

PRE-CONQUEST MORTUARY ARTS AND STATUS
IN THE CENTRAL REGION OF PANAMA

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DISSERTATION

Submitted in Partial Fulfillment of the
Requirements for the Degree of

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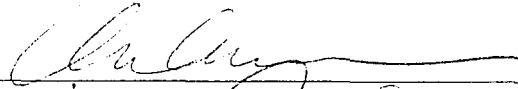
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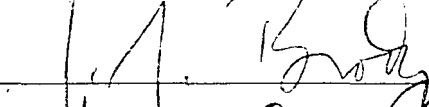
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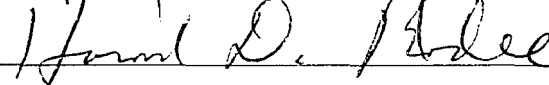
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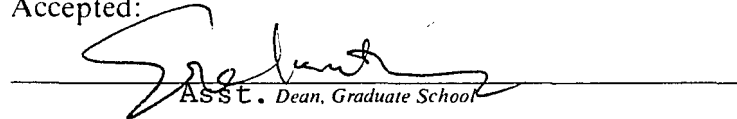


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ABSTRACT OF DISSERTATION

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This study examines how mortuary arts can inform us about the dynamic relationships between visual and social phenomena, in addition to changes in these relationships as the organization of a society varies. These associations are demonstrated by a village-by-village investigation of the pre-Conquest mortuary arts and remains from the central Panamanian sites of El Indio, La Cañaza, El Cafetal, and Sitio Conte which date from approximately 250 B.C. to 1000 A.D. The investigation establishes that the people from these villages expressed diverse statuses through visual symbols which were, in general, unique or specific to each site. Since the contextual study of mortuary arts and social dynamics which was employed required large amounts of comparative data, an exploratory data method--known as cluster analysis--was utilized to facilitate classification. This technique was used to form homogeneous groups of graves from each village on the basis of the presence or absence in each burial of specific mortuary arts. These graves were correlated with demographic, spatial, and depositional characteristics of the graves and interments. The detailed examinations of the graves, the material objects deposited in the burials, the size and shape of the graves, the disposition and treatment of the body of the deceased, and the spatial arrangements of the graves indicate gradual and local changes in social complexity ranging from egalitarian to ranked--or chiefdom--social organizations. This study concluded that mortuary arts are not simply another element in the visual vocabulary of a society but are, as well, discrete creations which can significantly enhance our interpretations of the relationship between the visual arts and social dynamics.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION.	1
Social Dimensions and Mortuary Remains. . .	4
Arthur Saxe: death, the individual and society	5
Lewis Binford: social complexity and mortuary practices.	9
Mortuary Arts, Chiefdoms, and the U.S. Army	11
Dress and insignia of rank and service	18
Cluster Analysis as a Mechanism of Data Organization and Exploration	25
Summary	31
II. THE MORTUARY SITES OF THE TONOSI VALLEY	34
The Mortuary Arts from the Phase II Graves at El Indio.	37
Demographic and physical characteristics of the Phase II El Indio population . . .	38
Cluster analyses of the mortuary arts from the Phase II El Indio graves	43
The social and visual dimensions of the Phase II El Indio mortuary arts	45
The Mortuary Arts from the Phase III Graves at El Indio.	53
Demographic and physical characteristics of the Phase III El Indio population. . .	54
Cluster analyses of the mortuary arts from the Phase III El Indio graves. . . .	56
The social and visual dimensions of the Phase III El Indio mortuary arts.	61

The Mortuary Arts from the Phase III Graves at La Cañaza	68
Demographic and physical characteristics of the La Cañaza graves	69
Cluster analyses of the mortuary arts from La Cañaza graves	73
The social and visual dimensions of the La Cañaza mortuary arts	75
The Mortuary Arts from the Phase II Graves at El Cafetal.	78
The demographic and physical characteristics of the El Cafetal graves.	80
Cluster analyses of the mortuary arts from El Cafetal	82
The social and visual dimensions of the El Cafetal mortuary arts.	86
Summary	91
III. THE MORTUARY SITE OF SITIO CONTE, COCLE PROVINCE.	94
The Mortuary Arts from Sitio Conte.	100
Demographic characteristics of the Sitio Conte mortuary population	101
Physical characteristics of the Sitio Conte interments.	104
Cluster Analyses of the Mortuary Arts from the Sitio Conte Graves	107
Cluster I	111
Cluster II.	118
Cluster III	122
Cluster IV.	131
Cluster V	134
Cluster VI.	136

Cluster VII	141
Cluster VIII.	144
Cluster IX.	149
Cluster X	152
Discussion of the cluster analysis.	153
The Social Dimensions of the Sitio Conte Mortuary Arts	156
The Visual Dimensions of the Sitio Conte Mortuary Arts	170
Social Status and the Sitio Conte Mortuary Arts	176
IV. CONCLUSIONS	192
APPENDICES	
Appendix 1 El Indio Phase II Graves	209
Appendix 2 El Indio Phase III Graves.	218
Appendix 3 La Cañaza Graves	229
Appendix 4 El Cafetal Graves.	236
Appendix 5 Sitio Conte Graves	245
Appendix 6 Distribution Charts of Mortuary Arts and Cluster Tree Diagrams.	285
REFERENCES CITED.	313
ILLUSTRATIONS	320

LIST OF ILLUSTRATIONS

FIGURE	PAGE
1 Map of Panamá and the Central Region	320
2 Map of Central America and the Isthmus	321
3 Map of the Coclé Area.	322
4 Ideal Chiefdom Organization.	323
5 Ideal U.S. Army Organization	323
6 An Example of a Dendrogram	324
7 Map of the Tonosí Valley	325
8 Excavation Area and Environs of El Indio	326
9 Excavation Areas at El Indio	327
10 "Dobles" from Phase II El Indio.	328
11 Mortuary Arts from Phase II El Indio	329
12 Bichrome Bowl and Shells from Phase II El Indio	330
13 Celts from Phase II El Indio	330
14 Designs on Phase III El Indio Ceramics	331
15 Shell Mortuary Arts from Phase III El Indio.	332
16 Excavation Area at La Cañaza	333
17 Clay Whistle from La Cañaza.	334
18 Shell Mortuary Arts from La Cañaza	334
19 Shell Mortuary Arts from La Cañaza	335
20 Excavation area at El Cafetal.	336
21 Map of Grave 1, Sitio Conte.	337
22 Map of Grave 26, Sitio Conte	338
23 Map of Grave 32, Sitio Conte	339

24	Map of Grave 32, Sitio Conte	340
25	Grave 74, Sitio Conte.	341
26	Grave 74, Sitio Conte.	342
27	Excavation Areas at Sitio Conte.	343
28	<u>Repoussé</u> Plaques, Sitio Conte.	344
29	<u>Repoussé</u> Plaques, Sitio Conte.	345
30	<u>Repoussé</u> Plaques, Sitio Conte.	346
31	<u>Repoussé</u> Plaques, Sitio Conte.	347
32	<u>Repoussé</u> Plaques, Sitio Conte.	348
33	Gold Objects, Sitio Conte.	349
34	Gold Objects, Sitio Conte.	350
35	Gold Bells, Sitio Conte.	351
36	Gold and Emerald Figurine, Sitio Conte	352
37	Bone or Ivory Figurines, Sitio Conte	353
38	Bone or Ivory Figurines, Sitio Conte	354
39	Profile of Objects in Figure 38.	355
40	Bone and Ivory Figurines, Sitio Conte.	356
41	Stone and Resin Figurines or Pendants, Sitio Conte.	357
42	Stone Figurines or Pendants, Sitio Conte	358
43	Stone Nose Ornaments, Sitio Conte.	359
44	<u>Repousse</u> Gold Disks, Sitio Conte	360
45	Gold Ornaments, Sitio Conte.	361
46	Gold Beads, Earrods, and Ornaments, Sitio Conte.	362
47	Gold Beads, Bells and Ornaments, Sitio Conte.	363

48	Animal Teeth, Bone Points, and Miscellaneous Bone Objects, Sitio Conte	364
49	Celts or Axes, Sitio Conte	365
50	Stone Points and Knives, Sitio Conte	366
51	Metate and Miscellaneous Stone Objects, Sitio Conte.	367
52	Polychrome Ceramic Plates, Sitio Conte	368
53	Polychrome Ceramic Plates, Sitio Conte	369
54	Polychrome Ceramic Jars and Effigy Vessels, Sitio Conte.	370
55	Polychrome Ceramic Plates, Sitio Conte	371
56	Polychrome Ceramic Plates, Sitio Conte	372
57	Polychrome Ceramic Plates, Sitio Conte	373
58	Polychrome Ceramic Plates, Sitio Conte	374
59	Polychrome Ceramic Plates, Sitio Conte	375
60	Polychrome Ceramic Plates, Sitio Conte	376
61	Polychrome Rectangular Ceramic Pedestal Plates, Sitio Conte.	377
62	Polychrome Rectangular Ceramic Pedestal Plates, Sitio Conte.	378
63	Polychrome Ceramic Plates, Sitio Conte	379
64	Polychrome Ceramic Plates, Sitio Conte	380
65	Polychrome Ceramic Plates, Sitio Conte	381
66	Polychrome Ceramic Jars, Sitio Conte	382
67	Bichrome Ceramic Pedestal Bowl and Plate, Sitio Conte.	383
68	Polychrome Ceramic Plates, Sitio Conte	384
69	Ceramic Fragments, Sitio Conte	385

70	Polychrome Ceramic Plates, Sitio Conte	386
71	Polychrome Ceramic Plates, Sitio Conte	387
72	Polychrome Ceramic Carafes and Jar, Sitio Conte.	388
73	Polychrome Ceramic Plates, Sitio Conte	389
74	Polychrome Ceramic Plate, Sitio Conte.	390
75	Polychrome Ceramic Bowls, Sitio Conte.	391
76	Polychrome Ceramic Jars, Sitio Conte	392
77	Incised and Plain Ceramic Jars, Sitio Conte. .	393
78	Red Ceramic Plate and Censer, Sitio Conte. . .	394
79	Polychrome Ceramic Effigy Vessels, Sitio Conte.	395
80	Ceramic Effigy Vessels, Sitio Conte.	396
31	Polychrome Ceramic Effigy Vessels, Sitio Conte.	397
82	Polychrome Ceramic Effigy Vessels, Sitio Conte.	398
83	Polychrome Ceramic Effigy Vessel, Sitio Conte.	399
84	Polychrome Ceramic Effigy Vessels, Sitio Conte.	400

LIST OF TABLES

TABLE	PAGE
1 Frequency of Army Ranks, 30 September 1978.	22
2 Percent of United States Army Military Ranks during Five Year Period.	23
3 Number of Enlisted Men and Officers in the United States Army during a Five Year Period	23
4 El Indio (Phase II): Grave Loci.	39
5 El Indio (Phase II): Age and Position of Interments.	41
6 El Indio (Phase II): Distribution of Age Groups by Excavation Area.	40
7 El Indio (Phase II): Number of Interments by Age Group and Presence/Absence of Mortuary Arts:	43
8 El Indio (Phase II): Comparison of Cluster Analyses	45
9 El Indio (Phase III): Number of Inter- ments by Age Group by Excavation Area.	53
10 El Indio (Phase III): Age and Position of Interments.	55
11 El Indio (Phase III): Distribution of Age Groups and Presence/Absence of Mortuary Arts	56
12 El Indio (Phase III): Comparison of Cluster Analyses	59
13 La Cañaza: Age and Position of Interments	70
14 La Cañaza: Correspondence of Grave Numbers.	71

15	La Cañaza: Number of Interments by Age Group and Presence/Absence of Mortuary Arts.	72
16	La Cañaza: Comparison of Cluster Analyses	73
17	La Cañaza: Complete Linkage Cluster Analysis at the Three, Four, and Five Cluster Levels	74
18	El Cafetal: Age and Position of Interments.	81
19	El Cafetal: Grave Loci	83
20	El Cafetal: Comparison of Cluster Analyses	84
21	Sitio Conte: Age and Sex Characteristics of the Interments.	102
22	Sitio Conte: Age and Sex Characteristics of Interments with Mortuary Arts	103
23	Sitio Conte: Disposition of Interments	105
24	Sitio Conte: Comparison of Cluster Analyses	109
25	Sitio Conte: Distribution of Mortuary Arts.	145
26	Sitio Conte: Disposition of Cluster VIII Graves.	147
27	Sitio Conte: Average Number of Mortuary Arts Per Grave Per Cluster	144
28	Sitio Conte: Mortuary Arts in Cluster IX Graves.	150
29	Sitio Conte: Disposition of Cluster IX Interments.	149
30	Sitio Conte: Number of Mortuary Arts and Types in Graves with More than One Interment.	158

31	Sitio Conte: Distribution of Mortuary Arts in Clusters I-VII, IX, and X	160
32	Sitio Conte: Presence/Absence of Costume and Sumptuary Mortuary Arts.	162
33	Sitio Conte: Total Costume and Sumptuary Mortuary Arts by Cluster	165
34	Sitio Conte: Presence/Absence of Design Subjects (Exclusive of Cluster VIII)	173
35	Sitio Conte: Distribution of Design Sub- jects (Exclusive of Cluster VIII).	172
A-1	El Indio (Phase II): Distribution of Mortuary Arts.	288
A-2	El Indio (Phase II): Presence/Absence of Mortuary Arts.	289
A-3	Mortuary Arts Object Codes for Tonosí Valley Sites	290
A-4	El Indio (Phase II): Cluster Tree Diagram. . .	291
A-5	El Indio (Phase III): Distribution of Mortuary Arts.	292
A-6	El Indio (Phase III): Presence/Absence of Mortuary Arts	293
A-7	El Indio (Phase III): Cluster Tree Diagram . .	294
A-8	La Cañaza: Distribution of Mortuary Arts.	295
A-9	La Cañaza: Presence/Absence of Mortuary Arts.	296
A-10	La Cañaza: Cluster Tree Diagram.	297
A-11	El Cafetal: Presence/Absence of Mortuary Arts.	298
A-12	El Cafetal: Cluster Tree Diagram	300
A-13	Sitio Conte: Presence/Absence of Lithic Mortuary Arts	301
A-14	Sitio Conte: Presence/Absence of Metal Mortuary Arts.	303

A-15	Sitio Conte: Presence/Absence of Bone, Ivory, and Vegetal Mortuary Arts	305
A-16	Sitio Conte: Presence/Absence of Ceramic Mortuary Arts.	307
A-17	Sitio Conte: Mortuary Arts Codes	311

I.

INTRODUCTION

Most, if not all, contemporary or historic societies have invested considerable artistic materials and efforts in the disposal of their dead. The monumental funerary complexes of dynastic Egypt, the "ceramic armies" of Qin Shi Huang's third century B.C. tomb from Xi'an, China, the beehive tombs of Mycenae, and the marble sculptures of Michaelangelo exemplify just a few of the consequences of enormous expenditures of artistic energy dedicated to such ends. Yet death is not solely an occasion for a society to boast of its artistic prowess; it is also an event loaded with social significance. One may persuasively argue, for example, that the creation of art associated with the dead embodies for the living members of a society the social status of the deceased. The relationship between mortuary art and social dimensions is the subject of this study.

The pre-Conquest cultures of central Panamá (Fig. 1) provide a useful arena to examine the social dimensions of mortuary art. Most of the pre-Columbian groups from the modern provinces of Coclé, Herrera, Los Santos, and Veraguas are almost exclusively known to us through their mortuary remains. The cemeteries from approximately 200 B.C. to 1500 A.D., or Phases IV through VII (see Cooke 1976 for the chronology of the Central Region of Panamá)

offer a particularly rich source of mortuary arts. Moreover, during this time the societies inhabiting the Central Region instituted substantial changes in their economic and social organization. These changes, amounting to a shift from small farming and fishing villages to larger, nucleated towns populated by as many as several thousand people who were ruled by chiefs, unavoidably influenced the content and organization of the mortuary arts of these peoples. (For the most recent survey of the prehistory of central Panamá see Cooke 1984.)

The evaluation of the complex relationships between mortuary arts and social dynamics necessitates information about mortuary treatments, demographic parameters derived from skeletal remains, and the visual characteristics of the mortuary arts, as well as a representative sample of a population. The majority of known archaeological sites in the Central Region of Panamá do not reliably provide such comprehensive data (see, for example, Dade 1960 and 1972, Mitchell and Heidenreich 1975, Ichon 1972, Cooke n.d. and 1978, Verrill 1926 and 1927, Zelsman 1959, Curtis 1959, Mitchell and Acker 1961a, b; Mitchell 1962; Wassen 1957-58; Dade 1960; Casimir de Brizuela 1972, n.d., and p.c.; Gonzalez 1971; Mahler 1961; Quiros 1972; Sterling 1950; Harte 1958). As a result, I shall focus on pre-Conquest archaeological sites which yielded mortuary remains excavated under controlled circumstances and which also

contained a useful number of interments. One or two graves do not sufficiently represent a population or sub-population and, therefore, can not accurately amplify relationships between the mortuary arts and social dynamics. Therefore, this study has been limited to archaeological sites which yielded at least fifteen graves excavated under controlled conditions and by professional archaeologists.

Although the vast majority of graves excavated in the Central Region of Panamá must be eliminated from consideration because of uncontrolled and poorly documented excavations, several mortuary sites are not addressed in this study for other reasons. Gladys Casimir de Bri-zuela's (1972, n.d., and p.c.) excavations at the site of Las Huacas, for example, uncovered numerous caches of intriguing mortuary arts from a pre-Conquest cemetery in the province of Veraguas. Unfortunately, the soil conditions caused complete disintegration of the human skeletal remains and, as a result, provided no information on the age or sex characteristics of the population. Moreover, since no human skeletal remains were discovered in association with the "mortuary" caches, one must assume that the excavated artifacts were a part of a cemetery or other mortuary disposal system.

Cooke's (1971, 1975, and 1978) excavations at the site of Sitio Sierra also uncovered important mortuary

finds, but the deceased population was small, and the age and sex information was not uniformly available for all of the interments. Cooke has, however, published some of his findings on this site which I shall have occasion to refer to in Chapters III and IV. The preceramic site of Cerro Mangote excavated by Charles McGimsey (1956, 1958 and McGimsey, Collins and McKern 1966) is not included for analysis because the graves did not contain mortuary arts. Finally, the excavation reports (Bull 1963 and Ladd 1964) from the late site of El Hatillo lacked consistency. This site was excavated by two different individuals, and their field techniques, strategy, and results were not compatible.

The pre-Conquest sites from the Central Region of Panamá whose excavated field data do meet the outlined needs of this study include El Indio, La Cañaza, and El Cafetal from the Tonosí peninsula (Fig. 2), and the famous site of Sitio Conte located in Coclé province (Fig. 3). In addition to providing the necessary data, the mortuary remains from these pre-Conquest locales also present a temporal progression from approximately 200 A.D. to 1200 A.D. and, as will be demonstrated, illustrate important changes in the social dynamics which ultimately shed light on the culture and art history of the region as a whole.

Social Dimensions and Mortuary Remains

Since the late 1960s, the interpretation of the

social dynamics of non-living societies has steadily advanced with the help of archaeological analyses of mortuary remains. The body of knowledge within this field of socio-archaeology offers useful theories and methodologies to those interested in prehistoric art. My purpose here, however, is not to review in depth the contributions of the past twenty years; if desired, the reader is directed to the review of Tainter (1978) which emphasizes the most important contributions of the 1960s and 1970s and the more recent article by Bartel (1982) which surveys mortuary studies from the late nineteenth century to the present.

But two seminal works were produced by the "new archaeologists" in the 1970s and are of fundamental importance to all subsequent social analyses of mortuary remains. Arthur Saxe in his 1970 dissertation, "Social Dimensions of Mortuary Practices," examined and tested a series of hypotheses which related mortuary treatment of individuals with variations in social dynamics and complexity. In the other seminal work, "Mortuary Practices: Their Study and Their Potential," Lewis Binford attempted to interpret variation in "mortuary treatments as a function of the complexity and degree of differentiation characteristic of the relevant society" (1971:25). It will be useful to review briefly both of these contributions.

Arthur Saxe: death, the individual and society.

Saxe, building on the foundations of role model theory, applies to mortuary analysis the concepts of social identity and social persona developed by Ward Goodenough (see Saxe 1970). Each member of society, he contends, has a variety of identity relationships with other members of society. These may include, for example, being a member of a university faculty, affiliating with a military organization, having a spouse, and so forth. The composite of these relationships or identities amounts to one's social persona. Death, as Saxe points out, provides the opportunity for the expression of the greatest number of one's social identities. The ritual of death, as a result, may encompass the greatest number of dimensions of an individual's social persona.

Building on these observations, Saxe developed a number of testable hypotheses. The first four of these, which are presented below, were "concerned with the way social personae are differentially represented within disposal domains [i.e., burials, cremations, and so forth]" (Saxe 1970:65):

Hypothesis #1: The Components of a Given Disposal Domain Cooperate in a Partitioning of the Universe, the Resultant Combinations Representing Different Social Personae (1970:65).

Hypothesis #2: In a Given Domain, the Principles Organizing the Set of Social Personae (Produced by the Cooperative Partitioning of the Universe of Disposal Components) are Congruent with Those Organizing Social Relations in the Society at Large (1970:66).

Hypothesis #3: Within a Given Domain, Personae of Lesser Social Significance Tend to Manifest Fewer Positive Components in Their Significata Relative to Others, and Conversely (1970:69).

Hypothesis #4: The Greater the Social Significance of the Deceased the Greater Will Be the Tendency for the Social Persona Represented at Death to Contain Social Identities Congruent with that Higher Position at the Expense of Other (and Less Socially Significant Identities) the Deceased May Have Had in Life, and Conversely (1970:71).

The other four hypotheses were "concerned with the way different social identities are differentially represented among different disposal remains" (1970:65).

The first of which is:

Hypothesis #5: The More Paradigmatic the Attributes Evidenced in the Key Structure of the Domain, the Less Complex and More Egalitarian the Social Organization. Conversely, the More Tree-Like the Attributes, the More Complex and the Less Egalitarian the Social Organization (1970:75).

Although my concern in presenting these hypotheses is simply to introduce the critically important work of Saxe, some explanation of the terminology in the above hypothesis is necessary in order to understand it. Again, Saxe's own words are best:

The structure of a domain is a perfect paradigm if each and every componential definition (i.e., "significatum," or "disposal type") is a "minimal classification event," i.e., it contains one positive component for each and every dimension . . . as the key [as in a key diagram] ramifies horizontally the branches pass through each and every dimension in turn, accumulating one component from each dimension . . . This means that the appearance of a particular value of a dimension does not demand the subsequent appearance of other particular values

and dimensions Another way to think about this completely non-redundant situation of all combining with all is as one of complete randomness in organization . . . [Whereas] a perfect tree is a maximally redundant structure in which, for any dimension, there is a unique node at which it is applied; each dimension branches from one and only one node . . . [or] complete non-randomness in organization. (1970:75-78)

Following are the remaining hypotheses put forward by

Saxe:

Hypothesis #6: The Simpler a Sociocultural System the Greater Will Be the Tendency for there to be a Linear Relationship Between Number of Components in Significata, Number of Contrast Sets Necessary to Define Them, and the Social Significance of the Significata, and Conversely (1970:112).

Hypothesis #7: The Simpler the Sociocultural System the Less Divergence Will be Evident in the Treatment of Different Kinds of Deviant Social Personae, and Conversely (1970:118).

Hypothesis #8: 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, and Conversely (1970:119).

Saxe tested these eight hypotheses with ethnographic evidence from the Kapauku Papuans of West New Guinea, the Shanti of Africa, and the Bontoc Igorot of Luzon, Philippines. He found that hypotheses 1, 2, 4, and 8 were all supported by the data. The only hypothesis not supported by the data was 3. Hypothesis 5 was neither supported nor disproved; hypothesis 6 was supported to a minor degree; and, finally, data was not available to

evaluate hypothesis 7.

Saxe makes very clear that the activities surrounding the disposition of a dead member of a particular social group will, more than any other activity, tend to sum up the social identities of that individual. Tainter (1978), expanding on Saxe's study, points out that:

. . . in societies organized on differing levels of complexity, social identities will vary as to the number of identity relationships that it is possible for them to have. In egalitarian societies infants will have few social identities, whereas adults will have acquired many [I]f archaeologists find an infant buried in a manner indicating a social persona larger than that possessed by some adults, a principle of social ranking by birth is probably indicated (1978:106).

Saxe's hypotheses also imply that as one increases in status, the number of identity relationships also increases; as a result, the death of a high-status individual will occasion a greater number of expressed social identities, thereby accounting for the greater attention received by such an individual. Death is, when approached as a social phenomena, the final rite of passage--one's last, if you will, social event. It allows the living members of society an occasion to recount and recognize important achievements.

Lewis Binford: social complexity and mortuary practices. The consequences of Saxe's rather elegant arguments are extensive and had an immediate, and continuing, impact on other archaeologists interested in interpreting mortuary

finds. Binford's 1971 article, "Mortuary Practices: Their Study and Their Potential," provided further evaluation of the relevance of many of Saxe's ideas which relate levels of social organization with changes in mortuary practices.

Two important propositions were examined by Binford:

It was argued that there should be a high degree of isomorphism between (a) the complexity of the status structure in a socio-cultural system and (b) the complexity of mortuary ceremonialism as regards differential treatment of persons occupying different status positions (1971:18).

He noted that this proposition was impossible to evaluate because sufficient data did not exist. However, based on general surveys found in ethnographic accounts, Binford was able to support the plausibility of the proposition.

He continued:

The second proposition which I have attempted to test . . . [argues] that among societies of minimal complexity, the major dimensions which serve for status differentiation are based upon the personal qualities of the individuals involved: age, sex, and differential capacities for performance of cultural tasks. On the other hand, among more complex socio-cultural systems, status position may be defined in terms of more abstract characteristics related to the culturally designated and symbolized means employed for partitioning the socially organized human aggregate. Given the proposition that distinctions made in mortuary ritual are made in terms of the social persona, the composite of the social identities held in life, there should be a strong correspondence between the nature of the dimensional characteristics serving as the basis for differential mortuary treatment and the expected criteria employed for status differentiation among societies arranged on a scale from simple to complex (1971:18-19).

In other words, the more socially complex a society, the more complex should be the expression of social dimensions within a mortuary context; and, in addition, societies of different social complexity will use different criteria to express social status. Binford examined these propositions with available ethnographic literature from the Human Relations Area File and found his ideas to be sound.

During the past fifteen years, other archaeologists have added to the contributions of Saxe and Binford. Sophisticated studies based on measurements of caloric expenditures during mortuary rituals, exploitation of information theory to identify social complexity, and analysis of the spatial dynamics of interments have contributed to substantial expansion of these seminal works (see Tainter 1978 for a review of Saxe's and Binford's influence on mortuary studies). However, the majority of the more recent studies which have focused attention on mortuary goods have concentrated on the social significance of quantitative dimensions, e.g., the number of shell beads, the number of ceramic bowls, and so forth. They have not, in general, incorporated qualitative dimensions of the mortuary goods, such as visual characteristics, into their studies.

Mortuary Arts, Chiefdoms,
and the U.S. Army

Building on the contributions of Saxe and Binford, an

inquiry into the relationship between social status and the visual attributes of a group of specified mortuary furnishings may add previously unexplained dimensions to contemporary studies of mortuary furnishings. Particular symbols, for example, discovered on a number of art works buried with one or several individuals may well be representations of an individual's group lineage, social ranking, age, sex or some type of subgroup affiliation. For the purpose of demonstrating such a relationship, ranked societies or chiefdoms (following Service 1962) afford a practical illustration which is ultimately relevant to the mortuary sites examined in this study.

Unlike a band or egalitarian society in which status levels are egocentric, ranks in a chiefdom are less dependent on individual qualities, such as task performance, and the unavoidable criteria of age and sex, of the person holding the rank. (This does not deny, however, that such factors as charisma or sex can play an important role in the achievement or ascription of a rank.) Yet, after the attainment of a specific status, the more sociocentric ranks of a chiefdom become similar to offices having "ascribed functions and conventionalized attributes no matter who occupies [them]" (Service 1962:155); membership in them is hierarchically ordered and structurally resembles a pyramid (Fig. 4).

Service explains further that "a chiefdom has

centralized authority that extends toward the boundary of the society [like an] umbrella . . . so that no one can be in doubt as to his membership, if not his precise place, in it" (1962:167). Commonly, but by no means exclusively, one's "precise place" is often defined by the genealogical closeness of the individual to the central authority or chief. The attainment of one's place, however, can be either ascribed or achieved through a complex array of familial, occupational, and political relationships. Of particular interest to art historians is Service's observation that:

[C]oncepts involving prescription, proscription, sumptuary laws, marriage rules and customs, genealogical conceptions and etiquette in general combine to create and perpetuate this socio-political ordering . . . [and] distinctiveness in dress and ornamentation seem to be the most visible of these and probably the simplest, and perhaps the first, that were instituted (1962:155-156).

Within modern military organizations one can find a ready example of the codification and institutionalization of the sumptuary laws to which Service draws attention. The military's, for example the U.S. Army's, controlled celebration of rank and status through rules governing dress, costume, and etiquette is, moreover, potentially expressible through mortuary arts. This parallel did not escape Service. He wrote:

[T]he use of sumptuary rules for this purpose [identifying rank] is readily seen in any modern Army. There is in the U.S. Army a continuous gradation of rank from private, corporal, ser-

geant, lieutenant, on to the five-star general. But a sharp break is made in the continuity of the gradation by emphasizing the distinction between "officers" and "men." Sumptuary rules in dress, ornamentation, and privilege create a social distance which might be called "artificial daylight" between the two classes. As everyone must know, the purpose of this is clearly and explicitly to implement authority (1962:159).

Service's above observations not only help to clarify the similarities in the pyramidal structure of chiefdoms or tribes and the U.S. Army (compare Figs. 4 and 5) but they also suggest an avenue to explore the logic of the articulation of such a social structure within the arena of mortuary arts. In this case, the U.S. Army provides an excellent analytical vehicle because the glut of beaucaratic Army regulations provides an unmatched source of data which govern this group's mortuary practices. Moreover, these regulations cover almost all aspects of mortuary practices, from the initial autopsy to the crowning grave marker. Of even more relevance, the Army's rules precisely detail the form and content of the visual expressions of rank and status within mortuary contexts.

The explication of the U.S. Army's "mortuary logic" provides an analogy, or model, which will serve to justify the assumption that an identifiable logic also governs the relationship between mortuary arts and social status in pre-Conquest Panamanian societies. By no means do I propose that the logical steps which determine the mortuary practices among these groups are identical.

Indeed, despite the fact that they share the characteristic of a pyramidal social structure, enormous variability can be encountered. The exact number of ranks, the means of recognizing status, the relative importance of genealogical closeness, the significance of achieved versus ascribed status, and so forth vary among groups as well as historically within any one group. Yet, in order to focus attention of the "mortuary logic" of the Army, I will not discuss these historical variables but will, instead, concentrate only on the Army's written rules in effect for one year, namely 1946. (The Vietnam and Korean "wars" which followed World War II caused confusing changes in Army regulations. These post-1946 changes tend to unnecessarily complicate--for this study--Army mortuary practices.) The Army regulations have an important advantage in that they provide an almost complete source of data which governs the mortuary practices of the participating members of this special society. This expectation of the data has not been realized in traditional ethnographic sources because they more regularly focus their attention either on the beliefs and customs associated with the dead and concepts of "afterlife" or on the rites performed for one or two members, usually elites, of the society. (See Binford 1971 or Bartel 1982 for surveys of such mortuary studies.)

When an individual in the Army dies, he is entitled

to an official Army burial; if this right is exercised, the regulations to be discussed are pertinent. However, through the expressed wishes of the next of kin or as expressed in a will, the burial of the individual may be assumed by relatives and taken out of the hands of the Army. The relatives may simply agree to an official burial or may secure certain or partial official ceremonies and paraphernalia, such as a uniform, casket, military weapons display, and so forth, commensurate with the dead person's rank. On the other hand, the next of kin may want to cremate the body or undertake a completely civilian ceremony (War Department 1943b, 1943c). Under all unofficial, kin-controlled burials the social identity of the individual re-enters in varying degrees the society at large, creating the opportunity for displays of identities far outnumbered and uncontrolled by Army regulations. The rules governing this type of burial are out of the Army's jurisdiction and fall within the enormous complexity of modern United States mortuary codes. As a result, these types of burials will not form a part of the "model" Army mortuary practices.

As noted above, I have isolated and summarized the relevant Army regulations in effect during one year, 1946, the end of World War II and, therefore, before confusing regulation changes were formulated as a result of the "non-wars" in Korea and Vietnam. The treatment of bodies

by Army personnel before an interment is quite similar for individuals of all ranks: personal property is removed, the body is washed, and then dressed in an official uniform. Alterations in these procedures arise only if the individual died of undetermined causes, in which case an autopsy is performed, or if the manner of death so mutilated the body that washing and dressing are made impossible. In this latter case, the uniform is simply placed inside the coffin. Moreover, coffin choice, place of interment, and grave marking are also generally the same for all ranks; however, they may be altered, as mentioned above, by familial interference or religious preference, but not by the rank of the deceased (War Department 1943c).

The wives of both officers and enlisted men may be interred with their husbands in national cemeteries. In the case of officers, two, preferably contiguous, graves are assigned for the burial; among enlisted men, the wife is buried in the same grave as her husband. Furthermore, most national cemeteries are sub-divided into sections which have separate areas designated for officers and enlisted men (Office of the Quartermaster General 1931).

The ceremonial activity surrounding an Army burial mimics the patterns represented in the material expressions of status. For example, while the residue of this activity may not be recovered by archaeological methods,

the number of official representatives required to attend funeral services increases with the rank of the deceased. A Major General is entitled to one regiment of infantry, two troops of cavalry, and a battery of field artillery; a Brigadier General is entitled to one regiment of infantry, one troop of cavalry, and a platoon of field artillery; a Colonel is entitled to a regiment; a Lieutenant Colonel or Major is allowed a battalion or squadron. Finally, a Private is entitled to eight men including one skeleton [sic] squad, the corporal in command, and a bugler (War Department 1933 and 1943a).

Dress and insignia of rank and service.

The most accurate resource of recoverable rank expressions found in the Army interments is occasioned by the inclusion of the military uniform in the burial. The style and location of rank emblems may change with the type of uniform, i.e., work, combat, or dress. Burials, however, are usually made with the deceased dressed in the service uniform and, therefore, observations on my part will be limited to it. Enlisted men are required to wear issue uniforms, while officers don tailored, non-issue but regulation suits. The location on the uniform of various emblematic details likewise varies between the two "classes" of soldiers, for example, a "U.S." insignia appears only on one of the enlisted men's collars but on both of the collars of the officer. Even the technique of

manufacture of the emblem varies, a repoussé button for the enlisted men and a fully three dimensional pin for officers (War Department 1941).

Individual officer ranks are indicated by insignia worn on the shoulder loops of the service jacket: four stars for a General, three stars for a Lieutenant General, two stars for a Major General, one star for a Brigadier General, an eagle for a Colonel, a silver oak leaf for a Lieutenant Colonel, a gold oak leaf for a Major, two silver bars for a Captain, one silver bar for a First Lieutenant, one gold bar for a Second Lieutenant, and one silver or gold bar with two or three enamel bands for Warrant Officers. (The material and number of enamel bands varies with the Grade of the Warrant Officer.) However, if a Warrant Officer or enlisted man served as a regular officer in World War I, he is entitled to wear green braids on the sleeves of his jacket. Specific rank insignia for enlisted men are placed on the sleeve of the jacket and consist of various combinations of chevrons. Sergeant Majors have three chevrons above and three arcs below with a star in between the center chevron and arc; Master Sergeants have three chevrons placed above three arcs; First Sergeants have the same insignia as the Master Sergeant except with a lozenge between the chevrons and the arcs; and so forth down the ranking ladder to a Private First Class who is allowed one chevron. Other

Privates and recruits wear no rank insignia (Young 1959:390-391).

In addition to these strictly rank designations, each member of the military belongs to one or more subgroups. All officers and enlisted men must wear on their service jacket's lapel the insignia of the Army unit to which they are currently assigned. Enlisted men must also add the badge of the arm of service they belong to on their left collar, opposite the "U.S." repoussé button. Distinctive insignia representing the regiment, separate batallion, or company may be worn by officers on the shoulder loops and by enlisted men on both lapels. All personnel, regardless of rank, display wound and war chevrons on their jacket sleeve; slight changes in the location of these stripes distinguishes between officers and enlisted men. Service stripes, each one representing three years of service, are worn on the sleeve only by enlisted men.

Decorations commemorating individual achievements are displayed in the same way by both officers and enlisted men. The Medal of Honor, for example, is worn as a pendant hanging from the neck and over the individual's tie. The Distinguished Service Cross, Distinguished Service Medal, Silver Star, Purple Heart, Soldier's Medal, Distinguished Flying Cross, Navy Cross, Gold Life-Saving Medal and Silver Life-Saving Medal are all exhibited on the left breast of the service jacket and, if an indi-

vidual has received multiple awards, they proceed from right to left in the same order as listed above. The Good Conduct Medal is also worn on the jacket's left breast, but to the left of all other medals. Oak leaf clusters are added to the ribbons of the respective medals; these ribbons may also be embellished with citation stars and clasps.

Badges representing qualification in the use of a particular weapon are displayed on the left pocket flap of the service jacket. Generally, enlisted men may wear any of the weapon badges for which they have qualified; officers, however, can only exhibit the badge of the last weapon for which they passed qualification tests. Foreign decorations are acceptable additions to the Army uniform and are worn as closely as possible to the style stipulated by the issuing country, but always to the left of all U.S. Army decorations.

The U.S. Army presents a close to ideal situation in respect to the mortuary arts: it is a rigidly ranked social group which structurally resembles a chiefdom and whose ranks and subgroup affiliations are clearly differentiated through visual cues. Returning to Service's ideal pyramidal model of a chiefdom or ranked society, it is noticeable that as rank increases, there is a decrease in the number of individuals within the rank or status group. In the U.S. Army the pattern is similar; there is

a consistently greater number of enlisted men than officers. While Table 1 clearly indicates that the fit

Table 1
 Frequency of Army Ranks,
 30 September 1978
 (Department of Defense 1979:45)

<u>Rank</u>	<u>Number of Individuals</u>
General of the Army	1
General	10
Lieutenant General	36
Major General	169
Brigadier General	216
Colonel	4453
Lieutenant Colonel	11062
Major	16334
Captain	28628
1st Lieutenant	10839
2nd Lieutenant	12750
Warrant Officer	13287
Sergeant Major	3739
Master Sergeant	12460
Sergeant 1st Class	45308
Staff Sergeant	69973
Sergeant	118598
Corporal	179026
Private 1st Class	113769
Private PV1 and PV2	126642

between the Army ranks and the pyramidal model is not without variation--note the "bulges" at the level of Captain and Corporal--the overall distribution of their numbers within the ranks does closely approximate the ideal model. Although not within the temporal limits which bounded the selection of specific Army regulations, Table 1 expresses the "real" population in the Army for one day, 30 September 1978; Tables 2 and 3 confirm the general pattern suggested by Table 1 for the years 1973-1977 and 1925-1939. Based on this information we might

Table 2
Percent of United States Army Military
Ranks during a Five Year Period
(Department of Defense 1979:46)

<u>Rank</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
General of the Army	.00004	.00005	.00005	.00005	.00005
General	.0016	.0016	.0016	.0017	.0018
Lieutenant General	.0061	.0055	.0057	.0057	.0055
Major General	.021	.021	.019	.021	.020
Brigadier General	.028	.028	.027	.028	.028
Colonel	.709	.687	.645	.680	.690
Lieutenant Colonel	1.6	1.55	1.52	1.58	1.58
Major	2.6	2.59	2.57	2.52	2.44
Captain	4.34	4.31	4.48	4.58	4.55
1st Lieutenant	1.95	2.05	1.97	1.80	1.65
2nd Lieutenant	1.79	1.74	1.57	1.52	1.59
Warrant Officer	.914	.864	.829	.815	.839
Sergeant Major	.641	.634	.615	.634	.637
Master Sergeant	1.59	1.61	1.62	1.63	1.64
Sergeant 1st Class	5.85	5.81	5.76	5.67	5.72
Staff Sergeant	10.51	10.26	10.12	10.03	9.91
Sergeant	14.46	14.50	15.08	14.78	15.45
Corporal	17.09	18.78	19.21	19.53	19.46
Private 1st Class	14.77	14.38	15.20	15.43	15.36
Private PV1 or PV2	20.32	20.17	18.79	18.80	18.44

Table 3
Number of Enlisted Men and Officers in the
United States Military during a Fifteen Year Period
(Department of Defense 1979:30)

<u>Year</u>	<u>Officers</u>	<u>Enlisted Men</u>
1925	14594	122454
1926	14143	120795
1927	14020	120809
1928	14019	122065
1929	14047	125071
1930	14151	125227
1931	14159	126357
1932	14111	120846
1933	13896	122651
1934	13761	124703
1935	13471	126015
1936	13512	154304
1937	13740	166228
1938	13975	171513
1939	14486	175353

anticipate proportionately fewer higher ranking individuals in a military cemetery than lower ranking soldiers. Concomitantly, as rank increases we should also expect a decrease in the number of individuals who share the respective ranking emblem. Under ideal conditions, those symbols whose distribution is isomorphic with the pyramid will represent ranking symbols. If nonranking insignia, such as the Bronze Stars, Medals of Honor and so forth, were included in the burials, they would also tend to increase in frequency in the higher ranks since, in general, higher ranks represent greater length of service affording an increased chance of winning more subgroup badges. Moreover, subgroup membership increases upward mobility, also accounting for their higher frequency at the upper status levels. We could therefore expect some symbols to reflect the pyramidal rank structure and others to indicate status through the number of different, or variety of, emblems associated with an individual.

The above expectations derived from the example of the U.S. Army are based on the assumption that a particular mortuary population, especially at a chiefdom level of social organization, will utilize the same "mortuary logic" which determines the structural properties of the Army's mortuary population. This assumption must be tempered by the realization that historical events or circumstances can affect the

"neatness" of the pyramid. For example, participation in the U.S. Army's official mortuary practices is not mandatory. As a result, we might reasonably expect that the presence of particular ranks in the actual graves would be skewed. Lower ranking enlisted men, for example, might be underrepresented while higher ranking officers might be more prone to select an official Army burial. Moreover, various types of military cemeteries may contain skewed distributions of rank. For example, the National Cemetery at Arlington and permanent cemeteries located at Army posts might contain a larger proportion of officers, both commissioned and non-commissioned. On the contrary a cemetery located at a battle site might reflect a higher number of enlisted men and lower ranking officers. These and other historical circumstances must be considered in the interpretation of any mortuary study. However, they do not negate the importance or relevance of the general principles--the logic--which is exemplified in the U.S. Army mortuary practices.

Cluster Analysis as a Mechanism of Data Organization and Exploration

The examination of these ideas within the context of prehistoric societies requires a substantial amount of comparative information from each site or village under study. A few scattered graves does not provide the breadth of information required to establish the patterns

of mortuary practices and uses of various mortuary arts. In general, the larger the sample or amount of mortuary data from a site, the more representational the information. As a result, the quantity of data--the number of individual graves, the amount of mortuary arts, the variations among the grave furnishings--requires the use of methods of examination which are not widely used in art historical studies. The method I have used to organize the mortuary arts is cluster analysis, also called numeric taxonomy, and first used effectively in a study of prehistoric mortuary practices by Christopher Peebles (1969).

Cluster analysis is a widely used and accepted analytical technique in both the social and natural sciences. Its purpose is to "discover whether there exists any structure (i.e., natural arrangement of objects into homogenous groups) inherent in the data themselves" (Johnson 1967:241). In 1963 Robert Sokal and Peter Sneath published Principles of Numeric Taxonomy, the primary source on this technique, and since that time the literature has grown enormously. Aldenderfer and Blashfield (1984:8) state, for example, that the rate of the growth of the literature between 1963 and 1975 was "faster than that of even the most rapidly growing disciplines, such as biochemistry." These two authors have presented a recent "guide to the novice through the maze of cluster analysis"

(1984:9), and this survey contains a concise history of cluster analysis and an introduction to applications of the technique.

The process of organizing things or information into one or another closely homogenous clusters depends on measuring the similarity between those things. Similarity in quantitative analyses is dominated by the concept of metrics. As Aldenderfer and Blashfield point out, "This approach to similarity represents cases as points in a coordinate space such that the observed similarities and dissimilarities of the points correspond to metric distances between them" (1984:18). There are a wide variety of similarity measurements, but the most commonly used methods in the social sciences are correlation coefficients and distance measures. The majority of cluster analyses, including those applied in this study, employ the distance measures.

Technically, they [the distance measures] are described as dissimilarity measures; most of the more popular coefficients demonstrate similarity by high values within their ranges, but distance measures are scaled in the reverse. Two cases are identical if each one is described by variables with the same magnitudes. In this case, the distance between them is zero (Aldenderfer and Blashfield 1984:24-25).

The cluster analyses available through the Statistical Analysis System (SAS) package used in this study all employ a Euclidian distance measure, sometimes referred to as a Pythagorean distance, which "is a percentage ratio of

the sum of squared distances between units and their cluster centres relative to their summed distances from the overall data mean" (Hodson 1971:34).

There are presently seven primary types of cluster analysis: hierarchical agglomerative, hierarchical divisive, iterative partitioning, density search, factor analytic, clumping, and graph theoretic. Hierarchical agglomerative methods are by far the most widely used technique. Following Peebles' arguments (1974:99-100) in favor of this type of cluster analysis, I have also employed it. Peebles also provides a precise explanation of hierarchical agglomerative clustering, also called hierarchic fusion and polythetic-agglomerative; these techniques:

. . . begin with a population of N individuals and $N-1$ fusions reduce that population to one cluster of N individuals. The steps in such a reduction are:

1. Define a measure of similarity S_{pq} between two groups p and q where the groups may contain one or more individuals,
2. Start with N groups (each comprising a single individual), and compute the between-group similarities S_{pk} --this is called the similarity matrix,
3. Fuse those two groups p and q which are most similar (on the first cycle, these will be the two most similar individuals in the entire population). The structure of the new cluster is then [sic] resolved, and the new similarities $S_{p+q, r}$ between cluster $(p+q)$ and all other cluster R are calculated,
4. Return to 3. and continue fusing clusters successively until $N-1$ cycles have been performed (1974:99-100).

The sequence of mergers of the hierarchical agglomerative

type of cluster analysis can be visually represented by a tree diagram, often called a dendrogram (Fig. 6). Within this type of analysis, none of the clusters overlap; instead, each cluster can be subsumed as a member of a larger, more inclusive cluster at a higher level of similarity (Aldenderfer and Blashfield 1984:36-37).

Obviously the formation of clusters within the hierarchical agglomerative type of analysis will vary with the selected similarity measurement. In Peebles' study of the burials from Moundville in Georgia, he argues that Ward's measurement is one of the most reliable; this opinion has been seconded by the SAS manual which states that "many studies of cluster analysis have indicated that Ward's method and average linkage are among the best available hierarchical clustering algorithms" (SAS 1982:424). I have taken a different tack in this study; I have submitted the data to a variety of algorithms in order to evaluate the differences and similarities in the results among them. The methods employed in this study include complete linkage, average linkage, Ward's method, and the centroid method.

The complete linkage algorithm, used in the 1979 version of SAS, states that:

Any candidate for inclusion into an existing cluster must be within a certain level of similarity to all members of that cluster
[T]herefore, complete linkage has a tendency to find relatively compact, hyperspherical clusters

composed of highly similar cases (Aldenderfer and Blashfield 1984:40).

The average linkage method "computes an average of the similarity of a case under consideration with all cases in the existing cluster and, subsequently, joins the case to that cluster if a given level of similarity is achieved using this average value" (Aldenderfer and Blashfield 1984:40). This method, which is widely used in the biological sciences, "tends to join clusters with small variances, and is biased toward producing clusters with roughly the same variance" (SAS 1982:421).

Ward's (1963) method and subsequent formula was "designed to optimize the minimum variance within clusters [and] works by joining those groups or cases that result in the minimum increase in the error sum of squares" (Aldenderfer and Blashfield 1984:43). As noted in both the SAS manual (1982:421) and Aldenderfer and Blashfield's review (1984:43), this method "is biased toward producing clusters with roughly the same number of observations." The centroid method defines the distance between two clusters as the distance between their centroids or means (SAS 1982:421). As a result, it favors outliers. In general, the centroid method rarely agreed with or paralleled the results obtained by the other algorithms. While the other three clustering methods obtained similar results with the data, the ability of the complete linkage method to discover compact clusters of highly similar

populations predisposed me to depend on its results more heavily.

The advantages of cluster analysis stem from its ability to analyze large quantities of data; its identification and measurement of similarities which are neither apparent nor easily justified by the researcher among the data; and its reduction of often burdensome a priori assumptions concerning the relationships among the data elements. Clustering methods have been used for a wide variety of purposes in an equally wide variety of disciplines. I hasten to point out that these methods simply amount to a classificatory technique. Classification of art works--whether they are based on stylistic, iconographic, contextual, technical, or other criteria--is a normal and, usually, necessary part of any art historical study. A scholar's classification or taxonomy is not an end in itself but is a mechanism which facilitates inquiry of large quantities of data. Cluster analysis, one type of such a mechanism, is new to the discipline of art history; the principle, however, is not. The applicability of the technique to art history will, therefore, not stem from its newness but from its usefulness.

Summary

The history of art abounds with almost endless examples of mortuary arts. For the most part, these

artistic undertakings have been treated simply as another element in the visual vocabulary of a particular society. This study argues that mortuary arts, as identifiably discrete human creations, provide a base of information which has the potential of significantly enhancing our understanding of the relationships between the visual arts and human social dynamics.

I have argued that the study of mortuary arts and social dynamics necessitates a mortuary population of some considerable size (in this case, at least fifteen graves) in order to generate reliable information on the demographic characteristics of the society under study. El Indio, La Cañaza, El Cafetal, and Sitio Conte, all from the Central Region of Panamá, meet these requirements. In addition, these pre-Conquest archaeological sites are from a region in the New World which is primarily known to us from mortuary remains.

Since the study of mortuary arts potentially informs us about the dynamics of visual and social phenomena, it also has the capability to enhance our understanding of the variation in these dynamics as the social configuration of a society changes. The methodological basis underlying such an inquiry is obtained in the seminal works of Saxe (1970) and Binford (1971). In order to make concrete the correlation between mortuary arts and social dynamics, I introduced the analogy of the U.S.

Army. The description of the Army's rules governing mortuary interments, combined with the visual articulation of rank within this "closed" social system, provides an accessible example which enhances the work of Saxe and Binford as well as this study.

Moreover, the example of the U.S. Army brings to the forefront the importance of stressing the context which the arts, or visual information, occupy. The social meaning, and in most circumstances the artistic content, of a work of art changes with its social context. One of the elementary measures required to exploit the analytical potential of these relationships rests in the recognition of the context of mortuary arts. The implications of this observation are all too often overlooked. For example, the inclusion of rank and sub-group emblems within the context of the entire Army population at one hypothetical point in time (i.e., 1946) permits generalizations about the social meaning of those emblems which would not be accessible in studying a small fragment of the population.

Finally, the strategy outlined in this study requires alternatives to traditional art historical methods. I decided, as a result, to examine relationships among the mortuary arts by utilizing the techniques of cluster analysis. This stochastic method, proven to be applicable in mortuary studies (Peebles 1974), makes it possible to explore and organize in various ways large amounts of data.

II.

THE MORTUARY SITES OF THE TONOSI VALLEY

From 1967 to 1970 Alain Ichon, a French archaeologist, conducted research on and excavated a number of pre-Conquest sites located in the southern tip of Panamá's Azuero peninsula (Fig. 2). A few untrained archaeologists had preceded him (see Mitchell and Heidenreich 1975; although published later than Ichon's results, these excavations were carried out before his), but Ichon's work represents the first useful body of information on the archaeology of the area.

Ichon's field work and published results (1968, 1970, 1974, 1975, 1980) focus on the Tonosi river valley (Fig. 7), an area of approximately 870 square kilometers and classified by Köppen (1932[1972 reprint]:59) as humid tropics with an average annual rainfall of 2645 millimeters. Only 5 percent of the precipitation falls during the dry season from January to April. The valley is an alluvium which includes, in addition to the Tonosi itself, the Cañas, Aguas Buenas, Limón and Guánico rivers. The entire valley, stretching approximately fifteen kilometers north and south and twenty kilometers east and west, is bordered on its southern edge by mangrove swamps and the Pacific Ocean; and on the north, east and west by hilly terrain, at points reaching elevations of 1500 meters. Arms of the various river systems extend into

these hills, the Tonosí's being the largest and most populated today and, apparently, in pre-Conquest times (see Ichon 1974:316).

Ichon's survey of sixty sites in the Tonosí valley (1974:438-459) recorded that fifty-one had evidence of habitation, eleven had cemeteries and nine had ceremonial structures. Two of the sites were petroglyph areas, and one was defined as a fishing camp. Of the eleven sites with cemeteries, La India I (TI-1), Chara (TI-3), El Bijagual (TI-15), Bucaro (TI-22), El Infernillo (TI-30), El Agua (TI-34), La Tinajita (TI-46) and Cañas (TI-57) either had too few excavated burials or only had been surveyed on the surface. Only two sites, El Indio (TI-18) and La Cañaza (TI-9), had a sufficient number of excavated graves to be useful to this study. The site of El Cafetal (TI-35) was surveyed by Ichon, but no excavations were undertaken. In the rainy season of 1969 and in the wake of an onslaught of grave robbing, the Panamanian government sent Raul González, a co-worker of Ichon's, to the site before it was ruined by huagueros, or grave robbers. El Cafetal provided a large number of burials and makes up the third site from the Tonosí Valley discussed in the present study (González 1971).

Based on stratigraphic pits, ceramic seriation and radiocarbon dating, Ichon formulated the following chronology for the Tonosí valley (also adopted by González

in his El Cafetal excavations):

Phase I (Bucaro)	? - 250 BC
Phase II (El Indio)	250 BC - 500 AD
Phase III (La Cañaza)	500 AD - 1000 AD
Phase IV (Bijaguales)	1000 AD - 1500 AD

In Cooke's review (1976) of the Central Region of Panamá, he integrated Ichon's chronological scheme into one which serves the entire cultural region. Cooke's chronology is divided into seven phases:

Phase I (preceramic):

9000 BC - 3000 BC

Phase II-III (plastic ceramic decoration):

3000 BC - 150 AD

Phase IV (bichrome and trichrome ceramics):

150 AD - 450 AD

Phase V-VI (four color tradition):

500 AD - 1100 AD

Phase VIIA (Parita style):

1100 AD - 1300 AD

Phase VIIB (El Hatillo style):

1445 AD - 1625 AD

This chronology includes the entire Central Region of Panamá and incorporates a wider range of data than Ichon's; in addition, it accounts for a pre-ceramic phase, apparently not encountered in Ichon's surveys. The obvious differences are that Ichon's Phases I and II are

encompassed by Cooke's II/III and Ichon's Phase IV is refined in Cooke's scheme to VIIA and VIIB.

However, both chronologies are based on changes in ceramic styles. While the differences and refinements are important for studies based on ceramic seriation, they are not particularly relevant to this study. For ease of cross-referencing my analysis of the Tonosí material with the excavation reports of Ichon and González, I shall use the former's chronological framework in this part of the study. Moreover, Ichon's phases I and IV can be eliminated from consideration since none of the burials at El Indio, La Cañaza or El Cafetal date from these periods.

The Mortuary Arts from the Phase II

Graves at El Indio

The site of El Indio, located approximately ten kilometers due east of the modern town of Tonosí, is situated on a peninsula of raised land which extends into a mangrove swamp (Fig. 8). The swamp surrounds the site on the north, east and south; several hundred meters to the west, the land increases in elevation. The Pacific Ocean lies about two kilometers to the south, connected to El Indio on the south and east by the Indio estuary and on the north and east by the Juncal estuary which flows into the Indio.

Ichon undertook excavations at the site of El Indio during the two dry seasons of 1969 and 1970. Between

these two visits, huaqueros excavated a number of illegal pits.

As seen in Figure 9 and observed by Ichon (1974:177), the Phase II burials appear to be irregularly distributed in the central area of El Indio. The vertical and horizontal proximity of the graves vary considerably (Table 4). Ichon uncovered a layer of hard-packed earth at a depth of 95 centimeters above most of the burials. He suggested most emphatically for the burials from his trench 2 (F.2), that this layer represented house floors (Ichon 1974:179, 187). Therefore, he concluded, the burials below were of kin or family groups affiliated with the house above.

The isolation of discrete graves among the burials is difficult because the excavations were not able to identify separate walls or floors. Therefore, occasionally the attribution of mortuary arts to a specific burial may be questionable. Amalgamations of burials into larger grave groupings are possible only on the basis of physical proximity. Whether such groups represent aboriginal patterns or simply a bias of the modern excavations is not clear.

Demographic and physical characteristics of the Phase II El Indio population.

The total number of Phase II burials was forty-three distributed among thirty-seven graves (Appendix 1). The

Table 4
El Indio (Phase II): Grave Loci

<u>Grave</u>	<u>Trench or Pit</u>	<u>Horizontal Locus by Excavation Square</u>	<u>Vertical Locus by Depth from Surface (cms.)</u>
1	F.2	B5-C5	120
2	F.2	C6-B6	130
3	F.2	B6	130
4	F.2	C5	135
5	F.2	B5-B6	145
6	F.2	B6	160
7	F.2	C6	120
8	F.2	C6	135
9	F.2	B6, B7, C6, C7	170
10	F.2	B5	120
11	F.2	D6	120
12	F.3	K6	120
13	F.3	F5	130
14	F.3	J6	120
15	F.3	E5-F5	130
16	F.3	G5	140
17	F.3	J7	100
18	F.3	I7-J7	140
19	F.3	K6	140
20	F.3	I5-J5	140
21	F.3	K4-K5	140
22	F.3	K5-L5	140
23	F.3	K7	145
24	F.4	S3	110
25	F.4	S15-S16	150
26	F.4	S17	160
27	F.4	T17	160
28	F.4	T15	130
29	F.4	T15	150
30	F.4	T16	150
31	F.4	T15-U15	150
32	S.7	Pit 7	100
33	F.6	C8	160
34	F.6	F3	160
35	S.8	Pit 8	150
36	H.3	None	Unknown
37	F.4-F.5	None	Unknown

ages, orientations, positions and depositions of these individuals are summarized in Table 5. Ichon was unable to make any sex determinations on the badly decomposed skeletal remains. Moreover, in a number of instances, portions of the skeleton's torso were completely absent from the burial. Age determinations, based on tooth wear, were grouped into four classes: mature adult, adult, young adult and child. Because of inherent problems in fine diacriminations of age by tooth wear (Ubelaker 1978:64-65), I have combined mature adult and adult into one class, "adult." Ichon's young adult (adult jeune in French) is interpreted as adolescent. Table 6 summarizes the distributions of these age groups by excavation trench.

Table 6
El Indio (Phase II):
Distribution of Age Groups
By Excavation Area

<u>Trench/Pit</u>	<u>Children</u>	<u>Adolescents</u>	<u>Adults</u>	<u>Unknowns</u>
F.2	5	4	2	0
F.3	2	5	6	0
F.4	4	3	2	0
F.6	0	1	1	0
H.3	0	0	1	0
S.7	1	0	0	0
S.8	0	0	5	0
F.4-F.5	0	0	0	1
Totals:	12 (28%)	13 (30%)	17 (40%)	1 (2%)

Concentrating on the distribution of mortuary arts among the graves (summarized in Tables A-1 through A-3, Appendix 6), the primary division or grouping is between

Table 5
El Indio (Phase II):
Age and Position of Interments

<u>Grave</u>	<u>Age</u>	<u>Orientation</u>	<u>Position</u>	<u>Deposition</u>
1	1	7	3	1
2	3	2	3	2
3	3	2	3	2
4	3	1	3	9
5	2	7	3	4
6	2	4	3	1
7	2	9	9	9
8	3	9	9	9
9	2	7	3	4
10	3	9	9	9
11	1	9	9	9
12	1	5	3	9
13	2	5	3	9
14	3	9	9	9
15	1	1	3	4
16	1	7	3	5
17	1,3	9,9	9,4	9,9
18	1	9	9	9
19	2	4	3	3
20	2	9	9	9
21	2	9	9	9
22	2	1	3	9
23	1	9	1	4
24	3	9	9	9
25	3	7	3	3
26	3,1	7,7	9,3	9,1
27	2	8	3	4
28	2	7	3	3
29	2	7	3	2
30	3	1	3	3
31	1	9	9	9
32	3	1	3	3
33	1	3	3	4
34	2	3	3	2
35	1 (all)	9 (all)	3 (all)	9 (all)
36	1	9	9	9
37	9	9	9	9

Table 5 cont.

Key

Age: 1- Adult, 2-Adolescent, 3-Child, 9-Unknown

Orientation of Body: 1-North/South, 2-Northwest/Southeast,
3-Northeast/Southwest, 4-South/North, 7-West/East,
8-East/West, 9-Unknown

Position: 1-Extended, 2-Semiflexed, 3-Flexed, 4-Tightly
flexed, 9-Unknown

Deposition: 1-Lying on back, 2-Lying on right side, 3-
Lying on left side, 4-Lying on stomach, 5-Lying on unknown
side, 6-Sitting, 9-Unknown

those graves with no objects and those with objects. Those without mortuary arts amount to half of the graves (n=19 or 51 percent). This subset of burials reflects a range of ages which is quite similar to the population as a whole (Table 7), suggesting that the presence or absence of mortuary furnishings does not represent a preferential burial treatment for particular age groups. The polarization of the cemetery population into these two, almost equal groups, might, on the other hand, reflect a binary social dimension such as sex or moiety.

Table 7
El Indio (Phase II):
Number of Interments by Age Group and
Presence/Absence of Mortuary Arts

<u>Age</u>	<u>With Mortuary Arts</u>	<u>Without Mortuary Arts</u>
Child	7 (58%)	5 (42%)
Adolescent	5 (39%)	8 (61%)
Adult	7 (41%)	10 (59%)
Unknown	1 (100%)	0

Cluster analyses of the mortuary arts from the Phase II El Indio graves.

Based on the formulae and procedures already presented in Chapter I, the El Indio Phase II burials with mortuary furnishings (n=18) group into six clusters (Appendix 6, Table A-4):

I. Graves 1, 12, 15, and 24 all had undecorated bowls (C3); in addition, graves 1 and 15 had undecorated jars (C1), and Grave 24 had an undecorated plate (C2).

II. Graves 2, 3, 17 and 27 all had undecorated bowls (C3) and dobles or compound silhouette vessels (C6); in addition Grave 17 contained a decorated plate or bowl (C4), and grave 27 had unworked shell (S5).

III. Graves 5, 26 and 29 each contained a unique object, grave 5 with worked shell (S4), grave 26 with a paired ceramic vessel (C7), and grave 29 with shell beads.

IV. Graves 13, 16, 25, and 32 all had decorated plates or bowls (C4), and graves 13 and 16 each had undecorated bowls (C3).

V. Graves 36 and 37 both contained metates (L3) and, in addition, grave 36 had an effigy vessel (C9); grave 36 was partially excavated by huaqueros.

VI. Grave 9, isolated by the presence of four types of mortuary arts: decorated plate (C4), ceramic figurine (C14), stone axe or chisel (L4) and unworked shell (S5).

The other three cluster analyses from the 1982 version of SAS, namely Ward's, centroid and the average linkage methods, closely parallel the results from the complete linkage analysis (Table 8). The biases of the various analyses have already been discussed in Chapter I. Therefore, if we drop the centroid method, the only differences among the complete linkage, Ward's and average linkage methods is the shift of grave 17 from cluster II in the complete linkage test to cluster IV in the other tests. This is a minimal difference and increases confidence in

the reliability of the complete linkage analysis.

Table 8
El Indio (Phase II):
Comparison of Cluster Analyses

Cluster	Analysis:			
	<u>Complete Linkage</u>	<u>Ward's</u>	<u>Centroid</u>	<u>Average Linkage</u>
I	Graves 1, 12, 15, 24	1, 12, 15, 24	1, 2, 3, 12, 13, 15, 16, 17, 24, 25, 27, 32	1, 12, 15, 24
II	2, 3, 17, 27	2, 3, 27	5	2, 3, 27
III	5, 26, 29	5, 26, 29	26	5, 26, 29
IV	13, 16, 25, 32	13, 16, 17, 25, 32	29	13, 16, 17, 25, 32
V	36, 37	36, 37	36, 37	36, 37
VI	9	9	9	9

The social and visual dimensions of the Phase II El Indio mortuary arts.

The results of the complete linkage cluster analysis emphasize age categories among the graves. For example, excluding multiple burials in graves 17 and 26, only one adult grave--namely grave 16 found in cluster IV--is not part of clusters I or V. In cluster I, three of the four graves are adults, while in cluster V there is one adult grave and another with a skeleton of undetermined age. All the other four clusters are clearly dominated by

children or adolescents. When adults do appear, they are part of a multiple burial accompanied by a child. This suggests that the presence or absence of various mortuary arts, the basis of the clusterings, is strongly affected by the age of the deceased.

The distinctions among the age groups are emphasized by the presence and absence of specific mortuary items. For example, in cluster IV children are buried without plain, undecorated bowls (C3); in cluster II the sole child grave (24) is the only burial with a plain plate (C2). Cluster V almost exclusively contains children and is unique in that every grave has a doble or compound silhouette vessel (C6). While there is one grave (27) in this cluster which is not of a child as classified by Ichon, this adolescent burial may represent a misclassification of age either due to severe skeletal decomposition or the possibility that the individual was on the verge of adolescence. Minimally, the dobles are all associated with young people and, perhaps, exclusively with children. These mortuary items are the most visually expressive arts found in the El Indio Phase II burials. The designs (Fig. 10) on these bi- and trichrome vessels (black on white, black on red, and black and red on white) vary from non-objective geometric patterns to formalized renderings of fauna, human beings and, possibly, ritual activities (see Miranda G. 1973). The vessels are all figure-eight

shaped, displaying some variation in the proportions between the top and bottom segments (see Ichon 1980:123), and all exhibit an integration of the vessel shape and painted design. Even though these elaborate vessels are found exclusively with children (or young people), not all of the children are buried with one; four of the children's graves (24, 25, 26, and 32) do not have dobles. These four graves are concentrated in the northwest sections of the site (graves 24, 25, and 26 in Trench F.4 and grave 32 in the far northwestern Pit 7 or Ichon's S.7). Therefore, it appears that no group of burials at the site had special privileges related to the inclusion of a doble in the mortuary furnishings. Moreover, the orientation, deposition and position of the children burials, with or without dobles, does not follow any regular pattern.

Two of the graves that include children are multiple burials, both with combinations of one adult and one child. In grave 17 four dobles were found, and the child was placed inside one of them. Three of the four dobles discovered in grave 17 were complete vessels. One (Fig. 10a) is divided into bands and depicts human figures involved in some type of activity, interpreted by Miranda (1973) as ritualistic. These scenes of human activity have been found on other dobles from other locales in the Tonosí Valley. The scenes have been interpreted as representing agricultural or domestic activity (Ichon 1974:139-

140) or possibly ceremonial construction work (Cooke 1984:289). The other two dobles (Fig. 10c and 10d) portray frontal human figures on opposite sides of the vessel. The eyes and noses of the human figures can also be interpreted as bird motifs. The painting can be read as either white on black or black on white, and the information changes with the reading. While these two vessels are not identical, the close similarity in design, color (black and white) and shape suggests that they are a pair.

In grave 26 the child was found lying on top of the adult. The only mortuary item in this grave was a paired vessel (Fig. 11a), possibly symbolizing the interdependency of child and adult. The temptation to suggest that the adult is a woman and, therefore, the mother of the child, is strong but, as noted above, determining the sex of the skeletons was impossible due to their advanced state of decomposition. Even if the adult proved to be a woman, we can eliminate the idea that the possible symbolic content of the burial and the ceramic vessel relates to the death of the mother and child at birth; the soft infant skeleton would most likely not have survived the humid and acidic soil conditions at the site. The paired mortuary arts found in this grave are not unique. As discussed above, in the only other multiple burial grave (17) not only are an adult and child present, but two dobles with designs so similar they could be called a pair

are also present (Fig. 10c and 10d). This seemingly coincidental situation supports the observation that these multiple burials are socially significant, and the ceramic "pairs" demonstrate the significance.

