served as paths around the perimeter of the plaza. Access to the plaza is through several points around its perimeter. The primary accessways correspond with the points where the site's central axis passes through the

midpoints of the plaza's southeast and northwest sides. Additional entry and exit features are located at the midpoints of the plaza's northeast and southwest walls and at its north corner. Excavations within the plaza produced a wide variety of artifacts and features, including petroglyphs, stone sculptures, stone tools, and fragments of ceramics from the El Bosque-La Selva and La Cabaña phases (Troyo and Garnier 2002:93-94).

To the north side of the central plaza 1 is Mound 28. The mound measures 30 m in diameter and is 3 m high. The primary entrance to this structure is by way of a stone stairway from the northwest corner of central plaza. A smaller stairway links Mound 28 to a pavement surrounding Mound 1 (Fonseca 1980:107). Another circular structure apparently mirrored Mound 28 west of the central plaza. Among the previously undocumented features at Guayabo is a 30-m long arc of stones located on the west end of the central plaza (Figure 10.4). As currently mapped, its size, construction, and position suggest that it is a partially exposed circular structure built as the pair to Mound 28, located on the opposite side of the plaza. Although field evaluation of this feature is required to verify that it is actually a foundation to another structure, all available data support this inference. Based on the size of the arc of stones, the complete structure would be slightly smaller in diameter than its northern counterpart and lower in elevation, as it is not constructed on a mound. Another significant difference between this structure and Mound 28 is that it is not connected architecturally to the plaza.
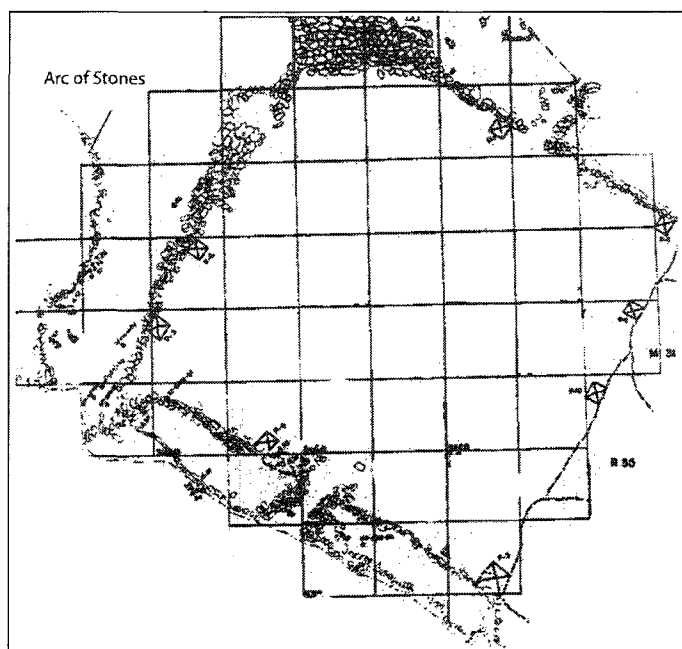
Figure 10. 4 Central Plaza with arc of stones indicated (Modified from Troyo and Garnier 2002:92)

Mound 1 is located along the site's central axis just northwest of the central plaza. At 28 m in diameter and 2.76 m tall it is second largest mound at the site. The circular platform once served as the foundation for a conical structure made of perishable materials, like those suggested for Rivas. In the case of Guayabo, the structure on Mound 1 was placed so that it mirrored the conical form of the Turrialba Volcano, located directly behind Mound 1 when viewed from the causeway (Figure 10.5) (Fonseca 1980; Snarskis 2002). A 10-m wide pavement encircles the base of Mound 1, linking it to several structures and other architectural features (Fonseca 1980:107; Garnier and Troyo 2002:66-7).
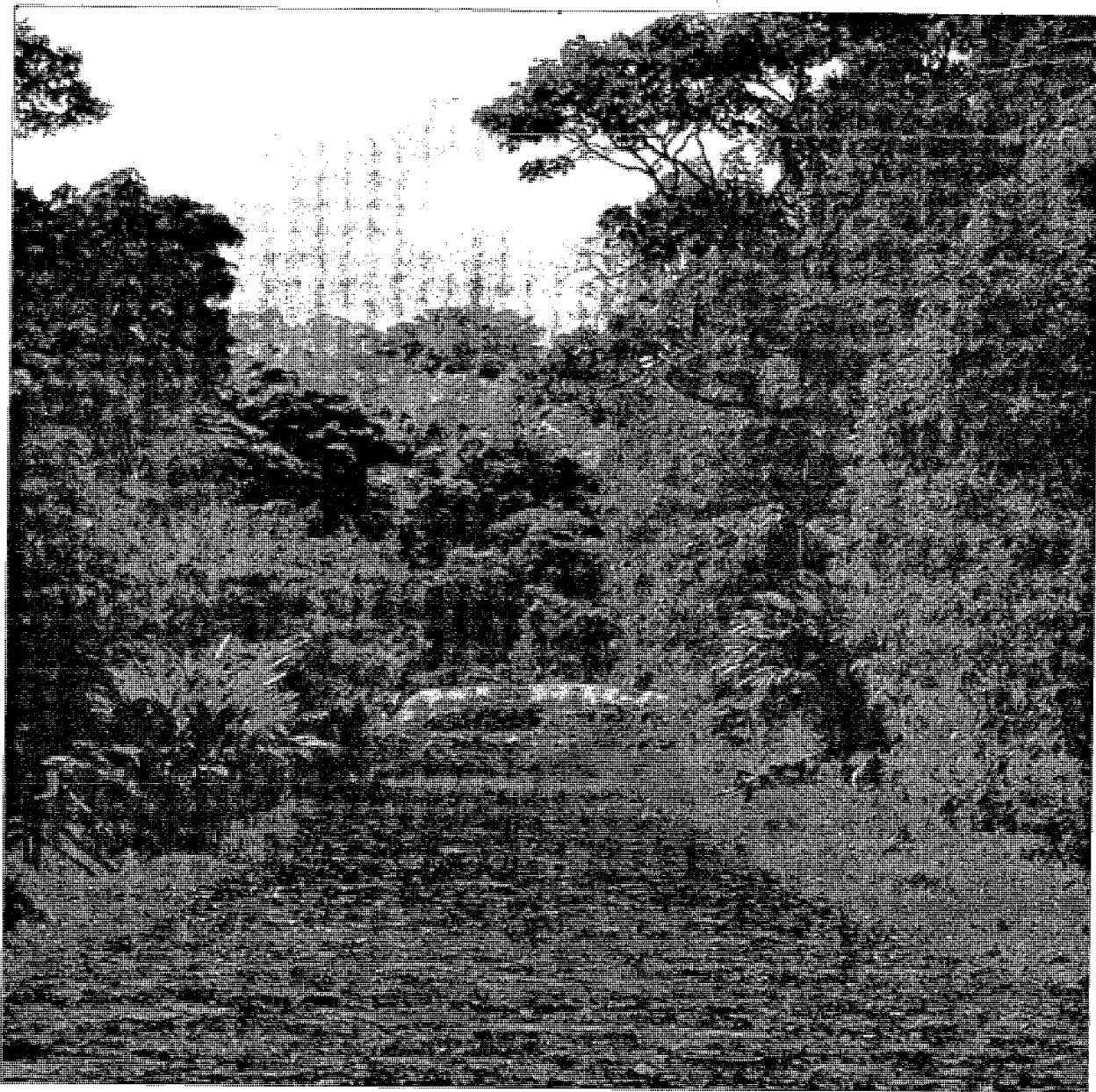
Figure 10. 5 Causeway leading to Mound 1. The Turrialba Volcano is visible in the distance

Mound 1 has two access points, both defined by trapezoidal stone stairways. The smaller entrance corresponds with the central axis of the causeway and faces southeast to the central plaza and the causeway beyond. A larger stairway is oriented towards a smaller oval plaza located on the west side of the structure.

To the northwest side of Mound 1 are numerous other circular structures, which may have served as residences for the site's elite (Snarskis 2002). Elaborate networks of paths, plazas, pools, and aqueducts link these structures into a continuous architectural complex. Like the structures on the southeast side of Mound 1, several of these are paired and arranged in relation to the site's central axis.

Duality at Guayabo

Guayabo exhibits several examples of dually organized architecture at various scales: the paired rectangular mounds at the east end of the causeway, the paired sets of montículos gemelos, the paired mounds along the opposite end of the causeway, the symmetry of the central plaza with its paired northeast and southwest entrances, and Mound 28 and the unnamed ring of stones to its southwest. An additional example of paired architecture is found in the northwest sector of the site pairs of circular mounds are positioned on opposite sides of the axis. With only one exception, paired architectural elements along Guayabo's central axis appear to have been constructed symmetrically. Only Mound 28 and the apparent arc of stones on the opposite side of the central plaza exhibit evidence of asymmetrical construction, as the latter is at a lower elevation than the former.

At Guayabo, expressions of duality were not confined to the architecture along its central axis. The geographical positioning of the site enabled its inhabitants to take advantage of paired features from the natural world. For example, the hydraulic system at Guayabo utilized water diverted from two separate streams bounding the site. Water from the Lajita River fed the northwestern sector of the site while the Quebrada La Chanchera served the central region of the

site (Hurtado de Mendoza 2004:128). The two water sources thus created two independent water supply and disposal systems that served different sectors of the Guayabo site.

These water systems may have also been constructed and utilized in order to enhance the cosmic symbolism constructed within the Guayabo site. Michael Snarskis has suggested that water from the Quebrada La Chanchera was occasionally diverted to fill the oval plaza on the west side of Mound 1. The conical form of the earthen mound and perishable structure, when reflected in the pool below, would have created the illusion of a two 3-dimensional cones meeting at their bases, thus mimicking the biconic upper world/underworld form of the universe, as envisioned by Talamancan people (Michael Snarskis, personal communication. 2004). Reichel-Dolmatoff (1975:210) provides the following description of Kógi temples, which is striking in its similarity to the Mound 1 structure at Guayabo.

> En primer lugar, cada templo Kógi se considera ser una replica del cosmos... Además cada templo se imagina que continua bajo la tierra en forma inversa; dividido por el plan terrestre el templo se concibe como un doble cono, arriba tangible y visible a la luz del día. Abajo intangible e invisible a la luz del "sol negro"que solo las mamas pueden percibir.

> First, each Kogi temple is considered to be a replica of the cosmos... Moreover, each temple is imagined as continuing below the earth in reverse form; divided by the earth the temple plan is designed as a double cone, tangible above and visible in daylight. Intangible below and invisible by the light of the "black sun" that only the mamas can perceive (my translation)

Concepts of duality may also be expressed iconographically in Guayabo's sculptures. One of the many petroglyphs found within the central core of the site bears the images of a stylized feline and lizard, perhaps a crocodile, on opposite sides of a large block of stone (Figure 10.5). The lizard is depicted with a bifurcated tail, and a similar curled dual projection below its mouth, perhaps representing a tongue. These bifurcated appendages further imply duality within the single image. Similar bifurcated tails and occasional paired heads are common elements of

contemporary stonework and goldwork across Greater Chiriquí. As feline and saurian imagery is commonly associated with members of elite groups and are common themes in late pre-Contact gold and stonework, these images juxtapose the stylized images of two powerful creatures, which may have represented opposing forces: underworld/upper world, aquatic/terrestrial, wet/dry, etc. Given the common association of similar images with groups in the Diquís and Atlantic Watershed/Central Valley, these images may also be interpreted as the opposed yet complementary emblems of two social groups (Hurtado de Mendoza 2004:109).
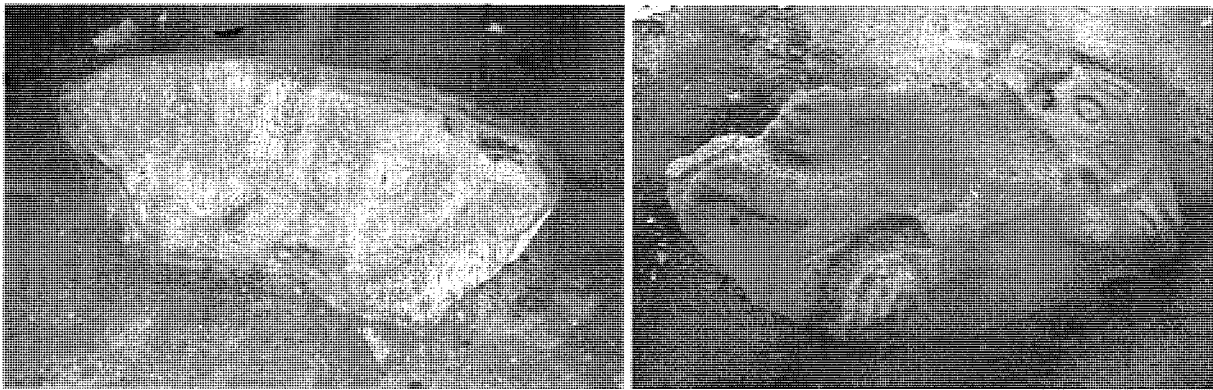
Figure 10. 6 Guayabo Petroglyph with jaguar (left) and lizard (right).

