Mortuary Practices and Social Organization at Cerro Juan Díaz, Central Panama

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Abstract

This research focuses on the site of Cerro Juan Díaz, located in Central Panama and occupied continuously for over 2000 years from approximately 400 BC to AD 1600. Archaeological investigations uncovered 115 individuals at the site that fall into two temporal periods: the Conte Ceramic Phase (700 – 850 A.D.) and the Macaracas Ceramic Phase (900-1100 A.D.). These cultural phases are of particular importance in Central Panama, as they are distinguished by the first unambiguous evidence for hierarchical social ranking at Sitio Conte. A primary goal of this study is to examine aspects of deathways and paleodemography at the 'commoner' site of Cerro Juan Díaz and outline how they relate to social organization. Furthermore, changing mortuary practices at Cerro Juan Díaz are examined within a regional context, specifically in relation to the higher status sites of Sitio Conte and He-4.

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PREFACE

I want to thank Dr. Mikael Haller, not only for his academic guidance throughout this process, but for introducing me to world of Panamanian archaeology. His wealth of knowledge was fundamental in the development of this thesis. I would also like to my second reader, doctoral candidate, Adam Menzies from the University of Pittsburgh for all of his suggestions and advice throughout the writing process.

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1. INTRODUCTION

The existence of mortuary practices traces back throughout the entirety of human history, from the simplest of disposals, to the execution of elaborate rituals involving a lifetime of preparation. Across the globe, cultures both past and present share a universal commonality involving the practical necessity of dealing with the physical remains of the deceased. The notion of universal commonalities ends with this practical necessity and evolves into an astounding variation of cultural expressions unique to each society. The disposal of the dead is not a cold mechanical process, but a series of cultural customs and rites of passage in which the dead are physically and symbolically separated from the living and transformed into ancestors. Mortuary practices are imbued with symbolism reflecting not only the life of the deceased, but their relation to the living who inters them, and the society in which this symbolism takes meaning. The intricacies of dominant cultural ideologies, political systems, and social organization within a society are manifest within various aspects of funerary rituals and subsequently in the remains often uncovered by archaeologists (Binford 1971; Chapman 1977; Crown and Fish 1996; Goldstein 1980; Hohmann 2001; Mitchell 1994; Mitchell and Brunson-Hadley 2001; Pearson 2005; Saxe 1970; Shennan 1975; Tainter 1975, 1978; Whittlesey and Reid 2001).

Archaeological remnants of mortuary behaviors have provided some of the best means for investigating the obscurities that often surround the structural organization of past societies. In a similar fashion, this study will employ mortuary analysis in order to explore the nature of social organization in the agricultural community of Cerro Juan Díaz, located in Central Panama. The mortuary data utilized in this study dates from A.D. 700 to 1100, and will be compared with mortuary data sets from two formal elite cemeteries in the Central Region of Panama with corresponding dates of operation: Sitio Conte (A.D. 700-950) and He-4 (A.D. 900-1100). Mortuary practices at the three sites are compared in order to foster a greater comprehension of variations in social organization throughout the region.

The potential for mortuary studies to facilitate a greater understanding of the cultural values, belief systems, political structures and social organizations of a society is no better exemplified

than in the investigations of the mortuary data from the necropolis of Sitio Conte in Central Panama (Briggs 1989; Ladd 1957; Lothrop 1937, 1942). Since its discovery in the early twentieth century, the site of Sitio Conte has arguably become one of the most renowned pre-conquest archaeological sites in Panama (Hearne and Sharer 1992). Investigations of the formal cemetery unearthed quantities and qualities of mortuary furnishings that have yet to be matched by any other pre-conquest mortuary context in Panama. The interments and their associated features, dating to the Conte phase (A.D. 700-900) and the first part of the Macaracas phase (A.D. 900-1000), have effectively demonstrated the earliest undisputed evidence of hierarchal social ranking in the region (Briggs 1989; Cooke 2003; Cooke et al. 2004; Haller 2004). The presence of copious amounts of elaborate gold and bone ornamentation hoards of weapons and iconographic animal representations depicting warrior-like traits of fierceness and aggression allowed for much insight into the social and ideological realms during this time period.

The mortuary characteristics at Sitio Conte hold striking parallels to sixteenth century documented Spanish accounts of funerary practices taking place in Central Panama, approximately 600 years after mortuary activity at Sitio Conte took place (Andagoya 1865, 1994; Espinosa 1994; Lothrop 1937, 1942; Oviedo 1853, 1944, 1995). Spanish descriptions depict a society in which warfare was a central component and positions of elevated status were rooted in success and prowess in battle. Funerary rites for the elite chiefs and high ranking warriors at initial contact are described as being large ceremonious and ritual events in which the elevated ranks of the deceased individuals were reiterated through their public transition into death. The numerous archaeological correlations uncovered at Sitio Conte to Spanish accounts have led scholars to hypothesize that the cemetery served as a pan-regional interment facility, functioning as an interment site for elites from across the region (Cooke 2004; Haller 2004).

The only other archaeological site in Central Panama that is comparable to Sitio Conte in terms demographic composition and elaborateness of the mortuary assemblage is the site of He-4. The high status interments at He-4 date to the Macaracas phase (A.D. 900-1100). As elite burials at Sitio Conte diminish, elite interment activity is initiated at He-4. The corresponding chronological sequence of the only two high status burial sites uncovered thus far in the region have led some scholars to purpose that perhaps He-4 replaced Sitio Conte as the elite burial facility in the region (Cooke 2004; Haller 2004).

The difficulty in making assertions concerning the regional integration of the various settlements in pre-conquest Central Panama is that much of the archaeological focus thus far has been concentrated on the elite site of Sitio Conte, and to a lesser degree He-4. While such investigations have been essential to current understandings of ancient social organization and political structure, a greater understanding of the organization of secondary or 'commoner' sites is required. I believe that the in-depth analysis of the social organization of non-central sites currently holds the most potential for providing a greater understanding of the integration and interaction between settlements in the Central Panamanian region (Haller 2007). Therefore, in this research I explore and elucidate the nature of social organization of the secondary site of Cerro Juan Díaz by means of mortuary analysis.

The mortuary data set available from Cerro Juan Díaz entails a representative sample of 115 individuals dating to both the Conte and Macaracas phases, when elite interments were taking place at Sitio Conte and subsequently He-4 (Díaz 1999). This mortuary sample provides an excellent opportunity to explore what was going on at non-central places during a crucial time period often described as the defining moment in the emergence of hierarchal social ranking in the region (Briggs 1989; Cooke 2004; Haller 2004; Lothrop 1937, 1942). The main research questions and subsidiary topics addressed in this paper are:

1. What is the nature of the Cerro Juan Díaz community? Who was interred at the site? Does the mortuary data suggest that the site is similar in nature to others from the Central Region of Panama such as Sitio Conte and He-4, in that the cemetery was highly selective with restricted elite access? Or, as some scholars have suggested (Cooke et al. 1998; Díaz 1999; Haller 2004) does the mortuary data suggest a less restricted, commoner burial ground?
2. How was society at Cerro Juan Díaz organized? Is there evidence of ascribed or achieved social status? In other words, was the settlement at the site egalitarian in nature, where individuals would gain status through personal accomplishments and leadership abilities? Or was the settlement divided into a range of social hierarchies where positions of status are inherited at birth? Analysis of the collected mortuary data and the exploration of the Cerro Juan Díaz grave goods tradition will provide a means of understanding basic levels of societal organization along with the associated implications.

3. How did the mortuary practices, aspects of deathways and paleodemography change over time? The presence of burials and grave goods from both phases allows for the opportunity to explore changes in social organization and cultural ideologies over time.
4. What does an in-depth analysis of mortuary practices at the site of Cerro Juan Díaz reveal in terms of greater patterns of change in social organization in the Central Region of Panama between A.D. 700 and 1100?

In order to make inferences about the social organization of past societies from the mortuary remains, it is important to comprehend why and how such correlations can be made. The following section will provide a review of mortuary studies literature in order to establish the significance of such analysis to archaeological investigations. This will provide a basis to overview the relevant mortuary studies undertaken in the Central Panama region, and subsequently explore the mortuary data from Cerro Juan Díaz.

2. MORTUARY STUDIES

> [The ritual of] burial is a deeply significant act imbued with meaning. It represents one of the most formal and carefully prepared deposits that archaeologists encounter [Pearson 2005:5].

2.1. THEORETICAL FRAMEWORK

The acts, rituals and festivities carried out by the living in prehistoric mortuary contexts represent passing moments in history that can never be recaptured. In both ancient and modern societies, mortuary rituals are carried out over and over again, with meaningful variations from individual to individual. Such rituals within a culture undoubtedly entailed both minor and momentous transformations throughout time. While we may never be able to fully comprehend the intricacies of ancient funerary rituals and ceremonies themselves, it is certain that mortuary rituals and their subsequent material correlations hold inextricable links to the ideological, social and political milieu in which they were carried out. An explicit concept underlying this study is that mortuary assemblages in the archaeological record represent practices that are both culturally significant, and highly patterned, and that such patterns are indeed accessible through statistical analysis (Green 1999; O'Shea 1984).

Statistical analysis is the key to this study in that the mortuary data set entails an extremely complex array of interrelated variables which can conceal the meaningful patterns in the data (Green 1999; Pearson 2005). Statistical methods also provide an avenue for exploring various relationships in the data set, uncovering anomalies, and attaining a greater comprehension of mortuary patterns and their subsequent relation to prehistoric social, political and ideological structures (Green 1999).

The basis from which my theoretical framework extends can be traced to the beginning of archaeological thought with early intuitive assertions concerning the link between social organization and mortuary practices (Bendann 1930; Binford 1962; Hertz 1907; Kroeber 1927; Stickel 1968). Intuitive assertions developed into processualist, comprehensive hypothesis testing (Binford 1971; Chapman 1977; Goldstein 1980; Saxe 1970; Shennan 1975; Tainter 1978) which provided a springboard for mortuary investigations as well as theoretical discussions and debates surrounding mortuary studies that have continued into the present day (Beck 1995; Briggs 1989; Chapman 1981; Hohmann 2001; Pearson 2005; Rakita and Buikstra 2001; Whittlesey and Reid 2001). Below is a review of the literature that has proven critical in arriving at the current diverse understandings of mortuary practices in archaeological contexts and their implications for reconstructing social organization.

2.2. ARCHAEOLOGICAL STUDY OF THE DEAD

The large majority of discussions in mortuary archaeology hold a base in seminal works that emerged during the 1970s era. This time period is characterized by a shift away from the previously dominant culture-history theoretical views concerning the purpose, nature and methods of archaeology, to a more science-oriented take on how archaeology should be carried out. Arguably, some of the most influential works regarding mortuary archaeology emerged during this time period. The research of Arthur A. Saxe (1970) and Lewis R. Binford (1971) were among the first attempts "to construct a coherent theoretical basis for mortuary analysis by essentially extending the normal behavior of a society to the cemetery" (Green 1999:5). Both works are similar in nature in that they quantitatively analyze ethnographic data in order to test various hypotheses regarding the social inferences that can be made from mortuary data sets.

The Saxe-Binford Approach. In his frequently cited dissertation, *Social Dimensions of Mortuary Practices* (1970), Saxe asserts that variations in the mortuary practices of a society essentially reflect the variations present in social dimensions. Drawing from ethnographic data of three cultures (the Kapuku Papuans, the Ashanti, and the Bontoc Igorot), he concluded that differential mortuary treatment within a society can be linked to the various distinctive social positions held by individuals within that particular society. In other words, a position of high

status held by an individual in life will be symbolically represented and manifested in mortuary treatment.

In the justification of this correlation, principles were derived from the sociological realm, particularly from Goodenough's (1965) 'role theory'. According to role theory, the social persona of every individual is comprised of the various roles assumed by that individual in society. These roles maintain meaning within a particular society through social interaction, where they are recognized and subsequently reiterated. Decisions involving mortuary treatment are carried out by the living and based upon their relationships to the deceased. Thus, mortuary practices reflecting the social persona of individuals inherently provide insight into various dimensions of social, political and ideological organization of a particular society.

A significant aspect of mortuary practices acknowledged by Saxe (1970) that has not only withstood time, but has received considerable attention and expansion in terms of its social implications is his Hypothesis 8, which regards the social significance of spatial arrangements of interments.

> To the degree that corporate group rights to use and/or control crucial but restricted resources are attained and/or legitimized by means of lineal descent from the dead (i.e. lineal ties to ancestors), such groups will maintain formal disposal areas for the exclusive disposal of their dead [Saxe 1970:119].

Stimulated by this suggestion, Lynn Goldstein (1980) conducted ethnographic evaluations of thirty globally representative ethnographic sets of mortuary data regarding the spatial distribution of interments. Her investigations provided substantial evidence supporting Saxe's (1970) hypothesis, with slight modification:

> Not all corporate groups that control critical resources through lineal descent will maintain formal, exclusive areas for their dead…but if a formal, bounded disposal area exists and if it is used exclusively for the dead, [then] the society is very likely to have corporate groups organized by lineal descent [Goldstein 1980:8].

Goldstein (1980) asserted the critical importance of intra-cemetery spatial dimensions to mortuary analysis. Concepts involving the mere presence or absence of burials, boundaries, and group burials can be used to make substantial inferences about social organization regarding kinship and group identities. The premise of social organization and mortuary spatial dynamics has provided the basis of many discussions since the publication of Saxe (1970) and Goldstein (1980) (see Morris 1991; Beck 1995; Goldstein 2002).

In similar form to Saxe (1970), Binford expanded theoretical knowledge in the realm of mortuary archaeology with his work entitled *Mortuary Practice: Their Study and Their Potential* (1971). In this work, cross-cultural investigations of forty ethnographic cases were carried out in order to test the hypothesis that "there should be a high degree of isomorphism between (a) the complexity of the status structure in a sociocultural system and (b) the complexity of mortuary ceremonialism as regards differential mortuary treatments of persons occupying different status positions" (Binford 1971:226). In essence, mortuary treatment varies according to status, and the more culturally complex a society, the more complex and varied the mortuary treatments will be. Binford (1971) confirmed his hypothesis by ascertaining distinct patterns in the elaboration of mortuary behaviors in societies with various subsistence strategies. Subsistence strategies were used as a proxy measure for social complexity and as a society transitioned from hunter-gatherer to agricultural, mortuary practices increased in complexity (Rakita and Buikstra 2001).

The correlations derived from Binford's (1971) research are rationalized under an assumption similar to Saxe (1970) in that the more social 'roles', and subsequent greater position of status held by an individual, the greater the amount of corporate involvement and symbolic representation in the mortuary ritual. Evidence from the ethnographic study led him to emphasize the correspondence between material artifact assemblages in mortuary contexts and the status of an individual and organization of society. He asserts that "status was most commonly symbolized by status-specific 'badges' of office and by the quantities of goods contributed to the grave furniture" (Binford 1971:23).

The conclusions arrived by both Saxe (1970) and Binford (1971) not only broke from the culture history framework, but sparked a renewed interest in seeking the social significance of mortuary practices. Since then, their approaches have merged into what is regarded as the "Saxe-Binford approach" (Brown 1995). Many of the fundamental notions set out within this the work of both scholars are widely accepted and continue to provide useful analytical frameworks for the analysis of the relationship between social organization and variations in mortuary treatment (Rakita and Buikstra 2001). In fact there have been many exceptional examples involving archaeological investigations of mortuary data sets that have drawn inspiration from the Saxe-Binford premise (e.g. Crown and Fish 1996; Briggs 1989; Green 1999; Hohmann 1982, 2001; Peebles and Kus 1977; Tainter 1978; Whittlesey and Reid 2001).

The Saxe-Binford Approach: A Case Study. A quintessential case where the Saxe-Binford method is applied to an archaeological mortuary data set in order to ascertain an understanding of prehistoric social organization is the cemetery complex at Moundville, Alabama. The large settlement consists of twenty-six mounds surrounding a central plaza, dating from A.D. 1050 to 1550. Peebles and Kus' (1977) numerical investigation of mortuary remains at the Mississippian site facilitated the identification a society with highly structured social ranking.

The study involved 2,053 graves located within the flat-topped rectangular mounds containing ceremonial funerary goods of weaponry, copper gorgets, marine shell ornaments, intricately carved bone and tooth adornments, and particular motifs such as winged serpents, eyes within hands, raptors and skulls. Analysis of the distribution of funerary furnishings resulted in the identification of eleven funerary clusters, each entailing related grave good patterns. In terms of quantities and types of grave associations, the clusters formed a clear pyramidal shape indicative of a ranked society. The largest clusters entailed burials with no grave associations as well as burials with minimal ceramics. The next group of clusters encompassed individuals with no marked differential grave good associations other than those divided along the lines of age and sex, likely based on achievement. As the complexity of the mortuary ritual increased, the number of graves with such complex mortuary treatment decreased.

A very small proportion (5%) of the mortuary population at Moundville makes up the upper ranks of society (Pearson 2005:90). The higher ranks of chiefs and elites are primarily adult males and interred near the largest mounds. Mortuary treatment of these high status individuals is recognized through association with the richest and most exotic funerary accompaniments (Peebles and Kus 1977). For example, the presence of copper axes was restricted to only the most elaborate cluster of high status graves (encompassing only seven individuals), and general artifacts of copper such as ear spools and gorgets were found only in the top three clusters of high ranking graves (Peebles and Kus 1977). Thus, Peebles and Kus (1977) found that within the Mississippian culture complex of Moundville, the sheer presence of a specific artifact material (i.e. copper) provided a valuable indicator of social rank.

Critiques of the Saxe-Binford Approach. As exemplified by Peebles and Kus (1977), the Saxe-Binford approach has spurred many studies regarding social organization and mortuary

practices; however, the dialectical nature of archaeology soon saw the development of critiques (Braun 1981; Cannon 1989; Hodder 1991; McGuire 1989; Pearson 1982; Tilley 1984). Critiques of the mortuary archaeology as realized under processual-theoretical frameworks emerged along with a wave of critiques directed towards to the overall empirical and quantitative nature of processual theory. Those who emerged with critiques of processual theory were bound simply through the commonality of the critiques themselves, and thus developed into what is now known as the post-processual theoretical framework.

Early post-processual critiques of the Saxe-Binford approach were directed towards their use of cross-cultural ethnographic assessments (Hodder 1984; McGuire 1982; Pearson 1982; Ucko 1969). Such investigations were thought to be detrimental to understanding the intricacies of a past society as they are argued to essentially gloss over variations distinct to each society in the search of all encompassing regularities. In their critiques of the Saxe-Binford approach, post processualists present the importance of cultural and historical context, and emphasize the need to explore variations in symbolism and meaning that are integrated into the mortuary practices of a community.

There exist multiple variations of post-processual critiques that address the potential for mortuary studies to produce accurate representations of past social, political and ideological structures (Hodder 1980, 1991; McGuire 1989; Pearson 1982; Tilley 1984). Proponents of the framework, however, are united in their reservations in acknowledging the ability for mortuary practices to accurately reflect the organization of a past society. They assert that mortuary rituals are not only utilized by the living to display power and social relations, but are also used to negotiate, mask or transform these relations. The notion that "mortuary rites are often an arena in which status and other social distinctions can be negotiated, appropriated, and reappropriated, thus serving as agents of cultural change" (Rakita and Buikstra 2001:7), has been brought to the forefront by post-processual critiques (Pearson 1982; Cannon 1989). Critiques as such do not negate the social significance of mortuary practices, but rather present an added social dimension which must be incorporated into more critical analyses of mortuary practices.

Notions of cross-cultural universalisms have largely been abandoned and are no longer found in processual approaches to mortuary studies, but the correlation between the mortuary practices of a society and the existing political, social and ideological structures within that society, remains. Post processual critiques have brought to light the notion that mortuary

practices are not simply passive manifestations of abstract organizational structures within a society, but such practices provide an opportunity for the manipulation of social relations (Pearson 2005). It is unfortunate, however, that critiques are often plagued by the absence of convincing archaeological case studies (Rakita and Buikstra 2001:7). Thus perspectives rooted in the Saxe-Binford method sill represent the dominant interpretive framework concerning archaeological mortuary studies in American archaeology today (Green 1999; Mitchell and Brunson-Hadley 2001; Rakita and Buikstra 2001).

The early works of Saxe (1970) and Binford (1971) regarding the social significance of mortuary practices continue to structure the research of modern day archaeological scholars (Rakita and Buikstra 2001:9), and this work is no different. The mortuary data set from Cerro Juan Díaz lends itself nicely to statistical analysis as a means of making social inferences primarily because there is currently a supporting base of research concerning various mortuary contexts from coinciding temporal periods in the Central region of Panama, specifically Sitio Conte and He-4. Furthermore, interpretations of meaning regarding the imagery and iconography found within the mortuary contexts relevant to this study are supported by the presence of extensive research on symbolism within the artifact assemblage of the *Gran Coclé* cultural region (Cooke 2004a; Cooke 2004b; Linares 1977).