While all of the mortuary arts in the children's graves are ceramic vessels, only one such item was found among the adolescent graves (13). On the other hand, shell objects, including beads, worked and unworked shell, were only found in adolescent graves. Adolescent grave 9 is quite exceptional, containing a cache of gastropods and bivalve shells, burned deer bones, clay figurines (Fig. 11b and 11c), a basalt axe, and a bichrome bowl (Fig 12). The basalt axe and ceramic figurines are unique to this grave, the most diverse of Phase II at El Indio. The figurines represent humans in Kewpie doll shapes, with an arched back; punctate bands vertically and horizontally divide the figure. The basalt axe is of a common type comparable to those found throughout the site (Fig. 13). The rim of the bowl (Fig. 12) was elaborately painted, and the designs are quite similar to those found on the dobles. Unfortunately, this bowl was severely damaged, and the designs below the rim are lost. All of the gastropods and shells were found inside this vessel.

Adult graves have less in common with one another. Although grave goods among the adults are limited to ceramic vessels with only one exception (grave 36 with a

stone metate), they do not share unique mortuary items like the graves of children and adolescents. For example, an effigy vessel (C9) is the only Phase II mortuary object from El Indio found solely with an adult; however, this object occurs in only one adult burial (grave 36). Undecorated jars (C1), the most frequently found object in adult burials (excluding the multiple burials of grave 17 and 24), are present in only forty percent of the adult graves. One adult grave and another of an individual of undetermined age used oval, tripod metates as burial platforms. This practice did not occur in any other Phase II graves at El Indio or El Cafetal.

Generally, age was an important criterion used in determining the inclusion or exclusion of various mortuary items among all the Phase II El Indio graves. In addition, comparison of the youth burials (children and adolescents) with the adult interments demonstrates an increase in the variation of mortuary furnishings paralleling an increase in age. That is, the classes of objects found in adult burials are less regular or predictable than those in adolescent or child burials. Individuals of lesser age are treated more as a class than their elders. This pattern suggests that as an individual grew older, their social identities became more distinct in comparison with their peers. Such a system of determining social identities is characteristic of status based

on achievements. Adolescents and children, on the other hand, had less opportunity to develop or gain unique social positions and so they are treated more uniformly, sharing similar social identities.

The distribution of the graves provides support for this interpretation. Ichon (1974:177, 179) notes that in trenches F.2 and F.3 the burials were discovered under a three centimeter layer of hard clay, interpreted by him as an interior habitation floor. Above the clay floor was debris from Phases II and III. No associated wall foundations, post holes or other features were discovered. Ichon argued that the burials under the "floor" corresponded to family burial groups. Whether the hard clay layer represented a house floor or not, the burials in F.2 and F.3 are grouped together yet, the overall pattern of all the graves does not correspond to a graveyard or cemetery.

Trench F.2, Ichon argues strongly (1974:179), not only represents a family burial area, but also a "normal" family population, in this case six adults and five children, with a high infant mortality rate. Regardless of whether one uses the age categories of this study or of Ichon's, the age distributions in this burial group do not in all likelihood represent anything like a family unit, normal or not. While the age data is admittedly general, it does not easily fit into any of Weiss' (1973) model

population charts; the infant mortality rate is too high to maintain any population. The trench F.2 "family" was either on the verge of total extinction or does not represent a "normal" family. The former is probably not the case, since people continuously occupied El Indio through Phases II and III, a period of approximately 1,250 years. Ichon's conjecture that the burial group represents a family unit is not likely under these circumstances.

However, Ichon's observation of the burial groups is important in itself. The distribution of burials in other trenches is scattered and indicates that the village did not have a formal cemetery. Saxe (1970) has persuasively argued that the emergence and use of formal cemeteries is strongly correlated with constrained resource availability and increased social complexity, as represented by chiefdoms. Therefore, the lack of a formal cemetery at Phase II El Indio, suggests that the level of social complexity was less than that fitting the general criteria of chiefdom.

One other observation supports this interpretation. In societies where ascribed ranks are important (e.g., chiefdoms), visual or artistic expression of these ranks is very often articulated through costume elements, as exemplified by the United States Army. With the exception of two shell beads in grave 29, none of the Phase II graves at El Indio contained any evidence of known

mortuary items even closely resembling costume elements. Combined with the absence of a formal cemetery, the emphasis on age distinctions and the possible sexual division of the distribution of mortuary arts indicates that the Phase II El Indio community fits the general criteria of an egalitarian society.

The Mortuary Arts from the
Phase III Graves at El Indio

The Phase III graves (see Appendix 2) of El Indio are distinguished from the Phase II burials because they contained ceramics different in style from those of Phase II; those graves without ceramics were dated to Phase III because of their physical proximity to known Phase III burials. In addition, the location of the Phase III graves at the site of El Indio is distinct from those of Phase II (compare Tables 9 and 6), supporting the ceramic-based

Table 9
El Indio (Phase III):
Distribution of Age Groups
By Excavation Area

<u>Trench/Pit</u>	<u>Children</u>	<u>Adolescents</u>	<u>Adults</u>	<u>Unknowns</u>
F.3	1	0	0	0
F.4	1	1	0	0
F.5	0	7	3	1
F.6	6	15	8	5
H.9	0	0	1	0
Totals:	8 (16%)	23 (47%)	12 (24%)	6 (12%)

chronological placement of the graves. Trenches 5, 6 and the huaquero-damaged pit H.9 contained the majority (46 of 49) of the Phase III burials, whereas the Phase II graves

were predominantly located in trenches 2, 3 and 4.

Demographic and physical characteristics of the Phase III El Indio graves.

Since the Phase III graves were excavated at the same time as the earlier burials, similar excavation problems account for uncertain associations between the mortuary furnishings and specific graves. Furthermore, huaqueros had plundered an extensive area of Phase III graves (Ichon 1974:292-295). However, some data from the disturbed area were usable, including information from graves 35 through 42 of this study.

No skeletal remains from the Phase III burials were sexed. The same age categories used in the discussion of the Phase II burials have been used for these later burials. The forty-two Phase III graves yielded forty-nine individuals. In comparison with the deposition, position and orientation of the Phase II burials, the Phase III interments exhibit only one major difference (Table 10). Excluding unknown information, the majority (n=12 or 76 percent) of the individuals in the Phase III graves were found in a sitting position; none of the individuals in the Phase II burials were discovered in this position. Very slight differences occur between the orientations of the bodies in Phase II and Phase III graves. Seventy-eight percent of the Phase III bodies, for example, were oriented to the north or south and 22

Table 10
El Indio (Phase III):
Age and Position of Interments

<u>Grave</u>	<u>Age</u>	<u>Orientation</u>	<u>Position</u>	<u>Deposition</u>
1	3	9	3	9
2	2	1	3	6
3	3	4	9	9
4	2	9	3	6
5	1	4	3	6
6	1	4	3	6
7	2	9	9	9
8	2	7	3	9
9	1	9	1	9
10	2	1	3	6
11	9	9	9	9
12	2	8	3	1
13	2	9	9	9
14	2	9	9	9
15	3,3	9	4	9
16	3	9	9	9
17	1	9	9	9
18	2	9	9	9
19	2	8	3	6
20	2,2	4,9	3,9	6,9
21	2	4	3	6
22	2	4	3	9
23	2	9	9	9
24	1,9	9	9	9
25	2	1	3	6
26	2,1	4,1	3	6
27	2	1	3	6
28	1	9	3	9
29	2	1	3	6
30	9	9	9	9
31	1	1	3	6
32	2	1	3	4
33	2	4	3	6
34	2,3	4,1	3	6,2
35	1	8	3	9
36	9	9	9	9
37	9	9	9	9
38	9	9	3	9
39	1,1	9	3	9
40	1	9	3	9
41	3	9	3	5
42	2,3	8,9	3,9	3,9

Key: See Table 5

percent towards the east or west; while in the Phase II burials, 30 percent of the individuals were aligned north or south and 43 percent east or west.

Twelve percent of the Phase III graves did not contain recoverable mortuary furnishings. In general, the graves with younger individuals had a greater chance of having mortuary furnishings. After eliminating those individuals with unknown ages, children, for example, had an 88.5 percent chance of receiving mortuary objects, adolescents a 74 percent chance, and adults a 67 percent chance (Table 11).

Table 11
El Indio (Phase III):
Number of Interments by Age Group and
Presence/Absence of Mortuary Arts

<u>Age</u>	<u>With Mortuary Arts</u>	<u>Without Mortuary Arts</u>
Child	8 (67%)	4 (33%)
Adolescent	17 (74%)	6 (26%)
Adult	7 (88%)	1 (12%)
Unknown	5 (83%)	1 (17%)

The age distributions of the Phase III individuals vary considerably from the burials of Phase II (compare Tables 6 and 9). Adolescents increased their representation during Phase III (from 31 to 53.5 percent), while there were fewer adults (Phase II, 40.5 percent and Phase III, 28 percent) and children (Phase II, 29 percent and Phase III, 19 percent).

Cluster analyses of the mortuary arts from the Phase III

El Indio graves.

The Phase III El Indio graves with mortuary furnishings (n=32) group into five or six clusters (Appendix 6, Table A-5). The selection of the number of useful clusters is somewhat arbitrary; the differences amount to the inclusion or exclusion of grave 38 in cluster I. I shall use five clusters.

Cluster I includes graves 1, 4, 10, 11, 14, 20, 23, 24, 26-29, 31, 33, and 35-40. They are linked by the presence of decorated jars (C1) and pedestal plates or bowls (C5); 80 percent of the graves in this cluster had one or both of these objects. Apart from these mortuary furnishings, the majority of the graves in this cluster had a relatively low number of objects in each grave. The average number of ceramic types in each grave is 2.45; grave 10 with six and grave 38 with five artifact types were exceptional. Moreover, few of the mortuary objects found in cluster I graves were shared by one or more of the burials. The sparsely distributed mortuary furnishings comprised ceramic cups (C8, grave 24), decorated jars (C15, graves 4, 10, 31, and 38), shell beads (S3, grave 20), worked shell (S4, grave 10), a tumbaga or gold pendant (T2, grave 10), tumbaga plaques (T3, graves 5 and 11), bird bones (B8, grave 23), deer antler (B9, grave 10), deer bones (B10, grave 33), fish bones (B12, grave 39), and worked stone (L9, grave 38). The ceramic cup

found in grave 24 is unique among all the Phase III burials.

Graves 2, 3, 21, 34, and 41 constitute cluster II; all of these burials contained shell pendants (S1). In addition, graves 2 and 3 contained decorated plates or bowls (C4); graves 3 and 21 had shell beads (S3); and graves 3, 21, and 34 included canine teeth (B12). Scattered among individual burials were an undecorated jar (C1 in grave 34), shell figurines (S2 in grave 21), an unknown incised bone object (B3 in grave 2), bird bones (B8 in grave 3), deer bones (B10 in grave 21) and a stone pendant (L5 in grave 34).

The graves comprising cluster III are those numbered 15, 19, and 22. They are characterized by undecorated jars (C1), shell beads (S3) and canine or dog teeth (B12). Two graves, 19 and 22, also contained a bone pendant (B1); moreover, grave 19 had shark's teeth (B7) and decorated plates or bowls (C4). Graves 15 and 22 yielded shell pendants (S1); and the latter of these two burials had decorated pedestal plates or bowls (C5).

The single member of cluster IV, grave 8, contained undecorated jars (C1), decorated pedestal plates or bowls (C5), shell pendants (S1), shell beads (S3), worked shell (S4), sting ray points or spines (B5), and shark's teeth (B7).

Grave 42 is the sole member of cluster V. The burial

contained undecorated jars (C1), pedestal plates or bowls (C5), an effigy vessel (C9), a decorated jar (C15), a fragment of a tumbaga figurine (T4), fragments of shell pendants (S1), unworked shells (S5), and non-human bones (B11).

The average linkage, centroid and Ward's cluster analyses do not agree as well with the complete linkage analysis of the El Indio Phase III burials as they did with the Phase II burials (Table 12). I have already noted that

Table 12
El Indio (Phase III):
Comparison of Cluster Analyses

Cluster	Analysis <u>Complete Linkage</u>	<u>Ward's</u>	<u>Centroid</u>	<u>Average Linkage</u>
I	Graves 1, 4, 10, 11, 14, 20, 23, 24, 26, 27, 28, 29, 31, 33, 35, 36, 37, 38, 39, 40	1, 11, 14, 26, 27, 33, 35, 39, 40	1-4, 11, 14, 15, 20, 22- 24, 26- 29, 31, 33-41	1, 2, 4, 11, 14, 20, 23, 24, 26-29, 31, 33, 35-41
II	2, 3, 21, 34, 41	4, 10, 31, 38	19	3, 15, 19, 21, 22, 34
III	15, 19, 22	42	8	8
IV	8	2, 23, 24, 28, 36, 37, 41	10	10
V	42	3, 8, 15, 19, 20, 21, 22, 29, 34	42	42

Ward's method tends to select for clusters of similar size and the centroid analysis has a bias towards emphasizing

the outliers within a body of data. These patterns or biases are well represented in Table 12. At the five cluster level, the centroid test, for example, arrives at a determination of four clusters each with one member and one cluster with the remainder of the graves. Ward's analysis, on the other hand, finds only one cluster with a single member and broadly distributes the other graves among four clusters. The average linkage method corresponds closely to the complete linkage cluster analysis; changes only occur in the distribution of six graves (2, 10, 15, 19, 22, and 41). However, all of the methods agree on the uniqueness of grave 42, and three of the four tests concur on the singularity of grave 8. The centroid and average linkage methods also single out grave 10; there is justification for this in the distribution of the mortuary furnishings in this grave (Appendix 6, Tables A-6 and A-7). Grave 10 contains six artifact types and ten different objects; as a result, it is on the border of cluster I in the complete linkage analysis. If Ward's method is eliminated from consideration, the major differences among the remaining analyses centers on the distribution of graves within those clusters which contain the largest number of burials, namely clusters I and II above. This situation should not be unexpected, since this large group of graves (clusters I and II, or 25 of 30 graves) also represents a large degree of variation in the

distribution and presence of specific mortuary furnishings. Yet, similar to the Phase II burials, there are no overwhelming reasons not to continue to use the complete linkage analysis.

The social and visual dimensions of the Phase III El Indio mortuary arts.

A comparison of Tables 10 and A-5 (Appendix 6) does not support suggestions of a strong relationship between body treatment (deposition, position and orientation) with any of the clusters. However, substantive associations persist between the distribution of the graves among the clusters and the age of the buried individuals. Clusters II through V, representing only ten of the graves with mortuary furnishings, contain only adolescents and children. All of the adults are grouped into cluster I.

Age groups also correspond with the distribution of specific mortuary arts. With only one exception (the fish bones in grave 28), the mortuary furnishings in adult burials were limited to ceramics. This pattern is identical to the Phase II burials. Moreover, the majority of ceramic types and shapes found in the adult burials are also commonly found in the graves of children and adolescents. Undecorated jar (C1), pedestal plate or bowl (C5), cup (C8), and decorated jar (C15) are the only ceramic types found in the adult burials. In only one instance, grave 24, did an adult burial contain a unique

ceramic object (a bichrome cup [C4]) not found in the graves of children or adolescents. This object was exceptional and was not discovered in any other Phase III graves at El Indio.

The adolescent burials of the Phase III do not fit neatly into any general patterns. The lack of any obvious patterns may be partially explained by the divisions among age groups within cluster I. Only one child (grave 1) represents this group and because of its uniqueness it may signify an error in the aging of the skeleton. Otherwise, the individuals representing this cluster are divided equally between adolescents and adults. Furthermore, with the exception of grave 10, the distribution of mortuary furnishings between the adults and adolescents of cluster I betrays no outstanding differences. Based upon the presence or absence of the mortuary arts, these adolescents have more in common with the adults than with their peers of clusters II through V. On the other hand, the adolescents of clusters II through V share more mortuary object types with the children of these same clusters. The clusterings may, therefore, indicate that the age distinction of adolescent is irrelevant. That is, there are adolescents who are treated as adults and adolescents who are treated like children, resulting in two useful age categories. Therefore, I have reduced the age grades to children, also

representing adolescents who are treated like children, and adults, also representing adolescents who are treated like adults.

Continuing a pattern established by the Phase II burials, the Phase III childrens' graves are the richest in the number and type of mortuary arts and contain the most visually complex objects found in all of the Phase III graves. Unlike Phase II, however, objects with visual information are not exclusively ceramics. Indeed, the decorated ceramic vessels of the Phase III burials are not selectively distributed by age. Yet, the absolute number of decorated ceramics in the Phase III burials is substantial; among the eighty ceramic vessels from the burials over one-half (forty-five) are decorated. Decorated pedestal plates or bowls (C5, n=33) appear most frequently. Cluster II demonstrates a strong relationship to this object; all of its graves (2, 3, 21, 34, and 41) contain decorated pedestal plates or bowls.

Both the decorated pedestal plates or bowls (C5) and decorated plates or bowls (C4) exhibit expressive and possibly symbolic designs. Ichon has adequately discussed the various types and formats of the designs (1975:226-242). Without repeating his presentation at length, I would like to stress that there is a finite range of visual subjects found on these ceramics. According to Ichon's calculations, of the zoomorphic designs (Fig. 15a-

f), 52 percent were of a "monster," 22 percent of a bird, 15 percent of a crab or scorpion like animal, 6.6 percent of a humanoid, 3 percent of a serpent, and 1.4 percent of a double animal (1974:242). The decorated jars, far fewer in number than the bowls or plates (n=6), have a similarly limited range of subjects. This restricted range of motifs suggests a standardization of visual symbols; but the relationship of the content or subject matter of the designs with the burials is not readily apparent. Moreover, determining the provenance of each individual vessel from the grave in which it was found has been severely hampered by incomplete records.

While it may be tempting to interpret the standardization of motifs on the decorated ceramics as an indication of limited artistic expression, such is not the case. These polychrome vessels, painted in red, black, white, purple and orange on white and red grounds, display remarkable precision in execution represented by the fineness of the lines and the adaptation of the designs to the vessels' interiors. Many of the decorated ceramics were found in excellent condition; the lack of surface abrasions and normal wear and tear suggest that they may have been manufactured as specialty vessels. If this is the case, the special use of these vessels was not only for burial in the graves because they were uncovered throughout the site in non-mortuary contexts. As a

result, the cultural context of the ceramic vessel, that is its association with a grave, is the most reliable guide of its special function.

The visual content of other mortuary furnishings found among the children's graves of clusters II through V corresponds to specific graves or groups of graves. Shell objects (Fig. 16) are found almost exclusively in the graves of the above clusters; the two exceptions are graves 10 (somewhat of an anomaly to begin with) and 20 of cluster I. Grave 10 contained three pieces of worked shell (S4), and grave 20 had an unknown number of shell beads (S3). Other than these two examples, shell beads (S3) were found in two graves of cluster II, all three graves of cluster III, and grave 8, the sole member of cluster IV. Shell pendants (S1) occur in all graves of clusters II through V except one (grave 19). Shell figurines (S2) were only found in grave 21; similarly, worked or unworked shell (S4 and S5) was only located in graves 8 and 42 of clusters II and V. Shell pendants and beads are of prominent importance in the children's graves of these clusters.

The exact number of shell beads was documented only for graves 8 and 15. The former had twelve beads and the latter forty, both numbers suggest a string or strings of beads such as a necklace. The shell pendants (S1) fall into a more complicated pattern. Graves 2, 3, 8 and 41

all contained one pendant; graves 15, 21, 22 and 34 each had two pendants; and graves 2 and 42 held three pendants apiece. The pendants can be conveniently divided into three groups: geometric, zoomorphic and undefined (Fig. 16). Among the latter group is a tooth-like pendant from grave 34 and a hook-shaped pendant from grave 8. The geometric pendants are either round, triangular or trapezoidal; while the zoomorphic pendants include monkeys or humanoid figures (grave 8 and 41) and frogs or toads (grave 42). Among all the pendants, the largest and most visually expressive are the three found in grave 42; all of these represent either frogs or toads. Two of the pendants from grave 42 combine representations of three frogs or toads on one long rectangular pendant. The eyes, legs and arms of the animal are only slightly suggested by engraved lines. As a result, the images border on abstraction suggesting that some of the other geometric pendants depict abstract representations of the same animal. The frog or toad does not appear on any other Phase III objects found at El Indio. Moreover, its sole occurrence is in grave 42, the richest of all the graves at the site. The distribution pattern of shell mortuary arts, especially shell pendants, among the Phase III graves suggests that any graves with shell are of special status. In addition, grave 42 is particularly important because of the presence of the toad or frog pendants.

Nonetheless, all the individuals in this "special" grave (42) are children or adolescents. Indeed, the "special" status of any of the above graves does not repeatedly ignore the social criteria of age; therefore, the pattern of the distribution of the mortuary arts among the Phase III burials suggests the continuation of an egalitarian social system like that found in Phase II. But there are significant differences in the mortuary practices of Phase II and Phase III burials. These differences do indicate variations in the social dimensions of each phase. In general, the expression of age among the Phase III graves intensified. This is articulated through the greater variation in the number of mortuary goods in a burial (e.g., those of cluster I as opposed to those of clusters II through V); the exclusiveness of specific grave objects (i.e., shell) to childrens graves; and the dramatically increased use of clothing or costume elements in the burials (beads, pendants and figurines made of shell, bone and tumbaga or gold). The differences in the distribution and types of mortuary furnishings among clusters II through V indicate that social criteria other than age played an important role in the selection and inclusion of particular mortuary arts in a burial. In addition, unlike the Phase II burials, the Phase III graves are distributed within the site of El Indio in specific groups characteristic of

formal cemeteries. In general, the increase in complexity associated with the distribution and content of the mortuary arts and the presence of a formal cemetery area indicates an increased social complexity during Phase III --that is, a more rigid and hierarchic social system than represented by the Phase II burials. Nonetheless, the mortuary arts of the Phase III burials still represent an egalitarian society.

The Mortuary Arts from the
Phase III Graves at La Cañaza

The site of La Cañaza is located on a limestone outcrop near the Tonosí river (Fig. 7). This ridge is approximately twenty meters above sea level and 8.5 kilometers west and northwest from the lacustrine environment of the mangrove swamps near El Indio. The graves at the site were discovered during the construction of a road and the subsequent excavation by Ichon during the 1969 season was a rapid salvage operation. The excavation was further hampered by the composition of the soil which is liberally laden with limestone boulders interspersed with hard and dense yellow clay.

Ichon (1974:285-291) noted that archaeological surface remains indicated that the site was inhabited during Phases II, III and IV. Yet, all the graves, with the exception of one possible Phase II burial (2), date from Phase III. No habitation areas nor stratigraphic control

pits were excavated. The graves uncovered by Ichon were spread over approximately nine square meters of the site (see Appendix 3). Huaqueros had damaged a small section of this part of the site (Fig. 17).

Demographic and physical characteristics of the La Cañaza graves.

Forty-two individuals were found in thirty-four graves at La Cañaza. The graves were aboriginally excavated in yellow clay and the boulders were either dug around or moved to accompany the burial. Because of the apparent difficulty of digging in this soil, the aboriginal inhabitants cleaned and reused graves for subsequent burials. Therefore, the isolation of discreet graves and the attribution of mortuary furnishings to a specific burial is complicated. The preservation of all mortuary remains, including the human skeletons, was very poor.

Deposition characteristics of the burials are summarized in Table 13. The same age categories used in the El Indio graves were applied to the La Cañaza individuals. For purposes of this study Ichon's graves 3, 18, 37, 38 and 39 were eliminated from consideration because of severe tampering by huaqueros. In addition, Ichon's graves 4 through 8 (this study's grave 3, see Table 14) and 11 through 13 (this study's grave 6) were combined to represent one grave unit. These two graves, 3

Table 13
La Cañaza: Age and Position of Interments

<u>Grave</u>	<u>Age</u>	<u>Orientation</u>	<u>Position</u>	<u>Deposition</u>
1	1	9	9	9
2	2	4	3	1
3	1,2,1 3,3	9 (all) 9	9,3,9 9,9	9,6,9 9,9
4	1	9	9	9
5	1,9	9	9	9
6	1 (all)	9 (all)	3 (all)	9 (all)
7	3,1	9,7	9,3	9
8	1	9	3	9
9	1	7	3	3
10	1	9	9	9
11	1	1	9	9
12	1	9	3	9
13	1	9	9	9
14	3	9	9	9
15	1	4	3	6
16	3	9	9	9
17	1	1	3	9
18	9	9	9	9
19	1	9	3	4
20	9	9	9	9
21	1,1	9,9	9,9	9,9
22	9	9	9	9
23	9	9	9	9
24	9	9	9	9
25	9	9	9	9
26	1	2	3	1
27	2	9	9	9

Key: See Table 5

Table 14
 La Cañaza: Correspondence of Grave Numbers

<u>Numbers Used in this Study</u>	<u>Ichon's Numbers</u>
1	1, 1'
2	2
3	4-8
4	9
5	10
6	11-13
7	14
8	15
9	16
10	17
11	19
12	20
13	21
14	22
15	23
16	24
17	25
18	26
19	27
20	28
21	29, 30
22	31
23	32
24	33
25	34
26	35
27	36

and 6, along with graves 5 and 7, comprise the multiple burials found at La Cañaza.

From the total of forty-two individuals, including those in the "contaminated" graves, twenty-five were adults, three were adolescents, and six were children. The ages of the remaining skeletons were unknown. Similar to the El Indio Phase II graves, approximately one-half (47.6 percent) of the mortuary population was found with associated mortuary furnishings (Table 15). These propor-

Table 15
La Cañaza: Number of Interments by Age Group and Presence/Absence of Mortuary Arts

<u>Age</u>	<u>With Mortuary Arts</u>	<u>Without Mortuary Arts</u>
Child	3 (60%)	2 (40%)
Adolescent	2 (67%)	1 (33%)
Adult	8 (38%)	13 (62%)
Unknown	3 (38%)	5 (62%)

tions are similar if the contaminated graves were eliminated from consideration. Of the twenty-nine graves, sixteen (55 percent), contained no objects; of the thirty-six individuals, twenty-one (58 percent) were adults, three (8 percent) were adolescents, nine (11 percent) were children, and eight (21 percent) were of unknown age. The useful burials were distributed among thirteen graves whose characteristics are summarized in Tables A-9 and A-10 of Appendix 6. The polarization of the population into two, almost equal groups (those with and those without grave goods), might indicate a binary social

dimension such as sex or moiety affiliation, as outlined in conjunction with the El Indio Phase II burials. Cluster analyses of the mortuary arts from the La Cañaza graves.

The La Cañaza graves with mortuary furnishings do not form neat clusters. The differences among the clusters are not always sharp and the relevant number of clusters for interpretation is not a clear choice. This is complicated by a lack of agreement among the types of cluster analyses, the member graves, and the apparent criteria used to compose the clustered formations. For reference purposes these differences are summarized at the four, five and six levels of clusters in Tables 16 and 17.

Table 16
La Cañaza: Comparison of Cluster Analyses

Cluster	Analysis	<u>Complete Linkage</u>	<u>Ward's</u>	<u>Centroid</u>	<u>Average Linkage</u>
I	Graves 2, 3, 7, 9	2, 9, 14, 16, 19, 24	2, 4, 6, 9, 14, 16, 18, 19, 24, 26	2, 4, 6, 9, 14, 16, 18, 19, 24, 26	2, 4, 6, 9, 14, 16, 18, 19, 24, 26
II	13	4, 6, 18, 26	4, 6, 18, 26	13	7
III	4, 6, 14, 18, 24, 26	4, 6, 14, 18, 24, 26	3	3	13
IV	16, 19	16, 19	7, 13	7	3

Table 17
 La Cañaza: Comparison of Complete Linkage Cluster
 Analysis at the Three, Four, and Five Cluster Levels

Cluster	<u>Three Clusters</u>	<u>Four Clusters</u>	<u>Five Clusters</u>
I	2, 3, 7, 9	2, 3, 7, 9	2, 3, 9
II	13	13	7
III	4, 6, 14, 16, 18, 19, 24, 26	4, 6, 14, 18, 24, 26	13
IV		16, 19	4, 6, 14, 18, 24, 26
V			16, 19

Beginning at an arbitrary level of four clusters all but the complete linkage analysis isolate graves 3, 7, and 13, indicating their uniqueness. At the level of six clusters, the complete linkage test reaches the same point. Also at this level, the complete linkage, average linkage and centroid analyses share substantial agreement on the distributions of the rest of the graves; only graves 9 and 16 change their cluster membership. Ward's test, as one would expect, tends to "even out" the distributions. For purposes of this discussion, therefore, we shall select the complete linkage test at the six cluster level (Appendix 6, Table A-8).

Cluster I includes graves 2 and 9; they have no mortuary furnishings in common. The former contained a ceramic whistle (C13) and unworked shell (S5), and the latter grave had a large number of shell beads (S3).

Grave 3 was the sole member of cluster II. It had an undecorated ceramic plate (C2), a shell figurine (S2), shell beads (S3), and unworked shell (S5).

Cluster III also had only one member, grave 7, and contained a pedestal plate or bowl (C5), shell beads (S3), unworked bone (S5), a sting ray point or spine (B5), and crab bone (B6).

The sole member of cluster IV is grave 13, whose contents were a pedestal plate or bowl (C5), a decorated jar (C15), a shell pendant (S1), shell beads (S3), unworked shell (S5), and shark's teeth (B7).

Graves 4, 6, 14, 18, 24 and 26 comprise cluster V; all of the graves had either pedestal plates or bowls (C5), or decorated jars (C15); in addition grave 26 had a bone pendant (B1), and grave 6 had a tumbaga pendant (T2).

The last cluster, VI, included graves 16 and 19; both contained shell pendants (S1). In addition, grave 16 had a decorated plate or bowl (C4) and a decorated jar (C15) while grave 19 had a tumbaga or gold plaque (T3).

The social and visual dimensions of the La Cañaza mortuary arts.

The small sample of graves and individuals combined with the skewed distribution of the age groups severely hamper generalizations about the distribution of mortuary arts at La Cañaza. In addition, the lack of information concerning deposition, orientation and position of the

burials (see Table 13) further reduces the range of potential associations among the graves and the furnishings.

The six graves of cluster V are dominated by the presence of ceramic plates or bowls and decorated jars; only graves 6 and 26 contain other types of furnishings, namely a tumbaqa and bone pendant. Of the known ages within this cluster, all are adults. However, adults are also found among all other clusters. The only obvious age-based criteria is that in clusters I through IV and VI all except one grave contain the only presence of adolescents or children. All of these clusters have more anomalous or ideosyncratic distributions of mortuary furnishings than cluster V. Nonetheless, the one common characteristic which these graves share is the presence of shell objects including pendants, beads and unworked shells. There does not, however, appear to be any other age criteria used in the distribution of the mortuary arts. Moreover, there is no spatial organization of the graves which strongly correlates with the mortuary furnishings.

If clusters I through IV and VI represent a number of specialized burials, the relatively even proportion of these elites to the non-elites of cluster V precludes the conclusion that they do, in fact, represent social elites. The full range of ages in these clusters might suggest that the same types of status were being given to adolescents and children as to adults. That is, the

status of the three age grades were being treated equally in spite of the individual's age. This is possible evidence of a ranked society. However, the lack of supporting data and the small size of the sample suggests that this conclusion is not appropriate.

Few specific furnishings at this site seem to have any significance. Many of the ceramics were in poor condition, yet even their total numbers or absence and presence seems to indicate little in the way of special use. One ceramic object is unique, and that is the whistle found in grave 2 (Fig. 18). The fragmentary human head on this figure is fully three dimensional with a marked protruding chin and headdress. The pendants (Fig. 19), both shell and bone, are all geometric, either trapezoidal (found in graves 13 and 26) or circular (found in graves 16 and 19). Shell beads were found in considerable quantities, including 609 in grave 3, several hundred in grave 9, and seventy-five in grave 7. In all cases, including the multiple burials of graves 3 and 7, the beads are directly associated with adults. However, not all objects which could be interpreted as costume elements are associated only with adults. Shell figurines (Fig. 20) in the shape of toads or frogs are found with adolescents in grave 3, and a disk pendant was found with a child in grave 16. While these are the only two exceptions, the low number of adolescents and children in

the burials makes their exceptional quality all the more important. The tumbaga objects (T2 and T3; Fig. 21a of this study) and the unique sting ray point (Fig. 21b), crab bone, and shark's teeth (Fig. 21c) are all found with adults. There is a conspicuous absence of lithic material associated with any of the graves.

Sixty-seven percent, or ten of fifteen, object categories are found in one of the La Cañaza graves; these unique furnishings are distributed among 62 percent or eight of thirteen graves. Unlike the mixed age groups among clusters I-IV and VI which could be construed to represent a rank society, the wide distribution of these unique furnishings suggests social recognition of individual achievements indicative of an egalitarian society. However, this inference may be too premature in the light of the inadequacy of our information from the site.

The Mortuary Arts from the Phase II Graves at El Cafetal

The site of El Cafetal (Ichon's TI-35) is located approximately one kilometer east and northeast of El Indio and is bounded by the same natural features as this site, including the Juncal estuary, mangrove swamps, and the Pacific Ocean to the south (Fig. 7). The El Indio estuary is found to the north of El Cafetal and to the east are additional mangrove swamps; toward the west are found small hills composed of calcium deposits, referred to as

"Los Morros de la Albina de Juncal." Raul González Guzmán (1971) directed the excavation of El Cafetal from December 1969 to May 1970. This archaeological field project was hastily organized by the Panamanian government in the wake of extensive looting of the burials located at the site.

Four trenches (González's 1 through 4), each six meters long (north by south) and two meters wide, formed the excavated area. An additional two meter by two meter area was uncovered at the south end of trench 3 (Fig. 22). According to González, no residue from aboriginal habitations was discovered in the trenches and, moreover, there were no surface indications of house-like structures in the mortuary area. He does argue, however, that on the basis of surface collections habitations surrounded the mortuary area (1971:171). In at least one instance in the 1971 report of the excavations, the archaeologist mentions finding in Trench 1, square D5 and D6, utilitarian ceramics and a red jar associated with fish vertebrae but not, apparently, associated with any burial (1971:153). If these remains indicate domestic or other non-mortuary type of use, they are, indeed, exceptional finds from the excavated area.

The state of preservation of the ceramic and other mortuary remains at El Cafetal was very poor; only a very few (one or two) ceramic vessels were found in complete or nearly complete condition. These vessels were undecorated

red jars. Many of the "damaged" items, González claimed (1971:157), were purposely broken before or during the aboriginal interring. All of the ceramics from the burials, as well as the sherds collected from the nearby habitation area, were typologically consistent with Ichon's Phase II, or El Indio phase, ceramics. No archaeological debris dating from Phase I, III, or IV was found at El Cafetal. It is not clear from the published report whether samples for radiocarbon dating were taken from the site.

The demographic and physical characteristics of the El Cafetal graves.

Thirty-eight skeletons, not including individuals from looted graves, were uncovered during González's excavations. Only six of these were not found with associated mortuary furnishings. Similar to Ichon's data, no sexing of the skeletal remains was undertaken. González attributed ages to over 53 percent of the individuals, resulting in ten adults, two adolescents, and eight children (Table 18). The criteria used for aging the skeletons are unknown.

The spatial configuration of the graves is difficult to determine; no walls, soil stratae, nor other features were reported. The only available criteria for including or excluding specific individuals in a given grave is the relative vertical and horizontal proximity of one skeleton

Table 18
El Cafetal: Age and Position of Interments*

<u>Grave**</u>	<u>Age</u>	<u>Orientation</u>	<u>Position</u>	<u>Deposition</u>	<u>Form</u>
1(1,2)	1,1	9	9	9	3
3(3,4)	3,3	9	3	9	9
6	1	9	9	9	1
7	3	9	9	9	5
8	9	1	9	9	6
9	3	9	9	9	5
10	3	3	3	9	1
12(11,12)	2,2	9	3,9	9	1,9
13	3	9	9	9	9
14	1	2	3	9	1
15	1	6	3	9	1
16	1	4	9	9	1
17	1	6	3	9	1
19	9	9	9	9	7
21	9	2	3	9	1
22	3	9	9	9	5
23	9	2	9	9	1
24	9	6	9	9	1
25	9	5	3	9	1
26	3	9	9	9	6
27	9	7	3	9	1
29(29,30)	9,9	7,9	3,9	9,9	1,5
32	9	6	3	9	1
33(33,34)	9,9	9,9	9,9	4,4	1,1
35	9	2	3	9	1
36	9	1	3	9	1
38	1,9	1,1	3,3	9,9	5,5

*Sex is not listed since it was unknown for all individuals. See Table 5 for codes.

**Numbers in parentheses represent González's grave numbers if they differed from the numbers used in this study.

to another. Any attributions of groups of skeletons in the graves is further hampered by the lack of a published map of the site and the absence of specific spatial distributions or loci of the burials. In spite of these drawbacks, the characteristics of these graves based on the information found in González's report, are summarized in Table 18.

The lack of habitation debris among the El Cafetal burials and the positioning of the graves into a discrete area surrounded by houses indicates that the burial area is a formal cemetery. González, in addition, argues that the graves are spatially divided into two groups. The first group, graves found at levels between 80 and 115 centimeters, is composed of an arc of primary burials surrounding a cluster of secondary burials near the center of a hypothetical circle formed by the arc. González suggests that the ceramics in this group of graves were intentionally broken before or during interment (1971:171-2). The second group of graves, composed of burials found between 120 and 140 centimeters, is not defined by any distinctive spatial pattern; the graves are located in the northwest corner of the excavated area (Table 19). The few ceramics found in this group were not broken, and almost all the gold objects found at El Cafetal came from the graves in this group (Table A-12, Appendix 6). Cluster analyses of the mortuary arts from the El Cafetal

Table 19
El Cafetal: Grave Loci

<u>Grave</u>	<u>Square</u>	<u>Depth</u> <u>(in centimeters)</u>
1	C6,D5	103,106
3	C3,D4	98
6	D3	127
7	D2	91
8	C2	105
9	C2	?
10	C2	?
12	B4	103,104
13	A5	99
14	A3,B3	105
15	A3,B3	103
16	B1,B2	110
17	A1,A2	112
19	Y6,Z6	?
21	Z5	99
22	Y4	80
23	Y4	114
24	Z2	?
25	Y1,Y9	110
26	Z8	?
27	Z4	130
29	Y1,Z1,Z2	135
32	X5	119
33	X4	106
35	V4	105
36	V5,V6,X5,X6	?
38	X4	133

graves.

The four cluster analyses performed on the distribution of mortuary arts in the El Cafetal graves all suggest that graves 3, 25, and 29 were unusual. All of the analyses isolated grave 29 in a single cluster; graves 3 and 25 formed a single cluster in three of the four analytical tests. In addition, graves 14 and 21 tend to be separated from the majority of the other graves. Grave 14, for example, appears in Cluster II either by itself or with one or two other members in three of the four analyses. The majority (n=22) of the graves from El Cafetal are found in Cluster I (Table 20).

Table 20
El Cafetal: Comparison of Cluster Analyses

<u>Cluster</u>	<u>Analysis: Complete Linkage</u>	<u>Ward's</u>	<u>Centroid</u>	<u>Average Linkage</u>
I	1,6,7,8, 9,10,12, 13,15,16, 17,19,22, 23,24,26, 27,32,33, 35,36,38	1,6,7,8, 12,15,16, 17,23,24, 26,27,32, 33,36	1,6,7,8-10 12,13,15- 17,19,21- 27,32,33, 35,36,38	1,6-10,12, 13,15-17, 19,22,23, 24,26,27, 32,33,35, 36
II	14,21	3,25	14	14,21,38
III	3,25	29	3	3,25
IV	29	10,13,14, 19,21,22, 38	29	29

The complete linkage cluster analysis of the El Cafetal burials presents the most reasonable results (Appendix 6, Table A-11). Cluster I is represented by twenty-two

graves (1, 4 through 10, 12 through 14, 16, 19 through 21, 23, 24, 28 through 31, and 33). These graves are notable by the small number of mortuary furnishings, containing an average of 1.6 object types and 2.6 objects per grave. Sixty-three percent of the mortuary object types were ceramics, composed of undecorated plates (C2), cups (C8), and doble, or compound silhouette, vessels (C6). Scattered among the graves of this cluster were an undecorated jar (C1), a pedestal plate or bowl (C5), an effigy vessel (C9), a vessel support (C10), a ceramic whistle (C13), agate and serpentine beads (L6 and L7), unworked stones (L8), and two tumbaga figurines (T4).

Cluster II includes only two graves, 11 and 18. Except for the presence of effigy vessels (C9), these two graves did not contain any other ceramic objects. Both graves did, however, contain unworked stones (L8); and in grave 11 González found worked and unworked shell (S4 and S5). Grave 18 also contained several unknown types of objects manufactured from bone.

Cluster III is also represented by only two graves, 2 and 22. Similar to cluster II, few ceramics were found in the graves of this cluster. Each of the two graves contained dobles (C6); in addition, grave 2 also had a ceramic cup (C8). The two graves of this group, however, had the largest concentration of lithic mortuary furnishings, including agate pendants (L5), agate and serpen-

tine beads (L6 and L7), and unworked stone (L8). Grave 22 also contained a tumbaga plaque (T3).

Only one grave (26) was included in cluster IV. Two moderately common ceramic objects, a doble (C6) and a cup (C8), were found in this grave. In addition, a number of mortuary furnishings were unique to this grave; they included a bone point (B4), tumbaga or gold beads (T1), tumbaga or gold pendant (T2) and ring (T5), and an undetermined type of metal object (T6).

The skeletons found in González's graves 1 and 2, 3 and 4, 11 and 12, 29 and 30, and 33 and 34 were in such close proximity that they were probably buried as pairs or multiple burials, placed in a single grave. If this were the case, the number of total graves identified by González would be reduced by five (see Table 18). Among these multiple burials, three of the graves' interments were identical to one another--that is, grave 1 (González's graves 1 and 2) contained two adults, grave 9 (González's graves 11 and 12) held two adolescents, and in grave 2 two children were found. All of the multiple burials contained mortuary furnishings. The social and visual dimensions of the El Cafetal mortuary arts.

Thirteen of the twenty-two types of mortuary furnishings found in the graves of El Cafetal were only found in single occurrences. Interestingly, the unique

ceramic objects were only found in the graves of cluster I. For example, the one example of an undecorated jar found at the site was isolated to grave 9; one pedestaled plate or bowl was found, in grave 13; the one vessel support was isolated to grave 4; and the sole ceramic whistle was found in grave 6. None of the unique shell or tumbaga items was found in cluster I burials. Worked and unworked shell was isolated to grave 11; the bone projectile point, tumbaga or gold bead, pendant and ring, and an unknown object of tumbaga were located in grave 26; non-human bone was isolated to grave 18; and only grave 22 contained tumbaga plaques. Grave 26 stands out among all El Cafetal burials with a total of five unique types of mortuary objects.

Of the remaining types of mortuary furnishings, none is dominant in any of the grave groups. The most common object, the doble ceramic vessel, is found in eleven of the twenty-seven graves which contained mortuary objects. Ceramics were uncovered in all but two graves (16 and 29). In contrast to--and in spite of--González's statement (1971:173) that "los restos de concha son abundantes y se trata sin duda de parte de la ofrenda alimentación," only one grave contained shell remains. The absence of shell objects is in marked contrast to El Cafetal's neighboring site of El Indio.

The lack of uniform information on both the age and

deposition or position of the El Cafetal interments hinders our formulation of patterns which might be associated with the mortuary furnishings at El Cafetal. However, as González points out (1971:172), all but one of the doble vessels associated with secondary burials contained children's skeletons. This parallels the association of dobles and children found in the Phase II burials of El Indio.

Some of the mortuary furnishings among the El Cafetal graves can be interpreted as parts of costumes. These objects include stone pendants; agate and serpentine beads; and tumbaga beads, pendants, plaques, figurines and rings. Nine of the fourteen occurrences of these costume elements are evenly distributed among graves 2, 22, and 26 which represent clusters III and IV. The other five costume objects were found in single occurrences in graves 9, 21, 24, 31, and 33. The latter graves are all from cluster I; no costume elements were found in the graves of cluster II. Only two of the above graves, 2 and 26, displayed costume objects in contexts which suggest that the items were worn. For example, a string of tumbaga beads and a tumbaga pendant were both found around the skull of one of the skeletons in grave 26; in contrast to graves 31 and 33, in which the tumbaga figures of a spider, an eagle, and an armadillo head, which are probably better characterized as pendants, were found near the skeletons.

The spider rested on a ceramic plate and the eagle and armadillo head were noted by González as being found on the same level as the skeleton (1971:169-170).

Interpretations which relate the El Cafetal mortuary arts to social dimensions are difficult owing to the lack of information on age, sex and deposition of the skeletons, and the brevity of the excavation reports. However, several minor trends are apparent in the distribution of the objects. For example, all shell, bone, and metal mortuary arts are found only in adult burials; none of these objects is present in the graves of adolescents or children. Lithics, on the contrary, only appear in children and adolescent burials with only two exceptions (graves 14 and 16).

Ceramics do not appear with any great frequency in any specific cluster. The ceramic dobles, for example, are not exclusively limited to non-adult graves like those found in the children and adolescent graves of Phase II at El Indio. The graves which comprise clusters II, III, and IV are separated from one another on account of the presence or absence of non-ceramic objects. These objects are, in general, costume elements, including agate beads (L6) and agate pendants (L5) located in graves 3 and 25, and tumbaga beads (T1), tumbaga pendants (T2), and tumbaga rings (T5) found in grave 29.

Unfortunately, the designs on the ceramics are not

known because the vessels were badly broken and decomposed. Among the remaining mortuary arts, of the two ceramic whistles found in grave 8, one was modeled in the shape of a fish, and the other was of an undetermined animal shape; an effigy vessel discovered in grave 38 had an armadillo's head. The two tumbaga figurines found in graves 36 and 38 represented, respectively, a spider and an eagle. Finally, of the five tumbaga pendants found in grave 29, four were modeled as birds and the fifth represented an unknown animal.

The distribution of the mortuary arts and their designs and any correlates with social dynamics at El Cafetal are suspect owing to the very poor preservation of the artifacts, the lack of skeletal information, and the deficiencies of the published field reports. However, the graves from El Cafetal do contrast in interesting ways with the graves of their temporal cousins of Phase II at El Indio. From the information given in González's excavation report, it is apparent that the graves from El Cafetal were organized into a formal cemetery and, therefore, represent a commitment to a lineage system indicative of social relationships more complex than those represented by the Phase II graves at El Indio. The observation that El Cafetal was socially more complex than Phase II at El Indio is also supported by the greater frequency of costume or sumptuary goods found in mortuary

contexts in the former site, e.g., gold or tumbaga pendants and figurines which are probably items of status designation. Moreover, the distribution of the graves among the clusters emphasizes the uniqueness of a very few graves (i.e., graves 3, 14, 21, 29, and 35) over the majority of other burials. The El Cafetal cluster analysis is in sharp contrast to the less paradigmatic distribution of the cluster analysis of the Phase II, El Indio graves. While these patterns are not supported by more detailed information from the El Cafetal graves, it does suggest that the burials are indicative of a more complex and stratified society than the early El Indio burials.

Summary

The diversity in the relationship between mortuary arts and social dimensions among the Phase II and III (c. 250 B.C. to 1000 A.D.) graves of El Indio, La Cañaza, and El Cafetal gives an excellent indication of the variability that might be expected among temporally and spatially proximate groups. In spite of the fact that all the villages discussed in this chapter seem to have been egalitarian societies, they exhibit substantial changes in the social dimensions of their mortuary arts. For example, distinctions among age groups, articulated by the greater variation in the number of mortuary furnishings in a burial, intensified in Phase III El Indio graves in

contrast to the Phase II graves from the same site. Moreover, the later graves also demonstrated a greater degree of stratification measured by the increased presence of sumptuary goods. While the Phase II graves from El Indio strongly emphasized the age of the interred, the Phase III graves, especially those of clusters II through V indicated that social criteria other than age played an important role in the selection and inclusion of particular mortuary objects. Finally, unlike the Phase II burials, the Phase III graves are distributed within the site of El Indio in specific groups characteristic of formal cemeteries. In general, the increase in complexity associated with the distribution and content of the mortuary furnishings and the presence of a formal cemetery area indicates an increase in social complexity and stratification from Phase II to Phase III.

The condition and sample size of the Phase III La Cañaza graves serve as a caution when the findings from this site are compared with those of El Indio. However, the La Cañaza graves did, in general, have a smaller number of costume or sumptuary goods per grave than the contemporary burials from El Indio. La Cañaza's mortuary population is also almost equally divided between those with and those without mortuary furnishings, possibly indicative of a sexual criteria in determining the distribution of mortuary arts. If any importance can be

reliably placed on these factors, they would indicate a less stratified social group than represented by the Phase III El Indio graves.

The El Cafetal mortuary arts appear to have more in common with the Phase III El Indio burials and, therefore, represent a social unit more stratified than La Cañaza or Phase II El Indio. For example, the distribution of graves at the site of El Cafetal suggests that a formal cemetery may have been present and the isolation of specific art works--i.e., those made of gold or tumbaga--to graves located in one section of the site indicates special treatment for a select group. Moreover, a large number of interments contain costume or sumptuary arts. Despite these affinities with Phase III El Indio, the graves from El Cafetal all date to Phase II. Nonetheless, the criterion of age, demonstrated by the skewed distribution of dobles, lithics, shell, bone, and metal arts, is still strongly represented among these graves and, therefore, indicates a similarity to Phase II El Indio burials.

Thus, it is reasonable to expect substantial variation in the social dimensions of arts as well as social organization among discrete groups or villages located in a rather small area, in this case the southeast corner of the Tonosí Valley.

III.

THE MORTUARY SITE OF SITIO CONTE, COCLE PROVINCE

The necropolis of Sitio Conte rests on the eastern bank of the Río Grande de Coclé (Fig. 3). The site extends east, north and south along the river and covers approximately eight acres. The closest modern village, Nata, is located eleven kilometers to the southwest and the shores of the Pacific Ocean lay only fifteen kilometers directly south. The mountains which run the length of Panamá are found approximately twenty-five kilometers north of the site.

Sitio Conte is surrounded by plains that are infrequently checkered with low hills. The climate, classified as "savanna" by Köppen (1932 [1972 reprint]:59), is just a bit drier than the Tonosí Valley. The average annual rainfall measures over 1,800 millimeters and during the dry season, usually from December or January through March or April, almost no rain falls. In one year, for example, 1,836 millimeters of rain fell in the nearby village of Penonomé, but only 169 millimeters of the total fell from December to April (Köppen 1932 [1972 reprint]:45). The area is best described as tropical savanna (Talbot and Kesel 1975:15-26), comprising large areas of grasslands and shrubs, interspersed with scattered stands of trees.

Sitio Conte may lay claim to being the most famous archaeological site in Central America south of the Maya

center of Copán in Honduras. It is certainly the most renowned pre-Conquest site in Panamá. Sometime in the last half of the nineteenth century the Río Grande de Coclé changed course and cut a new river bed through the western edge of Sitio Conte. The gold, precious stones, polychrome ceramics and other items washed out of the rich burials commanded local attention and were subsequently collected and sold. The Panamanian government displayed some of the mortuary artifacts in an exposition organized for the 1915 inauguration of the Panama Canal; and Samuel Lothrop reported that he bought gold items from the site in Panama City as early as 1917 (Lothrop 1937:36).

The Río Grande flooded extensively in 1927, and many more objects from the site washed out onto the banks and alluvial pans of the river. The Conte family, owners of the land on which the site is located and from whom the site derives its name, excavated a pit in the necropolis in 1928 after the flooding ceased. Instead of encountering burials or graves rich in gold and precious stones as expected, they struck and uncovered a number of stone columns which apparently surrounded all or most of the original site (see Lothrop 1937:39-43 and Fig. 23). Despite this lack of "success," the Contes' attention and interest in Sitio Conte may well have discouraged extensive looting of the site.

Some of the mortuary objects which had washed out of

the river banks made their way to the Peabody Museum of Harvard University. The material stimulated interest in the region and in 1928 Alfred M. Tozzer and E.A. Hooton led the first Peabody expedition to Sitio Conte. While in Panamá they surveyed the site and established preliminary arrangements for future Peabody Museum excavations.

The Peabody began excavations during the dry season of 1930 and continued until 1933. The 1930 and 1931 expeditions were led by Henry D. Roberts, while Lothrop directed the final 1933 season. Lothrop's well known published results in the Memoirs of the Peabody Museum of Archaeology and Ethnology, Harvard University of 1937 (Volume 7, also reprint 1970) and 1942 (Volume 8, also reprint 1976) detail his excavation techniques, finds, and interpretations. Following the 1933 field season, the Peabody did not return to Sitio Conte, and The University Museum of the University of Pennsylvania took the opportunity to negotiate their own excavation contract with the Conte family. The University Museum spent only the 1940 dry season in the field. J. Alden Mason led the expedition, and Lothrop accompanied him for the initial two weeks of the project. The results of Mason's excavations were never fully published (see Mason 1940, 1941, and 1942 for short notices and interpretations of some of the finds) because Mason felt his findings only confirmed Lothrop's chronological framework and ceramic

analysis and, thereby, shed no new ideas about Sitio Conte (Mason n.d.). In order to provide a parallel to Lothrop's published data, I have presented a report on Mason's excavations in Appendix 5.

Mason and Lothrop concentrated their field programs on the Sitio Conte graves. As a result, information from other contexts, such as habitation areas, did not receive as much attention. Stratigraphic controls were abandoned, living debris was often swept aside, and field controls over artifact marking and recording were overly relaxed at times. In a more recent commentary, Linares summed up the situation rather pointedly: "Their excavation 'techniques' . . . left much to be desired" (1977:34).

The archaeological deposits are as confused as the archaeologists' reports. In many instances older burials were aboriginally cut through to make room for newer burials; while moving aside the older burials, the new graves were enriched with mortuary objects from them. The wet soil conditions, in addition, had the same effects on skeletal remains we have noted at other sites in the central region of Panamá. Almost all skeletal remains, especially human, were found in a powdery, decomposed, and fragile state. While in situ, the remains could be measured, analyzed, and recorded and the Peabody Museum found that "all bone and most copper had to be hardened before removal from the ground and even stone of the

softer varieties called for similar treatment" (Lothrop 1937:V). The University Museum did not attempt to recover any of the human skeletons they uncovered.

Problems pertaining to the care and preservation of the mortuary arts from Sitio Conte during and subsequent to the excavations also complicate interpretive efforts. Lothrop pointed out, for example, that "we cannot give an exact enumeration of pottery vessels from many graves. Certain pieces had disintegrated in the ground . . . others melted and disappeared down the drain when an attempt was made to clean them in the Museum" (1937:52). Moreover, the mortuary finds were not all deposited either at the Peabody or University Museums; many objects were left with the Conte family in Penonomé. The 1933 contract between the Peabody Museum and the Conte family stated that:

[Cuando haya mas de un ejemplar de estos objetos [gold items], entonces se dividirán en partes iguales; una mitad será exclusivamente de propiedad del señor Conte Bermúdez, y la otra mitad será del Museo Peabody; [it continued] los objetos de piedra, barro (alfarería), momias, esqueletos, etc., que se encuentran en las excavaciones serán divididos por mitad entre el señor Conte Bermúdez y el Museo Peabody (University Museum n.d.).

The University Museum followed the same contractual arrangements regarding gold objects; but in respect to other items the Museum representatives negotiated terms which allowed them to retain almost everything. Point 6 of their contract stated that:

Los objetos de piedra, barro (alfarería) que se encuentran enteros las excavaciones serán divididos por mitad entre el señor Conte y la Universidad, siempre y cuando sean ejemplares con duplicado. Se entiende por esto que en el caso de que se encontrare ejemplares únicos, estos serán de propiedad de la Universidad (University Museum n.d., my emphasis).

The exact meaning of "unique" and "duplicate examples" was never discussed and, perhaps as a result, The University Museum holds almost the complete inventory of mortuary furnishings which they excavated at Sitio Conte. The Conte family still retains a sizeable collection of ceramics and some stone work from excavations at their site, but many items from their collection have been dispersed. The poor care and condition of the remaining objects in the Conte collection mitigates against their use for interpretation.

The Peabody Museum is the largest single repository of Sitio Conte mortuary objects. The 1931 season was co-sponsored by the Brooklyn Museum and Mr. and Mrs. William Claflin and, as a result, some of the material was deposited with these sponsors in the Boston and New York areas and other pieces were dispersed to various museums in the United States. In addition, some of the Sitio Conte items in The University Museum's collection were stolen in 1977, and other pieces were put on extended loan to the Museo del Hombre Panameño. As a result of so many problematic arrangements regarding the present disposition of the

mortuary remains, I shall rely heavily on Lothrop's published reports for the Harvard expedition finds. The interpretation deriving from Mason's unpublished finds, however, will be based on first-hand examination of the mortuary artifacts, field notes and archival documents housed at The University Museum in Philadelphia.

The Mortuary Arts from Sitio Conte

Except for the small scale field projects of Cooke (1971 and 1972) and Ladd's stratigraphic analysis (1957), all attention and scholarly interest directed toward Sitio Conte has focused on the burials. Mason's, Robert's and Lothrop's excavations cleared at least 100 graves containing approximately 201 individuals. The objects found within the burials sometimes numbered in the thousands and included some of the most finely decorated ceramics, carved bones, cast and repoussé gold, and other luxury items found in all of pre-Conquest Central America, as well as more "ordinary" objects, such as projectile points, utilitarian ceramic vessels, and celts, used in daily activities.

All of the excavators found it difficult to distinguish between graves and "caches." In general, a cache at Sitio Conte designated a discrete group of artifacts or features without associated human skeletons. While it is reasonable to separate these finds from the burials, the use of the term "cache" is of questionable value. There

are no compelling reasons which suggest that these groups of artifacts or features contained goods stored for future use; some of the groups of artifacts may simply have been residue or debris from special activities. Along this line, Linares has suggested that large concentrations of tools "represent the implements (metate, meat cleaver, and so forth) used for procuring and processing the food consumed by the crowds participating in the funerary rites" (1977:43). Regardless of the aboriginal activity associated with these finds, the absence of human skeletons clearly isolates them from the burials and, therefore, the so-called "caches" are not considered in this study.

Numerous factors complicate the determination of discrete graves at Sitio Conte. Unclear and sometimes contradictory field notes and maps, aboriginal re-excavation of burials, an absence of detectable features such as walls, and rather sloppy field controls create interpretive nightmares. When these factors influence possible interpretations of specific graves, they will be discussed in the text, otherwise they are more fully covered by Lothrop (1937 and 1942) and in my Appendix 5 on Mason's excavations.

Demographic characteristics of the Sitio Conte mortuary population.

The ageing and sexing of the Sitio Conte skeletons seem to follow a fairly consistent pattern in both the

Peabody's and The University Museum's excavations (Tables 21 and 22). It is not clear from Lothrop's publications who was responsible for the field analysis of the skeletons excavated by the Peabody Museum's teams, but John Corning undertook the skeletal analysis for Mason's

Table 21
Sitio Conte: Age and Sex
Characteristics of Interments

Lothrop's Graves

	Males	Females	Unknown	Total	% Exclusive of Unknown
Adult	41	13	42	96	95
Adolescent	2	1	5	8	5
Child	0	0	1	1	
Unknown	0	0	16	16	
Total	43	14	64	121	

Mason's Graves

	Males	Females	Unknown	Total	% Exclusive of Unknown
Adult	31	8	6	45	93
Adolescent	0	3	3	6	7
Child	0	0	1	1	
Unknown	1	0	48	49	
Total	32	11	58	101	

Combined Graves

	Males	Females	Unknown	Total	% Exclusive of Unknown
Adult	72	21	48	141	94
Adolescent	2	4	8	14	6
Child	0	0	2	2	
Unknown	1	0	64	65	
Total	75	25	122	222	

excavations. The analytical methods employed by either party are not known, but the results are similar. Leaving aside unaged and unsexed skeletons, Lothrop's team found 72 percent adult males, 23 percent adult females, 4 percent adolescent males, and 2 percent adolescent females. Mason arrived at figures of 74 percent adult

males, 19 percent adult females, no adolescent males, and 7 percent adolescent females. The only substantive difference is the absence of adolescent males in Mason's figures. Yet, even in Lothrop's population, adolescent males amounted to only 4 percent of the population. The difference is small.

Table 22
 Sitio Conte: Age and Sex Characteristics
 of Interments with Mortuary Arts

Lothrop's Graves

	Males	Females	Unknown	Total	% Exclusive of Unknown
Adult	34	11	35	80	94
Adolescent	2	1	4	7	6
Child	0	0	1	1	
Unknown	0	0	13	13	
Total	36	12	53	101	

Mason's Graves

	Males	Females	Unknown	Total	% Exclusive of Unknown
Adult	25	6	5	36	94
Adolescent	0	2	2	4	6
Child	0	0	1	1	
Unknown	1	0	38	39	
Total	26	8	46	80	

Combined Graves

	Males	Females	Unknown	Total	% Exclusive of Unknown
Adult	59	17	40	115	93
Adolescent	2	3	6	11	7
Child	0	0	2	2	
Unknown	1	0	51	52	
Total	62	20	99	181	

Combining Mason's and Lothrop's populations, we find 72 percent adult males, 21 percent adult females, 2 percent adolescent males, and 4 percent adolescent females. It is obvious that adult males dominate the

mortuary population, almost three to one. One of the most obvious characteristics of the sexed and aged individuals at Sitio Conte is the absence of children. Their exclusion from the above figures may be largely accountable to the difficulty of sexing children's skeletons. However, Mason and Lothrop together only identified two children (or 1 percent) among 201 individuals.

Mason's team was more conservative than Lothrop's in their aging and sexing of the population. From a total of eighty individuals, Mason did not attribute an age or sex to almost half of them (n=38), whereas among Lothrop's one hundred and twenty-one individuals, only sixteen (13 percent) were neither aged nor sexed.

Physical characteristics of the Sitio Conte interments.

The excavated graves from both the University Museum's and the Peabody Museum's excavations exhibit almost identical patterns of the orientation, deposition and position of the burial occupants summarized in Table 23. Over half (52 percent) of all skeletons at Sitio Conte were oriented east to west; if this figure is added to those individuals oriented west to east, the total rises to 62 percent of the burials with recorded orientations. The graves listed in Lothrop's report exhibit a wider range of orientations than Mason's burials; but, in general, the Sitio Conte burials, exclusive of those oriented on an east or west axis, are

Table 23
Sitio Conte: Disposition of Interments

<u>Orientation</u>	<u>Number of Lothrop's Graves</u>	<u>Number of Mason's Graves</u>	<u>Total</u>	<u>Percentage of Total</u>
1	17	4	21	13
2	2	1	3	2
3	13	3	16	10
4	7	0	7	4
5	4	1	5	3
6	2	6	8	5
7	10	5	15	10
8	44	37	81	52
 <u>Deposition</u>				
1	9	7	16	12
2	10	0	10	8
3	14	4	18	14
4	45	39	84	64
6	3	0	3	2
 <u>Position</u>				
1	60	51	111	74
2	4	3	7	5
3	31	1	32	21
 <u>Form</u>				
1	55	49	104	90
2	0	4	4	3
3	0	5	5	4
6	0	3	3	3

Key:

Orientation: 1-north/south, 2-northwest/southeast, 3-northeast/southwest, 4-south/north, 5-southeast/northwest, 6-southwest/northeast, 7-west/east, 8-east/west

Deposition: 1-lying on back, 2-lying on right side, 3-lying on left side, 4-lying on stomach, 6-sitting

Position: 1-extended, 2-semiflexed, 3-flexed

Form: 1-articulated, 2-partially articulated, 3-disarticulated, 6-disturbed

parceled out among six other orientations and display no predominant secondary patterns.

Any generalizations concerning burial patterns at Sitio Conte must be tempered with the observation that a large percentage of the individuals of this sample (and, additionally, the deposition and position sample) are from only eight graves. For example, 156 burials had recorded information in respect to orientation. Of this number, eighty-two (54 percent) were from eight graves with multiple burials ranging from four to twenty-six individuals. The organization of the multiple burials followed the pattern of placing individuals on the floor or floors of the grave to make a human bedding for the primary occupant. As a result, the placement of the individuals appears to be determined more by a concern for filling up the empty floor space than orienting them to a specific direction. Similarly, it makes sense that the majority of these individuals would be extended; they cover more of the floor in that position. Therefore, care must be taken in proposing significance to general patterns or formal characteristics of body treatment in the Sitio Conte burials, especially the graves with multiple burials.

The deposition, like the orientation, of individuals at Sitio Conte also follows a rather uniform pattern. From both Lothrop's and Mason's information, over 64 per-

cent of the individuals were found lying on their stomachs. Among Mason's burials only, the percentage was much higher (78), while among Lothrop's burials individuals lying on their stomach accounted for 55 percent of the population. The position of the individuals in the burials displayed an even stronger pattern. Seventy-four percent of the individuals at Sitio Conte were extended, and over 90 percent were articulated. Lothrop uncovered a substantial number (32 percent) of flexed burials, whereas Mason found only one flexed individual. Within reason-- and the limitations of attributing any general significance to the formal treatment of the burials--a "normal" burial at Sitio Conte consists of an adult male, oriented east to west, body extended, and lying face down. Among Lothrop's burials one other minor pattern is evident: that is, almost all individuals oriented north to south were lying on their left side in a flexed position.

Cluster Analyses of the Mortuary Arts from the Sitio Conte Graves

The four different types of cluster analyses of those burials containing mortuary furnishings (87 of 100 graves) were moderately consistent. All mortuary furnishings which appeared only once among the Sitio Conte graves were not keyed into the analyses (Appendix 6, Table A-13). The cluster analyses were first performed with these objects and then again without; there were absolutely no

differences in the results. A list of the final sixty-one object classes used in the analyses and their distribution among the graves are presented in Appendix 6 (Tables A-14 through A-17). Analyses were performed from the four through fifteen cluster level; the ten cluster level was selected for my use since it was the square root of the total number of graves (i.e., 100, or the analytical population) found at Sitio Conte. When there are no compelling reasons to select a cut-off level for the number of clusters, this technique has been suggested by SAS in their 1982 publication SAS User's Guide: Statistics (419-420).

All four of the cluster analyses--Ward's, average linkage, centroid and complete linkage--display their expected biases. Ward's, for example, selected an almost perfect pyramidal distribution of the graves at the ten cluster level. Cluster IX contained twenty graves, cluster X had seventeen graves, cluster VIII had fourteen graves, cluster VII had ten graves, cluster VI had nine graves, cluster IV had five graves, clusters I and V had four graves each, cluster II had two graves, and cluster III contained one grave (Table 24). The distribution of Ward's graves nicely fits the ideal model from Service's analysis of chiefdoms (1962:159). However, it does not accurately reflect the actual model developed from specific analysis of the U. S. Army population with its ex-

Table 24
 Sitio Conte: Comparison of Cluster Analyses

<u>Cluster</u>	<u>Complete Linkage</u>	<u>Ward's</u>
I	1, 5, 26	1, 5, 26, 32
II	32	74, 91
III	74, 91	90
IV	2, 24	2, 6, 13, 16, 24
V	13, 16	19, 20, 23, 68
VI	4, 6, 9, 19, 20, 23, 68	4, 7, 9, 14, 15, 17, 21, 31, 43
VII	90	54, 88, 75, 78, 81, 86, 89, 93, 95, 100
VIII	3, 7, 8, 10, 11, 14, 15, 17, 18, 21, 22, 25, 27, 29-31, 33, 36-39, 42- 48, 54-56, 58- 60, 62, 63, 65- 67, 69-73, 75-80, 82-85, 87, 89, 92, 94, 96-99	3, 22, 25, 29, 36, 37, 38, 39, 45, 47, 48, 58, 67, 97
IX	81, 88, 93, 95, 100	10, 11, 27, 30, 33, 42, 44, 46, 56, 59, 60, 62, 63, 66, 69, 70, 73, 84, 98, 99
X	86	8, 18, 55, 65, 71, 72, 76, 77, 79, 80, 82, 83, 85, 87, 92, 94, 96

Table 24 continued

	<u>Centroid</u>	<u>Average Linkage</u>
I	1, 5, 26	1, 5, 26
II	32	32
III	74	74
IV	91	91
V	2	2
VI	4, 6, 13, 20, 23, 61	4, 6, 13, 19, 20, 23, 68
VII	16	16
VIII	3, 7-11, 14, 15, 17-19, 21, 22, 25, 27, 29-31, 33, 36-39, 42- 48, 54-56, 58- 60, 62, 63, 65- 67, 69-73, 75- 89, 92-100	3, 7-11, 14, 15, 17, 18, 21, 22, 25, 27, 29-31, 33, 36- 39, 42-48, 54- 56, 58-60, 62, 63, 65-67, 69- 73, 75-89, 92- 100
IX	24	24
X	90	90

tended number of groupings with smaller populations at the higher ranks. The average linkage and centroid analyses heighten the outliers suggested by Ward's test (clusters I-V). These two tests created two large base populations of sixty-nine and seventy graves respectively and then doled out the remaining graves for membership in the other nine clusters. As has been pointed out in the discussion of the Tonosi Valley mortuary sites, the complete linkage test moderates the biases of the centroid, average linkage and Ward's methods. For this reason and in order to be consistent with the previous sections of this study, I shall use the results of the complete linkage test (Appendix 6 and Table 24).

Cluster I.