Rivas-Reina/Guayabo Comparisons

Guayabo and Riva-Reina have much in common. They are largely contemporary regional centers that likely ruled over smaller secondary communities. Both have received extensive excavation and have been thoroughly mapped. The two sites also maintain similar architectural features including large circular structures, pavements, drains, paths, and causeways.

There are some significant differences between the two sites. First, Guayabo includes features not present at Rivas including the artificial mounds and the pools and underground

aqueducts. Burial patterns at Guayabo are also significantly different than Rivas. Unlike Chiriquí

graves, burials at Guayabo do not form cemeteries but are located in small groups within the

core of the site and interspersed among residential structures on the surrounding hillsides. This

distribution suggests that the deceased were buried in graves adjacent to their domestic units,

though these patterns have not been thoroughly investigated.

While the sites differ in these details, the revised map of Guayabo allows me to

document remarkably similar patterns of organization along the central axes of the two sites, as

shown on Figure 10.6. Archaeological features on both maps are presented at the same scale but

I have reoriented the architecture so that the plazas and circular architecture are to the right. As

the sites are oriented to different cardinal directions I will refer to relative directions in the

following discussion.
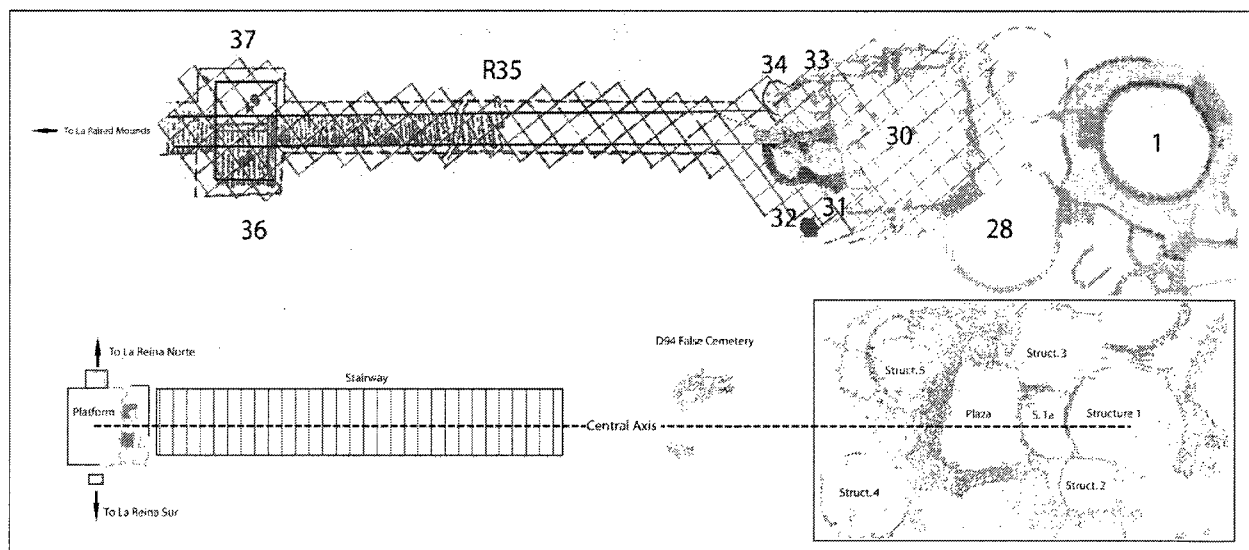
Figure 10. 7 Central axis architecture at Guayabo (top) and Rivas (bottom)

Both sites are built of paired and shared sets of architecture arranged in relation to a central

axis. Both axes are materialized as large stone walkways, a causeway at Guayabo and a stairway

at Rivas. Both axes originate in a single circular structure and end in a complex of paired rectangular architecture. These and other features are arranged around the central axis in the following way.

At the far right of Figure 10.7, the axes originate within a large circular structure located in the approximate center of the site's residential/ceremonial core. The circular structure is among the largest at the site and is set within a contiguous complex of smaller circular structures, walls, pavements, and other features. The primary entrance of the circular structure is aligned with the central axis, and its secondary access point is located approximately 120 degrees clockwise from the primary entrance. The primary entrance leads to a small open court defined by the walls of four architectural features—the central circular structure, a rectangular plaza, and a pair of circular structures, above and below. These paired structures link the plaza and the central structure architecturally and presumably provide an alternative and indirect route from the central structure to the plaza. Access points on these structures coincide with corners of the plaza and with the initial structure.

The plaza is the next feature along the axis. The Guayabo plaza is a rectangular enclosure with an interior space of approximately 730 square meters in area. Walls paralleling the central axis sides may have served as raised walkways around the perimeter of the plaza. Access points, perpendicular to the main axis, are located along the center of the northeast and southwest walls of the plaza. The Rivas plaza is considerably smaller at just 420 square meters. It is slightly trapezoidal with its west end wider than the east. The north and south walls are constructed as causeways, which do not appear to include entrance points to the plaza. The opposite end of the plaza is marked by paired circular structures symmetrical to the central axis. At Guayabo, these are the two figure-eight Montículos Gemelos. At Rivas, they are Structures 4 and 5.

At Rivas, Structures 4 and 5 are followed by the dual grave-like pavements of the false cemetery. Similar features are not present at Guayabo, but as noted above, the Montículos Gemelos contained several stone box tombs. As these features were looted before scientific investigations began, it is not clear if they once contained interments or were empty "false graves" like those at Rivas. Perhaps, like the pavements forming the "false graves" at Rivas, the box tombs at Guayabo held the remains of the deceased for short periods of time prior to burial in a cemeteries at other locations. Thus, both sites may have incorporated graves or grave-like features in similar positions along their central axis.

At both sites, the central axis then continues along a formal stone-paved passage. While the paths at both sites are in similar positions in relation to other architectural features along the centerline, the two paths assume different forms: an 8-m wide causeway at Guayabo and an 18-m wide stairway at Rivas. Another difference between the two walkways is their articulation to the architecture described above. The causeway at Guayabo begins at the edge of the central plaza. At Rivas, the false cemeteries and pavements on Terrace 3 sit between the central plaza and the stairway.

Finally, the stone walkway ends in a paired set of rectangular architectural features opposite the plaza and main circular structure. In both sites, the features at the ends of the causeway follow opposing construction principles—paired, rectangular architecture at one end; singular, circular architecture at the other. At Guayabo, this includes two rectangular structures that are commonly interpreted as an entrance for controlling the flow of people into the site (Aguilar 1972; Fonseca 1979; Snarskis 2002). At Rivas, the architecture is a rectangular platform utilized for mortuary ceremonies. As the paired mounds at Guayabo regulated access to

the site's center, so the paired sunken patios at Rivas may have helped control the movement of bodies to the north and south cemeteries.

Both sites include additional paired features beyond the rectangular constructions, which do not appear on Figure 10.7. At Rivas, the Panteón de la Reina cemeteries are located north and south of the platform, perpendicular to the central axis and mark the endpoint in the route from village to grave. The central axis at Guayabo continues past Mounds 36 and 37 for a distance of one kilometer and meets a pair of mounds. They have not been archaeologically investigated, and their purpose remains unknown. The mounds do correspond with the junction of several paths that meet the primary causeway in this location. In contrast to the patterns at Rivas, these mounds appear to mark the beginning of a formal route into the Guayabo site.

Rivas and Guayabo exhibit some significant differences, which were likely related to the primary function of each. While both sites were probably used for a variety of public performances, celebrations, and daily activities, the interpretations of each site's primary function differ radically. Archaeologists have interpreted the central causeway and associated features at Guayabo as an entrance to the site, ultimately leading to Mound 1 and the architecture positioned behind it. Paired rectangular mounds at the east end of the causeway are interpreted as guardhouses to limit access and control the flow of people into the site. The placement of the conical structure on Mound 1 to mimic the Turrialba volcano was designed to create a sense of awe as visitors entered the village. It would have also emphasized the symbolic nature of the central structure as a reference to the shape of the upper-world of the universe.

The central core of the Rivas site is interpreted as a location dedicated primarily to mortuary activities, and its spatial organization was designed to create a flow of movement along

the central axis from Structure 1, located in the center of the site, up the staircase, and subsequently to the two cemeteries. Along this route are several architectural features dedicated to mortuary activities.

If these interpretations are correct, then architecture at each site, though constructed according to an almost identical plan, was utilized to channel groups of people in different direction during public events. Architecture along the central axis at Guayabo was used to bring people into the site while the central axis at Rivas was designed to move people away from the site and into cemeteries.

Summary

The above discussion of architectural patterns at Rivas-Reina and Guayabo de Turrialba has demonstrated that the two sites were constructed along a central axis that bisects multiple paired and shared sets of architecture. Although the two sites represent only a small sample of the total known pre-Columbian residential-ceremonial sites in Costa Rica, the spatial arrangement of these sites is a strong indication that during the period A.D 900 to 1300 groups on both sides of the Talamanca Range maintained similar social and symbolic views based on the concept of dualism.

The central axis of each site, with their multiple paired and shared architectural elements likely served as a spatial metaphor for the cosmos and society and were constructed physically in order to structure ritual activity. Paired spaces strongly suggest that participants in public events were repeatedly divided into two groups, perhaps along moiety lines, and were later united in processions along causeways or in gathering in the large central plazas.

One of the significant differences between Rivas and Guayabo is the architectural expression of asymmetry along the central axis. The strong disparity in the sizes of multiple paired elements at Rivas strongly suggests that the two moieties may have maintained asymmetric relations. Such patterns were more difficult to define with the architectural patterns at Guayabo. It is not clear at this time if the expressions of duality are representative of the larger archaeological sub-areas in which the two sites are located.

With respect to political organization, it is difficult to make interpretations about societal leadership based on current information from Rivas-Reina and Guayabo. If we accept the dual spatial divisions as evidence for two moieties, then we may assume that the sites were politically organized under diarchic rule, with a high-ranking member of each moiety fulfilling leadership positions. The Bribri-Cabécar leadership model, in which leadership is organized between a secular chief and a high priest, is one way to envision village power relations at Rivas-Reina and Guayabo. However, social and political organization could have operated significantly in the period A.D. 900-1300 than it operates today.

11. SUMMARY AND CONCLUSIONS

The primary objective of this dissertation was to develop a more thorough understanding of Chiriquí period sociopolitical organization through an investigation of the spatial organization of Chiriquí mortuary complexes. Through a review of ethnographic sources from Costa Rica and Colombia, I constructed a model of Chiriquí socio-political organization in which I proposed that Chiriquí societies were dually organized into two hierarchically ranked moieties, and leadership offices were divided between the two moieties.