Accounts of mortuary practices and their relation to social, political and ideological structures at the time of the Spanish Conquest strongly correlate to mortuary remains uncovered at both Sitio Conte and He-4. Albeit a temporal disparity, this correlation has significantly enhanced interpretations of material artifact classes, and their relation to various social groups (Briggs 1989; Bull 1965; Cooke 2004a; Lothrop 1937, 1942). The Spanish accounts also shed light on the nature of elite mortuary practices at the time of the conquest. Mortuary practices were not simply passive reflections of the social structures within society, but were indeed public arenas in which the negotiation of status occurred. Mortuary traditions for the chiefly elite involved elaborate displays of wealth, ceremonial public feasting and ritual, as well as symbolic assertions of power. Such mortuary rites not only served to celebrate the life and accomplishments of the deceased ruler, but to symbolically emphasize and reiterate the supremacy held by the upper chiefly elite of society.

> Attendant upon the dead chief's funeral was the induction of the new chief…There he presided over ceremonies lasting three or more days, during which he received his vassals, laden with gifts of food, and was instructed in his

> lineage's genealogy and past history by means of epic songs. The deeds of former chiefs were thus related, including the alliances and enemies of his father, the dead chief, thereby updating the oral history and setting the future course of relationships with neighboring chiefs [(Redmond 1994:49) Oviedo 1853:155-156].

It is certainly conceivable, and must be considered, that this integration of politicking and social maneuvering within the realm of mortuary traditions was present in varying degrees throughout all ranks of society.

All lines of previously established research in the Central Region of Panama allow for a more holistic and contextualized interpretation of patterns in the mortuary behaviors at Cerro Juan Díaz and their significance in terms of social, political and ideological organization. The following chapter discusses the relevant studies pertaining to mortuary practices and social organization in the Central Region of Panama as such studies are crucial to the ensuing exploration of mortuary variability at Cerro Juan Díaz.

3. ARCHAEOLOGICAL INVESTIGATION IN CENTRAL PANAMA

Until recently, the nature of archaeological investigations in Central Panama can be described as limited, both in the magnitude and scope of explorations. Much of the knowledge regarding ancient Panamanian society stems from archaeological investigations of mortuary contexts. Early archaeological investigations were infused with antiquarian notions and particular focus was placed on aesthetically pleasing material culture primarily found in mortuary contexts. As a consequence, the systematic documentation of artifacts and rigorous collection of data suffered. Lack of methodical approaches and inconsistent recording by both archaeologists and amateurs alike have certainly plagued interpretations of the cultural remains excavated during this early era of archaeology. Adding to the list of obstacles that hinder archaeological interpretation are the ubiquitous looters pits. The looting of ancient artifacts, particularly within grave contexts, has been commonly practiced in Central Panama and extends back to the time of the Spanish conquest (Briggs 1989; Cooke et al. 1998, 2003; Cooke and Sánchez 1997; Haller 2004; Linares and Ranere 1980).

It is within recent decades that archaeological interest in Central Panama has significantly expanded, as have perceptions of the purpose of archaeology. The motives behind archaeological investigation have transitioned from chronology building and mere descriptions of culture, to a desire for an understanding of cultural phenomena. Recent and current explorations in Central Panama seek to understand notions of power, status, production, resource control, symbolism and iconography, demography, and how they interplay between these various cultural elements led to the large, densely populated, and inter-related chiefdoms encountered and documented by the Spanish at the time of first contact in the 16th century (for examples see Cooke 1992, 1998a, 1998c, 2003; Cooke and Bray 1985; Cooke et al 2003a; Cooke and Sanchez 1997; Haller 2004; Helms 1979; Linares 1977; Linares and Ranere 1980).

The lines of evidence aiding in the reconstruction and understanding of the society in ancient Panama, both archaeology and Spanish historical documents, are infused with data drawn from

mortuary contexts. Excavations have uncovered both entire formal cemeteries, as well as individual graves throughout Central Panama, while Spanish records provide detailed descriptions of the chiefly burial practices and associated rituals witnessed at the culmination of approximately 11 000 years of indigenous development. Excavations of human remains and material goods from mortuary contexts in Central Panama, dating throughout the various cultural phases, have been essential to knowledge regarding important transitions in ideologies, subsistence and social organization (Lothrop 1937, 1942; Briggs 1989, 1993; Bull 1961, 1965; Cooke and Sanchez 1997; Díaz 1999; Isaza 2004; Ladd 1964). The focus of this study lies within the confines of the Conte (A.D. 700 – 900) and Macaracas (A.D. 900 – 1100) cultural phases (Figure 3.1). It is during this sequential episode where we observe the first unambiguous evidence for hierarchical social ranking involving highly pronounced expressions of 'elitism' (Briggs 1989; Cooke et al 2000; Haller 2004; Linares 1977; Locascio 2007). These periods represent cultural phases within the larger chronology recognized as the Late Occupation Sequence, spanning from 200 B.C. directly up until Spanish Colonization in A.D. 1522.

The beginning of the Late Occupation Sequence is characterized by the nucleation of once dispersed populations into sedentary agricultural villages, as well as increasing socioeconomic interaction between populations (Haller 2004; Hansell 1988). Trends of sedentism translated into increased investments in mortuary practices that are subsequently visible in the archaeological record. Throughout this chronological sequence, mortuary evidence has defined a general shift towards greater elaborations of mortuary practices as well as increasingly distinct expressions of individual social status throughout the Central Region of Panama (Cooke et al. 2000; Dade 1972; Haller 2004; Linares 1977).

The characteristics of the mortuary practices uncovered at the elite interment facilities of Sitio Conte and He-4, as those of Cerro Juan Díaz, are inextricably linked to and built upon the earlier mortuary traditions. Thus, in order to attain a holistic and contextualized analysis of the mortuary characteristics of Cerro Juan Díaz, a brief overview of the development of mortuary traditions, characteristics and interpretations in terms of social organization within the Central Region of Panama is required.

Multiple chronological sequences defining the prehistory of Central Panama have been fashioned over the years (Cooke 1984, 1995; Cooke and Ranere 1984; Cooke and Sánchez 1997; Cooke, et al. 2000; Hansell 1988; Isaza 1993; Ladd 1964; Lothrop 1937, 1942; Sánchez 1995,

2000; Willey and McGimsey 1954), however, the defined chronology for the Late Occupation sequence used in this study is based on that of Cooke and Sánchez (2000) and modified by Haller (2004). This chronological sequence provides a coherent synthesis of previous chronologies along with the incorporation of more recent results from radiocarbon dating (Haller 2004:32). The chronological sequence was devised primarily using distinctive ceramic seriation as well as historical Spanish documents for the later phases (Cooke and Sánchez 2000; Haller 2004).

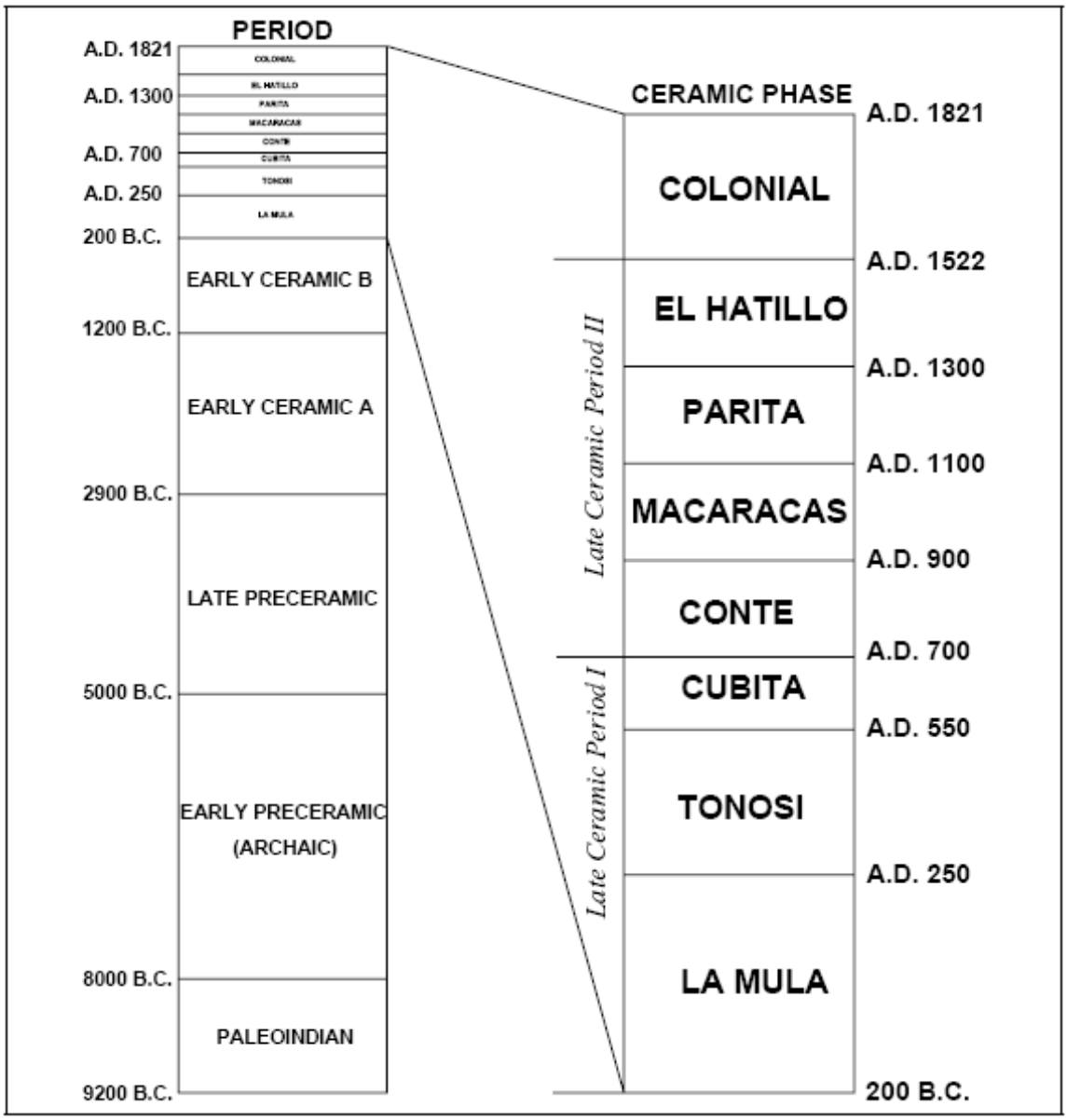


Figure 3.1. Prehistoric Chronology Sequence (Haller 2004:Figure 2.12).

3.1. MORTUARY PRACTICES IN THE CENTRAL REGION OF PANAMA

A detailed chronological summary of burial practices from the Central Region of Panama has been done in Haller (2004) which has substantially added to understandings of regional mortuary traditions. The early part of the Late Occupation Sequence is distinguished by a dramatic increase in population nucleated into sedentary settlements. This settlement pattern coincides with the abundance of innovative technologies uncovered in the archaeological record, particularly in the form of polished stone axes, manos and legless metates (Cooke and Ranere 1992a:277; Hansell 1988:231). The introduction of such tools within a sedentary context strongly suggests shifting subsistence strategies involving increased reliance on agriculture (Cooke 2004; Cooke and Ranere 1992; Haller 2004). The beginning of the Late Occupation Sequence represents the first clear increase in mortuary activity detectable in the archaeological record. Inferences of social organization during the initial cultural phases of this sequence (La Mula, Tonosí and Cubitá) have typically been drawn from the mortuary contexts of La Mula-Sarigua, Sitio Sierra and the first mortuary phase at Cerro Juan Díaz (Cooke 1984, 1988, 2003a; Cooke et al. 2000; Hansell 1988; Isaza 1993). Conclusions based on the data sets from this time period have generated interpretations of the development of social organization during this time frame.

La Mula-Sarigua site that represents a transition from the early to late occupation sequence. During this time settlement is suggested to have served as a regional center during the Mula cultural phase (Cooke and Ranere 1992a; Hansell 1987, 1988; Weiland 1984; Haller 2004). Given the suggested significance of the site, it is unfortunate that only five individual remains have been uncovered and archaeologically investigated (Hansell 1988). The interments included bundle burials potentially associated with minimal shell and ceramic sherds, the flexed remains of an adult with no grave associations and individual and also disarticulated human remains haphazardly disposed in two trash pits (Hansell 1988:213,237).

Although absent from the mortuary remains at La Mula-Sarigua, standardized agricultural tools including both polished stone axes and metates made from non-local material were recovered from the site (Haller 2004; Hansell 1987, 1988). The presence of products

imported from other areas of Central Panama presents the possibility that there existed an exchange network, involving labor specialization and increased socioeconomic interaction throughout the region (Hansell 1988:249). This premise is used in collaboration with the proposal the burials from La Mula-Sarigua represent individuals of a lower social position in a society with emerging variations in social positions (Hansell 1988:238).

Additional mortuary data has added to understandings of mortuary traditions and subsequent interpretations of social organization during La Mula phase. Burial data from Sitio Sierra has led scholars to argue that differences in social status may not have been as pronounced as the data from La Mula-Sarigua suggests (Cooke 1984; Isaza 1993). Excavations beneath a round structure at the riverine site of Sitio Sierra have uncovered a formal cemetery holding 25 individuals (Cooke 1979; Isaza 1993). The burial population represented both males and females of all ages and were interred in a standardized primary flexed position. The mortuary furnishings were not overwhelmingly abundant and generally consisted of utilitarian pottery, polished stone axes, stingray spines, iron pyrite, and shell beads (Cooke 1979; Isaza 1993:82-84). The presence of tools and repair kits in three of the graves has led Cooke (1984:287) to suggest that they represent woodworking and axe manufacturing activities.

The mortuary furnishings at Sitio Sierra are predominantly utilitarian in nature and are distributed among the interred according to age, sex and perhaps occupation, as opposed to social rank (Cooke 1984:287; Isaza 1993:82-84). The mortuary data suggests a society egalitarian in nature where status in society is generally attained through personal merit and achievement and organization and the fundamental notions underlying the organization of society are rooted in kinship as opposed to formally structured social positions (Cooke 1984:287; Cooke and Ranere 1992a:281; Isaza 1993).

Archaeological evidence from the first mortuary phase at Cerro Juan Díaz, dating from La Mula to Cubitá cultural phases, attests to a trend of increasing investment and elaboration in mortuary practices as well as the increasing variability in the forms of these practices. The mortuary context of this early phase at Cerro Juan Díaz consists of various interments cut into the bedrock and stratified under circular arrangement of stone lined features (Cooke et al. 1998, 2000; Díaz 1999). The primary and secondary interments share particular traits with those previously described in the region, however, the circular stone features are unique to the Gran Coclé mortuary assemblage (Cooke et al. 1998:136). Various excavations within the feature have

uncovered graves from La Mula, Tonosí and Cubitá phases located in the center of the circular feature as well as along the peripheries.

Along the peripheries of the circular structure, Feature 16 is among the earliest, consisting of a burial shaft containing at least18 bundled individuals. The interments include individuals of all sexes and ages and are associated with various small shell objects, animal teeth and worked stone (Cooke et al. 1998:141; Cooke et al. 2000:162). The last package thought to be interred in the shaft is composed of an adult and an infant recovered in association with 73 perforated felid canines and two polished stone bars (Cooke et al. 2000:163). The interments of Feature 16 are dated to the latter part of La Mula phase or perhaps during the Tonosí phase (Cooke and Sánchez 1997; Cooke, et al. 2000:164).

In the center, Feature 1 represents the intact remains of a flexed adult as well as the fragmented and dispersed remains of an adult and a child which date to the Tonosí and Cubitá phases. The remains were uncovered in association with various mortuary furnishings including two ceramic incense burners, two hammered gold plaques, approximately 400 tube shaped *Spondylus* beads and 24 perforated felid canine teeth (two jaguar and 22 puma) (Cooke et al. 1998:139; Cooke, et al. 2000:161-163). Cooke, et al. (1998c, 2003a) suggest that the felid canines, gold plaques and abundance of shell beads may have once formed a part of some type of costume good such as a shirt or apron (Cooke 1988c:107-108; Cooke, et al. 2003a:117-118).

Feature 2, also situated in the central area of the greater circular formation, enclosed 13 package burials containing a minimum of 25 individuals. The individuals, primarily adult, date to the Tonosí and Cubitá phases (Cooke et al. 1998:139; Cooke et al 2000:162). Evidence suggests that the individuals within the package burials were treated first in another location before their remains were collected, wrapped, and interred at this location (Cooke et al. 1998:139). The package burials entail lesser quantities of mortuary furnishings than those of Feature 1, and comprise five felid canines, (one puma and four jaguar), a hammered gold plaque with a raised spiral design, 34 *Spondylus* beads and one fragment of worked shell (*Calliostoma*) which would have been imported from the Caribbean coast (Cooke et al. 1998:140). Evidence of four post holes at the bottom of a grave (Feature 1) in the central area indicates that there was once a structure, made of perishable material, covering the grave area (Cooke et al. 1998:138).

The circular arrangement of stone-lined features making up the context for these interments have been described as ovens, and within these various features archaeologists uncovered ashes,

carbonized wood, burnt clay and pots altered by fire (Cooke et al 1998:153). While the exact purpose of the 'ovens' remains unknown, parallels to ethnohistoric accounts of mortuary practices throughout the Central Region of Panama strongly suggests that some form of mortuary ritual involving desiccation was taking place (Cooke at el. 1998:129; Cooke and Sánchez 1997:63).

In A.D. 1519, Espinosa (1994b:63-64) witnessed and documented the elaborate mortuary rituals and events that transpired during the funeral of Chief Parita. The detailed accounts included the ritualistic desiccation of the corpse by means of smoking prior to burial followed by display of the corpse. Lothrop (1937:46) has subsequently associated this mortuary ritual to the main interment of Grave 5 at the elite burial facility at Sitio Conte.

Further evidence linking the mortuary features at Cerro Juan Díaz with desiccation rituals can be found in ethnohistoric accounts written by Friar Adria Uffelder dating between A.D. 1622 and 1637. The Spanish Friar documented mortuary practices carried out for particular individuals among the indigenous *Ngawbe* (Guayamí) of Western Panama who are thought to have ancestral origins in Central Panama (Cooke 2003a; Cooke et al. 1993; Haller 2004; Young 1970, 1971). The mortuary process was carried out in three distinct phases beginning with the desiccation of the corpse by means of smoking, followed by inhumation, and finally by exhumation and display of the preserved corpse (Cooke and Ranere 1992b:226; Cooke et al. 1998:154).

The unique nature of the mortuary features of the first mortuary phase at Cerro Juan Díaz coupled with relatively large quantities of ritualistic mortuary furnishings including goldwork, felid tooth and shell ornamentation, incense burners and polished stone bars, have generated interpretations that the individuals buried below the ovens held positions of particular distinction. Cooke, et al. (2003a:117-118; Cooke 1988c:107-108) have interpreted these individuals as holding positions of ritual importance, possibly a shaman or a healer.

Overall, the transition in mortuary practices from La Mula to Cubitá phases clearly reveals an increasing investment in mortuary rituals. Furthermore, investigations of the above mortuary contexts have exposed an ever-increasing disparity in the display of wealth. There is a positive relationship between the chronology of the early Late Occupation sequence, and the sheer quantity and variation of sumptuary goods (Briggs 1989:62). Social inferences made from these patterns of transition in mortuary ritual have translated to interpretations of emerging status differentiation in the Central Region of Panama (Briggs 1989; Cooke 2003a; Haller 2004;

Hansell 1988) throughout La Mula to Cubitá phases. That being established, the nature of the distribution of mortuary furnishings throughout this time period nevertheless represents a primarily egalitarian level of organization with differential status positions established on the basis of social identities and individual achievements in life (Briggs 1989). Mortuary data from various other sites in the region that date to the Tonosí phase, particularly El Indio and El Cafetal, also substantiate presence of a predominantly egalitarian based society into the Cubitá phase (Briggs 1989:33, 62-63).

It is not until A.D. 700 that there is clear mortuary evidence that supports the existence of a highly developed hierarchy guiding social organization in the Central Region Panama (Briggs 1989; Cooke et al 2000, 2003, 2004; Cooke and Sanchez 2004; Briggs; Haller 2004). Excavations of mortuary contexts at the site of Sitio Conte revealed that elite mortuary activity occurred throughout the Conte phase and into the early part of the Macaracas phase (A.D. 750–950) (Lothrop 1937; Mason 1941, 1942). As mortuary activity ceases at Sitio Conte, high-status interments at He-4 begin and continue until approximately the time of Spanish contact in the sixteenth century (Bull 1968; Dade 1972; Ladd 1964; Sterling and Steward 1949). Critical to interpretations of the mortuary data these elite sites, particularly Sitio Conte, are ethnohistoric Spanish accounts of sociopolitical organization and mortuary ritual at the time of contact in the early sixteenth century. The detailed parallels between the mortuary characteristics uncovered in the archaeological record at Sitio Conte and Spanish descriptions of mortuary practices are extraordinary, and have subsequently led scholars to assert the establishment of social ranking in Central Panama by at least A.D. 700 (Lothrop 1937, 1942; Creamer and Hass 1985; Cooke et al. 2000; Drennan 1996b Haller 2004; Linares 1977).

The clear evidence of hierarchical social ranking at Sitio Conte has generated substantial attention towards the site throughout the field of anthropological research:

> Sitio Conte is frequently cited as the paradigmatic example of a ranked or chiefdom society. As a result, it regularly serves as a marker for matching or comparing the social complexity reached by other peoples living in lower Central America before the Conquest [Briggs 1989:64].