Cluster I contained graves 1 (Fig. 21), 26 (Fig. 22) and 5, all from the Peabody's excavations. These three graves shared thirty-two of the sixty-one artifact types, including stone points (L3), stone pendants (L5), celts or adzes (L6), knives (L7), stone beads (L8), stone concretions (L11), mirror backs or frames (L12), whetstones or polishing stones (L13), quartz crystals (L18), metal plaques (M29), metal beads (M31), metal figurines (M32), metal pendants (M33), metal bells (M36), metal greaves or wristlets (M37), bone pendants (B68), bone beads (B71), whale teeth (B73), shark teeth (B74), unknown animal teeth (B78), ceramic carafes (C98 and C99),

ceramic bowls (C100 and C101), ceramic jars (C102 and C103), ceramic plates (C104 and C105), decorated ceramic covers or lids (C113), ceramic effigy vessels (C117) and ceramic censers (C118). In addition, sixteen artifact types were shared by two of the three graves in this cluster, including stone ear decorations (L16), miscellaneous metal overlay (M28), metal nose decorations (M34), metal chisels (M38), metal helmets or caps (M40), bone chisels or awls (B72), canine teeth (B76), peccary tusks (B79), sting ray spines (B83), manatee ribs (B88), undecorated ceramic covers or lids (C112), unclassified vessels (C114 and C115), ceramic rectangular trays (C116) and ceramic cups (C119). As well as being extremely wealthy graves, averaging over 1600 mortuary objects per grave, all were multiple burials containing four (grave 1), fifteen (grave 5) and twenty-two (grave 26) interments respectively.

The three graves (1, 5 and 26) of cluster I have much in common. Lothrop has adequately described the configurations of these graves (1937:210-219, 227-237, 269-277), and I shall have occasion to refer to his observations. All of the graves of cluster I are multiple burials and, both in quantity and diversity of mortuary furnishings, are some of the richest graves excavated at Sitio Conte. In each of the graves, there is a seated individual saturated with gold objects and accompanied by a number of

attendants. The retinue, along with turtle shells, stone slabs, and ceramic vessels, lined the grave bottoms like flooring. In the most complex of these graves there were as many as three or four layers of mortuary furnishings and interments. The seated individuals found in graves 1 and 5 were classified by Lothrop as old men; moreover, he described the person in grave 1 as a "chief and three retainers" (1937:210). The primary or seated central figure of grave 26 was an adult, but based on tooth wear was not as old as the primary interments of graves 1 and 5.

Lothrop's descriptions of the mortuary furnishings associated with each skeleton in these graves indicate that in many cases the attribution of specific objects to one or another individual was not easy. For example, probably in all three graves, but most assuredly in graves 5 and 26, the main figure was originally housed in a makeshift hut, probably manufactured from vegetal materials such as bark cloth, basketry, and textile. In addition to the mortuary furnishings found inside the "hut," other objects were piled on top. The hut collapsed from the pressure of the earthen fill, the organic structure decomposed, and the mortuary furnishings from above were mixed with those inside the hut. Moreover, some of the graves were apparently re-opened on occasion, and either more goods or interments were added. Finally,

the excavations themselves were not always well controlled. It has been common to cast blame on Lothrop for his lack of refined excavation techniques (e.g., Linares 1977:34). We recall, however, that he only directed the 1933 excavations, and a number of the graves were uncovered when he was not a member of the team. Lothrop himself notes, for example, that "no single person followed the excavation process" (1937:227) for grave 5, one of the largest and most complicated graves at Sitio Conte. Regardless of blame, some of the excavation notes and descriptions for both the Peabody's and The University Museum's expeditions are unclear and obfuscate interpretations.

All of the central or most prominent figures in the three graves of cluster I are laden with sumptuary goods. Associated with skeleton I of grave 1, for example, were over seventeen hundred serpentine beads, canine teeth aprons, and necklaces as well as several bundles of sting ray spines, bone pendants, metal figurines, metal bells, agate winged pendants, mirror backs, individual and necklaces of gold or tumbaga beads, gold or tumbaga pendants, gold or tumbaga greaves, metal disks, whale teeth with gold overlay, gold or tumbaga chisels and carved manatee ribs. The other skeletons were not associated with as wide and as rich an assortment of mortuary furnishings as skeleton I. The goods found with

skeleton II, for example, contain fewer gold or tumbaga objects but had a shark tooth necklace, metal nose rings, celts, eight pecarry tusk necklaces, carved manatee ribs, over sixty stone blades and blanks, quartz crystals, sting ray spines, a belt and shirt front made of bone beads, a pile of bone awls, a metal plaque and a metate. The other two individuals (skeletons III and IV) were accompanied with goods similar to skeleton II, although fewer in number. Except for a very few miniature ceramic vessels and ceramic incense burners, the ceramics from grave 1 were not included as an integral part of any individual's mortuary furnishings. Instead, they were distributed around the edge, bottom, and top of the grave, sort of as "filler" items. The example of this one complex grave is informative since it underscores the importance of treating the entire grave as one mortuary unit. That is, all mortuary furnishings and the interments must be considered as part of the primary individual's furnishings, not as distinct items attributable to each separate individual.

The other two graves from cluster I have similar mortuary furnishings and interment arrangements as were found in Grave 1. Grave 5 (Lothrop 1937:227-237) contained fifteen skeletons. The grave had a bottom layer of ceramics, stone slabs, turtle or tortoise shells and fourteen interments. The primary skeleton (XV) was

lavishly adorned with a gold or tumbaga helmet, greaves, cuffs, several plaques, a nose clip, mirror frame; carved whale tooth pendant, metal bells, and stone mirror backs. Six of the interments were found on the northern edge of the grave and, according to Lothrop, were part of an earlier burial. The other eight interments were distributed primarily in an east-west orientation in the southern and western parts of the grave. None of these fourteen individuals was associated with the rich sumptuary goods found with skeleton XV. Among the fourteen skeletons were found stone and bone pendants (skeletons III and XIII), gold beads (skeleton III), gold pendant (skeletons IX and XIII) and stone beads (skeleton X).

Grave 26 (Lothrop 1937: 269-277), one of the richest graves found at Sitio Conte, was the largest in area, number of individuals, and funeral furnishings uncovered by the Peabody excavations. The grave contained at least twenty-two interments and, according to Lothrop, hundreds of grave goods "robbed" from nearby graves (1937:269). The twenty-two skeletons were located on a floor space of approximately two by three meters. Along with ceramics and a stone slab, twenty-one of the skeletons formed a floor for the one primary interment (skeleton XII). Like graves 1 and 5, the richest group of sumptuary materials was found with the chief occupant of the grave. This find

included stone mirror backs, stone celts and blades, stone beads and pendants, carved whale teeth and manatee ribs, an emerald, gold cuffs and greaves, gold beads, gold disks or plaques, bone pendants, and sting ray spines. While none of the sumptuary finds associated with any other individual of grave 26 excelled that of skeleton XII, they were quite rich and some of the furnishings accompanying the retinue certainly rivaled those of important individuals of other multiple burial graves. For example, associated with skeleton VIII were several gold ear rods, a gold pendant, gold beads and a stone mirror back. Throughout the grave, deposits of sumptuary goods were found which were not clearly associated with any one specific skeleton but were certainly part of the mortuary furnishings. These deposits (see Lothrop's deposits numbered VI, VII, VIII and 1937:271-273) included stone celts, blades and points, shark teeth, sting ray spines, gold or tumbaga disks, quartz pendant with a metal casting, gold beads, an agate winged pendant, stone ear rods and a copper bar. Barkcloth remnants were discovered scattered throughout the grave, and Lothrop concluded that "the occurrences of the cloth apparently indicate that the floor of the grave had been lined and also that the greater part of the funeral offerings had been covered with cloth weighted down by a few pieces of pottery" (1937:274).

The majority of the ceramic vessels lined the outside walls of grave 26. Lothrop noted that this grave had an unusually large number of effigy vessels and a relatively small number of large polychrome plates, a common ceramic item in many other graves (1937:274). Grave 26 did, in fact, have a large number and proportion of effigy vessels in comparison, for example, with Grave 1 of this cluster. Grave 1 had eight effigy vessels and one hundred and twelve plates or bowls, whereas Grave 26 had thirty-six effigy vessels and ninety plates or bowls. However, in comparison with grave 5, also of cluster I, grave 26 had proportionately fewer effigy vessels; grave 5 had twenty-six effigy vessels and forty plates or bowls.

Cluster II.

Cluster II is comprised of one member, grave 32, which was excavated by the Peabody Museum. This grave contained stone points (L3), celts or adzes (L6), stone knives (L7), stone beads (L8), stone mirror backs or frames (L12), whetstones or polishing stones (L13), metal ribbons (M27), miscellaneous metal overlay (M28), metal plaques (M29), metal disks (M30), metal beads (M31), metal figurines (M32), metal pendants (M33), metal nose and ear decorations (M34 and M35), metal bells (M36), metal greaves or wristlets (M37), metal chisels (M38), metal rings or bracelets (M39), metal helmets or caps (M40), bone points (B67), bone pendants (B68), bone figurines

(B69), bone tubes (B70), bone chisel or awls (B72), whale teeth (B73), shark teeth (B74), unknown animal teeth (B78), ceramic carafes (C98 and C99), ceramic bowls (C100 and C101), ceramic jars (C102 and 103), ceramic plates (C104 and C105), undecorated ceramic covers or lids (C112), ceramic effigy vessels (C117), ceramic censer (C118) and ceramic cups (C119). This grave or cluster differed from those of cluster I in the greater variety of metal objects and the absence of a number of stone, bone and ceramic object types. Despite having fewer artifact classes than the graves of cluster I, grave 32 contained over 5,670 individual objects and six interments.

Grave 32, the only member of cluster II, was the first grave opened by the Peabody excavations. This complex of interments and offerings (Figs. 23, 24) was not immediately understood when it was first uncovered. Lothrop (1937:283) suggested that the grave contained three different sets of interments placed in the grave on three different occasions. Skeletons I and II, he argued, comprised the oldest interment, and these bones were swept aside for later burials. Moreover, the mortuary furnishings associated with these two individuals were, according to Lothrop, removed and placed with the later interments. At least one gold disk with a repoussé human face was associated with this "early" interment. Based on the stylistic similarity of this one disk with other disks

found in later burials, Lothrop concluded that the other disks associated with the "later" burials were originally a part of the mortuary furnishings of the "early" burials (1937:282). In addition, a carved bone tube was found with the first burial. Whether the disks should be included as part of the regalia of the so-called "earlier" or "later" burials is questionable and not solved by Lothrop's explanation. The structure of the grave's interments and the distribution of the mortuary furnishings are consistent with other large Sitio Conte graves (e.g., graves 5 or 26); therefore I shall consider this entire complex of interments and furnishings as a unit.

The second interment (chronologically speaking), Lothrop's Burial B, included three individuals. These burials had been disturbed by the final interment, Lothrop's Burial C (1937:283). These three individuals lay on top of a bed of sand and traces of bark cloth were found on top of them. Above the bark cloth were fish bones, fish teeth, and sting ray spines; the entire area was covered with a layer of ceramic vessels. Since the burial was disturbed, the exact position of two of the skeletons was impossible to determine, and it is not certain which, if any, of the individuals was the "primary" occupant of this level. Among the three skeletons of Lothrop's "B" level was a quantity of gold or tumbaga nose clips, pendants, disks, cuffs and chisels, carved whale teeth and

bones, bone spear throwers and deer vertebrae. The final interment, Lothrop's Burial C, was a single individual in a flexed position accompanied by a rich group of gold or tumbaga objects which included disks, cuffs, beads and a nose ornament.

A layer of ceramics, as mentioned above, was found on top of the grave and cannot be definitely associated with any one individual or interment. This is a common occurrence among many of the graves of Sitio Conte.

In noting the importance of the sequential interments of Grave 32, Lothrop pointed out that "with the exception of Grave 5, no other graves at Sitio Conte appeared to have been opened to introduce later burials." He continued, adding that "in each case, looting took place and complete disregard for the dead was shown" (1937:289). Such a conclusion or interpretation is difficult to support. We have no information on the value system of the people of Sitio Conte and cannot know if "borrowing" or redistributing grave goods was considered "looting" or an indication of "disregard" for others--dead or alive. Moreover, Lothrop's supposition that "borrowing" took place is based on his notion that some mortuary items in one interment were stylistically similar to those of another. He notes that the duration of time between interments is unknown. Therefore, the "borrowing" or "looting" may only be a factor of continued burial

activity of all individuals being placed in a particular grave. It would be reasonable to consider that the entire grave is one burial or mortuary unit, and perhaps the last interment may be the central figure while the previous five interments were retainers of this more prominent person. Such an interpretation is supported by the fact that all objects in the grave appear to be contemporaneous. Even Lothrop noted that "most of the objects . . . differ markedly in style from other finds at Sitio Conte" (1937:289).

Cluster III.

Cluster III included graves 74 and 91 excavated by J. Alden Mason. Both of these graves shared the following mortuary furnishings: stone points (L3 [Fig. 50]), stone pendants (L5 [Fig. 43]), celts or adzes (L6 [Figs. 49, 51]), stone beads (L8 [Fig. 51]), quartz crystals (L18), metal plaques (M29 [Figs. 28-32]), metal beads (M31 [Fig. 47]), metal nose and ear decorations (M34 and M35 [Fig. 45]), metal greaves or wristlets (M37 [Fig. 33]), metal chisels (M38), bone tubes (B70), shark teeth (B74 [Fig. 48]), canine teeth (B76 [Fig. 48]), ceramic carafes (C98 and C99 [Fig. 72]), ceramic bowls (C100 and C101 [Figs. 53, 65, 68, 75]), ceramic jars (C102 and C103), ceramic plates (C104 and C105 [Figs. 57, 59, 65, 74, 78]), undetermined ceramic vessels (C114 and C115), effigy vessels (C117 [Figs. 54, 79, 80, 84]) and ceramic censers

(C118 [Fig. 78]). This cluster reflects a continued trend in the reduction of the number of lithic, metal, and bone object types compared to the first two clusters. Both of these graves were multiple burials: grave 74 had twenty-three individuals, and grave 91 had two interments. Grave 74 contained over 7,500 separate mortuary furnishings. Based on the the number of interred individuals and the number of mortuary objects, this grave is the richest uncovered at Sitio Conte. (Objects from grave 74 are illustrated in Figs. 28-33, 36-39, 41, 42, 44-51, 53, 54, 57, 59, 61, 62, 68, 69, 72, 74, 75, 78, 79, 82, 84.)

The only grave from Sitio Conte excavated by Mason and for which there is a published description is grave 74 or Mason's burial 11 (1942:103-107, and to a lesser extent 1941:261-263). Grave 74 (Figs. 25, 26) was not as large in area as some of Lothrop's larger graves, e.g., graves 1, 5, or 32, but it was certainly as complex as any found at the site. It contained at least twenty-three individuals on three different levels and over seven thousand mortuary objects. In general, Mason's field notes agree with his published descriptions; however, particular points which are not clear in the notes are more precisely explained in the published account. Most probably, this is the result of Mason's personal involvement with the excavations and, therefore, his ability to eliminate apparent ambiguities in the field

notes. For example, Mason's notes are not explicit about which individuals in the grave are the central figures, yet the published descriptions clearly identify two of the skeletons as the most prominent (XV and XVI). Since ambiguities exist throughout the field notes, it is unfortunate that we are not able to clarify them at this time with Mason's personal information. Nevertheless, since Mason's excavations have never been fully published, I shall provide more descriptive detail.

Grave 74 was shaped like a bowl. The upper lip of the grave was located approximately 1.5 meters below the surface of the ground; the diameter of the lip was approximately 4.2 meters. The walls of the grave slanted inward at about sixty degrees, culminating in a floor 2.4 meters in diameter. The floor was located at 2.1 meters below the lip of the grave and only thirty centimeters above the dry season water table. The grave contained three levels of interments, one at 1.35 meters below the rim, another at 1.8 meters, and the bottom level at 2.1 meters.

The lowest level contained three individuals resting on a bed of ceramic vessels. One skeleton (XXI), found in a prone position approximately east and west, had a cache of quartz projectile points located at its right elbow and found at its right carpus or wrist was a cache of stone celts. The individual rested on bark cloth and apparently had some wood objects near the left arm, all of which were

badly decomposed. A cache of gold beads was found near the left radius. One of the other skeletons (XXII) also lay east and west and had a cache of stone points positioned at the right talus or ankle. The third individual (XXIII) was disarticulated and had no objects specifically associated with it. The sexes of the individuals were not known, and only skeleton XXI was aged (an adult).

The middle level contained twelve individuals (IX-XX), all resting on top of and surrounded by a large number of ceramic vessels. The ceramics found on this level continued up the sides of the north and south walls of the grave and formed a "ceramic wall" over thirty centimeters thick. While some complete vessels were found in this wall and on the floor, the great majority of the vessels were broken. (The ceramics from grave 74 reproduced in Figs. 53, 54, 57, 61, 62, 68, 72, 75, 78, 79, and 84 are from this "wall"). The quantity of pottery overwhelmed the excavators. They relaxed their routine excavation techniques, and many vessels were removed without notes on their location or descriptions. This lapse in field procedures occurred because this very complex grave was the last burial excavated during the season and the rains were fast approaching. Moreover, as Mason noted in his writings filed at The University Museum, "gold fever" easily overtook the field team; he

noted that they "were anxious to get [the] vessels removed from above [the] gold objects, so began removing vessels before making list" (n.d.:64).

The exact location of all twelve individuals on the middle level of grave 74 is not clear from either the field notes or Mason's published accounts. However, two individuals (XV and XVI), one lying on top of the other and located in the center of the grave, were laden with such a massive quantity of gold and other objects that it is reasonable to assume, as Mason did, that one or both of these persons were the chief occupant(s) of the grave.

As listed in Mason's notes, the objects associated with these individuals included:

. . . a lot of small gold plaques [Fig. 44]; a couple of larger [plaques] to the N[orth], 2 large ear ornaments one set at either side . . . at sides but also in center a great mass of gold beads and bells (only a few bells); in center, probably on chest, 3 baton beads of gold, the bone shafts broken . . . a gold cuff [Fig. 33] at either side; smaller end of cuff to E[ast] suggesting that arms are folded up with hands to shoulder. In center between cuffs probably on chest or abdomen [were] a number of large superimposed gold plaques. In a [__?_] n[orth] and s[outh] lies a great mass of gold beads over large plaques. A cache of projectile points and a fine stone celt near [the] head. At head

-26 repousse gold plaques [Figs. 29-32]

-3 plain gold plaques

-3 earrods with heads

-1 loose earrod tip

Small ring beads, some segmented tubular beads, and small bells in great mass near cranium and teeth.

-2 long awls isolated to E[ast] of

head

-6 small awls

Quantities of beads around neck, cranium bones and jaw; plain plaque only at N[orth]; purple color to earth under small plaque; gold earrods found in many places except near ears. 3 large plaques on chest with gold headed batons and gold pendant above; 2 large plaques below and on abdomen . . . on either side, a crushed pair of cuffs with repoussé design with smaller bracelets inside . . . under cuffs and plaques are several more gold headed ivory batons. Bird figure of resin, etc. Several objects with gold relief onlay (Mason n.d.:64-66).

Mason continued with the note: "finest pendant [Fig. 36] with green stone [emerald] found on principal figure above large gold plaques, bottom up. Other pendant found near cache of earrods" (n.d.:66). This listing of mortuary furnishings from Mason's field notes is impressive in both the quantity of items associated with the primary occupant(s) of grave 74 and in the skill required by Mason to sort through the objects.

The exact location of the other ten individuals from the middle level of this grave is not clear. Neither Mason's notes nor his published accounts shed any light on the problem. The notes of his assistants, John Corning, often provided a more detailed description of the location of skeletal remains. However, even Corning's observations do not offer us any more information on the position of these ten individuals. At least four of them lay near the principal interments. On the north side of the grave was an individual identified as a female (IX) lying on top of

another individual (X). Quantities of dog teeth, gold triangular pendants, and other metal objects (Figs. 46 [40-13-79, 144] and 47 [UM40-13-34, 35, 41]) were found associated with these two interments. Another skeleton's skull (XI) was located at the feet of the above two individuals (IX and X); interment XI had only a nose clip decorated with gold filagree (Fig. 45 [UM40-13-96]). The last clearly identified individual was a young male (XII) lying near another individual at the east end of the grave. Near the mandible of this person was a pair of whale teeth with embossed gold overlay, a large gold bell was located near his skull, and a cache of dog teeth was found at the fourth or fifth rib. A carved figure of unknown material with gold embossed overlay, a stone celt, and several green projectile points were located in unspecified proximity to this individual.

Eight skeletons (I-VIII) were discovered on the upper level of the grave. The individuals were in extended positions; none was as lavishly endowed as the main occupant(s) from the middle level. All were lying face down, and those identified were either old or mature males. Two of the individuals (I and II) had only one ceramic vessel associated with them; two others (III and IV) had a cache of ceramic vessels and stone projectile points between them. Between skeletons IV and V was an agate winged pendant; and a cache of stone points was found at the feet

of skeleton IV. In addition, a cache of gold beads, four plain wristlets or anklets and five repoussé gold plaques (Figs. 28, 29 [UM40-13-9 through 11]) crushed by ceramic vessels were found on top of this individual. A group of gold beads, an agate figurine and a copal figurine (Figs. 41, 42 [UM40-13-604, 610]) had been deposited at the base of the skull of skeleton V; also, below this individual was a stone disk and traces of bark cloth. Associated with this interment were two carved whale teeth, a cache of sting ray spines, shark teeth and bone projectile points. Skeleton VII was positioned next to skeleton VI; and next to VII was skeleton VIII. Between VII and VIII was located a zoomorphic agate pendant (Fig. 41 [UM40-13-6091]), an agate winged pendant, a necklace of gold bells, and a copper ornament. A gold plaque, as well as several carved bones (Figs. 38, 39 [UM40-13-132, 133]), gold tipped stone ear rods, and stone celts, were found on the sacrum of skeleton VI. At one femora of skeleton VIII, an adult male, was deposited a stone celt; and near his skull were found at least three gold chisels and a nose ornament.

In its dimensions, number of interments and quantity of mortuary furnishings, grave 74 is similar to the other large graves at Sitio Conte. It consisted of several layers of interments and included one, possibly two, individuals as the primary occupants. Unlike many of the

other large graves--e.g., 1, 5, 26, and 32--the primary interment(s) was not in a flexed position.

Grave 91 (Mason's Burial 19), the other member of cluster III, is not as complex as grave 74. The grave was located about forty-six centimeters below grave 83 and about 3.05 meters below ground level. Two individuals, at least one of which was an adult male, were found in this burial. One skeleton (I) was found in the center of the grave and was associated with the following furnishings: gold ear ornaments with wood sleeves at the base of the skull; copper plaque near the sacrum; two ceramic censers below the ilium; one celt above the individual's skull and another celt to the left of the skull; a bone winged pendant near the ilium; gold pin or needle on the left side; small pedestal ceramic cup to the left of the left patella or knee cap. The other individual (II) was located near the edge of the burial. This interment was, according to Corning's notes, an adult female. The following objects were associated with this person: three stone celts just above the left patella; two ceramic jars (a pair) at the left clavicle; a copper nose clip at the right clavicle; and a complete ceramic vessel rested on the person's skull. All other objects in the grave were found near the edges of the burial and not directly associated with any individual skeleton. As was the general pattern with many multiple burial graves at Sitio

Conte, the ceramics served, by and large, as part of the floor, fill and walls.

Cluster IV.

Cluster IV also contained two graves (2 and 24) but were from the Peabody's excavations. These two graves shared celts or adzes (L6), stone knives (L7), stone beads (L8), whetstones or polishing stones (L13), metal beads (M31), bone beads (B71), manatee ribs (B88), ceramic carafes (C98 and C99), ceramic bowls (C100 and C101), ceramic jars (C102 and C103), ceramic plates (C104 and C105), effigy vessels (C117), ceramic censers (C118) and ceramic cups (C119). Grave 24 contained ten individuals and over 450 objects while grave 2 contained less than half that number of objects and probably only one individual. The graves in this cluster are almost totally void of metal and bone artifacts.

The central one-third of this grave was aboriginally disturbed, and no complete skeletons were uncovered in the center or near the walls of the grave. Lothrop (1937:220) reported that the grave's skeletons had been robbed but he was unable to determine which other nearby grave had received the "looted" material. The only clear recipient would have been grave 5. The remaining or undamaged area of the grave was similar to other large graves at Sitio Conte. The floor was in the shape of a rough oval and contained a layer of ceramics and turtle carapices. The

upper level of grave 2 had been completely destroyed in the aboriginal excavations for grave 5, located immediately above. If any skeletons had rested on the upper level, they, too, were lost. Grave 2 contained a substantial amount of mortuary arts, the majority of which were ceramics.

The other grave from this cluster (24) was also partially destroyed by aboriginal excavations, in this case Lothrop's description of grave 24 states that it was looted for the interments of grave 26 (1937:262-267). The southern half of grave 24 was almost completely destroyed. The floor of this grave was coated with clay, and in the approximate center of the floor was a stone slab which was, according to Lothrop, shattered by heat (1937:262). Ceramic vessels and a few traces of textiles and turtle shells lined the entire floor; in addition, the ceramics, like those in other large graves at this site, were piled deep against the outside walls of the grave.

There were at least ten individuals (I-X) in grave 24, but the bones were very fragmentary and their placement was confusing. The femora, fibulae, tibiae and ilia of three adults (VIII-X) rested on the south side of the disturbed area of the grave. In proximity to these three individuals were found the remains of three gold ear rods, a stone ear rod, two gold ear spools, a gold nose ring, two bone tubes, two stone celts, a textile

impression and fragments of three ceramic plates. One of the two turtle shells were found near these three individuals.

The skeletal remains of interments I-III were located in the northeast section of the grave. Between skeletons I and II was a large cache of sting ray spines. A large metal disk and two carved manatee ribs were found at the feet of individual II.

The skeletal remains of an adult male (skeleton V) were found on top of the stone slab; this individual was described as "probably the principal occupant of the grave" (Lothrop 1937:262). Associated with this skeleton, which was also disturbed, were ninety-two gold overlays for beads, a stone celt and many sherds. Two carved manatee ribs were found just to the north of the interment.

Skeleton VI was represented only by the skull of a young adult and no specific objects were associated with it. However, in close proximity, but still possibly related to interments I-III, were seven gold jaguar teeth, a fragment of a pottery figurine, a cast gold nose clip, two gold ear spools, a ceramic cup, seven other ceramic vessels, and four stone projectile points. Interment VII consisted of traces of long bones found near the northern end of the grave.

Scattered about the grave were over one hundred stone blades, two stone mirror backs, traces of baskets and tex-

tiles, celts, animal teeth and bone beads. Due to the aboriginal destruction of the area, the association of any of these objects with one specific individual or even a group of interments in this grave is impossible.

Cluster V.

Cluster V, like Cluster IV, is composed of two graves from Lothrop's excavations, burials 13 and 16. Grave 13 (Lothrop 1937:245-249) was found at a depth of 2.59 meters and continued .3 meters further down. The shape of the grave was rectangular and the corners were oriented toward the cardinal points. The floor area measured 2.6 by 1.5 meters. The two graves contained stone points (L3), stone pendants (L5), celts or adzes (L6), stone knives (L7), stone beads (L8), whetstones or polishing stones (L13), quartz crystals (L18), metal plaques (M29), metal nose decorations (M34), bone pendants (B68), bone beads (B71), decorated ceramic carafes (C99), ceramic bowls (C100 and C101), ceramic jars (C102 and C103), ceramic plates (C104 and C105), ceramic rectangular trays (C116), ceramic effigy vessels (C117) and ceramic censers (C118). Lothrop considered this grave the most difficult of his 1933 excavations because of its complicated structure of nine levels and the "unusual breakage of funeral offerings" (1937:245).

The nine levels, as isolated by Lothrop from the bottom up, included a layer of sand on the floor of the

grave; sherd fragments; bark cloth under the skeletons; earth over the bark cloth (the earth contained burned, carbonized material); another layer of bark cloth; ceramics which held down the corners of the bark cloth; and, finally, another layer of bark cloth.

Of the two individuals found in the grave, skeleton I was an aged male deposited faced down in a prone position. The person had worn a belt of bone beads and had strings of bone beads attached to each ulna. Under his ribs were discovered two tumbaga disks and an agate winged pendant; and under his face down skull was found a nose ornament made of a perishable material and covered in gold. In addition, six groups or deposits of small objects surrounded skeleton I. Included among these objects were stone celts, rubbing stones, stone beads, gold disks, bone pendants, sting ray spines, quartz crystals, projectile points, bone points, shark teeth, nose rings, agate winged pendants, boar tusks, stone balls and a variety of miscellaneous objects (Lothrop 1937:247). No objects were associated with skeleton II.

Grave 16, the other member of Cluster V, was oval in shape and contained only one individual, an adult male (Lothrop 1937: 252-254). The size of the grave floor was approximately 2.6 by 1.8 meters; the long part of the oval was oriented northeast and southwest.

Around the skull of the skeleton was a band of gold;

under the right side of the body were two tumbaga disks. Lothrop continued, pointing out that, "beside the left ear was a copper bell and close to the jaw were two nose rings of gold. Between the upper left arm and the spine lay a pair of carved whale tooth pendants, an agate pendant and two tubular stone beads" (1937:252). Along the left and right radii were strings of tubular bone beads arranged in the same fashion as those found near the radii of skeleton I of grave 13. Rubbing stones, stone blades, projectile points, celts, a sharpening stone, and at least forty ceramic vessels were found throughout the grave.

A textile fragment, described by Lothrop as the shirt of the interred individual, was found among some oxidized materials on the underside of the tumbaga plaque. In addition, remnants of a checker weave basket containing shark teeth were also discovered near this plaque. Finally, between the femora of the skeleton, was located a large mass of bone beads which, according to Lothrop, was the remains of a beaded bag.

Cluster VI.

Cluster VI, only one of two clusters which contained graves from both Lothrop's and Mason's excavations, was dominated by graves from Lothrop's study (4, 6, 19, 20, 23); Mason's grave 68 was the other burial found in this cluster. All six of these graves contained stone pendants (L5), stone knives (L7), shark teeth (B74), undecorated

ceramic carafes (C98), ceramic bowls (C100 and C101 [Figs. 65, 68]), ceramic jars (C102 and C103), undecorated ceramic plates (C104), ceramic effigy vessels (C117 [Fig. 80]) and ceramic censers (C118). One-half or more of these graves shared stone points (L3), celts or adzes (L6), whetstones or polishing stones (L13), stone ear decorations (L16), quartz crystals (L18), metal beads (M31), metal chisels (M38), decorated ceramic carafes (C99), decorated ceramic plates (C105 [Figs. 56, 60]), and ceramic cups (C119). Fourteen other artifact types were scattered among the graves. Four of the six graves contained multiple burials; graves 6 and 68 each had three individuals, and graves 20 and 23 each had two individuals. The remaining two graves were single burials. In respect to the dominant artifact types--that is, those types found in all the graves--this cluster had almost no metal or bone furnishings.

Grave 4, located only fifteen centimeters above grave 5, was disturbed by excavations done by the inhabitants of Sitio Conte for the lower burial. Grave 4 was two meters below ground level, and before its destruction was rectangular in outline and oriented toward the cardinal points (Lothrop 1937:226). The bones of a single individual identified as an adult male were the only skeletal remains found in Grave 4. These bones were disturbed, and Lothrop (1937:226) speculated, that other

individuals were buried in this grave but when grave 5 was excavated their bones were removed from Grave 4. Since the burial was disturbed, no costume or personal ornaments were found in association with the skeleton. However, nearby were two gold ear spools, two gold nose rings, a fossil shark tooth, a quartz crystal, two stone tools, a tumbaga plaque, and a stone celt. Ceramic vessels lined the floor of the northern half of the grave.

Grave 6 (Lothrop 1937:237-241) was also a rectangular shaped burial and oriented to the cardinal points. The grave, consisting of two distinct layers, had three skeletons (I-III), two adult males and one younger adult male, on the lower level. Individuals I and III were possibly attendants or retainers and, in comparison with skeleton II, had few objects of personal adornment. Skeleton I had anklets and bands around the patellae and ends of the femora made of bone beads and skeleton III had a necklace of gold beads.

Skeleton II was probably the central occupant of the grave. His associated belongings included a pair of gold and stone ear rods, gold beads, a gold pendant, canine teeth bracelets, stone pendants, agate winged pendants, metal chisels, five stone ear rods, belt with bone "bangles," gold nose ornament, three ceramic incense burners, a "mass of heat-shattered stone objects, among which were over twenty winged pendants, several monkey

pendants, tubular beads, stone concretions, an arrow shaft wrench and a quartz crystal" (Lothrop 1937:237).

Scattered about the lower level of this grave was the residue of small fires, burned after the individuals had been interred. Skeleton I, for example, had his femora and other leg bones as well as his mandible scorched. Skeleton III's left femora and patella were burned and evidence of fire was also noted by Lothrop (1937:238) near this individual's ilium and over his torso. After the deposition of the bodies and the setting of the fires, a layer of ceramic plates were placed upside down over the interments. On top of the plates was added a seventeen centimeter layer of earth, over which was placed another strata of ceramic vessels which included stone celts and either food or animal bones.

Grave 19 (Lothrop 1937:255-256) was not as elaborate as grave 6. This round or oval grave contained only one individual, an adult in a prone position. Around the edges of the grave were ceramic vessels. Associated more closely with the interred individual was an agate winged pendant, two cylindrical stone beads, two gold chisels, a shark tooth, sting ray spines, two stone ear rods, and two stone blades. Also in grave 19, near the right foot of the skeleton, was found a large red jar. Lothrop (1937:256) suggested, very tentatively, that the jar contained a secondary urn burial. The evidence for this

suggestion is weak.

Grave 20 (Lothrop 1937:256-257), like grave 19, was oval in shape and the long axis was oriented east and west. The grave contained two skeletons, a young female (I) and an older male (II). A deposit of objects was located near the left side of the ilium and the right patella of skeleton II and included a stone winged pendant, twelve stone celts, a gold chisel, two copper chisels, four bone projectile points, a bundle of sting ray spines, a stone ear rod, nine stone blades, a quartz crystal, two stone balls, ten shark teeth, and twenty-three other animal teeth. Skeleton I was completely covered with ceramic vessels and had no other specific items associated with her.

Grave 23 (Lothrop 1937:260-262), the last grave from the Peabody's excavations in this cluster, contained two skeletons, an adult male (I) and an adult female (II). According to Lothrop, the excavation of grave 23 damaged the majority of grave 22. Grave 23 was rectangular in outline and oriented to the cardinal points. The two individuals were accompanied by a variety of ceramic vessels, but objects specifically associated with each individual were sparse. Skeleton I had an agate winged pendant, and skeleton II displayed a bracelet of gold beads on her carpus.

Grave 68 (Mason's Burial 7) contained three indi-

viduals, an adult male (III), an adult female (I) and an individual of undetermined age (II). The skeletons were all oriented east and west, Skeleton I was found at the south end of the grave, skeleton II was located in the middle, and skeleton III was placed at the northern end of the grave. The grave was approximately square and the walls were oriented toward the cardinal points. The northeast corner of the grave was damaged, possibly by aboriginal excavations for grave 72 (Mason's Burial 10a). The southern edge of the grave was within just one foot of one of the earlier Peabody trenches (Fig. 27).

All three skeletons were surrounded by ceramic vessels; the largest concentrations of vessels were at the northern and southern ends of the grave, between skeletons II and III. The furnishings associated with specific individuals were not numerous. Between and under the ilium of skeleton II were 351 stone projectile points; fourteen gold or tumbaga beads were found among the ribs of skeleton I; an agate winged pendant was located near one of the clavicles of skeleton II. The rest of the mortuary furnishings were scattered among the grave's ceramic contents.

Cluster VII.

Cluster VII contained only one grave (90, or Mason's burial 18). Found in the grave were stone pendants (L5 [Figs. 42, 43]), celts or adzes (L6), concretions (L11),

stone mirror backs or frames (L12), metal ribbons (M27), metal plaques (M29 [Fig. 44]), metal beads (M31), metal figurines (M32 [Fig. 34]), metal pendants (M33), metal bells (M36), bone point (B67), bone beads (B71), shark teeth (B74), unknown animal teeth (B78), ceramic bowls (C100 and C101), ceramic jars (C102 and C103 [Fig. 76]), ceramic plates (C104 and C105), decorated ceramic covers (C113 [Fig. 81]), undecorated ceramic vessels (C114), effigy vessels (C117 [Figs. 79, 81]) and ceramic censers (C118). The grave held eight individuals, three probable males (I, II, VIII), four males (IV, V, VI, VII), and one female (III); all were probably adults.

The skeletons were all located on the northern half of the grave which was divided into two levels. The upper level contained three skeletons (I, II, and VIII), all of which were probably males and located about thirty centimeters above the lower level. Two of these individuals (I and II) were extended and interred in the main area of the grave. The third individual (VIII) on this level was a disturbed burial located in the southeast corner of the grave. Between skeletons I and II was an agate winged pendant. In addition, near the skull of skeleton I was found a metal plaque and a copper figurine described in Corning's notes as a bird or monkey. The associated belongings with individual II on this level were not much more elaborate than those for I. According

to Corning (n.d.), two copper animal-shaped figurines were deposited near the base of the skull of individual II. Mason (n.d.a) reported that a gold repoussé plaque and a copper figurine representing an alligator were uncovered in the same location. Since these items were all in a fragmentary state at the University Museum's collections, it is difficult to evaluate who was correct. Both agree, however, that a tumbaga ornament was near one of the *huerii* of skeleton I. The southern half of the grave contained the majority of the ceramics found on this upper level.

The five individuals (III-VII) on the lower level were all extended, and all were oriented approximately north and south. Based on the quantity and quality of personal belongings, individual V was the principal occupant of the grave. Near the base of this individual's skull were the remains of gold necklaces made up of eighteen gold bells, ten copper bells, and one bell in the shape of a feline's head; four gold plaques were found on the individual's sacrum; on the left and right radii or carpi were gold bracelets. He was also accompanied by two agate winged pendants, one located near the ilium between the individual's femora and the other to the east side of the skull; two effigy agate pendants were found near the base of the interred's skull; a sandstone mirror back was located on his ilium; and, finally, a group of tubular

gold beads were found near the person's feet. Mason says six beads and Corning says three beads. Skeleton III, a female, and skeleton IV, a male, had no specific personal belongings associated with them.

Cluster VIII.

Cluster VIII is the largest of the ten grave groups and encompasses sixty-three separate burials. The interments and objects are summarized in Tables 25 and 26. The graves of cluster VIII exhibit a conspicuous lack of luxury and sumptuary mortuary arts, registering a frequency of only 2.3 percent, in contrast to all the other clusters which together average a frequency of 27 percent (Table 27). The only mortuary objects which are found in

Table 27
Sitio Conte: Average Number of
Mortuary Arts Per Grave Per Cluster

<u>Cluster</u>	<u>Average</u>
I	44.6 (15 of which were ceramics)
II	40 (12 of which were ceramics)
III	35 (14 of which were ceramics)
IV	28 (13.5 of which were ceramics)
V	29 (12.5 of which were ceramics)
VI	19.8 (6 of which were ceramics)
VII	24 (10 of which were ceramics)
VIII	6.3 (4.6 of which were ceramics)
IX	14.2 (9.4 of which were ceramics)
X	15 (5 of which were ceramics)

more than one-half of the graves of cluster VIII are C100 (undecorated bowls) and C102 (undecorated jars [Fig. 771]); these items are frequently found throughout all the interments at the site. Seven of the graves in this cluster had multiple burials (graves 21, 30, 31, 58, 62,

Table 25
 Sitio Conte: Distribution of Mortuary Arts

<u>Object</u>	<u>Graves Containing Objects</u>
L3	8, 9, 14, 15, 21, 54, 71, 75, 76, 79, 82, 87, 96
L5	7, 63, 89
L6	7, 15, 17, 22, 31, 36, 37, 43, 45, 54, 58, 60, 62, 67, 72, 75, 79, 82, 87, 89, 92
L7	3, 17, 21, 30
L8	3, 7, 14, 27, 29, 37, 82, 97
L9	67, 83
L10	83
L11	8, 58, 89
L13	7, 9, 11, 14, 15, 17, 18, 21, 27, 31, 42, 43
L17	29
L18	17, 31, 67, 75
M29	43, 72
M30	72
M31	3, 14, 29, 43, 47, 54, 97
M33	3, 56
M34	3, 54, 78
M38	94
B67	39
B70	85, 92
B71	15, 72
B74	21, 43, 72, 85, 94
B75	11
B76	54, 94
B78	31, 75, 97
B79	72, 94
B83	94
C98	7, 8, 9, 15, 18, 54, 55, 56, 65, 69, 70, 72, 77, 79, 80, 82, 83, 87, 92, 94, 96, 97, 99
C99	3, 7, 8, 9, 15, 43, 56, 69, 70, 75, 73, 76, 77, 78, 79, 80, 84, 82, 83, 85, 87, 89, 92, 99
C100	3, 29, 97, 7, 8, 9, 11, 14, 15, 17, 18, 21, 22, 25, 54, 31, 36, 37, 38, 39, 43, 46, 47, 48, 55, 58, 62, 65, 67, 71, 72, 75, 76, 77, 78, 79, 80, 82, 98
C101	3, 7, 9, 15, 17, 21, 25, 31, 37, 43, 44, 45, 48, 54, 58, 65, 75, 78, 79, 82, 97
C102	3, 9, 10, 14, 15, 18, 21, 22, 25, 29, 31, 33, 36, 37, 38, 39, 43, 45, 47, 58, 55, 56, 58, 59, 66, 67, 69, 73, 75, 77, 78, 79, 80, 82, 83, 85, 87, 89, 94, 97
C103	3, 9, 14, 15, 18, 21, 31, 37, 39, 43, 54, 71, 75, 78, 80, 85, 87, 89, 94, 96, 97

Table 25 continued

C104	14, 15, 21, 33, 36, 48, 55, 71, 72, 75, 77, 78, 79, 82, 84, 89, 92, 94, 97, 98
C105	3, 7, 14, 15, 17, 21, 43, 45, 54, 65, 67, 71, 72, 75, 76, 77, 78, 79, 80, 82, 83, 85, 87, 92, 97
C112	15, 31, 39, 43, 47, 58,
C113	21, 31, 85, 87
C114	7, 8, 9, 14, 15, 17, 27, 47, 48, 76, 82, 83, 92
C115	39, 47, 67, 71, 79, 82, 85,
C116	76
C117	7, 9, 14, 15, 17, 43, 45, 55, 56, 58, 66, 72, 75, 76, 78, 79, 85, 87, 89, 92, 94, 99
C118	7, 8, 15, 17, 21, 22, 25, 31, 36, 38, 39, 48, 54, 58, 48, 75, 78, 89, 97
C119	9, 29, 71, 72, 75, 79, 92, 97

Object Codes: See Table A-17.

Table 26
 Sitio Conte: Disposition of Cluster VIII Graves

<u>Grave</u>	<u>Age</u>	<u>Sex</u>	<u>Orientation</u>	<u>Deposition</u>	<u>Position</u>	<u>Form</u>
3	9	9	9	9	9	9
7	1	1	8	1	1	1
8	1	1	8	2	3	9
9	1	9	7	9	1	9
10	1	9	7	9	1	9
11	1	9	7	9	1	1
14	9	9	9	9	9	9
15	9	9	9	9	9	9
17	1	1	3	4	1	1
18	1	9	6	9	3	9
21*	1	1	3	4	1	1
	1	9	3	4	1	1
	1	2	9	9	9	9
22	1	9	5	9	9	9
25	9	9	9	9	9	9
27	1	1	4	1	3	9
29	1	1	1	3	3	9
30*	1	1	8	3	3	1
	9	9	3	3	3	1
31*	1	9	8	3	3	1
	1	9	8	3	3	1
33	1	1	3	3	3	9
36	1	9	3	4	3	9
37	1	1	1	3	3	9
38	1	1	1	4	3	9
39	1	1	1	2	3	9
42	1	9	5	4	1	9
43	1	1	8	4	2	9
44	1	2	3	2	3	9
45	9	9	9	9	9	9
46	1	2	8	4	1	9
47*	1	9	1	4	3	1
	1	9	8	4	3	9
48	1	9	8	4	3	9
54	9	9	1	9	9	9
55	2	1	8	4	1	1
56	1	9	1	3	3	9
58*	3	9	8	9	3	9
	1	2	8	3	3	1
59	1	1	8	1	1	1
60	1	9	3	3	1	1

Table 26 continued

<u>Grave</u>	<u>Age</u>	<u>Sex</u>	<u>Orientation</u>	<u>Deposition</u>	<u>Position</u>	<u>Form</u>
62*	1	1	9	9	9	9
	1	2	8	3	1	1
63	3	9	8	4	3	1
65	9	9	9	9	9	9
66	9	9	9	9	9	9
67*	9	9	6	9	1	2
	9	9	6	9	1	2
	9	9	6	9	1	2
	9	9	6	9	1	2
	9	9	6	9	1	2
69	9	9	9	9	9	9
70	9	9	9	9	9	9
71	9	9	9	9	9	3
72	1	1	9	4	1	1
73	9	9	9	9	9	9
75	1	1	8	1	1	1
76	9	9	9	9	9	9
77	9	9	9	9	9	9
78	1	1	8	4	1	6
79	9	9	9	9	9	9
80	9	9	9	9	9	9
82	9	9	1	9	9	6
83	9	9	3	9	9	9
84	9	9	9	9	9	9
85	9	9	9	9	9	9
87	9	9	9	9	9	9
89	1	1	9	9	9	3
92	9	9	9	9	9	9
94	1	2	8	4	1	1
96	9	9	9	9	9	9
97	1	9	9	9	9	9
98	1	1	5	9	1	1
99	9	9	9	9	9	9

*Multiple burials in these graves.

67 and 91); the remainder were all single interments.

Cluster IX.

Cluster IX, containing five graves from Mason's excavations, included burials 81, 88, 93, 95 and 100 (Mason's Burials 12f, 17a, 23, 25, and 28). These graves shared nine different types of ceramic objects, including undecorated ceramic carafes (C98), undecorated ceramic bowls (C100), ceramic jars (C102 and C103), ceramic censers (C118), decorated ceramic carafes (C99), ceramic plates (C104 and C105 [Figs. 55, 57, 58, 69, 71, 73]) and undecorated ceramic vessels (C114) and one lithic object (celt or adze [L6]). Nineteen other object types were scattered among the interments. Personal or luxury goods were quite sparse in the graves of this cluster, appearing with a frequency of only 12 percent. Two of the graves were multiple burials: grave 95 had four individuals and grave 100 contained two individuals. The remainder of the graves had single interments. The variations in the graves of this cluster are summarized in Tables 28 and 29.

Table 29
Sitio Conte: Disposition of Cluster IX Interments

<u>Grave</u>	<u>Age</u>	<u>Sex</u>	<u>Orientation</u>	<u>Deposition</u>	<u>Position</u>	<u>Form</u>
81	9	9	8	9	9	9
88	1	1	8	4	1	1
93	9	9	8	9	9	6
95	1	1	7	1	1	1
	1	2	7	1	1	1
	2	2	8	9	2	2
	2	2	8	9	2	2
100	9	9	1	9	9	3

Table 28
 Sitio Conte: Mortuary Arts in Cluster IX Graves

<u>Object</u>	<u>Grave</u>
L5	100
L6	81, 88, 93, 95, 100
L8	93, 95
L18	100
M29	93, 95
M31	88, 95
M32	88, 95
M33	100
M34	88
M36	95
M38	81
V54	88
B69	88
B71	88
B73	95
B74	95
C97	81
C98	81, 88, 93, 95, 100
C100	81, 88, 93, 95, 100
C101	93
C102	81, 88, 93, 95, 100
C103	81, 88, 93, 95, 100
C104	81, 88, 95, 100
C105	81, 88, 95, 100
C114	81, 88, 93, 95
C115	93, 95
C117	93, 95
C118	81, 88, 93, 95, 100

Object codes: See Table A-17

Three of the graves, 81, 88 and 93, contained one interment each, a male in grave 88, a female adolescent or child in grave 93, and an unaged and unsexed individual in grave 81. The fragmentary skeletal remains found in grave 81 were located about ten centimeters below a layer of ceramic vessels. The only objects found were on his left clavicle except for a gold double eagle ornament located on his ribs. The three females found in this grave were piled together in the northern section of the burial. The adult female was prone, lying on her back, and her skull pointed east while facing north. A metal plaque was found under her right femur. Below the adult female were two other females (skeletons III and IV), side by side. The exact position of these burials was impossible for the excavators to determine. No specific personal mortuary goods were associated with these two individuals.

The north end of grave 100 (Mason's Burial 28) was severed by aboriginal excavations and, as a result, the skeletal material in the grave was scattered. Two skulls were found in the grave and several long bones were scattered about; no ages or sexes were able to be determined from these fragmentary remains. At the base of one skull, a crab-like carved green stone, possibly a nose or ear plug, as well as a copper ornament, were found. The ceramic vessels scattered in this grave were not all retained by the excavators. Mason noted, for example,

that he "removed some of the better vessels, keeping only specimens of the incomplete and plain ones" (n.d.:140).

Cluster IX shared a number of ceramic types, including C100 (undecorated ceramic bowl) and C102 (undecorated ceramic jar). These objects are common to the majority of graves at Sitio Conte and, therefore, are not of consequence for distinguishing among the graves. The rest of the ceramic vessels were also not unique to cluster IX; and their distribution, even among the graves of the larger cluster VIII, suggests that they too are of little use in indicating differences among the interments. The only other shared characteristic of cluster IX is the object L6, celt or adze, found in all the graves of this cluster. Although a number of the graves in cluster IX seem to include substantial numbers of sumptuary or luxury good (e.g., the plaques in grave 95), the percentage or frequency of such items is, in general, quite small and represents only 11 percent of the mortuary goods.

Cluster X.

Cluster X, the last of the Sitio Conte clusters, consists of only one burial, grave 86 (Mason's Burial 15b) from The University Museum's excavations. Grave 86 contained one individual who was laying in an extended position, face down. Lothrop helped in the excavation of this burial and, according to Mason (n.d.a.), noted that the orientation of the interment was difficult to

determine since only the skull, the right humerus and a few ribs were uncovered. Apparently the individual was laid out north and south. Under the ribs were discovered two gold or tumbaga plaques and five more plaques were located to the east of the skull. In addition to a variety of ceramic vessels, the individual was also accompanied by two green stone pendants carved in the shape of large canine teeth, three winged pendants (two ivory and one stone), a stone mirror back, and a copal resin pendant. A variety of animal teeth, including those from a whale, peccary and a canine animal, were located in the burial. This grave was singled out from inclusion in the larger Cluster VIII on account of the presence of these animal teeth, the stone pendants, and metal plaques.

Discussion of the cluster analyses.

The distribution of the Sitio Conte graves among the ten clusters suggests that there may be a bias in the placement of one grave or another in a specific cluster because of the differences between the reporting methods of Mason and Lothrop and not as a result of the differences among the mortuary objects in the burials. Excluding cluster VIII with sixty-four graves, among the remaining nine clusters there is only one instance, grave 68 in cluster VI, in which a burial from one excavator's report was included in a cluster with graves from the other's excavations. This pattern is imitated, in various

degrees, by the other cluster analyses. It is a suspicious pattern and suggests that either the mortuary goods which combined to make each excavator's graves different had a spatial significance in the necropolis or that the recording of field data and object classification differed considerably.

In contrast, the actual number of graves represented in the various clusters from the excavation of Mason and Lothrop is very close to the proportion of graves from each excavator in the sample. For example, among all Sitio Conte graves Lothrop's graves represent 59 percent and Mason's graves amount to 41 percent, while among these nine clusters, Lothrop's graves represent 57 percent and Mason's 43 percent of the graves.

With these problems in mind, I shall now turn to the various analyses. Despite the fact that the complete linkage analysis mediates the biases of the algorithms of the other cluster analyses, this test also emphasizes the presence of a large base population of graves--i.e., cluster VIII with sixty-three members. The remaining clusters are made up of much smaller numbers of graves, the most being cluster VI with six graves. The large size of cluster VIII is tempered at the eleventh cluster level when it is broken into two clusters of sixteen and forty-seven members. However, this does not represent a trend. At the twelfth and thirteenth cluster levels, the smaller

clusters of II and IV are split; the larger clusters which originally represented cluster VIII are not broken further. There are, therefore, no compelling reasons not to use the ten clusters produced by the first complete linkage cluster analysis.

The complete linkage analysis emphasizes a general tendency in the distribution of particular mortuary furnishings to be widely dispersed among all of the graves. This broad representation suggests that certain objects are universal and can be eliminated from consideration as providing information which may be socially significant. That is, there is no or little variation in their distribution. These object classes include stone points (L3), stone pendants (L5), celts or adzes (L6), metal plaques (M29), metal nose decoration (M34), bone beads (B71), shark teeth (B74) and ceramic carafes, bowls, jars and plates (C98 through C105). In addition, the ceramic covers (C112 and C113) and undetermined vessel types (C114 and C115) do not seem to be of any potential analytical usefulness; the former because they were probably parts of other vessels, and the latter because the category is too non-descriptive. (The use of the ceramic classification "undetermined vessel" was necessitated by the inclusion of undescribed ceramic vessels left in Panamá with the Conte family or in situ and for those items not found in museum collections or in too fragmen-

tary of a state to determine their form.) This argument does not mean that the visual information found on some of these artifacts or that the absolute number and quantitative distribution of these objects is not important. However, the presence or absence of these mortuary furnishings as object classes found in specific graves does not seem to have any significance.

The Social Dimensions of the Sitio Conte Mortuary Arts

The complexity of the necropolis at Sitio Conte is staggering in comparison to the Azuero peninsula sites of El Indio, La Cañaza, and El Cafetal. From even a cursory comparison of the range of mortuary arts, the quantity of energy expended in the burials, and the degree of variation in the burial treatment, it is evident that there were substantial differences in social complexity between Sitio Conte and the Tonoai sites.

In my discussion of El Indio, I argued that the Phase II graves from that site exhibited differential treatment of the deceased on the basis of an individual's sex and age. Furthermore, such treatment was indicative of an egalitarian society. In common with El Indio, the interments at Sitio Conte display a dramatic difference in mortuary treatment between the sexes and among the age groups. I noted above that 94 percent of the individuals buried at Sitio Conte were adults and 75 percent were

male. Children were almost totally absent from the Sitio Conte graves, and all but one of the females found in the graves were buried in conjunction with an adult male. Moreover, the very few adolescents at Sitio Conte were, regardless of sex, also found only in association with adult males. If the Sitio Conte cemetery is a specialized burial facility for individuals who have achieved a unique status entitling them to interment in this necropolis, such special treatment centered on adult males.

The selective use of a cemetery on the basis of sex and age is not uncommon. Yet, while the burial criteria used at the Sitio Conte cemetery are strongly affected by the age and sex of the deceased, any suggestion that the organization and complexity of the graves represent an egalitarian society similar to El Indio does not accurately reflect the variations in the distribution of the mortuary arts. Turning attention to the variation of the quantity and quality of the mortuary arts in the graves and the treatment of the dominant sex and age group, namely adult males, a more accurate description of the social dynamics and status system of Sitio Conte society can be presented.

The largest percentage (22 percent) of male interments in the ten clusters of the Sitio Conte graves is found in cluster VIII (n=63). Among the graves of cluster VIII, individuals were accompanied by an average of 6.3

types of mortuary objects; the number and diversity of these mortuary arts were the smallest of any cluster (see Table 27). Seventy-three percent of the mortuary objects in cluster VIII, for example, were ceramic items; lithics constituted 18 percent, metal items amounted to 4 percent, and bone objects accounted for only 5 percent.

Clusters I through VII are quite different. These seven clusters represent only 21 percent (n=23) of the total number of graves with mortuary arts but contained 60 percent (n=106) of the interred individuals (Table 30)

Table 30
Sitio Conte: Number of Mortuary Art
Types in Graves with More than One Interment

<u>Cluster</u>	<u>Grave</u>	<u>Number of Skeletons</u>	<u>Number of Lithic</u>	<u>Number of Metal</u>	<u>Number of Bone</u>	<u>Number of Ceramic</u>
I	1	4	9	10	12	16
	5	15	10	9	9	15
	26	22	10	11	11	14
II	32	6	6	14	8	12
III	74	23	7	10	7	14
	91	2	8	6	3	14
IV	24	10	7	5	5	14
V	13	2	8	4	8	12
VI	6	3	8	4	4	12
	20	2	7	1	4	9
	23	2	5	2	2	8
	68	3	4	1	1	12
VII	90	8	4	6	4	10
VIII	21	3	3	0	1	8
	30	2	1	0	0	0
	31	2	3	0	1	7
	47	2	0	1	0	5
	58	2	2	0	0	6
	62	2	1	0	0	1
	67	5	3	0	0	4
IX	95	4	2	4	2	10
	100	2	3	1	0	8

from Sitio Conte. Each grave averaged 4.6 interments, of which 77 percent of the deceased with known age and sex were adult males. The central or primary interment, when identifiable in the graves of these clusters, was always an adult male.

Both the absolute number of mortuary objects and the number of the different classes of mortuary arts found in these graves bolsters the disparity between the graves of these seven clusters and the majority of Sitio Conte graves found in cluster VIII. For example, cluster I averaged 44.6 object classes per grave of which an average of fifteen were ceramic objects; cluster II averaged forty object classes for its one grave of which twelve were ceramics; cluster III averaged thirty-five classes of objects of which fourteen were ceramics; cluster IV averaged twenty-eight classes of which 13.5 were ceramics; cluster V had an average of twenty-nine classes of objects of which 12.5 were ceramics; cluster VI averaged 19.8 object classes per grave of which six were ceramics; and, finally, cluster VII had an average of twenty-four object classes of which ten were ceramic objects. The cluster with the fewest object classes, VI with 19.8 per grave, contained over three times the average number of types of mortuary objects classes per grave in comparison to cluster VIII.

The graphic representation (Table 31) of the classes

Table 31
 Sitio Conte: Distribution of Mortuary
 Arts in Clusters I-VII, IX, and X

<u>Grave</u>	<u>Cluster</u>	<u>Types</u>	<u>Number of Object</u>
81	IX	12	*****
93	IX	12	*****
100	IX	12	*****
86	X	15	*****
95	IX	16	*****
88	IX	16	*****
23	VI	17	*****
19	VI	17	*****
68	VI	18	*****
20	VI	21	*****
4	VI	22	*****
90	VII	24	*****
16	V	26	*****
2	IV	26	*****
6	VI	28	*****
24	VI	30	*****
91	III	31	*****
13	V	32	*****
74	III	39	*****
32	II	40	*****
1	I	42	*****
5	I	43	*****
26	I	46	*****

of the mortuary arts is remarkably similar to both the pyramidal structure of Service's chiefdom model of organization (Fig. 4) and the model derived from the organization of U.S. Army ranks (Fig. 5). The differences in the graded distribution of the mortuary arts among the Sitio Conte graves does not depend merely on the presence of specific objects in one cluster which are not present in another cluster. The distribution, on the other hand, seems to be determined by an additive mechanism--that is, as the clusters decrease in the number of member graves,

the smaller, or subsequent cluster, contains all the goods of the larger, or preceding cluster plus additional items. For example, cluster I contained an average of forty-three mortuary art types while the next cluster, II, contained an average of only forty object classes; moreover, the object types in cluster II are almost all also present in cluster I (Appendix 6, Tables A-14 through A-17). In Saxe's terminology, the distribution of the mortuary arts among the Sitio Conte graves is more tree-like and less paradigmatic than the distribution of the grave goods among the El Indio graves, especially those of Phase II. Moreover, the more rigidly structured graves of Sitio Conte are dominated by one age and sex group, adult males. Such a pattern is clearly more indicative of a substantially more complex and socially rigid structure and supports the identification of Sitio Conte as a chiefdom or ranked society.

The distribution of mortuary arts which could be considered costume or sumptuary items also corroborates this observation. The primary criteria used to discriminate among the Sitio Conte graves and allocate them to one or another of the clusters centers on the presence or absence in each grave of specific costume or sumptuary objects (Table 32). Interestingly, the presence or absence of a large number of ceramic object classes has little influence on determining which grave belongs to

Table 32
 Sitio Conte: Presence/Absence of
 Costume and Sumptuary Mortuary Arts

<u>Cluster</u>	<u>I</u>		<u>II</u>		<u>III</u>		<u>IV</u>		<u>V</u>		<u>VI</u>					
	1	26	5	32	74	91	2	24	13	16	4	6	19	20	23	68
<u>Object</u>																
L5	X	X	X		X	X	X		X	X	X	X	X	X	X	X
L8	X	X	X	X	X	X	X	X	X	X		X	X			
L16		X	X		X			X				X	X	X		
M29	X	X	X	X	X	X		X	X	X						
M30	X			X	X						X					
M31	X	X	X	X	X	X	X	X	X			X			X	X
M32	X	X	X	X	X			X				X				
M33	X	X	X	X	X											
M34	X		X	X	X	X		X	X	X	X	X				
M35		X		X	X	X		X	X	X	X	X				
M36	X	X	X	X	X					X						
M37	X	X	X	X	X	X										
M39		X		X												
M40		X	X	X												
B68	X	X	X	X				X	X	X						
B69			X	X												
B70	X		X	X	X	X										
B71	X	X	X		X		X	X	X	X		X				
B73	X	X	X	X						X						
B74	X	X	X	X	X	X		X	X		X	X	X	X	X	X
B75								X								
B76	X	X			X	X						X				
B78	X	X	X	X	X				X					X		
B79	X	X					X		X							
B83	X	X			X				X				X	X	X	

Table 32 continued

<u>Cluster</u>	<u>VII</u>		<u>IX*</u>		<u>X</u>	
	<u>90</u>	<u>100</u>	<u>93</u>	<u>95</u>	<u>88</u>	<u>86</u>
<u>Gravea</u>						
<u>Object</u>						
L5	X	X				X
L8			X	X		
L16						
M29	X		X	X		X
M30						
M31	X		X		X	
M32	X			X	X	
M33	X					
M34						
M35						
M36	X			X		
M37						
M39						
M40						
B68						
B69						
B70						
B71	X				X	
B73				X		
B74	X			X		
B75						
B76						X
B78	X					
B79						X
B83						

*Grave 81 of Cluster IX contained no costume or sumptuary objects.

Object Codes: See Table A-17.

which cluster. Ceramics, for the most part, are important only in discriminating degrees of possible status distinctions among the graves within lowly cluster VIII. In the elite burials of clusters I-VII, ceramic objects are ubiquitous and are used primarily as fill or flooring for the interments.

Approximately twenty-six types of mortuary objects can be considered costume or sumptuary goods, including stone pendants (Figs. 42 and 43), stone beads (Fig. 51), stone ear decorations (Fig. 46), metal plaques (Figs. 28-32), metal disks (Fig. 44), metal beads (Fig. 47), metal figures (Figs. 33, 34, and 36), metal pendants (Figs. 33 and 34), metal nose decorations (Figs. 45 and 47), metal ear decorations (Fig. 46), metal bells (Figs. 35, 45, and 47), metal wrist or ankle cuffs or greaves (Fig. 33), metal ring or bracelet, metal helmet or head piece, bone pendants, bone figures (Figs. 37-40), bone tubes (Fig. 43), bone beads (Fig. 48), whale teeth, shark teeth (Fig. 48), jaguar teeth (B75), canine teeth (Fig. 48), unknown animal teeth, peccary tusks, sting ray spines (Fig. 48), and resin figurines (Fig. 41). The percentage of these goods as part of the total number of mortuary items from each cluster except VIII, is 76 percent in cluster I, 72 percent in cluster II, 54 percent in cluster III, 44 percent in cluster V, 36 percent in cluster VII, 32 percent in cluster IV, 24 percent in cluster X, 21 percent

in cluster VI, and 11 percent in cluster IX. The diminishing number of these object classes in each of the above seven clusters once again confirms a pyramidal pattern indicative of ranked societies.

In addition to the significance of the presence or absence of costume and sumptuary mortuary arts, the absolute quantities of these objects yields similar results. The above twenty-five classes of mortuary arts, which I have defined as costume or sumptuary items, amounted to at least 15,576 individual items. The majority of these, as well as all mortuary arts, are found in clusters I, II and III; the total number of sumptuary and costume arts found in the six graves of these same clusters represent 90 percent of all such objects found at the necropolis of Sitio Conte. Predictably, the number (Table 33) of these

Table 33
Sitio Conte: Total Number of Costume and
Sumptuary Mortuary Arts by Cluster

<u>Cluster</u>	<u>Quantity</u>	<u>Percentage</u>	<u>Average Number</u>
I	3800	76	1266.7
II	5415	72	5415.0
III	4941	54	2470.5
IV	158	32	79.0
V	573	44	286.5
VI	487	21	81.2
VII	68	36	68.0
VIII	44	1	0.7
IX	99	11	24.8
X	17	24	17.0

mortuary arts decreases in clusters IV through VII and diminishes to almost nothing in cluster VIII. Therefore,

both the simple presence or absence and the absolute number of sumptuary and costume mortuary arts indicate higher or lower status among the deceased at Sitio Conte.

Finally, there is a reciprocal relationship between the number of individuals in a grave and the number of mortuary arts. As the number of individuals interred in each grave increases, the quantity of mortuary arts and the number of different classes of mortuary arts increases. For example, the six graves from clusters I, II and III, contain seventy-two, or 26 percent, of the 201 interments at Sitio Conte and average twelve interments in each grave. The graves in clusters IV through VII average just over three interments each, while the graves found in cluster VIII average only slightly more than one interment. In conclusion, no matter what criteria--the number of objects, the variation in the type of objects, or the number of interments in each grave--are selected and used to arrange a rank or status ordering of the clusters, clusters I, II and III rise to the top, and clusters IV, V, VI, and VII fit immediately below the top three clusters. These seven clusters are followed by a sharp break to the majority of graves found in cluster VIII. Clusters IX and X tend toward an average number of mortuary arts and interments and, thereby, bridge the distance between the top seven clusters and cluster VIII.

The distribution or organization of the mortuary arts

among the clusters also provides information on the means of status attainment or achievement among the adult males of Sitio Conte. For example, no mortuary arts predominate in any other cluster which do not regularly appear in the graves of clusters I, II and III. This pattern confirms that the identification of status by mortuary arts, especially sumptuary or costume items, is, as pointed out, an additive process. That is, an individual of high status received specific "extra" mortuary arts which were in addition to those he received as a member of a lower status level.

For example, several specific sumptuary and costume mortuary arts tend to be isolated to the top ranking clusters of I, II, and III: metal plaques (Figs. 28-32), metal disks (Fig. 44), metal pendants (Figs. 33, 34, 36), metal greaves for the wrists and ankles (Fig. 33), metal head coverings shaped like a helmet, bone tubes, and whale teeth. The bone tubes were probably either used for "aprons" or as large beads and, therefore, may be more properly classed with bone beads. However, the metal disks are quite distinct from the plaques. The plaques are generally decorated with repoussé figures and measure between fifteen and twenty-five centimeters in diameter (Figs. 28-32). The metal disks (Fig. 44) are smaller, measuring five to ten centimeters in diameter, thinner, and do not display any extensive decoration other than

punched holes and very simple repoussé geometric patterns. These disks usually have one or two holes which could have been used for attaching them to garments. The rest of the above items which are segregated to clusters I, II and III, are also costume items. Most of the whale teeth, for example, have holes drilled in the basal end and were likely used as pendants.

The additive process of status achievement reflected in the distribution of these costume and sumptuary mortuary arts neatly fits Saxe's idea that burial practices acknowledge and summarize the deceased's most complete social identity or persona. Saxe pointed out, moreover, that the mortuary treatment of individuals of high rank exhibits a greater number of statuses because they have identity relationships with a wider segment of the members of the society. Moreover, many of these identity relationships are with other high ranking members who, because of their power, are more regularly acknowledged (1970:72). The variation in the type of sumptuary and costume objects which is found in the elite burials of Sitio Conte should, therefore, be expected.

At first glance such an additive pattern of status recognition does not closely parallel the U. S. Army's method of status acknowledgement as reflected in their mortuary arts and treatment. The Army recognizes most ranks through a process of formal changes in the type of

rank emblems. A captain's rank, we recall, is acknowledged by two silver bars, and a major is recognized by the presence of a brass cluster on each shoulder. A major, the rank immediately above the captain, does not also display his captain's emblems along with his major's emblems. He only displays those rank emblems which represent his current status. Therefore, the number of status emblems is relatively constant and recognition is evident by the formal change in the design of the emblem. In a few of the ranks--e.g., enlisted men and generals--some minor variations occur which are of an additive nature, such as the number of stripes representing the various levels of enlisted men and non-commissioned officers or the number of stars which denote different statuses of generals. In these cases the two types of status recognition systems are integrated and somewhat parallel the social recognition mechanisms used at Sitio Conte.