In order to test the applicability of this model I adopted a direct-historic approach, examining evidence for dual organization in sixteenth-century Spanish documents and the spatial and architectural organization of archaeological sites from the region. As a case study with which to more fully evaluate this hypothesis at the site level, I conducted excavations and mapping at the Panteón de la Reina, a large Chiriquí period mortuary complex in southern Costa Rica, dating to A.D 900-1300. Excavations were designed to understand spatial and material expressions differences between the two halves.

The results of my study demonstrate that there is a strong historical continuity of dual organization in Greater Chiriquí from at least A.D 900 until the recent past. The spatial and material expressions of dual organization change through time but commonly are found in the iconography of pre-Columbian artwork, the built environment of villages and cemeteries, and the natural world around these sites.

Chiriquí Dual Organization

Previous research on moieties has demonstrated that spatial organization of villages is closely tied to a society's system of beliefs (Forth 2001; Knight 1998, Zuidema 198) and that the physical layout of sites is the best way to identify dual organization archaeologically (Burger and Salazar-Burger 1993; Fowles 2003; Lowell 1996). Sites constructed according to concepts of duality often include multiple paired sets of architecture positioned in relation to a central axis. Paired spaces often are linked architecturally by shared public spaces such as plazas or mounds. Such patterns are present at Chiriquí period sites, though patterns change through time.

To date, the most compelling evidence for dual organization during the Chiriquí Period is found in the spatial organization of large mortuary complexes. These sites are divided into two contemporary but spatially discrete interment areas, which ostensibly served the two moieties. Available data indicates that at some of these sites the interment areas may have been constructed asymmetrically, with one higher or larger than its counterpart, suggesting that the two moieties maintained asymmetric social and power relations.

The Rivas-Panteón de la Reina complex, discussed in more detail below, provides a particularly striking example of dual organization. This site is constructed in relation to a central axis, which corresponds with the location of a monumental stairway. Multiple sets of paired architecture are positioned on either side. Spatial patterning from the site further demonstrates that many of these spaces were constructed asymmetrically.

Broadly contemporary sites including Huacal del Angel, Huacal de Bugába, Brisha⁵ Cra, appear to have similar organization, although none have been studied in sufficient detail to make meaningful comparisons. Based on current information, Brisha⁵ Cra, with its central causeway, paired mounds, and possible paired cemeteries, appears to be a potentially good example of a

site organized according to dual principles. Hopefully, future investigations at the site will help to better define its internal organization and characterize differences between its paired features.

The spatial and architectural organization at Rivas-Reina was not confined to Greater Chiriquí but was also shared across the Talamanca Range at the site of Guayabo de Turrialba. Like Rivas, the site is constructed with multiple paired spaces constructed in relation to a central axis.

Changes in Spatial Patterns

Current data suggest that there may have been some significant changes the spatial expressions of dual organization in the organization throughout the Chiriquí period. Rivas, Guayabo de Turrialba and other large ceremonial centers in Greater Chiriquí and the Atlantic Watershed regions are abandoned around A.D. 1300 but duality endures as an organizing principle.

Based on patterns at the late Chiriquí site of Murciélago and contact period sites throughout central and southern Costa Rica, sites constructed after A.D 1300 seem to have been constructed according to different rules of spatial organization. We no longer see evidence of sites organized in reference to a physical axis. Instead, habitation sites are constructed as two spatially discrete residential areas, each composed of multiple residential units. At Murciélago, multiple cemeteries are grouped into two mortuary zones, which likely correspond to social units within the residential site.

Spanish documents from the Contact era don't provide direct evidence of dual social organization but the similarity of some social positions within Contact society and the numerous dually organized settlements throughout Costa Rica imply dual organization. Based on patterns

described in Spanish documents, there appears to have been some regional variation in the internal organization of these sites. Settlements in central Costa Rica and are described as "pueblos juntos" while those in southern Pacific Costa Rica are described as two forts (dos palenques). A third settlement type, on the Caribbean slope near the Costa Rica-Panama border, seems to have consisted of a fort and a village (pueblo y palenque). Unfortunately, we lack archaeological evidence from contact period villages and we know nothing about their burial patterns.

Rivas-Panteón de la Reina

Much of my work concentrated on understand the internal organization and material patterning at the Panteón de la Reina, a large mortuary complex located at the northern end of Greater Chiriquí. The results of my investigations provided several conclusions about the spatial organization of the site that contributed to our knowledge of Chiriquí organization and mortuary practices.

Evidence for dual organization was most clearly visible along a stairway located between the two cemeteries. The centerline serves as an axis, which runs between several paired sets of architecture located at its base and summit. Some of these paired features were constructed asymmetrically, with one half constructed larger than its counterpart. This asymmetry also extends to the geographical placement of the two cemeteries. The north cemetery is positioned higher than the south cemetery and constructed so that it appears larger from the perspective of the village below. If the asymmetric pairing of the two cemeteries is indicative of status and wealth differences between the two burial populations, it does not appear to be reflected in the material evidence from La Reina Norte and La Reina Sur.

My excavations also aimed to understand subdivisions within Chiriquí society through differences in material patterns within subsections of the two cemeteries. Walls and stone pillars were used to demarcate subsections within the two cemeteries. However, artifacts between these sections do not appear to indicate significant differences. Both cemeteries contained nearly identical ceramic assemblages. Thus, based on current evidence it does not appear that there was a significant disparity in access to resources between the two groups represented. However, the Panteón de la Reina has been severely looted and it is not clear if the two groups had similar access to gold, tumbaga, and prestige items made from perishable materials.

I was also able to establish an architectural link between Rivas and the Panteón de la Reina. The centerline of the stairway leading to the Panteón de la Reina corresponds with a central axis, which divides Rivas and the Panteón de la Reina into two halves. Within the Rivas site the axis divides multiple paired sets of architectural features. Unlike the paired features at the Panteón de la Reina, there is little evidence for asymmetry in the Rivas site.

Spatial and material patterns at Rivas and the Panteón de la Reina support Quilter's (2004:183) interpretation that Rivas was an important ceremonial center that specialized in funeral activities for the interment of people on the Panteón de la Reina. These patterns also closely match archaeological expectations for Talamancan funerals as described ethnographically.

Directions for future research

This investigation has implications for future research in Greater Chiriquí and neighboring regions. At Panteón de la Reina, additional excavations on the Stairway and associated platform features are warranted. Due to time constraints and restrictions imposed by

landowners, I was able to only excavate the front (east) half of the Stairway platform, and a portion of the north walled patio. I initially avoided working on the Upper Platform because looting seemed so severe that I assumed that there would be no intact features. Small test excavations on this platform demonstrated that intact architectural features are present and that additional excavations could reveal additional information about the spatial organization of the Stairway and platforms and Chiriquí funeral processes. Future excavations should expand excavations of the platform and north patio to the west to fully investigate their construction and other possible architectural features.

Similarly, I was limited in the amount of architecture I was able to excavate around the perimeter of La Reina Norte and la Reina Sur. In particular, the wall defining the south end of the La Reina Norte cemetery represents only a small percentage of the total architecture identified through surface indications. Additional excavations along this wall could reveal much about how the cemetery was spatially defined and perhaps provide additional information related to mortuary practices.

My investigations were also limited in the number of radiocarbon dates I was able to collect and submit for analysis. Additional radiocarbon dates are necessary for more fully establishing the contemporaneity of La Reina Norte and La Reina Sur and to establish patterns of cemetery growth and development within each half.

There remains a disparity in the number of graves I was able to excavate in La Reina Norte (8) compared to what I was able to excavate in La Reina Sur (1). One of the reason for this may be that La Reina Sur has suffered more severe looting. I hope that future investigations will be able to identify and excavate additional graves in the south cemetery. A larger sample size would

provide a better basis for comparing grave construction and contents between the two cemeteries.

Finally, I was unable to identify clear evidence to determine the nature of the political organization within and between the two moieties. The question of whether they were organized as a diarchy with two chiefs or a civil chief from one moiety and a religious authority from the opposite moiety remains unanswered.

Regionally, several questions await future research and a program of mapping and test excavations at additional Chiriquí cemetery sites could help resolve several critical issues. One set of problems involves the origins of dual organization in the Diquís, and elsewhere in Central America. It is unclear if the origins of dual organization correspond with the Aguas Buenas -- Chiriquí transition or if moieties developed after the start of the Chiriquí period.

In Chapter 5 I identified two spatial patterns for Chiriquí cemeteries: dually organized and multiple-mound. Although we lack the radiocarbon dates necessary to organize them chronologically, several lines of evidence suggest that multiple-mound cemeteries represent the continued use, or perhaps reuse, of Aguas Buenas mound sites during the Chiriquí period and dually organized sites develop later, with the transition from one type to the other occurring around A.D. 900.

As discussed in Chapter 5, it is possible that dualistic beliefs and moiety organization were among the suite of traits that accompanied the transition from Aguas Buenas to Chiriquí but moieties were not salient enough to inform funerary practices and cemetery layout during the first 150 years of the Chiriquí period. Alternatively, the transition from multiple-mound to dually organized cemeteries could signal a radical change in mortuary practices, perhaps precipitated in

part by changes in ideology and social organization that occurred during this 150-year period. The third possibility is that two cemetery types may represent two mortuary patterns that existed contemporaneously within Greater Chiriquí Confirmation of any of these proposals would require significant fieldwork but would also greatly improve our understanding of this region and its political development and operation.

In addition to the Panteón de la Reina, at least eight Chiriquí cemetery sites in Greater Chiriquí exhibit evidence of dual organization but to date, no scientific work has been conducted at them other than identifying their locations. The work at the Panteón de la Reina has demonstrated that even severely looted sites still maintain remnants of graves and architecture and that much can be learned about Chiriquí culture by investigating them. With comparative data now available from the Panteón de la Reina, a project involving even limited inspection, surface collection, and mapping at additional sites would make a significant contribution to understanding the range of variation in the size, organization, and ceramic assemblages of dually organized cemeteries.

At a larger regional level, the spatial patterns at Rivas-Reina and Guayabo de Turrialba are strikingly similar. It is not clear however, how widespread this architectural pattern was throughout Costa Rica and surrounding regions. Broadly contemporary sites including Ta'lari de Pacuar, La Cabaña, and Nuevo Corinto in the Central Highlands/Atlantic Watershed region and Brisha^v Cra in Greater Chiriquí appear to have utilized a very similar architectural plan, although none have been studied in sufficient detail to make meaningful comparisons. Hopefully future investigations at these sites will further our understanding of dual organization and the ritual

activities that occurred along their central axes and associated architectural features. It is clear that the activities that occurred at these sites involved the repeated division and uniting of groups of people along a central axis. The events that comprised these ritual activities are not as clear. All available data from Rivas-Reina demonstrate that the ritual activities along its central axis were oriented toward mortuary activities. The types of activities that occurred at Guayabo and similarly organized sites are not clearly understood but I expect future reach will help clarify how these sites and their internal spaces were utilized.