A great deal of emphasis has been placed on the elite interment facilities of Sitio Conte and He-4 and their implications regarding social organization, however, archaeological investigations elsewhere in the region have failed to provide evidence akin to such rigid hierarchal social ranking (Briggs 1989; Cooke et al. 2000, 2003). The extensive mortuary data regarding contemporaneous interments from the second mortuary phase at Cerro Juan Díaz (A.D. 700 to

1100), which is the focus of this research, does not reveal levels of prestigious mortuary furnishings or distribution patterns comparable to those observed at Sitio Conte, and to a lesser extent, He-4 (Bull 1965, 1968; Dade 1972; Ladd 1964; Haller 2004; Mitchell and Acker 1961).

Thus far, the absence of other high-status burial facilities in the region have led scholars to purpose that the necropolis at Sitio Conte could represent the apex of a macro sociopolitical unit that maintained some degree of paramountcy within central region as a whole (Cooke, et al. 2000, 2003a; Haller 2004; Linares 1977). Furthermore, the sequential chronology between the only two identified elite interment sites presents the possibility the He-4 indeed replaced Sitio Conte as the primary macro elite necropolis in central Panama and may have remained so until the Colonial period (Cooke 2000, 2003a; Haller 2004).

While the archaeological record throughout the prehistory of Panama reveals various distinctive and often dissimilar mortuary practices, the persistence of particular cultural mortuary traditions is nevertheless present. The archaeological footprint left behind by the mortuary practices of ancient Panamanians has allowed for insight into the transition from the early egalitarian based villages in which to rigidly ranked societies with the presence of formal social positions. Increasing disparities in the both the distribution and display of wealth in mortuary contexts strongly alludes to emerging social inequalities within an ever transitioning structure of social organization. After approximately eleven thousand years of continuous development, indigenous cultural traditions entrenched in history were cut short by Spanish colonizers. Ironically, however, detailed Spanish accounts of the cultural traditions and sociopolitical organization of the native settlements in Panama during the sixteenth century have proven to be a fundamental resource and have significantly contributed to interpretations and understandings of the material culture uncovered in the archaeological record.

3.2. CHRONICLES OF THE SPANISH CONQUISTADORES

To a large extent, scholarly interpretations regarding the nature of early indigenous societies in Central Panama gain sustenance from detailed observations chronicled by Spanish explorers during early expeditions. Such chronicles describe sixteenth century societies in Panama as characterized by the presence of large sedentary villages, chiefdom level political

organization, inter-village alliances and warfare, extensive regional trade and complex mortuary rituals (Andagoya 1865, 1994; Espinosa 1864, 1994; Oviedo 1853, 1994).

Lothrop's (1937, 1942) and Helms' (1976:40-65) ethnohistoric analysis of select Spanish documents provides insight into the basic hierarchical structure of Panamanian chiefdoms. Panamanian chiefdoms involved a rigid, military based sociopolitical organization with a ruling paramount chief (*quevís*), often described as a war leader, at the apex of the hierarchy. These high rulers, who resided in chiefly centers (*bohíos*), presided over the surrounding smaller dispersed settlements which were under the rule of local-level chiefs (*sacos*). Forming the lowest status grouping in the elite hierarchy was the rank of warriors (*cabras*). There was also a presence of slaves (*pacos*), who were not born into this lowest rank but were individuals from rival chiefdoms who were captured in warfare (Helms 1979:40-65; Linares 1977:76-77; Lothrop 1937:22).

Spanish accounts frequently describe warfare as a salient feature in Panamanian chiefdom society, and one which served as a primary avenue for social and political mobility (Oviedo 1853:130; Espinosa 1864:497). Prowess on the battlefield was a means of social advancement into the upper echelons of society. Military skill and bravery were qualities that were highly admired and warriors who displayed courageousness were rewarded with improved military titles (Andagoya 1865:12; Redmond 1994:48). Furthermore, commoners who demonstrated great dexterity in warfare could achieve the rank of *cabra* (Andagoya 1994:30; Helms 1979:32). The augmented status of distinguished warriors was often recognized by the paramount chief through the bestowment of land, as well as additional wives (Linares 1977:74). Sons of capable warriors were presented the opportunity to inherit the title and position of *cabra*, however, the position was only maintained if they dedicated themselves to, and demonstrated skill in the art of warfare (Briggs 1989; Espinosa 1964; Oviedo 1853; Redmond 1994).

According to Spanish descriptions, the power and prestige held by individuals of high social status within the military hierarchy was subsequently manifest in the level of elaboration and investment in mortuary treatment at death. Mortuary treatment of the chiefly elite in ancient Panamanian chiefdoms was infused with symbolic representations the individuals' power, skill, achievements and inherent sacred value (Helms 1979:73-75). The strong connection between social status of the chiefly elite and mortuary elaboration is apparent in Espinosa's (1994:63-64) eye witness documentation of the funerary rites of Chief Parita—a powerful military leader who

had achieved political control over much of the eastern shores of the Azuero peninsula (Espinosa 1873:23-25; Lothrop 1936:22; Helms 1994).

When Espinosa (1873:23-25) visited the body of Chief Parita, which was suspended in a hammock in the chiefly residence, the desiccated chief was adorned with gold ornaments and wrapped in mantles of cotton. The Spanish conquistadores proceeded to remove the chief's burial shroud to reveal what is described as a corpse bedecked in gold: "from the gold helmet on his head to the greaves covering his legs" (Redmond 1994:48). The full assemblage of this "golden armor" included necklaces, cylindrical arm casings, leg casings, breast and shoulder plates, a helmet, belt, and gold bells (Linares 1977:76). Throughout the Spanish chronicles, prominent warriors are often described as wearing such golden apparel into battle in order to distinguish themselves from the lesser warriors (Cooke 2003a). The bodies of two women, also possessing gold ornamentation, were laid out next to the Chief Parita's body and are described as voluntarily accompanying the chief in death (Espinosa 1873:24). The funerary circumstances of Chief Parita exemplify the tradition of human sacrifice associated with elite mortuary practices within the chiefdoms of central Panama as the funerary rituals of Chief Parita further involved the sacrifice of twenty war captives, including the son of a rival chief (Espinosa 1873:27). Such sacrificed individuals often served as retainers in the interments the elite (Lothrop 1937).

The actual act of burial was often a drawn out ceremonious process involving public rituals that could last for days (Oviedo 1853:156). During the mortuary proceedings, the power and virtues held by the chief were celebrated in mourning ceremonies characterized by song, dancing, feasting and copious amounts of drinking (Oviedo 1853:156). Throughout the pomp and circumstance of the funerary rituals, the deceased elite are described as often being presented among their most valued possessions, often comprised of weapons of war (Andagoya 1945:395).

Spanish ethnohistoric documentation has proven to be pivotal in interpretations of mortuary characteristics uncovered in the archaeological record as the traditions witnessed in the sixteenth century are certainly deeply rooted in the indigenous cultural development of the region.

Interments within the archaeological record of Central Panama, particularly those from Sitio Conte, have shown remarkably detailed parallels to the descriptions found in the Spanish chronicles (Briggs 1989; Cooke 2003a; Cooke et al 2000; Lothrop 1937). Essentially, the similarities are so striking that they have served as support for "projecting the evidence of contact period chiefdoms back in time 1000 years" (Drennan 1995).

3.3. BURIAL GROUNDS FOR THE ELITE

Sitio Conte. After being concealed within the subsurface for approximately 1000 years, the ever shifting course of the Río Grande began to naturally expose ancient cultural material that would significantly restructure scholarly knowledge regarding the history of indigenous cultural development in Central Panama (Briggs 1989, 1993; Cooke 1984a; Cooke, et al. 2000; Hearne and Sharer 1993; Helms 1995, 2000; Ladd 1964; Linares 1977; Lothrop 1937, 1942; Sánchez 2000:131-132).

In 1927, human bone fragments, pottery and gold objects were observed washing ashore along the banks of the Río Grande, thus initiating the "discovery" of the elite necropolis of Sitio Conte (Hearne and Sharer 1992). Sitio Conte was the first site in Panama to receive large-scale funding for modern archaeological excavations (Briggs 1989:64). The archaeological project was initiated between 1930 and 1933 by Harvard University's Peabody Museum, under the direction of Samuel K. Lothrop. Excavations continued in 1935 by the University of Pennsylvania under the direction of J. Alden Mason (Mason 1941, 1942). The lavish burials contained magnificent golden jewelry and objects of personal adornment such as necklaces, pendants and nose rings, elaborately painted polychrome ceramics decorated with symbolic iconography, bone and ivory figurines and effigies, sting ray spines, projectile points, weapons and utilitarian items (Briggs 1989; Lothrop 1937). The mortuary objects were among the most extravagant of cultural materials uncovered in Central America and thus commanded the attention of both scholars and the general public alike (Briggs 1989; Hearne 1992; Linares 1977; Lothrop 1937).

The necropolis dates from A.D. 750 to 950 and is located on the eastern banks of the Río Grand and covers approximately 3 to 4 ha (Briggs 1989:65). There has been no evidence thus far indicating a substantial residential occupation during this time. Moderate residential occupation has been identified for periods when the cemetery was not in use, including A.D. 200-700 and A.D. 950-1100, when the size of the site expands to approximately 8 ha (Linares 1977:34; Ladd 1957). Lothrop's (1934, 1937) excavations at the site unearthed over 100 graves containing at least 201 individuals (Briggs 1989:72). The aging and sexing of the mortuary population uncovered at Sitio Conte revealed distinctive characteristics that set it apart from any other

formal cemetery in the region (Tables 3.1 and 3.2). Leaving aside individuals whose age and sex could not be identified, through osteological analysis established that 98.7% (155) of the individuals were adult. Only two non-adults make up the remaining 1.3%. Another striking characteristic of the burial population at Sitio Conte is that 75% (62) of sexed individuals were ascertained to be male, with only 25% (20) females (Briggs 1989:72).

Table 3.1. Age frequencies and proportions at Sitio Conte (based on Briggs 1989:72).

Age	Adult	Non-Adult	Total
frequencies	155	2	157
proportions	98.7%	1.3%	100.0%

Table 3.2. Sex frequencies and proportions at Sitio Conte (based on Briggs 1989:72).

Sex	Male	Female	Total
frequencies	62	20	100
proportions	75.0%	25.0.%	100.0%

The nature of the interments at the site is not characterized by individual burials, but mass interments in which 60% of the individuals were uncovered from only 18 graves (Briggs 1993:156). The number of individuals in each grave ranges from four up to 24, and very often, the high-status primary occupant can be clearly identified by his seated position in the center of the interment (Briggs 1989; Cooke 2003a; Lothrop 1937). Many of the secondary individuals in the graves were uncovered in extended ventral positions (Lothrop 1937; Briggs 1989). The nature and positioning of the individuals within the burials at Sitio Conte led Lothrop (1937:22) to draw analogy to sixteenth century Spanish descriptions of burial practices that they had witnessed among the chiefly elite in central Panama. Mortuary practices in chiefly burials included both the sacrifice and burial of both war captives as well as the chief's wives as accompaniments in death (Andagoya 1945:394; Espinosa 1994b:63-64; Oviedo 1853:142). Although Lothrop's early assertion has come to be an accepted interpretation by modern scholars, Cooke (2001) has alternatively suggested the possibility that the additional corpses are those of embalmed ancestors which were historically documented to have been stored in special funerary houses.

Parallels in the mortuary characteristics at Sitio Conte go well beyond the presence of individual sacrificial offerings. There are indeed striking similarities between the ethnohistoric descriptions of funerary practices, particularly those regarding the funerary costume and accompaniments of Chief Parita in A.D. 1519, and the mortuary goods recovered from the graves at Sitio Conte (Briggs 1989; Cooke 2003a; Cooke et al. 2000: Lothrop 1937; Mason 1942). For example, among the most elaborate and richest graves at Sitio Conte is Grave 26 (Lothrop 1937:269-277; Briggs 1989:82). Grave 26 is the largest grave in terms of area, numbers of individuals and funeral furnishings. On top of several layers of stone slabs and broken ceramics, the corpses of 21 individuals were laid out in extended ventral positions to form the base on which one elite adult male was seated. The mortuary costume associated to this male included gold cuffs and greaves, gold embossed plaques, gold beads, bells and bone pendants. These gold objects which would have bedecked the body of the deceased bear remarkable resemblance to Chief Parita's funerary costume, as described in A.D. 1519 by the Spanish conquistadores who so boldly unwrapped him (Espinosa 1994b:63-64; Lothrop 1937:46). In addition, the elite primary male in Grave 5 (Briggs 1989:81-82; Lothrop 1937:227-237) was adorned in a comparable fashion. Also uncovered in addition to the golden greaves, cuffs and plaques, was a gold helmet similar in detail to the helmet adorning the great Chief Parita (Espinosa 1994b:63-64; Lothrop 1937:46). In life, just as in death, gold breastplates, greaves and helmets served as markers of status and were worn into battle by chiefs and elite warriors as a means of identifying their position of power to both their own troops as well as to the enemy (Cooke and Sánchez 2004; Cooke 2003a; Oviedo 1853).

Similar to the ostentatious displays of social status through means of gold and bone jewelry and various adornments, Spanish ethnohistoric documents recount that slaves who were captured in war would have their incisors knocked out as a means of distinguishing their social position in society (Andagoya 1994:28-35). In a potential parallel at Sitio Conte, an elite individual of Grave 38 was uncovered with clusters of at least 53 perforated human teeth thought to have once formed a necklace which would have been worn as a grandiose display of prowess and victory in warfare (Lothrop1937:288; Redmond 1994:113).

Spanish descriptions placed great emphasis on the prominence of warfare throughout the Central Region of Panama and this feature was indeed represented within the mortuary assemblages at Sitio Conte. Many of the individuals at Sitio Conte were interred with hoards of

weaponry including bone spear throwers, chipped stone blades, points and knives (Briggs 1989; Cooke, et al. 2000; Linares 1977). Bundles of stingray spines have been uncovered in abundance throughout the elite mortuary assemblages at Sitio Conte (Briggs 1989:78-84). The Spanish conquistadores recorded the use of sting ray spines for spearheads and were described as a means of inflicting festering wounds in their victims (Lothrop 1937:20; Oviedo 1853:129). Shark teeth, also found in great quantities throughout all of the high-status burials at Sitio Conte, were ethnohistorically documented to have been often used in battle by warriors of status as they were fastened to wooden clubs and lances (Espinosa 1864:516-517).

Spanish ethnohistoric accounts depict a society in which warfare was not only rampant, but was essentially the realm from which the social and political structure of society was manifest. Because prowess in battle served as an avenue for social advancement in ethnohistorically documented Panamanian society, the attributes that pertain to such success such as fierceness, aggression, bravery and power, have been argued to be symbolically represented among the arts at Sitio Conte (Andagoya 1994; Cooke 2003a, 2003b; Cooke et al. 2000; Helms 1979; Linares 1977). The iconographic motifs most prominent within the Sitio Conte mortuary assemblage very often involve powerful predatory animals such as crocodiles, hammerhead sharks, stingrays and scorpions which entail the (Briggs 1989; Cooke 2003a; Linares 1977). While the bones of these specific animals are very rarely present in middens, it is suggested they were highly epitomized in the iconography of the mortuary assemblage at Sitio Conte (often in humanized forms) particularly because they hold qualities that would have been most esteemed and valued within a war faring society (Cooke 2003a; Cooke et al. 2000; Linares 1977).

The similarities between the ethnographic documents and the mortuary assemblage from guided Lothrop's (1937) inferences in regards the structure of social organization among the population at Sitio Conte. Lothrop (1937) intuitively discerned that the richest graves indicated the presence of high ranking paramount chiefs (*sacos* or *quevís*), while the less opulent graves belonged to sub-chiefs (*cabras*) (Cooke et al. 2003:120). Also recognized, was the pattern of gold ornaments relating to battle regalia and their frequent association with the richest and largest of graves (Lothrop 1937:60). These perceptions, in correlation with similarities to ethnohistoric documents, led Lothrop (1937:115) to suggest that specific mortuary furnishings at Sitio Conte, specifically metal helmets, greaves and plaques, were indicative of high social rank (Cooke et al 2003:120; Haller 2004:2). In fact, the similarities between Sitio Conte mortuary

furnishings and those described by the Spanish soldiers in the sixteenth century were so striking that both Lothrop (1937) and Mason (1942) asserted the belief that the necropolis dated to a 200 year time period immediately prior to Spanish colonization:

> Our knowledge on the aboriginal peoples is limited to reports by the Spanish conquerors, supplemented by the results of archaeological work. These tally so closely as to indicate that the [Sitio Conte] cemetery was used until the time of the Conquest, the people the same as those found there at that time…Dr. Lothrop estimates that the period of this cemetery was roughly A.D. 1300 to 1500 [Mason 1942:103-104].

Contrary to early assertions, more recent research indicates that the mortuary assemblage at Sitio Conte represents a chronology dating from approximately A.D 750 to 950 (Cooke 2003a; Cooke et al. 1998, 2000). This chronology has been crucial to understanding the indigenous cultural development within the Central Region of Panama as the complexity of the mortuary assemblage at Sitio Conte has served establish the existence of hierarchal social ranking almost 1000 years earlier than previously recognized (Cooke 1984; Cooke et al 2000:168; Linares 1977:72).

In1989, propelled by Lothrop's early intuitive observations of hierarchal social ranking at Sitio Conte, Briggs (1989) produced a study entitled *Art, Death and Social Order: The Mortuary Arts of Pre-Conquest Central Panama* which explored the distribution of mortuary furnishings at Sitio Conte by means of statistical cluster analysis. Briggs' (1989) study analyzed the mortuary data from Sitio Conte, as well as from other sites within the Tonosí valley, and statistically demonstrated that Sitio Conte was the only site in the region to entail clear evidence supporting the existence of hierarchical social ranking (Briggs 1989).

Briggs (1989:130) suggested that interment within the cemetery at Sitio Conte was indeed reserved for individuals, particularly adult males, who had achieved an elevated status within society. Statistical analysis of the mortuary assemblage delineated ten clusters of graves, representing a gradient artifact distribution which formed a pyramidal structure. At the apex of the hypothetical pyramid were the few powerful and high ranking individuals who were able to amass incredible amounts of wealth and prestige. Analysis of the distribution of mortuary items throughout the graves at Sitio Conte revealed what Briggs (1989:138-139) terms an 'additive pattern' in terms of status recognition. The pattern is as follows: the greater the status ranking of the individual, the more quantities and categories of artifacts that he possessed (Briggs 1989:138; Cooke 2003a:275). Certain artifact classes were restricted only to the richest and most elaborate

graves (Briggs 1989:138). The highest ranking interments were found to comprise the same types of mortuary furnishings as the interments of lower ranking individuals, but they also possessed objects and materials that were restricted only to the most elite graves (Briggs 1989:138). The richest graves were also characterized by being larger, deeper and containing greater numbers of secondary individuals (Briggs 1989:139; Cooke 2003a:175; Cooke et al 2003:121).

Lothrop's initial observations that gold helmets, greaves and plaques may have served as indicators of high-status were substantiated and expanded by Briggs' (1989) statistical analysis. Briggs (1989:137-138) found that particular types of mortuary furnishings were exclusively associated with only the highest ranking individuals at Sitio Conte. It was not only gold that served as an indicator of high-status but in fact, twenty six types of objects within the mortuary assemblage at Sitio Conte were established to as extremely useful indicators of high-status (Table 3.3). These sumptuous goods were fundamental elements in the strong individual wealth differentials observed and served to identify the differential social rankings within the elite mortuary context at Sitio Conte. "The simple presence or absence and the absolute number of sumptuary goods…indicate higher or lower status among the deceased at Sitio Conte" (Briggs 1989:137).

Table 3.2. Categories of goods considered to be sumptuous (based on Briggs 1989:137)

SUMPTUOUS GOODS	
Stone	Pendants, Beads, Ear Decorations
Metal	Plaques, Disks, Beads, Figures, Pendants, Ear Decorations, Bells, Wrist/Ankle Cuffs, Ring/Bracelet, Helmet/Head Piece
Bone	Pendants, Figures, Tubes, Beads
Teeth	Whale, Shark, Jaguar, Canine, General animal
Other	Peccary Tusks, Sting Ray Spines, Resin Figurines

This form of burial pattern is comparable to that which occurred in the Mississippian complex of Moundville (A.D. 1200 – 1500). Moundville interments are similar in nature to those

of Sitio Conte in that the mortuary population is dominated by adult males. The statistical analysis of the Moundville mortuary assemblage undertaken by Peebles and Kus (1977) revealed that the differential distribution of funerary furnishings followed a logic that paralleled the distinct social rankings within society. Certain artifact types, particularly copper axes, were confined to the richest and top ranking clusters of graves representing the apex of the Moundville social hierarchy (Peebles and Kus 1977). The primary difference in the mortuary assemblages of Moundville and Sitio Conte is that the distribution of grave associations at Moundville does not represent an additive process as it does at Sitio Conte (Briggs 1989). This difference has been attributed to distinctions of "how separate social segments were integrated within these two societies" (Haller 2004:80).