However, one aspect of U.S. Army status recognition is quite similar to the Sitio Conte additive system of acknowledging status. The Army's emblematic demarcation of sub-group affiliations, such as participation in particular battles, the shared characteristic of having been wounded in battle, commendations of bravery, and so forth, is part of an additive recognition system. The social identity of any individual is constantly enhanced by the

additional display of the total number of sub-group statuses achieved. These emblems are displayed in toto; the individual does not display only the most recently acquired medal of a sub-group affiliation. The number of these medals is indicative of higher rank since as one increases in rank--e.g., private, captain, major, and so forth--the number of earned sub-group affiliations also increases.

In summary, the differential treatment of adult males at Sitio Conte through the qualitative and quantitative variations in the mortuary arts--especially those of a costume or sumptuary type--is indicative of a chiefdom or ranked society. The organizational parallels of the Sitio Conte ranking system with Service's and the U.S. Army's pyramidal models of ranking corroborate this interpretation. It is also clear that specific types of mortuary arts acknowledge those ranks through an increase in their presence. The final issue to be addressed is whether among the Sitio Conte burials, specific emblems, designs, or decorations are also used to express rank or status.

The Visual Dimensions of the Sitio Conte Mortuary Arts

The number of possible design elements found on the Sitio Conte mortuary arts is potentially infinite. Olga Linares (1977:60) has convincingly argued that splitting up the Conte designs into a limitless host of component

parts would not fruitfully yield meaningful results. Her analysis centered on identifiable fauna (flora is notably absent from Sitio Conte designs), and she selected twenty categories, namely, bird, fish, crab, hammer-headed shark, stingray, frog, snake, marine worm, needle fish, turtle, crustacean, armadillo, curassow, scorpion, tick, squid, crocodile, feline, man-of-war, and hawk (See Linares 1977: Figs. 13, 22, 28-30, 35-37, and 39-41). Her selection of these subjects is primarily based on the designs found on ceramic objects.

Among the twenty categories, she included visual subjects in her study from sites "related" to Sitio Conte and found in the other areas of Veraguas, Azuero and Coclé sites. There is no convincing evidence that the visual symbolic system from these "related" sites is the same, shares specific meanings with the symbolic system at Sitio Conte, or that the social meaning of the symbols is the same or similar. As a result, I have selected fifteen design subjects which were chosen only from the Sitio Conte mortuary arts. These subjects include fish (Figs. 54, 68), bird (Figs. 28, 41, 52, 54, 60, 63, 64, 69, 81), turtle (Figs. 43, 54, 81), snake (Fig. 58), human (Figs. 30, 33, 35, 37, 82-84), crab or similar crustacean (Figs. 53, 60, 62, 67-69), insect (Figs. 53, 68), bat (Figs. 33, 34), armadillo (Figs. 79, 80), deer (Figs. 63, 70), stingray (Figs. 67, 79), monkey, crocodile (Figs. 28-42,

45, 52, 55-59, 61, 63, 65, 66, 69-71), frog or toad (Fig. 80), and unknown. A few of Linares more specific subjects, such as marine worm, shark, needle fish, scorpion, curassow and hawk, are subsumed by several of my broader categories. Moreover, subjects which do not appear on Sitio Conte mortuary arts, such as Linares' squid, have been eliminated from my list.

The distribution of the fifteen visual subjects is not surprising; it parallels quite closely the distribution of the types of mortuary arts (Tables 34 and 35).

Table 35
 Sitio Conte: Distribution of of Design
 Subjects among Graves (exclusive of Cluster VIII)

<u>Grave</u>	<u>Cluster</u>	<u>Quantity</u>	
86	X	1	*
95	IX	1	*
81	IX	1	*
93	IX	2	**
88	IX	2	**
68	VI	2	**
20	VI	2	**
16	V	2	**
100	IX	3	***
23	VI	3	***
19	VI	3	***
2	IV	4	****
91	III	5	*****
4	VI	5	*****
90	VII	6	*****
6	VI	6	*****
24	IV	7	*****
13	V	9	*****
74	III	9	*****
32	II	9	*****
1	I	9	*****
5	I	10	*****
26	I	10	*****

Table 34
 Sitio Conte: Presence/Absence of Design
 Subjects (exclusive of Cluster VIII)

Cluster	Grave	Design														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
I	1	X	X	X	X	X	X	X			X		X			
	26	X		X	X	X	X	X	X	X		X				X
	5	X	X	X	X	X	X					X	X	X		X
II	32	X	X	X	X	X			X	X	X				X	
III	74	X	X	X	X	X	X	X	X							X
	91	X			X	X	X							X		
IV	2	X	X	X					X							
	24	X	X	X	X	X				X						X
V	13	X	X	X	X		X	X	X					X		X
	16	X		X												
VI	4	X	X	X	X						X					
	6	X		X			X		X				X			X
	19	X			X		X									
	20	X														X
	23			X					X	X						
68	X								X							
VII	90	X		X		X						X	X	X		
IX	81	X														
	100	X	X			X										
	88	X	X													
	93			X		X										
	95	X														
X	86				X											

Design Subject Code:
 1-Crocodile; 2-Snake; 3-Bird; 4-Humanoid; 5-Turtle;
 6-Crab; 7-Insect; 8-Fish; 9-Frog; 10-Deer; 11-Sting Ray;
 12-Bat; 13-Armadillo; 14-Monkey

Excluding cluster VIII from consideration, the graves in clusters I, II and III, which rank highest in respect to the number and quality of mortuary arts, also contain the greatest number or variety of visual subjects. For example, cluster I (graves 1, 5 and 26) had a 60 percent frequency of the fifteen subjects and contained 26 percent of the total number of design occurrences, averaging 8.6 designs per grave. In fact, if the ranking of the graves is based on the average number of visual subject categories per grave, it continues in order from cluster I through cluster X, with the exception only of cluster VII (grave 90) which jumps to fourth place. Moreover, there are no designs which are unique to the graves of any one cluster except for the monkey, which appears only once and is isolated to grave 32 of cluster II.

Not only does the distribution pattern of designs or subjects on the mortuary arts parallel the ranking of the graves derived from the cluster analyses, but the pattern of the presence and absence of the designs closely follows the additive pattern of rank recognition as determined by the mortuary arts themselves. That is, increased status is recognized by a number of different emblems and not by exclusive use of one or another of the emblems or visual subjects. For example crocodiles and birds apparently represent characteristics common to almost all high status individuals buried at Sitio Conte. Crocodiles appear in

one form or another in twenty of the twenty-three top graves (clusters I-VII, IX and X), while birds are found in fifteen of these same graves. The decrease of eight occurrences of this latter subject takes place in the lower status graves of the above nine clusters.

Similarly, as the rank of the deceased in a particular grave rises, the number of other visual subjects found on the mortuary arts in that grave also increases. This pattern is graphically illustrated in Table 35. Cluster I, for example, has an average of 8.6 subjects per grave; cluster II averages nine designs; cluster III contains approximately 6.5 subjects per grave; and so on down to cluster X which averages just one design per grave. The only cluster out of sequence is cluster VII (grave 90) which averaged six designs and, as a result, follows cluster III in its frequency of visual subjects. Analogous to the mortuary art objects, the visual symbols found on them do acknowledge status, but not by their exclusivity to one or another individual. Status is recognized by the total number of different emblems the deceased was entitled to display, an additive pattern of recognition.

The parceling among the graves of the visual subjects found on the Sitio Conte mortuary arts varies significantly with the type of object. With the exception of ceramics, the designs are confined to sumptuary or costume

arts such as pendants, disks, figurines and so forth. Among these objects, the total number of different designs on these objects is reduced from the original fifteen to nine. The frequency of these nine designs mirrors the larger sample of fifteen visual subjects. For example, clusters I and II average three and five designs respectively and so on down to the lower clusters which average .16, .75, and one design among the respective clusters of VI, IX, and X. However, no emblems or designs are found on non-ceramic arts which do not also appear on ceramics. To the contrary, certain emblems seem to be almost exclusive to ceramics, including birds, turtles, crabs, insects, fish, deer, and sting rays. This distribution of designs supports the argument that non-ceramic, sumptuary and costume arts comprise a special group of mortuary art objects. Their importance in visualizing levels of status derives as much from their material and context as from the specific motifs found on them.

Social Status and the Sitio Conte Mortuary Arts

Both the distribution of mortuary arts, especially sumptuary and costume objects, and the designs decorating them, were given out on the basis of individual performance. An individual's, specifically an adult male's, status was demonstrated to his society through the total number of statuses recognized by the mortuary arts. Such

a system has been described by Service (1962:154-164) as an achieved system and is a normal component of particular types of chiefdoms. Other researchers working with the Sitio Conte mortuary remains have drawn conclusions which support the application of Service's social typology. For example, Lothrop, summarizing for the most part Oviedo's descriptions of the inhabitants of the Central Region of Panamá at the time of the Conquest, noted that the

sub-chiefs called cabra [were positions which] could be won only by a deed of valor . . . It was most often granted to a warrior who fought fiercely . . . Sons of a cabra inherited the title on his death but they retained it only if they dedicated themselves to warfare (1937:22).

Although we now know the Sitio Conte graves date five to nine hundred years earlier than Oviedo's observations which guided Lothrop, the method of status acquisition described above is applicable to Sitio Conte and clearly describes an achieved status system with some incipient characteristics of ascribed status.

More recently, Helms (1979) has continued the application of post-Conquest Spanish sources to flesh out the social dynamics articulated through the mortuary remains of Sitio Conte. Consequently, Helms arrived at conclusions similar to Lothrop's. Linares, however, was more cautious in her application of ethnohistoric sources; yet, based on a combination of archaeological evidence, social theory, and the early post-Conquest Spanish sources, she also implies that increases or changes in status were

attained primarily through personal achievement (Linares 1977:31, 70-72).

Within their analyses of the social dynamics of Sitio Conte society, several of the above scholars have attempted to determine more exact meanings for specific designs or emblems found on the Sitio Conte mortuary arts. Lothrop (1937:115,133, and 159) tentatively suggested that some mortuary arts, such as metal "helmets" (Lothrop 1937:Fig. 107), plaques (Figs. 28-32), and greaves (Fig. 33), symbolically represented a particular individual's high status. However, his accounts of Sitio Conte exhibited more interest in describing the range or type of arts than in ascribing social significance to them and, as a result, he did not explain his interpretations in depth.

On the other hand, the works of Helms and Linares devoted considerable space to demonstrating and arguing for the social significance of specific designs or emblems found on the Sitio Conte mortuary arts. Helms suggested, for example, that ear pieces (e.g., Fig. 46), nose rings (e.g., Fig. 45) and plates (e.g., Figs. 28-32, 44) "worn by the ancient Panamanians . . . stood as metaphors for proper human . . . behavior and identified the individual wearer as a participant in this ordered [society]" (1979:81-83). In the development of this and other arguments, Helms relied heavily on analogies between pre-Conquest Panamanian life and twentieth century San Blas

Cuna culture of the Atlantic coast of Panamá.

I propose [she writes] that there probably was a complex of metaphors associating chiefship with the solar-celestial realm, with brightness, and with gold. I have argued that the metaphorical 'golden clothing' worn by Tad Ibe [a Cuna mythic personage] in his mythical combats was evidenced literally in the golden plates and helmets, greaves, and anklets worn by pre-Columbian Panamanian warriors and rulers in life and in death. . . . (1979:95-96)

She continued by finding somewhat novel symbolic meaning in Sitio Conte polychrome pottery which, according to her reconstruction, was primarily black and red (a rather misleading observation because these ceramics were painted in white, orange, blue, purple, black, and several shades of red). Again, following Cuna and other tropical peoples' beliefs, Helms concluded that:

. . . this pairing of red and black was not accidental but was meaningful within a symbolic context . . . the combination [of colors] may be tentatively interpreted as symbolic of the dynamics and renewal of life (1979:96).

One last example of Helms' arguments, which depend on interweaving temporally and spatially distant cultures, focuses on her reinterpretation of the crocodile motif (e.g., Fig. 39), a common subject found on Sitio Conte ceramics and luxury mortuary arts. On the basis of a survey of American tropical forest mythology, Helms suggested that in pre-Columbian times there existed an association between iguanas, solar forms of "cosmic energy," and "chiefship" (1979:97). Following her

argument, the previously identified crocodile motif was, in many cases, actually an iguana. This is certainly possible and quite reasonable. But the suggestion that this motif had any association with cosmic energy is not strongly supported with evidence found within the context of pre-Conquest, especially Sitio Conte, culture.

Moreover, the ubiquitousness of the crocodile/iguana motif actually argues against its significance as a symbol of chiefly rank. It would be expected that a symbol which singularly expresses chiefship would be less universal among the burials of Sitio Conte. In fact, due to the ubiquity of the motif, it may be more strongly argued that if the crocodile/iguana design had social significance it was either a territorial emblem or a symbol which stood for a broadly organized political unit and not the social position of the individual chief.

While some of Helms' ideas reflect provocative meanings for specific Sitio Conte mortuary arts and designs, her arguments which were based on broad analogies and the stretching of ethnohistoric and ethnographic information to temporally and spatially distant cultures do not convince this author. For example, her discussion of Sitio Conte relied heavily on Spanish ethnohistoric accounts even though the necropolis was not in full use for several hundred years as a mortuary site immediately prior to or during the Conquest. Moreover, she attempted

to reconstruct exacting agents of central Panamanian social life through juggling the Spanish accounts with the culture history of the Cuna. In summary of her methodology, she states that:

Although general features of settlement pattern and subsistence are provided in the Hispanic accounts, the ethnohistorical materials are deficient on many topics relevant to sociopolitical structure and function. Furthermore, what data are available are fragmentary and incomplete. Some insights can be gleaned, however, if the evidence is compared with characteristics of chiefdoms from other areas where data are more satisfactory. This methodology assumes that, while details may be expected to vary, a measure of regularity and predictability exists with respect to the general structural and functional characteristics of rank societies wherever they appear (1979:11).

Helms proceeded to examine "relationships between chiefly status and power, regional and long-distance exchange networks, and the acquisition of esoteric knowledge" (1979:1). Her construction of very complex chains of arguments based on the cross fertilization of Spanish sources, examples of other chiefdoms from around the world, and ethnographic information about the Cuna, deserve scholarly attention. Yet, her methodology offers no independent means to evaluate her conclusions. Moreover, her stated interest in making general observations about ranking or chiefdoms in Panamá has been compromised with fine discriminations and exacting characterizations of pre-Conquest social status, cosmology, ideology,

economics, and other cultural dimensions of these societies. The archaeological record, at least as of this writing, does not provide the information or data required to support or refute Helm's reconstructions of central Panamanian society before the Spanish Conquest.

But Helms' reconstructions, are important for a less obvious reason: she gave more attention to the importance of non-ceramic objects in her analyses of the social meaning of Sitio Conte mortuary arts. Linares, perhaps following the strong predilection among archaeologists to depend heavily on ceramics as the primary artifactual resource from ceramic-yielding archaeological sites, relied heavily on these objects in her provocative socio-ecological analysis of the same mortuary arts. However, Linares' analysis was based on the known archaeological record, and her arguments and discussion of the social dynamics of Sitio Conte mortuary arts are of more particular relevance to this study.

Following her earlier work (1976; also see the more recent study by Linares and Ranere 1980, and that of Cooke 1976 and 1984, and Ichon 1974), Linares proposes an evolutionary culture history for the Central Region of Panamá. Briefly, she suggests that the pre-1000 B.C. pre-Conquest cultures of this region emphasized adaptive processes which focused on seasonally nomadic exploitation of lacustrine and riverine environments, followed by the introduc-

tion of seed agriculture, primarily oriented toward maize and beans (1000-200 B.C.). Small sedentary agricultural villages, which accompanied a growing dependence on agriculture, were followed by increased agricultural sedentism along the rivers; but the small villages did not completely disappear (200 B.C.- 500 A.D.). The growth of larger, river-bank agricultural villages coincided with an increase in social complexity, population, territoriality, and agricultural intensification (500-1500 A.D.). The material from Sitio Conte spans the last two evolutionary periods, but the site was most actively used as a cemetery between 500 and 1000 A.D., or Cooke's Phase V-VI.

Linares argued that, as population spiraled after A.D. 500:

. . . the rivalry for land, and for control of crafts and trade routes, also increased. Status differences were accentuated. The dynamics of warfare and competition were in full force at the time the Spaniards came. The central Panamanian groups became typical rank-societies, neither completely egalitarian nor markedly stratified. . . . [T]he most ranked social groups [were] in the driest sector of the country [e.g., the Sitio Conte area]. Here survival, or at least prosperity, depended on the control of riverine tracts for agriculture and trade (1977:31).

Linares' observations support, it should be pointed out, the interpretation that a ranked society or chiefdom is responsible for the interments and mortuary arts from Sitio Conte.

Cooke's more recent outline (1984) of the culture

history of the Central Region of Panamá underscored Linares' and his earlier reconstructions (1976). Both scholars emphasized the indigenous regional development of the highly accentuated status system observed by the Spanish in the sixteenth century. Ichon (1974) and Helms (1979), on the other hand, proposed that many of the important status goods--e.g., gold and finely painted ceramics--were imported, along with social dynamics, from outside of the region. The exacting reconstruction of the ceramic development and the identification of a pattern of local social evolution in the Central Region by Cooke (1972, 1976a, and 1984) should put to rest, finally, the notion that Panamanian cultural change and growth was primarily a function of diffusion and external stimuli.

Linares' study of the social significance of the Sitio Conte mortuary arts continued with a summary of the Peabody Museum's excavations. Mason's work at the site was acknowledged and cited; but since his excavations were never published, Linares depended primarily on Lothrop's publications. After a review and inventory of the grave goods found at the site, she turned her attention almost exclusively to ceramics, arguing that the shapes of the ceramic objects (e.g., carafes, rectangular trays, large plates, and oversized bowls) are functionally awkward but:

. . . from another perspective these shapes are just right. For in their simplicity, in their flatness, or in the uncluttered broadness of their exposed surfaces, they are admirably

suitable for ease of decoration and for maximum enhancement of any painted design (1977:46).

In respect to the type of motifs painted on the ceramics, she concluded "that the more flat and open the surface, the larger the repertoire of motif elements" (1977:51). Linares narrowed her focus to the depictions of animals found on ceramic objects, primarily vessels. What distinguishes this ceramic tradition in general, she noted, is the:

. . . skillful way in which artists chose to portray certain animals, in certain postures, and with certain traits emphasized. In spite of extreme stylization and the common practice of combining attributes from several species, it is possible to identify to a surprising degree these 'fantastic' motifs (1977:60).

These species include, as noted previously, crab, bird, hammer-headed shark, stingray, frogs, snakes, marine worms, needle fish, turtles, crustaceans, armadillos, curassow, scorpion, tick, squid, crocodile, feline, man-of-war, and hawk.

In order to heighten the social charge of these motifs, Linares argued that,

. . . at the level of the iconography itself, and by a sort of logical extension, the animals portrayed in central Panamanian art were highly valued as the source of paraphernalia used to establish status and rank (1977:61).

She specifically called attention to bird bone necklaces, aprons and bracelets; sting ray spines and shark teeth points; canine and other animal tooth necklaces; and a

"great profusion" of turtle carapices. Birds, stingrays, and sharks are frequently found painted on Sitio Conte mortuary ceramics.

Her suggestion, however, that there is a substantive relationship among the animals portrayed on the mortuary arts and the material or "source" of the regalia is not strongly supported by the artifactual remains. A brief review of the contents of the graves (see either Lothrop 1937 or Appendix 5) reveals, for example, that turtle carapices were not very profuse in the Sitio Conte graves. For example, among the "elite" burials found in clusters I-VII, six graves had carapices, and in each case they served as "bedding" for the interments. The other objects cited above, such as bird bone necklaces, shark's teeth, stingray spines, and so forth were found in Sitio Conte graves. But the evidence that the animals which served as the raw materials for some mortuary arts and appeared as motifs on ceramic vessels formed a regular and meaningful pattern of combining motif and material, which culminated in a highly valued and, therefore, more "loaded" status emblem, is not overwhelming. In fact, by examining specific relationships among material and symbol, the evidence tends to refute any regular interplay between them. For example, in many instances an animal motif appears and no objects made from the remains of that particular animal can be found. In other cases, the objects made from

animal remains are found but the animal does not appear in any motifs, e.g., whales and manatees. In addition, an overwhelming number of objects found in Sitio Conte graves are made of metal, stone and ceramic--materials which bear little relation to faunal resources.

However, her important and intriguing arguments stem from an ecological perspective, summarized in her analysis of the cultural or symbolic parallels of the fauna found on the mortuary arts with the behavioral characteristics of these same animals. She pointed out, for example, that the animals which are portrayed on the mortuary arts are, generally, repellent, dangerous, have hard body parts, "charge," have a "pinch" or "sting," are cryptic, eat people, or are predatory (1977:65-70).

Conversely animals that do not appear or are uncommon in the art have soft body parts or are vulnerable. . . . The general rule seems to have been that common, everyday animals which were eaten were not portrayed (Linares 1977:67).

Linares extended her argument to explain that the animals portrayed on the ceramics symbolically and practically represented attributes which would help warriors and others seeking upward mobility through aggressively achieved ranks.

To conclude, the central Panamanian art style was centered on a rich symbolic system using animal motifs metaphorically to express the qualities of aggression and hostility which characterized the social and political life of this and later periods in the central provinces. . . . It seems to me that they were

emphasizing certain values, most especially those that would be held by warriors (Linares 1977:70).

It is important to emphasize, again, that Linares concluded that status was awarded through achievement.

Without hesitation, all scholars have agreed that the mortuary arts of Sitio Conte and the contexts in which they were found are symptomatic of a society whose members were aggressively achieving rank. While this is the first study to document and examine all the known graves from Sitio Conte, my conclusions support rather than alter this general view. However, the meaning of this general view to the culture history of the Central Region of Panamá is not so broadly shared.

Linares (1977) and Cooke (1976, 1984) vigorously argued that the entire Central Region of Panamá was part of a socio-economic system which exhibited a large degree of cultural homogeneity. Linares asserted, for example, that:

Apparently the entire Pacific lowland area of central Panamá was at this time (500-1500 A.D.) participating in a unified cultural system based on the exploitation of similar micro-environments. At the level of artistic style, this unity was expressed in a distinctive polychrome pottery tradition and in common stylistic conventions in the making of elaborate funerary objects in gold, assorted bone materials, and precious stone (1977:31).

Cooke (1976) has been more cautious in his assessment of the meaning of the broad similarities in ceramic technology among the Phase IV through VII, but more

especially the Phase IV and V, sites of the region. His primary interest has been to demonstrate that the region's ceramic sequences from the earliest plastic decorated ceramics to the elaborately painted polychromes of the later Macaracas style (late Phase VI, approximately 1100 A.D.) were an indigenous Panamanian development. But he also proposed that the social significance of the presence or absence in mortuary contexts of particular ceramic types, costume or luxury goods, or of large quantities of good are significant on a regional level for the identification of social complexity and degrees of ranking. He concluded, for example, that the Tonosi ceramic type defined by Ichon (1974, 1980),

. . . was a luxury item that was produced not just in southern Los Santos and Veraguas, but at those important villages over the Central Region which were in positions favorable for the import and exploitation of the raw materials necessary for its manufacture. The distribution of the Tonosi pottery should depend upon social context, rather than regional geography alone (1984:288).

Cooke went on to suggest that the uncommonness of Tonosi pottery at Sitio Sierra in Coclé province was because this site probably was a low-rank village (1984:289).

One of the underlying assumptions of both Linares' and Cooke's interpretations is that a status object or design from one site has an analagous social function when found at another site which shares a certain (but unspecified) temporal and spatial proximity. Cooke followed this

line of reasoning not only with Tonosí ceramics but also with costume and sumptuary goods such as agate pendants, tumbaga objects, animal bone beads, and so forth (1984:290). Linares, as noted earlier, included in her discussion of Sitio Conte ceramic designs, the subjects found on ceramics from "related" or "homogenous" sites located in Tonosí, Veraguas, and other areas. One such example was her inclusion of the octopus found on ceramics from Tonosí but not present on any ceramics or in any other form at Sitio Conte.

The concept of an homogenized network of social groups in the Central Region does not explain either the expected results of the "normal processes of fision and fusion so common of tropical-forest cultivators in their expansionist phase" (Linares 1977:31) or the demonstrated variability in the archaeological and artistic record. In a discussion of the formation of chiefdoms, Service noted that tribes,

. . . expand in an area by fissioning, creating additional groups which largely replicate each other. Chiefdoms, on the other hand, tend to expand by a sort of budding off of families that have low potentiality in the inheritance scheme (1962:166).

Therefore, while a splinter group may share a technological base with its larger, "mother" group, its smaller population and need for political and territorial definition would suggest that both the social complexity and

symbolic system used to acknowledge territory and lineage or status would be different (see Plog 1980 for an example). Fried's observations on rank societies support this view:

In rank society villages tend to exist as largely independent, autonomous social systems, although most have some point or points at which they are articulated with a larger and usually cooperative network. . . . Apart from kinship alliances, the hierarchical rank structure of a village tends to be specific to it. . . . (1967:119).

Rather than expecting a uniformity in the social dynamics and artistic expressions of the Central Region of Panamá, we should expect considerable variation in village size, location of villages, degrees of ranking, and emblematic recognition of status, among other things. While technological variation may be minimal among the various villages, ideo-functional variation may be quite divergent. Therefore, the variation in the social context and meaning of mortuary arts witnessed among the sites of the Tonosi valley and between these sites and Sitio Conte is more important than the similarities largely expressed through material technologies. The absence of the octopus design, for example, on Sitio Conte mortuary ceramics and its presence on the Tonosi ceramics is more significant in this respect than the technological similarity of these same clay vessels.

IV.

CONCLUSIONS

One of the primary contributions of this study to the pre-Conquest culture and art history of the Central Region of Panamá lies in the clarification of the linkages between mortuary art and social dynamics of specific villages. The village-by-village investigation of the pre-Conquest burials from El Indio, La Cañaza, El Cafetal, and Sitio Conte has demonstrated that the peoples of this area visually expressed diverse statuses through grave goods and the symbols found on them which were, in general, unique or specific to each site.

The expression of social status through the mortuary arts from the graves of the Tonosí Valley sites of El Indio, La Cañaza, and El Cafetal is, for example, sui generis in each group of graves. The earliest, or Ichon's Phase II (250 B.C.-500 A.D.), burials from El Indio reserved the most elaborate mortuary arts, in this case the polychrome ceramic "dobles" (or compound silhouette vessels [Fig. 10]), for the graves of children. These burials, however, did not contain a wide range of costume or sumptuary objects. On the other hand, the El Cafetal mortuary arts, which date from the same period, included a much higher number of costume or luxury arts including, for example, tumbaga pendants. In addition, and unlike the contemporary El Indio graves, the burials from El Cafetal

were organized into a formal cemetery. Despite the significant differences between these sites, the distribution of the attendant mortuary arts--especially in comparison with the location, age, and sex of the interments--indicate that they are contemporaneous egalitarian societies.

Although the site of El Cafetal seems to have had the same general level of social organization as Phase II El Indio and La Cañaza, the distribution and the types of mortuary arts also appear to have much in common with the Phase III (500-1000 A.D.) burials at El Indio. For example, the spatial arrangement of the El Cafetal graves suggests that a formal cemetery may have been present at the site; what is more, the isolation of specific art works--i.e., those made of gold or tumbaga--to graves located in one section of the site indicates special treatment for a select group. Finally, a large number of interments (10 of 38 graves, compared with 1 of 37 graves at El Indio [Phase II]) contain costume or sumptuary arts. In spite of these affinities with the Phase III burials from El Indio, the criterion of age, evidenced through the skewed distribution of dobles, lithics, shell, bone, and metal arts, is still dominant among these graves. This factor, on the other hand, stresses the similarity to Phase II El Indio burials. In consideration of these circumstances, it is all the more reasonable to expect substantial variation in the social dimensions of arts as

well as social organization among and within discrete groups or villages located in a rather small geographic area, in this case the southeast corner of the Tonoai Valley.

As I have already mentioned in these concluding remarks, the later Phase III (or Cooke's Phase V/VI, approximately 500 to 1100 A.D.) graves from El Indio and La Cañaza have much in common with the earlier El Cafetal burials. The Phase III burials from both of these sites were organized as formal cemeteries, and costume or luxury goods, such as shell pendants or figurines (Figs. 15, 18, 19), were found in a significant number of individual graves. Despite these similarities, the specific visual expressions of status found among the mortuary arts from these sites differed considerably. The Phase III El Indio graves, for example, continued the practice of the antecedent Phase II burials from the same site by highlighting children's burials. The youth of this site earned the most visually complex and refined mortuary arts, including polychrome ceramics and shell pendants. Unlike their earlier counterparts, however, the Phase III children's graves at El Indio contained a large number of non-ceramic costume mortuary arts, such as shell beads and pendants; these items were not found in the Phase II children's graves.

The identification of specific La Cañaza mortuary

arts with particular status levels was impractical owing to the physical condition of the objects and the ambiguous results of the cluster analyses. Moreover, the small sample size of the Phase III graves from La Cañaza should serve as a caution when the findings from this site are compared with those of El Indio. However, the very fact that the graves did not neatly cluster, although they shared with graves from contemporary sites technologically similar objects, suggests that a different system of symbolic or emblematic representation of social status was in use at La Cañaza. In spite of the analytical problems with the data, I hasten to point out that the La Cañaza graves did, in general, have a smaller number of costume or sumptuary goods per grave than the Phase III burials from El Indio. La Cañaza's mortuary population is also almost equally divided between those interments with and those without mortuary furnishings, possibly indicative of a bimodal criteria such as sex or moiety membership used to determine the distribution of mortuary arts. If any significance can be reliably placed on these factors, they would suggest a slightly less stratified social group than represented by the Phase III El Indio graves.

The diversity in the relationship between mortuary arts and social dimensions among the Phase II and III graves of El Indio, La Cañaza, and El Cafetal gives an excellent indication of the variability that might be

expected among temporally and spatially proximate groups. In spite of the fact that all the villages from the Tonosí Valley discussed in this study seem to have been egalitarian societies, they exhibit substantial changes in the social dimensions of their mortuary arts. In general, we can observe that the increase in complexity associated with the distribution and content of the mortuary furnishings and the presence or absence of formal cemeteries indicate an increase in social complexity and stratification from Phase II to Phase III.

The social content of the mortuary arts from the Tonosí Valley sites contrasts sharply with the grave goods from Sitio Conte. Extensive comparison of the data is not necessary; the necropolis of Sitio Conte and its attendant mortuary arts indicate that this ranked society was much more complex than the earlier or contemporary villages in the Tonosí Valley. The number of mortuary arts and their distribution, the presence of large numbers of sumptuary or luxury arts, and the distribution of visual symbols found on the mortuary arts support this viewpoint. (For example, the highest number of mortuary arts in any one grave from the Tonosí Valley is 614, while the same number for a Sitio Conte grave is 7,497.) The majority of the Sitio Conte graves date to the same time as the Phase III (Cooke's Phase V/VI) graves at El Indio and La Cañaza; moreover, all the sites share technologically similar

artifacts, including polychrome ceramics and cast tumbaga pendants. Yet, by no stretch of the imagination do the physically similar mortuary arts, especially ceramics, symbolize either broad parallels in social organization-- i.e. ranked versus egalitarian societies--or specific examples of similar social statuses which might have been shared among the sites.

The lack of symbolic parallels used in the recognition or visual display of status among the mortuary arts from these contemporary sites contrasts sharply with their technological and stylistic similarity. While the technological variation may be minimal among the various villages, ideo- and socio-functional variation is quite divergent. Such distinctions among artifacts are useful because they discourage the assumption that objects which look alike or have technical similarities share the same ideological or social meanings. In response to this attitude, Lewis Binford's (1976) distinctions among "technomic," "sociotechnic," and "ideotechnic" artifacts are most pertinent:

Technomic signifies those artifacts having their primary functional context in coping directly with the physical environment. Variability in the technomic components of archaeological assemblages is seen as primarily explicable in the ecological frame of reference. . . . Another major class of artifacts which the archaeologists recover can be termed sociotechnic. These artifacts were the material elements having their primary functional context in the social subsystems of the total cultural system. . . . The third major class . . . can be termed ideo-

technic artifacts. Items of this class have their primary functional context in the ideological component of the social system. These are the items which signify and symbolize the ideological rationalizations for the social system and further provide the symbolic milieu in which individuals are enculturated (Binford 1976:23-24).

Sociotechnic artifacts are, by and large, the class which best describes the objects from the burials discussed in this study. Pertaining to this artifact class, Binford points out that:

Observable differences and changes in the sociotechnic components of archaeological assemblages must be explained with reference to structural changes in the social system and in terms of processes of social change and evolution (1976:24).

The distinctions raised above are in response to the common assumption that "artifacts regardless of their functional context, can be treated as equal and comparable 'traits'" (Binford 1976:21). On the contrary, Binford suggests that "artifacts having their primary functional context in different operational subsystems of the total cultural system will exhibit differences and similarities differentially, in terms of the structure of the cultural system of which they were a part" (1976:21).

Binford's observations are particularly relevant to the interpretation of the mortuary arts from the Central Region of Panamá. The artifacts found in the burials exhibited similar technological features throughout the region; however, the social context of these "similar"

artifacts does not indicate parallel or equivalent social dimensions. As a result, we should reconsider the significance of the mortuary arts in the reconstructions of pre-Conquest Panamanian culture history.

Mary Helms, as has been discussed in Chapter III (pp. 177-182), argued that the entire Central Region shared similar social, ideological, and symbolic--as well as technological--systems. Moreover, the indigenous groups from the Central Region also shared specific characteristics and maintained active social and economic ties with cultures in the Darien peninsula of eastern Panamá and in other tropical regions of South America even further to the east and south (Helms 1979). She states, for example, that:

In previous chapters the search for, acquisition of, and control of esoteric knowledge as it is defined and expressed by the leadership of the contemporary Cuna of eastern Panamá were briefly examined and it was proposed that a similar pattern can be projected onto the political life of their pre-Columbian Isthmian ancestors. It was argued by ethnographic analogy that in the ancient rank societies of Panamá the search for this "resource" required contact among the various Panamanian elites and between select Panamanian elites and colleagues in northern Colombia, and that select Panamanian rulers or young "leaders in training" actually may have traveled to northern South America to confer with elite leaders of recognized intellectual excellence. I further suspect (borrowing from Flannery's model) that, generally speaking, the rank societies of the Panamanian Isthmus were slightly less complex [because of the presence of ceremonial centers and elite necropolises in Colombia] than at least some societies of northern and central Colombia . . . and that the rulership of Panamá gained in status and

prestige through this association with more elaborate Colombian centers (1979:176-7).

No independent evidence from the archaeological record of the Central Region of Panamá supports this view. Without doubt, Helms believes that the entire region of the Isthmus and northern Colombia shared a complex of cultural traits, primarily knowledge, which formed the foundation for her perceived cultural uniformities:

In the model I am suggesting, a shared ideological context is a prerequisite for all those involved, either in teaching or in learning. Agreement as to the basic form and content of the religious-political and cosmological system is assumed to have underwritten the long-distance educational network and to have provided a basic epistemological foundation on which elite students and teachers could build and through which elite rulers and commoners could communicate (Helms 1979:177)

Despite Helms' rather elaborate recreations, the attempt to reconstruct the meaning of archaeological cultural residue without recourse to the examination of the contextual variability of the artifacts ignores important differences among sites and between regions.

Contrary to Helms, Richard Cooke has persuasively argued (see 1976a and 1984) that the ceramic technology of the Central Region exhibits predictable patterns and changes in its decorations, forms, and styles consistent with an indigenous or endemic pre-Conquest Panamanian tradition and, therefore, is neither the result of nor significantly influenced by diffused traditions, or

"knowledge," from other locales. Particular changes in the ceramic technology are, according to Cooke, chronologically significant. In addition, he explicitly points out that the technical features of the region's material culture, especially of ceramics, are not identical with region-wide social dimensions or characteristics: that is, there is not a direct relation between the technical aspects of the material culture and the social significance of the artifacts. In his 1984 summary of the "Archaeological Research in Central and Eastern Panamá," Cooke states:

The mechanism by which the characteristic Panamanian ranked societies were formed were already in operation by the time of Christ. Rather than argue for 'invasions' and 'intrusions' (Ichon 1980), I shall stress continuity in material culture over the Central region, but not the structure and nature of chiefdoms. . . . (1984:287-8, my emphasis)

Cooke's statement, however, begs several questions: namely, what is a "characteristic Panamanian ranked society" and how can one talk about the mechanism of the formation of rank societies without further discussion of the structure and nature of chiefdoms? Both of these questions, as will be seen, have been skillfully addressed by Olga Linares (1977). For the present, however, Cooke's "continuity of material culture" represents, for the most part, similarity in ceramic technology and duplication in numerous discrete villages of specific objects in mortuary contexts (see Cooke 1984:288-91). While the exact signi-

ficance in his argument between a continuity of material culture and the mechanisms of rank formation are not explicit, he seems to suggest that the regionally homogeneous and indigenous technical traditions of ceramic and other artifactual production are not evidence of homogeneous social dynamics and mechanisms of social change. This is, of course, quite contrary to Helms' arguments.

Cooke seems to contradict himself in the same article when he observes that "the burials that belong to Ichon's El Indio Phase [250 B.C.-200 A.D.] in the Tonosi Valley seem hardly more differentiated socially than those of Sitio Sierra [a village site located in the Aguadulce District of Coclé province, see Cooke 1975, 1978], though the vessels they contain are mostly Tonosi trichrome" (1984:289, my emphasis). The absence of the Tonosi trichrome vessels from Sitio Sierra, Cooke suggests, is due to the possibility that this later village, as a social or corporate entity, had a lower rank or status than the village of El Indio; therefore, presumably, Sitio Sierra did not have the social right or power needed to possess such elaborate and well made vessels. Cooke's reconstruction of the social characteristics of El Indio and Sitio Sierra places these villages within an egalitarian system, an interpretation strongly supported by the present study. Nevertheless, as Cooke's previous observations suggest, there is no substantial evidence to

suggest that Sitio Sierra had a lower social status in comparison to El Indio or that a regional ranking of villages was in practice during this time. The absence of Tonosí trichrome ceramics is not sufficient evidence because it has not been demonstrated that these vessels had a region-wide sociotechnic dimension. Their importance as "markers" of social status even among the Tonosí Valley graves has not been clearly determined. Moreover, objects were deposited in Sitio Sierra graves (see Cooke 1978), such as pyrite beads, which were not found in El Indio graves. This situation does not mean that Sitio Sierra was a higher or lower rank village than El Indio; it does suggest, however, that these egalitarian villages recognized variation in status through different symbols. The villages of the Central Region of Panamá may have shared technomically similar artifacts, as well as adaptive behaviors; but the region also demonstrated substantial differences and local variability in the socio-technic aspects of their artifacts, especially in the expression of status recognition through mortuary arts.

As discussed in Chapter III (pp. 182-188), Linares (1977) also presumed that the technical similarity of artifacts justified the assumption that the same artifacts also had identical social meanings. On the basis of this assumption, she grouped together in her analysis of the social meaning of Sitio Conte mortuary arts, designs and

subjects on the ceramics found in the Tonosí Valley sites which are a considerable distance from Sitio Conte. The same criticism directed toward Cooke is pertinent to Linares' assumption and resultant methodology.

It would be unfair to Linares' and Cooke's studies to ignore their important contributions to furthering understanding and directing productive research on the adaptive behavior of pre-Conquest Panamanians. The differences I have with their use of some of the archaeological data mentioned above does not belie the perceptiveness of their reconstructions of the social dynamics among the peoples of the Central Region of Panamá. Cooke, for example, recognizes that changes in the social complexity among the pre-Conquest villages were not patently uniform:

La evidencia adquirida en la Bahía de Parita, todavía no resulta adecuada para sincronizar bien estos desarrollos hipotéticos, pero hay bastante evidencia de que hubo un aumento relativamente repentino de aldeas agrícolas en los valles inferiores de los ríos Tonosí, Santa María, Chico y Grande entre 100 y 500 D.C. [Ichon 1979; Cooke 1972]. Mientras que emperoraba la tensión entre los territorios colindantes, se intensificaba (ni seguimos el argumento propuesto por la Dra. Linares), la competencia dentro de las mismas productivas (las riberas de los ríos, por ejemplo), comenzaron acumular más prestigio económico y social y rivalizaban por la hegemonía del grupo. El prestigio ocasionó el deseo de adquirir bienes materiales, para el adorno personal y la jactancia en las batallas (1976a:26).

Similarly, Linares provides one of the most persuasive

evaluations of the social dynamics at work in the Central Region at the end of Cooke's Phase V/VI (500-1100 A.D.) and the length of Phases VIIa and VIIb (1100-1625 A.D.):

Ethnohistorical sources have clearly shown us that the chiefdoms of the central provinces were loose political alliances, in which different village groups, at different points in time, cooperated for particular purposes: to make war, to control trade routes, to obtain additional women, and to enhance prestige. Labelled as a contingent political system, there were no permanent centers of power to coordinate economic, social, and religious activities, as there are in the continuous political systems of state societies. To look, then, for the symbols of permanency in manifestations such as social class, ruling families, and monumental architecture, as people have done at Sitio Conte with little success, is to misunderstand the nature of these systems. Rather than a stage in the evolution of New World societies, the chiefdoms of Panamá were typical of an area where status and power were based mainly in impermanent occupation of shifting positions (1979:76, my emphasis).

On the basis of this study, we should add that the visual expression of those ranks within the chiefdoms, as well as statuses within egalitarian groups, were also impermanent and shifted from village to village.

In addition to the more strictly historical considerations addressed by this study, the "type" or "class" of art works under scrutiny, namely mortuary arts, is not a common forum for art historical inquiry and, therefore, adds a new dimension to the discipline. The material objects deposited in a burial, the size and shape of the grave, the disposition of the body of the deceased, and the arrangement of accompanying interments are some of the

attributes which comprise the visual residue of a mortuary art work--namely, the burial and its attendant ritual. These characteristics are the residue of a largely ephemeral artistic undertaking, the burial of a deceased member of society. The history of art from Paelolithic times to the present abounds with almost endless examples of these "residues." For the most part, these artistic remains have been treated simply as another element in the visual vocabulary of a particular society. This study argues that mortuary arts, as identifiably discrete human creations, provide a base of information which has the potential of significantly enhancing our understanding of the relationships between the visual arts and human social dynamics.

While such an "expanded" concept of mortuary arts is novel in art historical studies, it is of little consequence in and of itself. Any number of strictly traditional art historical methods, such as iconographical, formal, or style analyses, may still be applied to the corpus of accumulated data. In this respect, I have veered from the traditional. Through the analysis of the pre-Conquest mortuary arts of the Central Region of Panamá, I have demonstrated that the development of a general idea or model about mortuary art can be examined and evaluated by methods which more closely approximate objectivity.

The study of mortuary arts potentially informs us about the dynamics of visual and social phenomena and has the capacity to enhance our understanding of the variation in these dynamics as the social configuration of a society changes. The methodological basis underlying such an inquiry can be found in the seminal works of Saxe (1970) and Binford (1971). In order to make concrete the correlation between mortuary arts and social dynamics, I introduced the analogy of the U.S. Army. The description of the Army's rules governing mortuary interments, combined with the visual articulation of rank within this "closed" social system, provides an accessible model. The model explicitly makes clear that an isomorphism--that is, a similarity in the structural attributes or characteristics of two temporally, spatially, and socially distant cultural phenomena--can provide tangible principles useful in understanding the meaning of the arts of "dead" societies.

The strategy outlined in this study requires alternatives to traditional art historical methods. I selected, as a result, to examine relationships among the pre-Conquest Panamanian mortuary arts by utilizing the techniques of cluster analysis. This stochastic method, proven to be applicable in mortuary studies (Peebles 1974), makes it possible to explore and organize in various ways large amounts of data and to explore poten-

tially meaningful relationships among them. Except for the rather indeterminate results from the mortuary remains of La Cañaza, the cluster algorithms applied in this study--complete linkage, Ward's method, average linkage, and the centroid method--regularly produced useful results.

The contextual study of mortuary arts through explicit methodologies which seek objectivity can provide important information on the relationship between art and society. The majority of previous studies which have dwelt on the links between death and art have focused on the iconography of afterlife or the system of religious beliefs represented in those arts. While such approaches are certainly a legitimate art historical concern, mortuary arts have the potential of providing information and insight about a much broader range of human behavior.

Appendix 1

El Indio, Phase II Graves (Figs. 8,9)

The information presented in Appendices 1 through 3 is derived from Ichon's publications (1974, 1975 and 1980) and personal communication with the author. None of the published reports agree on all details concerning the burials. If a disagreement was irresolvable, the 1974 doctoral dissertation was used as the authoritative source.

Grave 1

Field Designation: TI-18, f.2, burial 1
Provenience: Squares B.5 and C.5
Elevation: Level 120
Sex: Male
Age: Adult
Position: Flexed on back with head towards the west
Artifacts: 1 and 2. red ceramic bowls with handles
 3. red ceramic vessel of an unknown shape
 4. white ceramic bowl
Features: None
Comments: The skeleton was incomplete; also, see comments for Grave 2.

Grave 2

Field Designation: TI-18, f.2, burial 2
Provenience: Square B.6 and C.6
Elevation: Level 130
Sex: Unknown
Age: Child
Position: Flexed in a fetal position, lying on the right side and oriented northwest by southeast
Artifacts: 1. red ceramic bowl with a handle
 2. polychrome "doble" (Fig. 10a)
Features: None
Comments: There is a difference between the 1974 and 1975 publications concerning the artifacts found in graves 1, 2, and 3. The contents in this appendix have been corrected via personal communication with Ichon.

Grave 3

Field Designation: TI-18, f.2, burial 3
Provenience: Square B.6
Elevation: Level 130
Sex: Unknown
Age: Child
Position: Flexed in a fetal position, lying on the right side and oriented northwest and southeast
Artifacts: 1. and 2. red ceramic vessels of an unknown shape

3. polychrome doble

Features: None
Comments: See Grave 2.

Grave 4

Field Designation: TI-18, f.2, burial 4
Provenience: Square C.5
Elevation: Level 135
Sex: Unknown
Age: Child
Position: Flexed in a fetal position, the body was oriented north and south
Artifacts: None
Features: None

Grave 5

Field Designation: TI-18, f.2, burial 5
Provenience: Squares B.5 and B.6
Elevation: Level 145
Sex: Unknown
Age: Adolescent
Position: Flexed, lying on stomach and oriented west and east
Artifacts: 1. perforated gastropod
Features: The skeleton lay upon a layer of light gray sand and concretions
Comments: Graves 5 and 6 may be parts of the same grave.

Grave 6

Field Designation: TI-18, f.2, burial 6
Provenience: Square B.6
Elevation: Level 160
Sex: Unknown
Age: Adolescent
Position: Flexed, lying on back and oriented south and north
Artifacts: None
Features: The skeleton lay on a layer of light gray sand and concretions
Comments: See Grave 5.

Grave 7

Field Designation : TI-18, f.2, burial 7
Provenience: Square C.5
Elevation: Level 120
Sex: Unknown
Age: Adolescent
Position: Unknown
Artifacts: None
Features: None
Comments: The burial was in the south wall of the excavation trench.

Grave 8

Field Designation: TI-18, f.2, burial 8
Provenience: Square C.6
Elevation: Level 135
Sex: Unknown
Age: Child
Position: Unknown
Artifacts: None
Features: None
Comments: The skeletal remains were in a very advanced state of decomposition.

Grave 9

Field Designation: TI-18, f.2, burial 9
Provenience: Squares B.6, B.7, C.6, and C.7
Elevation: Level 170
Sex: Unknown
Age: Adolescent
Position: Flexed, lying on the stomach and oriented west and east
Artifacts: 1. bichrome bowl (Fig. 12)
2. basalt axe or celt
3. and 4. clay figurines (Figs. 11b, c)
5. cache of burned deer bones
6. through 9. gastropods (Fig. 12)
10. and 11. bivalve shells (Fig. 12)
Features: The skeleton lay upon a layer of light gray sand and concretions
Comments: Artifacts 3., 4. and 6. through 11. were found inside the bichrome bowl (1.); the deer bones were found underneath the same bowl.

Grave 10

Field Designation: TI-18, f.2, burial 10
Provenience: Square B.5
Elevation: Level 120
Sex: Unknown
Age: Child
Position: Unknown
Artifacts: None
Features: None

Grave 11

Field Designation: TI-18, f.2, burial 11
Provenience: Square D.6
Elevation: 120
Sex: Unknown
Age: Adult
Position: Unknown
Artifacts: None
Features: None

Comments: Only the skull of the individual was present in the grave.

Grave 12

Field Designation: TI-18, f.3, burial 2
Provenience: Square K.6
Elevation: 120
Sex: Unknown
Age: Adult
Position: Flexed in a fetal position, oriented southeast and northwest
Artifacts: 1. red ceramic vessel of an unknown shape
Features: None

Grave 13

Field Designation: TI-18, f.3, burial 3
Provenience: Square F.5
Elevation: Level 130
Sex: Unknown
Age: Adolescent
Position: Flexed, probably oriented southeast and northwest
Artifacts: 1. red ceramic bowl
 2. bichrome ceramic bowl
Features: None
Comments: The advanced decomposition of the skeleton made determination of the orientation difficult.

Grave 14

Field Designation: TI-18, f.3, burial 4
Provenience: Square J.6
Elevation: Level 120
Sex: Unknown
Age: Child
Position: Unknown
Artifacts: None
Features: None

Grave 15

Field Designation: TI-18, f.3, burial 5
Provenience: Squares E.5 and F.5
Elevation: Level 130
Sex: Unknown
Age: Adult
Position: Flexed, lying on the stomach and oriented north and south
Artifacts: 1. red ceramic jar
 2. and 3. red ceramic bowls, each with a handle
Features: None

Grave 16

Field Designation: TI-18, f.3, burial 6

Provenience: Square G.5
Elevation: Level 140
Sex: Unknown
Age: Adult
Position: Flexed, lying on the side and oriented west and east
Artifacts: 1. and 2. red ceramic bowls
 3. bichrome ceramic bowl
Features: None

Grave 17

Field Designation: TI-18, f.3, burials 7 and 8
Provenience: Square J.7
Elevation: Level 100
Sex: Unknown
Age: Child and adult
Position: The child was found inside one of the doble vessels and the position of the adult was unknown
Artifacts: 1. red ceramic bowl with a handle
 2. polychrome ceramic bowl
 3. through 6. polychrome dobles (Figs. 10b-d)
Features: None
Comments: The adult skeleton was very fragmentary; 1978 personal communication with Ichon clarified that his f.3 burials 7 and 8 were part of the same grave.

Grave 18

Field Designation: TI-18, f.3, burial 9
Provenience: Squares I.7 and J.7
Elevation: Level 140
Sex: Unknown
Age: Adult
Position: Unknown
Artifacts: None
Features: None

Grave 19

Field Designation: TI-18, f.3, burial 10
Provenience: Square K.6
Elevation: Level 140
Sex: Unknown
Age: Adolescent
Position: Flexed in a fetal position, lying on the left side and oriented south and north
Artifacts: None
Features: None

Grave 20

Field Designation: TI-18, f.3, burial 11
Provenience: Squares I.5 and J.5
Elevation: Level 140
Sex: Unknown

Age: Adolescent
Position: Unknown
Artifacts: None
Features: None
Comments: Only the skull was excavated.

Grave 21

Field Designation: TI-18, f.3, burial 12
Provenience: Squares K.4 and K.5
Elevation: Level 140
Sex: Unknown
Age: Adolescent
Position: Unknown
Artifacts: None
Features: None
Comments: Only the skull was excavated.

Grave 22

Field Designation: TI-18, f.3, burial 13
Provenience: Squares K.5 and L.5
Elevation: Level 140
Sex: Unknown
Age: Adolescent
Position: Flexed, oriented north and south
Artifacts: None
Features: None
Comments: Only the lower torso was excavated.

Grave 23

Field Designation: TI-18, f.3, burial 14
Provenience: Square K.7
Elevation: Level 145
Sex: Unknown
Age: Adult
Position: Possibly extended and lying on the stomach
Artifacts: None
Features: None
Comments: The lower half of the skeleton was missing.

Grave 24

Field Designation: TI-18, f.4, burial 2
Provenience: Square S.3
Elevation: Level 110
Sex: Unknown
Age: Child
Position: Unknown
Artifacts: 1. brown ceramic bowl with loop handles
 2. red ceramic plate
 3. red ceramic vessel of an undetermined shape
Features: None
Comments: The skeleton was too deteriorated to determine the position.

Grave 25

Field Designation: TI-18, f.4, burial 3
Provenience: Squares S.15 and S.16
Elevation: Level 150
Sex: Unknown
Age: Child
Position: Flexed in a fetal position, lying on the left side and oriented west and east
Artifacts: 1. bichrome ceramic bowl
Features: None

Grave 26

Field Designation: TI-18, f.4, burials 4 and 5
Provenience: Square S.17
Elevation: Level 160
Sex: Unknown
Age: Child and adult
Position: The child lay on top of the adult; the adult was flexed, lying on its back and oriented west and east
Artifacts: 1. two red ceramic bowl connected by a loop handle (Fig. 11a)
Features: None

Grave 27

Field Designation: TI-18, f.4, burial 6
Provenience: Square T.17
Elevation: Level 160
Sex: Unknown
Age: Adolescent
Position: Flexed, lying on stomach and oriented west and west
Artifacts: 1. polychrome doble
 2. red ceramic vessel of an unknown shape
 3. unknown quantity of shells
Comments: This grave was damaged by aboriginal excavation.

Grave 28

Field Designation: TI-18, f.4, burial
Provenience: Square T.15
Elevation: Level 130
Sex: Unknown
Age: Adolescent
Position: Flexed, lying on left side and oriented west and east
Artifacts: None
Features: None
Comments: The upper torso was not present.

Grave 29

Field Designation: TI-18, f.4, burial 8
Provenience: Square T.15

Elevation: Level 150
Sex: Unknown
Age: Adolescent
Position: Flexed, lying on right side and oriented west
and east
Artifacts: 1. and 2. shell beads
Features: None

Grave 30

Field Designation: TI-18, f.4, burial 9
Provenience: Square T.16
Elevation: Level 150
Sex: Unknown
Age: Child
Position: Flexed in a fetal position, lying on left side
and oriented north and south
Artifacts: None
Features: None

Grave 31

Field Designation: TI-18, f.4, burial 10
Provenience: Squares T.15 and U.15
Elevation: Level 150
Sex: Unknown
Age: Adult
Position: Unknown
Artifacts: None
Features: None
Comments: Only the skull cap and teeth were present.

Grave 32

Field Designation: TI-18, s.7, burial 1
Provenience: Pit 7
Elevation: Level 100
Sex: Unknown
Age: Child
Position: Flexed in a fetal position, lying on left side
and oriented north and south
Artifacts: 1. bichrome ceramic bowl
Features: None

Grave 33

Field Designation: TI-18, f.6, burial 21
Provenience: Square C.8
Elevation: Level 160
Sex: Unknown
Age: Adult
Position: Flexed and lying face down; oriented northeast
and southwest
Artifacts: None
Features: None

Grave 34

Field Designation: TI-18, f.6, burial 25
Provenience: Square F.3
Elevation: Level 160
Sex: Unknown
Age: Adolescent
Position: Flexed in a fetal position, lying on right side
and oriented northeast and southwest
Artifacts: None
Features: None

Grave 35

Field Designation: TI-18, s.8, burials 1 through 5
Provenience: Pit 8
Elevation: Level 150
Sex: Unknown
Age: Adults
Position: All were flexed
Artifacts: None
Features: None

Grave 36

Field Designation: TI-18, H.3, metate burial
Provenience: H.3
Elevation: Unknown
Sex: Unknown
Age: Adult
Position: Unknown
Artifacts: 1. bichrome vessel with attached zoomorphic
effigies
2. tripod stone metate
Features: None

Grave 37

Field Designation: TI-18, f.4 and f.5, metate burial
Provenience: Between trenches f.4 and f.5
Elevation: Unknown
Sex: Unknown
Age: Unknown
Position: Unknown
Artifacts: 1. tripod stone metate
Features: None

Appendix 2

El Indio, Phase III Graves (Figs. 8, 9)

The sources used in this appendix are the same as noted for Appendix 1.

Grave 1

Field Designation: TI-18, f.3, burial 1
Provenience: Square B.6
Elevation: Level 110
Sex: Unknown
Age: Child
Position: Flexed
Artifacts: 1. pedestal bowl with applique
Features: None
Comments: An unknown number of unidentified fish vertebrae were found with the burial.

Grave 2

Field Designation: TI-18, f.4, burial 1
Provenience: Squares S.3, S.4, T.3 and T.4
Elevation: Level 160
Sex: Unknown
Age: Adolescent
Position: Flexed, in a sitting position and facing north
Artifacts: 1. incised ceramic bowl
 2. incised long bone
 3. round shell pendant
Features: None

Grave 3

Field Designation: TI-18, f.4, burial 11
Provenience: Square S.17
Elevation: Level 200
Sex: Unknown
Age: Child
Position: Unknown, facing north
Artifacts: 1. polychrome bowl
 2. zoomorphic shell pendant
 3. and 4. perforated canine teeth
 5. undetermined number of shell beads
 6. "collar" of bird bones
Features: An "ash basin" was mentioned as being found in this grave.

Grave 4

Field Designation: TI-18, f.5, burial 1
Provenience: Square C.13
Elevation: Level 180
Sex: Unknown
Age: Adolescent

Position: Flexed, in a sitting position
Artifacts: 1. red ceramic pedestal plate
 2. polychrome ceramic jar
Features: "Bed of ashes" found in the grave
Comments: The skeleton was described as sitting on the
"bed of ashes."

Grave 5

Field Designation: TI-18, f.5, burial 2
Provenience: Square C.17
Elevation: Level 180
Sex: Unknown
Age: Adult
Position: Flexed in a sitting position and facing south
Artifacts: None
Features: "Bed" of ashes
Comments: It was noted that the skeleton was sitting on
the "bed" of ashes.

Grave 6

Field Designation: TI-18, f.5, burial 3
Provenience: Squares C.15 and C.16
Elevation: Level 180
Sex: Unknown
Age: Adult
Position: Flexed in a sitting position and facing south
Artifacts: None
Features: "Bed" of ashes

Grave 7

Field Designation: TI-18, f.5, burial 4
Provenience: Square D.15
Elevation: Level 180
Sex: Unknown
Age: Adolescent
Position: Unknown, the skeleton was disturbed
Artifacts: None
Features: None

Grave 8

Field Designation: TI-18, f.5, burial 5
Provenience: Square C.13
Elevation: Level 220
Sex: Unknown
Age: Adolescent
Position: Flexed, facing west
Artifacts: 1. and 2. identical polychrome ceramic pedestal
 bowls
 3. polychrome ceramic jar
 4. undecorated ceramic jar
 5. and 6. perforated shell pendant fragments
 7. sting ray point

8. and 9. perforated shark's teeth
10. shell, possibly concha, hook or pendant (Fig. 15e)
11. through 22. concha beads

Features: "Shaft" of ashes

Comments: The beads (11. through 22.) were found in the "shaft" of ashes.

Grave 9

Field Designation: TI-18, f.5, burial 6

Provenience: Square C.16

Elevation: Level 180

Sex: Unknown

Age: Adult ?

Position: "Plano vertical" ?

Artifacts: None

Features: None

Comments: The skeleton was disturbed.

Grave 10

Field Designation: TI-18, f.5, burial 7

Provenience: Squares C.17 and D.17

Elevation: Level 220

Sex: Unknown

Age: Adolescent

Position: Flexed, sitting and facing north

Artifacts: 1. and 2. polychrome ceramic pedestal bowls

3. and 4. polychrome ceramic jars

5. tumbaga pendant

6. through 8. worked concha shells

9. unknown number of canine teeth

10. unknown number of deer antlers

Features: "Pit" of ashes

Grave 11

Field Designation: TI-18, f.5, burial 8

Provenience: Squares B.13 and B.14

Elevation: Level 220

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: 1. and 2. polychrome ceramic pedestal bowls

3. and 4. polychrome ceramic jars

5. tumbaga plaque

Features: "Pit" of ashes

Comments: The burial was disturbed by huaqueros.

Grave 12

Field Designation: TI-18, f.5, burial 9

Provenience: Square C.16

Elevation: Level 230

Sex: Unknown

Age: Adolescent
Position: Flexed, lying on back and oriented west and east
Artifacts: none
Features: None

Grave 13

Field Designation: TI-18, f.5, burial 10
Provenience: Square C.16
Elevation: Level 230
Sex: Unknown
Age: Adolescent
Position: Unknown
Artifacts: None
Features: None

Grave 14

Field Designation: TI-18, f.5, burial 11
Provenience: Squares B.16 and B.17
Elevation: Level 230
Sex: Unknown
Age: Adolescent
Position: Unknown
Artifacts: 1. and 2. polychrome ceramic pedestal bowls
3. and 4. polychrome ceramic jars
Features: None

Grave 15

Field Designation: TI-18, f.6, burials 2 and 3
Provenience: Square G.7
Elevation: Level 170
Sex: Unknown
Age: Children
Position: Unknown, probably flexed since both were found
inside of ceramic jar (42.).
Artifacts: 1. zoomorphic concha pendant
2. triangular concha pendant
3. unknown number of perforated canine teeth
4. through 21. concha beads
22. through 41. concha beads shaped liked teeth
42. red ceramic jar
Features: None

Grave 16

Field Designation: TI-18, f.6, burial 4
Provenience: Squares G.8 and H.8
Elevation: Level 180
Sex: Unknown
Age: Child
Position: Unknown
Artifacts: None
Features: None
Comments: The graves was disturbed.

Grave 17

Field Designation: TI-18, f.6, burial 5
Provenience: Squares G.8 and H.8
Elevation: Level 180
Sex: Unknown
Age: Adult
Position: Unknown
Artifacts: None
Features: None

Grave 18

Field Designation: TI-18, f.6, burial 6
Provenience: Squares G.6 and H.6
Elevation: Level 180
Sex: Unknown
Age: Adolescent
Position: Unknown
Artifacts: None
Features: "Pile" of ashes

Grave 19

Field Designation: TI-18, f.6, burial 7
Provenience: Square H.17
Elevation: Level 185
Sex: Unknown
Age: Adolescent
Position: Flexed, bundled and sitting; facing east
Artifacts: 1. red ceramic jar
 2. and 3. polychrome ceramic bowls
 4. trapezoidal bone pendant
 5. and 6. perforated shark's teeth
 7. unknown number of concha beads
 8. unknown number of perforated canine teeth
Features: "Pit" of ashes

Grave 20

Field Designation: TI-18, f.6, burials 8 and 12
Provenience: Square H.7
Elevation: Level 230
Sex: Unknown
Age: Adolescents
Position: One individual was flexed, bundled, and in a sitting position facing south; the position of the other individual is unknown
Artifacts: 1. ceramic jar
 2. ceramic pedestal bowl
 3. unknown number of perforated canine teeth
 4. unknown number of concha beads
Features: "Pit" of ashes

Grave 21

Field Designation: TI-18, f.6, burial 9

Provenience: Square G.8
Elevation: Level 210
Sex: Unknown
Age: adolescent
Position: Flexed, sitting and facing southeast
Artifacts: 1. through 13. deer g bones in the shape of a collar
14. and 15. conchas in the shape of crocodiles (Figs. 15a, b)
16. and 17. trapezoidal concha pendants
18. unknown number of perforated canine teeth
19. unknown number of concha beads
Features: "Pit" of ashes

Grave 22

Field Designation: TI-18, f.6, burial 10
Provenience: Square G.6
Elevation: Level 215
Sex: Unknown
Age: Adolescent
Position: Flexed, facing south
Artifacts: 1. and 2. polychrome ceramic jars
3. and 4. polychrome ceramic pedestal bowls
5. and 6. trapezoidal concha pendants
7. tooth-shaped bone pendant
8. unknown number of perforated canine teeth
9. unknown number of concha beads
Features: "Pit" of ashes

Grave 23

Field Designation: TI-18, f.6, burial 11
Provenience: Squares G.8 and H.8
Elevation: Level 200
Sex: Unknown
Age: Adolescent
Position: Unknown
Artifacts: 1. perforated canine tooth
2. and 3. bird long bones
Features: None
Comments: Ichon noted (1974:466) that this burial may be the same as TI-18, f.6, burial 5, my grave 17.

Grave 24

Field Designation: TI-18, f.6, burials 13 and 14
Provenience: Square H.8
Elevation: Level 260
Sex: Unknown
Age: An adult and an individual of unknown age
Position: Unknown
Artifacts: 1. bichrome ceramic cup
Features: None

Grave 25

Field Designation: TI-18, f.6, burial 15
Provenience: Square F.8
Elevation: Level 215
Sex: Unknown
Age: Adolescent
Position: Flexed, in a sitting position facing north
Artifacts: None
Features: None
Comments: The grave was disturbed.

Grave 26

Field Designation: TI-18, f.6, burials 16 and 17
Provenience: Square F.8
Elevation: Level 215
Sex: Unknown
Age: An adolescent and an adult
Position: Both were flexed and in a sitting position; the adolescent faced south and the adult faced north
Artifacts: 1. red ceramic jar
 2. polychrome ceramic pedestal bowl
Features: "Ash pit" associated with the adolescent

Grave 27

Field Designation: TI-18, f.6, burial 18
Provenience: Squares E.8 and E.9
Elevation: Level 200
Sex: Unknown
Age: Adolescent
Position: Flexed, in a sitting position facing north
Artifacts: 1. and 2. polychrome ceramic jars
 3. and 4. polychrome ceramic pedestal bowls
Features: "Ash pit"

Grave 28

Field Designation: TI-18, f.6, burial 19
Provenience: Squares F.6 and G.6
Elevation: Level 210
Sex: Unknown
Age: Adult
Position: Flexed, secondary burial
Artifacts: 1. through 32. perforated canine teeth (Figs. 15f, g)
Features: None

Grave 29

Field Designation: TI-18, f.6, burial 20
Provenience: Squares D.6 and E.6
Elevation: Level 250
Sex: Unknown
Age: Adolescent
Position: Flexed, in a sitting position facing north

Artifacts: 1. polychrome ceramic pedestal bowl
2. polychrome ceramic jar
3. unknown number of perforated and unperforated canine teeth
Features: An "ash pit"

Grave 30

Field Designation: TI-18, f.6, burial 22
Provenience: Square G.5
Elevation: Level 200
Sex: Unknown
Age: Unknown
Position: Unknown
Artifacts: None
Features: None

Grave 31

Field Designation: TI-18, f.6, burial 23
Provenience: Squares G.5 and G.6
Elevation: Level 180
Sex: Unknown
Age: Adult
Position: Flexed, in a sitting position facing north
Artifacts: 1. polychrome ceramic jar
Features: An "ash pit"
Comments: The grave was located in the north wall of the excavation area.

Grave 32

Field Designation: TI-18, f.6, burial 24
Provenience: Square G.4
Elevation: Level 200
Sex: Unknown
Age: Adolescent
Position: Flexed, resting face down and oriented north and south
Artifacts: None
Features: None

Grave 33

Field Designation: TI-18, f.6, burial 26
Provenience: Square E.4
Elevation: Level 200
Sex: Unknown
Age: Adolescent
Position: Flexed, in a sitting position facing south
Artifacts: 1. and 2. polychrome ceramic pedestal bowls
3. and 4. polychrome ceramic jars
5. through 8. deer long bones
9. one-half of a cut human long bone
Features: None

Grave 34

Field Designation: TI-18, f.6, burials 27 and 28

Provenience: Squares F.2 and F.3

Elevation: Level 110

Sex: Unknown

Age: An adolescent and a child

Position: Both flexed; the adolescent was in a sitting position facing south with legs folded to the left side; the child was in a fetal position resting on the right side and facing north

Artifacts: 1. and 2. stone pendants
3. and 4. concha pendants (Fig. 15f, g)
5. through 11. perforated canine teeth
12. red ceramic urn

Features: None

Comments: Both individuals were found inside the urn.

Grave 35

Field Designation: TI-18, h.9, burial 1

Provenience: Unknown

Elevation: Exact level unknown; between levels 210 and 260

Sex: Unknown

Age: Adult

Position: Flexed and facing east

Artifacts: 1. polychrome ceramic pedestal plate
2. and 3. polychrome ceramic jars
4. red ceramic jar or urn

Features: None

Comments: The individual was found inside the urn along with the ceramic pedestal plate; objects 2. and 3. were found outside but next to object 4. Another urn was found near this burial but it did not contain a skeleton.

Grave 36

Field Designation: TI-18, h.9, urn 3

Provenience: O.4 and P.4

Elevation: Level 245

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: 1. white ceramic urn or jar

Features: None

Comments: This burial was not completely excavated; it was assumed by Ichon that the urn contained a skeleton.