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334

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APPENDIX A: CHIRIQUÍ PERIOD CEMETERY COMPLEXES

Diquís Sites

Table A 1 Chiriquí Period cemetery complexes in Costa Rica

	Site	Number	Coords.[*]	Elevation	Size	Type/org	Features
1	Brisha^v Cra	P-673-Bc	N^{3}22-23, E^{5}28-29	350 masl	<10 ha	Dual	Stone balls
2	Buenos Aires 13	P-241-Ba13	N^{3}46, E^{5}35	320 masl	NA	Multi-mound	NA
3	Caracol	P-63-Cc	N^{3}40, E^{5}31-32	284 masl	2 ha	Multi-mound	Pillars, ball
4	Cerro las Bolas	NA	N^{3}41, E^{5}20	900 masl	NA	Dual Organization	2 balls
5	Cola de Pato	P-64-CdP	N^{3}35, E^{5}45	275 masl	8.6 ha	Multi-mound	Stone cist tombs
6	Coquito	NA	N^{3}19-20 E^{5}41-42	500-800 masl	NA	Unknown	Not described
7	Curré	P-62-Cé P-191-Cé	N^{3}26, E^{5}45-6	100-200 masl	5.4 ha	Multi-mound	Multiple stone sided mounds
8	El Chiricano (Cajón)	NA	N^{3}60-61, E^{5}09-10	700 masl	NA	Dual	Single mound
9	El Zoncho	Cat-UCR-168	N^{3}07.550 E^{5}57.400	1100-1250 masl	NA	Multiple cemeteries	Four Cemeteries
10	Finca Remolino	P-52-Fr	N^{3}46, E^{5}33	300 masl	2.5 ha	Multi-mound	13 mounds, pillars
11	Huacal del Cacique	NA	N^{3}14-15, E^{5}53-54	820 masl	NA	Multiple interment areas	10 cemeteries
12	Huacal de Jabillo	NA	N^{3}19-21, E^{5}64-65	500-600 masl	NA	Dual	NA
13	Huacal del Angel	NA	N^{3}52-53, E^{5}26	560-570 masl	NA	Dual, mound	Pillars, Large central mound
14	Jalaca	NA	N^{3}13-14 E^{5}34-35	50 masl (approx.)	NA	Not reported	None described
15	La Vaca	NA	N^{2}60-61, E^{5}69-71	300 masl	NA	NA	NA
16	Limón	P-231-Ln	N^{3}27-28 E^{5}49-50	160 masl	12 ha	Not reported	Large central mound
17	Macho Monte	P-58-Mm	N^{3}35-36, E^{5}43-55	125 masl	2 ha	Multi-mound?	Architecture
18	Maíz de los Uvas	NA	N^{3}33-34, E^{5}23-24	360-380 masl	NA	Dual	
19	Mosca	Unreported	N^{3}41-2, E^{5}59-60	1420 masl	NA	2 or 3 sections	No description
20	Murciélago	P-107-Mc	N^{3}29-30, E^{5}47-49	140-170 masl	NA	Dual	Two cemetery zones
21	Pacuar	NA	N^{3}57, E^{5}02	500-520 masl	NA	Dual	Pillars
22	Palmar Sur Finca 4		N^{3}20-21, E^{5}20-21	10 masl	NA	Mound	NA
23	Panteón de la Reina	Sj-109-Rv	N^{3}73-75, E^{5}00-02	900 masl	13 ha	Dual	Mound, walls, pillars
24	Peñas Blancas	Sj-292-Pb	N^{3}59-61, E^{5}03-04	600 masl	1.4 ha	Multi-mound	Multiple cemeteries, Mounds

[*] Costa Rican coordinates listed are according to the Lambert coordinate system (Ocotepeque Datum 1935).

25	Potrero Grande	P-184-Pg	N^{3}29-30, E^{5}56-57	220 masl	1.5 ha	Multi-mound	7 mounds Stone pillars
26	Puerto González Víquez	NA	N^{2}63-64, E^{5}84-85	30 masl	NA	NA	NA
27	Sabanas Esperanza	NA	N^{3}37, E^{5}70	1815 masl	3.ha	Dual	NA
28	San Andrés	NA	N^{3}33-34, E^{5}46-47	150 masl	NA	Multi-mound	NA
30	Ujarraz	NA	N^{3}56-57, E^{5}40-41	600 masl	NA	Indeterminate	Balls

1. Brisha' Cra

Site Number: P-561-Bc
Quad Map: Chánguena, Costa Rica 1:50,000 (IGNCR-1980)
Coordinates: N^{3}22-23, E^{5}28-29
Province: Puntarenas
Location: 1.5 km south of the Río Grande de Térraba and 7 km east of Palmar Sur
Elevation: 340-360m
Size: <10 ha.
Description: Large residential-ceremonial site with central causeway, large mounds, stone balls, and petroglyphs. Funeral sector located at northwest end of site. A possible second funeral sector is located at the southeast end of the site. The site exhibits strong dual organization.
Organization: Dually organized architecture at site core and possibly two funeral sectors, located northwest ad southeast extremes of the site
Sources: Sol 2001

2. Buenos Aires

Site Number: P-241-Ba-13
Quad Map: General, Costa Rica 1:50,000 (IGNCR-1975)
Coordinates: N^{3}46, E^{5}35
Province: Puntarenas:
Location Description: Located 2km east of Finca Remolino and 1km NE of Carlos Obando on opposite side of Quebrada Grande
Elevation: 320m
Size: Not reported
Description: Not described
Organization: Multi-mound
Sources: Haberland 1957, 1961a, 1961b; Stone 1977: 110
Comments: Also known as Huacal Panteón (Buenos Aires): Haberland 1961:34-5, 1959: 9-10. Three burial mounds. 1. 26 graves excavated in 1958-59), 2. 18 graves excavated. 3. No graves excavated (general description provided by Stone for sites of Panteón, Buenos Aires, Carlos Obando, and Papayal): "The graves lay in earthen mounds which were retained by a wall of horizontally laid cobblestones with smaller cobblestones sprinkled over their surface. As a rule, the burials were rectangular and filled with soil, covered by oval slabs under which offerings had been paled. Sometimes vessels had been turned upside down on top of the slab."

3. Caracol

Site Number: P-63-Cc
Quad Map: General, Costa Rica 1:50,000 (IGNCR-1975)
Coordinates: N^{3}40, E^{5}31-32
Province: Puntarenas
Location Description: Located upon the *Loma Cambute* where Ceibo and General Rivers meet (south of Río Ceibo and East of Río General). 6.0 km south of Finca Remolino
Elevation: 284 masl
Size: 2.0 ha

Description: Series of seven rectangular mounds raised 35-70 cm above the ground and faced with straight-sided retaining walls. hundreds of tombs arranged in rows with circular or oval pavement of stones. Stone pillars, stone ball on south end of site. Largest mound appears to be reinforced on its corners by stone slabs set upright.

Haberland 1961: 32 reports two grave types in mound: (1) a simple rectangular grave covered with stone slabs and (2) a more common type that was shallower and more elaborate. The walls of these graves were built with vertical slabs capped with horizontal slabs to form a box.

Organization: multiple mounds

Sources: Haberland 1961a: 32-3 (includes maps: Fig 14, p 48, fig 16 p 50, fig 17, p 50) Haberland 1984: 257, 260, 261; Drolet 1983: 40, 1984: 261; 1992; Stone 1977:109

Comments: Excavated by Haberland in 1958. Only site with pillars and stone balls.

4. Cerro de las Bolas

Site Number: None published

Quad Map: General

Coordinates: N^{3}41, E^{5}20

Province: San José

Location Description:

Elevation: 900 masl

Size: Indeterminate

Description: Two spatially discrete cemeteries on hilltop. Two stone balls.

Organization: Dual

Sources: Survey map on file at Museo Regional del Sur, Region Brunca, San Isidro de El General, PZ, Costa Rica

Comments: Dual organization. Quebrada Las Bolas originates between the two halves. In this way the organization is similar to Murciélago. Residential sector has not been identified but may lie to north of site along the Quebrada Las Bolas.

5. Cola de Pato

Site Number: P-64-CdP

Quad Map: General, Costa Rica 1:50,000 (IGNCR-1975)

Coordinates: N^{3}35, E^{5}45

Province: Puntarenas

Location Description: A prominent rise on the "Sabanas Cola de Pato" to the north of the Río General and east of the Quebrada San Antonio. 1.5km SE of Macho Montes.

Elevation: 275masl

Size: 8.6 ha

Description: Large mound constructions with stone cist tombs. All tombs are disturbed

Organization: multiple mounds

Sources: Drolet 1983:40 1984:261; Haberland 1984

Comments: Associated with a 20 ha low-status cemetery. Also, could this be associated with Macho Monte, just 1.5km to NW.

6. Coquito

Site Number: None

Quad Map: Changuena, Costa Rica 1:50,000 (IGNCR-1980)

Coordinates: N^{3}19-20, E^{5}41-42

Province: Puntarenas

Location Description: The location is disputed. A map in the Museo del Sur shows the site located near the town of Coquito, along the *Fila Cajón* overlooking the Río Coquito, .25km to the southeast. Drolet (1992: 33) describes the site as "located between the Curré and Puerto Nuevo Communities"

Elevation: 500-800 masl

Size: indeterminate

Description: Large mound constructions with stone cist tombs.

Organization: indeterminate

Sources: Drolet1992: 233; Stone 1954, 1977

Comments: Very little information available on this cemetery.

7. Curré

Site Number: P-60-62-Cé/ P-191-Cé
Quad Map: Changuena, Costa Rica 1:50,000 (IGNCR-1980)
Coordinates: N^{3}26, E^{5}45-6
Province: Puntarenas
Location Description: Located along the north bank of the Rio Grande de Terraba 1km east of the town of Curré.
Elevation: 100-200 masl
Size: 5.4 ha
Description: "Large mound constructions with stone cist tombs" Drolet 1983: 261.
Drolet1992:229 reports "Multiple stone-faced, artificial burial mounds" but does not indicate how many mounds were present. Also indicates that the site had "unusual expressions of wealth" including "Special pottery...ceremonial metates, polished stone tools, and a diversity of domestic and luxury items.

This cemetery is likely associated with the Chiriquí period site of Curré (P-62-Cé). This site had a funerary zone, which was "completely looted" to the southwest portion of the site. This smaller cemetery mound measuring 50m x 80m with an extension oriented toward the residential zone (Corrales 1985:4, 12).

Also in the immediate area is another contact-period cemetery (P-191-Cé) located on a terrace above P-62-Cé. This cemetery is reported as looted but according to local looters it had both large quantities of gold and metal objects of European origin such as axes and knives (Corrales 1985:13).

Organization: multiple mounds
Sources: Corrales 1985:12; Drolet 1983:40; Drolet 1992:229; Haberland 1984

8. El Chiricano (El Cajón)

Site Number: None
Quad Map: Repunta, Costa Rica 1:50,000 (IGNCR-1975)
Coordinates: N^{3}60-61, E^{5}09-10
Province: Puntarenas
Location Description: Located 0.5km northeast of the town of Cajón. Quebrada Cajón 1.0km to west, Quebrada Guaro 1km to east.
Elevation: 700 masl
Size: Not measured
Description: Raised oval mound faced with oval cobbles surrounded by larger oval area. Gold-bearing.
Organization: Dual organization.
Sources: Blanco, pers comm.; Pérez Zeledón 1907-8; Stone 1977

9. El Zoncho

Site Number: UCR-168
Quad Map: Cañas Gordas
Coordinates: N^{3}07.550, E^{5}77.400
Province: Puntarenas
Location Description:
Size: Indeterminate
Description: Four cemeteries situated on hills, Designated Zoncho A, B, C, D. Burials arranged in an e/w line and had cobble stones about 30-60cm underground. Ceramics were from the Aguas Buenas phase and scattered on the surface except Zoncho D.
Represents site with early goldwork.
Elevation: 1100-1250 masl
Organization: Four cemeteries
Sources: Gómez Belmonte and Soto Solórzano 3003, Laurencich de Minelli and Minelli 1960a, 1960b, 1961, 1963, 1966, 1972; Stone 1977:119

Comments: Alternately called "El Soncho" especially in the early works of Minelli and Minelli.