The intricacies of social ranking as described by the Spanish conquistadores tell of the malleable boundaries between the achieved and ascribed positions of status in central Panamanian society (Espinosa 1864:497; Oviedo 1853:130). Chiefly ranks were ascribed at birth, however, valor and fierceness in warfare played a critical role in maintaining and increased status and prestige (Andagoya 1994:30; Briggs 1989: 139; Cooke and Sánchez 2004:24-25; Haller 2004:80; Helms 1979:31-32). For example, sons of the *cabras* were documented by the Spanish to inherit the ranks of their warrior fathers at birth, but such a social position was only retained if they could demonstrate competency and skill in combat (Oviedo 1853:130). Drawing parallels to such ethnohistoric descriptions, the additive process of wealth distribution uncovered in the mortuary assemblage at Sitio Conte is suggested to reflect a social structure in which status was achieved primarily on the basis of military skill and success (Briggs 1989: Cooke 2003a; Cooke et al. 2000; Haller 2004). The absence of child interments in the elite cemetery of Sitio Conte reaffirms the great role that achievement (i.e., in war) would have played in attaining and maintaining positions of status and power (Briggs 1989; Cooke et al. 2003; Haller 2004).

Sixteenth century Spanish documents describe the presence of various politically independent chiefdom territories, under the control of individual leaders, distributed throughout central Panama at the time of the conquest (Andagoya 1865; Cooke 1993; Espinosa 1864, 1994; Oviedo 1853, 1994). Parallels to this form of regional organization, however, have yet to be uncovered in the archaeological record. Sitio Conte represents an anomaly, in that the mortuary assemblage is more complex, and reflects a level of social organization far greater than any other

mortuary assemblage uncovered archaeologically in central Panama (Cooke et al. 2000, 2003a; Haller 2004:187). Various interpretations have arisen as to the significance of this anomaly (Cooke, et al. 2000; 2003a; Linares 1977).

It is possible that Sitio Conte appears anomalous primarily due to the vast amounts of looting activities prevalent throughout the region, thus obliterating much evidence of additional high-status mortuary interments in the region (Cooke et al 2003a:127). Haller (2004:92), however, notes that "the dearth of wealth from the known burials suggests that Sitio Conte is more of an anomaly than a fortuitous find." An alternative suggestion is that the remains from the individuals at Sitio Conte came from a much larger territorial catchment than both previously recognized by scholars, or depicted in the Spanish chronicles (Cooke at al 2003a:127). Cooke (2003a; Cooke et al. 2000, 2003a) and Linares (1977) suggest that the site transcended chiefly territorial boundaries in that it was the final resting place for high-status males from an extended network of communities. Thus, the site may have served as a pan-regional elite burial facility where populations throughout all of the Central Region would assemble for the feasting, drinking and ritual celebrations associated with the funerary rites of the esteemed elite warriors and leaders (Cooke 2003a:273; Cooke et al. 2000, 2003a; Haller 2004; Linares 1977).

The only mortuary assemblage in central Panama considered comparable in nature to that of Sitio Conte, is found within the elite burial mounds at He-4 (Cooke et al. 2003). As mortuary activity ceases at Sitio Conte around A.D. 950, elite interments at He-4 begin and continue throughout the Macaracas phase and up to the time of contact (Haller 2004). The burial mounds at He-4 contain some of the most elaborate and wealthy mortuary assemblages outside of Sitio Conte (Cooke 2003:136-137). Although the elaborateness of the interments at He-4 is not to the scale of those at Sitio Conte, the chronology and elite nature of the site have led scholars to suggest that He-4 replaced Sitio Conte as the pan-regional necropolis during the Macaracas phase (Cooke et al. 2000:172; Haller 2004:91).

He-4. The site of He-4 (also referred to as El Hatillo and Finca Calderon), geographically located on banks of the Río Parita, maintained an extensive and continuous occupation from approximately 250 B.C. to A.D 1522 (Haller 2004). Identified as an emerging hamlet in the Tonosí phase, He-4 developed a considerable residential population and is likely to be the powerful regional chiefly center occupied in the sixteenth century and described in the accounts by the Spanish conquistadores (Bull 1965; Cooke et al. 2000, 2003; Espinosa 1994; Haller 2004;

Ladd 1964; Menzies 2006). As chiefly center of the lower valleys of La Villa and Parita rivers at the time of Spanish contact (1516-1517), the site is thought to be the native land (*bohío*) of the influential Chief Parita (Cooke 1993; Cooke et al. 2003:274; Lothrop 1937:46).

He-4 is the only site in the valley to contain archaeological evidence of interments and associated mortuary features comparable to those of Sitio Conte (Haller 2004:90,112). The site was excavated by a team led by Gordon Willey and Mathew Stirling under the auspices of the Smithsonian Institution and the National Geographic Society. The site was subsequently 'ransacked' by both amateurs and looters who discovered much of the wealth contained within the burials (Biese 1967; Cooke 2003a). Among the excavations undertaken by both professionals and amateurs (Bull 1965; Dade 1972; Ladd 1964; Mitchell and Acker 1961), the presence of such varying techniques as well as the lack of comprehensive data collection have very much plagued interpretations of the site (Haller 2004).

Although the history of excavation at the site of He-4 has not been carried out in an ideal fashion, publications regarding both mortuary furnishings and skeletal data suggest strong parallels to the mortuary characteristics of the high-status necropolis of Sitio Conte (Bull 1968; Cooke et al. 2000, 2003; Dade 1972; Haller 2004; Ladd 1964; Mitchell and Acker 1961). Although lacking the sheer quantity and variety of mortuary furnishings associated with the elite interments at Sitio Conte, reports of sumptuous mortuary goods at He-4 have revealed that certain individuals within society were indeed able to accumulate significant amounts of wealth—including sumptuary goods such as gold pendants, helmets and craved manatee bone (Bull 1965; Dade 1972; Ladd 1964; Mitchell and Acker 1961). Such evidence has provided support for the existence of social ranking at He-4 from approximately A.D. 950 onward (Cooke et al. 2003; Haller 2004).

High-status mortuary activity at He-4 begins in the Macaracas phase at approximately A.D. 900, and appears to continue throughout the remainder of indigenous cultural development until the time of the Spanish conquest circa A.D. 1500. The interments at He-4 were situated within a complex of low burial mounds suggested to have been spatially arranged in a circular pattern surrounding central plaza covering an area of up to 2 ha (Bull 1965:31-33; Ladd 1964:25). The burial mounds have been reported to number between 11 and 14, ranging from 1 to 3 m in height and up to 20 m in diameter (Ladd 1964:24-25, 27, 29, 34; Bull 1965:32-34, 39-42; Mitchell and Acker 1961:4-7). There were a total of 44 graves unearthed from the mounds at

He-4 containing a total of 96 individuals (Haller 2004:92). Although relatively limited, the age and sex profiles of the interred at He-4 are reminiscent of the mortuary population at Sitio Conte (Tables 3.4 and 3.5).

Table 3.3. Age frequencies and proportions at He-4 (based on Haller 2004: Table 4.4).

Age	Adult	Non-Adult	Total
frequencies	44	6	50
proportions	88.0%	12.0%	100.0%

Table 3.4. Sex frequencies and proportions at He-4 (based on Haller 2004: Table 4.4).

Sex	Male	Female	Total
frequencies	17	0	17
proportions	100.0%	0.0%	100.0%

Of these 96 individual remains, the age grade of 50 could be identified and the majority of these (88%) were adult, while the remaining 12% comprised of sub-adults and infants. Only a limited sample, specifically 17 individuals, could be sexed and all of these individuals were identified as male (Haller 2004).

The parallels to Sitio Conte in fact go beyond the sex and age profiles as many of the salient artifact classes restricted to the most elite individuals at Sitio Conte were similarly uncovered in the mortuary context at He-4. Unfortunately, due to the incomplete and inconsistent manner in which the data from He-4 was recorded, along with the fact that most of the lavish finds have in fact vanished from the any archaeological record., Briggs (1989:3), for this reason, did not include the mortuary data set from He-4 in his cluster analysis. While no formal analysis has been accomplished, the documented presence of lavish mortuary furnishings has strongly supported the notion that He-4 served as an elite burial ground similar in nature to Sitio Conte (Cooke et al 1998, 2003; Haller 2004).

Mortuary finds from He-4 have been summarized by Haller (2004) and the earliest datable individual interments of high-status at He-4 date to the Macaracas phase were two adult males located in Mound VI (Bull 1965; Haller 2004). The grave associations for these individuals include 86 shell beads, a perforated bone pendent, a perforated gold disk likely used

as adornment and also 44 red ware vessels (Bull 1965; Haller 2004:93). Three other adult males were uncovered in extended positions over four legged metates within the same mound and their grave associations included over 1200 shell beads, 17 pieces of carved and hollowed bone tubes, six Macaracas vessels, a tumbaga disk ornament as well as a tumbaga spangle (Bull 1964:35-36). Also in association with the Macaracas phase, excavations in Mound VII unearthed fragments of a carved manatee-bone baton (Ladd 1964:250-252). Carved manatee bone was in fact a sumptuous good found to be restricted only to the individuals of the highest status at Sitio Conte as it was imported from the Caribbean coast (Briggs 1989:137; Haller 2004). The sumptuous role of both manatee bone and gold at Sitio Conte (Briggs 1989:137) is reminiscent of the chiefly hierarchical organization uncovered at Moundville where copper axes served as distinct indicators of high-status. Individuals within these Sitio Conte Macaracas interments were certainly able to amass wealthy items that have been demonstrated to be symbolic of power and status (i.e. carved bone and metal), however, it is clear that we will never know the true elaboration and content of mortuary furnishings within such interments.

Some of the most elaborate interments at He-4 date to the late Macaracas or Parita cultural phases and have been excavated by amateurs. Philip Dade (1972) uncovered 23 individuals from a tomb in Mound XI adorned with 30 gold objects including a disintegrated gold disk and a pendant, 13 decorated bottles, 6 effigy bottles and other fine painted ceramics and red wares (Haller 2004:94). The elite burials continue into the El Hatillo cultural phase and often represent blatant displays of great power and social status. For example, an urn burial dating to the El Hatillo contained a necklace of 737 human incisors, very similar, albeit at a significantly greater scale, to the necklace of human teeth uncovered in Grave 38 at Sitio Conte (Briggs 1989:141; Ladd 1964:245; Stirling and Steward 1949:394). The sheer quantity of human teeth within that necklace is likely symbolic of power and alludes to the idea that the individual who wore it maintained an elevated status in society (Cooke 2003:277).

Due to the various amateur excavations as well as massive looting, some of the most lavish and elite mortuary furnishings from the He-4 burial mounds are simply lacking provenienced contexts. For example, the following objects were described by a looter as his findings from a mortuary context at He-4: approximately 30 cast gold effigies of humanized animal warriors, wearing the headdresses and belts associated with high rank, and wielding spear-throwers and sword-clubs of palm wood and sometimes with blades of manatee bone

(Biese 1967; Cooke 2003a:277; Cooke et al. 2003). Furthermore, a gold helmet, similar to that described in the funerary adornments of Chief Parita, was unearthed at He-4 but also entails no context (Cooke et al. 2003; Haller 2004; Roosevelt 1979). Gold helmets or headdresses served as very ostentatious displays of status and power and one was uncovered in one of the highest ranking interments at Sitio Conte (Briggs 1989:78, 137; Lothrop 1937:125; Mason 1940:17; Oviedo 1853:118).

Although what is documented of the mortuary contexts at He-4 presents assemblages which lack many of the characteristics of Sitio Conte, He-4 represents a site which is more similar in nature to Sitio Conte than has been demonstrated by any other mortuary context within the Central Region of Panama (Cooke et al. 2003:136-137; Haller 2004). The presence of many salient material indicators of high-status (Briggs 1989:137), albeit in smaller quantities, was uncovered throughout the mortuary assemblages at He-4, suggesting that it was not a cemetery for designated for the common individual. Furthermore, the site is considered by scholars (Cooke et al. 2003; Haller 2004; Ladd 1964; Linares 1977; Menzies 2006) to be of significance as it is one of only three sites in central Panama to provide evidence of ritual or ceremonial architecture. The plaza within the confines of the burial mounds is suggestive that ceremonial or ritual activities, particularly in association with the death of elite individuals, would have likely been taking place (Bull 1965; Ladd 1964; Espinosa 1994).

The unique ritualistic architectural features at He-4, in collaboration with presence of a mortuary assemblage indicative of elite interments represents the characteristics that have led scholars to assert the high-status nature of the formal cemetery at He-4 (Cooke et al. 2000, 2003). Furthermore, the complimentary chronological sequence of the only two identified high-status interment facilities in central Panama, Sitio Conte (A.D. 750-950) and He-4 (A.D. 950-1500), has been one of the strongest factors supporting the hypothesis the He-4 in fact served to replace Sitio Conte as the burial facilities for elite male warriors throughout the Region of Central Panama (Cooke et al. 2000:172; Haller 2004:91). While funerary rites involving the elaborate pomp and circumstance for elite individuals throughout the Central Region was taking place at Sitio Conte and He-4, a considerably different mortuary data set suggests that the ritual mortuary needs of the commoners (potentially from throughout the region) were being met at the site of Cerro Juan Díaz (Cooke and Sánchez 1997; Cooke, et al. 2000, 2003a; Díaz 1999:3).

3.4. BURIAL GROUNDS FOR THE POOR

The site of Cerro Juan Díaz, once attaining a size of 100 ha, stretches across both banks of the Río La Villa in the province of Los Santos (Cooke 2004; Isaza 2004); although it is not totally clear how the site's boundaries were determined (Haller 2004). Cerro Juan Díaz has been identified as one of the most important agricultural settlements of the region, whose success is clearly demonstrated by the longevity of its occupation (Cooke et al. 2000, 2003; Díaz 1999). The site maintained continuous occupation for approximately 2000 years, from approximately 400 BC to AD 1600 (Cooke et al. 1998). The location of the site was strategic, as the setting atop of the foothills allowed for a panoramic view of the coast. According to Cooke et al. (1998), this positioning would have allowed the people of Cerro Juan Díaz to monitor the movement of people and goods to and from the site. The proximity to the coast would have facilitated access to the readily available rich coastal resources and would have greatly contributed to such successful and lengthy occupation (Cooke et al. 1998).

Excavations began under Richard Cooke in 1992, thus initiating the long-term endeavor entitled the '*Proyecto Arqueológico de Cerro Juan Díaz'*. The project maintains the goal of attempting to reconstruct the social organization, economy and commercial relations established throughout the occupation of the site (STRI 2007). Since the commencement of the project, excavations have uncovered substantial burial populations that fall into two distinct chronological phases. The first burial phase, as addresses earlier in the literature, corresponds to La Mula through Cubitá phases, while the second burial phase is contemporaneous with the elite mortuary activity at Sitio Conte and the early part of He-4 (A.D. 700 to 1050), generally comprising the Conte and Macaracas phases (Cooke et al 1998, 2000; Díaz 1999).

While operation 4 was undertaken as a means of investigating the natural stratigraphy of the area, however, archaeologists uncovered a communal burial entailing a total of over 115 individual remains which were interred within a formal cemetery. The interments date to the second mortuary horizon at the site (Cooke et al. 1998, 2000; Díaz 1999). The skeletal assemblage has undergone extensive osteological analysis by Díaz (1999) and the presence of both adults and children of both sexes is a characteristic that distinguishes Cerro Juan Díaz from the elite cemeteries of Sitio Conte and He-4, which are restricted almost exclusively to adult males (Briggs 1989; Cooke et al. 2000; Díaz 1999).

Díaz (1999:68) recognized the presence of elaborate and lengthy mortuary ritual which would have been involved in funerary processes of many of the individual interments. There is absolutely no evidence, however, to suggest that these funerary rituals were performed on a similar scale to those documented in the sixteenth century Spanish chronicles, and those inferred to have taken place at Sitio Conte and He-4 (Cooke et al. 2000; Díaz 1999). Similarly, the various categories of mortuary furnishings distributed throughout the graves at Cerro Juan Díaz are present in much lesser quantities and qualities than the elaborations of goods associated with the elite funerary contexts within central Panama. While the mortuary furnishings in the contemporaneous cemeteries at Sitio Conte and He-4 reveal clear evidence for social ranking, this is not the case within the commoner interments at Cerro Juan Díaz (Díaz 1999).

The characteristics of the mortuary assemblage at Cerro Juan Díaz essentially reveal strong differentiations from those that characterize the mortuary interments of the high-status burial facilities. The formal cemetery at Cerro Juan Díaz was not restricted to any sector of society, but is considered a place in which the burial rites for commoners of all ages and sexes were carried out (Díaz 1999: 68, 70). Díaz (1999:3) suggests that the cemetery not only served the local community of Cerro Juan Díaz, but also commoners throughout the regional population.

The above literature review of archaeological and ethnohistoric information relevant to social organization in prehistoric Panama has served to provide the contextual framework in which this study is built. In the following pages I focus on the critical period from A.D. 700 to 1100: the first time period in which mortuary evidence presents definite and unequivocal evidence of hierarchical social ranking (Briggs 1989; Cooke et al. 2000, 2003; Haller 2004). I examine mortuary remains from the commoner cemetery of Cerro Juan Díaz, and compare and contrast them to the contemporaneous elite status burials from both Sitio Conte and He-4 in order to further our understanding of the social organization throughout the Central Region of Panama. I also examine how the critical social changes present within the Central Region of Panama from A.D. 700 to 1100 are manifest within the mortuary practices at the commoner level with the intent of obtaining a greater understanding of if, and how, the Central Region of Panama was integrated through mortuary ritual (Haller 2004:189).

4. METHODS

The mortuary data set used in this research comes from the excavations of Operation 4 of the "*Proyecto Arqueológico de Cerro Juan Díaz",* conducted under the direction of Richard Cooke. The raw mortuary data was obtained through the work of Claudia P. Díaz in her extensive osteological investigation of the remains recovered from Operation 4, entitled *"Estudio Bio-Antropológico de Rasgos Mortuorios de la Operación 4 del Sitio Arqueológico Cerro Juan Díaz, Panamá Central"*. The data for 115 individuals dating to both the Conte (A.D. 700-900) and Macaracas (A.D. 900-1100) phases made available in Díaz's (1999) publication provides the fundamental basis for this investigation

4.1. GENERAL STATISTICAL ANALYSIS

The multivariate nature of the mortuary data set is highly complex. That being said, the identification of meaningful patterns and relationships between the various mortuary characteristics provides an opportunity to explore variability in mortuary traditions as it relates to social organization. The various characteristics associated with the 36 graves, encompassing 115 individuals, are both extensive and inconsistent. Looting, differential preservation rates and disturbed contexts, as is the case in many archaeological contexts, have fostered a data set that is patchy in terms of the consistency of information available on each interment. The following is a brief description of the various characteristics of the Cerro Juan Díaz Operation 4 data set that are crucial to the mortuary analysis within this work.

Age. There are two different levels of information provided on the age of the individuals. All of the individuals have been identified as to their general age grouping. The two general age groupings primarily used throughout this study include adult and non-adult. The adult category is inclusive of any individual over the age of 10, while the non-adult grouping encompasses those

that are ten years old or younger. A large proportion of the individuals could further be attributed to a specific age grouping. The age grade groupings form the following eight categories: infant (<1), 1 year to 10 years, 11 to 20 years, 21 to 30 years, 31 to 40 years, 41 to 50 years, 51 to 60 years and >61 years.

Sex. Although the remains of many individuals could not be sexed (particularly those of children and infants), exploring divisions along the lines of male and female is nevertheless an essential component of any mortuary analysis.

Phase. The interments have been identified as forming a part of the second mortuary horizon at Cerro Juan Díaz. Specific dating of a large proportion of the graves has been achieved by means of radiocarbon dating, stratigraphy and association with distinct ceramic typologies. The two phases represented in this study are the Conte Phase and the Macaracas Phase spanning a period of approximately 400 years (A.D. 700-1100).

Burial Type. The documented burial types included in descriptions of the interments includes primary, secondary and dispersed. Primary burials entail the interment of an individual in an extended, semi-flexed or flexed position and are assumed to be the positions in which the individual was initially deposited. Secondary burials include burial in an ossuary, package or urn. Secondary burials represent individuals who are generally not the central individual of the grave, although they may have once been. Often, secondary interments are the result of secondary mortuary rites in which the individual remains exhumed, treated to a second mortuary ritual and replaced in the grave (Cooke 2003a).

Position. The various documented positions of interment include extended, semi-flexed, flexed, ossuary, package and urn interments. An ossuary interment is an assemblage of remains, sometimes enclosed in a box-like casing. Similarly, package burials comprise of bundled human remains often wrapped in textiles. Finally, urn burials often contain either human remains or ashes from a cremation process.

Disposition. The deposition of an interred individual reflects the physical arrangement of the body. The categories included in this study are dorsal decubitus, ventral decubitus, left lateral decubitus and right lateral decubitus.

Orientation. Within the mortuary population of Cerro Juan Díaz, the identification of individual orientation is infrequent but may nevertheless prove useful variable in the

investigation of meaningful patterns through statistical analysis. The orientation categories adhere to the cardinal directions: North, South, East West or any combination of the above.