Grave 37

Field Designation: TI-18, h.9, urn 4

Provenience: Squares N.4, N.5, O.4 and O.5

Elevation: Level 245

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: 1. red slipped ceramic urn or jar
Features: None
Comments: This urn burial was not fully excavated; Ichon assumed that the urn contained a skeleton.

Grave 38

Field Designation: TI-18, h.9, urn 5
Provenience: Squares 0.5 and 0.6
Elevation: Level 245
Sex: Unknown
Age: Unknown
Position: Unknown
Artifacts: 1. red ceramic urn or jar
 2. and 3. ceramic pedestal plates
 4. unknown stone object
 5. tumbaga plaque
 6. Fragments of a large polychrome ceramic jar
Features: Inside the urn was solidified ash, sand, and animal bones
Comments: No human skeletal remains were found inside the urn.

Grave 39

Field Designation: TI-18, h.9, urns or burials 6 and 7
Provenience: Squares 0.6, 0.7, P.6, P.7 and P.8
Elevation: Unknown
Sex: Unknown
Age: Adults
Position: Both flexed or disarticulated; the orientation is not known
Artifacts: 1. through 6. polychrome ceramic pedestal plates
 7. through 10. polychrome ceramic jars
 11. and 12. red ceramic urns or jars
Features: Ash pits located under each skeleton
Comments: A fish vertebra was found on top of one of the pedestal plates; two of the polychrome ceramic jars were found in the ash pit below the northern-most skeleton.

Grave 40

Field Designation: TI-18, h.9, burial 8
Provenience: Squares P.8 and P.9
Elevation: Unknown
Sex: Unknown
Age: Adult
Position: Unknown but probably flexed
Artifacts: 1. and 2. polychrome ceramic jars
 3. and 5. polychrome pedestal plates
Features: "Ash pit" underneath the skeleton

Grave 41

Field Designation: TI-18, h.9, burial 9

Provenience: Square P.9
Elevation: Unknown
Sex: Unknown
Age: Child
Position: Unknown orientation but flexed in a fetal position
Artifacts: 1. zoomorphic shell (Spondylus) pendant (Fig. 15c)
Features: "Ash basin" below the skeleton

Grave 42

Field Designation: TI-18, h.9, urn 8
Provenience: Square O.10
Elevation: Level 150
Sex: Unknown
Age: An adolescent and a child
Position: Adolescent was flexed, lying on its left side inside the urn, and oriented west and east; the child's position was unknown
Artifacts: 1. and 2. polychrome ceramic urns or jars
3. through 7. incomplete ceramic vessels
8. an unknown number of unidentified animal bones
9. unknown number of shells
10. brown ceramic vessel
11. through 13. shell (spondylus) pendants in the shape of toads or frogs (Figs. 15d, h)
14. through 16. zoomorphic tumbaga objects
17. through 28. bivalve shells
29. and 30. polychrome ceramic pedestal plates
31. polychrome ceramic jar
32. polychrome ceramic effigy jar
Features: None
Comments: The child was represented only by teeth. One of the urns contained both individuals and objects 3. through 28. The other urn was found on top of the other, acting as a lid. Objects 29. through 32. were found next to the urns.

Appendix 3

La Cañaza Graves (Fig. 16)

The sources used in this appendix are the same as noted for Appendix 1.

Grave 1

Field Designation: TI-9, burial 1 and 1'
Provenience: Square A.1
Elevation: Level 20
Sex: Unknown
Age: Adult
Position: Unknown
Artifacts: None
Features: None
Comments: The grave was disturbed.

Grave 2

Field Designation: TI-9, burial 2
Provenience: Squares A.1 and B.1
Elevation: Level 20
Sex: Unknown
Age: Adolescent
Position: Flexed, bundle burial resting on its back; oriented south and north
Artifacts: 1. concha shell
2. anthropomorphic-shaped ceramic whistle (Fig. 17)
Features: Layer of ash immediately below the skeleton
Comments: Personal communication (1978) from Ichon identified the material of the whistle.

Grave 3

Field Designation: TI-9, burial 4 through 8
Provenience: Square B.1
Elevation: Levels 50-100
Sex: Unknown
Age: Two adults (burials 4 and 6), one adolescent (burial 5) and two children (burials 7 and 8)
Position: Probable secondary burials (4 and 6); probable flexed burial in a sitting position (5); unknown (7 and 8)
Artifacts: 1. red ceramic plate (burial 5)
2. and 3. fragments of shell pendants (burial 5 [Figs. 19a, b])
4. shell figure in the shape of a crocodile (burial 6 [Fig. 19c])
5. through 613. shell beads (burial 6)
614. red ceramic pedestal plate (burial 8)
Features: None
Comments: The head of the skeleton of burial 7 was resting on the plate found with burial 5; the head of the indi-

vidual in burial 8 rested on the pedestal plate.

Grave 4

Field Designation: TI-9, burial 9

Provenience: Square A.3

Elevation: Level 100

Sex: Unknown

Age: Adult

Position: Probable secondary burial

Artifacts: 1. and 2. polychrome ceramic pedestal plates

3. and 4. polychrome ceramic jars

Features: Below the burial was an ash pit

Comments: Ichon's 1975 publication lists this burial as secondary but the 1974 publication does not note such a disposition.

Grave 5

Field Designation: TI-9, burial 10 and 10'

Provenience: Square C.2

Elevation: Level 140

Sex: Unknown

Age: An adult and an individual of unknown age

Position: The adult is a probable secondary burial with the bones of the individual of an unknown age mixed in with it

Artifacts: None

Features: None

Grave 6

Field Designation: TI-9, burials 11, 12 and 13

Provenience: Square C.1

Elevation: Level 140

Sex: Unknown

Age: Adults

Position: All three are flexed with unknown orientations

Artifacts: 1. and 2. polychrome ceramic pedestal plates

3. tumbaga pendant fragment

Features: None

Comments: The heads of the individuals were nested in the ceramic vessels.

Grave 7

Field Designation: TI-9, burial 14 and 14'

Provenience: Squares B.2 and C.2

Elevation: Level 130

Sex: Unknown

Age: A child and an adult

Position: The position of the child is unknown; the adult was flexed and in a sitting position facing west

Artifacts: 1. and 2. polychrome ceramic pedestal plates

3. concha shell

4. crab

5. sting ray projectile point

6. through 80. shell beads, probably a necklace

Features: None

Comments: The species of the crab was not identified (personal communication from Ichon [1978]).

Grave 8

Field Designation: TI-9, burial 15

Provenience: Square B.1

Elevation: Level 140

Sex: Unknown

Age: Adult

Position: Flexed, orientation unknown

Artifacts: None

Features: An ash layer was located under the burial

Grave 9

Field Designation: TI-9, burial 16

Provenience: Square B.1

Elevation: Level 130

Sex: Unknown

Age: Adult

Position: Flexed, lying on left side and oriented west and east

Artifacts: 1. through 3. shell bead necklaces; the exact number of beads is unknown

Features: A layer of ash found under the skeleton

Grave 10

Field Designation: TI-9, burial 17

Provenience: Square B.2

Elevation: Level 140

Sex: Unknown

Age: Adult

Position: Probable secondary burial

Artifacts: None

Features: An ash pit was located under the burial

Grave 11

Field Designation: TI-9, burial 19

Provenience: Square A.3

Elevation: Level 120

Sex: Unknown

Age: Adult

Position: Unknown deposition, but oriented north and south

Artifacts: None

Features: None

Comments: The burial was disturbed.

Grave 12

Field Designation: TI-9, burial 20

Provenience: Square A.3

Elevation: Level 140
Sex: Unknown
Age: Adult
Position: Flexed, orientation unknown
Artifacts: None
Features: None

Grave 13

Field Designation: TI-9, burial 21
Provenience: Square Z.1
Elevation: Level 65-90
Sex: Unknown
Age: Adult
Position: Unknown

Artifacts: 1. and 2. polychrome ceramic pedestal plates
3. and 4. polychrome ceramic jars
5. and 6. concha shell fragments
7. shell trapezoidal plaque
8. perforated shark's tooth
9. and 10. shell beads

Features: An ash layer under the skeleton
Comments: Objects 7. through 10. were found in the ashes;
the identification of objects 7., 9. and 10. were deter-
mined through personal communication (1978) from Ichon.

Grave 14

Field Designation: TI-9, burial 22
Provenience: Square Z.1
Elevation: Level 75
Sex: Unknown
Age: Unknown
Position: Unknown

Artifacts: 1. polychrome ceramic jar
Features: An ash pit was located under the skeleton

Grave 15

Field Designation: TI-9, burial 23
Provenience: Square Z.1
Elevation: Level 85
Sex: Unknown
Age: Adult
Position: Flexed, "crouched" and facing south
Artifacts: None
Features: None

Grave 16

Field Designation: TI-9, burial 24
Provenience: Square A.3
Elevation: Level 170
Sex: Unknown
Age: Child
Position: Unknown

Artifacts: 1. and 2. polychrome footed ceramic pedestal plates
3. and 4. polychrome ceramic jar
5. perforated shell disk

Features: Ash pit located below the skeleton

Comments: The exact location of this grave is ambiguous since the maps in Ichon's publications have the grave located in excavation square B.1, while the appendices in the same publications place the grave in square A.3.

Grave 17

Field Designation: TI-9, burial 25

Provenience: Square A.3

Elevation: Level 170

Sex: Unknown

Age: Adult

Position: Flexed, oriented north and south

Artifacts: None

Features: Ash layer located below the skeleton

Comments: The ambiguous location of this grave is a result of the same problem cited for grave 16.

Grave 18

Field Designation: TI-9, burial 26

Provenience: Square 2.1

Elevation: Level 110

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: 1. ceramic pedestal plate
2. ceramic jar

Features: None

Grave 19

Field Designation: TI-9, burial 27

Provenience: Square C.2

Elevation: Level 175

Sex: Unknown

Age: Adult

Position: Flexed. resting on stomach: unknown orientation

Artifacts: 1. tumbaqa plaque
2. perforated shell disk

Features: None

Grave 20

Field Designation: TI-9, burial 28

Provenience: Square C.1

Elevation: Level 160

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: None

Features: None

Grave 21

Field Designation: TI-9, burial 29 and 30

Provenience: Square Z.1

Elevation: Level 110

Sex: Unknown

Age: Adults

Position: Unknown

Artifacts: None

Features: None

Grave 22

Field Designation: TI-9, burial 31

Provenience: Square Z.1

Elevation: Level 110

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: None

Features: None

Grave 23

Field Designation: TI-9, burial 32

Provenience: A.9 (?)

Elevation: Level 130

Sex: Unknown

Age: Unknown

Position: Probable secondary burial

Artifacts: None

Features: None

Comments: The Spanish edition (1975) of Ichon's report refers to this burial as "33", instead of "32." It is not clear from the published sources exactly where square A.9 is located at La Cañaza.

Grave 24

Field Designation: TI-9, burial 33

Provenience: Square B.2

Elevation: Level 190

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: 1. polychrome ceramic jar

Features: Ash basin located underneath the skeleton

Grave 25

Field Designation: TI-9, burial 34

Provenience: Square B.2

Elevation: Level 190

Sex: Unknown

Age: Unknown

Position: Unknown
Artifacts: None
Features: None

Grave 26

Field Designation: TI-9, burial 35
Provenience: Square B.3
Elevation: Level 225
Sex: Unknown
Age: Adult
Position: Flexed, resting on back and oriented northwest
and southeast
Artifacts: 1. and 2. polychrome ceramic footed pedestal
plates
3. and 4. polychrome ceramic jars
5. and 6. trapezoidal bone pendants
Features: An ash basin is located underneath the skeleton

Grave 27

Field Designation: TI-9, burial 36
Provenience: Square A.2
Elevation: Level 160-200
Sex: Unknown
Age: Adolescent
Position: Unknown
Artifacts: None
Features: None

Appendix 4

El Cafetal Graves (Fig. 20)

The information presented in Appendix 4 is derived from González (1971).

Grave 1

Field Designation: Burial 1 and 2
Provenience: Trench 1, squares C-6 and D-5
Elevation: Level 103-106
Sex: Unknown
Age: Two adults?
Position: Disarticulated, head on top of bones which were piled up
Artifacts: None
Features: There may have been the residue of a net which held the bones
Comments: A red cup which is listed under artifacts found in Grave 5 may have belonged to Grave 1. The burials were described as being found in a paquete.

Grave 3

Field Designation: Burials 3 and 4
Provenience: Trench 1, squares C-3 and C-4
Elevation: Level 98
Sex: Unknown
Age: Two children
Position: Flexed
Artifacts: 1. agate pendant
2.-4. agate beads
5. white ceramic cup
6. bichrome ceramic doble vessel
7. unknown stone objects
8. unknown number of serpentine beads
Features: None
Comments: Numerous ceramic sherds were found among these two individuals; one of the children was described as being of a very young age.

Grave 5

Field Designation: Burial 5
Provenience: Trench 1, square D-3
Elevation: Level 107
Sex: Unknown
Age: Adult?
Position: Flexed
Artifacts: None
Features: None
Comments: Although no individual objects were found in this grave, the body was covered with polychrome and utility sherds.

Grave 6

Field Designation: Burial 6
Provenience: Trench 1, square D-3
Elevation: Level 127
Sex: Unknown
Age: Adult
Position: Unknown but oriented toward the west
Artifacts: 1. ceramic vessel support
Features: None
Comments: Found directly under Grave 5.

Grave 7

Field Designation: Burial 7
Provenience: Trench 1, square D-2
Elevation: Level 91
Sex: Unknown
Age: Child
Position: Secondary
Artifacts: 1. polychrome ceramic doble vessel
Features: None
Comments: The burial was located inside the ceramic vessel.

Grave 8

Field Designation: Burial 8
Provenience: Trench 1, square C-2
Elevation: Level 105
Sex: Unknown
Age: Unknown
Position: Unknown
Artifacts: 1. ceramic whistle in the shape of a fish
2. red ceramic cup
3. an unknown number of other ceramic whistles
Features: None
Comments: The skeletal remains were partial.

Grave 9

Field Designation: Burial 9
Provenience: Trench 1, square C-2
Elevation: Unknown
Sex: Unknown
Age: Child
Position: Secondary
Artifacts: 1. polychrome ceramic doble vessel
Features: None
Comments: The burial was found inside the ceramic vessel; the burial was not completely excavated since part of it was outside of the limits of the excavation area.

Grave 10

Field Designation: Burial 10
Provenience: Trench 1, square C-2

Elevation: Level Unknown
Sex: Unknown
Age: Child
Position: Unknown
Artifacts: 1. an unknown number of stones
 2. polychrome ceramic cup
Features: None
Comments: The burial was not completely excavated since it was partially located outside the limits of the excavation area.

Grave 12

Field Designation: Burials 11 and 12
Provenience: Trench 2, square B-4
Elevation: 103-104
Sex: Unknown
Age: Two adolescents
Position: Both were flexed
Artifacts: 1.-4. red ceramic vessels
 5. unknown number of agate beads
Features: None

Grave 13

Field Designation: Burial 3
Provenience: Trench 2, square A-5
Elevation: Level 99
Sex: Unknown
Age: Child
Position: Unknown
Artifacts: 1. bichrome ceramic doble vessel
 2. unknown type and number of stones
Features: None
Comments: The skeleton was in an advanced state of decomposition.

Grave 14

Field Designation: Burial 14
Provenience: Trench 2, squares A-3 and B-3
Elevation: Level 105
Sex: Unknown
Age: Adult
Position: Unknown but facing toward the northwest
Artifacts: 1. ceramic effigy vessel
 2. unknown number of shells
Features: None

Grave 15

Field Designation: Burial 15
Provenience: Trench 2, squares A-3 and B-3
Elevation: Level 103
Sex: Unknown
Age: Adult

Position: Flexed, facing toward the southwest
Artifacts: 1. fragment of a ceramic bichrome doble vessel
2. unknown number of red ceramic vessels
Features: None

Grave 16

Field Designation: Burial 16
Provenience: Trench 2, squares B-1 and B-2
Elevation: Level 110
Sex: Unknown
Age: Adult
Position: Unknown but facing south
Artifacts: 1. and 2. fragmentary ceramic bichrome doble
vessels
3. white ceramic pedestal
Features: None
Comments: The skeleton was covered with the ceramic
vessels and sherds.

Grave 17

Field Designation: Burial 17
Provenience: Trench 2, squares A-1 and A-2
Elevation: Level 112
Sex: Unknown
Age: Adult
Position: Flexed, facing west
Artifacts: 1. bichrome ceramic doble vessel
2. polychrome ceramic plate
3. unknown number of red ceramic cups
Features: None
Comments: All the artifacts were found around the cranium
of the skeleton.

Grave 18

Field Designation: Burial 18
Provenience: Trench 2, square A-3
Elevation: Level 130
Sex: Unknown
Age: Adult
Position: Flexed
Artifacts: 1. red ceramic vessel
Features: None

Grave 19

Field Designation: Burial 19
Provenience: Trench 3, squares Y-6 and Z-6
Elevation: Unknown
Sex: Unknown
Age: Unknown
Position: Unknown
Artifacts: None
Features: None

Comments: Only a cranium was discovered.

Grave 20

Field Designation: Burial 20
Provenience: Trench 3, squares Y-6 and Z-6?
Elevation: Unknown
Sex: Unknown
Age: Unknown
Position: Unknown
Artifacts: None
Features: None
Comments: Only some long bones were uncovered.

Grave 21

Field Designation: Burial 21
Provenience: Trench 3, square Z-5
Elevation: Unknown
Sex: Unknown
Age: Unknown
Position: Flexed
Artifacts: 1. red ceramic effigy vessel
 2. an unknown number of stones
Features: None

Grave 22

Field Designation: Burial 22
Provenience: Unknown
Elevation: Level 80
Sex: Unknown
Age: Child?
Position: Secondary
Artifacts: 1. ceramic doble vessel
 2.-4. three red ceramic vessels
 5. unknown number of stones
Features: None
Comments: The skeleton was found inside the "doble" vessel and the entire burial was disturbed by huaqueros.

Grave 23

Field Designation: Burial 23
Provenience: Trench 2, square Y-4
Elevation: Level 114
Sex: Unknown
Age: Unknown
Position: Unknown but facing toward the northwest
Artifacts: 1. red ceramic plate
Features: None
Comments: The plate was found under the individual's cranium.

Grave 24

Field Designation: Burial 24

Provenience: Trench 3, square Z-2
Elevation: Unknown
Sex: Unknown
Age: Unknown
Position: Unknown but facing toward the southwest
Artifacts: 1. bichrome ceramic doble vessel
2.-3. red ceramic vessels
4. red ceramic plate
5. unknown number of agate beads
Features: None

Grave 25

Field Designation: Burial 25
Provenience: Trench 3, Squares Y-1 and Y-9
Elevation: Level 110
Sex: Unknown
Age: Unknown
Position: Flexed, facing toward the southeast
Artifacts: 1. fragments of a doble vessel
2. tumbaga pendant
3. agate pendant
4. unknown number of agate beads
Features: None

Grave 26

Field Designation: Burial 26
Provenience: Trench 3, square Z-8
Elevation: Unknown
Sex: Unknown
Age: Child
Position: Unknown
Artifacts: 1. ceramic doble fragments
Features: None
Comments: The skeleton was in an advanced state of deterioration.

Grave 27

Field Designation: Burial 27
Provenience: Trench 3, square Z-4
Elevation: Level 130
Sex: Unknown
Age: Unknown
Position: Flexed, facing west
Artifacts: 1. polychrome cup
2. unknown number of serpentine beads
Features: None

Grave 28

Field Designation: Burial 28
Provenience: Trench 3, square Y-4
Elevation: Level 131
Sex: Unknown

Age: Unknown
Position: Unknown
Artifacts: None
Features: None
Comments: The cranium was separated from the torso.

Grave 29

Field Designation: Burials 29 and 30
Provenience: Trench 3, squares Y-1, Z-1, and Z-2
Elevation: Level 135
Sex: Unknown
Age: Adolescent
Position: One burial was flexed and faced west; the other burial was secondary
Artifacts: 1. red ceramic plate
2.-4. at least three plain ceramic vessels
5. unknown number of bone projectile points
6. unknown type of gold or tumbaga necklace
7.-8. two gold or tumbaga pendants
9. gold or tumbaga ring
10. ceramic effigy cup

Features: None
Comments: Artifacts 1., 6., 7., and 10. were found with the flexed burial; objects 2-4. were found between the two burials; the rest of the items were found with the secondary burial.

Grave 31

Field Designation: Burial 31?
Provenience: Trench 4, square X-6
Elevation: Level 150
Sex: Unknown
Age: Unknown
Position: Unknown
Artifacts: 1. plain ceramic vessel
Features: None
Comments: This may not have been a grave.

Grave 32

Field Designation: Grave 32
Provenience: Trench 4, square X-5
Elevation: Level 119
Sex: Unknown
Age: Unknown
Position: Flexed and facing toward the southwest
Artifacts: 1. red ceramic plate
2. red ceramic vessel
Features: None

Grave 33

Field Designation: Burials 33 and 34
Provenience: Trench 4, square X-4

Elevation: Level 75-106
Sex: Unknown
Age: Unknown
Position: Unknown
Artifacts: 1. unknown number of stones
Features: None

Grave 35

Field Designation: Burial 35
Provenience: Trench 4, square V-4
Elevation: Level 105
Sex: Unknown
Age: Unknown
Position: Flexed
Artifacts: 1. fragment of a ceramic doble vessel
Features: None

Grave 36

Field Designation: Burial 36
Provenience: Trench 4, squares V-5, V-6, X-5, and X-6
Elevation: Unknown
Sex: Unknown
Age: Unknown
Position: Flexed, facing north
Artifacts: 1.-3. three plain ceramic vessels
4. red ceramic plate
5. tumbaga pendant in the form of a spider
Features: None

Grave 37

Field Designation: Burial 37
Provenience: Trench 4, square X-5
Elevation: Level 133?
Sex: Unknown
Age: Adult?
Position: Secondary
Artifacts: 1. red ceramic vessel
Features: None
Comments: The ceramic vessel was found on its side and the bones were found as if they had spilled out of the vessel: there was no cranium in the debris.

Grave 38

Field Designation: Burial 38
Provenience: Trench 4, square X-4
Elevation: Level 133
Sex: Unknown
Age: Unknown
Position: Secondary
Artifacts: 1.-2. tumbaga effigies; one in the shape of an eagle and the other in a shape of an armadillo?

Features: None

Comments: This grave may have been part of Grave 37; the individual was described in the report as in a fetal position.

Appendix 5

Sitio Conte Graves (Figs. 21-27)

This appendix, when accompanied by Samuel Lothrop's 1937 publication, provides the full documentation on the graves from Sitio Conte. The information in this appendix was derived from examination of all of J. Alden Mason's excavations notes and maps; the notes of one of his assistants, John Corning; the maps and notes of Robert Merrill, another of Mason's assistants; the cinemagraphic and still photographic records (there is an impressive color movie film on file at The University Museum of these excavations at Sitio Conte); and the catalogue records of the University Museum of the University of Pennsylvania. Needless to say, not all of these sources agreed on all points of information concerning the location of objects, the separation of one grave from another, the position and number of skeletal remains, and so forth. I have attempted to correlate the information from these sources. While I did not follow any rigid rules, if a simple majority of the sources agreed on a disputed point, I choose to side with them; otherwise, I have tried to express the uncertainty evident in the field notes and other sources. For example, question marks as well as dashes frequently denote unclear or missing information. John Corning accompanied the University Museum's expedition as a specialist in skeletal remains, and Robert Merrill was included because of his engineering and mapping skills. The presence at the site of Corning's wife was briefly noted in the field notes but her role in the excavations is unclear. In addition, Mason took along his son, John, and Samuel Lothrop and his wife accompanied him for the first two weeks of the excavations. While in Panamá, Mason hired local laborers to help in moving the large amounts of dirt. At times these laborers numbered as high as thirty-five individuals.

Grave 60

Field Designation: Burial 1, also cited as Burial or Grave A and T1-B1

Provenience: Trench 1, 264.1-265.5 north by 84.1-86.0 west

Elevation: 14.1-14.4 feet (4.3-4.4 meters)

Sex: Unknown

Age: Adolescent or adult

Position: The extended body measured 155 centimeters from head to ankle; the feet were too decomposed for measurement. The individual's hand rested toward the northeast and the feet toward the southwest. The body lay on the left side, facing the southeast; the right arm rested over the midsection.

Artifacts: 1. stone celt

Features: None

Comments: The celt was found on its edge just below the individual's neck and between the humerii.

Grave 61

Field Designation: Burial 2, also cited as Burial or Grave B and T1-B2

Provenience: Trench 1, 266.7-267.3 north by 85.5-87.3 west

Elevation: 14.5 feet (4.42 meters)

Sex: Unknown

Age: Adult

Position: Extended east and west (measuring 140 centimeters from ankle to head); the individual's head was toward the east and faced north; the arms were across the chest

Artifacts: None

Features: None

Comments: The consistency of the bone was described as "wet dust."

Grave 62

Field Designation: Burial 3, also cited as Cache 3 and T1-B3

Provenience: Trench 1, 265.7-268.7 north by 87.7-92.5 west

Elevation: 14.6 feet (4.45 meters)

Sex: A possible female and a possible male

Age: Adults

Position: Both individuals were extended, lying on their left side and facing south; the male's head was located just above the knees of the female

Artifacts: 1. bichrome ceramic bowl (40-GC-11)

2. stone celt (40-GC-9)

Features: None

Comments: Lothrop suggested that the position of the skeletons suggested a man and a woman having sexual intercourse. The female, Lothrop added, was a "toothless old woman."

Grave 63

Field Designation: Burial 4, also cited as T1-B4

Provenience: Trench 1, 263.4-264.0 north by 86.5-88.0 west

Elevation: Approximately 13.6 feet (4.15 meters)

Sex: Unknown

Age: Approximately ten years old

Position: The bones were deteriorated. The individual was lying face down; the body was oriented east to west with the head toward the east. Either the legs were disarticulated before burial and not included in the interment or the legs were flexed underneath the torso and the advanced state of decomposition made them indistinguishable from the torso. The arms were flexed and the hands rested under the left mandible; the individual faced south.

Artifacts: 1. stone pendant
Features: None
Comments: Corning made the age determination.

Grave 64

Field Designation: Burial 5, also cited as T1-B5
Provenience: Trench 1, 270.2 north by 87.0 west
Elevation: 13.0 feet (3.96 meters)
Sex: Unknown
Age: Adult
Position: Extended, the individual was resting on its back
Artifacts: None
Features: None
Comments: The field notes on this grave were very cursory.

Grave 65

Field Designation: Burial 1, also cited as Cache 1, T2-B1
and T2-C1
Provenience: Trench 2, 164.3-165.3 north by 185.6-188.0
west
Elevation: 12.2-13.5 feet (3.72-4.11 meters)
Sex: Unknown
Age: Unknown
Position: Unknown
Artifacts: 1.-4. 4 black ceramic jars with lids (40-16-
4a,b; 7a,b)
5. bichrome ceramic pedestal plate (40-16-2)
6. bichrome ceramic tripod bowl (40-16-3)
7. red ceramic "pot rest" (40-16-1238)
8. bichrome ceramic carafe (40-16-8)
9. ceramic effigy whistle with incised deco-
ration (not located in the University
Museum's collections)

Features: None

Comments: This find may not be a grave. Merrill suggested
that this find was part of Cache 8 excavated during the
1931 Lothrop directed Peabody Museum excavations. No ske-
letal remains were found.

Grave 66

Field Designation: Burial 2, also cited as Cache 2, T2-B2
and T2-C2
Provenience: Trench 2, 168.0-169.4 north by 156.1-157.5
west
Elevation: 11.8-12.8 feet (3.6-3.9 meters)
Sex: Unknown
Age: Unknown
Position: Unknown
Artifacts: 1. polychrome ceramic effigy vessel (40-16-14)
2. red ceramic jar with an effigy handle (40-
16-16)
3. red ceramic jar with effigy applique on body

(40-16-17)

4. plain jar (40-16-17)

5. unknown number of red ceramic jars (40-16-16)

Features: None

Comments: This find is referred to in the field notes as both a cache and a burial. The human skeletal remains were found below the artifacts; yet any other relationship between the mortuary objects and the bones is unclear.

Grave 67

Field Designation: Burial 3, also cited as T2-B3, Burial 4 and T2-B4

Provenience: Trench 2, 162.0-166.8 north by 186.8-192.3 west

Elevation: 11.0-12.0 (3.34-3.66 meters)

Sex: Unknown

Age: Unknown

Position: Two or three bodies were superimposed one on top of the other; the top skeleton was oriented southwest and northeast the orientation of the other individual is unknown

Artifacts: None

Features: None

Grave 68

Field Designation: Burial 7, also cited as T2-B7

Provenience: Trench 2, 166.0-173.0 north by 155.0-161.2 west

Elevation: 10.3-11.5 feet (3.15-3.51 meters)

Sex: One female and two males

Age: An adult female and male; the other males age was undetermined adults

Position: The adult female was extended, cranium toward the east, laying face down with her arms fold across her chest and her hands directed toward her face. The feet were missing; from the top of the cranium to the end of the tibia measured approximately 140 centimeters. The adult males was also extended and lying face down. This individual measured 137 centimeters from the cranium to the end of its tibia and also like the above female was oriented east and west. The last individual was positioned exactly like the other adult male; he measured 115 centimeters from his cranium to the femora. The tibia were completely absent from this latter individual.

Artifacts: 1.-10. 10 red ceramic plates (40-15-180 through 184, 198, 40-16-35, 36, 38; one was not located in the University Museum's collections)

11.-17. 7 polychrome ceramic plates (40-15-199 through 201, 204, 206, 235, 40-16-37 [Figs. 56, 60, 65])

18.-22. 5 red ceramic carafes (40-15-178, 179,

- 194, 202, 284 through 292)
 23. and 24. red ceramic bowls (40-15-185, 195; one was not located in the University Museum's collections)
 25. and 26. red ceramic censers (40-15-191, 40-16-39)
 27. red ceramic bowl with incised decoration (40-15-262)
 28. polychrome ceramic carafe (40-15-177)
 29. polychrome ceramic bowl (40-15-192)
 30. polychrome ceramic spouted jar (40-15-196)
 31. red and buff pedestal bowl (not located in the University Museum's collections)
 32. red pedestal bowl (40-15-187)
 33. black pedestal bowl with fluted body (40-15-188)
 34. polychrome rectangular pedestal plate (40-15-190)
 35. red and white bowl (not located in the University Museum's collections)
 36. and 37. red and buff bowls with incised decoration (40-15-207, 208; one was not located in the University Museum's collections)
 38.-41. 4 red ceramic jars (40-15-189, 209, 1859; one was not located in the University Museum's collections)
 42. red ceramic jar with incised decoration (40-15-205)
 43. brown ceramic tripod effigy jar (not located in the University Museum's collections)
 44. polychrome ceramic effigy vessel (40-15-197 [Fig.80])
 45. polychrome ceramic jar (40-15-210)
 46. plain ceramic tripod jar with two loop handles (40-15-211)
 47. black ceramic vessel cover (40-15-215)
 48.-63. 16 stone celts (40-13-238 through 248; five were left with the Conte family in Panamá)
 64. agate winged shaped pendant (40-13-237)
 65. shark tooth (40-13-250)
 66.-79. 14 gold or tumbaga beads (40-13-250)
 80. stone knife or large projectile point (40-13-249)
 81.-431. 351 stone projectile points (40-13-251 through 601)

Features: According to Mason's notes a clump of "white stuff" was found near the unaged male.

Comments: The grave outline was approximately square with rounded corners; the walls were oriented toward the cardinal points. The northeast corner was slightly damaged, probably by aboriginal excavations for grave 72. The southern edge of this burial was within one foot of the

earlier Peabody excavations.

Grave 69

Field Designation: Burial 8a, also cited as T2-B8a

Provenience: Trench 2, 172.5-176.0 north by 155.0-159.0 west

Elevation: 11.9 feet (3.63 meters)

Sex: Unknown

Age: Unknown

Position: Scattered human bones with no apparent organization

Artifacts: 1.-22. 22 ceramic jars with traces of red paint; seven had handles (40-15-1 through 40-15-3, 6 through 11, 13 through 16, 18 through 24, 40-16-44)

23.and 24. polychrome ceramic carafes (40-15-4 and 5a,b)

25.and 26. red ceramic carafes (40-15-12, 170e

Features: None

Comments: The grave area was, according to Mason, a rectangle of 1.0 by 1.3 meters. No human skeletons were reported in the grave area, but Mason did observe traces of bone scattered in unspecified areas of the burial. All but the central area of the grave was covered with ceramic vessels. The distribution of the artifacts and the residue of bones suggest that this find probably is a grave.

Grave 70

Field Designation: Burial 8b, also cited as T2-B8b

Provenience: Trench 2, 170.4-172.7 north by 154.0-156.0 west

Elevation: 12.1 feet (3.69 meters)

Sex: Unknown

Age: Unknown

Artifacts: 1.-2. polychrome ceramic carafes (40-15-38 and 39)

3. red ceramic carafe represented only by the neck (40-15-40)

Features: None

Comments: This grave, immediately to the southeast of grave 69, was uncovered during the excavation of grave 68. The skeletal material in the find was fragmentary and mostly decomposed. As a result identification of the individual was impossible.

Grave 71

Field Designation: Burial 9, also cited as T2-B9

Provenience: Trench 2, approximately 168.0-173.0 north by 181.5-185.0 west

Elevation: 9.7-11.7 feet (2.96-3.57 meters)

Sex: Unknown

Age: Unknown

Position: Possibly two individuals were found in this grave; among a jumbled mass of bones, two craniums were found. One, located at 170.0 north by 183.0 west, had its head face down and the top of the skull was directed toward the east. The torso belonging to this cranium apparently lay on a southerly sloping floor. The leg bones were found on top of the jaw. Another "jumbled mass of long bones," according to Mason's notes, "without any articulation" was found between 169.0-170.0 north and 184.-185.0 west. These latter bones were strewn in every direction and were probably part of a secondary burial. Mason drew the reasonable conclusion that the burials were disarticulated and, possibly, bundled.

Artifacts: 1. polychrome ceramic jar (40-16-46)
2. red ceramic plate (40-16-47)
3. polychrome ceramic plate (40-16-48)
4. polychrome ceramic jar (40-16-51)
5. plain ceramic bowl with two handles on the rim (40-16-52)
6. polychrome vessel of an undetermined shape (40-16-50)
7. red ceramic cup with a pedestal base and a white interior (40-16-54)
8. stone projectile point (40-16-1861)

Features: None

Comments: The mass of long bones at 169.0-170.0 north and 184.0-185.0 west was not directly associated with any of the artifacts. The stone projectile point and a river pebble were discovered later in four bags of sherds. Since no sketches, maps, or photographs of this burial were found among the field notes, the position of the skeletons and their relationship to the artifacts are unclear. Merrill was cited by Mason as thinking that this burial was part of Cache 9 excavated by Lothrop's 1930 expedition. As a result, in some of Mason's field notes reference is made to Cache 9, when Burial 9 is intended. This situation is further confused by the presence in Mason's excavations of a find designated as Cache 9.

Grave 72

Field Designation: Burial 10a, also cited as T2-B10a

Provenience: Trench 2, 173.0-177.0 north by 155.0-159.0 west

Elevation: 10.5-11.6 feet (3.20-3.54 meters)

Sex: Male

Age: Adult

Position: Extended, lying face down; the upper arms were along the side of the torso and the lower arms and hands were flexed, resting near the shoulders. The approximate length from the longest, but broken tibia, to the head was 145 centimeters.

Artifacts: 1.-8. 8 red ceramic plates (40-16-59, 60, 65,

- 1274, 1277, 1281, 1285, 1286
 9.-13. 5 red ceramic carafes (40-16-70 through 730)
 14.-16. 3 polychrome ceramic effigy vessels (40-16-74, 75)
 17.and 18. brown or black ceramic plates (40-16-1275, 1283)
 19.-21. 3 red ceramic bowls (40-16-1263, 1268, 1283)
 22.and 23. polychrome ceramic plates (40-16-66, 1280)
 24. polychrome ceramic cup (no inventory number)
 25. gold or tumbaga plaque (40-14-600)
 26. stone celt (40-14-604)
 27.-43. 17 gold or tumbaga beads (40-13-209)
 44. a conglomerate of an undetermined number of peccary tusks, bird bones and unidentified material, all in a very poor state of preservation (40-14-607)
 45. a conglomerate of an undetermined number of bones, beads, at least five shark teeth and a variety of unidentified material (40-14-603)
 46.-53. 8 but possibly more peccary tusks in very fragmentary condition (40-14-602)

Features: None

Comments: One of the red ceramic plates (7., or 40-16-1215) and artifact 24. were not located by Mason or myself in the University Museum's collections. The partial tibia of the skeleton in this grave appears to have been removed in the aboriginal excavation of grave 68. The mingling of burial 68 and 72 presented Mason with some considerable difficulties in separating the objects which belonged to the respective grave. Objects 44. and 45. were found beside the right humerus, between the elbow and the shoulder, of the skeleton. The celt (26.) was located on the opposite side of the body, near the northern elbow and hip of the individual; the metal plaque (25.) rested under the skeleton near the sternum and ribs.

Grave 73

Field Designation: Burial 10b, also cited as T2-B10b

Provenience: Trench 2, 170.4-173.0 north by 153.7-157.0 west

Elevation: 11.0-11.2 feet (3.35-3.41 meters)

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: An undetermined number of ceramic vessels were uncovered in this grave; they included black or "smoked", polychrome and red vessels (40-16-79 through 83)

Comments: Only a right femur and some teeth were uncovered

in this grave. Mason noted that "this burial (was) very mixed up and all (the) vessels (were) broken and mixed." The separation of graves 72 and 73 is not clear. The skeleton found in grave 72 separated two distinct groups of ceramics; one of these groups, grave 73, was at a slightly different elevation. Yet, no well defined edges or walls of grave 73 could be isolated and, apparently, all the walls of the grave were altered by aboriginal excavations for grave 68. The artifacts cannot be itemized since they consist of numerous, unassembled sherds.

Grave 74 (Figs. 25, 26)

Field Designation: Burial 11, also cited as T2-B11

Provenience: Trench 2, 174.3-187.5 north by 159.3-171.3 west

Elevation: 5.0-10.0 feet (1.5-3.1 meters)

Sex: Eight males, one probable male, one probable female and thirteen unsexed individuals

Age: Ten adults, two adolescents and eleven unknown

Position: Mason wrote in one of his short, published reports (1942) that all the skeletons were extended, face down and with their heads toward the east. This, however, does not totally agree with Corning's notes nor the field maps and drawings. The following differences with Mason's generalization are noted: one of the male adult's head was toward the east but the extended body lay north and south; the heads of three of the unaged and unsexed individuals faced west and one of these three was face up, not face down; the legs of one of the adult males crossed over those of another adult male and touched the ankles of yet another adult male, in addition his right knee was flexed and touched the knee of the latter mentioned adult male.

Artifacts: 1.-34. 34 red ceramic jars (40-16-105, 106, 108, 126, 127, 130, 163, 181, 182, 199, 209 through 215, 251)
35.-77. 43 polychrome ceramic jars (40-16-93, 102, 104, 110, 111, 123, 125, 132, 147, 177, 202, 222, 223, 224, 226, 242, 259, 276, 360, 372, 387, 393, 402, 446, 449, 463, 466, 1136, 1289 through 1292, 1305, 1306, 1370, 1389, 1395, 1494; two vessels were left with the Conte family in Panamá; two were not located in the University Museum's collections [Fig.72])
78.-130. 53 red ceramic carafes (40-16-135, 158, 190, 203 through 208, 237, 238, 247, 257, 275, 278, 288, 294, 301, 323, 388, 396 through 398, 424, 483, 484, 496, 498, 506, 518, 520, 523, 524, 526, 528, 533, 1300, 1307, 1308, 1320, 1321, 1397; eleven vessels were left with the Conte family in Panamá; one vessel was not located in the University Museum's collections)

131.-151. 21 polychrome ceramic carafes (40-16-90, 91, 94, 162, 169, 175, 176, 197, 200, 227, 228, 230, 231, 283, 399, 400, 521, 1388; one of the vessels was left with the Conte family in Panamá [Fig. 72])

152.-181. 30 polychrome ceramic bowls (40-16-129, 144, 145, 155, 164, 218, 219, 255, 262, 263, 266, 326, 381, 401, 441, 442, 457, 460, 462, 479, 1309, 1311, 1344, 1345, 1346, 1357 through 1359, 1402, 1423, 1496 through 1498 [Figs. 53, 68, 69, 75])

182. and 183. 2 red miniature ceramic bowls (40-16-241; one vessel was left with the Conte family in Panamá)

184.-198. 15 red ceramic bowls (40-16-131, 220, 221, 272, 185, 198, 394, 485, 505, 512, 529, 535, 1349, 1499, 1502, 1503, and 1504)

199.-223. 25 polychrome effigy vessels (40-16-98, 133, 216, 217, 225, 232, 233, 235, 239, 240, 282, 295, 455, 472, 473, 1309, 1318, 1319, 1332, 1338 through 1340, 1369, 1378, 1500; two vessels were not located in the University Museum's collections [Figs. 54, 79, 81, 84])

224.-226. 3 polychrome ceramic pedestal plates (40-16-322, 515, and 531 [Fig. 59])

227.-242. 16 polychrome ceramic plates (40-16-89, 117, 134, 161, 330, 333, 384, 395, 403, 488, 494, 497, 1330, 1331, 1334, 1374, 1396, 1862 [Figs. 57, 74, 75])

243. red ceramic pedestal plate (40-16-1364 [Fig. 79])

244.-259. 16 red ceramic plates (40-16-87, 88, 92, 116, 149, 157, 193, 391, 392, 489, 1296, 1367, 1368, 1380 through 1385)

260.-278. 19 polychrome ceramic rectangular plates (40-16-96, 150, 160, 293, 304, 337, 369, 1295, 1298, 1299, 1301, 1317, 1322, 1323, 1373, 1398, 1399, 1414 [Figs. 61, 62, 68])

279. black ceramic pedestal effigy vessel (40-16-425)

280. and 281. 2 black ceramic bowls (40-16-423 and 1457)

282. black ceramic tripod bowl (40-16-421)

283.-294. 12 black ceramic pedestal bowls (40-16-103, 138, 165, 166, 270, 500, 522, 1287, 1288, 1304, 1391, 1460; one vessel was not located in the University Museum's collections)

295.-308. 14 miscellaneous polychrome ceramic vessels (40-16-95, 97, 107, 109, 148, 184, 195, 229, 242, 1338 through 1342, 1864 through 1869; one vessel was not located in the University Museum's collections)

309.-318. 10 plain ceramic jar (40-16-139, 142, 186, 191, 192, 196, 1333; three vessels were left with the Conte family in Panamá)
 319.-324. 6 polychrome ceramic bottles (40-16-174, 198, 201, 265, 1875; one vessel was left with the Conte family in Panamá)
 325. brown ceramic tripod bowl (40-16-422)
 326.-329. 4 brown or black ceramic bowls (40-16-249, 271, 405, 1898)
 330. and 331. 2 black ceramic pedestal jars (40-16-100 and 101)
 332. black ceramic jar (40-16-317)
 333.-335. 2 ceramic mirror backs ? (40-16-1365 through 1366)
 336. and 337. 2 plain ceramic bowls (40-16-140 and 378)
 338. and 339. 2 ceramic effigy vessels (40-16-306 and 413)
 340. red ceramic censor (40-16-1505 through 1508)
 341. unidentified ceramic vessel (40-16-1361 and 1362)
 342.-1889. 1548 stone projectile points (40-13-645, 648, 717 through 721, 746 through 996; 40-14-1 through 488, 490 through 540, 556 through 558; 40-16-564, 40-16-1427 through 1448; 725 were left with the Conte family in Panamá [Fig. 50])
 1890.-2057. 168 stone celts (40-13-643 through 662, 664 through 674, 675, 716; 40-14-553 through 555; ninety-one were left with the Conte family in Panamá [Figs. 49, 51])
 2058.-2070. 13 miscellaneous stones (40-14-543, 544, 546 through 550, 559; 40-16-1888; four were left with the Conte family in Panamá [Fig. 51])
 2071.-2073. 3 stone beads (40-14-551, 552, 580 [Fig. 51])
 2074.-2076. 3 stone rods, probably for ear decorations (40-16-560 through 562 [Fig. 51])
 2077. and 2078. 2 "sandstone" disks or plaques, possibly mirror backs (40-13-642; one of these objects was discarded in the field [Fig. 51])
 2079. and 2080. 2 quartz crystals (both were left with the Conte family in Panamá)
 2081. polishing stone (40-14-542)
 2082. stone plug? (40-16-565)
 2083.-2086. 4 agate pendants (40-13-609 through 611; one was left with the Conte family in Panamá [Figs. 45, 47])
 2087.-5582. 3496 gold or tumbaga beads [the number in parentheses is the total number of

beads included in the group of objects represented by the inventory number: 40-13-34(46), 35(64), 36(24), 37(23), 38(24), 39(16), 40(42), 41(37), 42a(175), 42b(44), 43(65), 44(500), 45(217), 46(231), 47(44), 48(10), 49(14), 50(27), 98(8), 99(14), 100(1), 101(18), 102(1), 105(15), 113 through 117(1 each), 137(5), 138(18), 143(1), 145(209), 146(1); 1,597 were left with the Conte family in Panamá [Fig. 45]

5583.-5770. 188 gold or tumbaga "ear rods" (40-13-51, 54 through 56, 60, 71 through 73, 75 through 77, 81, 82; 175 were left with the Conte family in Panamá [Fig. 46])

5771.-5861. 91 stone and gold or tumbaga "ear rods" (40-13-52, 53, 57 through 59, 80; 85 were left with the Conte family in Panamá)

5862.-5906. 45 miscellaneous pieces of gold or tumbaga for "ear rods" (40-13-61 through 70, 74, 78, 79, 83 through 92, 147; 20 were left with the Conte family in Panamá [Fig. 46])

5907.-5993. 87 gold or tumbaga bells (40-13-103, 104, 105; 30 objects had no inventory numbers; 15 were left with the Conte family in Panamá; 40-13-104 represents 26 bells and 40-13-105 represents 15 bells)

5994.-6022. 29 gold or tumbaga "medallions" (40-13-13 through 25, 149 through 151; 14 were left with the Conte family in Panamá [Fig. 44])

6023.-6039. 17 gold or tumbaga chisel (40-13-106 through 111, 139, 141, 142, 152; 6 were left with the Conte family in Panamá)

6040.-6052. 13 gold or tumbaga plaques (40-13-1 through 12, 26 [Figs. 28-32])

6053.-6056. 4 gold or tumbaga "cuffs" (40-13-29, 30; 2 were left with the Conte family in Panamá [Fig. 33])

6057. and 6058. 2 gold or tumbaga pendants (40-13-27, 28 [Figs. 33, 36])

6059.-6081. 23 bone, resin and ivory objects with gold or tumbaga overlay (40-13-118 through 127, 132 through 136, 176; one was left with the Conte family in Panamá [Figs. 37-39])

6082.-6087. 6 gold or tumbaga wristlets or anklets (40-13-31, 32, 93; 3 were left with the Conte family in Panamá)

6088.-6125. 38 gold or tumbaga miscellaneous overlay (40-13-128 through 130, 137, 138, 144a through 144d, 148a and b, 153 through 175, 200, 201 [Figs. 37, 45, 46])

6126.-6128. 3 gold or tumbaga nose ornament (40-13-94, 97; one was left with the Conte

family in Panamá [Fig. 45])
6129. and 6130. 2 gold or tumbaga nose clips or earrings (40-13-95 and 96 [Figs. 45, 47])
6131. gold or tumbaga nose ornament (40-13-33 [Fig. 33])
6132. gold or tumbaga bar (40-13-140)
6133. copper bell (40-14-137)
6134 unspecified gold or tumbaga ornament (the object was left in the field)
6135.-6561. 427 unidentified teeth (40-14-573, 580)
6562.-6882. 321 canine teeth (40-14-575, 580; one tooth was left with the Conte family in Panamá; the first inventory number represents 310 teeth and the latter represents 10 teeth [Fig. 48])
6883.-6982. 100 shark teeth (40-13-572, 580, 617, 658, 40-16-570; one tooth was left with the Conte family in Panamá; 40-13-572 represents 91 teeth, -580 represents 24 teeth, -658 represents 2 teeth and 40-16-570 represents 9 teeth)
6983.-7158. 176 rabbit teeth (40-14-574)
7159.-7226. 68 bone points (40-14-580 through 590, 620 through 629; 40-14-580 through 590 represents 33 points and -620 through 629 represents 35 points [Fig. 48])
7227.-7237. 11 feline claws (40-14-579)
7238.-7242. 5 bone beads (40-13-580 through 590, 603)
7243. and 7244. 2 bone tubes (40-16-567)
7245.-7248. 4 copal figurines (40-13-604, 607; 40-16-568, 569 [Fig. 41])
7249. and 7250. 2 miscellaneous copal fragments (40-13-608, 40-16-563 [Fig. 41])
7251. copal cylinder (40-16-566)
7252. copal ornament (40-13-616)
7253. and 7254. miscellaneous green substance (40-1-311, 312)
7255. yellow powder (40-16-313)
7256. seeds? (40-16-315)
7257. wood? (40-16-1887)
7258. and 7259. unidentified substances (40-16-427, 432)
7260. ceramic sherd with attached fibers (40-16-309)
7261. ceramic sherd with attached bark cloth (40-16-310)
7262. shell point (40-16-571)
7263.-7497. unknown number of sting ray spines, estimated at 205 objects (40-14-580 through 590, 640, 641; 40-14-580 through 590 represents

33 spines; -640 and -641 represents two large masses of spines embedded in the dirt)

Features: Residue of one and possibly two sheets of bark cloth were found beneath a group of eight of the skeletons; pockets of various colored powders were uncovered in unspecified locations of the grave; and a cache of unidentified seeds was excavated.

Comments: The quantity of ceramic vessels from this grave is substantially low since thousands of them were retrieved as sherds and were not reconstructed to be counted as individual vessels.

Grave 75

Field Designation: Burial 12, also cited as T2-B12

Provenience: Trench 2, 178.6-181.6 north by 172.9-176.8 west

Elevation: 10.2-12.3 feet (3.11-3.75 meters)

Sex: Male

Age: According to Corning's notes the individual was "middle age", therefore, adult

Position: The two femurs and pelvis of this incomplete skeleton were lying face up and oriented east and west with the feet toward the west; two sections of humeri were located across the pelvis and were possibly cut through; in another unspecified area a jaw with three right and left molars was discovered; the individual may have been either a bundle (secondary, possibly) or disturbed burial.

Artifacts: 1.-21. 21 red ceramic carafes, many with black and white scroll or chevron designs on the necks (40-16-546, 549, 553, 554, 556, 557, 562, 563, 567, 581, 584, 593, 595, 599, 1535, 1555, 1559 through 1561)
22.-41. 20 polychrome ceramic plates (40-16-551, 555, 558, 565, 570, 572, 574, 586, 589, 596, 597, 1537, 1539, 1541 through 1544, 1547, 1552, 1553, 1555 [Figs. 52, 59, 60, 64])
42.-48. 7 polychrome ceramic carafes (40-16-548, 552, 561, 571, 598)
49.-52. 4 red ceramic jars (40-16-559, 1548)
53.-55. 3 red ceramic plates (40-16-564, 1550, 1562)
56.-58. 3 red ceramic bowls (40-16-577, 582, 1557; one of these bowls had two loop handles attached to the body)
59. and 60. red pedestal cups (40-16-580, 1536; one of these cups also had black and white scroll designs on the body)
61. and 62. polychrome ceramic effigy vessels (40-16-1538, 1554, 1555)
63. and 64. brown ceramic bowls with incised decoration (40-16-1884, includes both vessels)

- 65. sepia and white ceramic carafe, body only (40-16-600)
- 66. red ceramic censor, fragmentary (40-16-1545, 1546)
- 67. red and buff ceramic plate (40-16-578)
- 68. plain ceramic plate (40-16-578)
- 69. polychrome ceramic bowl (40-16-579)
- 70. plain ceramic bowl (40-16-623)
- 71.-76. 6 stone celts (40-16-621, 40-14-610 through 613 [Fig. 42])
- 77. quartz crystal (40-14-609)
- 78. stone projectile point (40-14-614)
- 79. unidentified tooth (40-14-608)
- 80. tooth necklace (40-14-607, approximately 200 teeth, species unidentified)

Features: Textile impression, location unknown (40-14-606)

Comments: The ceramics from this burial included a large number of miscellaneous sherds. These broken ceramics primarily originated from the north side of the grave, possibly from a "grave shaft into which they (aboriginal inhabitants) threw vessels . . . great thickness and closely jammed and many fragments all messed up" (Mason's field notes).

Grave 76

Field Designation: Burial 12a, also cited as T2-B12a

Provenience: Trench 2, 182.2-184.9 north by 171.5-176.6 west

Elevation: 12.3-12.8 feet (3.75-3.90 meters)

Sex: Unknown

Age: Unknown

Position: Unknown

- Artifacts: 1.-4. 4 red ceramic carafes with black and white scrolls painted on the necks (40-16-629, 630, 633, 1563)
- 5. red ceramic bowl with lugs around rim (not located in the University Museum's collections)
 - 6. rectangular polychrome ceramic plate (not located in the University Museum's collections)
 - 7. polychrome ceramic plate (not located in the University Museum's collections)
 - 8. polychrome ceramic plate with a cup attached in the center (40-16-632; not located in the University Museum's collections)
 - 9. white ceramic vessel with handles (40-16-1564)
 - 10. polychrome ceramic effigy bowl (40-16-1568)
 - 11. stone projectile point (40-16-1566)

Features: None

Comments: Mason's classification of this group of artifacts as a grave is suspect. The find was isolated above grave 77 and there was no skeleton or skeletal residue

associated with the artifacts. Moreover, the artifacts of this burial were directly above the skeleton of grave 77, suggesting that grave 76 may actually be part of grave 77 instead of an isolated unit.

Grave 77

Field Designation: Burial 12b, also cited as T2-B12b

Provenience: 183.4-186.7 north by 177.7-183.7 west

Elevation: 11.43-12.16 feet (3.48-3.71 meters)

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: 1.-14. 14 red ceramic carafes (40-16-638, 656 through 659, 1570, 661 through 663, 1570, 1573 through 1575; one was left with the Conte family in Panamá; two were not located in the University Museum's collections; three had black and white scroll decorated necks)
15.-23. 9 red ceramic plates (40-16-643, 644, 645, 647 650 through 653, 655)
24.-27. 4 polychrome ceramic plates (40-16-646, 648, 649, 654)
28. and 29. polychrome ceramic carafes (40-16-660; one was not located in the University Museum's collections)
30. black ceramic bowl (40-16-664)
31. fragmentary red ceramic jar (40-16-639)

Features: None

Comments: The rectangular shaped grave was oriented approximately northwest and southeast and measured two meters long and 65 to 85 centimeters wide. A skeleton was mentioned in the field notes but no other details were provided by the excavators. As a result, the designation of this find as a grave is, once again, suspect. All of the ceramic plates in this grave were found inverted or face down.

Grave 78

Field Designation: Burial 12c, also cited as T2-B12c

Provenience: Trench 2, 180.9-184.8 north by 171.2-176.7 west

Elevation: 10.85-12.40 feet (3.31-3.78 meters)

Sex: Male

Age: Adult

Position: Extended, lying east and west with his head toward the east; the individual was face down and had his arms flexed with his hands toward his face; the bottom one-third of the tibia was missing.

Artifacts: 1.-6. 6 polychrome ceramic plates (40-16-667, 669, 673, 688, 1581, 1587 through 1589 [Fig. 63])

7.-12. 6 red ceramic plates (40-16-670, 671,

677, 1585; one was not located in the University Museum's collections)
13.-16. polychrome ceramic bowls (40-16-1582, 1583, 1590; one was not located in the University Museum's collections)
17.-19. 3 red ceramic bowls (40-16-678, 681, 686)
20. and 21. red ceramic jars (40-16-674; one was left with the Conte family in Panamá; the other was a tripod; both had two handles)
22. and 23. ceramic effigy vessels (40-16-693, 1584; one had a spout)
24. and 25. ceramic carafes (40-16-684, 685; one had a black and white scroll neck; the other was polychrome)
26. polychrome ceramic jar (40-16-672)
27. polychrome plate with a cup attached in the center (40-16-668)
28. red ceramic censer (40-16-1592, 1593)
29. copper "nose ring" (40-13-233; this object was not located in the University Museum's collections)

Features: None

Comments: The burial was probably cut through by aboriginal excavations. The north edge is contiguous with grave 77 but Mason says in his field notes that "there seems to be some sort of division between the two." The original grave was nearly square, measuring 150 by 150 centimeters; but the north and south dimensions had been aboriginally cut to 105 centimeters. Corning noted that the skeleton had an undisclosed number of gold or tumbaga beads in his chest cavity and an earring attached near the left ear. These items do not appear in Mason's notes. A boulder was located near the right hip of the individual.

Grave 79

Field Designation: Burial 12d, also cited as T2-B12d

Provenience: Trench 2, 180.3-183.8 north by 170.9-176.9 west

Elevation: 10.85-11.78 feet (3.31-3.59 meters)

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: 1.-22. 22 ceramic carafes (40-16-703 through 706, 709, 712, 715, 719, 722 through 724, 726, 727, 731, 733, 1602, 1603, 1607, 1608, 1616 through 1618, 1626; one carafe was not located in the University Museum's collections; nine of the carafes were polychrome and one had black and white scrolls on the neck)
23.-38. 16 polychrome ceramic plates (40-16-695, 696, 702, 710, 721, 729, 730, 736, 1594

through 1596, 1600, 1604, 1605, 1612, 1619
through 1621, 1893 through 1895)
39.-41. 3 polychrome ceramic bowls (40-16-697,
707, 713)
42.-44. 3 red ceramic plates (40-26-700, 1597,
1599)
45.-47. 3 ceramic jars (40-16-716, 717; one is
red, one brown and one red and white with two
loop handles)
48. polychrome spouted ceramic effigy vessel
(40-16-714)
49. red ceramic pedestal bowl (40-16-718)
50. red ceramic bowl (40-16-1615)
51. plain ceramic cup with handle (40-16-748)
52. fragmentary polychrome ceramic spouted
vessel (not located in the University Museum's
collections)
53. stone celt (40-14-615)
54.-57. 4 stone projectile points (40-14-616
through 619)

Features: None

Comments: The absence of skeletal remains creates doubt as
to the designation of this find as a grave.

Grave 80

Field Designation: Burial 12e, also cited as T2-B12e

Provenience: Trench 2, 182.9-186.1 north by 176.9-182.5
west

Elevation: 11.26-11.75 feet (3.43-3.58 meters)

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: 1.-3. 3 red ceramic carafes (40-16-752, 754,
757; one had black and white chevrons on
its neck)
4. and 5. 2 red and white ceramic plates (40-
16-749)
6. polychrome ceramic plate (40-16-750)
7. red ceramic bowl (40-16-751)
8. red ceramic jar with two handles (40-16-
1630)
9. red and white ceramic jar (40-16-758)

Features: None

Comments: Mason separated this grave from grave 79 on the
basis of the ceramic types. Without skeletal remains, the
designation of this find as a grave is suspect.

Grave 81

Field Designation: Burial 12f, also cited as T2-B12f

Provenience: Trench 2, 181.9-186.0 north by 171.4-176.9
west

Elevation: 10.80-11.50 feet (3.29-3.51 meters)

Sex: Unknown

Age: Unknown

Position: The torso was oriented east and west; no other information was available

Artifacts: 1.-10. 10 red ceramic plates (40-16-764, 773, 774, 777, 1635 through 1637, 1649, 1650, 1655 through 1657; one was left in the field and two were not located in the University Museum's collections)
11.-17. 7 red ceramic carafes (40-16-766, 769, 770, 775; six were painted with black and white scrolls or chevrons; three were not located in the University Museum's collections)
18.-22. 5 polychrome ceramic plates (40-16-760, 770, 777, 1638, 1639; one plate was not located in the University Museum's collections [Fig. 55])
23.-29. 7 red ceramic jars (40-16-768, 777; two jars were not located in the University Museum's collections)
30. red ceramic bowl (40-16-778)
31. polychrome ceramic jar (40-16-761)
32. black ceramic vessel (40-16-762)
33. polychrome ceramic pedestal bowl (40-16-763)
34. black ceramic pedestal vessel (40-16-1640)
35. polychrome ceramic bottle (40-16-1643)
36. red ceramic censer (40-16-772)
37.-40. 4 stone celts (40-14-621, 623, 627)
41.-48. 8 bone tubes (40-14-620)
49. copper chisel (40-13-234)

Features: In unspecified areas sand was found below the mortuary furnishings; the sand contained residue of either textiles or basketry.

Comments: The skeletal material which was quite fragmentary was found approximately 10 centimeters below the artifacts; the northern edge of the grave was defined by a group of plates set vertically on their rims. The field notes mentioned that a cache of shark's teeth, sting ray spines and large rodent teeth were located near the bone tubes (41.-48.). These items were not found in the University Museum's collections. Moreover, I would like to emphasize that a large number of ceramic vessels from this burial were not located in the Museum's collections. The boundaries between graves 81 and 82 are not easily defined.

Grave 82

Field Designation: Burial 12g, also cited as T2-B12g

Provenience: Trench 2, 182.7-185.7 north by 176.5-180.3 west

Elevation: 10.97-12.11 feet (3.34-3.69 meters)

Sex: Unknown

Age: Unknown

Position: the legs lay north and south; gravel was "hand packed," according to the field notes, around the cranium

Artifacts: 1.-11. 11 ceramic carafes (40-16-784, 787, 788, 792, 794, 795, 800, 801, 1671 through 1673; two carafes were not located in the University Museum's collections; four of the objects had black and white scroll designs painted on the necks and one was polychrome)
12.-20. 9 red ceramic jars (40-16-785, 786, 791, 803, 804; two jars were not located in the University Museum's collections; one was left with the Conte family in Panamá; six had loop handles on the side of the body [Fig. 77])
21. and 22. red ceramic vessels (40-16-796, 1909)
23. polychrome ceramic vessel (not located in the University Museum's collections)
24. polychrome ceramic bowl (40-16-789)
25. polychrome ceramic plate (40-16-797; not located in the University Museum's collections)
26. red ceramic plate (40-16-798)
27.-29. 3 stone celts (40-14-624 through 626)
30. green stone bead (40-14-630)
31.-33. 3 stone projectile points (40-14-627 through 629; two are of red jasper and one is a green stone)

Features: None

Comments: The skeletal remains were disturbed, probably aboriginally. The distinctions between this grave and 81 are not clear; the field notes state that burial 12g (grave 82) has more painted vessels than burial 12f (grave 81) but provides no more substantive reasons to separate the two burials.

Grave 83

Field Designation: Burial 13, also cited as burial 13a, T2-B13, and T2-B13a

Provenience: Trench 2, 166.0-168.8 north by 187.1-192.0 west

Elevation: 8.2-9.8 feet (2.50-2.99 meters)

Sex: Unknown

Age: Unknown

Position: The long bones were oriented northeast and southwest

Artifacts: 1.-6. 6 polychrome ceramic plates (40-16-809 through 811, 818, 822, 824 [Figs. 52, 64, 67, 70, 71])
7.-10. 4 red ceramic jars with vertical handles on the sides (40-16-812, 815, 816, 820; one was

- not located in the University Museum's collectiona)
- 11.-14. 4 red carafes (40-16-813, 814, 817, 819; two have black and white scroll designs of the necks)
 15. plain bowl with some red painting on exterior (40-16-823)
 16. red ceramic vessel (40-16-821)
 17. and 18. basalt manos (40-14-632, 633)
 19. and 20. two objects described by Mason as stone concretions (40-14-634; one may be a polishing stone of red jasper and the other was not located in the University Museum's collectiona)
 21. flaked stone tool (not located in the University Museum's collectiona)
 22. unidentified stone object (not located in the University Museum's collectiona)
 23. tripod basalt metate (40-14-631)
 24. and 25. red ceramic bowls partially covered with carbon (40-16-831, 832)

Features: None

Comments: Several of the ceramics along the northern border of the grave were cut in two by aboriginal excavations. The southeast corner and southern edge of the grave is well defined, but the original grave, according to Mason, extended further north and possibly west. The original grave, before aboriginal excavations, was apparently rectangular or square and the northern edge was sloped downward. The artifacts originally listed as being from Mason's B13a were probably taken from five bags of miscellaneous sherds mentioned in his field notes. One object (4.) was reported as being found at an elevation of 7.8. However, Mason's photographs clearly show that the object was found with the rest of the mortuary arts from this grave.

Grave 84

Field Designation: Burial 13b, also cited as T2-B13b
Provenience: Trench 2, 170.1-172.5 north by 183.6-186.8 west

Elevation: 7.60-9.05 feet (2.32-2.76 meters)

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: Several hundred ceramic fragments were found but there were no identifiable nor nearly complete vessels

Features: A large area of carbon residue was located between 171.1-172.4 north and 185.0-186.4 west at an elevation of 8.76 feet (2.63 meters); Mason stated that basketry patterns could be identified in some of the carbon. One can of the carbon was kept.

Comments: This may not be a burial but the residue of an activity area. The find was originally referred to as "Burial 13" in the field because Mason thought it was part of Burial 13 and 13a (grave 83). This field interpretation was rejected on further excavation.

Grave 85

Field Designation: Burial 14, also cited as T2-B14

Provenience: Trench 2, 170.2-173.3 north by 172.9-180.6 west

Elevation: 8.5-9.5 feet (2.59-2.90 meters)

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: 1.-12. 12 polychrome ceramic jars (40-15-70, 75, 77, 79, 80, 84, 87, 91; four were left with the Conte family in Panamá [Figs. 54, 66, 81])
13. polychrome ceramic effigy vessel, possibly an armadillo (40-15-72)
14.-16. 3 red ceramic jars (40-15-69, 86, 89 [Fig. 77])
17.-21. 5 ceramic spouted jars (40-15-74, 76a, 81, 83, 85; two were black with fluted bodies; two were red with fluted bodies; and one was polychrome [Fig. 76])
22.-26. 5 polychrome ceramic plates (40-15-71, 93a and b, 96 through 98; one was located inside artifact 1.; four had pedestals)
27. polychrome pedestal vessel (40-15-78)
28. polychrome effigy cover (40-15-82; Mason suggested that this lid belonged to artifact 6.
29. red ceramic carafe with black and white scroll designs on the neck (40-15-92 a and b)
30. bone tube found inside of artifact 16 (40-15-90)
31. fragmentary fossilized shark tooth (40-14-635)

Features: None

Comments: No human skeletal remains were found. The group of artifacts was unusual because they were almost all in perfect or complete condition. Mason also noted uncovering two "natural stones or pebbles" in this find but they were discarded.

Grave 86

Field Designation: Burial 15, also cited as T2-B15, T2-B15b and Burial 15b

Provenience: Trench 2, 165.7-168.2 north by 169.0-176.5 west

Elevation: 8.9-10.2 feet (2.70-3.11 meters)

Sex: Unknown

Age: Adolescent or adult

Position: Face down and extended with head at the south-east and the legs pointing northwest

Artifacts: 1.-7. 7 polychrome ceramic jars (40-16-839, 840, 894, 1686, 1691; one had a spout and one was left with the Conte family in Panamá)
8.-11. 4 polychrome effigy jars (40-16-841, 845, 1688; one was not located in the University Museum's collections)
12.-14. 3 red bowls (40-16-852, 1687, 1690; one had loop handles on the body)
15.-16. 2 polychrome ceramic bowls (40-16-848, 1689)
17. red ceramic censer (not located in the University Museum's collections)
18. and 19. green stone, perhaps serpentine, objects in the shape of tusks or large canine teeth, each with a hole in the base (40-14-639, 640)
20.-24. 5 stone celts (40-14-648, 652 through 654; one was left with the Conte family in Panamá)
25. and 26. red jasper points (40-14-649, 650)
27.-29. 3 "winged" pendants (40-14-641 through 643; two are ivory and one is stone)
30. and 31. unidentified ivory objects, possibly parts of pendants (40-14-644, 645)
32. Identified by Mason as a modified sperm whale tooth (40-14-638)
33. Unidentified bone object (40-14-646)
34. copal resin pendant (40-14-636)
35. copal resin (40-14-637)
36. tusk (boar?) (40-14-647a)
37. canine tooth (40-14-64?)
38. stone flake (left with the Conte family in Panamá)
39.-45. 7 gold or tumbaga plaques (40-13-211 through 217; one was not located in the University Museum's collections; two were fragmentary and may be part of the same plaque)
46. stone plaque, possibly a mirror back (40-14-651; not located in the University Museum's collections)

Features: Lothrop reported finding bark cloth residue near the coordinates 166.5 north and 175.0 west. Some white powdery material was uncovered immediately above the right humerus of the skeleton; Mason suggested that the material may have been decomposed turtle shell.