10. Finca Remolino
Site Number: P-52-Fr
Quad Map: General, Costa Rica 1:50,000 (IGNCR-1975)
Coordinates: $N^3 46$, $E^5 33$
Province: Puntarenas
Location Description: Located on a prominent rise 0.5km east of the Ceibo River, approximately .25km west of a small unnamed quebrada, and 1.25km northeast of where the Carretera Interamericana crosses the Ceibo River.
Elevation: 300 masl
Size: 2.5ha (26, 250m^2)
Description: 13 pillars raging in size from 1.0 to 4.0m in length found on some of the mounds. Mounds up to 2 meters in height.
Organization: 13 mounds
Sources: Drolet 1983:40, 56, 60; Drolet 1992:233; Haberland 1984
Comments: Located within 2.0 km of Carlos Obando and Buenos Aires-13. Residential area not identified, however, Haberland (1959) identified a residential-mortuary site (Quebrada Grande) 1.25 km to the southwest at the location of where the Interamericana crosses the Ceibo River. It is possible that the two sites are related as a single large complex. One of few sites with map (Drolet 1983: 60)

11. Huacal del Cacique
Site Number: none
Quad Map: Coto Brus, Costa Rica 1:50,000 (IGNCR-1980)
Coordinates: $N^3 14$-15, $E^5 53$-54
Province: Puntarenas
Location Description: 0.5 km southwest of the Quebrada Grande
Elevation: 820 masl
Size: indeterminate
Description: Several interment areas spread out linearly along Fila Anguciana. At least 10 interment areas defined. At center of site are four burial areas around two stone balls.
Organization: Multiple interment areas. Not enough information to determine if they are mounds
Sources: Survey map on file at Museo Regional del Sur, Region Brunca, San Isidro de El General, PZ, Costa Rica
Comments: Not visited

12. Huacal de Jabillo
Site Number: none
Quad Map: Coto Brus, Costa Rica 1:50,000 (IGNCR-1980)
Coordinates: $N^3 19$-21, $E^5 64$-65
Province: Puntarenas
Location Description: Located on a stepped hill 1.5 km west of the Río Coto Brus and 1.75 km east of the Pan-American highway
Elevation: 500-600 masl
Size: Not reported. At least 1600m long
Description: Three sections on stepped hill. Largest interment area is the highest.
Organization: Possible dual organization
Sources: Survey map on file at Museo Regional del Sur, Region Brunca, San Isidro de El General, PZ, Costa Rica
Comments: Constructed like Panteón de la Reina- two cemeteries with an intermediary area. Larger cemetery is 100 meters higher than the lower. Considered one of the largest cemeteries in the southern zone

13. Huacal del Angel
Site Number: None (unreported)
Quad Map: Buenos Aires, Costa Rica 1:50,000 (IGNCR-1975)
Coordinates: $N^3 52$-53, $E^5 26$
Province: Puntarenas

Location Description: Located on *Huacal Alto*, a prominent rise between the Quebrada Maura (2.0km to west) and Quebrada Angel (1.0km to east), both tributaries of the Río Volcán. Approx 2.5 km Northeast of Volcán and 11km NW of Buenos Aires.

Elevation: 560-580 masl

Size: unmeasured

Description: The site is huge but unmeasured. I assume approx the same size as the Panteón de la Reina. The site is still the object of much looting including slash and burn looting. At the center of the site is a large truncated mound 3 meters tall, 14 meters wide, and 80 meters long. A ramp, 8 meters wide, provides access to the mound.

Organization: Dual organization, two burial areas, each located on either side of a central mound

Sources: Survey map on file at Museo Regional del Sur, Region Brunca, San Isidro de El General, PZ, Costa Rica

14. Jalaca

Site Number: None Reported

Quad Map: Chánguena

Coordinates: $N^3$13-14, $E^5$34-35

Province: Puntarenas

Location description: 2 km North of Finca Puntarenas, Jalaca, near Esquinas, southeastern Costa Rica (Stone 1963: 339).

Elevation: 50 masl (approximate)

Size: Not reported

Description: Cemetery type: hilltop

Grave Finds: Metal, bone, shell, pottery, resin, grinding stones.

Grave description: Principal tomb oriented east-west, with the head of the occupant lying at the east. One body per burial with the arms extended alongside the head facing upwards. tombs measured 1-5 meters in depth. Arranged in lines marked by limestone slab at each end. . "Occasionally five to six slabs lay directly over skeleton in four graves the body seems to have been decapitated, leaving no trace of the head." "A single tomb was oriented east to west with the head to the east.

Sources: Laurencich de Minelli 1967; Stone 1963, Stone 1977:66, 121-126

Comments: Jalaca is one of the few gold-bearing cemetery sites in the Diquís to receive any professional attention. Unfortunately. The two publications that mention the site (Stone 1963, 1977) give only minimal information on the physical layout of the site, its physical characteristics or how the site was excavated.

15. La Vaca

Site Number: none

Quad Map: Pavon, Costa Rica 1:50,000 (IGNCR-1970)

Coordinates: $N^2$60-61, $E^5$69-71

Province: Puntarenas

Location Description: Exact locations unknown. Probably located on north side of Rio La Vaca near its confluence with the Quebrada Vuellas, approx. .5km west of town of La Vaca.

Elevation: 300 masl

Size: unknown

Description: unknown

Organization: unknown

Sources: Stone 1977:101, 129

16. Limón

Site Number: P-231-Ln

Quad Map: Coto Brus, Costa Rica 1:50,000 (IGNCR-1980)

Coordinates: $N^3$27-28, $E^5$49-50

Province: Puntarenas

Location Description: Located on a prominent hill on south side of Río Limón, approximately 2km east of the river's confluence with the Rió Grande de Terraba.

Elevation: 160 masl

Size: 12.0 ha

Description: Cemetery with architecture. Thousands of graves with a large central mound.
Organization: Indeterminate based on published descriptions
Sources: Drolet, pers. Comm., Drolet 1992: 229
Comments: Located south of Murciélago, south side of Rio Terraba.

17. Macho Monte
Site Number: P-58-Mm
Quad Map: General, Costa Rica 1:50,000 (IGNCR-1975)
Coordinates: N^{3}35-36, E^{5}43-55 (approximate)
Province: Puntarenas
Location Description: East side of Rio General on high point of land on inside bend of river. 1.5 km NW of Cola de Pato
Elevation: 125 masl
Size: 2.0 ha
Description: Cemetery with architecture. "...large mound constructions with stone cist tombs" Drolet 1983: 261.
Organization: Indeterminate based on published descriptions
Sources: Drolet 1983:40; Haberland 1984

18. Maíz de Los Uvas
Site Number: none
Quad Map: General, Costa Rica 1:50,000 (IGNCR-1975)
Coordinates: N^{3}33-34, E^{5}23-24
Province: Puntarenas
Location Description: Located on a slight rise on the south bank of the Río Maíz between the Plaza and Christian cemetery in the town of Maíz de los Uvas.
Elevation: 360-380 masl
Size: Not reported
Description: Smaller cemetery in two sections
Organization: Dual organization
Sources: Map on file at the Museo del Sur Region Brunca, San Isidro de El General, Costa Rica

19. Mosca
Site Number: None
Quad Map: Cabagra, Costa Rica 1:50,000 (IGNCR-1964)
Coordinates: N^{3}41-2, E^{5}59-60
Province: Puntarenas
Location Description: Located approximately 0.5km west of the Río Mosca and 1.25km NE of the town of Mosca, Costa Rica
Elevation: 1420 masl
Size: Not reported
Description: No additional information
Organization: Subdivided into three sections. Maybe organized like Panteón de la Reina.
Sources: Survey map on file at Museo Regional del Sur, Region Brunca, San Isidro de El General, PZ, Costa Rica

20. Murciélago
Site Number: P-107-Mc
Quad Map: Cabagra, Costa Rica 1:50,000 (IGNCR-1964)
Coordinates: N^{3}29-31, E^{5}47-49
Province: Puntarenas
Location Description: Cemeteries located on low hills west of Rio General and Rio Terraba.
Elevation: 150-200 masl
Size: 30 ha
Description: Two cemetery zones, north and south, each associated with a residential zone. Cemeteries and residential zones divided by Q. Murciélago

Organization: Dual. Two cemetery zones, each with multiple cemeteries.
Sources: Drolet 1986, 1992, 1994; Iwaniec 1986.

21. Pacuar

Site Number: NA
Quad Map: Repunta, Costa Rica 1:50,000 (IGNCR-1975)
Coordinates: $N^3$59-61, $E^5$56-57
Province: San Jose
Location Description: On a hilltop between the River General and Rio Pacuar. At town of Bajos de Pacuar.
Elevation: 500-520 masl
Size: Unknown
Description:
Organization: Appears to be dual—two points marked on National Museum of Costa Rica survey maps but no descriptions.
Sources: Lothrop 1926:444
Comments: Minimal information.

22. Palmar Sur—Finca 4

Site Number: NA
Quad Map: Chánguena, Costa Rica 1:50,000 (IGNCR-1980)
Coordinates: $N^3$20-21, $E^5$20-21
Province: Puntarenas
Location Description: Diquís Delta. 2.5 km southwest of town of Palmar Sur
Elevation: 10masl
Size: Not reported
Description:
Organization: Indeterminate based on description provided.
Sources: Bray 1980: 160; Lothrop 1963: 94

23. Panteón de la Reina

Site Number: Sj-109-Rv
Quad Map: San Isidro, Costa Rica 1:50,000 (IGNCR-19??)
Coordinates: $N^3$74-75, $E^5$00-02
Province: San José
Location: Upper General valley on hilltop .05km NW of confluence of the Río Chirripó Pacífico and the Río Buenavista. Overlooks residential site of Rivas (Sj-148-Rv)
Site Description:
Size: Length=600m, width variable between 20 and 80m
Organization: Dual organization with internal subsections
        Features: Mounds, staircase, pillars, standing walls
        Grave finds: Ceramics. Gold reported by looters
        Grave shapes: two styles: Oval and rectangular.
Sources: Bozzoli de Wille 1966; Drolet 1992: 233; Frost 2002a, b; Lothrop 1926: 444; MacCurdy 1911: 218-219; Pérez Zeledón 1907-8; Pittier 1892; Quilter 2000, Quilter 2004; Quilter and Blanco 1995; Quilter and Frost 2007.

24. Peñas Blancas

Site Number: Sj-292-Pb, and others
Quad Map: Repunta, Costa Rica 1:50,000 (IGNCR-1975)
Coordinates: $N^3$59-61, $E^5$03-04
Province: San Jose
Location Description: On a high hilltop located at confluence of Río General and Río Peñas Blancas, between the modern towns of Repunta and Juntas de Pacuar.
Elevation: 500 masl
Size: various, 236m^2 to 1413 m^2

Description: Lothrop 1926:444: "About ten miles above the place with the Rio Pacuare is cut by the Uvita-General trail, the river divides into two branches. Between the channels, and on a neighboring hill, are said to be many tombs marked by mounds and large stone columns.

Organization: A total of nine cemeteries on hilltop that "contain large funerary mounds covered by river cobbles. The number of mounds ranges from 1 to 6. Cemeteries are located on the edges of high terraces. The area of these cemeteries ranges from approximately 236m^2 to 1413m^2" "Mounds are generally oval in shape and are built 1-2 m above present ground surface. The surface of these mounds are covered by river cobbles, presumably transported from nearby rivers." Rago 1988:54.

Sources: Lothrop 1926: *439*, 444.; Rago 1988

25. Potrero Grande

Site Number: P-184-PG
Quad Map: Cabagra, Costa Rica (IGNCR -1964)
Coordinates: N^{3}31, E^{5}56-57
Province: Puntarenas
Location Description: 250 meters south of the Quebrada Potrero Grande and 1km north of the Quebrada Quijada, both tributaries of the Río Coto Brus, and 2.75 km east of the town of Potrero Grande
Elevation: 220 masl
Size: 1500 m^2
Description: Cemetery with seven mounds each associated with 1 or two pillars. Mounds area walled. Both walls and tombs are built with round rocks. The site is heavily looted but retains its general form (Corrales 1986: 59).
Organization: Not reported
Sources: Corrales 1986: 59, 60 (map)
Survey map on file at Museo Regional del Sur, Region Brunca, San Isidro de El General, PZ, Costa Rica. National Museum
Comments: Habitation site located .5km to south of cemetery

26. Puerto González Víquez

Site Number: none
Quad Map: Laurel, Costa Rica 1:50,000 (IGNCR-1978)
Coordinates: N^{2}63-64, E^{5}84-85
Province: Puntarenas
Location Description: On Costa Rica/Panama border, approximately 1km southeast Laurel, Costa Rica and 7km west-southwest Progreso, Panama. Site coordinates are approximate.
Elevation: 30 masl
Size: no data
Description: no data
Organization: no data
Sources: Haberland 1963: pp; Stone 1977: 129,
Comments: Considered one of richest cemeteries in Diquís. Looted in early 1960s. Several pieces from this cemetery are in Gold Museum, San Jose.