Mortuary Furnishings. An assortment of associated grave goods was unearthed during excavation of the burials at Cerro Juan Díaz. While the exact style, dimensions and form of the mortuary furnishings differ greatly within the total assemblage, the means devised to cope with this in the statistical analysis involves categorizing each grave good into groupings based on their physical composition and state of alteration. Thus, the seven categories utilized in this study include worked bone, un-worked bone, worked shell, un-worked shell, gold, lithics and ceramics.

Both the function and meaning of specific mortuary furnishings are also an important aspect of statistical analysis. Brigg's (1989:137) analysis of mortuary arts provides a list of sumptuous goods that served as indicators of high status interments at Sitio Conte during the same time period in which mortuary activity was taking place at Cerro Juan Díaz. Thus, these identified sumptuary goods provide a general context in which the mortuary furnishings at Cerro Juan Díaz are interpreted. Symbolism and iconography found in mortuary contexts has also been highly investigated throughout the Central Region of Panama (Cooke 2003a, 2003b; Cooke et al 2003; Linares 1977). Such investigations provide invaluable sources for inferences regarding the nature of belief systems and social organization made from the mortuary furnishings at Cerro Juan Díaz.

The characteristics described above provide the basis for the execution of standard statistical approaches which will serve as an efficient means to reveal general patterns in the mortuary data and explore the general nature of organization at the formal cemetery at Cerro Juan Díaz. Furthermore, such statistical approaches will allow for the general evaluation of the mortuary data set in comparison to other formal cemeteries in Central Panama, specifically the contemporaneous mortuary populations of He-4 and Sitio Conte.

4.2. CLUSTER ANALYSIS

Cluster analysis was the primary method of investigation used by Brigg's (1989) to explore the hierarchal nature of social organization at Sitio Conte as revealed through mortuary furnishings. The same methodological approach, hierarchal agglomerative cluster analysis, is

used in this study. This approach is a valuable means of organizing multivariate data sets and exploring suppressed or hidden patterns (Drennan 2001). With all variables considered together, cluster analysis acts to partition the data set into natural arrangements of groups, or clusters in which all encompassed cases will entail strong parallels to one another in terms of their characteristics. The analytical process also measures the strength of correlation between individual interments within and between clusters allowing for the groups to be viewed not as finite entities, but as part of a greater interrelated pattern. As the analysis progresses, individual burials and clusters are merged in a hierarchal fashion into successively larger and more inclusive groups (Drennan 2001). This process of progressive clustering is represented by means of a graphical dendogram in which all individual burials are arranged at one end of the graph. Beginning with the individual burials, the progression of hierarchal clustering is illustrated and concludes at the other end with a single complete cluster encompassing all burials (Drennan 2001).

The emergence of processual archaeology encouraged the rigorous use of the scientific method, often praising the objectivity of this approach. Scientific techniques such as statistical analysis were thought to overcome the greatly debated dilemma of subjectivity (Drennan 2001). It is clear, however, that such processes of statistical analysis are not completely bias-free, as it is the researcher who devises the initial categories. Naturally, categories are chosen for cluster analysis on the basis of relevance to the research question and availability of information. The categorical variables devised in this study, outlined in the previous chapter, are restricted to the unambiguous characteristics inherent in each interment in order to provide a stable foundation from which interpretations regarding social organization can be made.

The process of exploratory data analysis (EDA) also involves the standardization of variables into numerical forms. The program Statistical Information Management System (SIMS), created by Robert D. Drennan, was used to input the initial data. The limitations of this program were quickly encountered as it is designed to run only 85 cases, whereas the Cerro Juan Díaz sample size contains 115 cases. This dilemma was circumvented by dividing the sample into two distinct cluster analyses; one on the mortuary data from the Conte Phase and one from the later Macaracas Phase. Not all individuals in the sample of 115 could be associated to a specific period; therefore the Conte Phase period is represented by 28 individuals while the Macaracas Phase is represented by a larger sample of 69 individuals, for a total sample of 97 cases.

The mortuary furnishings were input with the designation of binary presence/absence variables with instructions to ignore "absence-absence" matches. This was done with the knowledge that there would be a considerable number of absent-absent matches and the inferences that can be made from such associations are extremely limited. Allowing for the association of absent-absent matches can also have the effect of artificially inflating similarities when there are large numbers of variables which are rare, as is the case for the mortuary sample from Cerro Juan Díaz (Drennan 2001). The focus of this analysis is to explore positive relationships within the mortuary population and the distribution of grave goods. All additional variables were treated simply as binary/nominal variables.

In order to obtain an output matrix of coefficients from SIMS, the data was input under the description of 'mixed variable coefficients' and the selected matrix form requested was that of a 'lower half matrix with diagonal'. The output matrix is then transferred to SYSTAT as a 'similarity' matrix. The organization of the data generated through the statistical analysis computer programs subsequently allowed for the construction of dendograms using cluster analysis. In production of the dendograms, the method utilized was that of 'complete linkage clustering'. This method was preferred because it prevents the undesirable joining of clusters with clusters encompassing dissimilar attributes. In other words, "…no two clusters are joined unless even the weakest similarity between any two cases of the cases involved is stronger than any other 'unused' similarity score in the matrix" (Drennan 2001). This particular method was also the method chosen by Briggs (1989) in his cluster analysis of the Sitio Conte mortuary data set, allowing for a more consistent means of comparison.

4.3. NATURAL ARRANGEMENT ANALYSIS

Cluster analysis is employed as a means of extracting meaningful patterns inherent within large amounts of multivariate data that may have otherwise been difficult to perceive. The nature of the interments within the Cerro Juan Díaz mortuary population, however, presents many challenges to such statistical analysis. Unlike the contemporaneous high-status interments of Sitio Conte, the multiple individual graves at Cerro Juan Díaz are rarely distinguished by a central individual (Briggs 1989; Díaz 1999; Lothrop 1937). In addition, mass graves are often

associated with multiple mortuary furnishings. Distinguishing relationships between a particular individual and a specific grave object was a very difficult task and these relationships have only been established for a fraction of the individuals interred within the mass graves (Díaz 1999). Because of this ambiguity, all grave goods in each mass grave have been associated with each individual in the particular interment.

Within the mortuary context at Cerro Juan Díaz, there are a total of 36 graves with the number of human remains unearthed within each grave ranging from 1 to 27. Stratigraphic evidence has revealed that many of the graves entailed multiple burial events and were used continuously over a period of time (Díaz 1999:34). Subsequently, it has been suggested that the formal cemetery was maintained by individuals who would have had social ties to those interred within that particular area (Briggs 1989; Cooke 2003a:274; Ichon 1975). Thus, evidence from the mortuary contexts at Cerro Juan Díaz suggests that the area was not a random repository for the deceased, but a sacred area imbued with meaning for the living in which complex mortuary rituals were carried out (Díaz 1999:68).

Among the graves in the formal cemetery at Cerro Juan Díaz, there is clear evidence of differential mortuary treatment, as well as differential grave good distribution. Given the suggested significance of the cemetery site to the ancient inhabitants of the region (Cooke 2003a; Cooke et al. 2003; Díaz 1999), it is necessary to explore the meaningful patterns within this intentional differential mortuary treatment. Therefore, while cluster analysis focuses on the characteristics of the individuals who are interred in the site, the natural arrangement analysis is intended to statistically explore the social significance of the natural arrangements of the 36 graves. Such an analysis provides an additional means understanding social organization, as well as group identity within Cerro Juan Díaz society.

5. INVESTIGATIONS OF A COMMONER CEMETERY

The following chapter presents the results obtained from an exploration of three distinct methods of the mortuary data from Cerro Juan Díaz: (1) General Statistical Analysis, (2) Cluster Analysis, and (3) Natural Arrangement Analysis. Each avenue of statistical exploration addresses the variations that are present in the mortuary traditions at the formal cemetery, as well as how these mortuary traditions changed from the Conte phase (A.D. 700-900) to the Macaracas phase (A.D. 900-1100).

5.1. GENERAL STATISTICAL ANALYSIS RESULTS

Sex. Of the representative sample of 115 individuals, only 36 individuals could be successfully sexed, leaving a substantial 79 individuals of sex unknown, see Table 5.1 below (Díaz 1999:84-86). This is primarily a consequence of the high proportion of children and infants in the sample population. Identification of the sex of an infant or child can be quite problematic, as prominent sexual dimorphisms develop later in life (Holcomb and Konigsberg 1995). Of the entire sexed population at Cerro Juan Díaz, females make up the majority with 75%, whereas the presence of males, obviously, totals 25%.

Table 5.1. Sex frequencies and proportions at Cerro Juan Díaz (based on Díaz 1999:84-86).

Sex	Male	Female	Total
frequencies	9	27	36
proportions	25.0%	75.0%	100.0%

Age. Of the sample of 115 individuals, the age range of all but one could be determined (Díaz 1999:84-86). The age variation within the mortuary population is relatively evenly distributed with just over half of the population (57%) being identified as adult. The remaining 43% represent infants and children under the age of 10 (Table 5.2).

Table 5.2. Age frequencies and proportions at Cerro Juan Díaz (based on Díaz 1999:84-86).

Age	Adult	Non-Adult	Total
frequencies	65	49	114
proportions	57.0%	43.0%	100.0%

Detailed information on specific age grades of a proportion individuals from the Cerro Juan Díaz sample, provided by Díaz (1999:84-86), allows for a more detailed examination of the age profiles within the mortuary population. Osteological analysis has provided specific age grades for 89 of the 115 individuals in the sample which allows for the construction of a mortality curve, represented in Figure 5.1 with associated specific values in Table 5.3.

The mortality curve provides insight into the general life patterns of the ancient inhabitants of Cerro Juan Díaz. This method of analysis clearly reveals that the mortality rate among infants and young children in the village is elevated. Infant remains aged below one year make up 17.9% of the mortuary population, while the remains of children between the ages of 1 and 10 years make up 25.9% of the population. Thus, a total of 43.8% of the inhabitants at Cerro Juan Díaz did not live past childhood. While this number seems rather high, the curve follows what has been established as a common trend in general mortality rates among prehistoric populations (Weiss 1973). Characteristics of this trend include high infant and child mortality rates which decrease into the juvenile years, and arrive at a low point during adolescence. Mortality rates subsequently rise progressively throughout adulthood, and eventually taper off (Weiss 1973, Storey 1985).

Table 5.3. Frequencies and proportions of age grades at Cerro Juan Díaz (based on Díaz 1999:84-86).

Cerro Juan Díaz Mortality Statistics		
Age Grade	**Proportion**	**Frequency**
Infant (<1)	17.9%	16
1 to 10	25.8%	23
11 to 20	4.5%	4
21 to 30	14.6%	13
31 to 40	16.9%	15
41 to 50	14.6%	13
50 to 60	4.5%	4
>61	1.1%	1

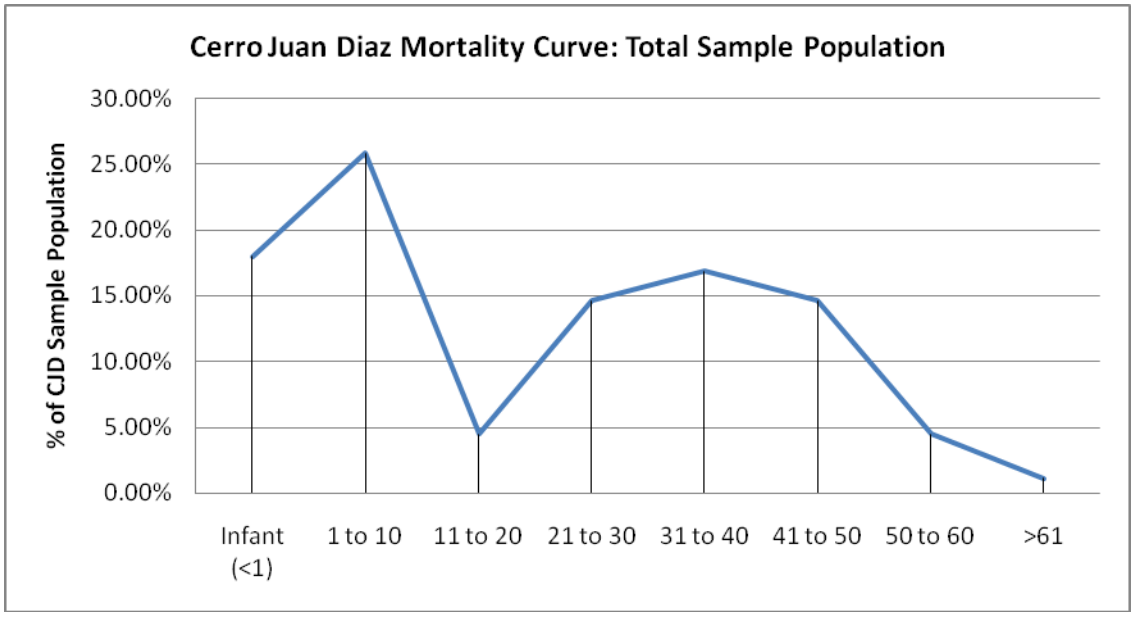


Figure 5.1. Cerro Juan Díaz Mortality Curve (based on Díaz 1999:84-86).

Adhering to this mortality trend, there is an initial peak in mortality at Cerro Juan Díaz between the ages of 1 and 10 years. Death rates then drop significantly through adolescence and early adulthood. Mortality patterns illustrate a progressive increase until mortality rates reach a subdued peak in adulthood between the ages of 31 and 40, a range which encompasses 16.9% of the entire sample population. Following this peak, mortality rates begin to slowly decline and it

is very rare that a pre-Columbian inhabitant at Cerro Juan Díaz would have survived past the age of 60 years. The fact that the Cerro Juan Díaz curve follows the normal mortality curve for many prehistoric societies in the Americas (Weiss 1973) reinforces the representativeness of the sample. If the general mortality curve "…is not present in a population of deaths, the representativeness of the population…would be questioned" (Storey 1985:526).

Separating the burials chronologically enables the exploration of changing mortality patterns at Cerro Juan Díaz over a span of 400 years, through the Conte and Macaracas phases. The total number of individuals who could be associated with an age grade in the Conte phase is 21, while the number of aged individuals correlating to the Macaracas phase is 52 (Díaz 1999:84-96). Table 5.4 demonstrates the proportion of deaths in each age grade for both phases, while Figure 5.2 expresses these proportions in terms of a comparative graph.

The mortality curve illustrates that childhood mortality remained relatively consistent throughout these time periods. During the Conte phase, childhood mortality including both infants and children under the 10 encompassed 47.6% of the population. The Macaracas phase witnessed similar childhood mortality with 46.2%. As previously suggested, these figures are not abnormal in terms of current literature regarding ancient population dynamics. According to such research, most prehistoric populations have childhood mortality rates averaging approximately 50%, while infant mortality for children under the age of 1 generally falls between 15 and 30% (Chamberlain 1997; Rega 1997).

In terms of mortality patterns throughout the various age grades, neither the Conte nor the Macaracas mortuary populations deviate significantly from the normal mortality patterns associated with prehistoric societies. Essentially, the mortality curves of both phases exhibit a strong similarity to one another. This suggests that patterns of mortality, or fundamental burial traditions at Cerro Juan Díaz, did not experience traceable changes in terms of age over the 400 year period spanning from A.D. 700 to 1100. This correlating pattern also supports the idea that we are seeing the natural patterning at Cerro Juan Díaz, as opposed to the vagaries of sampling (Drennan 1996).

Table 5.4. Cerro Juan Díaz Age Grade Mortality Proportions According to Phase (based on Díaz 1999:84-86).

Cerro Juan Díaz Mortality Statistics According to Phase		
Age Grades	**Conte Phase**	**Macaracas Phase**
Infant (<1)	28.6%	17.3%
1 to 10	19.1%	28.9%
11 to 20	0.0%	7.7%
21 to 30	14.3%	11.5%
31 to 40	19.1%	17.3%
41 to 50	19.1%	11.5%
50 to 60	0.00%	3.9%
>61	0.0%	1.9%

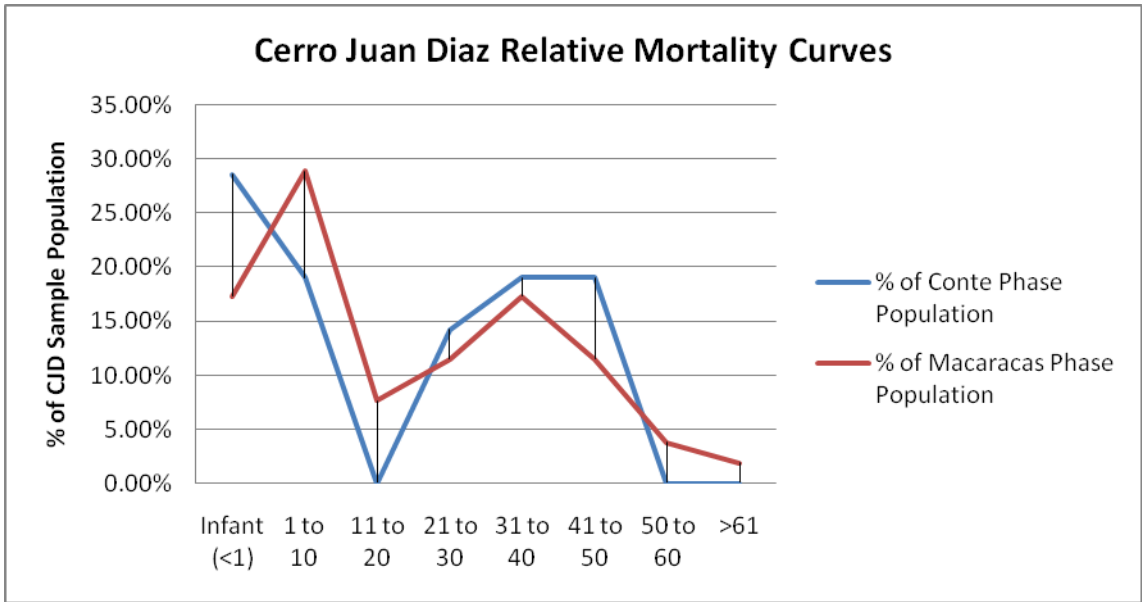


Figure 5.2. Cerro Juan Díaz mortality curves according to phase (based on Díaz 1999:84-86).

Health Indicators. General health issues in societies from the prehistoric New World are generally endemic and related to malnutrition (Storey 1985). Osteological investigations of health indicators at Cerro Juan Díaz were presented in Díaz (1999:57-67). The osteological evidence concludes that 37.9% of adults demonstrated evidence of serious health problems relating to prolonged nutritional deficiencies or stress including hypoplasias, osteitis and joint articulation diseases. There were no significant changes regarding the presence of these health

disorders from the Conte to the Macaracas phases. Díaz (1999) found little to no osteological evidence that would indicate death from trauma or injuries. This suggests that violence or warfare was not overtly present in the Cerro Juan Díaz mortuary population (Díaz 1999).

Interment type, position and orientation. The identification of a standard burial profile for the mortuary population at Cerro Juan Díaz is difficult. In terms of mortuary treatment regarding burial type, position and orientation, there is no evidence of a predominant method employed by the ancient inhabitants of Cerro Juan Díaz. While there are no overarching rules governing the interments at the cemetery, an overview of the characteristics and trends is nevertheless necessary.

A total of 75 individuals were in clear, identifiable interment positions, see Figure 5.3 (Díaz 1999:84-86). Although there was no dominant interment type, the most prevalent was the ossuary interment, comprising 37.3% of the mortuary population. Individuals interred in an extended position represent 22.7% with package burials forming 16.0%. Semiflexed (9.3%), flexed (5.3%), and urn (9.3%) burials have relatively low representations in the population.

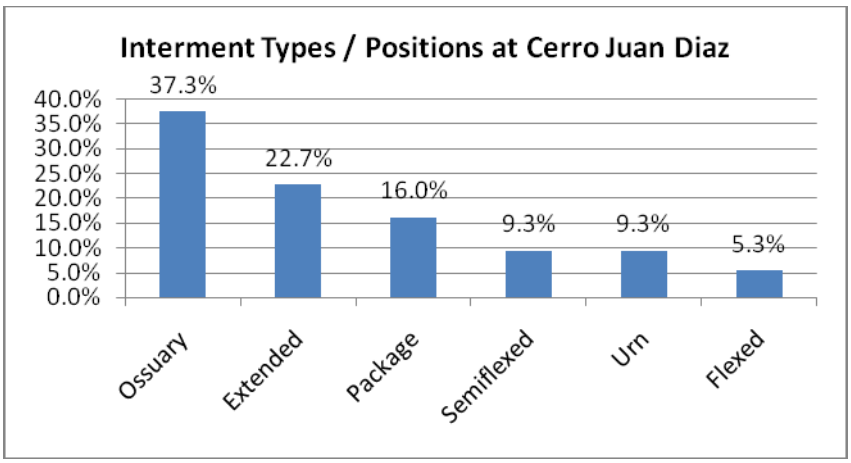


Figure 5.3. Cerro Juan Díaz interment types (based on Díaz 1999:84-86).