Comments: Both Mason and his assistant, Corning, agreed on the identification of the bones representing the individual in this grave. However, Merrill identified one long bone, found at approximately 173.0 west and 167.0

north as a femur while Mason and Corning discussed it as a humerus. The right humerus and a skull were discovered to the south and east of the controversial bone. To the north of the right humerus were the remains of some ribs. The suspect identification of the first long bone is important since it may determine the position of the skeleton. My inclination is to think Mason and Corning made a mistake; Merrill's identification is consistent with a face down, extended skeleton--a situation frequently noted in a number of other graves. The teeth of the individual were found but discarded in the field.

Either the one or two fragmentary gold or tumbaga plaques (44. and 45.) were found below the ribs of the individual; the other plaques (39. through 43.) were located to the east of the skull. One black pedestal ceramic vessel was cited in the field notes as being found above the right humerus; yet, this vessel never appeared in any other notes or burial descriptions and, therefore was not included.

Grave 87

Field Designation: Burial 16, also cited as T2-B16

Provenience: Trench 2, 176.3-179.0 north by 171.7-180.8 west

Elevation: 8.9-9.7 feet (2.70-2.96 meters)

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: 1.-5. 5 polychrome ceramic jars (40-15-344, 349, 857; one was not located in the University Museum's collections and one was left with the Conte family in Panamá)
6.-11. 6 polychrome ceramic pedestal plates (40-15-336, 339, 341, 345, 352, 354)
12.-16. 5 red ceramic carafes (40-15-337, 340, 347, 351, 353; one had black and white scroll designs on the neck)
17.-19. 3 polychrome ceramic effigy vessels (40-15-338, 355; one was left with the Conte family in Panamá and one had a spout [Fig. 80])
20.-22. 3 red ceramic jars with black line decoration (40-15-346, 40-16-854; one was left with the Conte family in Panamá)
23. and 24. red spouted ceramic jars (40-15-348, 40-16-855)
25. polychrome ceramic effigy cover (40-15-342)
26. polychrome ceramic carafe (40-15-343)
27. stone celt (not located in the University Museum's collections)
28. stone projectile point (not located in the University Museum's collections)

Features: None

Comments: No human skeletal material was uncovered in this find. Mason suggested that this grave may actually have been the northern part of grave 85. His reasons for this suggestion are not presented and a study of Merrill's maps presents no obvious evidence to support Mason's conjecture.

Grave 88

Field Designation: Burial 17a, also cited as T2-B17a

Provenience: 168.0-173.7 north by 157.8-163.6 west

Elevation: 8.9-9.7 feet (2.71-2.96 meters)

Sex: Male?

Age: Adult

Position: Extended, lying on his chest and oriented approximately east to west; the individual faced north and the arms were flexed with the hands toward his face

Artifacts: 1.-8. 8 polychrome ceramic plates (40-16-870, 871, 873, 874, 880, 1701, 1712, 1718 [Fig. 57, 58])
9.-14. 6 red ceramic carafes (40-16-859, 862, 872, 1721, 1914; one was not located in the University Museum's collections; four had black and white scroll designs on their necks)
15.-18. 4 red ceramic bowls (40-16-1710, 1713, 1714, 1719; one had a white base)
19.-21. 3 polychrome ceramic carafes (40-16-860, 861, 864)
22. and 23. red ceramic censers with flat handles (40-16-1910 through 1913)
24. and 25. buff and red ceramic jars (40-16-875, 1723)
26. polychrome ceramic jar (40-16-865)
27. red ceramic plate (40-16-879)
28. red ceramic vessel (40-16-867)
29. white and red ceramic plate (40-16-868)
30. buff and red ceramic plate (40-16-877)
31.-33. 3 stone celts (40-14-660 through 662)
34. bone figurine, possibly a crocodile or cayman (40-14-655)
35. copal resin figurine, fragmentary (40-14-658, 659)
36.-38. 3 gold or tumbaga rings or beads (40-13-210)
39. copper figurine, corroded (40-14-659)
40. metal nose ornament, corroded (40-13-223)
41. a mass of bone beads (40-14-656, 657)

Features: None

Comments: The grave was roughly rectangular with the long section oriented east and west. Artifact 40. was found near the nose of the skeleton; the mass of bone beads was located under the torso which suggested to Mason that they represented a bone breast plate, similar to those worn by

North American Plains Indians. One of the celts was found near the right knee and the other two were associated with the mass of bone beads; an unworked pebble was found on the left femur. Corning reported traces of a gold or tumbaga plaque under the chest cavity but this object was not mentioned by Mason.

Grave 89

Field Designation: Burial 17b, also cited as T2-B17b
Provenience: Trench 2, 167.0-171.2 north by 160.6-164.3 west

Elevation: 8.70-9.92 feet (2.65-3.02 meters)

Sex: Male

Age: Adult

Position: The bones of this individual were scattered throughout the grave, suggesting either a secondary or disturbed burial; part of the cranium was located at 168.0 north and 163.0 west, while the jaw and teeth were found at 168.3 north and 163.1 west.

Artifacts: 1.-5. 5 red ceramic plates (40-16-885, 886, 893, 896; one was not located in the University Museum's collections)
6. and 7. red ceramic jars (40-16-887, 895)
8. and 9. polychrome spouted ceramic jars (40-16-884; one was not located in the University Museum's collections)
10. red ceramic carafe with black and white scroll designs on the neck (40-16-883)
11. brown ceramic jar with three loop legs and two loop handles (40-16-888)
12. buff ceramic effigy vessel (40-16-889)
13. black fluted ceramic pedestal bowl (40-16-1730, 1731)
14. buff ceramic pedestal bowl (40-16-891)
15. red ceramic censer with a cylindrical handle (40-16-892)
16. polychrome spouted ceramic carafe (40-16-894)
17. agate "winged" pendant (40-14-663)
18. stone celt (40-14-664)
19. and 20. stone concretions (40-14-665, 666)

Features: None

Comments: Mason noted that burials 88 and 89 may be parts of the same grave, each area (represented by his "a" and "b" designations) was associated with one individual. If grave 89 is a separate burial, it is chronologically later than grave 88 since it intersects or cuts off the lower legs of the skeleton found in grave 88.

Grave 90

Field Designation: Burial 18, also cited as T2-B18
Provenience: 168.8-178.0 north by 1703.-181.8 west

Elevation: 6.43-7.73 feet (1.96-2.36 meters)

Sex: Three probable males; four certain males and one female

Age: Adult or adolescent ?

Position: Two of the probable males were on an upper level of the grave, about 30 centimeters above the other individuals. One of these males lay east and west on his left side and the skull at the east end faced south; the right foot of this individual rested on top of the left ankle. The upper torso of the other male on the upper level was fragmentary but lay parallel to the other individual but on his stomach rather than side. The one female and four other males were extended, lying parallel to one another. Their heads were directed toward the south-southwest. The males were placed on their stomachs and the female on her back. One of the males faced east and one west; the other faced down toward the ground with his hands under his face. One of the males may have been a companion to the female but the skeleton was badly decomposed and, therefore, the exact position was impossible to determine. Corning noted that he thought this latter male, the companion to the female, was extended, oriented northeast by southwest, lying on his stomach and, in general, in the same position as the female. The last male was found on the same level as the first two males found on the graves upper level. This last individual was a secondary or disturbed burial located in the southeast corner of the grave.

Artifacts: 1.-17. 17 polychrome ceramic jars (40-15-447, 470, 475 through 479, 487, 488, 494, 497, 501, 580; six had spouts and two were left with the Conte family in Panamá)
18.-25. 8 red ceramic bowls (40-15-480, 484, 489, 493, 40-16-901; three were not located in the University Museum's collections)
26.-32. 7 polychrome ceramic pedestal plates (40-15-458, 465 through 467, 469, 483, 496)
33.-38. 6 black pedestal bowls (40-15-462, 463, 474, 482, 490, 900; one was left with the Conte family in Panamá)
39.-43. 5 polychrome ceramic effigy vessels (40-15-449, 452, 472, 485, 40-16-899; one was spouted; one was not located in the University Museum's collections [Fig. 81])
44.-48. 5 bichrome ceramic jars (40-15-448, 450, 453, 464; one was left with the Conte family in Panamá and one is spouted [Fig. 76])
49.-52. 4 red ceramic jars (40-15-460, 473, 468; one was left with the Conte family in Panamá)
53. and 54. plain effigy vessel (40-15-481; one was not located in the University Museum's

- collections [Fig. 79])
55. and 56. red censers (40-15-456, 457)
 57. and 58. black bowls (40-15-491, 492)
 59. and 60. red ceramic pedestal plates (40-15-461, 471)
 61. and 62. fragmentary red vessels (not located in the University Museum's collections)
 63. polychrome ceramic plate (40-15-495)
 64. polychrome ceramic bowl (40-15-741 a and b)
 65. red ceramic plate
 66. plain jar (40-15-454, 455)
 67. polychrome effigy ceramic lid (40-16-902)
 - 68.-70. 3 stone celts (40-14-685, 686, 40-16-906)
 - 71.-77. 7 agate pendants (40-14-680 through 683, 678, 679; one was left with the Conte family in Panamá; four were "winged" pendants and two were effigies [Figs. 42, 43])
 78. stone mirror back (40-14-614)
 79. concretion or pebble (40-14-687)
 80. and 81. animal teeth (40-14-676; one of these teeth may be that of a jaguar)
 82. and 83. shark teeth (40-14-674, 677; one was a fossil tooth)
 84. bone projectile point (40-14-677)
 85. bone bead (40-14-673)
 - 86.-113. 28 metal bells (40-13-179, 180; 13 were left with the Conte family in Panamá)
 - 114.-120. 7 metal plaques (40-13-181 through 183, 668; two were left with the Conte family in Panamá and one was left in the field [Fig. 44])
 - 121.-133. 13 metal beads (40-13-184, 185; 3 were left with the Conte family in Panamá)
 - 134.-137. 5 metal effigies (40-14-667, 669 through 671 [Fig. 34])
 138. and 139. metal pendants (40-14-186)
 140. unknown number of metal bracelets (all were left with the Conte family in Panamá)
 141. metal ribbon (40-13-187)

Features: Mason noted that he observed "traces of bark cloth and bones."

Comments: Corning made all the skeletal classifications. Mason noted in 1951 that the Works Project Administration ceramic mending team misrepaired and mixed up a number of the ceramic vessels from this grave. In addition, they may have confused the over fourteen bags of sherds excavated from around this grave. One of the males was cited by Corning and Mason as the "principal" of this grave because he seems to have had the largest number of mortuary furnishings placed near his body.

Grave 91

Field Designation: Burial 19, also cited as T2-B19

Provenience: Trench 2, 165.7-174.7 north by 182.9-193.7 west

Elevation: 5.5-7.2 feet (1.68-2.19 meters)

Sex: A male and a female

Age: Both were adults

Position: The male was found in the approximate center of the grave, extended and lying on his stomach; the body lay east and west with the head toward the east. The arms of this individual were flexed. The female was located at the southern edge of the grave and was extended, lying face down; the body was oriented in the same direction as the male except that the female's arms were extended along her sides.

Artifacts: 1.-12. 12 red ceramic jars (40-16-907, 926, 936, 938, 950, 951, 966, 967, 971, 972, 975, 978, 988; two of the vessels had handles)
13.-21. 9 red ceramic carafes (40-16-921, 937, 943, 946, 962, 983, 986; one was not located in the University Museum's collections and another was kept by the Conte family in Panamá)
22.-30. 9 polychrome ceramic jars (40-16-960, 961, 973, 974, 977, 987, 997, 1776; two of the vessels had spouts and one was left with the Conte family in Panamá)
31.-39. 9 red ceramic plates with traces of white paint (40-16-917, 919, 927, 930, 939, 947, 976, 980, 999 [Fig. 65])
40.-47. 8 red ceramic pedestal plates (40-16-981, 982, 984, 985, 991, 996, 1001)
48.-53. 6 red ceramic censers (40-16-922, 931, 932, 957, 989, 1760; 3 had cylindrical handles and three had flat handles [Fig. 78])
54. red jar with two loop handles (40-16-1760)
55.-61. 7 red ceramic carafes with black and white scroll design on the neck (40-16-909, 910, 915, 916, 923, 1747, 1748, 1762 through 1764)
62.-67. 6 polychrome ceramic plate (40-16-945, 994, 998, 1765, 1779, 1780)
68.-71. 4 red ceramic bowls (40-16-941, 954, 1006, 10__; one had a pedestal base)
72.-74. 3 polychrome ceramic bowls (40-16-970, 994, 1003; one vessel had two handles and three legs)
75.-77. 3 red ceramic "pot rest" (40-16-920, 940)
78.-80. 3 red ceramic vessels (40-16-1749; one was left with the Conte family in Panamá and the other was not located in the University Museum's collections)

81. and 82. plain ceramic jars (40-16-990, 992; one had two handles and both had daubs of red paint on the body)

83. and 84. red and white ceramic effigy bowls (40-16-1771, 1772)

85.-87. 3 brown ceramic bowls (40-16-913, 1773, 1774; one had two handles and the other two had pedestal bases)

88. and 89. red ceramic pedestal vessels (40-16-948, 949)

90. polychrome ceramic pedestal bowl (40-16-911)

91. plain ceramic pedestal bowl (40-16-912)

92. black ceramic bowl (40-16-924)

93. plain ceramic bowl with red daub paint (40-16-1004)

94. plain ceramic plate (40-16-914)

95. red ceramic plate (40-16-1005)

96. red and white jar (40-16-1755)

97. polychrome ceramic effigy jar (40-16-955)

98. brown ceramic effigy jar with a pedestal base (40-16-956)

99. polychrome ceramic effigy carafe (40-16-934)

100. polychrome ceramic spouted vessel (not located in the University Museum's collections)

101. brown fragmentary ceramic vessel (40-16-953)

102. polychrome ceramic effigy cover (40-16-968)

103. polychrome fragmentary ceramic vessel (40-16-969)

104. plain ceramic pedestal cup (40-16-979)

105. brown ceramic jar with three loop legs and two handles (40-16-993)

106.-215. 110 green stone beads, possibly serpentine (40-14-692; there may be more than 110 beads in this group of objects)

216.-228. 13 stone celts (40-14-706 through 718 [Fig. 49])

229.-234. 6 stone projectile points (40-14-693 through 695 [Fig. 49])

235.-237. 3 tripod basalt metates (40-14-698 through 700 [Fig. 51])

238.-240. 3 basalt manos (40-14-701 through 703)

241. and 242. quartz crystals (40-14-697)

243. and 244. stone concretions (40-14-704, 505)

245. stone chisel (40-14-719)

246. and 247. "winged" pendants, possible agate (40-14-691 [Fig. 43])

- 248. and 249. bone tubes (40-14-688a)
- 250. and 251. gold or tumbaga ear plugs or rods (40-13-188, 189; one was stolen from the University Museum's exhibition area [Fig. 45])
- 252. gold or tumbaga chisel (40-13-192)
- 253. copper plaque (40-14-690)
- 254. gold or tumbaga "nose clip" (40-13-193)
- 255.-341. 87 gold or tumbaga beads (40-13-190, 191; 43 of these beads were left with the Conte family in Panamá; the remainder were not located in the University Museum's collections)
- 342. shark tooth with hole (40-14-689)
- 343. and 344. canine teeth (40-14-689)

Features: Mason excavated a floor sample (40-16-1008) which contained possible evidence of bark cloth.

Comments: Mason suggested that the skeletons rested on a large piece of fabric or bark cloth represented by black and grey residue on the floor of the grave.

Grave 92

Field Designation: Burial 22, also cited as T2-B22

Provenience: Trench 2, 178.6-180.0 north by 171.1-179.1 west

Elevation: 8.3-9.5 feet (2.53-2.90 meters)

Sex: Unknown

Age: Unknown

Provenience: Unknown

- Artifacts: 1.-8. 8 polychrome ceramic plates (40-16-1036, 1037, 1040, 1048, 1050, 1788, 1791, 1792; one was not located in the University Museum's collections [Fig. 70, 73, 74])
- 9. and 10. red ceramic plates (40-16-1043, 1045)
 - 11. and 12. polychrome ceramic carafes (40-16-1041, 1042)
 - 13. red ceramic carafe (40-16-1038)
 - 14. and 15. ceramic effigy vessels (40-16-1047, 1051; one is polychrome and spouted and the other is black [Fig. 82])
 - 16. fragmentary red ceramic vessel (40-16-1039)
 - 17. brown fluted ceramic pedestal bowl (40-16-1053)
 - 18. fragmentary black ceramic vessel (40-16-1053)
 - 19. red ceramic pedestal cup (40-16-1044)
 - 20.-23. 4 stone celts (40-14-721 through 724)
 - 24. bone or antler tube (40-14-720; species unknown)

Features: None

Comments: The only human skeletal remain uncovered in this burial was a cranium found at 179.2 north and 178.4 west. The southern end of this grave was cut off, possibly by

Mason's excavation crew. Merrill suggested that this find may be a part of grave 87 (B16). If Mason's excavations did cut off the above portion of this grave, Merrill's suggestion is quite reasonable.

Grave 93

Field Designation: Burial 23, also cited as T2-B23

Provenience: Trench 2, 167.2-173.0 north by 171.9-163.7 west

Elevation: 6.35-5.42 feet (1.94-1.65 meters)

Sex: Female

Age: Adolescent or child

Position: The position of the skeleton was disturbed during Mason's excavations. Corning believed, however, that the burial was secondary. The body lay generally east and west. The femurs were interchanged with each other and the head of the left femur was pointing to the left and the right femur to the right; both were also pushed toward the skull. The humeri were grouped in four parallel rows; no ribs appeared in situ but two were observed to be below one of the the femora.

Artifacts: 1.-12. 12 polychrome ceramic jars (40-16-1060, 1074, 1089, 1793, 1103, 1106 through 110; two were left with the Conte family in Panamá and one had a spout.

13.-21. 9 polychrome ceramic effigy vessels (40-16-1059 a and b, 1062 through 1065, 1080, 1095, 1111; one had a cover and one was left with the Conte family in Panamá)

22.-27. 6 red ceramic jars (40-16-1071, 1090, 1097, 1791, 1802, 1100; one was not located in the University Museum's collections and one had a handle)

28.-31. 4 red ceramic carafes (40-16-1070, 1072, 1086, these vessels were fragmentary and their identification as carafes is suspect; one was left with the Conte family in Panamá)

32.-35. 4 polychrome ceramic pedestal plates (40-16-1102, 1113, 1114; one was not located in the University Museum's collections)

36.-39. 4 polychrome ceramic vases (40-16-1081, 1088, 1099; one had a spout)

40.-42. 3 red ceramic pedestal plates (40-16-1066, 1917 through 1921)

43.-45. 3 red ceramic vases (40-16-1079, 1083, 1084; one had a spout and another had three conical feet)

46.-49. 4 red ceramic carafes (40-16-1078, 1085, 1087, 1093; one had a black and white painted scroll neck and a fluted body)

50.-52. 3 red pedestal ceramic bowls (40-16-1061, 1082; one was left with the Conte

family in Panamá)

53.-55. 3 red and sepia ceramic vases (40-16-1091, 1105; one had a spout and one was left with the Conte family in Panamá)

56.-58. 3 black ceramic vases (40-16-1067, 1101; one was left with the Conte family in Panamá)

59. and 60. fragmentary red ceramic vessels (40-16-1098; one was not located in the University Museum's collections)

61. fragmentary polychrome ceramic vessel (40-16-1115, 1795)

62. and 63. fragmentary black fluted ceramic vessels (40-16-1094; one was not located in the University Museum's collections)

64. black ceramic pedestal bowl (40-16-1057)

65. red and sepia ceramic bowl (40-16-1058)

66. red and sepia ceramic vase (40-16-1076)

67. polychrome ceramic carafe (40-16-1073)

68. red ceramic censer handle (40-16-1075)

69. red ceramic bowl (40-16-1795)

70. black ceramic tray (40-16-1112)

71. and 72. stone celts (40-14-727, 728)

73. gold or tumbaga sheet

74. "ropy" material (40-14-726)

75.-97. 23 green stone beads (40-14-725)

98.-101. at least 4 badly decomposed tumbaga or copper plaques or disks

Features: None

Comments: During the excavation of this grave, Mason separated areas with mortuary furnishings into discrete fields labeled A through D. Area D was reassigned as belonging to grave 95 (B25). The other areas include the above objects. Except for area D, the value of these spatial designations is not clear and, therefore, I have abandoned reference to them. The relationships between this grave and grave 95 is confused; at one point Mason and, apparently, Corning and Merrill, thought that the graves were quite distinct but in a few pages of the field notes following this opinion Mason states "I followed (the) black cleavage layer further W(est) and found it to continue under plate #1 of B25 (grave 95), a few inches under, thus tying up #23 (grave 93) and #25 (grave 95)." While this stratigraphic "link" does not unequivocally tie together graves 93 and 95, it does leave unexplained the exact relationships between portions of the excavation.

The "ropy" material (74.) was largely discarded and only a sample was retained by the excavators. The material may have been either a textile or a woven basketry mat laid under the body. Corning observed that the skeleton was "lying on a cloth which appears grayish with white striations" and to the north of the body was

the "black remains of bark cloth." The body lay east and west on top of the bark cloth.

Mason identified the individual in this burial as a child in his notes on grave 95 (B25) and offered the conjecture that the age of the individual explained the presence of a large number of ceramic vessels of small size.

Grave 94

Field Designation: Burial 24, also cited as Burial 24a, Burial 24b, T2-B24a, and T2-B24b

Provenience: Trench 2, 173.9-178.5 north by 181.0-186.6 west

Elevation: 8.7-11.2 feet (2.65-3.41 meters)

Sex: Female

Age: Adult

Position: The individual was extended, lying chest down and oriented east and west. The person faced south and the entire body rested on a ledge within the grave

Artifacts: 1.-4. 4 red ceramic carafes (40-16-1118, 1119, 1125, 1127)

5.-7. 3 red ceramic plates (40-16-1121, 1122, 1124)

8. red ceramic pedestal bowl (40-16-1120)

9. polychrome ceramic bowl (40-16-1123)

10. red fluted ceramic jar (40-16-1803 through 1805)

11. polychrome spouted ceramic jar (40-16-1806 through 1811)

12. red ceramic spouted jar (40-16-1138)

13. red and white ceramic jar with two handles (40-16-1139)

14. red ceramic effigy pedestal bowl (40-16-1140)

15. gold or tumbaga chisel (40-13-194)

16. shark tooth with a hole (40-14-73)

17. stone flake (40-14-73)

18. and 19. boar tusks (40-14-729)

20.-23. 4 sting ray spines (40-14-73)

24.-74. 51 canine teeth (40-14-729, 730; 50 of these teeth were, according to the field notes, found in a circle as if strung as a necklace

Features: Carbonized material was reportedly found under a sherd layer but above the skeletal remains

Comments: The designation of "24a" refers to a layer of sherds found about 20 centimeters above the skeleton at approximately 175.5 north and 186.0 west. This layer was first identified as part of grave 84 (Burial 13b) but later reassigned to grave 94. Mason's Burial 24b in the field notes refers to the skeleton and associated mortuary furnishings of this grave. In general the mortuary furnishings were located in a long rectangular area running

east and west. Artifacts 16., 17. and 20. through 24. were found along one of the femurs; 25. through 74. were located near the extended arms; and the gold or tumbaga chisel (15.) near the knees.

Grave 95

Field Designation: Burial 25, also cited as T2-B25

Provenience: Trench 2, 170.1-174.8 north by 165.0-173.3 west

Elevation: 5.78-7.0 feet (1.67-2.13 meters)

Sex: One male and three females

Age: The male and one female were identified as adult; the other two females were probably adolescents and possibly children (described as "young females" in the field notes)

Position: The adult male was found laying on his back, head to the east and facing north; his left arm ran along his side and his right arm crossed his stomach; the femora spread out to the sides and the tibiae and fibulae pointed in toward one another, as if touching toes. The adult female was located approximately 30 centimeters to the north of the adult male. This individual was lying extended on her back, oriented east and west, and with her head at the east end facing north; the arms were extended along the side of the torso. The other two females were jumbled together near the left leg of the adult female. Their heads were toward the west and, possibly, they may have been flexed or secondary burials. The bones were so mixed up that any further observations were impossible.

Artifacts: 1.-4. 4 polychrome ceramic jars with spouts (40-16-1143, 1157, 1170, ----; one was left with the Conte family in Panamá)

5.-7. 3 red ceramic censers (40-16-1144, 1160, 1162)

8.-10. 3 polychrome ceramic effigy jars (40-16-1149, 1153, 1166)

11.-13. 3 red ceramic carafes (40-16-1148, 1167; one was left with the Conte family in Panamá)

14. and 15. red ceramic jars (40-16-1151; one was not located in the University Museum's collections)

16. fragmentary black ceramic pedestal vessel (40-16-1146)

17. red ceramic pedestal bowl (40-16-1150)

18. black ceramic effigy vessel (40-16-1154)

19. polychrome ceramic effigy vessel (40-16-1155)

20. plain tripod ceramic jar with two handles (40-16-1156)

21. fragmentary black fluted vessel (40-16-1158)

22. red ceramic bowl (40-16-1159)

23. fragmentary polychrome ceramic vessel (40-16-1163; the parts of this object may represent two vessels)
24. red ceramic pedestal bowl with a stand (40-16-1164)
25. fragmentary polychrome ceramic pedestal vessel (40-16-1178)
26. polychrome ceramic plate (40-16-1168)
27. red ceramic plate (40-16-1142)
28. stone celt (40-14-738)
29. shark tooth (40-14-734)
30. whale tooth (40-14-735)
31. "cord" fragments (40-14-733)
32. ceramic effigy whistle (----)
- 33.-37. 5 gold or tumbaga plaques (40-13-195, 196; two of the plaques were left in situ)
38. and 39. gold or tumbaga figurines (40-13-197, 40-14-737 [Fig. 34])
40. and 41. gold or tumbaga beads (40-13-202, 40-14-736)
- 42.-84. 43 green stone beads (all were left with the Conte family in Panamá)
- 85.-96. 12 metal bells (40-13-198 through 201, 40-14-732)

Features: None

Comments: The adult male is referred to in the field notes as the "principal occupant." No reasons are presented for this designation but I suspect that the facts that the skeleton was isolated from the other three individuals and wore a prominent gold or tumbaga pendant influenced Mason's and Corning's statement. In addition to the above pendant, eight of the metal bells and the green stone beads were located on the tibiae of the male adult; at the left hip and end of the left humerus, beneath the body, four of the remaining gold or tumbaga plaques were found; finally a copper figurine was found on the left shoulder. Corning observed that black earth below the adult male represented remains of bark cloth; samples were taken. Mason does not mention these samples and none were located in the University Museum's collections. However, some other floor samples were removed from the grave (40-16-1172). The last gold or tumbaga plaque was found under the adult female. This individual also had two impacted wisdom teeth in the lower jaw.

Grave 96

Field Designation: Burial 26, also cited as cache 26 and T2-B26a

Provenience: Trench 2, 178.6-181.3 north by 156.6-159.0 west

Elevation: 12.08-12.60 feet (3.68-3.84 meters)

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: 1.-3. black ceramic vessels (40-16-1199, 1201, 1203; these vessels are fragmentary and possibly may all be part of the same vessel)
4. plain ceramic tripod "pitcher" with one loop handle (not located in the University Museum's collections)
5. red ceramic vessel (40-16-1200)
6. red ceramic carafe (40-15-1205)
7. stone projectile point (left with the Conte family in Panamá)

Features: Mason noted carbon deposits on the inside of a number of larger sherds. The material was not kept and its exact provenience is unknown.

Comments: A large area to the west and north of the main concentration of ceramic artifacts in this grave was covered with heavy, thick, plain and low fired sherds. The grave area was roughly rectangular, measuring approximately .82 by .73 meters. The one meter above the grave contained relatively sterile fill with only a few isolated sherds. The designation of this find as a grave is suspect due to the lack of human skeletal remains.

Grave 97

Field Designation: Burial 26a, also cited as T2-B26a

Provenience: Trench 2, 178.2-180.8 north by 154.9-158.9 west

Elevation: 10.42-11.51 feet (3.18-3.51 meters)

Sex: Unknown

Age:Adult?

Position: No torso or long bones were found to aid in interpretation of the position of the skeleton

Artifacts: 1.-5. 5 red ceramic carafes (40-16-1179, 1180, 1185; two were left with the Conte family in Panamá)
6. and 7. red ceramic pedestal cups or small bowls (40-16-1181; one was left with the Conte family in Panamá)
8. and 9. red ceramic bowl (40-16-1182, 1186; the latter had red and white painted applique decoration)
10. polychrome ceramic pedestal plate (40-16-1183)
11. and 12. red plates (40-16-1184, 1192)
13. described by Mason as a "vase" with a high neck and a red slip (left with the Conte family in Panamá)
14. ceramic vessel, probably a carafe, with a black and white painted body (40-16-1187)
15. polychrome ceramic bowl (40-16-1188)
16. and 17. polychrome ceramic plates (40-16-

1189, 1194)
18. and 19. red ceramic censers (40-16-1190, 1826; one has a flat handle and the other has a cylindrical handle)
20. polychrome spouted jar (40-16-1193)
21. red ceramic vessel (40-16-1195)
22.-34. 13 smashed gold or tumbaga beads (40-13-206 [Fig. 46])
35. tubular gold or tumbaga bead (40-13-204; not located in the University Museum's collections)
36. green stone bead associated with 35. (40-13-204; not located in the University Museum's collections)
37.-40. 4 objects of gold or tumbaga, two possible beads and two unknown objects (40-13-203; not located in the University Museum's collections)
41. and 42. two animal teeth, species unidentified (40-14-740; not located in the University Museum's collections)
43.-126. 84 gold or tumbaga beads (40-13-205; the field notes noted that there were 35 beads in this group; the present quantity is based on a count of beads in the University Museum's collections which are cataloged under the above number)

Features: None

Comments: The grave was in a roughly rectangular shape with the long ends oriented east and west. Only a cranium with 27 teeth were found associated with the above furnishings.

Grave 98

Field Designation: Burial 26b, also cited as T2-B26b
Provenience: Trench 2, 181.1-184.7 north by 156.3-160.6 west

Elevation: 11.14-11.16 feet (3.40 meters)

Sex: Male

Age: Adult

Position: Extended, arms flexed, oriented southeast and northwest with the cranium at the southeast; no information in the field notes on whether the individual rested on its back or stomach

Artifacts: 1. red ceramic plate (40-16-1922)
2. red ceramic bowl (40-16-1197)

Features: None

Comments: The grave was rectangular with the long axis oriented to the same direction as the skeleton. The body sloped slightly downward from the head toward the northwest. One tibia of the individual was bent straight down into the floor of the grave and cut off as if disturbed by

aboriginal excavations associated with grave 74. The entire skeleton rested on a bed of sherds, most of which were discarded in the field but described as "coarse." The entire grave was just a little higher in elevation than grave 97 (Burial 26a); the two were separated by only 10 centimeters.

Grave 99

Field Designation: Burial 27, also cited as Cache 27 and T2-B27

Provenience: Trench 2, 173.9-175.5 north by 143.8-145.6 west

Elevation: 10.0-11.1 feet (3.05-3.38 meters)

Sex: Unknown

Age: Unknown

Position: Unknown

Artifacts: 1.-6. 6 red ceramic carafes with black and white painted necks (40-16-1833, 1834, 1844 through 1846)

7.-10. 4 polychrome ceramic carafes (40-16-1832, 1209, 1213)

11. and 12. red ceramic carafe (40-16-1210, 1835)

13. polychrome effigy jar (40-16-1847)

14. and 15. tubular gold or tumbaga beads (40-13-207)

Features: None

Comments: Mason reported in the field notes that "some bones at a lower level" were found by his son, John, but he was "uncertain if [they were] articulated." No other information on the skeletal remains was reported. The grave also yielded two bags of miscellaneous sherds.

Grave 100

Field Designation: Burial 28, also cited as T2-B28

Provenience: Trench 2, 186.7-190.7 north by 168.0-172.8 west

Elevation: 11.58-12.30 feet (3.53-3.75 meters)

Sex: Unknown

Age: Unknown

Position: Possibly two individuals extended and oriented north and south or a disarticulated, secondary burial

Artifacts: 1.-8. 8 polychrome ceramic plates (40-16-1217, 1222, 1224, 1225, 1227, 1229, 1849; one was not located in the University Museum's collections [Figs. 55, 69, 71, 73])

9.-17. 9 red ceramic carafes (40-16-1218, 1221, 1226, 1233, 1852, 1853; six had black and white painted scrolls on the necks; two were left in situ; one was not located in the University Museum's collections)

18.-20. 3 red ceramic jars (40-16-1234; two

were left in situ)

21. and 22. red ceramic plates (40-16-1220, 1223)

23. and 24. red ceramic bowls (40-16-1850; one was not located in the University Museum's collections)

25. red ceramic "pot rest" (40-16-1219)

26. possible polychrome ceramic jar (left in situ and described by Mason in the field notes as "painted")

27. red ceramic censer handle (40-16-1231)

28. black pedestal ceramic vessel (40-16-1232)

29. green stone effigy ornament (40-14-743 [Fig. 43])

30. eroded copper ornament (40-14-741)

31. quartz crystal (40-14-744)

32. stone celt (40-14-745)

Features: A "brown substance," (40-14-742) possibly hematite or pyrite, was uncovered in association with the copper ornament (30.).

Comments: The burial was only partially excavated and, therefore, the size and quantity of mortuary furnishings and exact number and position of human skeletons is not known. Of the skeletal remains which were uncovered, Corning notes that two skulls were found, one at 187.1 north and 171.6 west and the other at undetermined coordinates. Some long bones, lying north and south, continued into the unexcavated north wall of the grave and, according to Corning, they were not in order but all mixed up. This observation suggests either a disarticulated burial or one damaged by aboriginal excavations.

Appendix 6

Distribution Charts of Mortuary Arts and Cluster Diagrams

A step-by-step account of the clustering procedures will allow the reader to more thoroughly evaluate the results. The procedures were identical for each group of graves discussed in this study.

The use of cluster analysis stems from its ability to orderly arrange large amounts of data into homogeneous or related groups. The results of this technique are analogous to the taxonomic diagrams created by biologists for a family or species of plants or animals. Art historians also regularly classify subsets of the art world into homogeneous groups or clusters. For example, a scholar studying Christian paintings from the fourteenth through sixteenth centuries might fashion as a category--for analytical purposes--a group of paintings which depict a young woman holding a small, naked child and call it a madonna. The scholar may sub-divide this large group of paintings into those with child-holding women who look to their left and have one breast exposed. Once these categories have been created, they are contrasted and compared with other sets of paintings. The process of grouping or classifying may continue indefinitely until all possible variables are exhausted.

The results of cluster are similar. However, while the researcher selects the particular variables which determine the character of the groupings, the computational procedures of cluster analysis independently measure which combinations of variables are more closely or distantly related. This is especially advantageous when a researcher does not have a priori assumptions about how the variables should be grouped and when considerable amounts of data are being examined.

The first step in the cluster procedures is the definition of variables. Since my study seeks to examine the relationship between social dimensions and mortuary arts, the variables which I selected pertain to the demographic and physical characteristics of the interred individuals and the mortuary arts found in the graves. The demographic and physical criteria, for example, age, sex, and position of the skeleton, were designated as independent variables against which the dependent variables--organized by cluster analysis--would be compared. The independent variables were the mortuary arts.

Several criteria determined the standards by which the mortuary arts were classified. I initially assumed that the raw material of an object may have had social significance and, therefore, the works of art were separated accordingly and included metal (or tumbaga/gold),

ceramic or clay, bone or ivory, stone or lithic, shell, and vegetal. Each of these sets were further divided into two groups: decorated and undecorated objects--criteria admittedly difficult to precisely define. Those mortuary arts which were painted with two-dimensional designs, modeled into three-dimensional non-utilitarian forms--for example, effigy vessels--or seemed to be part of a more complex decorated item--for example, as a bead relates to a necklace--were identified as "decorated." All mortuary arts which did not meet these criteria were treated as "undecorated." Finally, the mortuary arts were further classified by their physical appearance and identifiable function. The final list of the works of art included undecorated and decorated jar, ceramic figurine, metal bead, stone or lithic projectile point, nose decoration, ceramic bowl, shell pendant, and so forth (Tables A-3 and A-17). Generic categories, such as worked and unworked stone, served to classify objects which I was unable to identify. Due to the differences in the mortuary arts from the archaeological sites, two lists were used to identify the variables, one for the Tonosí Valley sites and one for Sitio Conte.

While the nomination of the above criteria included a degree of intuition on my part, it also avoided an endless selection of potential variables. In this regard, Aiden-derfer and Blashfield point out that:

The temptation to succumb to a naive empiricism in the use of cluster analysis is very strong, since the technique is ostensibly designed to produce "objective" groupings of entities. By "naive empiricism" we mean the collection and subsequent analysis of as many variables as possible in the hope that the "structure" will emerge if only enough data are obtained (1984:19-20).

After selection of the variables, their distribution in each grave was tallied (Tables A-1, A-2, A-5, A-6, A-8, A-9, A-11, A-13 through A-16). (If a variable was not found in any one of the graves from a site, it was omitted from the tally pertaining to that site.) The tallies of the variables, or mortuary arts, from the graves of each particular site were individually calculated by the cluster analysis programs detailed in SAS (1979, 1982). The computations created dendrograms (Tables A-4, A-7, A-10, and A-12) which graphically depict the degrees of homogeneity among groups of graves as determined by the distribution of the mortuary arts. The dendrograms are like a diagram of tree roots turned upside down. The first cluster, or homogeneous grouping, includes all, or "N", graves. The succeeding line separates a grave or

group of graves from the larger group resulting in N-1 clusters. This partitive process continues until all the graves are represented as individual groups or clusters. Graves which had no mortuary arts created an obvious homogeneous group and, therefore, were not included in the cluster analysis.

The complete linkage cluster analysis provided the most consistently useful results. Moreover, the algorithm used by this method (as well as the other three) involves a Euclidian distance measurement of the dissimilarity of the variables (see Chapter I, pp. 25-31). One advantage of this measurement is that standardization of the data has little or no effect on the results of the analysis. Since this study is interested in the quality of the mortuary arts as well as the quantity, the distributions of the variables were recalculated to note only their presence or absence. The results of these cluster analyses reflected no appreciable differences from the other tests. The dendrograms in Appendix 6 are derived from this latter data set.

Finally, I shall address the matter of the selection of the number of clusters for interpretation. The 1982 SAS User's Guide stated that, "there are no satisfactory methods for determining the number of clusters for any type of cluster analysis" (1982:419). This view has been seconded by many other writers including Aldenderfer and Blashfield who observed that, "this fundamental step is among the as yet unsolved problems of cluster analysis" (1984:53). The most common technique to select a "relevant" number of clusters is a heuristic procedure which "at the most basic level, a hierarchical tree is 'cut' by the subjective inspection of the different levels of the tree" (Aldenderfer and Blashfield 1984:54). SAS provides an analytical method, the cubic clustering criterion (CCC), to determine the number of clusters. Their endorsement of this method is less than enthusiastic: "The power of the CCC seems to be at least as good as that of the human eye in two dimensions with 100 observations" (SAS 1982:420). In fact, all the available methods seem little better than the "subjective inspection" of the dendrograms. This latter method is the one which I employed in this study.

Table A-1
 El Indio (Phase II):
 Distribution of Mortuary Arts

Grave	Objects:														
	C1	C2	C3	C4	C6	C7	C9	C11	C14	L3	L4	S3	S4	S5	B10
1			3					1							
2			1		1										
3					1			2							
4															
5													1		
6															
7															
8															
9				1					2	1				5	?
10															
11															
12								1							
13			1	1											
14															
15	1		2												
16			2	1											
17			1	1	4										
18															
19															
20															
21															
22															
23															
24		1	1					1							
25				1											
26						1									
27					1			1						5	
28												2			
29															
30															
31															
32				1											
33															
34															
35															
36							1			1					
37										1					

Table A-2
El Indio (Phase II):
Presence/Absence of Mortuary Arts

Grave	Objects:														
	<u>C1</u>	<u>C2</u>	<u>C3</u>	<u>C4</u>	<u>C6</u>	<u>C7</u>	<u>C9</u>	<u>C11</u>	<u>C14</u>	<u>L3</u>	<u>L4</u>	<u>S3</u>	<u>S4</u>	<u>S5</u>	<u>B10</u>
1			X					X							
2			X		X										
3					X			X							
4															
5													X		
6															
7															
8															
9				X					X	X			X	X	
10															
11															
12								X							
13			X	X											
14															
15	X		X												
16			X	X											
17			X	X	X										
18															
19															
20															
21															
22															
23															
24		X	X					X							
25				X											
26						X									
27					X			X					X		
28												X			
29															
30															
31															
32				X											
33															
34															
35															
36							X			X					
37										X					

Table A-3
 Key to Object Codes
 for Tonosi Valley Sites

Ceramics:

- C1-undecorated jar
- C2-undecorated plate
- C3-undecorated bowl
- C4-decorated plate/bowl
- C5-decorated pedestal plate or bowl
- C6-"doble" (compound silhouette) vessel
- C7-paired vessel
- C8-cup
- C9-effigy vessel
- C10-vessel support
- C11-unknown vessel type
- C12-unknown pedestal vessel type
- C13-whistle
- C14-figurine
- C15-decorated jar

Bone:

- B1-pendant
- B2-bead
- B3-miscellaneous incised object
- B4-projectile point
- B5-sting ray point or spine
- B6-crab bone
- B7-shark's tooth
- B8-bird bone
- B9-deer antler
- B10-deer bone
- B11-unknown bone, non-human
- B12-canine tooth
- B13-fish bone

Lithics:

- L1-projectile point
- L2-mano
- L3-metate
- L4-axe or chisel
- L5-pendant
- L6-agate bead
- L7-serpentine bead
- L8-unworked stone
- L9-worked stone

Tumbaga/Gold:

- T1-bead
- T2-pendant
- T3-plaque
- T4-figurine
- T5-ring
- T6-unknown object

Shell:

- S1-pendant
- S2-figurine
- S3-bead
- S4-worked shell
- S5-unworked shell

Table A-4
El Indio, Phase II
Cluster Tree Diagram

Number of Clusters	Grave:																		
	1	15	12	24	2	3	17	27	5	26	29	13	16	25	32	36	37	9	
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17	****	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16	****	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15	****	*	*	*****	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*
14	****	*	*	*****	*	*	*	*	*	*	*	*****	*****	*	*	*	*	*	*
13	*****	*	*****	*	*	*	*	*	*	*	*	*****	*****	*	*	*	*	*	*
12	*****	*	*****	*	*	*	*	*	*	*	*	*****	*****	*	*	*	*	*	*
11	*****	*	*****	*	*	*	*	*	*	*	*	*****	*****	*	*	*	*	*	*
10	*****	*	*****	*	*	*	*	*	*	*	*	*****	*****	*****	*	*	*	*	*
9	*****	*	*****	*	*	*	*	*	*	*	*	*****	*****	*****	*****	*	*	*	*
8	*****	*	*****	*	*	*	*	*	*	*	*	*****	*****	*****	*****	*****	*	*	*
7	*****	*	*****	*	*	*	*	*	*	*	*	*****	*****	*****	*****	*****	*****	*	*
6	*****	*	*****	*	*	*	*	*	*	*	*	*****	*****	*****	*****	*****	*****	*****	*
5	*****	*	*****	*	*	*	*	*	*	*	*	*****	*****	*****	*****	*****	*****	*****	*
4	*****	*	*****	*	*	*	*	*	*	*	*	*****	*****	*****	*****	*****	*****	*****	*
3	*****	*	*****	*	*	*	*	*	*	*	*	*****	*****	*****	*****	*****	*****	*****	*
2	*****	*	*****	*	*	*	*	*	*	*	*	*****	*****	*****	*****	*****	*****	*****	*
1	*****	*	*****	*	*	*	*	*	*	*	*	*****	*****	*****	*****	*****	*****	*****	*

Table A-5
 El Indio (Phase III):
 Distribution of Mortuary Arts

Objects:

	C	C	C	C	C	C	T	T	T	S	S	S	S	S	L	L	B	B	B	B	B	B	B	B	B	B
	1	4	5	8	9	15	2	3	4	1	2	3	4	5	5	9	1	3	5	7	8	9	10	11	12	13

Grave

1		1																								
2		1							1						1											
3		1							1	?									?						2	
4			1		1																					
5																										
6																										
7																										
8		2	2						1	12	2						1	2								
9																										
10			2		2	1							3							?					?	
11		2	2					1																		
12																										
13																										
14		2	2																							
15		1							2	40																?
16																										
17																										
18																										
19		1	2												?		1	2								?
20		1	1												?											?
21										2	2	?											13			?
22		2	2							2	?						1									?
23																							2			1
24				1																						
25																										
26		1	1																							
27		2	2																							
28																										32
29		1	1																							?
30																										
31						1																				
32																										
33		2	2																				4			
34		1							2						1											7
35		3	1																							
36		1																								
37		1																								
38		1	2		1	1									1											
39		6	6																							?
40		2	3																							
41										1																
42		3	2	1	1				3	3				12?												?

Key: See Table A-3

Table A-6
El Indio (Phase III):
Presence/Absence of Mortuary Arts

Grave	Objects:																								
	C	C	C	C	C	T	T	T	S	S	S	S	L	L	B	B	B	B	B	B	B	B	B		
	1	4	5	8	9	15	2	3	4	1	2	3	4	5	5	9	1	3	5	7	8	9	10	11	12
1		X																							
2		X							X						X										
3		X							X	X									X					X	
4			X		X																				
5																									
6																									
7																									
8	X	X							X	X	X				X	X									
9																									
10		X			X	X						X							X					X	
11	X	X					X																		
12																									
13																									
14	X	X																							
15	X								X	X															X
16																									
17																									
18																									
19	X	X									X				X		X								X
20	X	X									X														X
21									X	X	X									X					X
22	X	X							X	X					X										X
23																			X						X
24			X																						
25																									
26	X	X																							
27	X	X																							
28																									X
29	X	X																							X
30																									
31						X																			
32																									
33	X	X																		X					
34	X								X					X											X
35	X	X																							
36	X																								
37	X																								
38	X	X			X		X								X										
39	X	X																							X
40	X	X																							
41										X															
42	X	X		X	X		X	X				X											X		

Key: See Table A-3

Table A-7
 El Indio (Phase III):
 Cluster Tree Diagram

Number of Clusters	Grave:	1	4	31	24	23	28	11	14	26	27	35	40	33	36	37	39	20	29	10	38	2	41	3	34	21	15	22	19	8	42		
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Table A-8
 La Cañaza: Distribution of Mortuary Arts

Grave	Objects:													
	C1	C2	C5	C11	C13	T2	T3	S1	S2	S3	S5	B5	B6	B7
1														
2					1									1
3		1	1							1	610	2		
4	2		2											
5														
6			2			1								
7			2							75	1	1	1	
8														
9										75				
10														
11														
12														
13	2		2					1		2	2			1
14	1													
15														
16	2		2					1						
17														
18	1		1											
19							1	1						
20														
21														
22														
23														
24	1													
25														
26	2		2					2						
27														

Key: See Table A-3

Table A-9
 La Cañaza: Presence/Absence of Mortuary Arts

Grave	<u>Objecta:</u>													
	<u>C1</u>	<u>C2</u>	<u>C5</u>	<u>C11</u>	<u>C13</u>	<u>T2</u>	<u>T3</u>	<u>S1</u>	<u>S2</u>	<u>S3</u>	<u>S5</u>	<u>B5</u>	<u>B6</u>	<u>B7</u>
1														
2					X								X	
3		X	X						X	X		X		
4	X		X											
5														
6			X			X								
7			X							X	X	X	X	
8														
9										X				
10														
11														
12														
13	X		X					X		X	X			X
14	X													
15														
16	X		X					X						
17														
18	X		X											
19							X	X						
20														
21														
22														
23														
24	X													
25														
26	X		X					X						
27														

Key: See Table A-3

Table A-10
La Cañaza Cluster Tree Diagram

Number of Clusters	Grave:																		
	2	12	16	27	3	24	35	9	26	8	11	18	22	33	37	5	14	21	
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15	*	*	*	*	*****	*	*	*****	*	*	*	*	*	*	*	*	*	*	*
14	*	*	*	*	*****	*****	*****	*****	*	*	*	*	*	*	*	*	*	*	*
13	*	*	*	*	*****	*****	*****	*****	*****	*	*	*	*	*	*	*	*	*	*
12	*	*	*	*	*****	*****	*****	*****	*****	*	*	*	*	*	*	*	*	*	*
11	*	*	*	*	*****	*****	*****	*****	*****	*****	*	*	*	*	*	*	*	*	*
10	*	*	*	*	*****	*****	*****	*****	*****	*****	*****	*	*	*	*	*	*	*	*
9	*	*	*	*	*****	*****	*****	*****	*****	*****	*****	*****	*	*	*	*	*	*	*
8	*	*****	*	*	*****	*****	*****	*****	*****	*****	*****	*****	*****	*	*	*	*	*	*
7	*****	*****	*	*	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*	*	*	*	*
6	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*	*	*	*
5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*	*	*
4	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*	*
3	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*
2	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

Table A-11
 E1 Cafetal: Presence/Absence of Mortuary Objects

Grave	Object													
	C1	C2	C5	C6	C8	C9	C10	C11	C13	L5	L6	L7	L8	
1					X									
2														
3					X					X	X			
4				X				X			X	X	X	
5														
6							X							
7				X										
8					X				X					
9					X									
10					X								X	
11														
12	X							X			X			
13					X								X	
14							X						X	
15					X			X						
16			X		X									
17		X		X	X									
18								X						
19														
20														
21							X						X	
22					X	X		X					X	
23		X												
24		X			X			X			X			
25					X			X		X	X			
26					X			X						
27						X						X		
28														
29		X				X								
30								X						
31								X						
32		X						X						
33													X	
34														
35					X									
36		X						X						
37								X						
38						X								

Table A-11 continued

Grave	Object									
	S4	S5	B4	B11	T1	T2	T3	T4	T5	T6
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										X
14	X	X								
15										
16										
17										
18										
19										
20										
21				X						
22								X		
23										
24										
25							X			
26										
27										
28										
29					X					X
30			X			X		X	X	
31										
32										
33										
34										
35										
36								X		
37							X			
38							X	X		X

Key: See Table A-3

Table A-12
 El Cafetal
 Cluster Tree Diagram

Number of Clusters	Grave:	1	9	8	27	6	10	19	33	22	7	15	26	35	13	16	17	24	12	23	32	36	38	14	21	3	25	29	
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
26	****	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
25	****	*	*	*	*	*	*	*	****	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
24	****	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23	****	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22	****	*	*	*	*	****	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21	****	*	*	*	*	****	*	*	*****	*	*	*	*	*	*	****	*	*	*	*	*	*	*	*	*	*	*	*	*
20	*****	*	*	*	****	*	*	*	*****	*	*	*	*	*	*	****	*	*	*	*	*	*	*	*	*	*	*	*	*
19	*****	*	*	*	****	*	*	*	*****	*	*	*	*	*	*	****	*	*	*	*	*	*	*	*	*	*	*	*	*
18	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	****	*	*	*	*	*	*	*	*	*	*	*	*	*
17	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*	*
16	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*	*
15	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*	*
14	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*	*
13	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	****	*	*	*	*	*	*	*	*	*	*	*	*	*
12	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	****	*	*	*	*	*	*	*	*	*	*	*	*	*
11	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*
10	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*
9	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*
8	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*	*
7	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*
6	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*
5	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*
4	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*
3	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*
2	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*
1	*****	*	*	*****	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*

Table A-13
 Sitio Conte: Presence/Absence
 of Lithic Mortuary Arts

Grave	Lithic																	
	3	5	6	7	8	9	10	11	12	13	16	17	18					
1	X	X	X	X	X				X	X	X							X
2		X	X	X	X						X		X					
3				X	X													
4		X	X	X				X		X								X
5	X	X	X	X	X			X	X	X	X							X
6	X	X	X	X	X					X	X							X
7		X	X		X					X								
8	X							X										
9	X									X								
10																		
11										X								
13	X	X	X	X	X			X		X								X
14	X				X					X								
15	X		X							X								
16	X	X	X	X	X					X								X
17			X	X						X								X
18										X								
19		X		X	X							X						
20	X	X	X	X						X	X							X
21	X			X						X								
22			X															
23	X	X	X	X						X								
24	X		X	X	X				X	X	X							
25																		
26	X	X	X	X	X			X	X	X	X							X
27					X					X								
29					X								X					
30				X														
31			X							X								X
32	X		X	X	X				X	X								
33																		
36			X															
37			X		X													
38																		
39																		
42											X							
43			X								X							
44																		
45			X															
46																		
47																		

Table A-13 continued

Grave	Lithic																	
	3	5	6	7	8	9	10	11	12	13	16	17	18					
48																		
54	X		X															
55																		
56																		
58			X						X									
59																		
60			X															
62			X															
63		X																
65																		
66																		
67			X				X										X	
68	X	X	X	X														
69																		
70																		
71	X																	
72			X															
73																		
74	X	X	X		X					X		X				X		
75	X		X														X	
76	X																	
77																		
78																		
79	X		X															
80																		
81			X															
82	X		X		X													
83							X	X										
84																		
85																		
86	X	X	X							X								
87	X		X															
88			X															
89		X	X						X									
90		X	X						X	X								
91	X	X	X		X	X	X	X									X	
92			X															
93			X		X													
94																		
95			X		X													
96	X																	
97					X													
98																		
99																		
100		X	X														X	

Table A-14
 Sitio Conte: Presence/Absence of
 Metal Mortuary Arts

Grave	Metal													
	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	X		X	X	X	X	X	X		X	X	X		X
2		X			X									
3					X		X	X						
4				X				X	X					
5		X	X		X	X	X	X		X	X			X
6					X	X		X						
7														
8														
9														
10														
11														
13			X		X			X				X		
14					X									
15														
16			X					X		X				
17														
18														
19													X	
20													X	
21														
22														
23					X				X					
24			X		X	X		X	X					
25														
26		X	X		X	X	X		X	X	X	X	X	X
27														
29					X									
30														
31														
32	X	X	X	X	X	X	X	X	X	X	X	X	X	X
33														
36														
37														
38														
39														
42														
43			X		X									
44														
45														
46														
47					X									

Table A-14 continued

<u>Grave</u>	<u>Metal</u>													
	27	28	29	30	31	32	33	34	35	36	37	38	39	40
48														
54					X			X						
55														
56								X						
58														
59														
60														
62														
63														
65														
66														
67														
68					X									
69														
70														
71														
72			X	X										
73														
74	X	X		X	X	X	X	X	X	X	X	X	X	X
75														
76														
77														
78								X						
79														
80														
81													X	
82														
83														
84														
85														
86			X											
87														
88					X	X		X						
89														
90	X	X		X	X	X			X					
91		X		X				X	X		X	X		
92														
93		X												
94													X	
95		X		X	X				X					
96														
97					X									
98														
99														
100								X						

Table A-15
 Sitio Conte: Presence/Absence of
 Bone, Ivory and Vegetal Mortuary Arts

<u>Grave</u>	<u>Bone</u>														<u>Vegetal</u>	
	67	68	69	70	71	72	73	74	75	76	78	79	83	86	88	54
1		X		X	X	X	X	X		X	X	X	X	X	X	
2					X				X			X		X	X	
3																
4								X								
5		X	X	X	X	X	X	X			X				X	
6	X				X			X		X						
7																
8																
9																
10																
11									X							
13	X	X			X	X		X			X	X	X			
14																
15																
16		X			X		X									
17																
18																
19								X					X			
20	X							X			X		X			
21								X								
22																
23								X					X			
24		X			X			X							X	X
25																
26	X	X			X		X	X		X	X	X	X	X	X	X
27																
29																
30																
31												X				
32	X	X	X	X			X	X	X			X				
33																
36																
37																
38																
39	X															
42																
43									X							
44																
45																
46																
47																

Table A-15 continued

Grave	<u>Bone</u>													<u>Vegetal</u>		
	67	68	69	70	71	72	73	74	75	76	78	79	83	86	88	54
48																
54										X						
55																
56																
58																
59																
60																
62																
63																
65																
66																
67																
68									X							
69																
70																
71																
72					X			X				X				
73																
74	X			X	X			X		X	X		X			X
75											X					
76																
77																
78																
79																
80																
81																
82																
83																
84																
85				X				X								
86		X					X			X		X				X
87																
88			X		X											X
89																
90	X				X			X			X					
91					X			X		X						
92				X												
93																
94								X		X		X	X			
95							X	X								
96																
97											X					
98																
99																
100																

Table A-16
 Sitio Conte: Presence/Absence
 of Ceramic Mortuary Arts

Grave	Ceramic								
	97	98	99	100	101	102	103	104	105
1	X	X	X	X	X	X	X	X	X
2		X	X	X	X	X	X	X	X
3			X	X	X	X	X		X
4		X	X	X	X	X	X	X	X
5		X	X	X	X	X	X	X	X
6		X	X	X	X	X	X	X	X
7		X	X	X	X				X
8		X	X	X					
9		X	X	X	X	X	X		
10						X			
11				X					
13		X	X	X	X	X	X	X	X
14				X		X	X	X	X
15		X	X	X	X	X	X	X	X
16	X		X	X	X	X	X	X	X
17				X	X				X
18		X		X		X	X		
19		X		X	X	X	X	X	
20		X		X	X	X	X	X	X
21				X	X	X	X	X	X
22				X		X			
23		X		X	X	X	X	X	
24		X	X	X	X	X	X	X	X
25				X	X	X			
26		X	X	X	X	X	X	X	X
27									
29				X		X			
30									
31				X	X	X	X		
32		X	X	X	X	X	X	X	X
33						X		X	
36				X		X		X	
37				X	X	X	X		
38				X		X			
39				X		X	X		
42									
43			X	X	X	X			X
44					X				
45					X	X			X
46				X					
47				X		X			
48				X	X			X	
54		X		X	X		X		X

Table A-16 continued

Grave	Ceramic								
	97	98	99	100	101	102	103	104	105
55		X		X		X		X	
56		X	X			X			
58				X	X	X			
59						X			
60									
62				X					
63									
65		X		X	X				X
66						X			
67				X		X			X
68		X	X	X	X	X	X	X	X
69		X	X			X			
70		X	X						
71				X			X	X	X
72		X		X				X	X
73			X			X			
74	X	X	X	X	X	X	X	X	X
75			X	X	X	X	X	X	X
76			X	X					X
77		X	X	X		X		X	X
78			X	X	X	X	X	X	X
79		X	X	X	X	X		X	X
80		X	X	X		X	X		X
81	X	X	X	X		X	X	X	X
82		X	X		X	X		X	X
83		X	X	X		X			X
84			X					X	
85			X			X	X		X
86				X	X		X		
87		X	X			X	X		X
88		X	X	X		X	X	X	X
89			X			X	X	X	
90				X	X	X	X	X	X
91		X	X	X	X	X	X	X	X
92		X	X					X	X
93		X	X	X	X	X			
94		X				X	X	X	
95		X		X		X	X	X	X
96		X					X		
97		X		X	X	X	X	X	X
98				X				X	
99		X	X						
100		X	X	X		X	X	X	X

Table A-16 continued

Grave	Ceramic									
	112	113	114	115	116	117	118	119	122	
1	X	X	X	X		X	X	X	X	
2	X			X			X	X	X	
3										
4			X			X	X	X		
5	X	X		X	X	X	X		X	
6			X			X	X	X		
7			X			X	X			
8			X				X			
9			X			X		X		
10										
11										
13			X		X	X	X			
14			X			X				
15	X		X			X	X			
16	X	X			X	X	X			
17			X			X	X			
18										
19		X				X	X	X		
20						X	X			
21		X					X			
22							X			
23						X	X			
24		X			X	X	X	X	X	
25							X			
26		X	X	X		X	X	X		
27			X							
29										
30										
31	X	X					X			
32						X	X	X		
33										
36							X			
37										
38							X			
39	X			X			X			
42										
43	X					X				
44										
45						X				
46										
47	X		X	X						
48			X				X			
54							X			

Table A-16 continued

Grave	Ceramic								
	112	113	114	115	116	117	118	119	122
55						X			
56						X			
58	X					X	X		
59									
60									
62									
63									
65									
66						X			
67				X					
68	X				X	X	X		
69									
70									
71				X					X
72						X			
73									
74			X	X	X	X	X		
75						X	X		X
76			X		X	X			
77									
78						X	X		
79				X		X			X
80									
81			X				X		
82			X	X					
83			X						
84									
85		X		X		X			
86						X	X		
87		X				X			
88			X				X		
89						X	X		
90		X	X			X	X		X
91		X	X	X		X	X		X
92			X			X			X
93			X	X		X	X		
94						X			
95						X			
96									
97							X		X
98									
99						X			
100							X		

Tables A-17
Sitio Conte: Mortuary Art Codes

Lithic

L1-miscellaneous worked*	L10-mano
L2-miscellaneous unworked	L11-concretion
L3-point	L12-mirror back or frame
L4-figurine*	L13-whetstone**
L5-pendant	L14-polishing stone**
L6-celt or adze	L15-nose decoration
L7-knife	L16-ear decoration
L8-bead	L17-slab
L9-metate	L18-quartz crystal

Metal

M25-miscellaneous worked*	M34-nose decoration
M26-miscellaneous unworked	M35-ear decoration
M27-ribbon	M36-bell
M28-miscellaneous onlay	M37-wrist or ankle cuff
M29-plaque	M38-chisel
M30-disk	M39-ring or bracelet
M31-bead	M40-helmet or head piece
M32-figurine	M41-mirror back or frame*
M33-pendant	

Vegetal

V50-worked fibers*	V54-resin figurine
V51-unworked fibers*	V55-textile impression*
V52-seed*	V56-miscellaneous wood*
V53-resin bead*	

Shell

S60-miscellaneous worked*	S62-point*
S61-miscellaneous unworked*	

Bone or Ivory

B65-miscellaneous worked*	B77-rabbit tooth*
B66-miscellaneous unworked*	B78-unknown animal tooth
B67-point	B79-peccary tusk
B68-bone pendant	B80-jaguar bone or claw*
B69-bone figurine	B81-deer bone*
B70-tube	B82-deer teeth*
B71-bead	B83-sting ray spine
B72-chisel or awl	B84-ivory figurine*
B73-whale tooth	B85-ivory pendant*
B74-shark tooth	B86-turtle shell or carapice
B75-jaguar tooth	B87-bone atlatl*
B76-canine tooth	B88-manatee rib

Table A-17 continued

Clay or Ceramic

C95-miscellaneous worked*	C112-undecorated cover
C96-undecorated bottle*	C113-decorated cover
C97-decorated bottle	C114-undecorated vessel
C98-undecorated carafe	C115-decorated vessel
C99-decorated carafe	C116-rectangular tray
C100-undecorated bowl	C117-effigy vessel
C101-decorated bowl	C118-censer
C102-undecorated jar	C119-cup
C103-decorated jar	C120-whistle*
C104-undecorated plate	C121-rattle*
C105-decorated plate	C122-figurine

Notes

- * These objects were not included in the cluster analyses because of limited frequency.
- ** L13 and L14 were combined into one category for the cluster analyses, L13.

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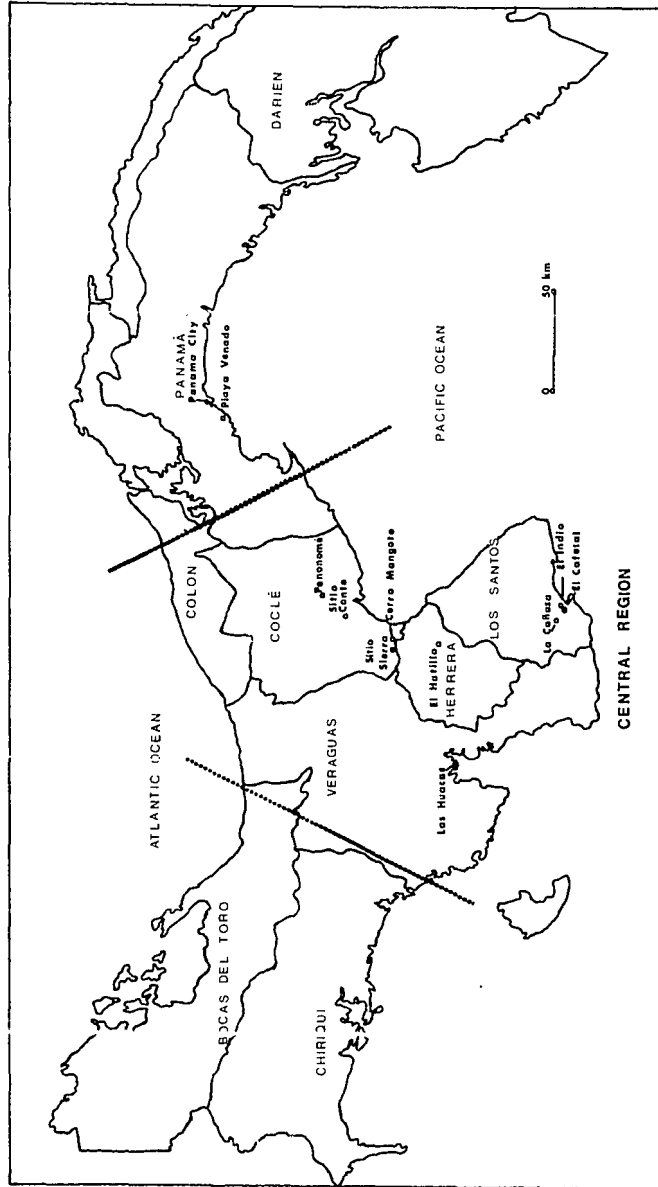


Fig. 1 Panamá and the Central Region (after Cooke 1976).

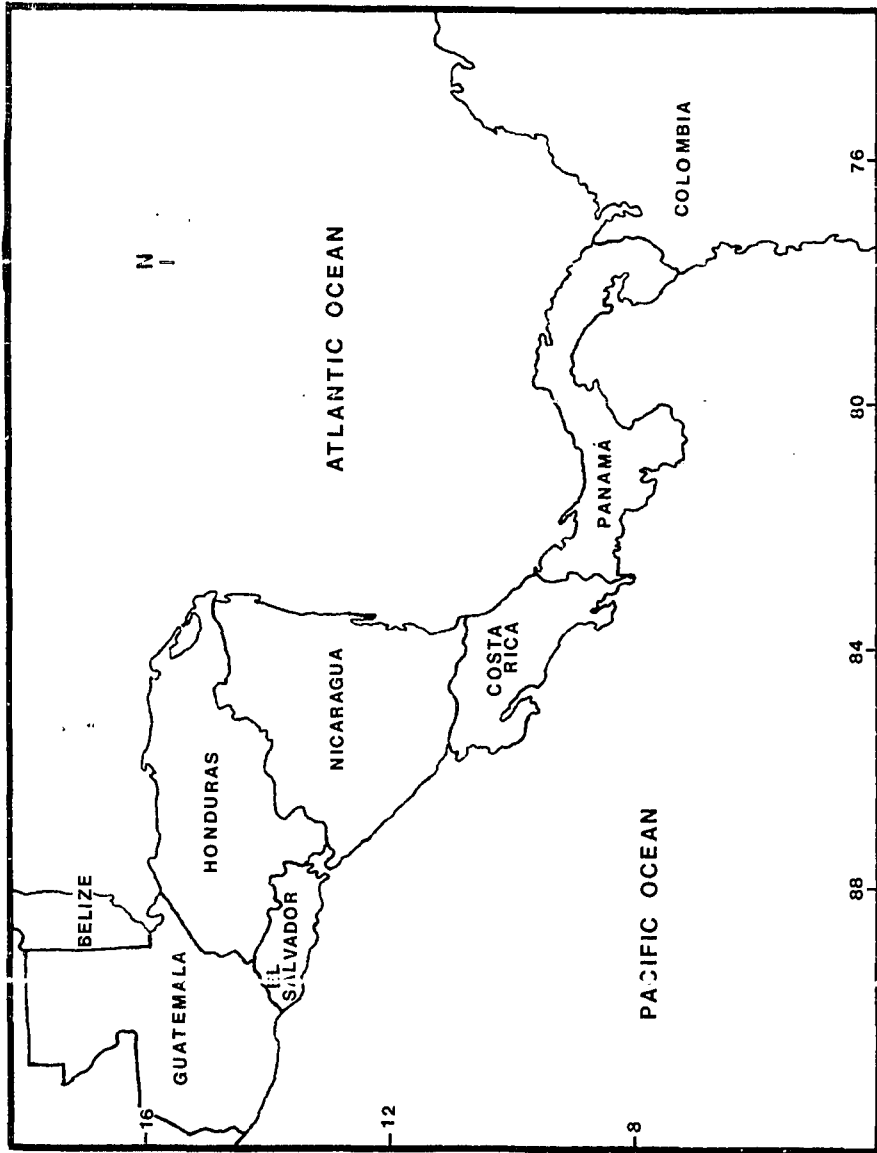


Fig. 2 Central America and the Isthmus (Briggs).