27. Sabanas Esperanza

Site Number: None
Quad Map: Cabagra, Costa Rica 1:50,000 (IGNCR-1964)
Coordinates: N^{3}37, E^{5}70
Province: Puntarenas
Location Description: On Cerro Apo between Río Singri and Río Plantanal
Elevation: 1815 masl
Size: 32,400m^2
Description: no data
Organization: Dual organization, two burial areas
Sources: Survey map on file at Museo Regional del Sur, Region Brunca, San Isidro de El General, PZ, Costa Rica

28. San Andrés
Site Number:
Quad Map: Buenos Aires. Costa Rica 1:50,000 (IGNCR-1975)
Coordinates: N^{3}56-57, E^{5}40-41
Province: Puntarenas
Location Description: East bank of Rio General, approximately 7km north of its confluence with Rio Coto Brus.
Elevation: 150 m
Size: not reported
Description: "Large mound constructions with stone cist tombs" Drolet 1984: 261. The site was discovered by Haberland. Now mostly destroyed by tractor farming. Drolet, personal communication January 2008.
Organization: Multi-mound
Sources: Drolet 1983:261

29. Ujarraz
Site Number:
Quad Map: Buenos Aires. Costa Rica 1:50,000 (IGNCR-1975)
Coordinates: N^{3}56-57, E^{5}40-41
Province: Puntarenas
Location Description: 3.2 Km NE town of Ujarraz at junction of Río Skra and Río Ceibo
Elevation: 600 masl
Size: indeterminate
Description: Stone balls petroglyph. Northernmost known stone balls
Organization:
Sources: Haberland 1961; Stone 1977

Western Panama Sites

Table A 2 Chiriquí Period cemetery complexes in Costa Rica

1	Huacal de Bugaba	NA	8°29'N, 82°37'W	145m	4.86 ha	Dual	Two burial sections, 3 grave types
2	Bugabita	NA	8°31'30"N, 82°38'W	235m	NA	Concentric	Mound, two burial sections
3	Boquete	NA	8°46'N, 82°26W	1050m	NA	Indeterminate	pillars

1. Huacal de Bugaba
Site Number: None
Quad Map: Alanje, Panama 1:50,000
Coordinates: 8°46'N, 82°37'W (approximate)
Province: Chiriquí
Location: Exact location Unknown. Assumed near village of Bugába, south of Concepción, Panama. 900 yards east of unnamed river.
Elevation: 145m
Size: 12 acres (48,562.28m^2)
Description: Two sections of 7 acres (28,327.99m^2) and 5 acres (20,234m^2), divided by a depression measuring between 10 and 18 meters. Larger section is to the north and smaller section to the south.
Organization: Dual organization.
Sources: Bateman 1860; Bollaert 1861, 1863; Merrritt 1861
Comments: Not visited by any archaeologists after 19th century

2. Bugabita
Site Number: None

Quad Map: Alanje, Panama 1:50,000
Coordinates: 8°31'30"N, 82°38'W (approximate)
Province: Chiriquí
Location: Exact location Unknown. Assumed west of village of Bugába, south of Concepción, Panama.
Elevation: 235m
Size: unknown
Description: Two sections plus mound
Organization: possible dual organization
Sources: Bollaert 1863; Otis 1859
Comments: Not visited by any archaeologists after 19th Century. May be same cemetery as Bugaba

3. Boquete
Site Number: None
Quad Map: Boquete, Panama 1:50,000
Coordinates: 8°46N, 82°37'W (approximate)
Province: Chiriquí
Location: Exact location unknown. Described as "
Elevation: 1050m (approximate)
Size: Unknown
Description: "at the foot of the Cordilleras," "on a high hill" Meagher 1861:206
Organization: Unknown
Sources: Bateman 1860, Meagher 1861:206, Merritt 1961:149
*Comments*: Not yet visited

APPENDIX B. RADIOCARBON DATES

Table B 1 Radiocarbon Dates from Rivas and Panteón de la Reina

Field No.	Laboratory Reference	Uncorrected 14C BP	Calibrated Age	Calibration (AD) 1 sigma	Calibration (AD) 2 sigma	Context
Rivas						
A1	Beta-54745	900 ± 80	1160	990-1280	1030-1230	Structure III
A2	Beta-54746	3380 ± 60[1]	1680 BC	1870-50 1780-1520	1740-1610	Structure I
A3	Beta-54747	660 ± 70	1300	1250-1420	1280-1400	Structure II
C1	Beta-146200	1080 ± 40[2]	980	890-1020	910-920 960-1000	Grave 7
C2	Beta-146201	560 ± 40[2]	1410	1300-1430	1320-1340 1390-1420	Grave 6
C3	Beta-54748	710 ± 70	1290	1200-1400	1260-1300	Grave 5
D1	Beta-54742	970 ± 60	1030	980-1200	1010-1160	Structure
D2	Beta-54743	870 ± 80	1180	1010-1290	1040-1260	Structure
D3	Beta-54744	920 ± 110	*	900-1200	1010-1240	Structure
E1	Beta-65944	980 ± 70	1025	910-920 955-1210	1000-1155	
E2	Beta-65943	820 ± 50	1225	1055-1085 1150-1285	1185-1265	Structure
E3	Beta-65947	690 ± 70	1290	1220-1410	1270-1310 1360-1385	Structure
E4	Beta-65946	1250±70	770	655-965	680-875	Structure
E5	Beta-65945	900±110	1160	910-920 955-1295	1015-1255	Structure
J1	Beta-146202	900±70	1160	1000-1270	1030-1220	Hearth
J2	Beta-146203	1690±220[1]	380	170-770 B.C.	90-610	Hearth
J2	Beta-146204	990±110	1020	790-1270	970-1180	Hearth
J3	Beta-103150	1050±60	1170	1015-1265	1035-1220	Hearth
K1	Beta-103149	990±60	1025	970-1195	1000-1055 1090-1150	Grave 4
K2	Beta-103148	5380±70[1]	4240 BC	4350-4015 B.C.	4330-4140 B.C.	Grave 2
Panteón de la Reina						
Sur 1	AA69760	1270 ± 30[2]	710, 750, 780	680-770	670-780	Grave 1
Sur 2	AA69761	900 ± 30[2]	1160	1050-1090 1130-1140 1140-1170	1040-1210	Carbon Level
Stair 1	AA65275	340 ± 40[2]	1520, 1590, 1620	1470-1640	1450-1650	South Fire Pit
Norte 1	AA65276	960 ± 40[2]	1040	1020-1060 1080-1150	1010-1170	Hearth
Norte 2	AA65277	3130 ± 40[1, 2]	1410 B.C.	1440-1390 B.C.	1490-1360 B.C. 1350-1310 B.C.	Grave 7
Norte 3	AA69762	1010 ± 30[2]	1020	1010-1030	980-1040	Grave 7
Norte 4	AA69763	880 ± 30[2]	1170	1160-1210	1040-1100 1120-1220	Grave 8

1. Questionable dates 2. AMS

Figure B. 1 Radiocarbon age ranges for Rivas and Panteón de la Reina
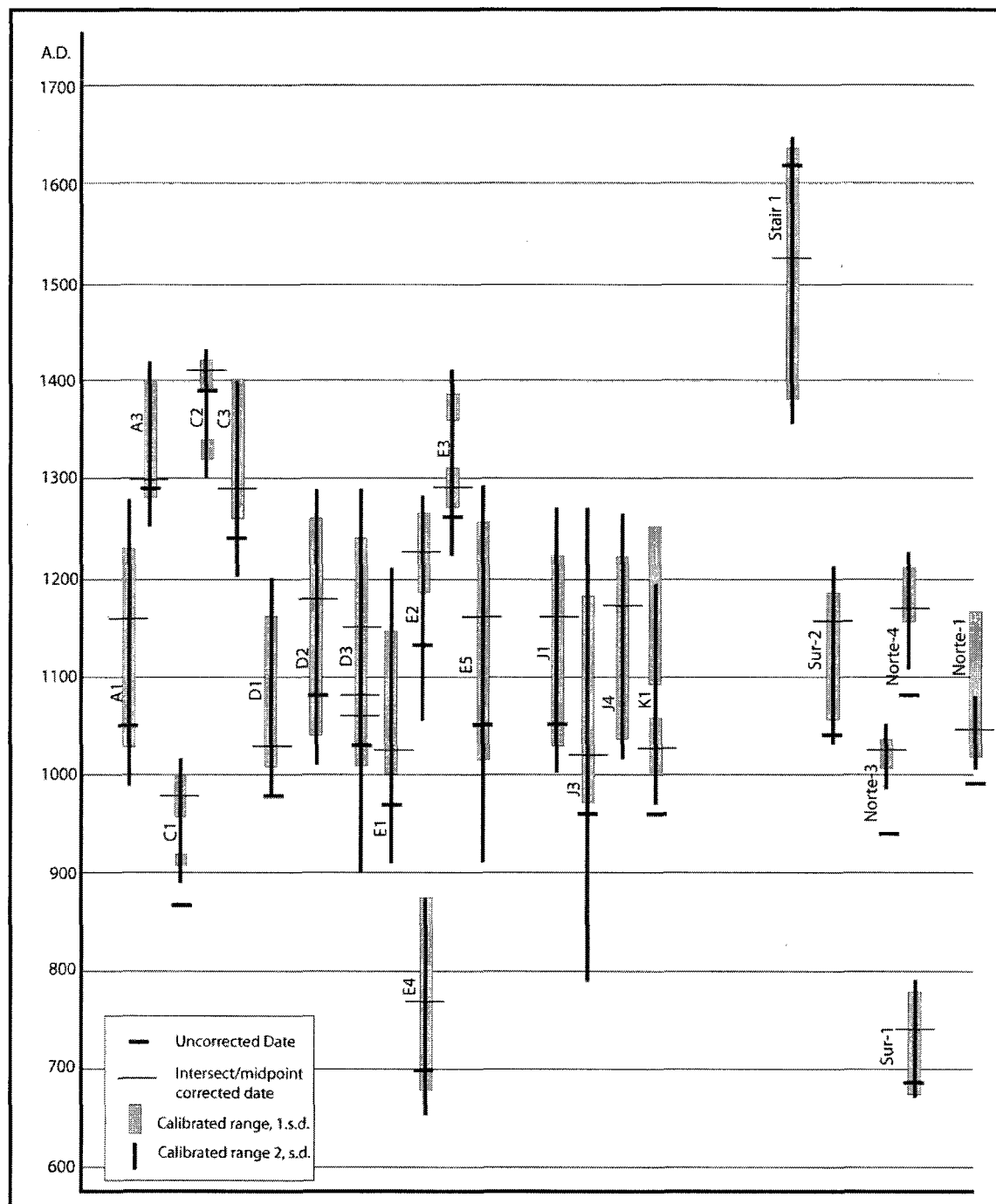
Contact: Frost, J.

AA #	Sample ID	Suite	Material	d13C	F	14C age BP
AA65275	P-3	1 of 3	charcoal	-26.9	0.9592+-0.0044	335+-37
AA65276	P-4	2 of 3	charcoal	-26.5	0.8877+-0.0042	957+-38
AA65277	P-5	3 of 3	charcoal	-24.7	0.6776+-0.0034	3,127+-41

Reported by _____

Contact: Frost, J.