There was no discernable pattern between adults and children in regards to the above burial characteristics. It was found that each category of burial type/position is relatively evenly represented by both adults and non-adults. The only pattern of significance is that there were no children uncovered in a flexed position suggesting that it was a position reserved for adults

In regards to the disposition of the primary interments within the mortuary population, the dispositions of 26 aged and sexed individuals could be clearly defined (Figure 5.4). The

dorsal decubitus disposition was uncovered in the highest proportion encompassing 53.8% of individuals, with the majority of the individuals identified as adult. The left lateral disposition represents the next most frequently uncovered with 26.9%, entailing no significant distinction between adults and non-adults. Individuals interred in a ventral decubitus position represent 15.4% of the identified population. This group is unique because it appears to a characteristic reserved for children. All individuals except one are non-adults, however, it should be noted that the one adult in the category is actually an adolescent to young adult with an age range of 12 to 18 years. The association of the ventral decubitus position with children is interesting as Briggs (1989:168) has suggested the disposition generally insinuates a submissiveness or subdued nature, and thus seems to be logically appropriate for children in a society in status is achieved.

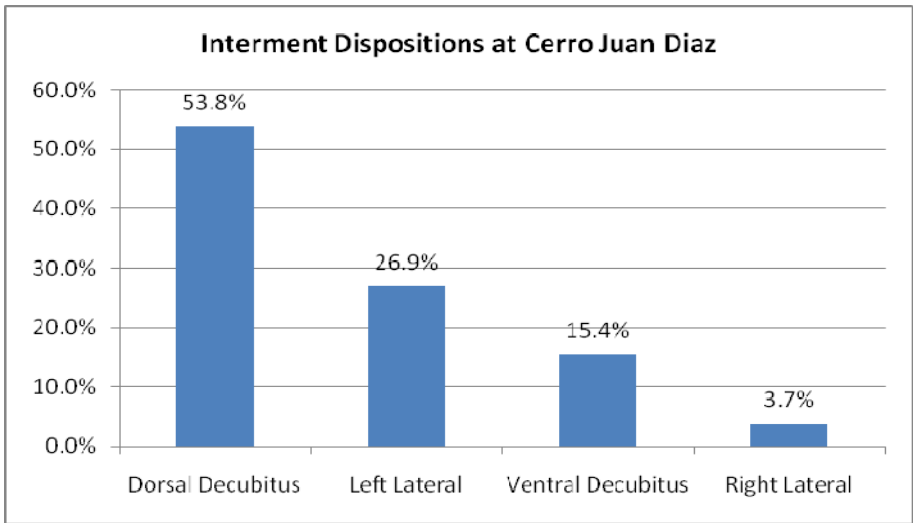


Figure 5.4. Cerro Juan Díaz interment dispositions (based on Díaz 1999:84-86).

There is one individual (I-55) in the entire sample buried in a right lateral position and this individual is an adult female. Interestingly, she is the sole occupant of the burial and is buried with what could be considered relatively wealthy grave goods, including 14 gold beads, two polychrome vessels and a monochrome effigy vessel. As will be examined, a single interment uncovered in association with grave goods of this nature is rare in the Cerro Juan Díaz population. Thus, the general distinctiveness of the interment leads to the speculation that this adult female may have held an elevated position in society.

Analysis of these same burial characteristics between phases reveals how these aspects of mortuary practices changed between the Conte and the Macaracas phases (Figure 5.5).

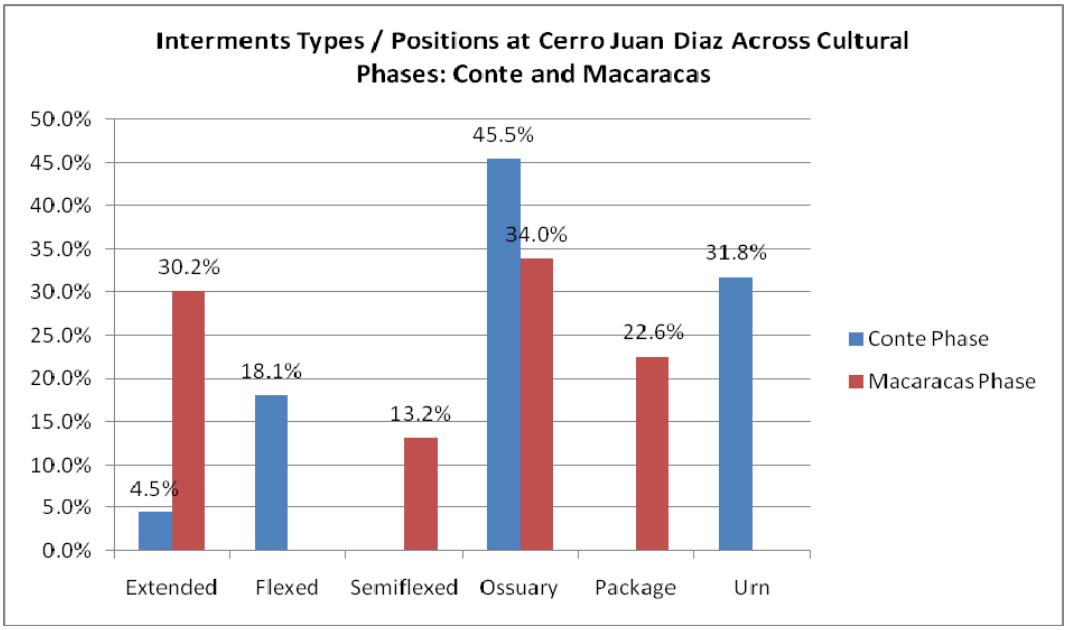


Figure 5.5. Cerro Juan Díaz interment type according to cultural phase (based on Díaz 1999:84-86).

The graphical representation indicates that there were indeed changes in the mortuary traditions regarding interment type from the Conte to the Macaracas phase. In the Conte phase, ossuary (45.5%) and urn (31.8%) secondary burials are dominant traditions, while flexed positions (18.1%) are the most frequent primary interment position. Extended burials (4.5%) represent only a small proportion of burial positions while semiflexed and package burials are completely absent from the Conte phase mortuary tradition altogether.

Into the Macaracas phase, we observe a dramatic increase in use of the extended position (30.2%). Semiflexed positions, previously absent in the Conte phase, make up 13.2% of the interment types. Flexed positions, however, are lacking in the Macaracas phase. The appearance of package burials (22.6%) in the Macaracas phase, in concurrence with the complete disappearance of urn burials reveals a clear shift in mortuary treatments of secondary interments. There is also a slight decrease from the Conte to the Macaracas phase regarding the use of the ossuary interment.

Addressing changes in the patterns of disposition throughout the phases is difficult as the disposition of only three individuals could be identified for the Conte phase (these include a dorsal decubitus, right lateral and left lateral). A larger number of dispositions, however, were identified from the Macaracas sample providing interesting patterns. The majority of identified individuals are in a dorsal decubitus disposition and almost always in an extended position. There is also a strong correlation between a left lateral disposition and a semiflexed position as all individuals in this position, with the exception of one, were also uncovered in a left lateral disposition. General patterns regarding individual orientation at the site cannot be described, as much of this information is relatively incomplete.

Mortuary Furnishings. Relative to the elaborate mortuary furnishings uncovered at contemporaneous elite status burials in the region (i.e. Sitio Conte and He-4), the mortuary furnishings uncovered at Cerro Juan Díaz are generally simplistic and utilitarian in nature and the presence of extremely elaborate, exotic or sumptuous goods is rare. Although there are no individual massive accumulations of wealth on a large scale similar to those at Sitio Conte and He-4, disparities in the distribution of goods in nevertheless present. The full mortuary assemblage, associated with the mortuary population at Cerro Juan Díaz, consists of goods that can be addressed using five material categories: ceramics, lithics, bone (both worked and unworked), shell (both worked and unworked), and gold.

Ceramics. Ceramic items in the mortuary assemblage are largely practical items that would have been used in day to day activities. These objects include vessels, gourds, jars, plates and bowls. Ceramic sherds are ubiquitous in this context. Ceramic wares vary from monochrome to polychrome items. There is a small presence of carved ceramic pendants, and along with the more elaborate ceramic wares, possibly indicate greater prestige or ritual importance. Also present in the assemblage is a single ceramic spindle whorl, generally used in textile manufacture (Haller 2004:161). There is also a high presence of beads, probably once making up various necklaces or similar ornaments. One artifact of interest is a single ceramic aerophone – a wind instrument similar to a flute or a whistle – which is perhaps indicatory of ritual (Cooke 2003a:272).

Lithics. All lithic items in the assemblage are utilitarian in nature which would have been used in every day subsistence activities. These items include tools such as polished stone axes, and hammers. There is a small presence of manos and metates which likely represent food

preparation activities such as grinding seeds or maize preparation (Haller 2004:161). The only projectile points in the assemblage are associated with an adult male likely representing an association to hunting or warfare. These goods are not considered to be superfluous, but crucial to subsistence and survival. They potentially represent a specialization, or occupation of the individual to which they are associated with in the mortuary context.

Bone. The bone present in mortuary contexts at Cerro Juan Díaz is a mixture, including both worked and unworked pieces. Unworked bone deposits generally include fish or deer. Both worked and unworked animal teeth are present along with two shark teeth, one worked into a pendent and the other unworked. The worked bones and teeth comprise many beads, including a shark vertebrae bead, and also one bone whistle. Bone paraphernalia are clearly not representative of functional items, but are more symbolic and personal in nature. According to Briggs (1989:137), carved bone pendants and shark teeth were considered sumptuous goods that served as indicators of high status among the elite at Sitio Conte.

Shell. Shell items present are also both worked and unworked. Worked items are generally pendants, including amorphic and zoomorphic, representing symbolic jewelry or burial attire. Unworked shell consists of conch shells and crab claws, among others.

Gold. Gold, often used as an indicator of distinction or high status in Central Panama (Briggs 1989:137; Cooke et al. 2003), is limited in the Cerro Juan Díaz mortuary collection. Gold is present only in the form of one gold plate and golden beads, and is present in only three graves which will be examined in greater detail in the following pages.

Analysis of the total grave good assemblage from the mortuary population in terms of sheer frequencies of each material reveals that ceramic goods are by far the most common grave good and actually make up just over half (51.0%) of the entire assemblage (Table 5.5 and Figure 5.6). Bone, lithic, shell and gold objects are found in significantly lower frequencies and subsequently represent lower proportions of the entire assemblage. Items made of bone make up 15.9%, with shell goods at 13.7%. The utilitarian lithic items include 10.6% of the assemblage. Gold is the material with the most restricted distribution, encompassing just 8.8% of the assemblage.

Table 5.5. Cerro Juan Díaz frequencies and proportions of total grave good assemblage according to material (based on Díaz 1999:84-86).

Total CJD Assemblage	Lithic	Gold	Bone	Shell	Ceramic	Total
frequencies	24	20	36	31	116	**227**
proportions	10.6%	8.8%	15.9%	13.7%	51.1%	**100.0%**

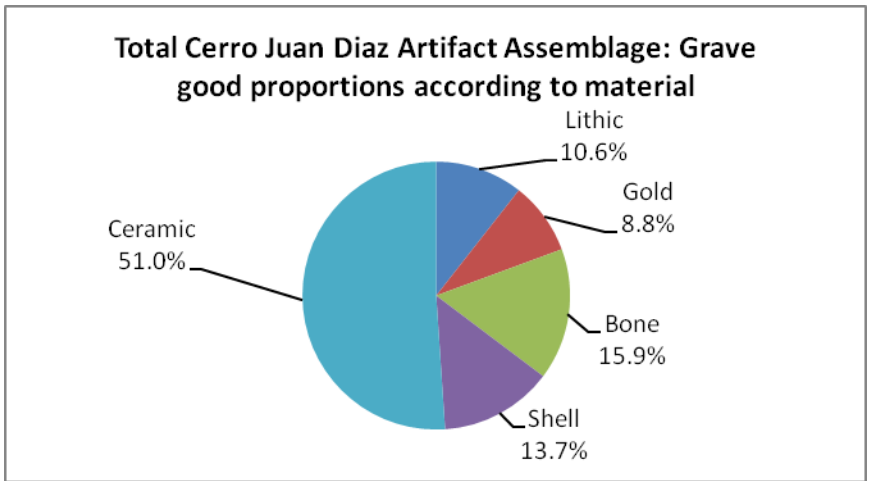


Figure 5.6. Cerro Juan Díaz total grave good assemblage according to material (based on Díaz 1999:84-86).

Material over time. Of the total count of 227 mortuary goods, only 11 are associated with a burial from an unknown cultural phase. Analysis of the 216 grave goods identifiable to phase provides for the opportunity to examine if there was any change in mortuary practices relating to the materials or types of grave good dispositions. The proportions of the various materials present within each phase are presented for a comparative analysis in Table 5.6, and Figure 5.7.

Both phases encompass similar frequencies in terms of the presence of mortuary furnishings, with the Conte phase comprising 101 objects and the Macaracas phase with a total of 115 goods. The changes revealed relative to the use of various mortuary furnishing materials are interesting. In regards to lithics and ceramics, both of which are categories made up of primarily functional items, usage in the mortuary context remains at a relatively consistent proportion of the assemblage in each phase. Ceramics make up 51.5% of the mortuary assemblage associated with the Conte phase, and a comparable 49.6% in the Macaracas phase. In

a similar pattern, the proportion of lithics hovers around approximately 10.0% throughout both phases. There is clear evidence of the increasing use of both bone and shell mortuary furnishings from the Conte to the Macaracas phase. Interestingly, gold is completely absent as a mortuary furnishing in the Macaracas phase.

Table 5.6. Cerro Juan Díaz frequencies and proportions of grave good materials according to phase (based on Díaz 1999:84-86).

		Lithic	Gold	Bone	Shell	Ceramic	Total
Conte Phase	*Frequencies*	10	20	12	7	52	**101**
	Proportions	9.9%	19.8%	11.9%	6.9%	51.5%	100.0%
Macaracas Phase	*Frequencies*	11	0	24	23	57	**115**
	Proportions	9.6%	0.0%	20.9%	20.0%	49.6%	100.0%

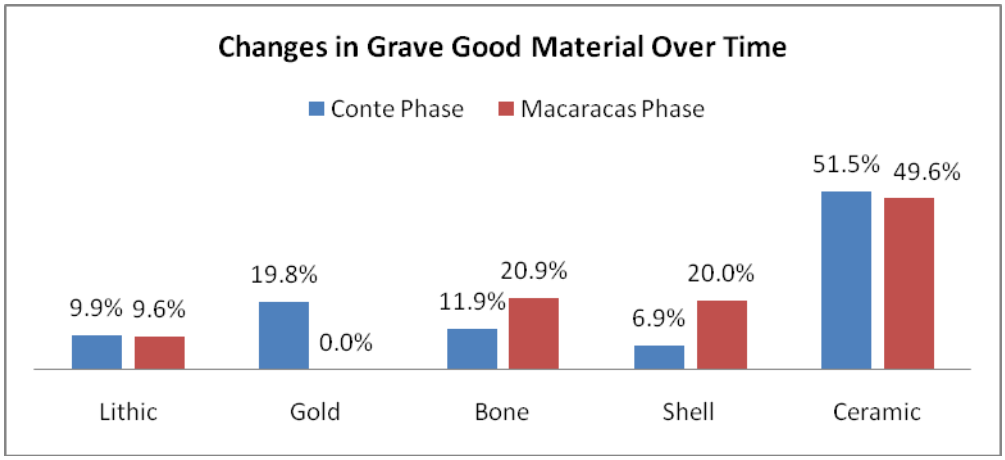


Figure 5.7. Changes in grave good material over time at Cerro Juan Díaz (based on Díaz 1999:84-86).

While this analysis has provided a general overview of the nature of the mortuary traditions at Cerro Juan Díaz and how they changed throughout the Conte and Macaracas periods, it is crucial to look at how these various materials are distributed amongst the interments in order to interpret this information and assess its implications for social organization. These fundamental relationships are explored in the following sections.

5.2. CLUSTER ANALYSIS RESULTS

The statistical process of complete linkage cluster analysis maintains the purpose of revealing meaningful patterns inherent within a multivariate data set. Naturally, this method of statistical analysis proves very beneficial when attempting to make social inferences from large, multivariate mortuary data sets such as that of Cerro Juan Díaz. The nature of this specific data set, however, was not conducive to such an analysis (summaries of the clusters as well as the dendograms can be found in Appendix b and c).

Many of the interments in the mortuary sample from Cerro Juan Díaz are in fact mass interments with numerous individuals and a variety of grave associations. Due to the nature of the graves, the majority of the mortuary furnishings cannot be associated with a particular individual. Thus, every individual in a mass grave is associated to every mortuary furnishing within that grave. It is primarily due to this ambiguity that the cluster analysis proved to be of limited value in the identification of meaningful patterns.

The statistical analysis generated clusters in two manners: (1) by cross-cutting the natural organization of the graves by grouping individuals from the same grave in separate groups, thus creating a situation in which the same grave goods are accounted for in various clusters, and (2) by grouping individuals of the same grave into the same cluster. In essence, the cluster analysis did not produce an efficient nor effective means of organizing the data, making interpretation difficult.

Despite the inability of the cluster analysis to discern interpretable groupings, the consequence of this inability has significant implications. It is clear, from the lack of systematic clustering, that there are no overarching hierarchal rules governing the mortuary traditions at Cerro Juan Díaz as were uncovered by Briggs (1989) at Sitio Conte. As many aspects of society, the rules governing the mortuary practices at Cerro Juan Díaz do not appear to be rigid. This assertion is clearly supportive of the notion that Cerro Juan Díaz was indeed a commoner interment area as Díaz (1999:3) suggests. The following analysis of both the remains and mortuary furnishings within their natural arrangements, as interred by the living at Cerro Juan Díaz, provides for a more comprehensive and insightful understanding of social organization at the site.

5.3. NATURAL ARRANGEMENT ANALYSIS RESULTS

The sample population from Operation 4 at Cerro Juan Díaz comprises a total of 38 graves. The analysis of the natural arrangement of these burials, in regards to the nature of the graves and quantity of grave associations, creates four distinct categories: (1) Mass interments with substantial grave goods; (2) Mass interments with minimal to no grave goods; (3) Interments with few individuals and minimal to no grave goods; and, (4) Interments with few individuals and substantial grave goods. The natural clusters of graves provide for an excellent means of exploring the characteristics and features of each group are described below. The full data set of each grouping can be found in Appendix A.

(1)Mass interments with substantial grave goods. The total number of tombs in this group is four, while the total number of individuals interred within these tombs totals 57. Included in this group are the interments: **T-1, T-51, R-4** and **R-5**.

Tomb 1 (**T-1)** is dated to the Conte phase and contains 12 individuals, seven of which are adult and five of which are non-adult. The sex of only four individuals could be identified and all are female. The majority of the individuals interred are in ossuaries (n = 10) while there is one individual in an urn, and another in a primary flexed position.

The mortuary furnishings associated with the individuals in this tomb relative to others at Cerro Juan Díaz are indeed exceptional within the Cerro Juan Díaz mortuary assemblage. The grave goods present in this assemblage include items both utilitarian and sumptuary in nature. These items include two urns with handles, a ceramic cover, a monochrome plate, a lithic core, two polished axes, two scrapers, a grinding stone, four beads (two bone and two ceramic), a gold plate and a large concentration of ceramic sherds.

Tomb 51 (**T-51)** is also dated to the Conte phase. This tomb contained eight individuals, with four adults and four non-adults. Three individuals could be sexed and these include one male and two females. All individuals but one represent secondary interments consisting of urn burials. The one primary interment is an unsexed adult in a flexed position and is likely to be the last individual buried in this tomb (Díaz 1999:29).

Again, mortuary furnishings are relatively outstanding, with a mixture of both sumptuary and utilitarian goods. In fact, this grave contains a high proportion of sumptuous goods similar in nature to those associated with elite interments at Sitio Conte (Briggs 1989). These include five

gold beads, two carved tooth pendants (1 shark tooth and one unknown animal tooth), four tooth beads and two projectile points. Other mortuary furnishings include a shell pendent, a worked shell, three ceramic beads, approximately 30 ceramic vessels, a metate, a polychrome plate, two axes, and a ceramic plate and bowl.

Unique to the entire Cerro Juan Díaz grave good assemblage is the iconography depicted on the polychrome plate of a crocodile motif. Crocodiles were apparently tabooed as a food source but iconographic representations throughout the Gran Coclé region have been associated in greatest frequencies with the most elite interments at Sitio Conte (Briggs 1989; Cook 2003:273; Linares 1977).

Feature 4 (**R-4**) represents the grave with the highest number of individual burials and is the only burial in this category to be dated to the Macaracas Phase. This grave contained 27 individuals, 20 of which are adult while the remaining seven have been identified as non-adults. The sex of only 12 individuals could be identified but the majority of these are female and there are only two identified males. The majority of all interments within R-4 are secondary. There are only four primary interments and all but one uncovered in an extended position. Most of the secondary interments are ossuaries, while package burials are also present. Unearthed from R-4 was a variety of grave goods including 47 beads, two ceramic pendants, three concentrations of fish bones, five worked bones, six worked shells, carbonized maize, two stone polishers, a bone perforator/graver awl, a metate, five lithic axes, and ceramic wares including an aerophone, vessel, bowl, polychrome plate, miniature jar, and incense burner.