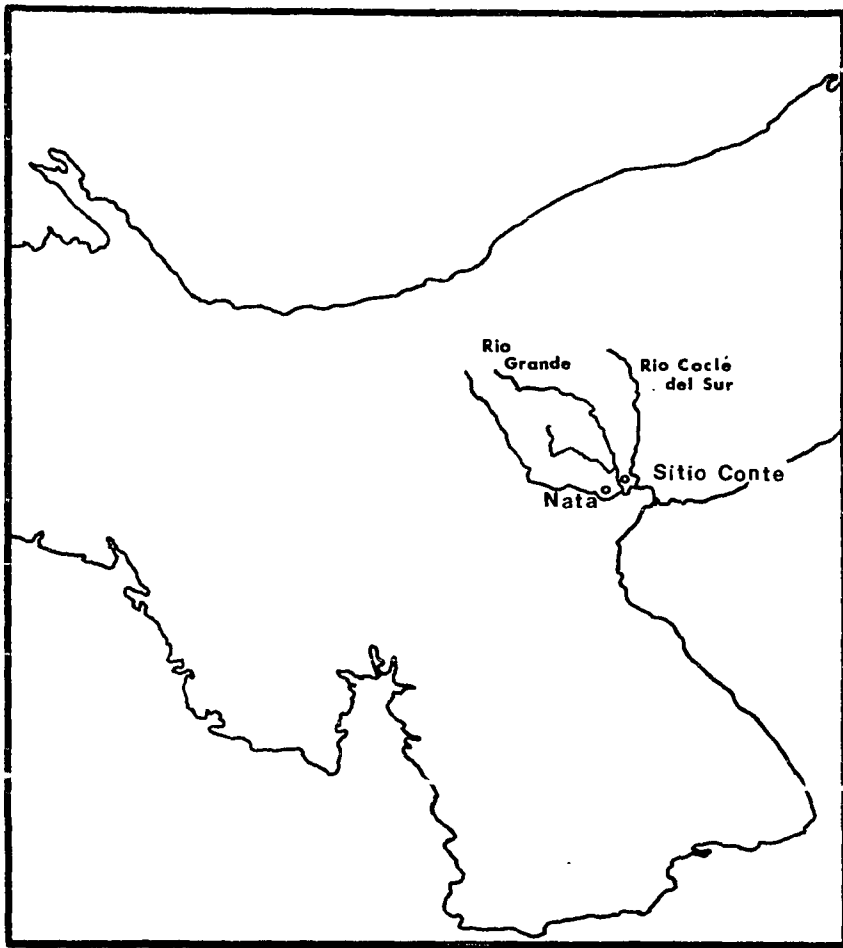


Fig. 3 Coclé area (after Ichon 1974).

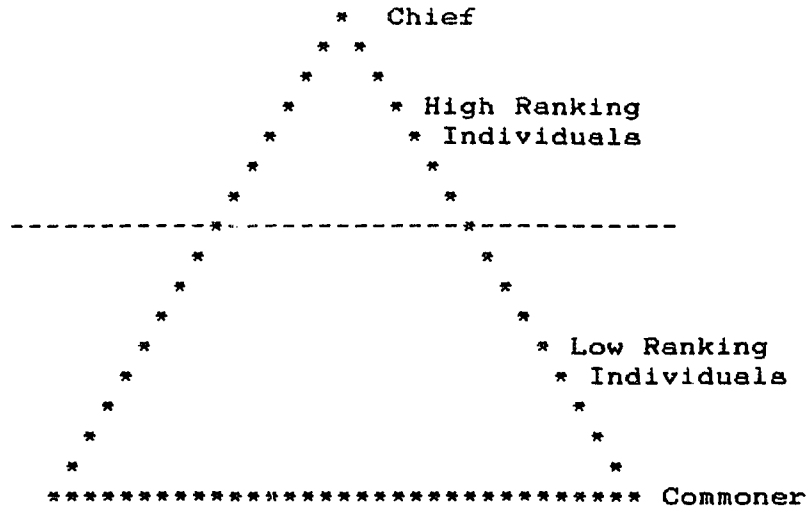


Fig. 4 Ideal chiefdom organization (after Service 1970).

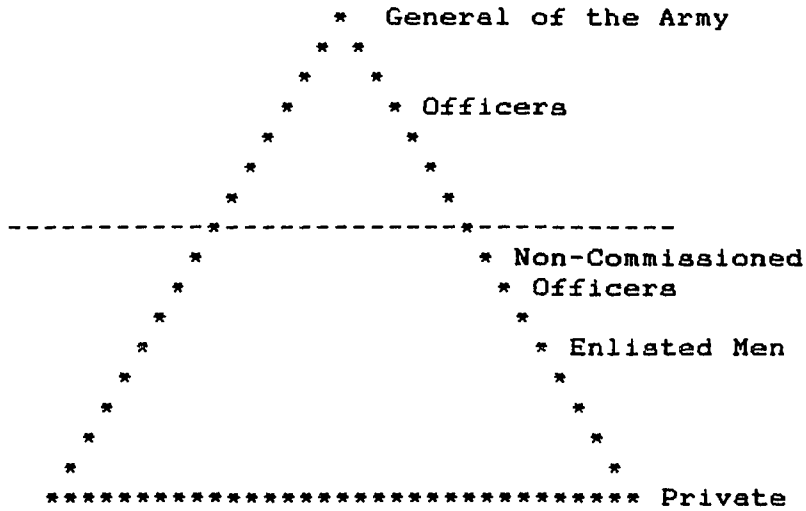


Fig. 5 Ideal U.S. Army organization (Briggs).

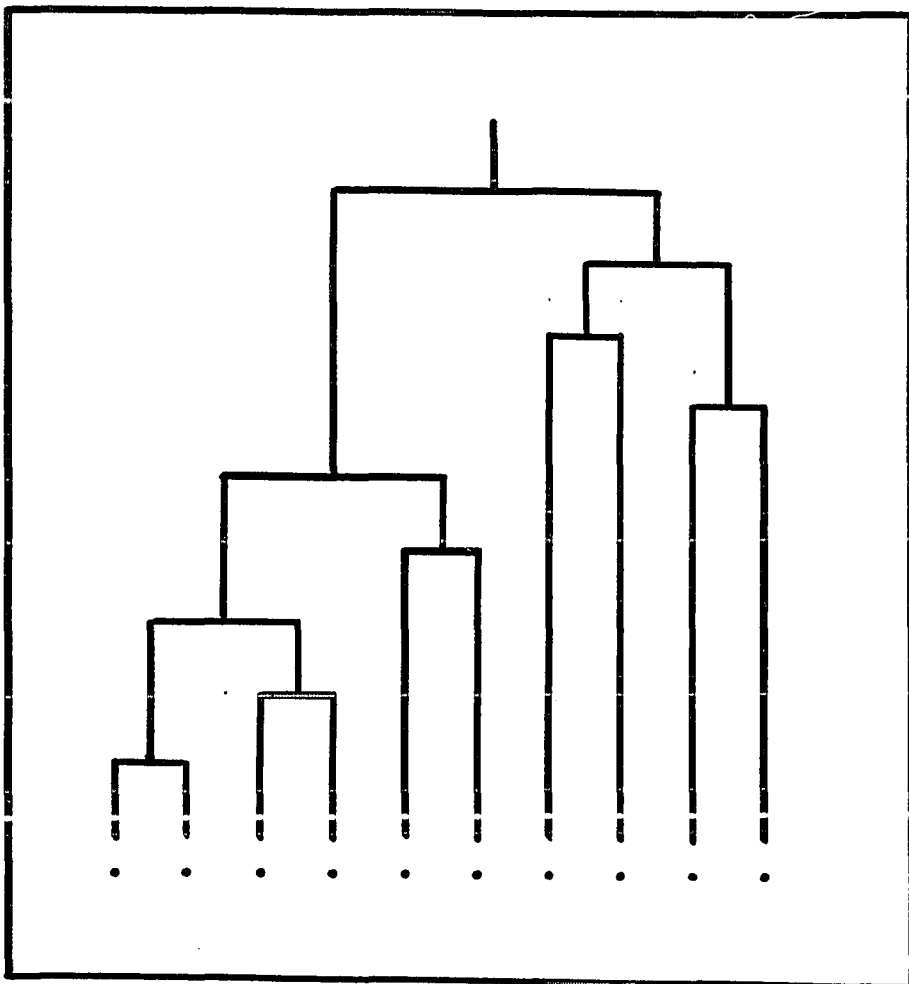


Fig. 6 An example of a dendrogram (Briggs).

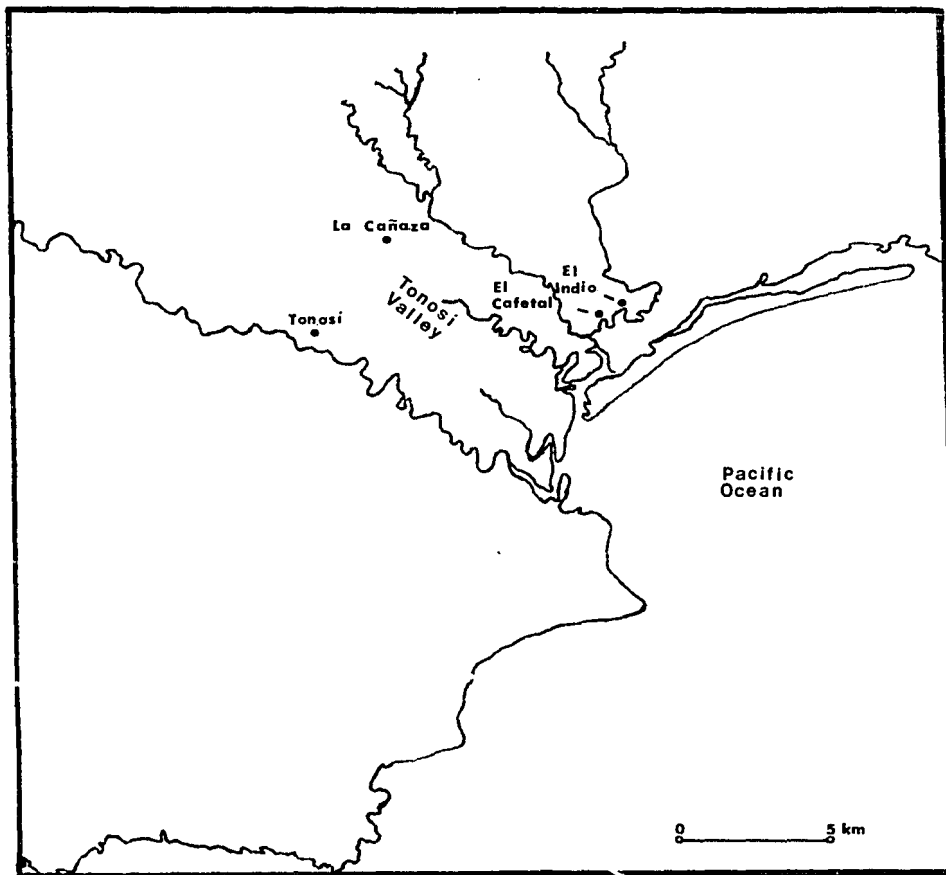


Fig. 7 The Tonosí Valley of the Azuero Peninsula (after Ichon 1974).

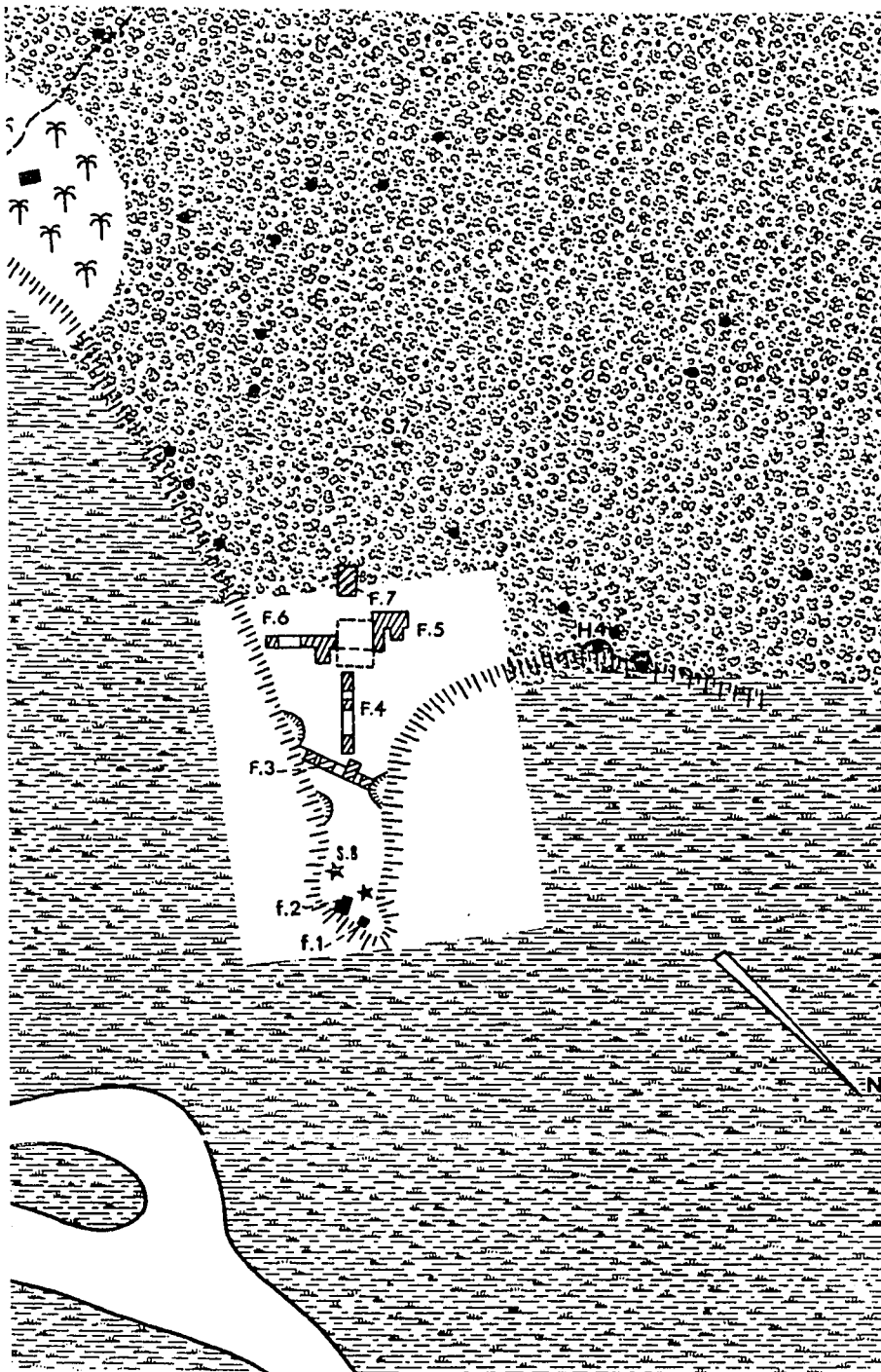


Fig. 8 Excavation area and environs of El Indio (Ichon 1974:81).

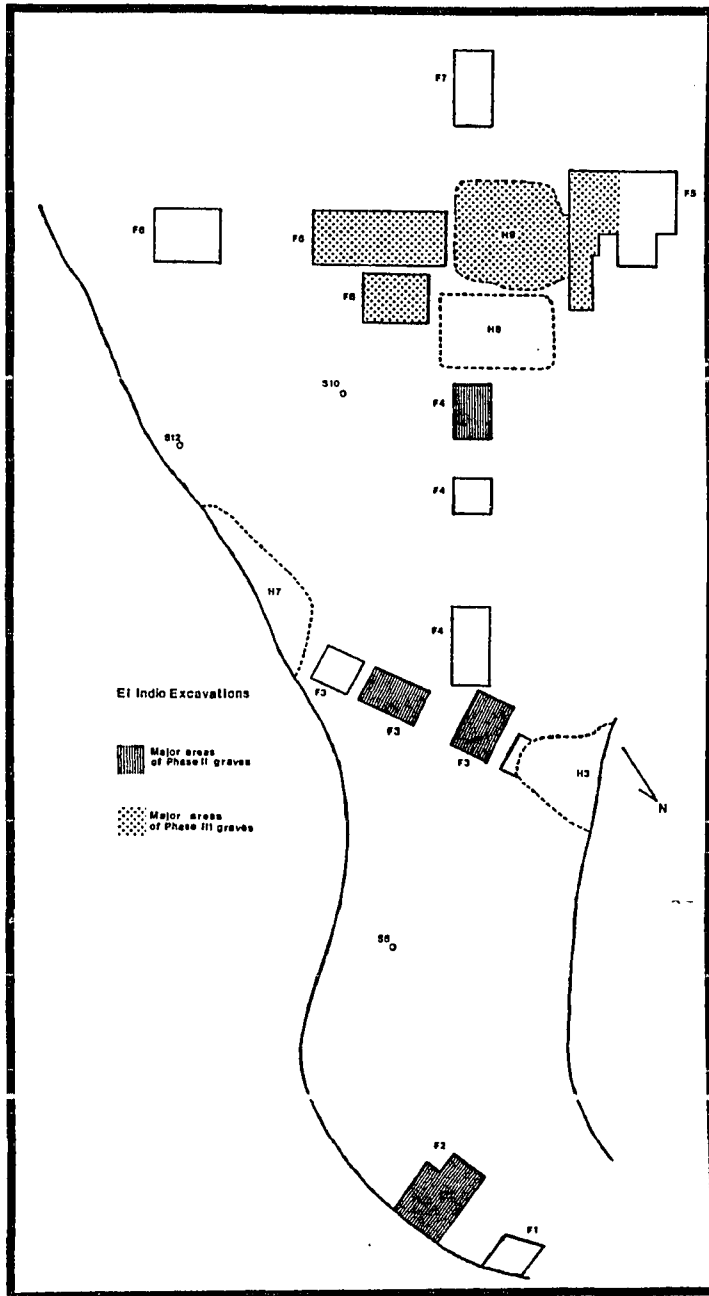


Fig. 9 Excavation areas at El Indio (after Ichon 1974:79).

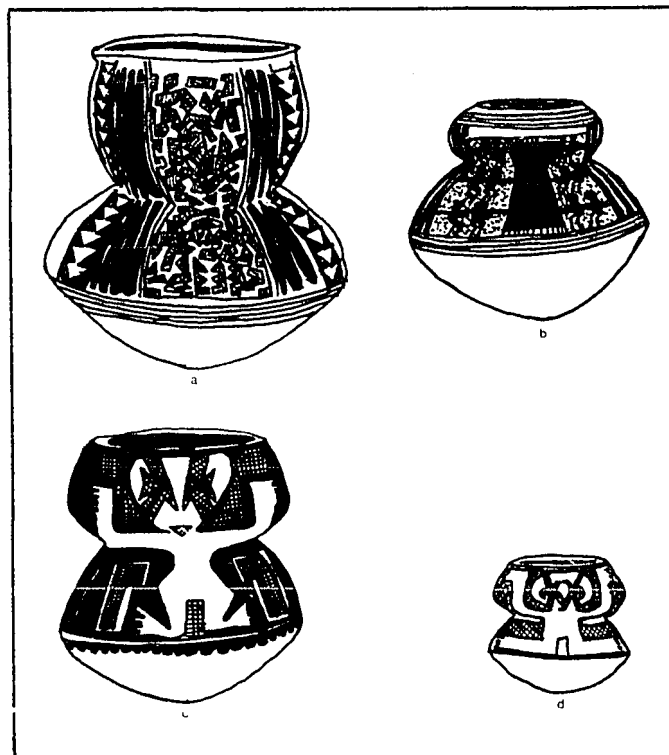


Fig. 10 "Dobles" from Phase II El Indio graves (exact dimensions of all objects are unknown): a, grave 2 (Ichon 1974:Plate XXVI; b, grave 17 (Ichon 1974:Plate XXVIII); c, grave 17 (Ichon 1974:Plate XXI); d, grave 17 (Ichon 1975:11).

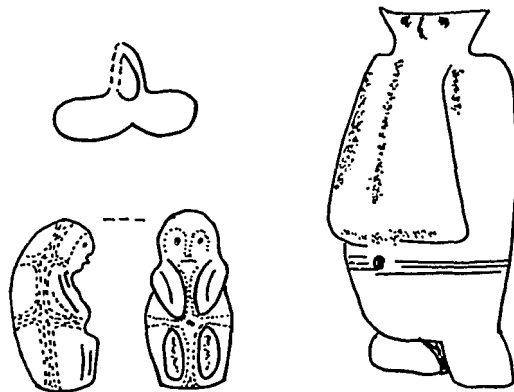


Fig. 11 Mortuary arts from Phase II El Indio graves (exact dimensions of all objects are unknown); a, double vessel with handle from grave 26 (Ichon 1974:Fig.23); b and c, clay figurines from grave 9 (left, Ichon 1974:Fig.47, right, Ichon 1974:Plate XXXV).

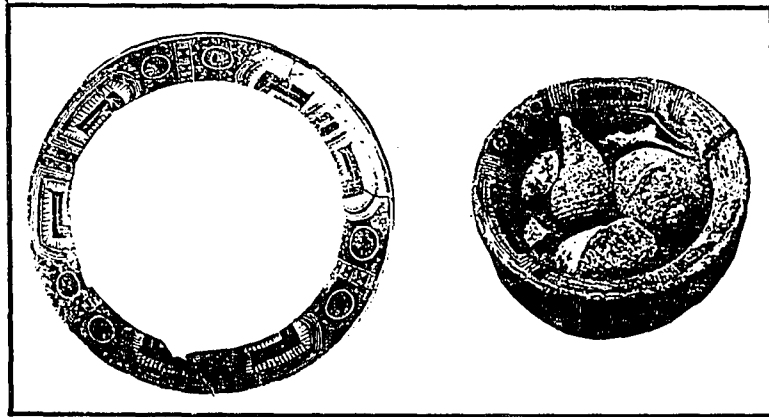


Fig. 12 Bichrome bowl filled with gastropods and bivalve shells from Phase II grave 9 at El Indio (exact dimensions are unknown; Ichon 1974:Plate XVI).

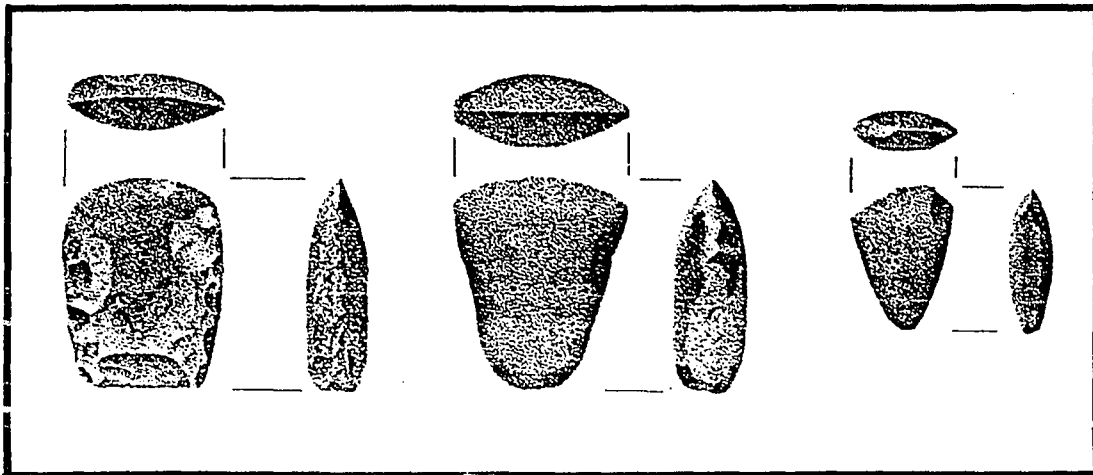


Fig. 13 Axes or celts from Phase II excavations at El Indio (exact dimensions are unknown; Ichon 1974:Fig. 55).



Fig. 14 Designs found on Phase III El Indio ceramics (after Ichon 1974).

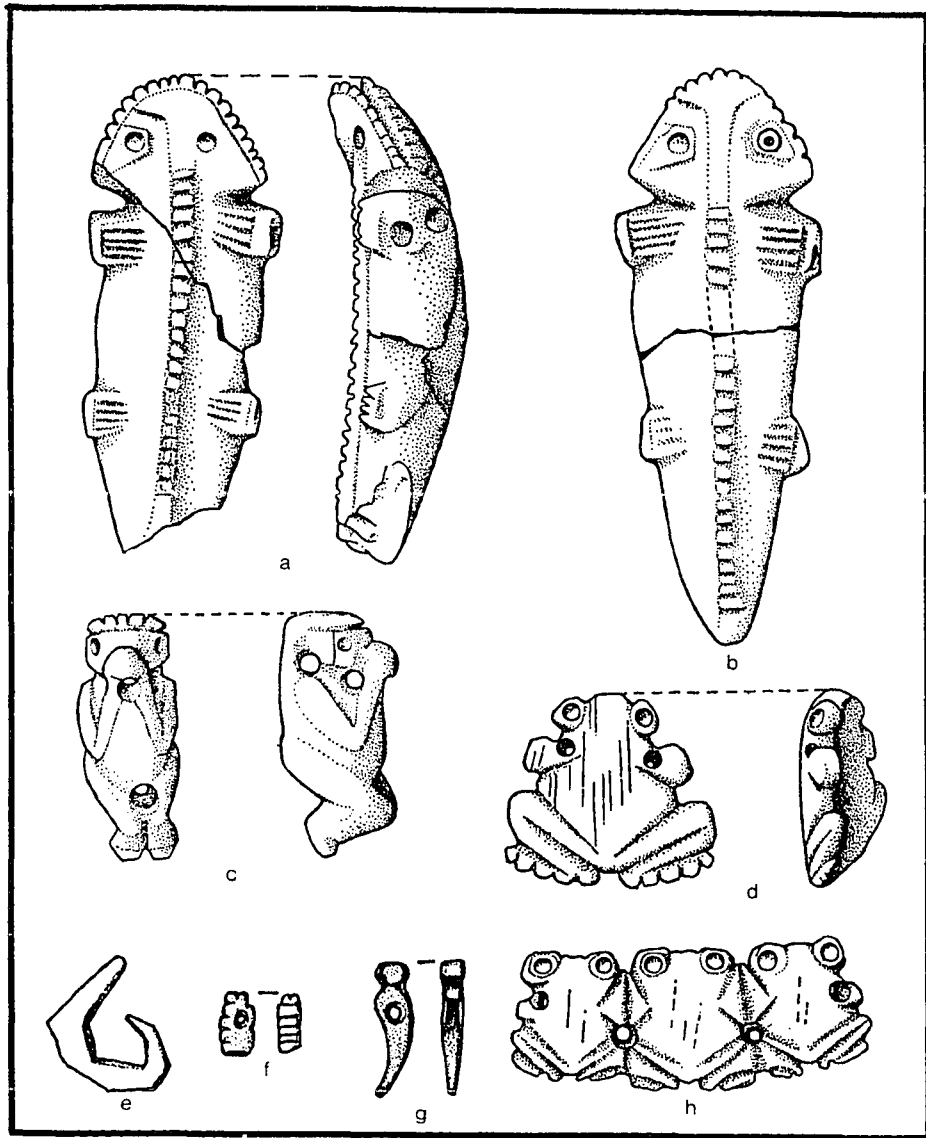


Fig. 15 Shell mortuary arts from Phase III El Indio graves (exact dimensions of all objects are unknown); a and b, concha shells carved in the shape of crocodiles from grave 21 (Ichon 1974:Figs. 89a, b); c, spondylus shell pendant in the shape of a human from grave 41 (Ichon 1974:Fig. 88h); d and h, spondylus shell pendants in the shape of frogs or toads from grave 42 (Ichon 1974:Figs. 88a, f); e, "hook" shaped pendant from grave 8 (Ichon 1974:Fig. 87s); f and g, shell pendants from grave 34 (Ichon 1974:Figs. 86b, c).

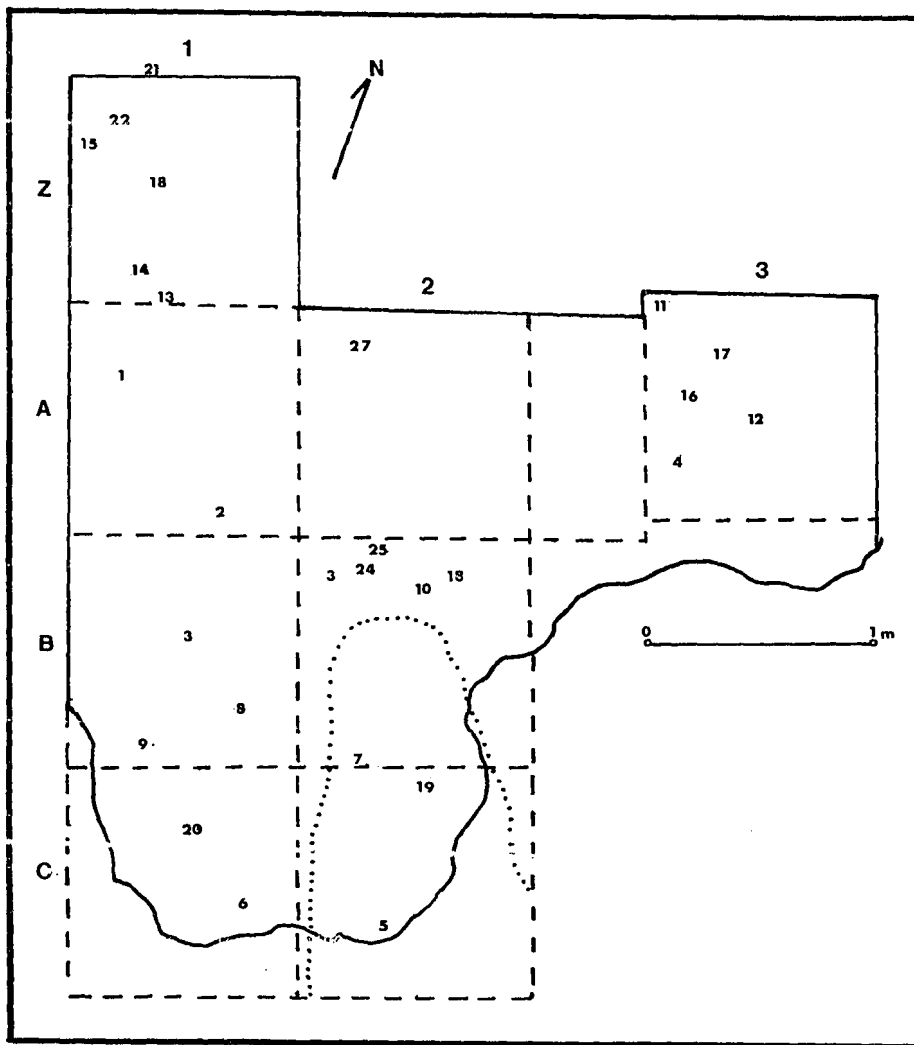


Fig. 16 Excavation area (with graves noted) at La Cañaza (after Ichon 1974:Fig. 92).

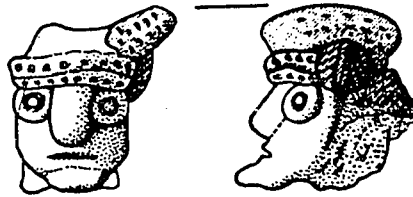


Fig. 17 Fragment of a ceramic whistle from Phase III grave 2 at La Cañaza (exact dimensions are unknown; Ichon 1974:Fig. 47b).

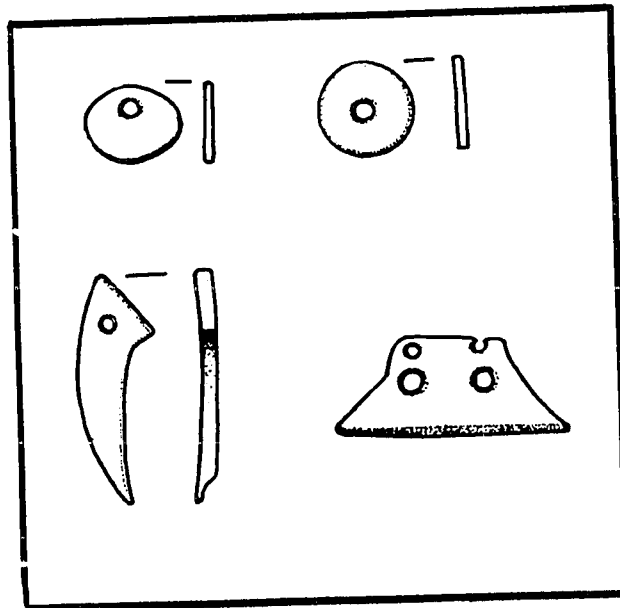


Fig. 18 Shell pendants from Phase III, La Cañaza (exact dimensions of all objects are unknown; Ichon 1974:Figs. 87b, e, j, l).

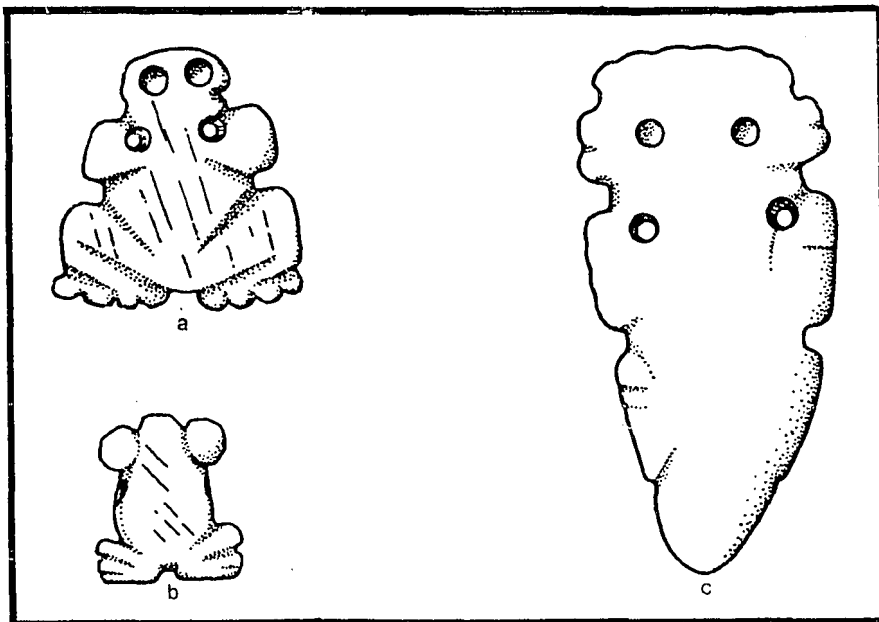


Fig. 19 Shell pendants or figures from Phase III graves at La Cañaza (exact dimensions for all objects are unknown); a and b, frog or toad shaped figures from grave 3 (Ichon 1974:Figs. 88b, d); c, crocodile shaped figure from grave 3 (Ichon 1974:Fig. 89).

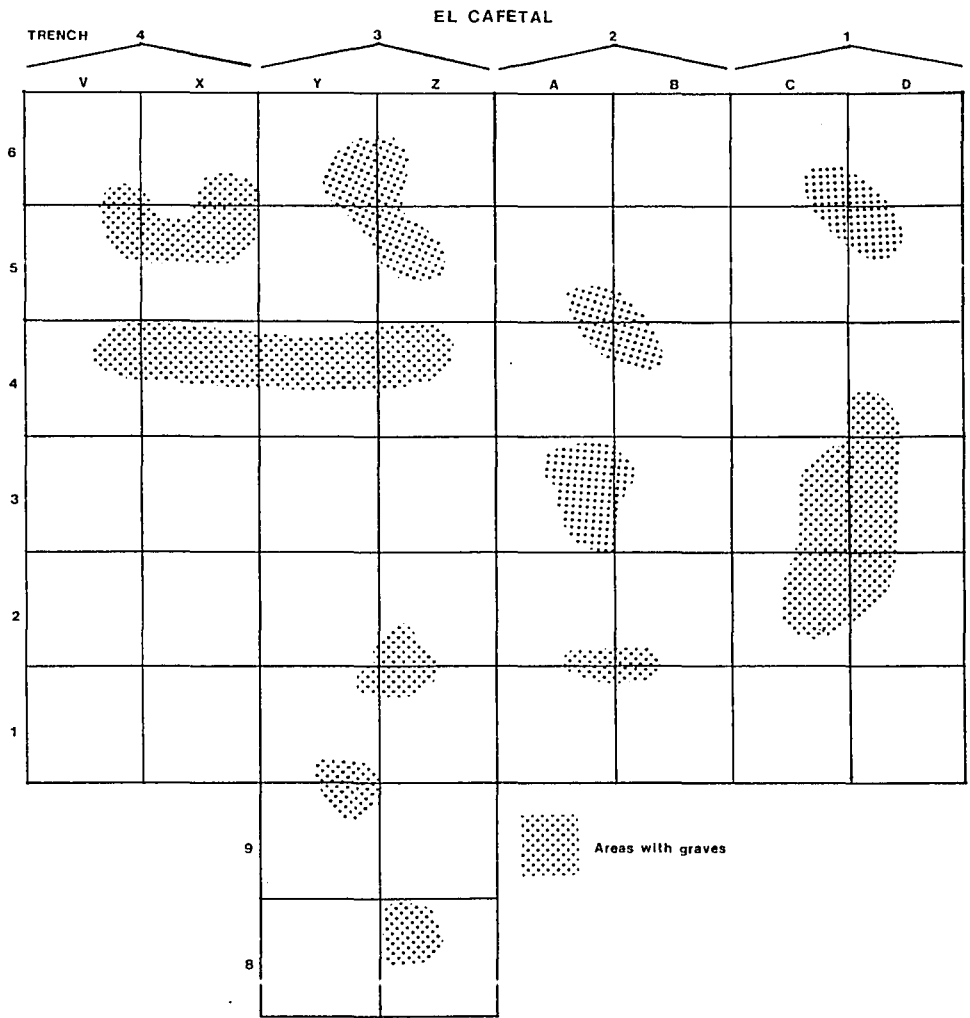


Fig. 20 Excavation area at El Cafetal (after González 1971).

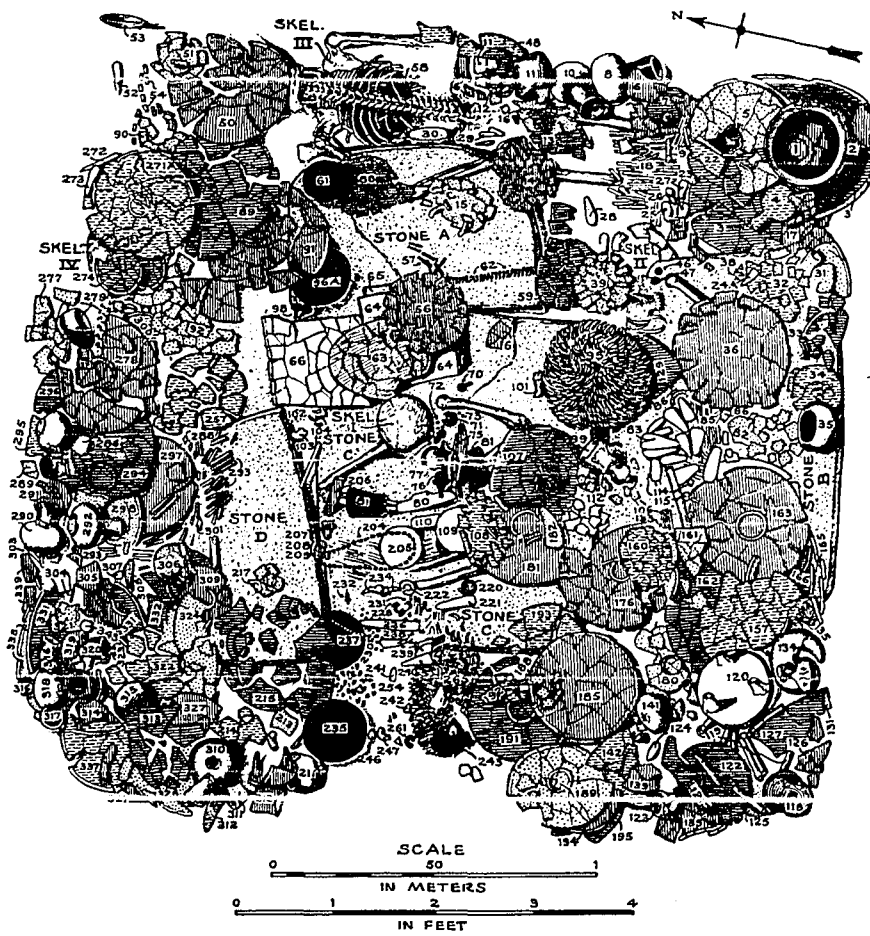


Fig. 21 Map of grave 1, top layer, Sitio Conte (Lothrop 1937:Fig. 207; copyright Harvard University).

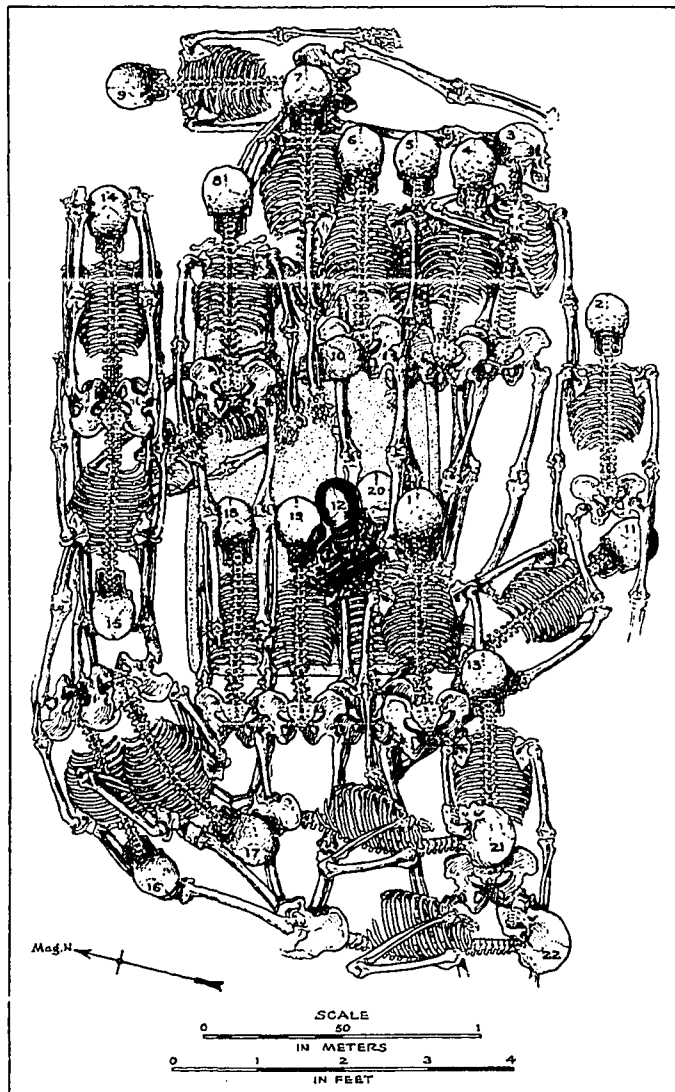


Fig. 22 Map of skeletons from grave 26, Sitio Conte (Lothrop 1937:Fig. 31; copyright Harvard University).

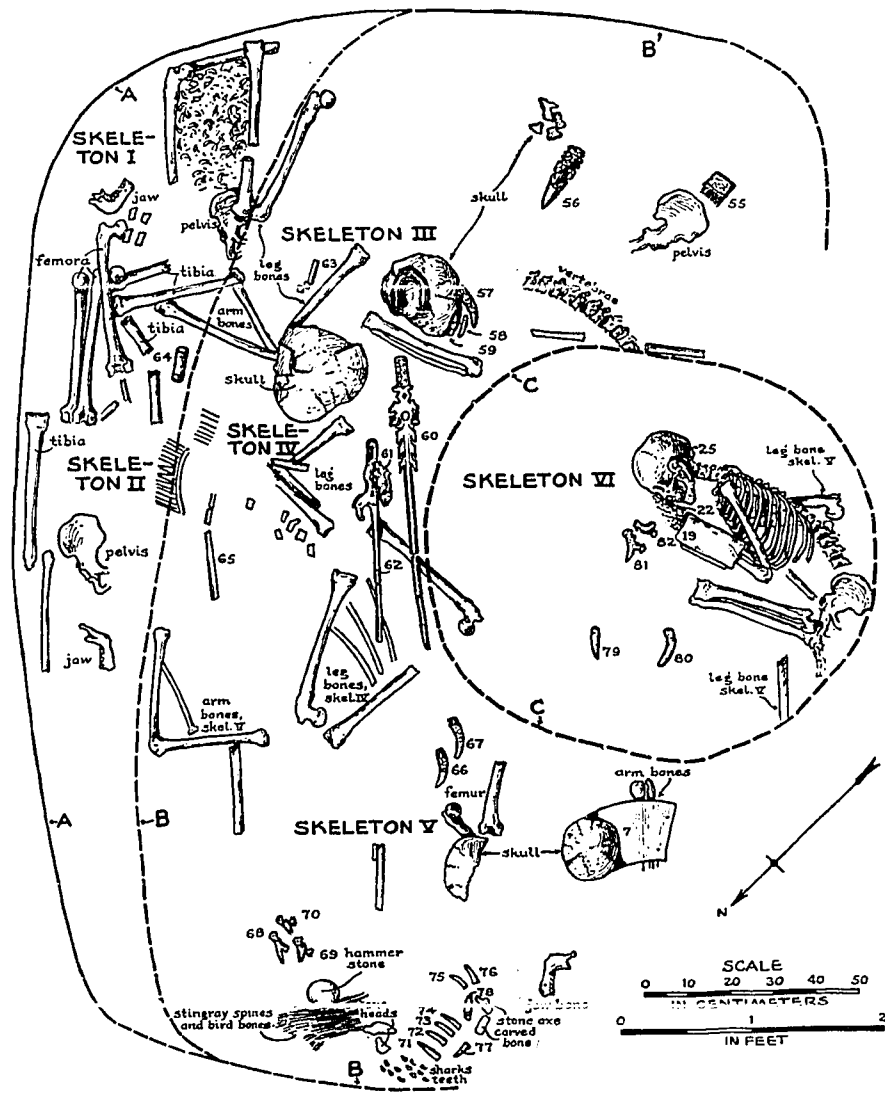


Fig. 23 Map of skeletons and bone objects from grave 32, Sitio Conte (Lothrop 1937:Fig. 251; copyright Harvard University).

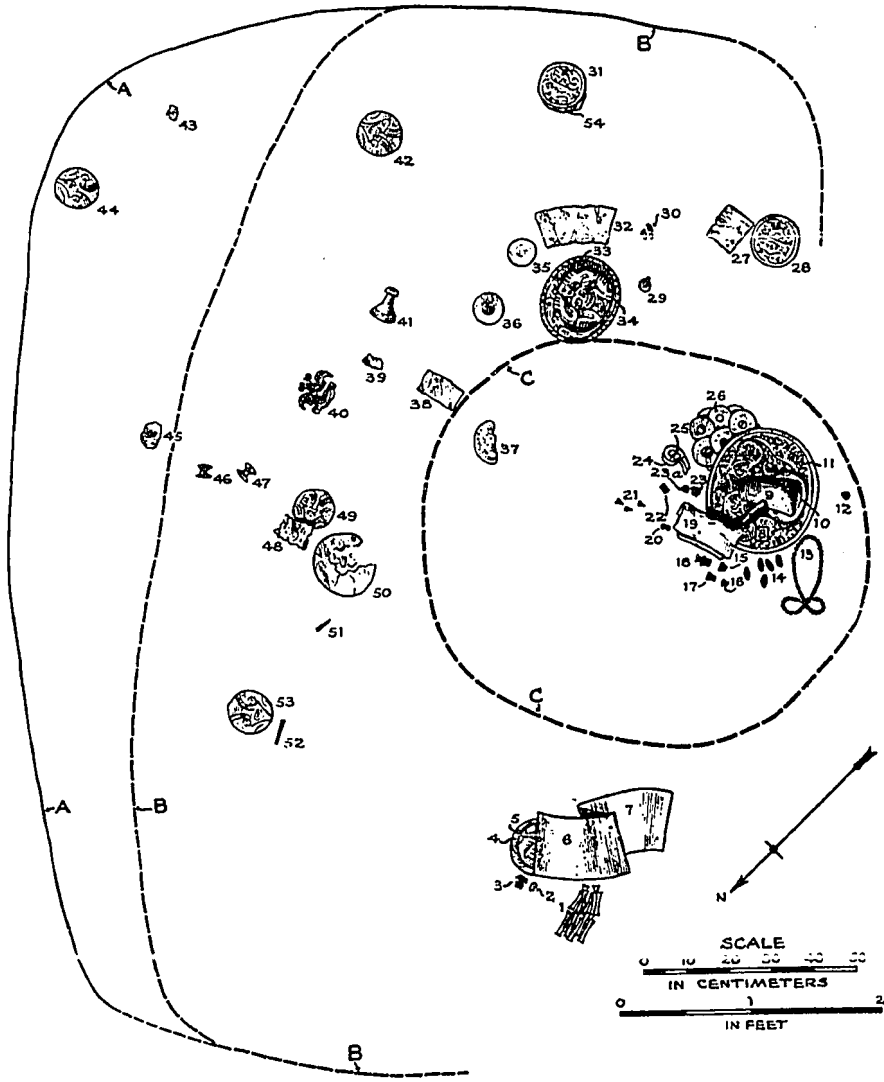


Fig. 24 Map of gold objects from grave 32, Sitio Conte (Lothrop 1937: Fig. 252; copyright Harvard University).

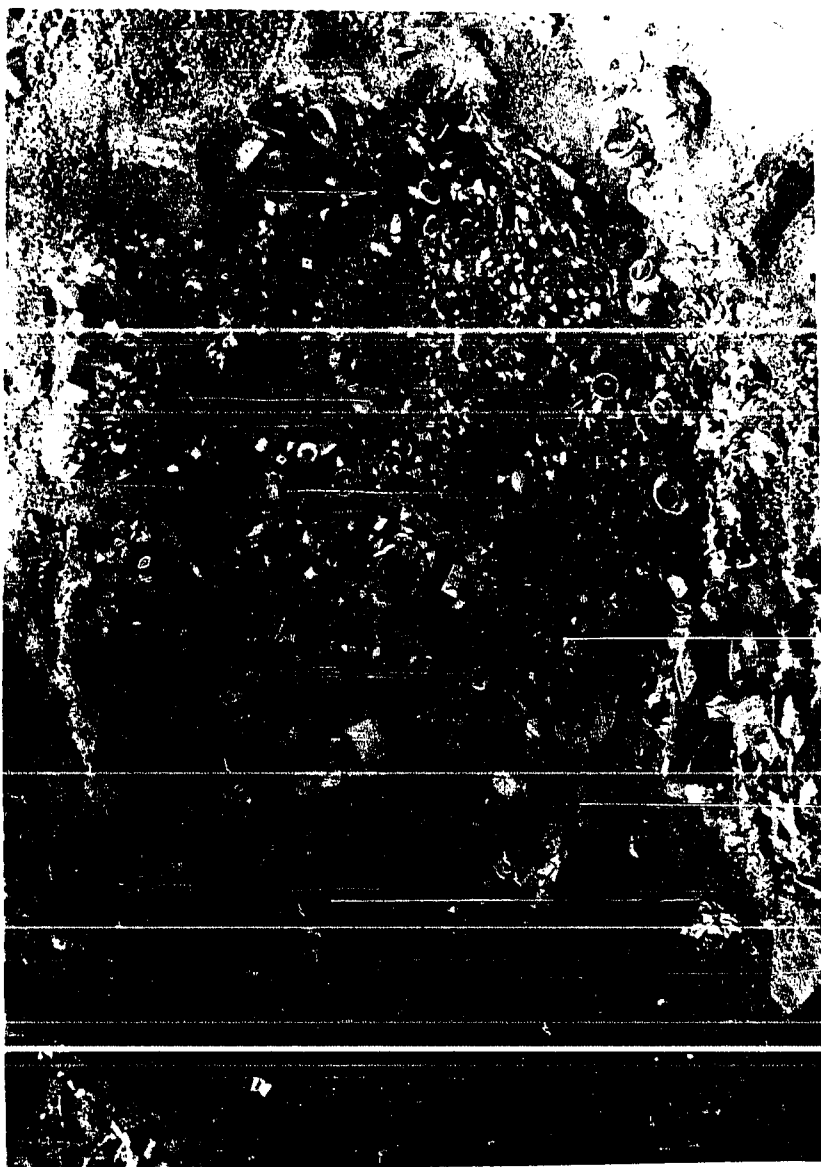


Fig. 25 Grave 74 ceramic layer and wall, Sitio Conte
(copyright The University Museum, University of
Pennsylvania).

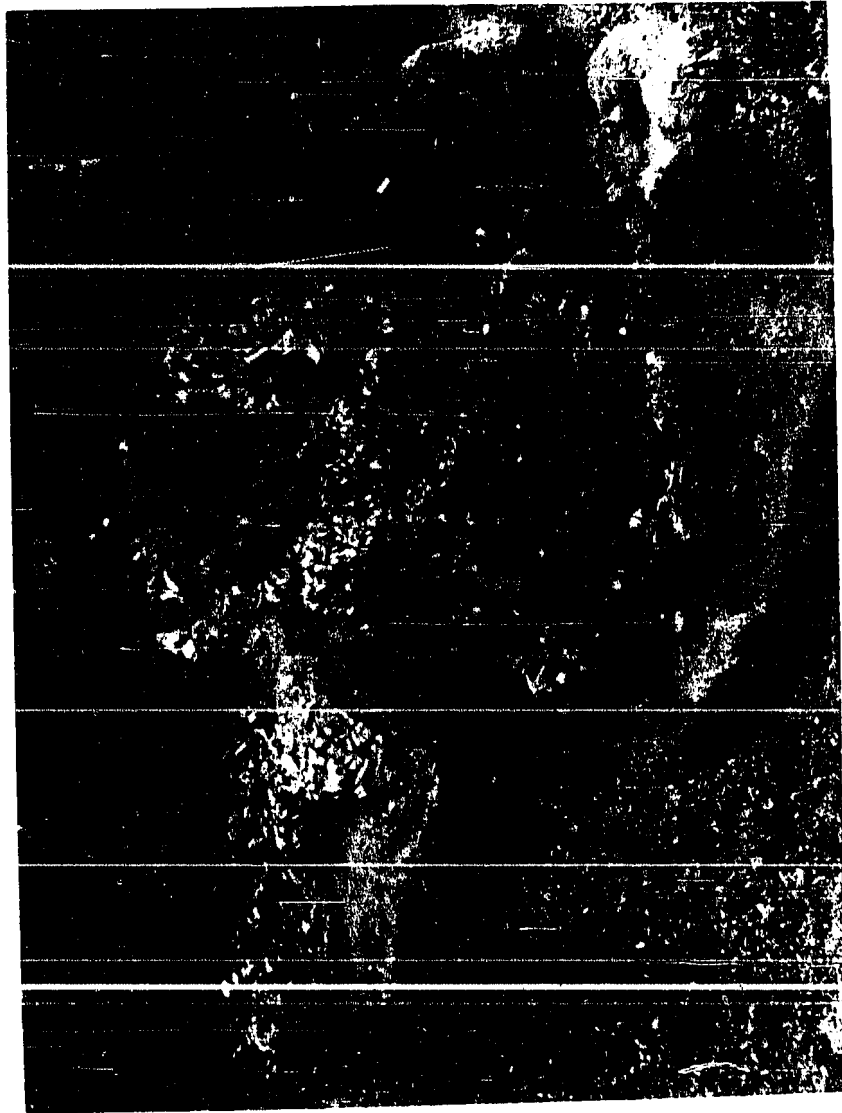


Fig. 26 Skeletons from grave 74, Sitio Conte (copyright The University Museum, University of Pennsylvania).

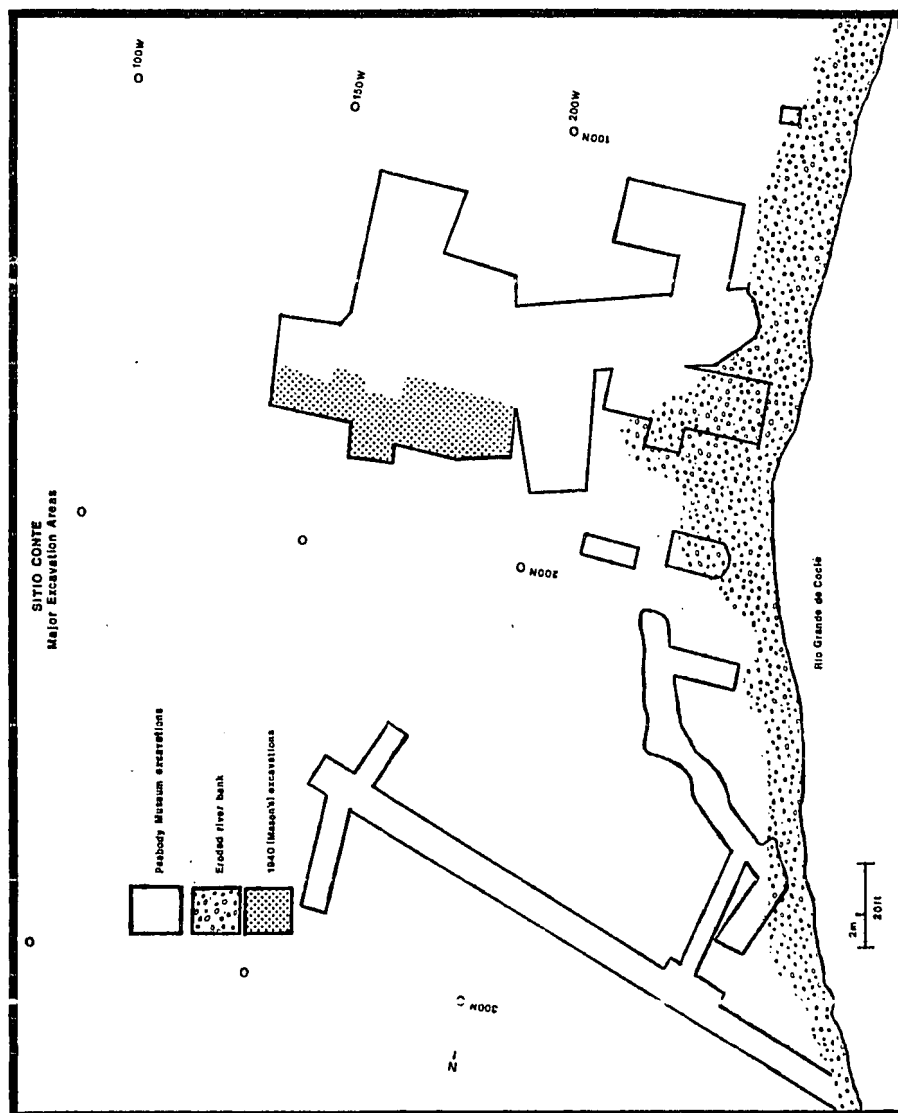


Fig. 27 Excavation areas at Sitio Conte (Briggs after Lothrop 1937, Mason n.d., and Merrill n.d.).

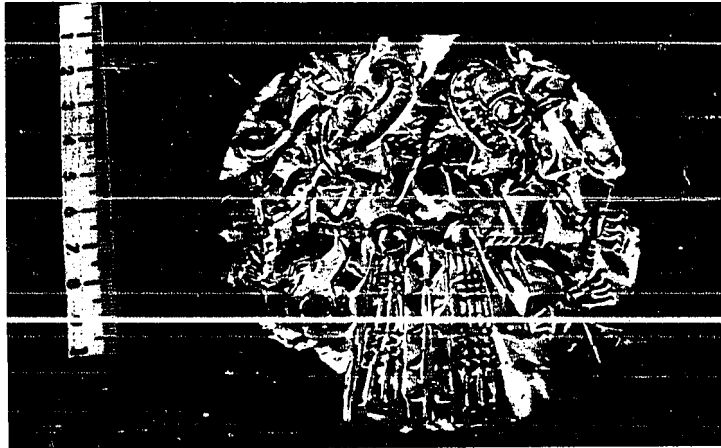
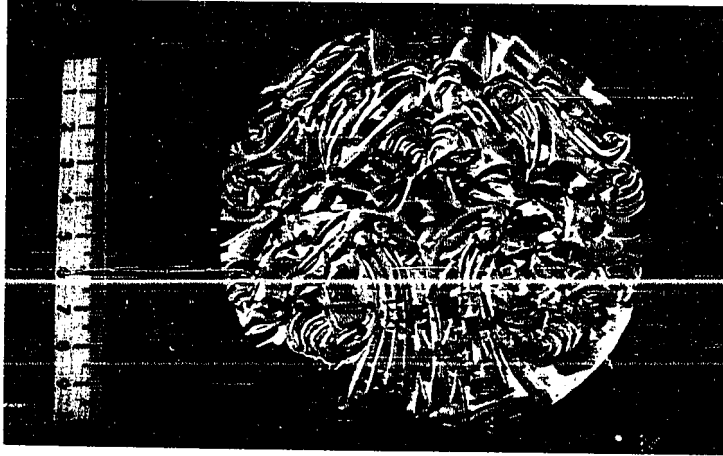


Fig. 28 Gold repoussé plaques from Grave 74, Sitio Conte (top: 11.2 cm. diameter [UM40-13-10]; bottom: 11.3 cm. diameter [UM40-13-9]).

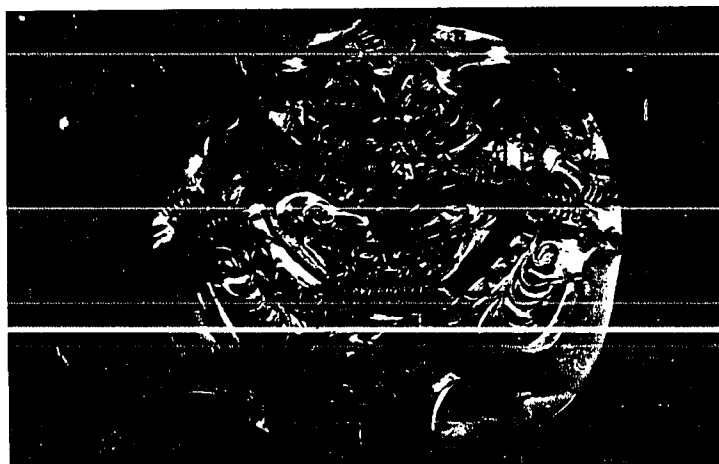
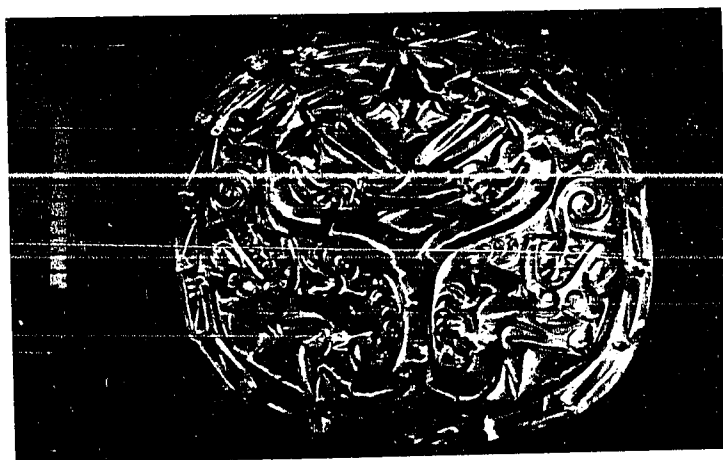


Fig. 29 Gold repoussé plaques from Grave 74, Sitio Conte (top: 25.6 cm. diameter [UM40-13-5]; bottom: 21.8 cm. diameter [UM40-13-11]).

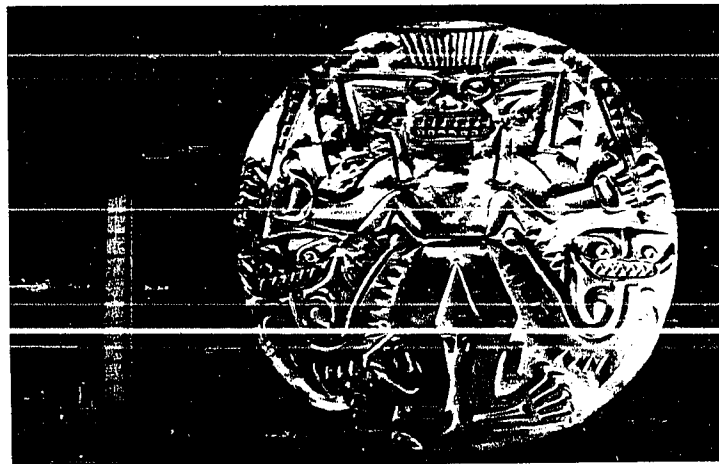
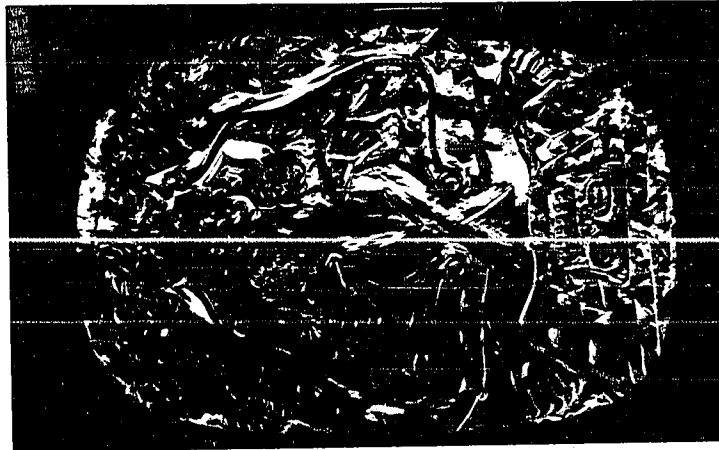


Fig. 30 Gold repoussé plaques from Grave 74, Sitio Conte
(top: 26.0 cm. high, 17.8 cm. wide [UM40-13-26];
bottom: 20.7 cm. diameter [UM40-13-3]).

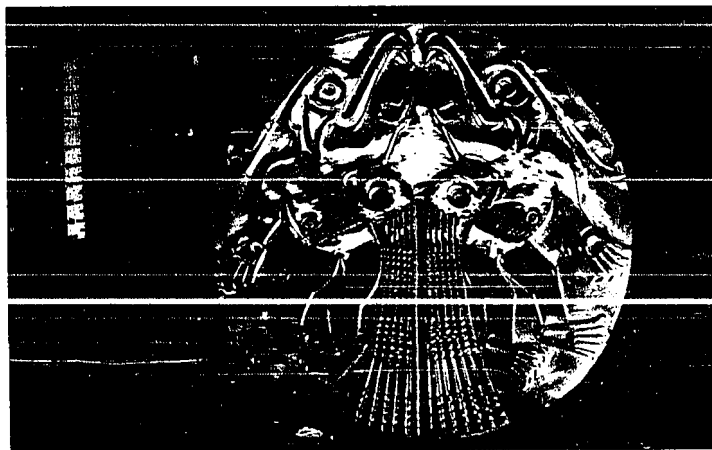
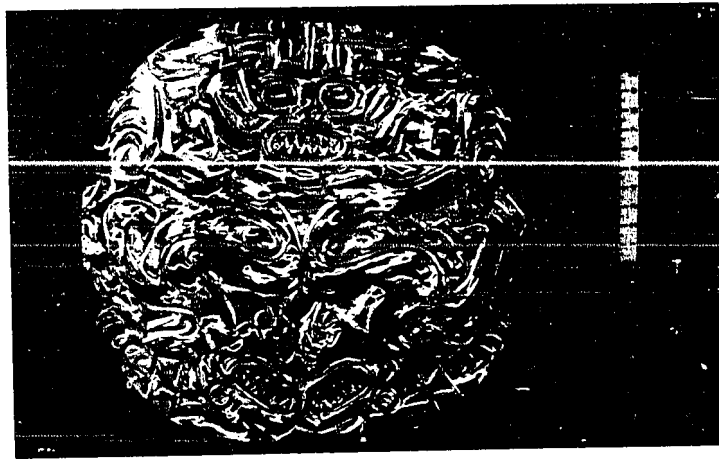


Fig. 31 Gold repoussé plaques from Grave 74, Sitio Conte (top: 22.8 cm. diameter [UM40-13-6]; bottom: 21.5 cm. diameter [UM40-13-2]).