AA #	Sample ID	Suite	Material	d13C	F	14C age BP
AA69760	Panteon Sur # 1	1 of 4	carbon	-25.5	0.8535+-0.0035	1,273+-33
AA69761	Panteon Sur # 2	2 of 4	carbon	-26.5	0.8935+-0.0036	905+-32
AA69762	Panteon Norte # 6	3 of 4	carbon	-26.0	0.8819+-0.0036	1,010+-32
AA69763	Panteon Norte # 7	4 of 4	carbon	-27.8	0.8968+-0.0036	875+-32

Reported by _____

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-25.5:lab. mult=1)

Laboratory number: **AA69760**

Conventional radiocarbon age: **1270±30 BP**

2 Sigma calibrated result: **Cal AD 670 to 780 (Cal BP 1280 to 1160)**
(95% probability)

Intercept data

Intercepts of radiocarbon age
with calibration curve: Cal AD 710 (Cal BP 1240) and
Cal AD 750 (Cal BP 1200) and
Cal AD 760 (Cal BP 1190)

1 Sigma calibrated result: Cal AD 680 to 770 (Cal BP 1270 to 1180)
(68% probability)
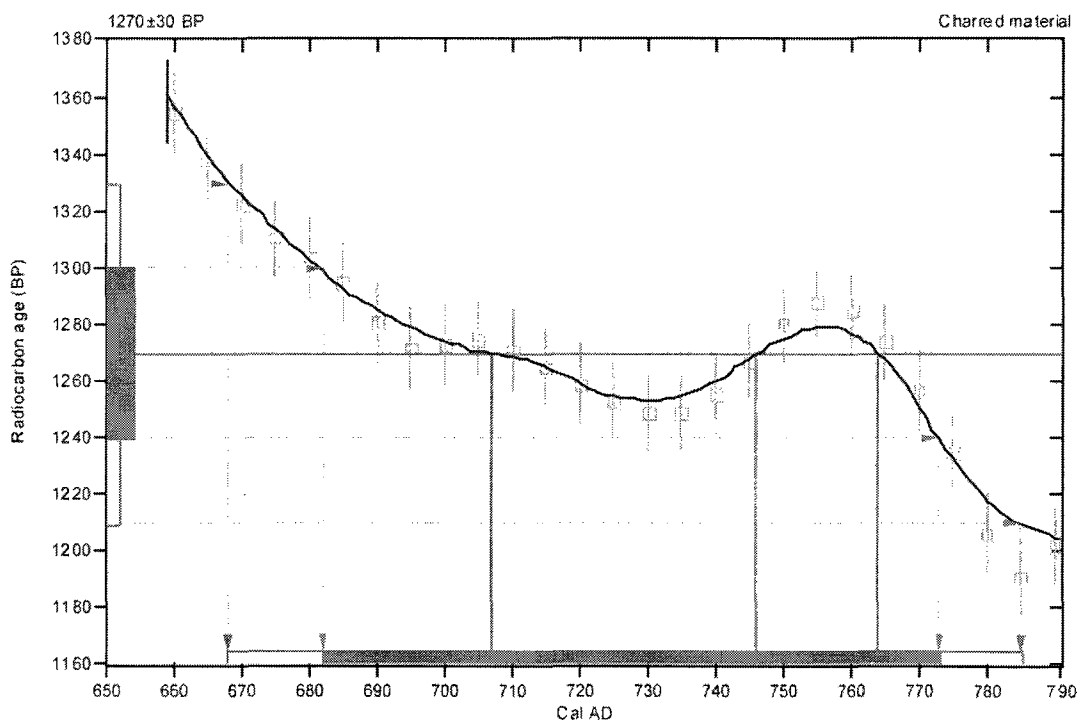
1270±30 BP — Charred material

References:
Database used
INTCAL04
Calibration Database
INTCAL04 Radiocarbon Age Calibration
IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).
Mathematics
A Simplified Approach to Calibrating C14 Dates
Talma. A. S., Vogel, J. C.. 1993. Radiocarbon 35(2), p317-322

Beta Analytic Radiocarbon Dating Laboratory

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

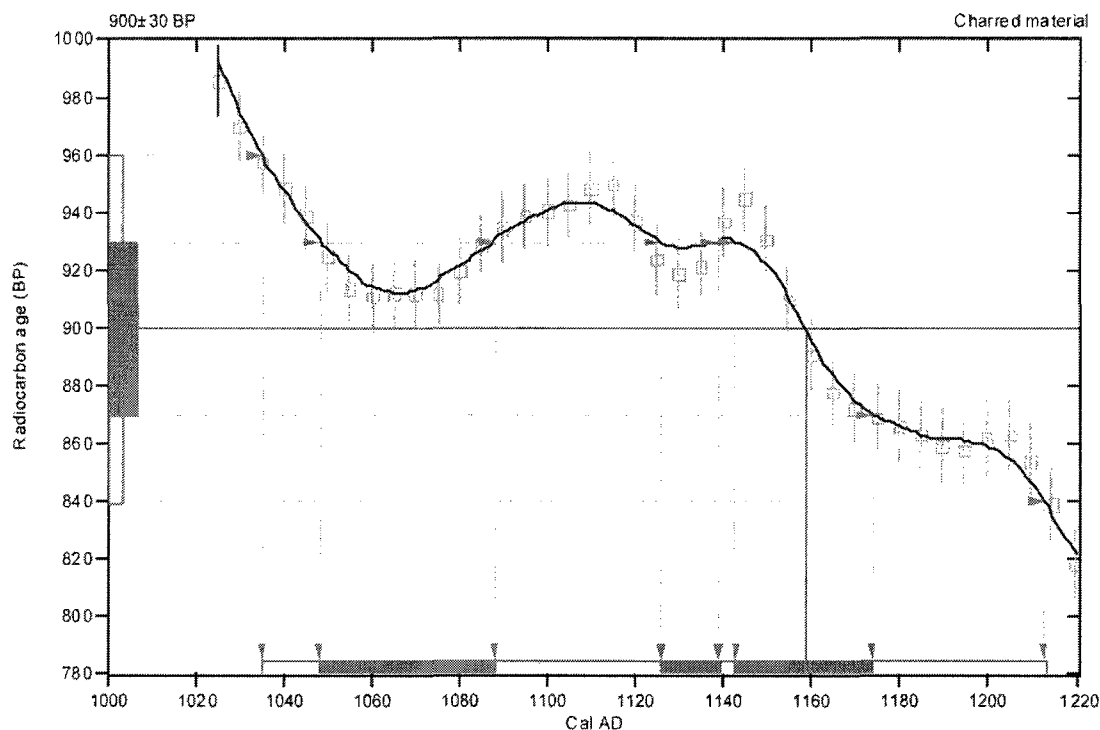(Variables: C13/C12=-26.5:lab. mult=1)

Laboratory number: AA69761

Conventional radiocarbon age: 900±30 BP

2 Sigma calibrated result: Cal AD 1040 to 1210 (Cal BP 920 to 740)
(95% probability)

Intercept data

Intercept of radiocarbon age
with calibration curve: Cal AD 1160 (Cal BP 790)

1 Sigma calibrated results: Cal AD 1050 to 1090 (Cal BP 900 to 860) and
(68% probability) Cal AD 1130 to 1140 (Cal BP 820 to 810) and
Cal AD 1140 to 1170 (Cal BP 810 to 780)

References:
Database used
INTCAL04
Calibration Database
INTCAL04 Radiocarbon Age Calibration
IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).
Mathematics
A Simplified Approach to Calibrating C14 Dates
Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

Beta Analytic Radiocarbon Dating Laboratory

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-26:lab. mult=1)

Laboratory number: AA69762

Conventional radiocarbon age: 1010±30 BP

2 Sigma calibrated result: Cal AD 980 to 1040 (Cal BP 960 to 910)
(95% probability)

Intercept data

Intercept of radiocarbon age
with calibration curve: Cal AD 1020 (Cal BP 930)

1 Sigma calibrated result: Cal AD 1010 to 1030 (Cal BP 940 to 920)
(68% probability)
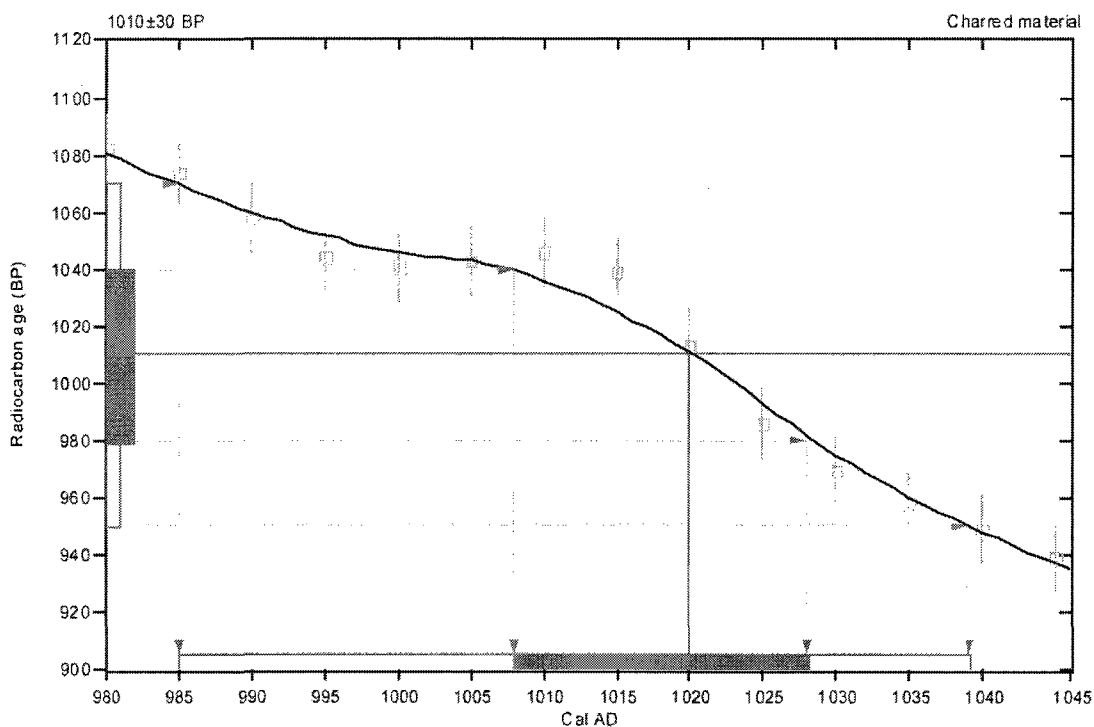
References:
Database used
INTCAL04
Calibration Database
INTCAL04 Radiocarbon Age Calibration
IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).
Mathematics
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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-27.8:lab. mult=1)

Laboratory number: **AA69763**

Conventional radiocarbon age: **880±30 BP**

2 Sigma calibrated results: **Cal AD 1040 to 1100 (Cal BP 910 to 850) and**
(95% probability) **Cal AD 1120 to 1220 (Cal BP 830 to 730)**

Intercept data

Intercept of radiocarbon age
with calibration curve: Cal AD 1170 (Cal BP 780)