Feature 5 (**R-5**) could not be associated with any particular phase. Ten individuals were unearthed in this particular feature, seven of which are adult and three are non-adult. Three individuals have been successfully sexed and of these, two are male. This grave assemblage represents the least elaborate of Group 1. The mortuary furnishings associated with R-5 include a ceramic whorl, a metate, two lithic axes, a worked piece of shell and six beads.

(2)Mass interments with minimal grave goods. There are two tombs in this grouping encompassing a total of 15 individuals. Included in this group are the interments **T-4** and **T-2**.

Tomb 4 (**T-4**) is associated with the Macaracas phase and entails a total of 8 individuals. Present in this burial are six adults and two non-adults. The sex of three individuals could be identified and include two male and one female. There does not appear to be a clear pattern in the disposition of the individuals as the remains of two individuals are dispersed, while the

remainders are combination of flexed, semi-flexed, extended or unknown. Grave goods are completely absent.

The associated phase for Tomb 2 (**T-2**) is unknown. There are seven individuals interred within this grave: four adults and three non-adults. Two females and one male have been identified. All individuals are interred in the form of package burials with the exception of the male who is in an extended position. Again, there are no associated mortuary furnishings.

(3)Interments with few individuals and minimal to no grave goods. This group entails 29 tombs totaling 37 individuals. Tombs under this category include: **T-6, T-12, T-21, T-24, T-32, T-35, T-42, T-3, T-7, T-8, T-9, T-13, T-14, T-29, T-31, T-33, T-37, T-41, T-38, T-5, T-10, T-15, T-16, T-22, T-23, T-34, T-36** and **T-39**.

This category is by far the largest of the four designated groupings in terms of actual number of tombs. Each tomb included in this group contains either one or two individuals. This is the only category in which non-adults dominate the population with 23 non-adults versus only 14 adults. Relatively few individuals could be sexed, with only six females and one male identified. Interestingly, all of the tombs included, with the exception of two, are associated with the Macaracas phase. Tomb 49 (**T-49**), which holds two individuals, is linked to the Conte phase while the phase associated with Tomb 38 (**T-38**) remains unknown. Burial types include a combination of primary with extended, flexed and semi-flexed positions, dispersed and few secondary burials. Generally, the dispersed burials appear to be reserved for non-adults while the primary burials are largely adult.

The grave goods associated with the individuals in this grouping are significant, chiefly because they are very minimal in terms of quantity and quality, and generally do not represent sumptuous goods. Less than half (13) of the tombs unearthed revealed a presence of grave goods of any sort. Goods generally comprise unworked shell and bone (deer, crab or fish), and worked shell or bone largely in the form of simplistic beads.

There are three tombs with distinctly utilitarian goods: Tomb 13 (**T-13**), Tomb 37 (**T-37**), and Tomb 21 (**T-21**). Tomb 13 has one adult female individual who is associated with a single stone hammer. Tomb 37 also entails an adult female and is associated with an axe along with other minimal goods, including crab claws, deer bone and an incised ceramic lid. Tomb 21 entails two non-adults associated with only an axe. This direct association between a non-adult and a distinct tool item proves to be somewhat of an anomaly within the Cerro Juan Díaz

mortuary sample, although it should be noted that one of the non-adults is an individual nearing adolescence.

Two graves with items that are unique to the entire mortuary sample include Tomb 14 (**T-14**) and Tomb 41 (**T-41**). Both tombs contained adult females associated with a single grave item. Both mortuary items are unique to the entire assemblage at Cerro Juan Díaz. T-14 was associated with what is described as a tube-shaped bone whistle, while T-41 is associated with an anthropomorphic ceramic figurine head.

The sole adult female interred in T-14 (I-26) is not only unique in terms of grave goods, but also because she is one of two individuals in the sample to display cranial modification in the superior region of the cranium (Díaz 1999:67). According to Díaz (1999), the deformation patterning is suggestive of that of vertical compression. This adult female, along with the other adult female (I-49) in Tomb 37 (both from the Macaracas phase) are significant because they represent the only documented cases of vertical compression cranial deformation in Panama, and the only ones recognized in Lower Central America (Díaz 1999:67).

Cranial modification is often used to denote positions of social distinction or high social status throughout many prehistoric societies throughout the world (Moss 1958). It is possible that this female maintained a special position in society, inferring from the unique tube-shaped bone whistle, perhaps a type of chanter or curer (Cook 2004:278).

(4)Interments with few individuals and substantial grave goods. This group encompasses three tombs totaling only six individuals. The tombs that fall under the definition of this category include **T-44, T-30** and **T-50**. It is of interest that all three tombs in this category are in fact associated with the Conte phase.

Tomb 44 (**T-44**) is the interment of one adult female situated in a primary, flexed position. T-44 is significant because this is the only single-individual grave in the sample to be associated with relatively intricate and sumptuous grave items. These items include 14 gold beads which were likely once part of a necklace, two polychrome vessels, and a monochrome effigy vessel.

Tomb 30 (**T-30**) entails three individuals: two non-adults and an adult. This burial pattern is unique to the sample. The adult is in a primary flexed position while one non-adult is in a primary extended position and the other non-adult is in an urn. Both non-adults are quite young in age and could be considered infants. Goods included in this tomb are a trichrome effigy bowl,

an amorphic shell bead, two zoomorphic shell pendants, three conches as well as a gourd with handles.

There are two adults interred in Tomb 50 (**T-50**), both of which are dispersed. Associated with these two individuals are five beads including one bone and one unknown tooth, a worked bone, a shark tooth, two projectile points, an axe, a red plate, an unworked deer bone, and a ceramic bowl and jar.

The unequal distribution of mortuary furnishings across groupings. The groupings described above create natural clusters indicative of inherent differences in mortuary treatment and wealth distribution at Cerro Juan Díaz. These differences are manifest in the archaeological record whereby some individuals, or groups of individuals, were able to accumulate a greater amount of wealth relative to others.

Returning to the distribution of mortuary furnishings according material, we can clearly observe this differential distribution of particular materials across the distinct groupings described above. The figures in Table 5.7 and Figure 5.8 correspond to both the quantity of each material as it relates to the entire assemblage of each grouping.

Table 5.7. Frequencies and proportions of materials across natural grave groupings at Cerro Juan Díaz (based on Díaz 1999:84-86).

Grouping		Lithic	Gold	Bone	Shell	Ceramic
Group 1	*Frequencies*	19	6	15	8	103
	Proportions	12.6%	4.0%	9.9%	5.3%	68.2%
Group 2	*Frequencies*	0	0	0	0	0
	Proportions	0.0%	0.0%	0.0%	0.0%	0.0%
Group 3	*Frequencies*	3	0	9	13	2
	Proportions	11.1%	0.0%	33.3%	48.1%	7.4%
Group 4	*Frequencies*	2	14	4	3	11
	Proportions	5.9%	41.2%	11.8%	8.8%	32.4%

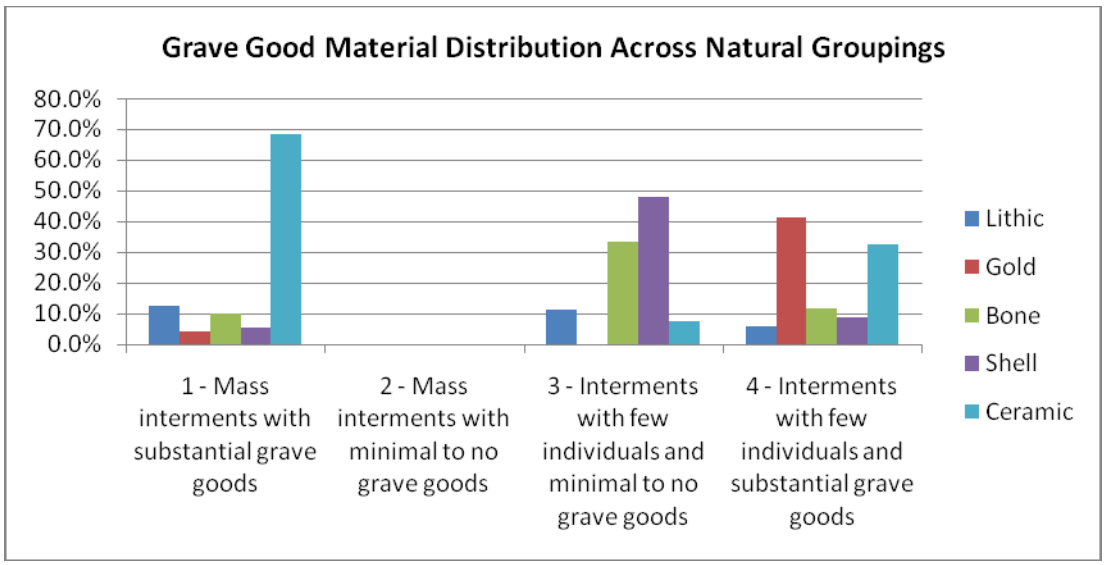


Figure 5.8. Proportions of materials across natural grave groupings at Cerro Juan Díaz (based on Díaz 1999:84-86).

It is clear that Group 2 has no grave good associations whatsoever, which leads to the interpretation of these groups of individuals as likely holding a lesser rank or social position in the Cerro Juan Díaz Society. The presence of gold, a general indicator of status (Cook 2003a; Cooke et al. 2003; Briggs 1989), is only seen in Group 1 (4.0%) and Group 4 (41.2%). These two potentially higher ranking groups also correlate with increased proportions of ceramics with Group 1 comprising 68.2% ceramics and Group 4 having 32.4%. Ceramic wares are found in a considerably lesser proportion in Group 3 (7.4%), a group characterized by small scale interments made up primarily of non-adults. It should be noted that the ceramics present within Group 3 are generally only associated with adults, and this is a pattern reflected throughout the entire mortuary assemblage. Ceramics are primarily found in the largest quantities in graves with greater quantities and varieties of other goods.

Across all of the groupings, lithics remain relatively consistent. Items of bone and shell, however, make up a very large proportion of the Group 3 assemblage (33.3% and 48.1% respectively)—dramatically higher than any of the other groups. The shell and bone objects in Group 3 are generally unsophisticated ornaments (i.e. single beads) or simply raw, unworked material. The high proportion of such simplistic objects within a group dominated by non-adults is suggestive of a society with definite notions of achieved social status. Supporting this idea is the fact that not one non-adult in the entire sample population is associated with anything but

minimal and simplistic goods made of shell or bone, with the one exception of T-21, in which an adolescent was associated with an axe. Non-adults associated with a wealth of goods are only found in the context of a mass burial where adults are present.

Change Over Time. A final avenue to explore is the relationship between natural burial groupings and the two temporal periods represented by the mortuary data. Did mortuary practices change throughout the Conte and Macaracas cultural phases? There are a few interesting points regarding this topic. Table 5.8 provides a summary of the frequency of natural arrangement groupings within each cultural period.

Table 5.8. Presence/absence of natural groupings across cultural phases at Cerro Juan Díaz (based on Díaz 1999:84-86).

Group	Conte (AD 700-900)	Macaracas (AD 900-1100)	Unknown	Total Graves
1 - Mass interments with substantial grave goods	2	1	1	**4**
2 - Mass interments with minimal to no grave goods	0	1	1	**2**
3 - Interments with few individuals and minimal to no grave goods	2	26	1	**29**
4 - Interments with few individuals and substantial grave goods	3	0	0	**3**

The Conte phase, in fact, holds the greater number of wealthy interments. It contains two mass interments with substantial grave goods (the wealthy burials of T-1 and T-51), and all three interments from Group 4 which include few individuals with relatively more elaborate and sumptuary mortuary furnishings. The Conte phase does not entail any interments belonging to Group 2 and only two individual graves that belong to Group 3.

The use of mass burials for relatively higher status groups continues into the Macaracas phase. It is in this phase that we also witness the appearance of a large amount of individual, small scale burials with very minimal and simplistic grave associations. Wealthy individual interments are no longer present in this phase, however, the largest of all mass burials (R-4 with 29 individuals), emerges as the only mass burial dated to the Macaracas period. Although R-4 represents the largest mass burial in the cemetery, there is no presence of any sumptuous good (as described by Briggs 1989:137) as there are in the two mass graves from the Conte phase. This incredibly large burial with the contemporaneous emergence of multiple (26) minimalistic, individual burials, is perhaps suggestive of increasing social distinctions and disparities among the population at Cerro Juan Díaz.

6. DISCUSSIONS AND CONCLUSIONS

Analysis of the high-status mortuary population at Sitio Conte enabled Briggs (1989) to summarize the standard mortuary tradition of the cemetery with ease: "[A] normal burial at Sitio Conte consists of an adult male, oriented east to west, body extended" (Briggs 1989:77). The highly patterned traditions and rigidly structured hierarchal organization was clearly presented in the mortuary features. Such a statement is not as easily attained from the mortuary population at Cerro Juan Díaz. The lack of overarching rules governing the mortuary traditions at Cerro Juan Díaz attests to the fundamental difference between this formal cemetery, and the elite interment facility at Sitio Conte. The increased amount of variability uncovered in the mortuary traditions at Cerro Juan Díaz is reflective of the decreased formalities associated with a commoner burial ground. Díaz (1999:70) suggests that the formal cemetery of Cerro Juan Díaz is a community burial ground, lacking both the elaboration and restrictions that are characteristic of contemporaneous elite interment facilities in the region such as Sitio Conte and He-4 (Briggs 1989; Cooke et al 2003; Ladd 1964)

The mortuary furnishings described as salient features indicative high rank at Sitio Conte, including intricately designed ivory adornments, weapons, gold plaques, greaves and helmets forming entire armors of gold and items of such, are simply absent from the mortuary assemblage of Cerro Juan Díaz (Briggs 1989; Díaz 1999). The mortuary assemblage of Cerro Juan Díaz analyzed in this research drastically contrasts that of Sitio Conte and He-4, not just in terms of quality, but in sheer quantity of mortuary goods. The entire mortuary assemblage unearthed in Operation 4 at Cerro Juan Díaz consists of a mere 216 objects, while one high-status grave at Sitio Conte may contain over 7000 individual mortuary furnishings (Briggs 1989:81). It is unambiguously evident, that these contemporaneous interment sites served very different sectors of society within the Region of Central Panama.

The cemetery of Cerro Juan Díaz is distinctly commoner in nature, however, amongst the commoner burial ground there is definite evidence of differential mortuary treatment, as well as

clear disparities in the distribution of mortuary furnishings. There are clear examples within the mortuary data of both groups of individuals, and individuals who were able to amass greater quantities of goods, including sumptuary goods, relative to others. Some of the wealthiest graves in the mortuary population are in the form of both mass interments and singular interments.

The stratigraphic evidence reveals that the mass graves at Cerro Juan Díaz were reopened throughout time with burials continuously being added (Briggs 1989; Cooke 2003a; Cooke et al. 2003; Cooke and Sánchez). Scholars suggest that the sections of a formal grave area, which were intentionally leveled, were upkept likely by kin, clans or individuals of a similar social group who held ties to the interred (Díaz 1999; Cooke 2003a:274). That the mass graves were used throughout time, likely for interment of socially connected individuals. Present within the Cerro Juan Díaz mortuary features are mass graves that encompass relatively wealthy grave associations (i.e. **T-1** and **T-51**) as well as other mass burials with simply no grave associations at all (**T-2** and **T-4**). The disparity in wealth leads to the speculation the mass interments comprising greater accumulations of wealth, represent kin or corporate social groupings who maintained special positions within the commoner society of Cerro Juan Díaz. Interment in one of the wealthier mass graves would have proven socially significant in that it serves to symbolically display an individual's distinction in society.

Both **T-1** and **T-51** entail grave associations that would are considered to be indicators of high status at Sitio Conte by Briggs (1989:137). Tomb 1 contains the only gold plate of the entire assemblage, while **T-51** contains five golden beads and carved shark tooth pendants. Tomb 51 is unique as it contains one of the two animal motifs uncovered in the mortuary assemblage at Cerro Juan Díaz. Iconography depicting a crocodile motif is painted on a polychrome plate that was uncovered among the mortuary furnishings of the mass burial **T-51**. The presence of this iconographic motif is significant due to the fact the crocodile motif was associated most frequently with the most elaborate and elite burials of Sitio Conte (Briggs 1989; Cooke 2003a).

Coclé art has often been described as symbolic system representing expressions of social and political difference (Linares 1977; Cooke 2004). This system is centered on the use of animal iconography which symbolically represents virtues that relate to both sociopolitical and military activities (Linares 1977). Animal iconography frequently uncovered in high-status mortuary contexts includes sting rays, hammer head sharks and crocodiles. These representations draw parallels to qualities of fierceness and aggression that would be desirable for a warrior.

Cooke (2003:273) purposes that iconographic representations of fierce animals, such as the crocodile, served to symbolize specific powerful ranked descent groups. Whether the presence of the crocodile in association with **T-51** represents a link to a powerful descent group, or simply a symbolic emulation is unknown. I purpose that the individuals interred in **T-51** (as well as **T-1**) represent a lineage or social group which held increased status within the Cerro Juan Díaz society.

Within the mortuary variation at Cerro Juan Díaz, there is also the presence of smaller scale burials, comprising of one or two individuals and relatively wealthy or sumptuous mortuary furnishings (Group 4). These individuals are all dated to the Conte phase, and one in particular stands out as maintaining a special status in society. The adult female interred in **T-44**, aged between 40 and 45 years, is unique in various aspects of her mortuary treatment. She is the sole occupant of the grave and is positioned in a flexed right lateral position which is unique to the entire mortuary population. What is most intriguing is her association with 14 sumptuous gold beads that have been identified as forming a bracelet, as well as two elaborate polychrome vessels and one monochrome effigy vessel. At Sitio Conte, there is incontrovertible evidence of one elderly woman (Grave 23) who was adorned in a bracelet of 55 gold beads, as well as only two others who were associated with gold ear rods and a chisel (Cooke et al. 2000, 2003; Lothrop 1937:260). This female represents one of only three interments to comprise gold objects, and the other two have been described above as the group burials, also from the Conte phase, represented an elevated status.

The interments clustered in Groups 1 and 4 of the natural arrangement analysis show evidence of a greater assortment and wealth of mortuary furnishings than the other groupings. The mass burials of Group 2 (**T-2** and **T-4)** were uncovered with no evidence of mortuary furnishings, while the 36 individuals comprising Group 3 were interred in single graves with very minimal mortuary furnishings. With the exception of a two individuals, the mortuary furnishings characteristic of Group 3 comprises of unworked shell and bone as well as shell and bone worked into beads. There was, however, one adult female (**T-14**) who stood out as unique among the more subdued interments of Group 3. The adult female in **T-14** displayed evidence of vertical compression cranial modification and was uncovered in association with a solitary mortuary furnishing: a tube-shaped bone whistle (Díaz 1999:67). Drawing from Cooke's (2003a:278) association of a bone whistle encountered in the Sitio Sierra mortuary context

(dating to approximately A.D. 980-1270) to a special position such as that of a curer or chanter, I purpose a similar suggestion in regards to the individual interred in **T-14**.

Thus, the analysis of the mortuary data revealed clear distinctions of differential treatment and accumulation of wealth between various groups and individuals within the society. It appears that both groups of individuals as well as solitary individuals had the potential to amass greater quantities of goods, including general and sumptuous, than others. I purpose that these individuals, particularly those comprising Group 1 and Group 4 of the natural cluster groupings, likely maintained positions of elevated or distinct status within the community level at Cerro Juan Díaz. While the mortuary data does support the presence of differential social status, the methods of attaining greater status in the Cerro Juan Díaz society are not as evident. There was a general lack of association of elaborate and copious amounts of material goods with non-adults. Group 3 contained the majority of children and infants who were interred in simplistic graves, encompassing modest mortuary furnishings such as fish bones, crab claws, unworked shell and deer bones. This mortuary patterning lacking wealthy children suggests that status was achieved through one's actions and accomplishments throughout their lifetime. This indeed parallels with the Spanish chronicles, which have closely correlated to archaeological evidence from the Conte and Macaracas phases, which describe the potential for men who demonstrate prowess and skill in warfare to attain higher rankings and positions of prestige in society (Andagoya 1865; Espinosa 1864, 1994; Oviedo 1853, 1994).

Children within the Cerro Juan Díaz population, however, are often associated with wealthy grave goods by default as they are often represented within the mass burials. As the mass burials likely represent lineal or corporate descent groups, the stark variation in mortuary furnishings between those in Group 1 and those in Group 2 is likely indicatory of the differential status of these groups within society. Although highly speculative, it is possible that children born into these groups may have incurred a minor form of ascribed status. Current evidence for ascription at Cerro Juan Díaz is essentially lacking and the mortuary data from Operation 4 is highly suggestive of a societal organization where positions of elevated status are based primarily on achievement.

The founding and abandonment of a cemetery, particularly grandiose elite interment facilities such as Sitio Conte and He-4, represent events that are interwoven with the overarching structures of sociopolitical organization. Often such changes are reflective of transitions in the

greater structures of a society such as shifting political powers. In a society in which warfare plays a significant role and chiefly elites are constantly vying for power over trades routes and access to resources, as described by the Spanish conquistadores, ever shifting political power could undoubtedly account for changes in elite mortuary traditions (Espinosa 1864, 1994; Oviedo 1853, 1994).

The unmatched complexity and elaboration of the mortuary context at Sitio Conte has led scholars to suggest that the necropolis served as an interment facility for the highest of political powers from across the Central Region of Panama during the Conte phase and into the early part of the Macaracas phase (Cooke 2003a:273; Cooke et al. 2000, 2003a; Haller 2004; Linares 1977). The decline and subsequent abandonment of elite mortuary activities at Sitio Conte coincides with the initiation of high-status interments at He-4. This complimentary sequential chronology of the only two high-status cemeteries in central Panama has led to the hypothesis that He-4 in fact replaced Sitio Conte as the pan-regional interment facility for elites throughout the region (Cooke et al. 2000:172; Haller 2004:91).

In regards to the mortuary rituals for the common people, Díaz (1999:68) suggests that the elevated complexity of mortuary ritual at Cerro Juan Díaz indicates that it was not just local commoners being interred within the cemetery, but individuals from far away communities. Thus, if mortuary traditions and practices throughout the region were indeed highly integrated during the Conte and Macaracas phases, how are changes in elite mortuary traditions manifest in the mortuary context of a commoner burial ground? Initial evidence towards the regional integration of mortuary practices entails the complimentary mortuary demographics of Cerro Juan Díaz, Sitio Conte and He-4. There is a significant absence of both females and children from the high-status interment facilities of He-4 and Sitio Conte, while at Cerro Juan Díaz, females represent a greater proportion of the population and there is a substantial presence of children. Thus, the composition of the mortuary populations in terms of sex and age supports the potential for highly integrated mortuary traditions within the Central Region.

Analysis of the interments and their associated mortuary furnishings revealed interesting changes in the mortuary traditions from the Conte phase to the Macaracas phase. The transition between the phases in regards to grave associations can be characterized by an overall general decrease in mortuary wealth. The Conte phase represents some of the wealthiest interments of the entire mortuary assemblage, such as the mass burials of **T-1** and **T-51**, as well as the singular

wealthy interments **T-30**, **T-44** and **T-50**). The presence of relatively rare sumptuous goods such as gold and carved shark tooth is entirely represented from the interments within this phase. Other elaborate or unique mortuary furnishings such as intricately carved shell pendants (**T-44**), projectile points (**T-51** and **T-50**), zoomorphic shell pendants (**T-30**) and high quality effigy ceramics (**T-30** and **T-44**) are also confined to the Conte phase.

The tradition of mass interments continues into the Macaracas phase, however, a primary mass grave (**R-4**) emerges which is significantly larger than those present in the previous Conte phase. Feature 4 (**R-4**) encompasses almost 33.0% of the Macaracas phase population and is associated with a variety of mortuary furnishings, although none of which would be considered sumptuary (Briggs 1989:137). There is one other mass interment (**T-4**) present within the Macaracas phase, although there are no associated mortuary furnishings.

A very significant characteristic of the Macaracas phase mortuary traditions is the appearance of numerous interments containing only a few individuals with minimal to no grave associations (Group 3). The majority of the individuals within this group were uncovered in extended positions, a characteristic that was not common in the Conte phase mortuary population. Corresponding to the emergence of minimalistic interments in the Macaracas phase, there is a related increase in the presence of unworked bone and shell—mortuary furnishings which are primarily associated with the lower status interments of Group 3.

As elite activity in the Central Region of Panama shifts from Sitio Conte to He-4, there is a substantial transition in mortuary traditions that has been identifiable through mortuary analysis. Although the level of wealth in the mortuary context at Cerro Juan Díaz does not compare to that of the elite interment at Sitio Conte or He-4, there was nevertheless a differential distribution of limited sumptuous mortuary goods among the mortuary population. It appears that throughout the Conte phase, individuals at Cerro Juan Díaz had greater access to both sumptuary and relatively elaborate mortuary furnishings. Both groups as well as single individuals were able to accumulate large amounts of wealth relative to others, and perhaps maintain positions of higher status within the community. The Macaracas phase reveals a lack of access to sumptuary good such as carved shark teeth and gold. The few wealthy, single occupant interments appear to have been replaced with many simplistic and minimal single occupant interments.

APPENDIX A

Cerro Juan Díaz Mortuary Data

Group 1

Phase	T/F#	Ind.	Age Category	Age Grade	Sex	Burial Type	Position	Dep.	Ortn.	Grave Goods/Artifacts
Conte	T-1	I-18	n-a	NB±2m		secondary	urn			2 urns with handles /
		I-101	n-a	NB±2m		secondary	ossuary			1 cover / 1 monochrome plate /
		I-102	a	30-35y	f	secondary	ossuary			concentration of sherds / 2 scrapers /
		I-103	a	20-24y	f	secondary	ossuary			1 core / 2 polished axes /
		I-120	n-a	NB±2m		secondary	ossuary			gold plate / grinding stone /
		I-121	a	35-40y	f	primary	flexed	LL	W	4 beads (2 bone, 1 ceramic)
		I-122	a	35-40y		secondary	ossuary			
		I-123	a		f	secondary	ossuary			
		I-124	n-a	NB±2m		secondary	ossuary			
		I-127	n-a			secondary	ossuary			
		I-141	a	20-24y		secondary	ossuary			
		I-142	a	40-45y		secondary	ossuary			
Macaracas	R-4	I-56	n-a			dispersed				47 beads /
		I-59	a			primary				6 worked shells / carbonized maize /
		I-61	a			dispersed				1 graver awl / 1 metate / 5 axes
		I-62	a		f	secondary	ossuary			2 pendants /
		I-80	a	35-40y	f	primary	extended	DD	N	1 miniature jar / 1 incense burner /
		I-83	a	45-50y	m	secondary				5 worked bones / 1 ceramic aerophono /
		I-84	a	30-35y	f	secondary	package			2 pulidores / 1 perforator/
		I-91	a	(+)60y	f	dispersed				1 polychrome plate / 1 bowl
		I-92	a			primary	extended	DD	NE	1 vessel /
		I-93	n-a	7y±24m		primary	extended	VD	S	3 concentrations of fish bones
		I-94	a	24-30y		secondary	package			
		I-104	a		f	secondary				
		I-125	a	35-40y	f	secondary	package			
		I-126	n-a			secondary	ossuary			
		I-128	a	40-50y	f	secondary	ossuary			
		I-130	a			secondary	package			
		I-134	a	20-24y	f	secondary	package			
		I-135	a		f	secondary	ossuary			
		I-136	a		f	secondary	ossuary			
		I-137	a		m	secondary	ossuary			
		I-138	a			secondary	ossuary			
		I-144	a	(+)50y		secondary	ossuary			
		I-145	a	45-50y		secondary	ossuary			
		I-148	n-a	3y±12m		secondary	ossuary			
		I-149	n-a	12y±24m		secondary	ossuary			
		I-150	n-a	10y±30m		secondary	ossuary			
		I-151	n-a	1y±4m		secondary	ossuary			
Unknown	R-5	I-85	a	20-24y	m	secondary				1 ceramic whorl /
		I-86	a	40-45y	m	secondary				6 beads /
		I-87	n-a	12m±30m		secondary				2 axes /
		I-88	a	24-30y	f	secondary				1 metate /
		I-89	n-a	7y±24m		primary	extended	DD	W	1 worked shell
		I-90	a	20-24y		secondary	ossuary			
		I-129	n-a	6y±24m		secondary	ossuary			
		I-152	a	20-24y		secondary	ossuary			
		I-153	a	30-35y		secondary	ossuary			
		I-154	a	30-30y		secondary	ossuary			
Conte	T-51	I-14	a		m	secondary	urn			3 pendants (1 shark tooth, 1 shell, 1 tooth) /
		I-15	n-a	3y±12m		secondary	urn			2 projectile points / 5 gold beads /
		I-95	n-a	NB±2m		secondary	urn			3 beads / 1 metate /
		I-96	a	40-45y	f	secondary				1 polychrome plate / 4 tooth beads /
		I-97	n-a	4y±12m		secondary				approx. 30 vessels / 2 axes /
		I-98	a	35-40y		primary	flexed			1 plate / 1 bowl /
		I-99	a	24-30y	f	secondary	urn			1 worked shell
		I-100	n-a	5y±16m		secondary	urn			

APPENDIX A

Cerro Juan Díaz Mortuary Data Continued

Group 2

Phase	T/F#	Ind.	Age Category	Age Grade	Sex	Burial Type	Position	Dep.	Ortn.	Grave Goods/Artifacts
Conte	T-2	I-1	a	45-50y	m	primary		DD	WE	
		I-2	a		f	secondary	package			
		I-19	n-a	18m±6m		secondary	package			
		I-35	a	(+)40y	f	secondary	package			
		I-36	n-a			secondary	package			
		I-139	n-a	9y±24m		secondary	package			
		I-143	a	(+)50y		secondary	package			
Macaracas	T-4	I-4	a	35-40y	f	primary	semiflexed	LL	NE	
		I-20	a	35-40y	m	secondary				
		I-21	n-a	6m±3m		primary	extended	DD	W	
		I-23	a	40-45y		secondary				
		I-24	n-a			secondary				
		I-25	a		m	primary	semiflexed	LL	NE	
		I-146	a	45-50y		dispersed				
		I-147	a	30-35y		dispersed				

APPENDIX A

Cerro Juan Díaz Mortuary Data Continued

Group 3

Phase	T/F#	Ind.	Age Category	Age Grade	Sex	Burial Type	Position	Dep.	Ortn.	Grave Goods/Artifacts
Macaracas	T-5	I-5	n-a	12y±30m		primary	semiflexed	LL	N	shells / 1 shark vertebrae bead
Macaracas	T-3	I-3	a	20-24y		primary		DD	N	
Macaracas	T-6	I-6	n-a	5y±16m		primary	extended	DD	S	
		I-155	n-a	9y±24m		dispersed				
Macaracas	T-7	I-7	a	20-24y		primary	semiflexed	LL	N	crab claws / shells / deer metacarpals
Macaracas	T-8	I-8	a	30-35y		primary	semiflexed	LL	NE	
Macaracas	T-9	I-9	a	35-40y		primary	extended	DD	E	deer bones / fish vertabrae / 1 shell pendant
Macaracas	T-10	I-10	n-a	7y±24m		primary	extended		N	
Macaracas	T-12	I-12	n-a	7y±24m		primary	extended		SW	shells
		I-17	n-a	3y±12m		dispersed				
Macaracas	T-13	I-13	a	15y±36m	f	primary	extended	VD	E	stone hammer
Macaracas	T-14	I-26	a	20-24y	f	primary	extended	DD	NE	1 tube shaped bone whistle
Macaracas	T-15	I-33	n-a	6y±24m						
Macaracas	T-16	I-34	n-a							
Macaracas	T-21	I-22	n-a	6m±3m		dispersed				axe
		I-37	n-a	7y±24m		dispersed				
Macaracas	T-22	I-38	n-a	6±24m						
Macaracas	T-23	I-39	n-a	7±24m						
Macaracas	T-24	I-11	n-a	NB±2m		dispersed				11 shell beads (4 tube shaped,
		I-40	n-a	9m±3m		primary	semiflexed	LL	W	3 geometric, 1 tooth form, 1 hoop)
Macaracas	T-29	I-42	a	20-24y	f	primary	extended	DD	E	1 disk-like shell bead
Macaracas	T-31	I-43	a			primary			NW	
Macaracas	T-32	I-41	n-a	NB±2m		dispersed				
		I-44	n-a	NB±2m		dispersed				
Macaracas	T-33	I-45	a	35-40y	m	primary	extended	DD	NW	
Macaracas	T-34	I-46	n-a	5y±16m		primary	semiflexed	VD	E	
Macaracas	T-35	I-47	n-a			dispersed				6 bone beads
	T-35	I-140	a	18-22y		dispersed				
Macaracas	T-36	I-48	n-a	6m±3m		dispersed				
Macaracas	T-37	I-49	a	45-55y	f	primary	extended	DD	W	crab claws / 1 deer bone / 1 axe / 1 lid
Unknown	T-38	I-60	a	(+)50	f	secondary	package			
Macaracas	T-39	I-58	n-a	7y±24m		primary	extended	VD	W	
Macaracas	T-41	I-52	a	(+)50y	f	primary	extended	DD	W	anthropomorphic ceramic figurine head
Macaracas	T-42	I-53	n-a	6m±3m		dispersed				deer bone / 1 shell bead
		I-54	n-a	NB±2m		dispersed				
Conte	T-49	I-81	a			secondary				
		I-156	n-a			secondary				

Group 4

Phase	T/F#	Ind.	Age Category	Age Grade	Sex	Burial Type	Position	Dep.	Ortn.	Grave Goods/Artifacts
Conte	T-30	I-50	n-a	NB±2m		primary	extended	DD	S	3 caracoles / 1 gourd handles /
	T-30	I-51	a	40-45y		primary	flexed	U	SW	2 zoomorphic shell pendants /
	T-30	I-68	n-a	18m±6m		secondary	urn			1 trichrome effigy bowl /
										1 amorphic shell bead
Conte	T-44	I-55	a	40-45y	f	primary	flexed	RL	N	14 gold beads /
										2 polychrome vessels /
										1 monochrome effigy vessel
Conte	T-50	I-157	a			dispersed				5 beads (1 bone, 1 tooth) /
	T-50	I-158	a			dispersed				1 projectile point / 1 worked bone
										1 shark tooth / 1 red plate /
										1 bowl / 1 deer bone /
										1 jar / 1 axe

APPENDIX B

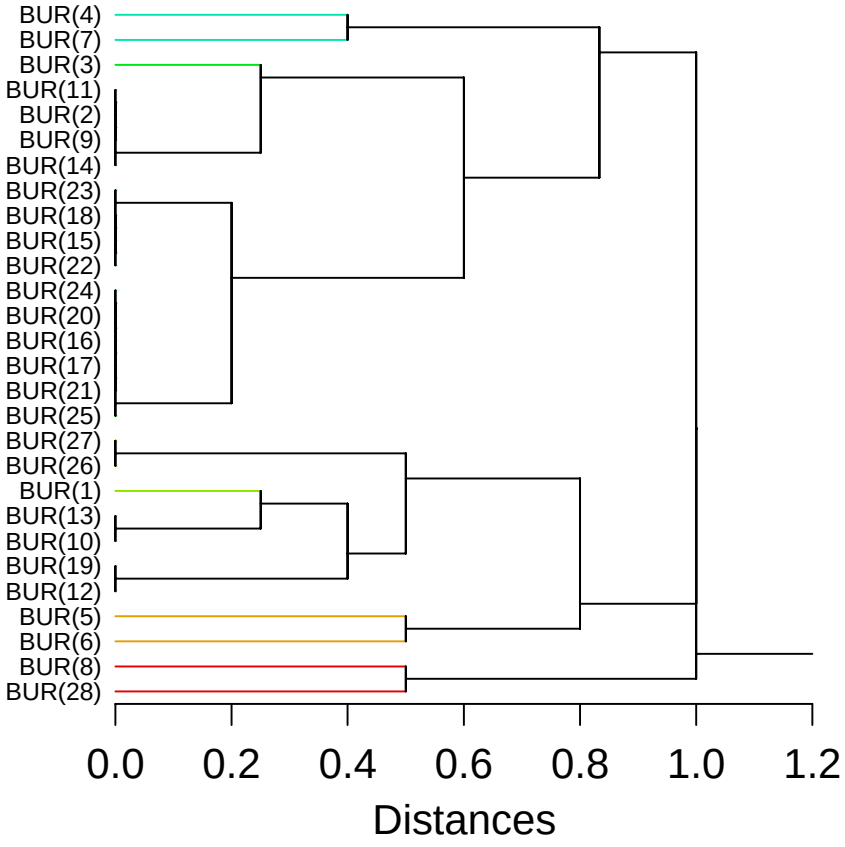
Complete Linkage Cluster Analysis Cluster Groupings

CONTE PHASE	
Conte Cluster A	I-50, I-68
Conte Cluster B	I-18, I-97, I-15, I-95, I-100
Conte Cluster C	I-127, I-120, I-101, I-124, I-141, I-122, I-102, I-103, I-123, I-142
Conte Cluster D	I-157, I-156, I-14, I-99, I-96, I-121, I-98
Conte Cluster E	I-51, I-55
Conte Cluster F	I-81, I-158
MACARACAS PHASE	
Macaracas Cluster A	I-92, I-59, I-80, I-91, I-61, I-130, I-83, I-94, I-125, I-84, I-134, I-136, I-128, I-62, I-104, I-135, I-138, I-145, I-137, I-148, I-146, I-126, I-147, I-149, I-93, I-56, I-53, I-54
Macaracas Cluster B	I-40, I-11, I-150, I-151
Macaracas Cluster C	I-140, I-26, I-23, I-20, I-144
Macaracas Cluster D	I-43, I-45, I-3, I-52, I-49, I-9, I-42
Macaracas Cluster E	I-46, I-13
Macaracas Cluster F	I-4, I-8, I-25, I-7, I-5
Macaracas Cluster G	I-47, I-48, I-41, I-22, I-37, I-44, I-155, I-17, I-12, I-6, I-33, I-38, I-21, I-34, I-10, I-58, I-39, I-24

APPENDIX C

Complete Linkage Cluster Analysis Dendograms

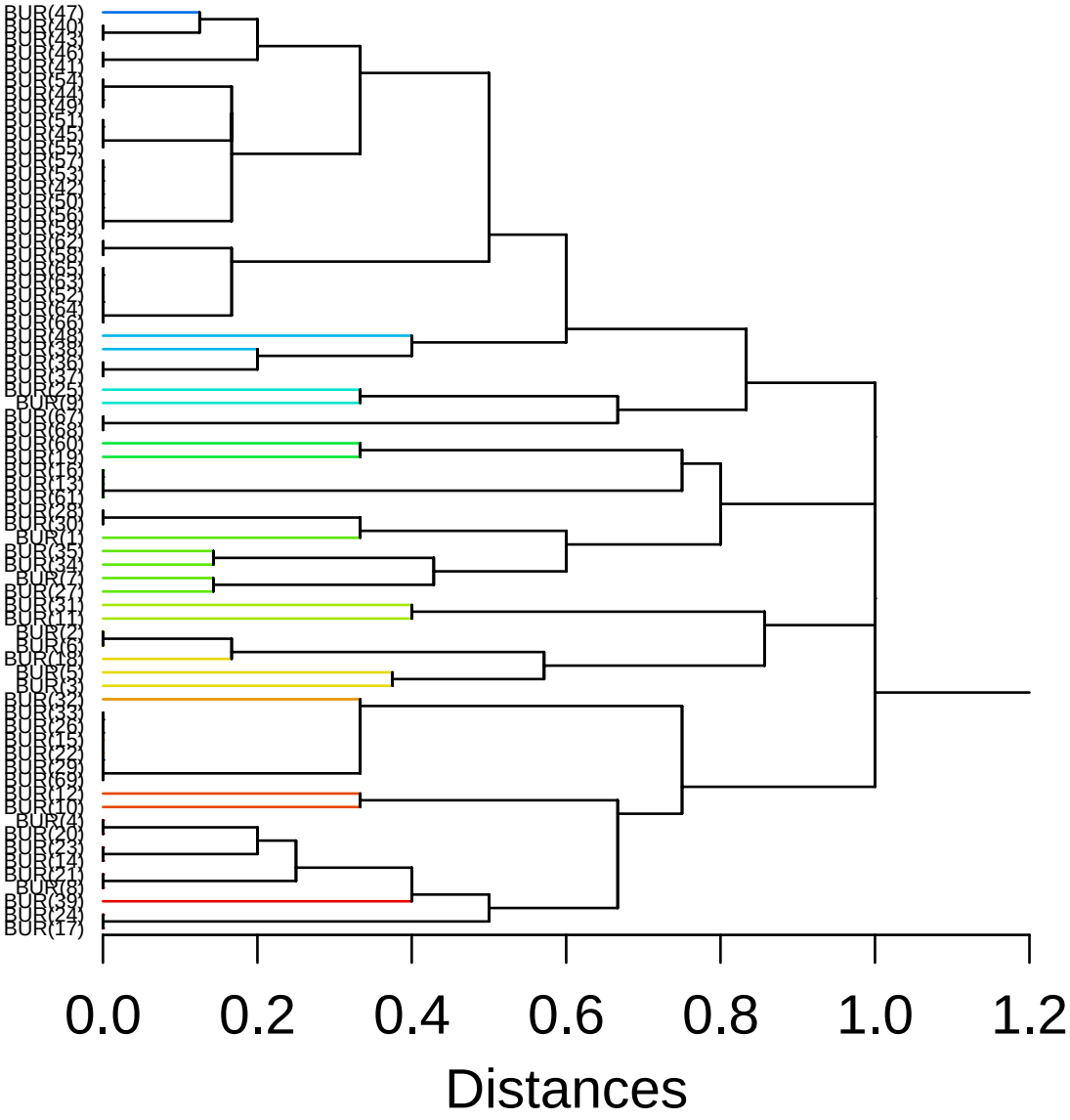
Conte Phase



APPENDIX C

Complete Linkage Cluster Analysis Dendograms Continued

Macaracas Phase



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