1 Sigma calibrated result: Cal AD 1160 to 1210 (Cal BP 800 to 740)
(68% probability)
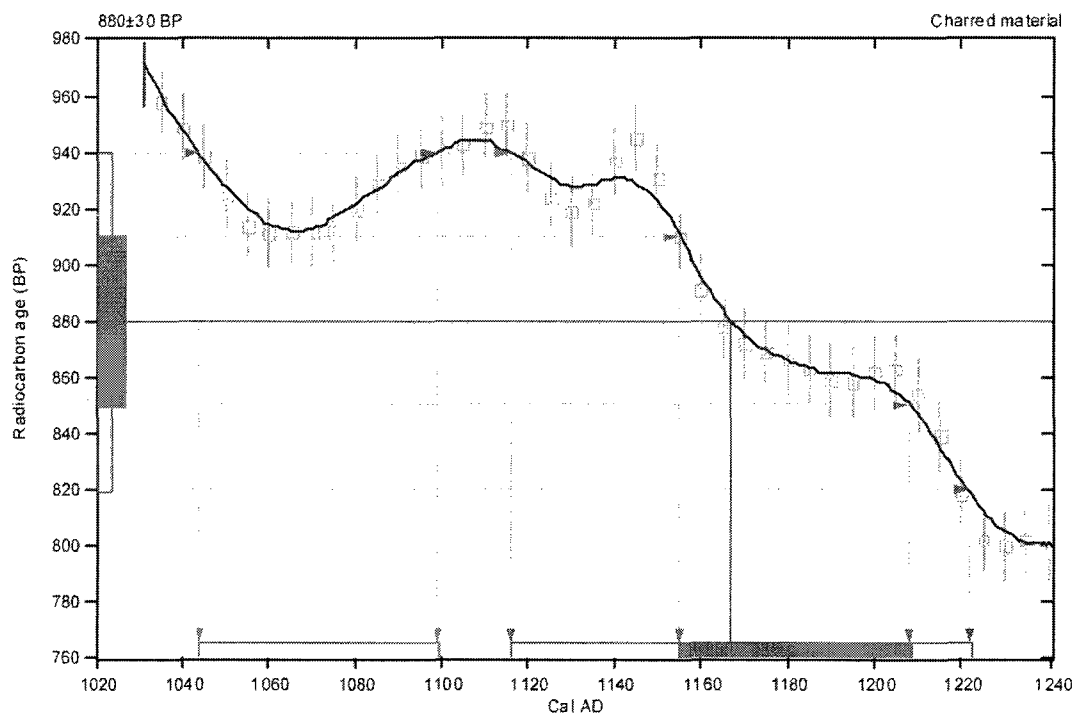
References:
Database used
INTCAL04
Calibration Database
INTCAL04 Radiocarbon Age Calibration
IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).
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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-26.9:lab. mult=1)

Laboratory number: AA65275
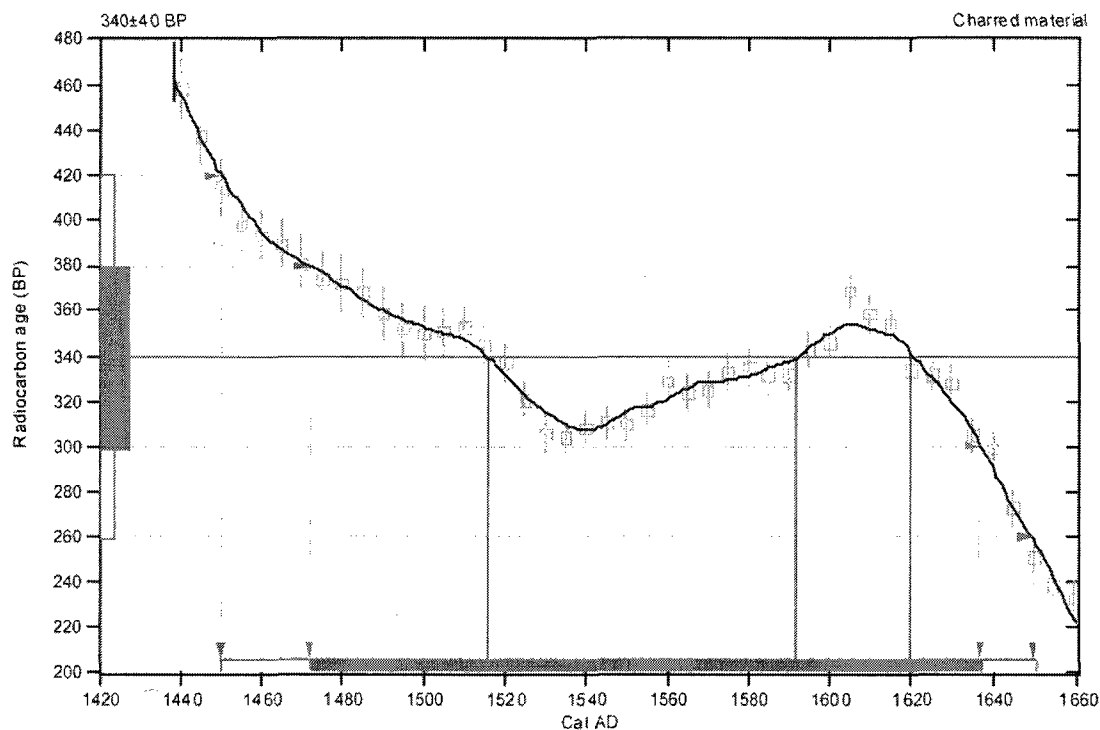
Conventional radiocarbon age: 340±40 BP

2 Sigma calibrated result: Cal AD 1450 to 1650 (Cal BP 500 to 300)
(95% probability)

Intercept data

Intercepts of radiocarbon age
with calibration curve: Cal AD 1520 (Cal BP 430) and
Cal AD 1590 (Cal BP 360) and
Cal AD 1620 (Cal BP 330)

1 Sigma calibrated result: Cal AD 1470 to 1640 (Cal BP 480 to 310)
(68% probability)

340±40 BP
Charred material

References:
Database used
INTCAL04
Calibration Database
INTCAL04 Radiocarbon Age Calibration
IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).
Mathematics
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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-26.5:lab. mult=1)

Laboratory number: AA65276

Conventional radiocarbon age: 960±40 BP

2 Sigma calibrated result: Cal AD 1010 to 1170 (Cal BP 940 to 780)
(95% probability)

Intercept data

Intercept of radiocarbon age
with calibration curve: Cal AD 1040 (Cal BP 920)

1 Sigma calibrated results: Cal AD 1020 to 1060 (Cal BP 930 to 900) and
(68% probability) Cal AD 1080 to 1150 (Cal BP 870 to 800)
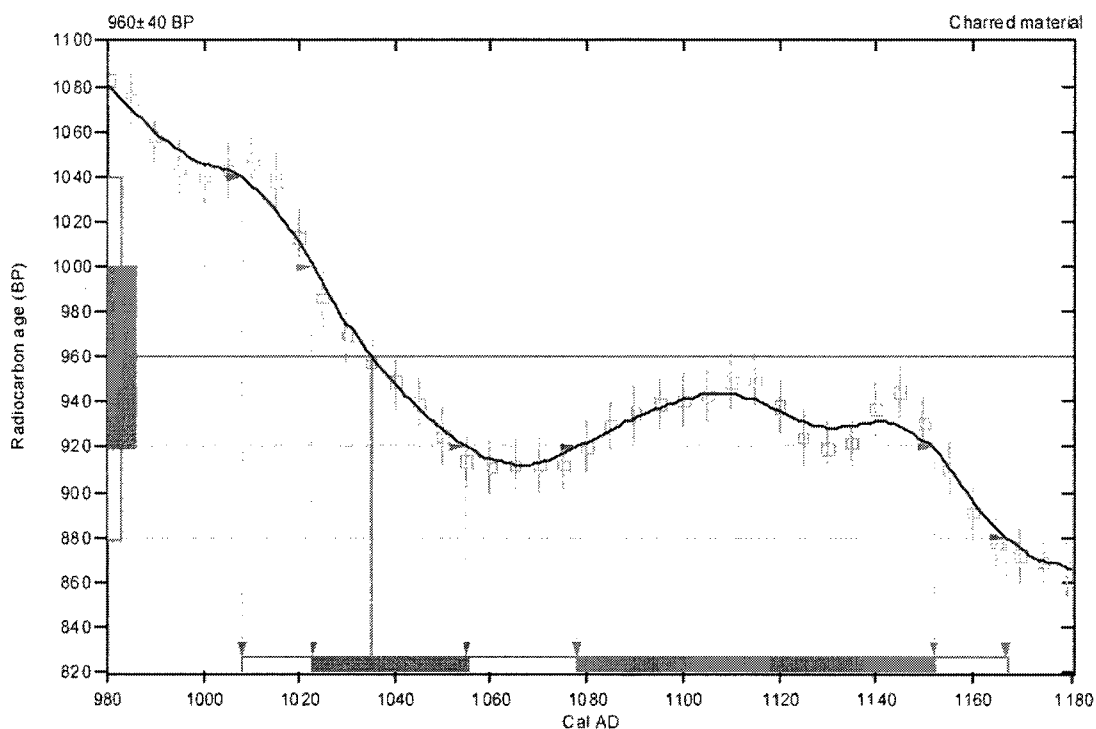
References:
Database used
  INTCAL04
Calibration Database
INTCAL04 Radiocarbon Age Calibration
  IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).
Mathematics
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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-24.7:lab. mult=1)
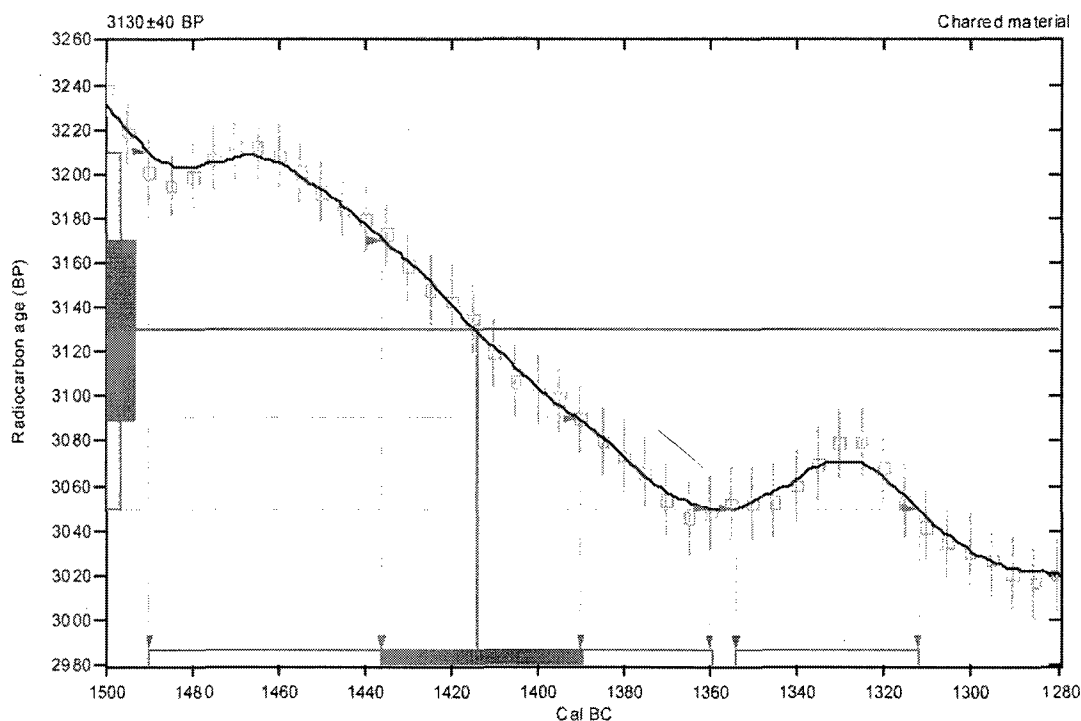
Laboratory number: AA65277

Conventional radiocarbon age: 3130±40 BP

2 Sigma calibrated results: Cal BC 1490 to 1360 (Cal BP 3440 to 3310) and
(95% probability) Cal BC 1350 to 1310 (Cal BP 3300 to 3260)

Intercept data

Intercept of radiocarbon age
with calibration curve: Cal BC 1410 (Cal BP 3360)

1 Sigma calibrated result: Cal BC 1440 to 1390 (Cal BP 3390 to 3340)
(68% probability)

References:

Database used
    INTCAL04
Calibration Database
INTCAL04 Radiocarbon Age Calibration
    IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).
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