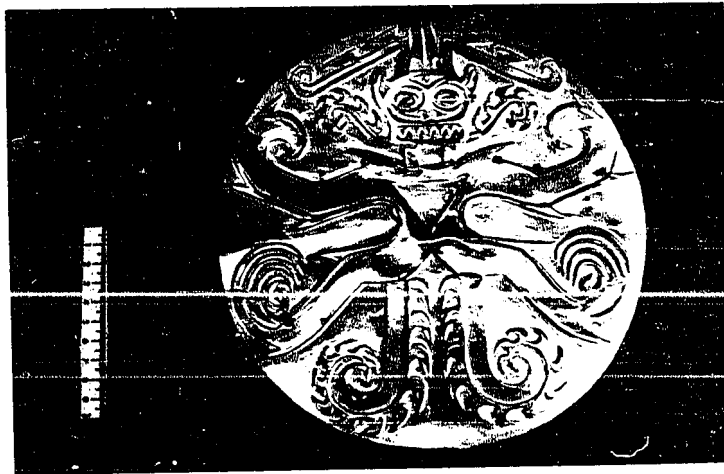


Fig. 32 Gold repoussé plaques from Grave 74, Sitio Conte (top: 21.8 cm. diameter [UM40-13-11]; bottom: 22.6 cm. diameter [UM40-13-4]).

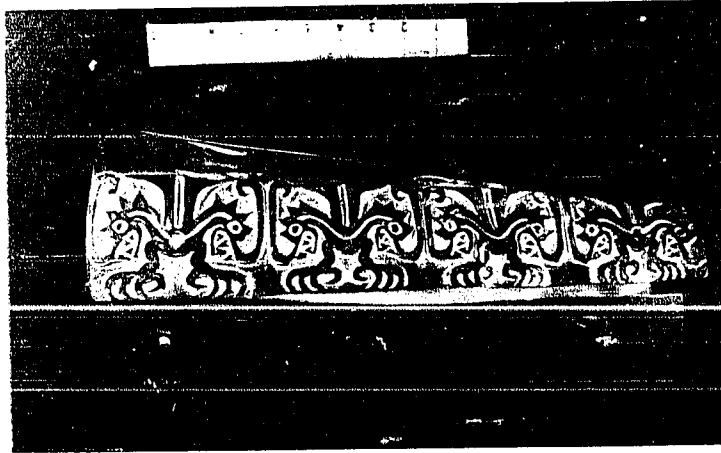


Fig. 33 Top: gold greave from grave 74, Sitio Conte (13.1 cm. long, 8.5 cm. diameter [UM40-13-29]); bottom: gold pendants or figurines (left: undetermined grave, 5.8 cm. high, 3.2 cm. wide [UM40-13-128]; right: grave 74, 2.3 cm. high, 4.4 cm. wide [UM40-13-33]).

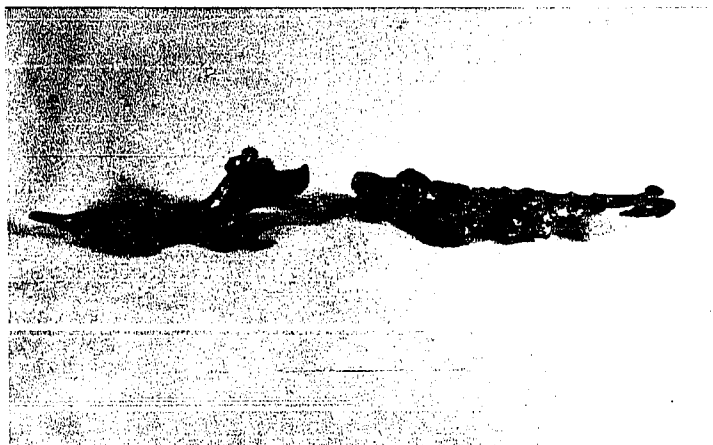


Fig. 34 Top: gold pendants, Sitio Conte (left: from grave 90, 10 cm. long, 3.4 cm. wide [UM40-14-669]; right: from grave 95, 9 cm. long, 4.2 cm. wide [UM40-14-737]); bottom: gold pendants, Sitio Conte (right and center: top view of above pendants; left: from grave 90, 7.3 cm. long, 5.1 cm. wide [UM40-14-670]).

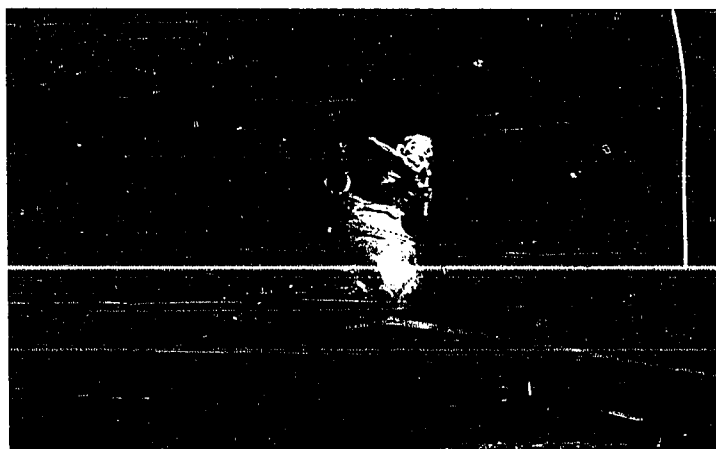


Fig. 35 Top: gold bell from an undetermined grave, Sitio Conte (3 cm. long, 2.2 cm. diameter [UM40-13-196]); bottom: gold bell from an undetermined grave, Sitio Conte (3.4 cm. long, 3.5 cm. wide [UM40-13-407]).

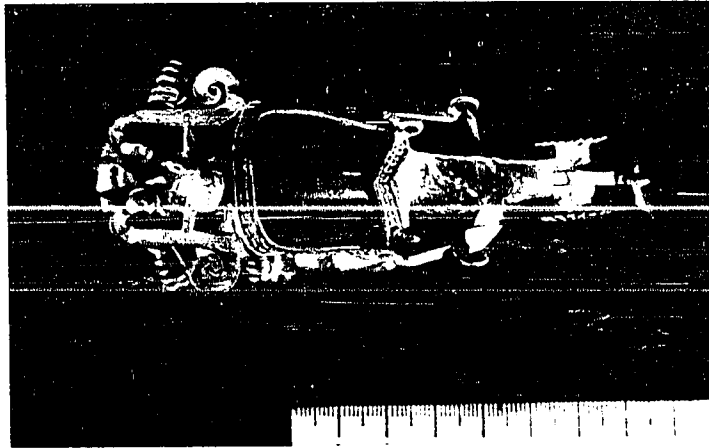


Fig. 36 Gold and emerald figurine from grave 74, Sitio Conte (10.9 cm. long, 4.7 cm. wide [UM40-13-27]).

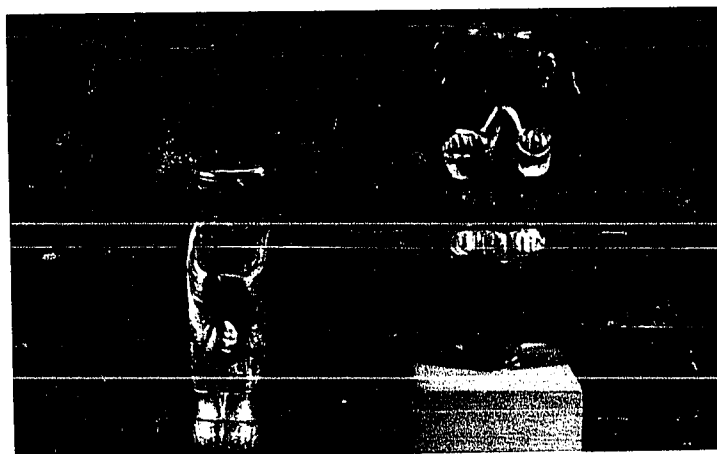


Fig. 37 Bone or ivory figurines with gold overlay, grave 74, Sitio Conte (top: left, 10.4 cm. high, 2.2 cm. wide [UM40-13-118]; center left, 5.4 cm. high, 1.9 cm. wide [UM40-13-123]; upper right, 2.6 cm. high, 3.6 cm. wide [UM40-13-153]; lower right, 1.2 cm. high, 2.1 cm. wide [UM40-13-154]; bottom: left, 7.5 cm. high, 2.6 cm. wide [UM40-13-126]; right, 10.4 cm. high, 3 cm. wide [UM40-13-121]).

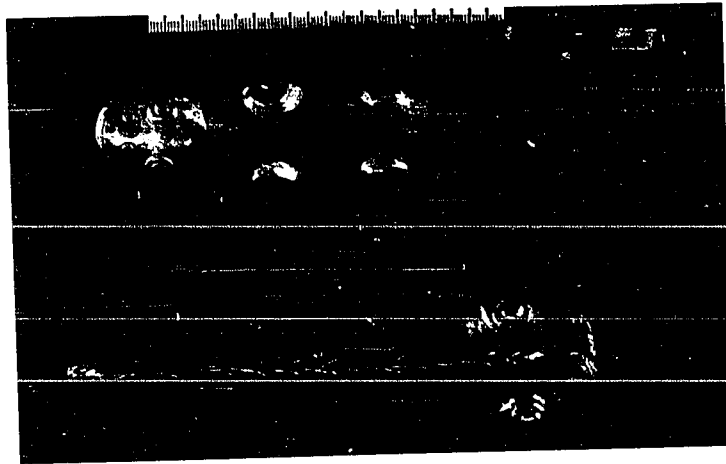
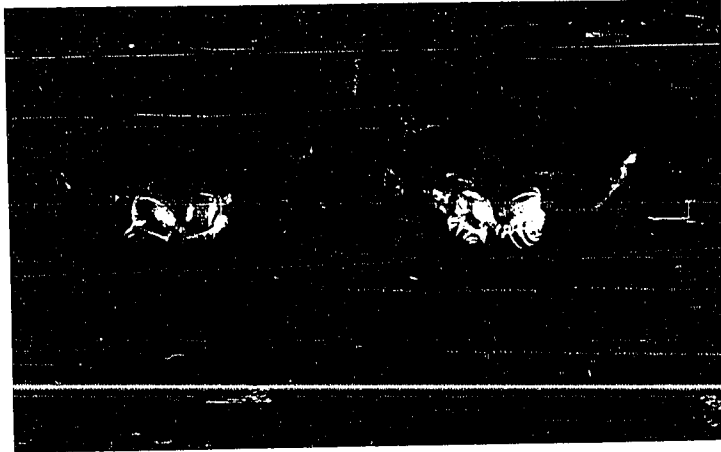


Fig. 38 Top: Ivory figurines with gold overlay from grave 74, Sitio Conte (left: 6.4 cm. long, 2.3 cm. wide, 2.4 cm. high [UM40-13-133]; right: 6.4 cm. long, 2.5 cm. wide, 2.4 cm. high [UM40-13-132]); bottom: bone or ivory figurines with gold overlay from grave 74, Sitio Conte (top: 13.8 cm. long, 3.3 cm. wide, 3.4 cm. high [UM40-13-124]; bottom: 13.8 cm. long, 4.3 cm. wide, 5.2 cm. high [UM40-13-120]).

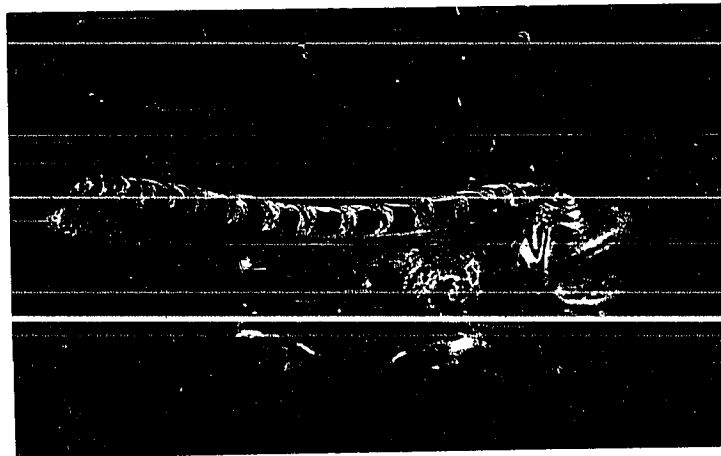
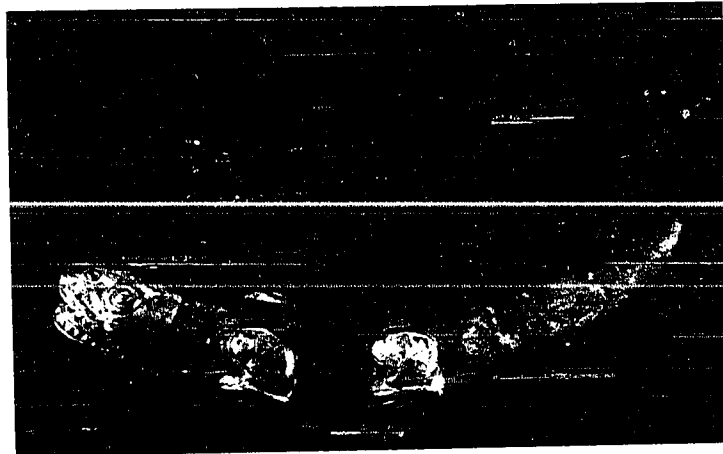


Fig. 39 Profile of objects in Fig. 38, bottom.

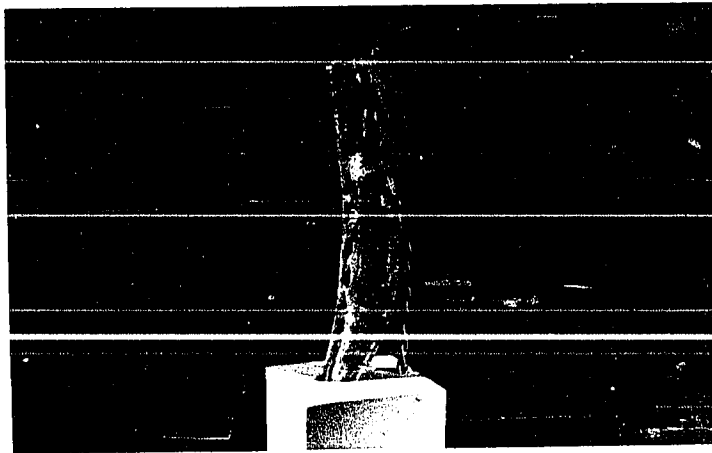
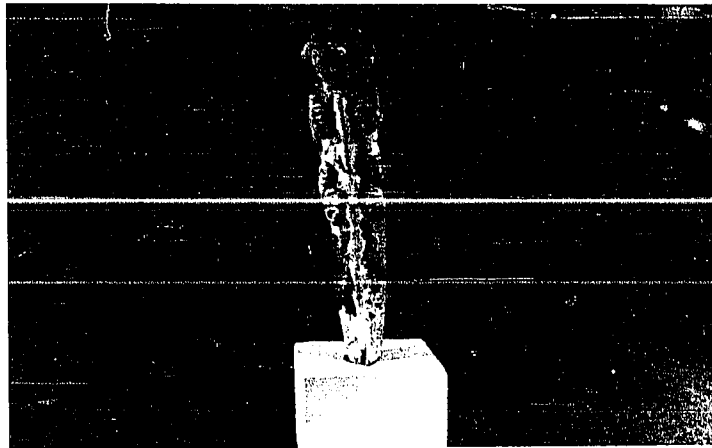


Fig. 40 Frontal and profile views of bone or ivory figurines from grave 88, Sitio Conte (17 cm. long, 2.8 cm. wide [UM40-14-655]).

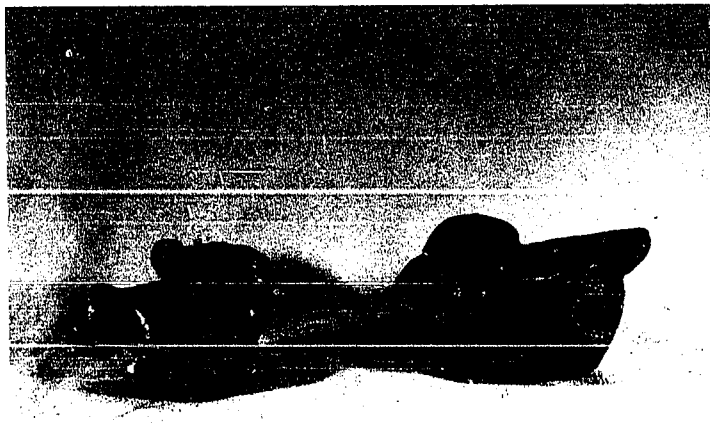
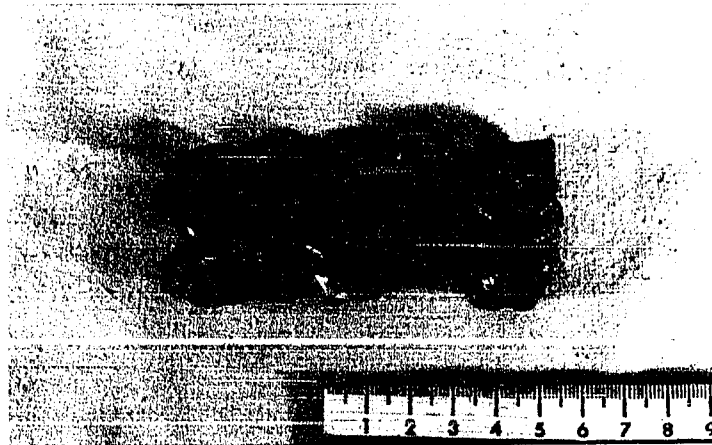


Fig. 41 Top: figurines or pendants from grave 74, Sitio Conte (left: dog or similar animal, agate, 5.1 cm. long, 4.2 cm. high [UM40-13-609]; right: crocodile, copal resin, 4.0 cm. high, 2.5 cm. wide [UM40-13-608]); bottom: copal resin figurines from grave 74, Sitio Conte (left: 5.6 cm. long, 3.5 cm. wide, 4.4 cm. high [UM40-13-604]; right: 5.5 cm. high, 7.5 cm. long [UM40-13-607]).

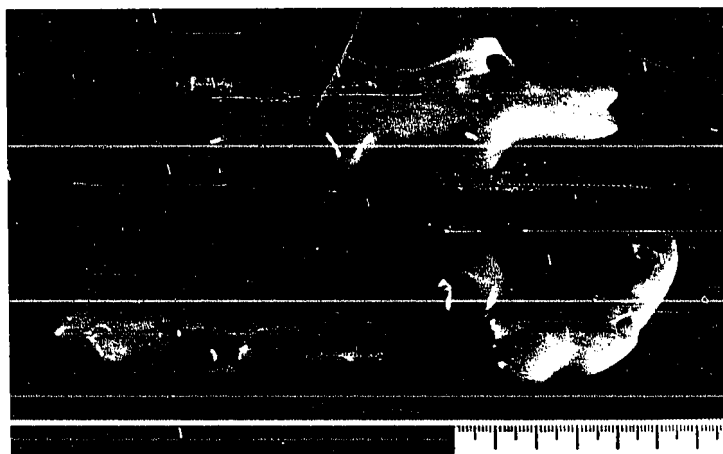
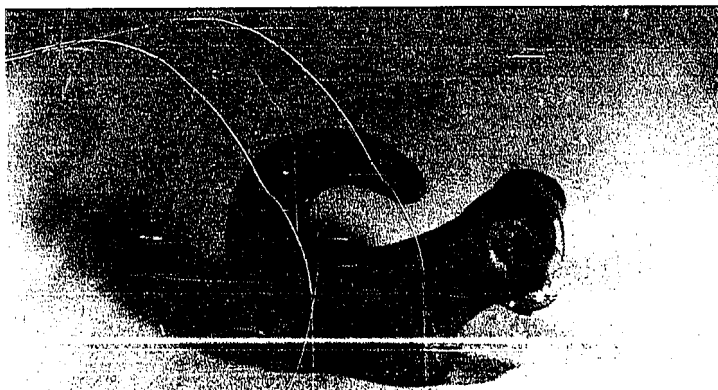


Fig. 42 Stone figurines or pendants, Sitio Conte (top: undetermined grave, 10 cm. long, 7.4 cm. high [UM40-14-829]; bottom: all are agate, upper center, grave 75, 9.9 cm. long, 3.3 cm. high [40-14-610]; lower left, grave 90, 7.2 cm. long, 2.8 cm. high [40-14-679]; lower right, grave 90, 6.3 cm. long, 3.5 cm. high [UM40-14-678]).

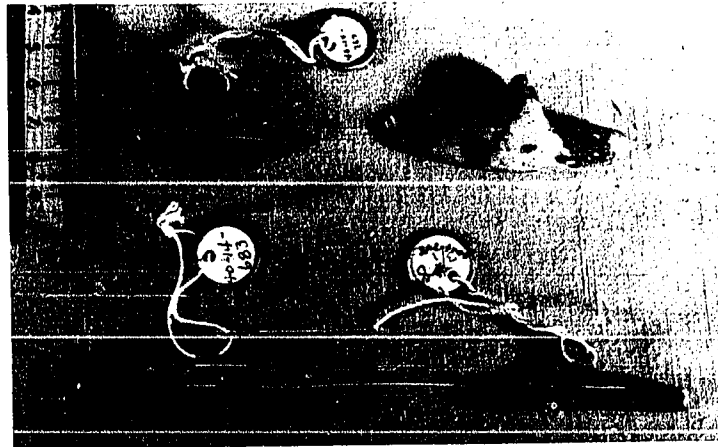
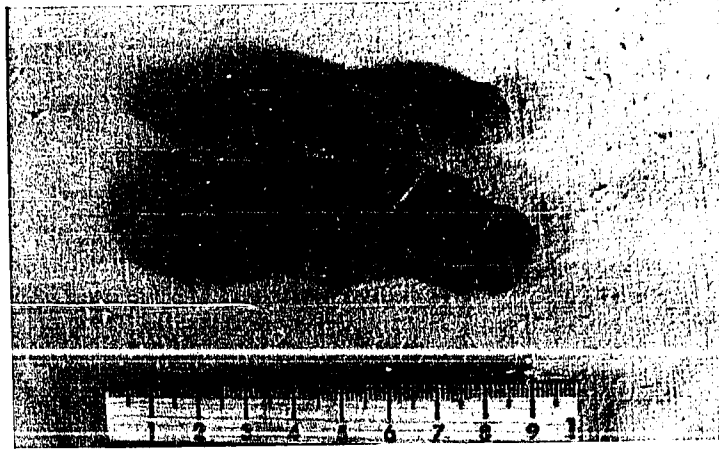


Fig. 43 Top: stone nose ornament from grave 100, Sitio Conte (4.7 cm. long, 8.2 cm. wide [UM40-14-743]); bottom: stone nose pendants, Sitio Conte (upper left: general find, 1.9 cm. long, 2.6 cm. wide [UM40-14-767]; upper right: grave 91, 5.6 cm. wide, 2.4 cm. high [UM40-14-691]; lower left: grave 90, 2.4 cm. wide, .7 cm. high [UM40-14-683]; lower right: Mason's cache 20, 5.5 cm. wide, 1.8 cm. high [UM40-14-746]).

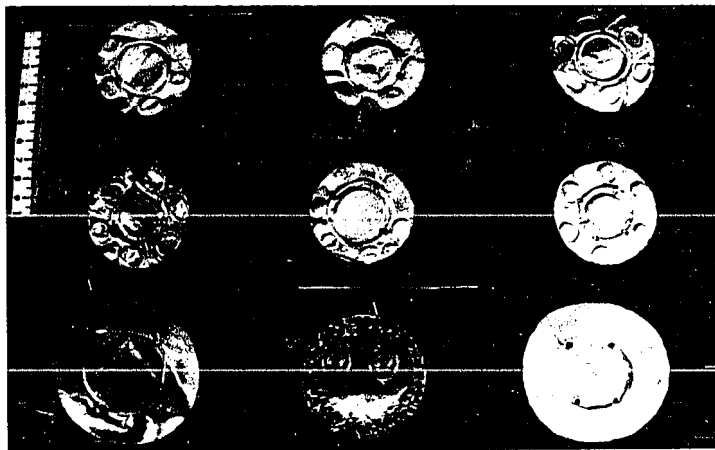


Fig. 44 Repoussé gold disks from graves 74 and 90, Sitio Conte (5.1 to 7.4 cm. diameters [left to right and top to bottom: UM40-13-13, 15, 17, 19, 20, 23, 149, 150, 183]; all are from grave 74 except 40-13-183).

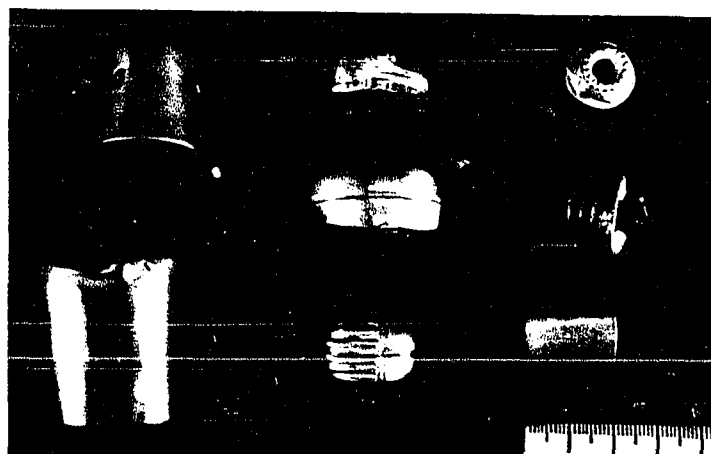
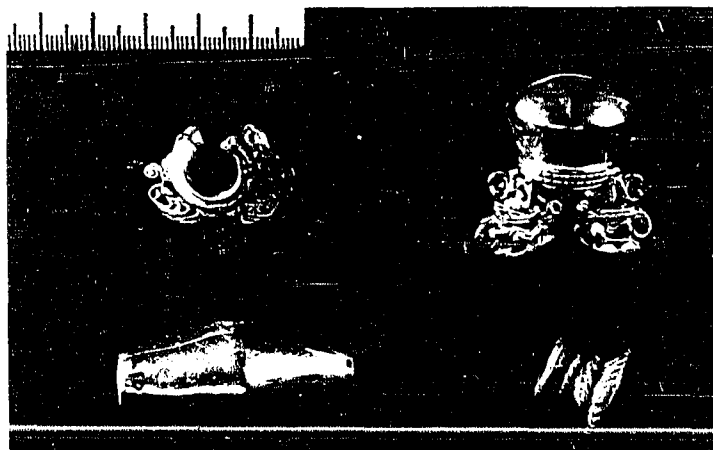


Fig. 45 Top: gold bell, nose ornaments, and a large bead all from grave 74, Sitio Conte, except bell in lower left which is from an unidentified grave (upper left, 2 cm. long, 1.7 cm. diameter [UM40-13-96]; lower left, 3.4 cm. wide, 3.5 cm. high [UM40-13-407]; upper right, 4.4 cm. long, 4.2 cm. diameter [40-13-102]; lower right, 1.9 cm. long, 1.4 cm. diameter [40-13-97]); bottom: gold nose ornament (center right) and gold overlay, Sitio Conte (left to right and top to bottom, largest piece is 3.9 cm. long, 2.5 cm. diameter [UM40-13-116, 157, 189, 114, 167, 224, 168, 117]); all are from grave 74 except top right [grave 91] and center right [undetermined grave]).

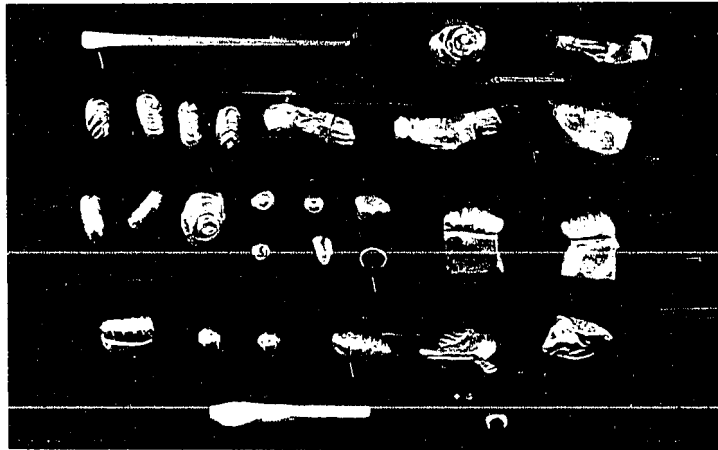
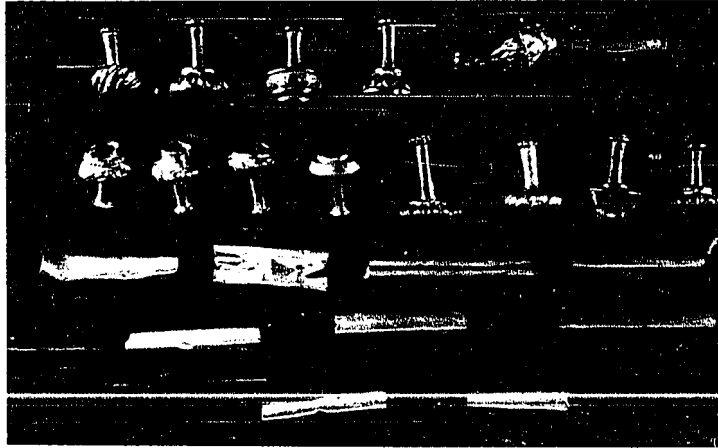


Fig. 46 Top: gold overlay for ear rods from graves 74 and 97, Sitio Conte (2.5 to 6.6 cm. long [left to right and top to bottom: UM40-13-61, 63, 66 through 69, 74, 75, 79, 81, 83 through 88, 90 through 92, 206]); all are from grave 74 except 40-13-206); bottom: gold beads, overlay and chisel from grave 74, Sitio Conte ([left to right and top to bottom: UM40-13-144, 147, 148, 155, 156, 158 through 164, 169 through 175, 200, 201, 1781; the chisel, UM40-13-178 is 7.9 cm. long).

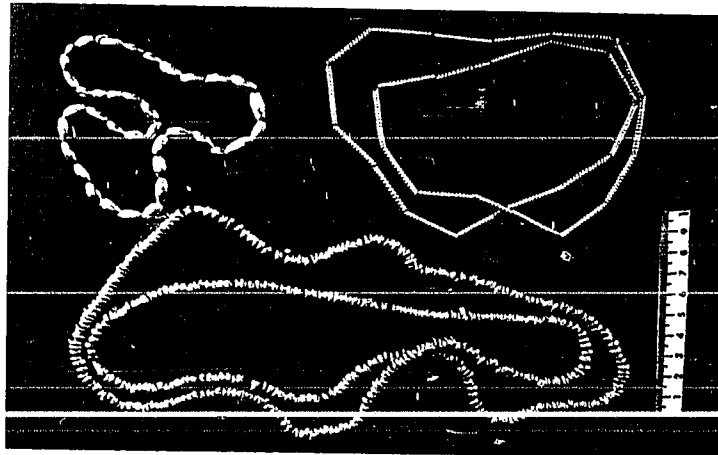
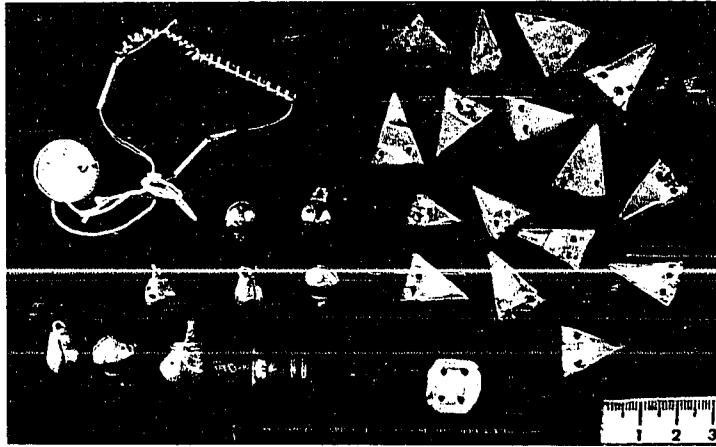


Fig. 47 Top: gold beads, bells and nose ornament from grave 74, Sitio Conte (.7-1.1 cm. long, .4-.7 cm. diameter [left to right and top to bottom: UM40-13-34, 35, 95, 101, 137]); bottom: gold beaded necklaces from grave 74, Sitio Conte (top: UM40-13-44; left: UM40-13-50; right: UM40-13-41).



Fig. 48 Top: canine teeth beads and bone projectile points from grave 74 (teeth: average 2 cm. long [UM40-14-575]; points: a maximum of 6.5 cm. long [UM40-14-581 through 590]); bottom: animal teeth beads, miscellaneous bone objects, sting ray spines, bone fragments, bone projectile points, and bone scrapers or knives from grave 74, Sitio Conte (UM40-14-580).



Fig. 49 Stone celts or axes from grave 74, Sitio Conte (Top: 4.3-13.9 cm. long [left to right and top to bottom: UM40-13-644 through 646, 648, 649, 654 through 659, 665, 669, 674]; bottom: 5.6-10.1 cm. long [left to right and top to bottom: UM40-13-541, 652, 663, 677, 681, 684, 685, 688, 690, 694, 700, 705, 706, 708, 712]).

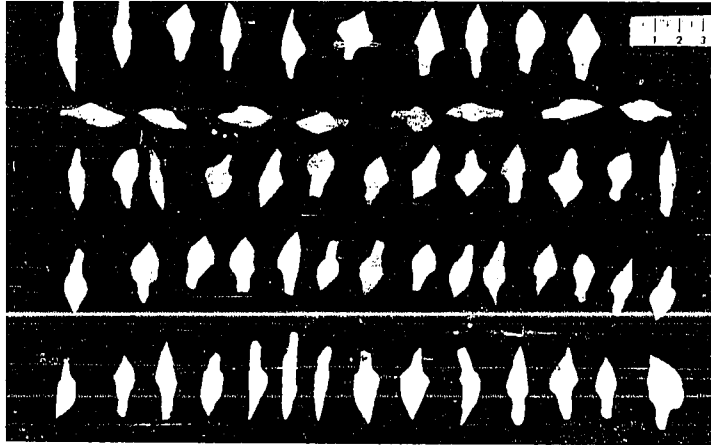


Fig. 50 Top: quartz projectile points from grave 74, Sitio Conte (2.8 cm. average length [UM40-14-116 through 175]); bottom: stone projectile points from grave 74, Sitio Conte: (2.6-6.9 cm. long [UM40-13-756 through 756, 40-14-476 through 478, 489, 540, 556 through 558]).

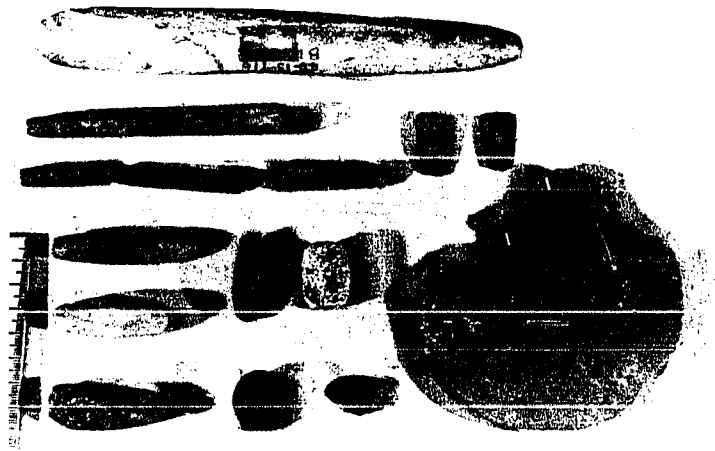
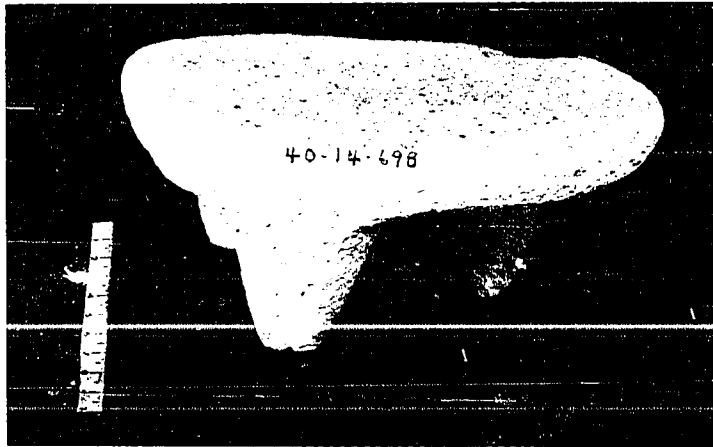


Fig. 51 Top: basalt metate from grave 91, Sitio Conte (11.2 cm. high, 19.7 cm. wide, 23.7 cm. long [UM40-16-698]); bottom: miscellaneous stone objects, including concretions, beads, celts, axes, ear rods, and a mirror back from grave 74, Sitio Conte (UM40-13-642, 716, 40-14-544, 546, 549, 551 through 555, 559 through 562).

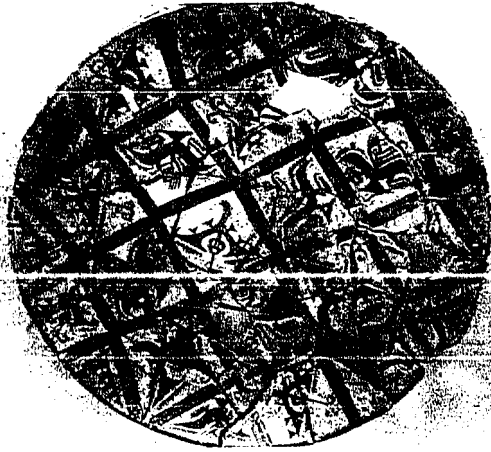


Fig. 52 Top: polychrome ceramic plate from grave 75, Sitio Conte (29.5 cm. diameter, 3.8 cm. high [UM40-16-1539]); bottom: polychrome ceramic plate from grave 83, Sitio Conte (29 cm. diameter, 4.1 cm. high [UM40-16-810]).

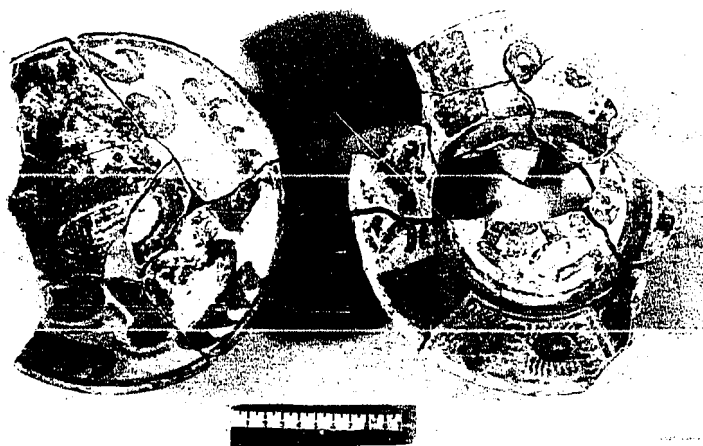
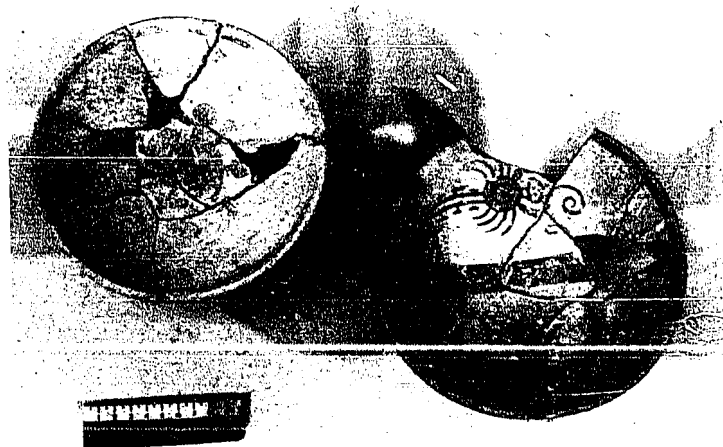


Fig. 53 Top: polychrome ceramic plate from grave 80 (17.2 cm. diameter, 5 cm. high [UM40-16-609]) and a bichrome plate possibly from grave 75 (size is unknown [UM40-16-609]); bottom: polychrome ceramic bowls from grave 74, Sitio Conte (left: 19.2cm. diameter, 6.2 cm. high [UM40-16-1423]; right: 20.8 cm. diameter, 4.8 cm. high [UM40-16-441]).

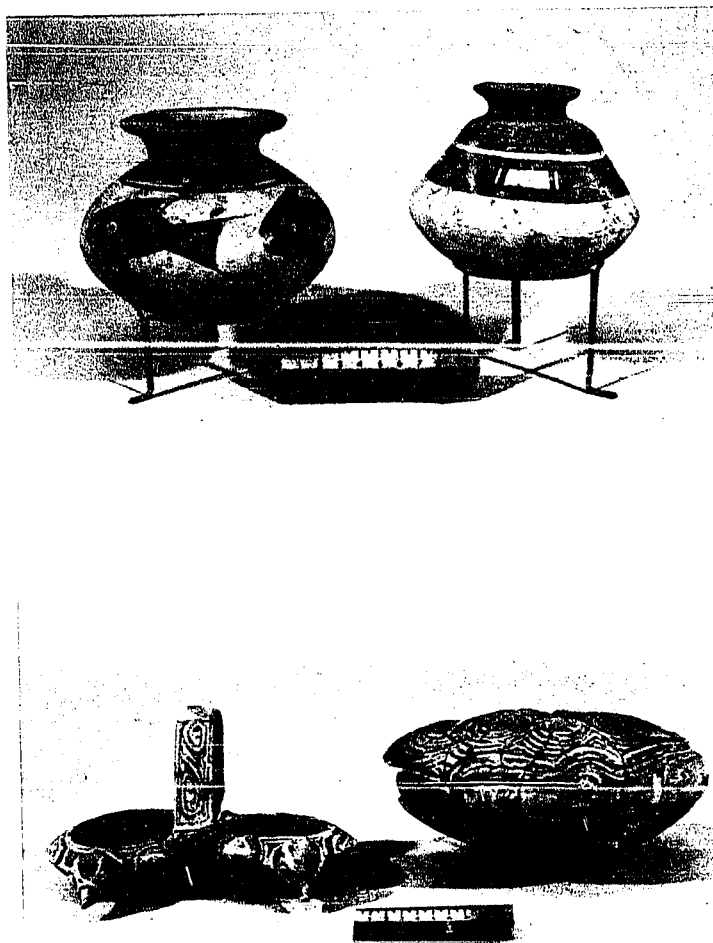


Fig. 54 Top: polychrome ceramic jars or ollas from grave 85, Sitio Conte (left: 13 cm. diameter, 10.6 cm. high [UM40-15-75]; right: 11.6 cm. diameter, 10 cm. high [UM40-15-79]); bottom: polychrome effigy vessels from grave 74, Sitio Conte (left: 2.5 cm. long, 14.1 cm. high, 14.6 cm. wide [UM40-16-133]; right: 24 cm. diameter, 14 cm. high [UM40-16-1332]).

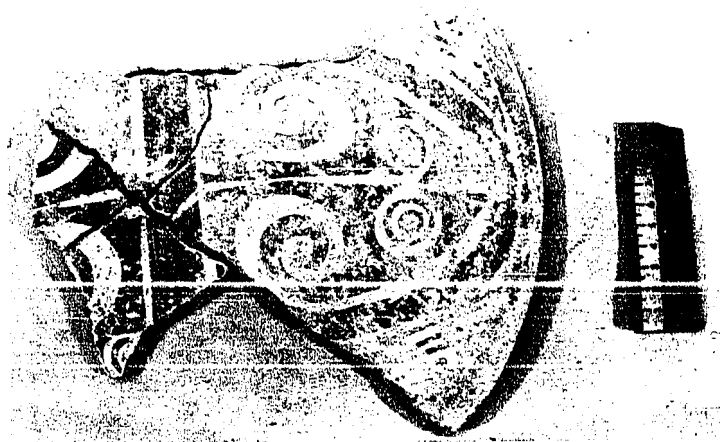


Fig. 55 Top: polychrome ceramic plate fragments from grave 100, Sitio Conte (unknown diameter, 4.6 cm. high [UM40-16-1227]); bottom: polychrome ceramic plate fragments from grave 81, Sitio Conte (30 cm. diameter, 4.5 cm. high [UM40-16-760]).

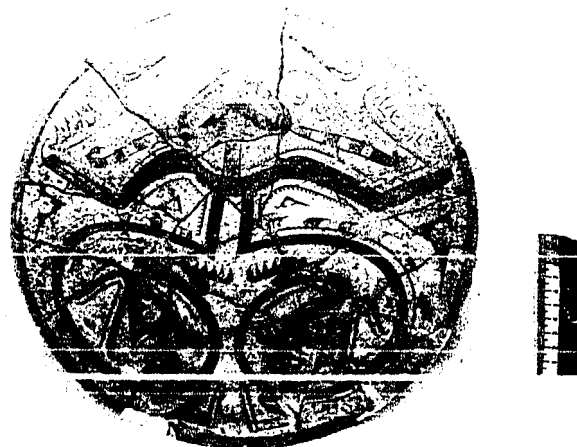
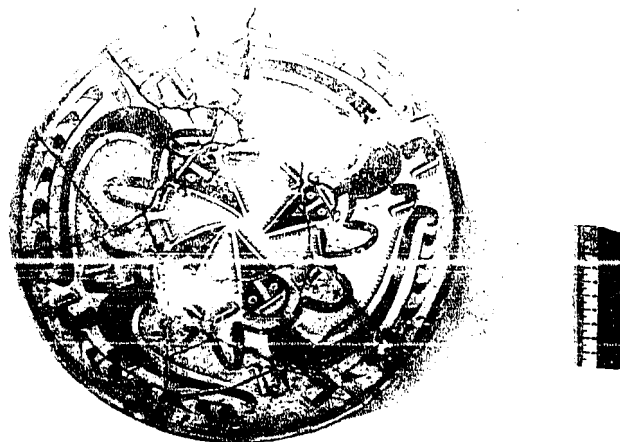


Fig. 56 Polychrome ceramic plates from grave 68, Sitio Conte (top: 29.9 cm. diameter, 5.4 cm. high [UM40-15-206]; bottom: 31 cm. diameter, 4 cm. high [UM40-15-201]).

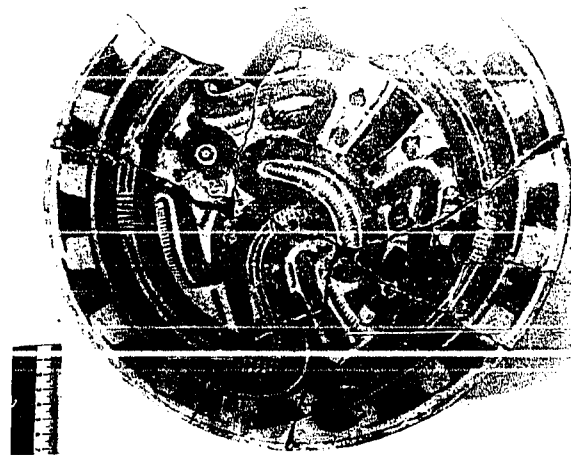
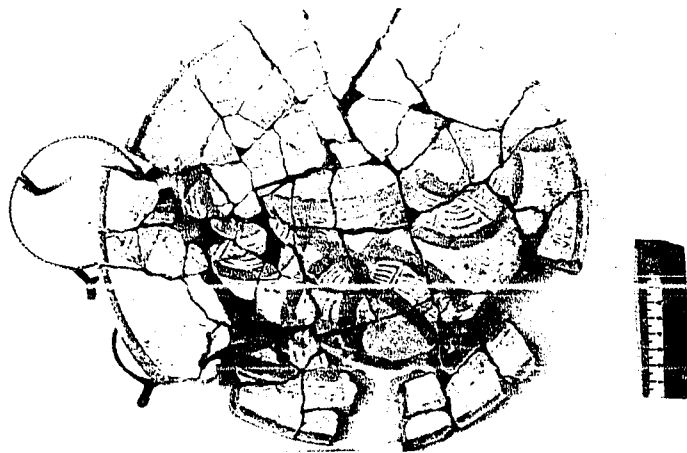


Fig. 57 Polychrome ceramic plates, Sitio Conte (top: grave 88, 27 cm. diameter, 9 cm. high [UM40-16-871]; bottom: grave 74, 31.4 cm. diameter, 5.2 cm. high [UM40-16-403]).



Fig. 58 Polychrome ceramic plates from grave 88, Sitio Conte (top: 32.9 cm. diameter, 4 cm. high [UM40-16-17i2]; bottom: 27.4 cm. diameter, 6.2 cm. high [UM40-16-874]).

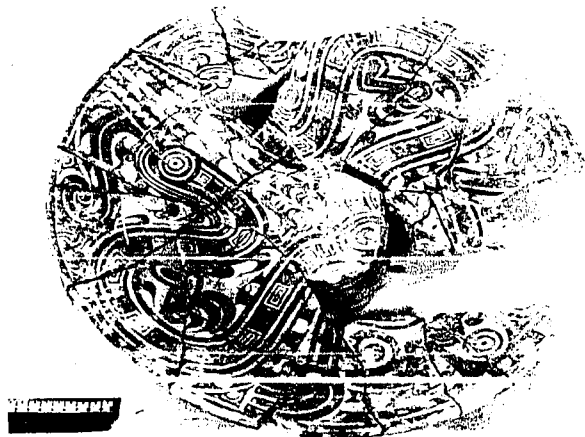
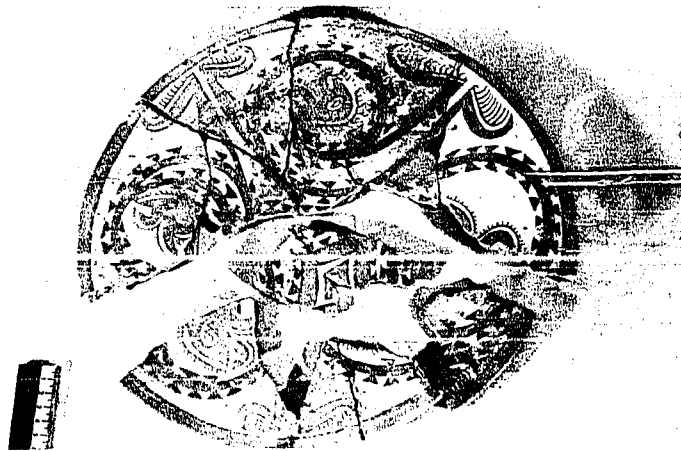


Fig. 59 Top: polychrome ceramic plate from grave 75, Sitio Conte (35.6 cm. diameter, unknown high [UM40-16-558]); bottom: polychrome pedestal plate from grave 74 (43.7 cm. diameter, 14.6 cm. high [UM40-16-515]).

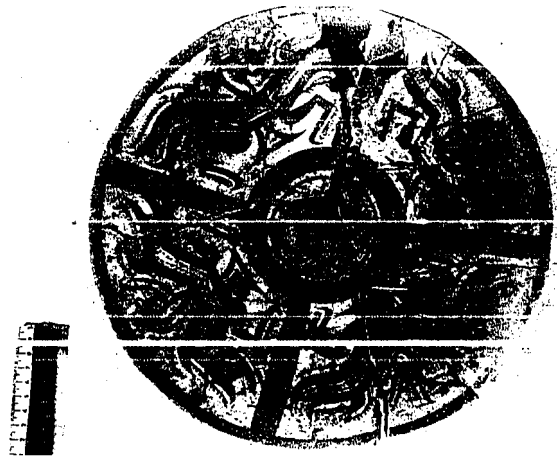
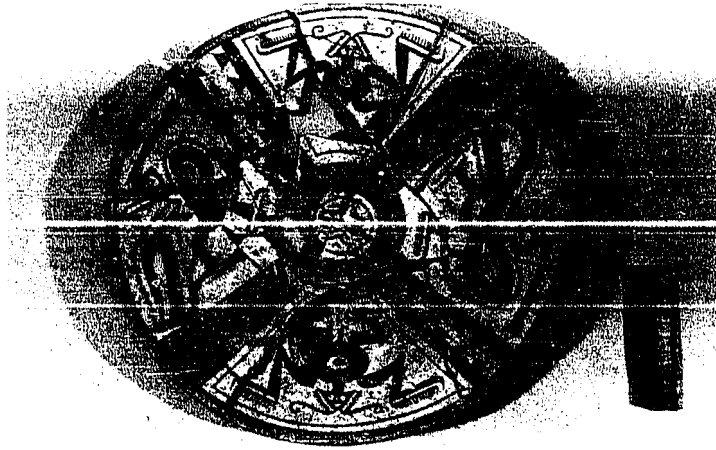


Fig. 60 Polychrome ceramic plates, Sitio Conte (top: grave 68, 31.8 cm. diameter, 4 cm. high [UM40-16-371]; bottom: grave 75, 30.8 cm. diameter, 4.5 cm. high [UM40-16-551]).

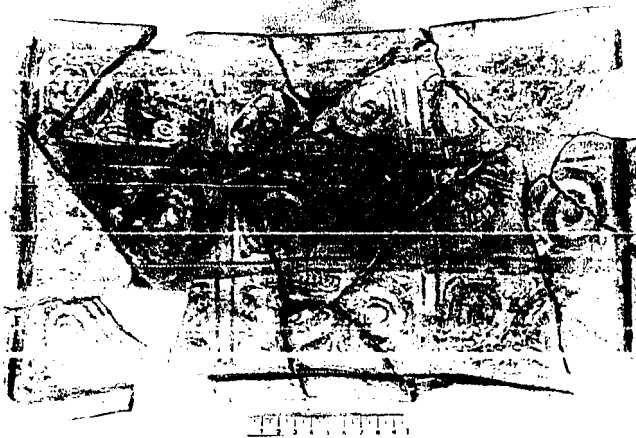
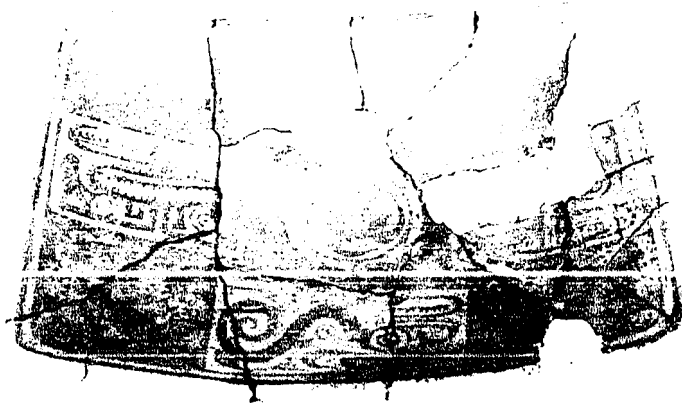


Fig. 61 Rectangular polychrome ceramic pedestal plates from grave 74, Sitio Conte (top: 42 cm. long, 29.8 cm. wide, 14.1 cm. high [UM40-16-1373]; bottom: 36.3 cm. long, 21.9 cm. wide, 9.8 cm. high [UM40-16-1322]).

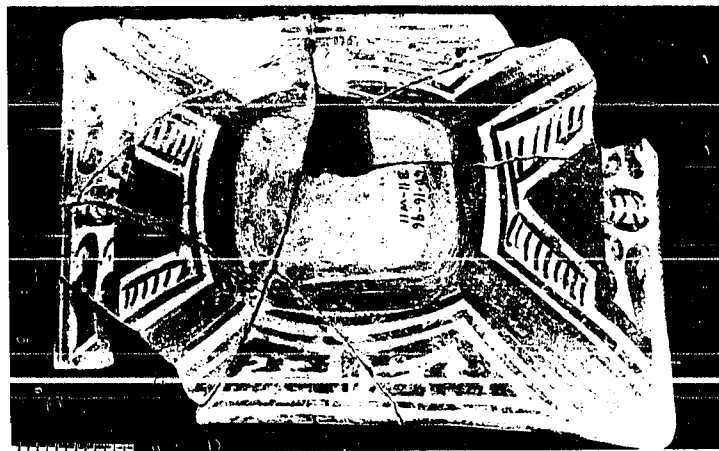
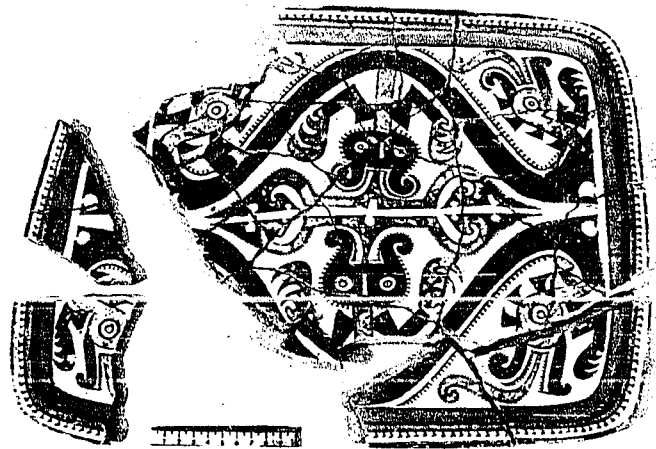


Fig. 62 Rectangular polychrome ceramic pedestal plates from grave 74, Sitio Conte (top: 40 cm. long, 33.7 cm. wide, 4.3 cm. high [UM40-16-337]; bottom: view of the underside, 31 cm. long, 22.5 cm. wide [UM40-16-96]).

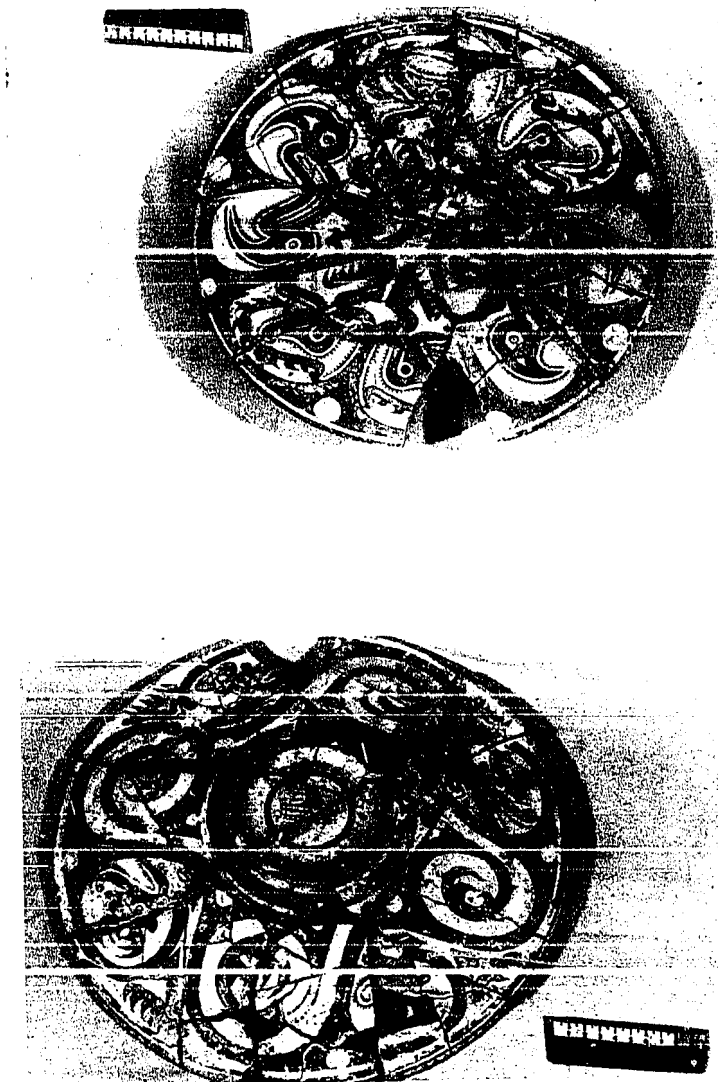


Fig. 63 Top and bottom views of polychrome ceramic plate from grave 78, Sitio Conte (33.5 cm. diameter, 5.7 cm. high [UM40-16-1581]).

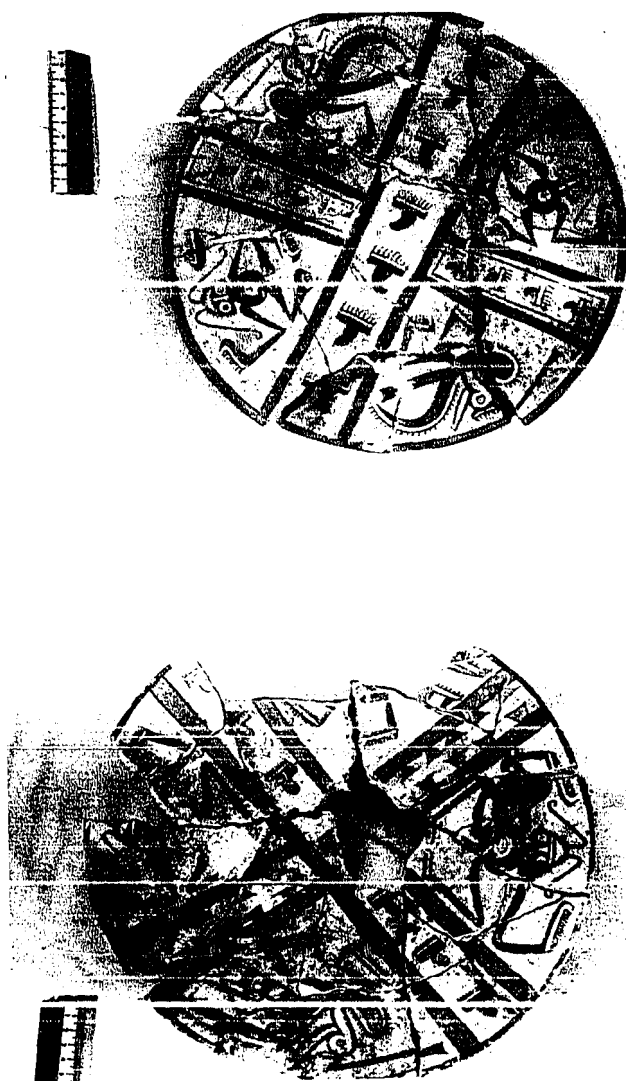


Fig. 64 Polychrome ceramic plates, Sitio Conte (top: grave 83, 31.3 cm. diameter, 5.3 cm. high [UM40-16-809]; bottom: grave 75, 31.8 cm. diameter, 3 cm. high [UM40-16-1547]).

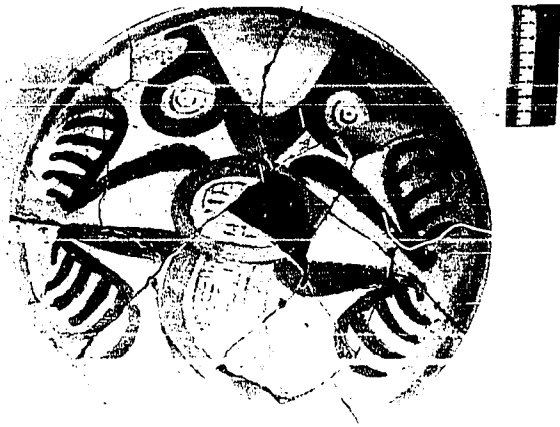
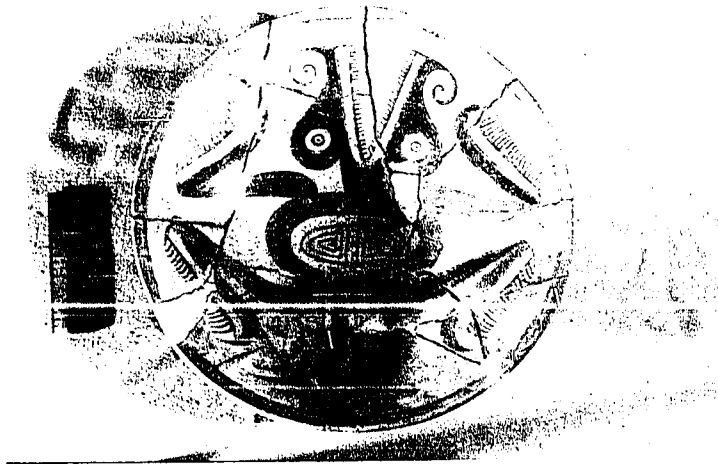


Fig. 65 Polychrome ceramic plates, Sitio Conte (top: grave 68, 28.2 cm. diameter, 7.3 cm. high [UM40-15-204]; bottom: 31.8 cm. diameter, 8.6 cm. high [UM40-16-939]).

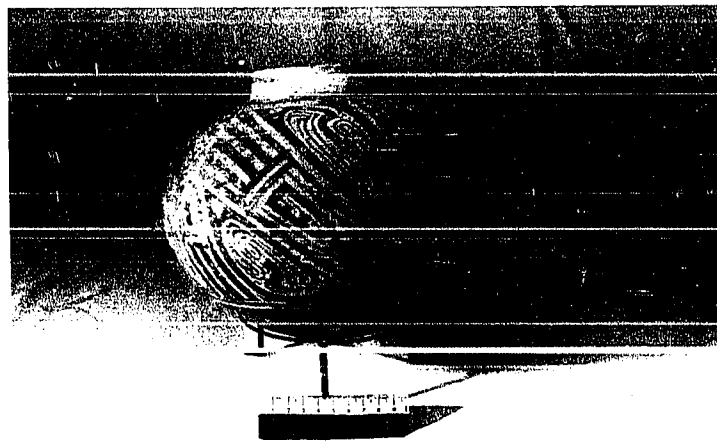
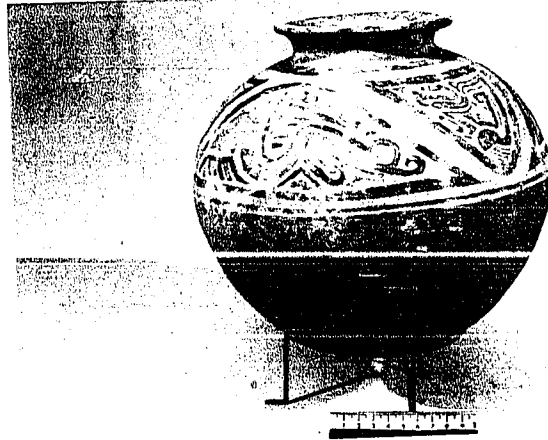


Fig. 66 Polychrome ceramic jars or ollas, Sitio Conte
(top: grave 85, 78.6 cm. circumference, 24.1 cm.
high [UM40-15-70]; bottom: Mason's cache 9, 72.8
cm. circumference, 18.6 cm. high [UM40-16-55]).



Fig. 67 Top: polychrome ceramic pedestal bowl from grave 58, Sitio Conte (11.7 cm. diameter, 10.4 cm. high [Brooklyn Museum 33.448-53]); bottom: bichrome ceramic plate from grave 83, Sitio Conte (30.8 cm. diameter, 4 cm. high [UM40-16-822]).

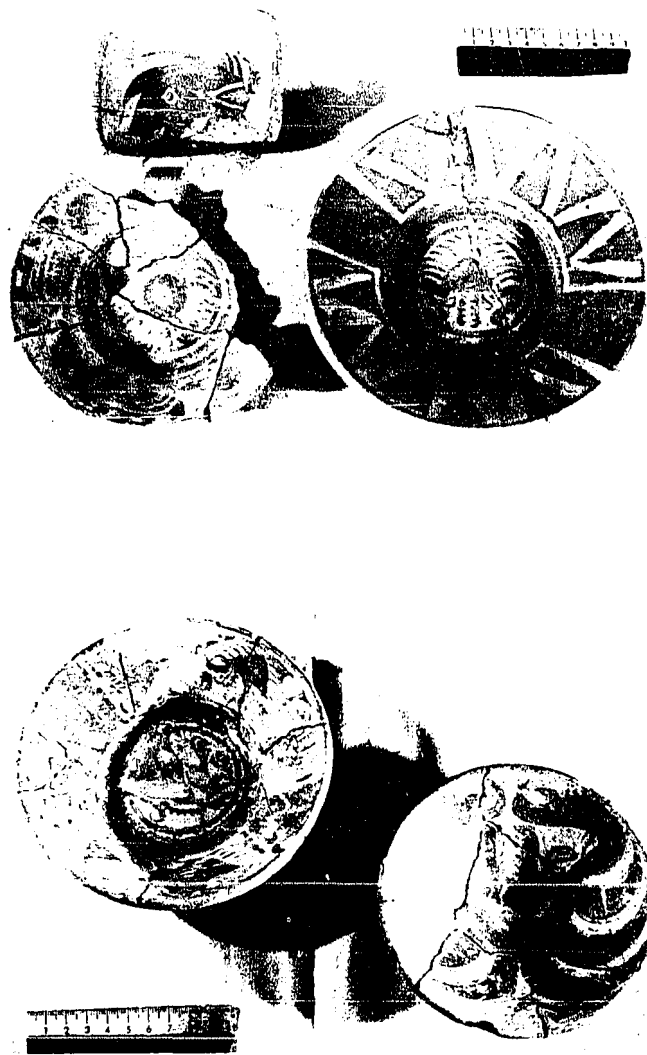


Fig. 68 Top: two polychrome ceramic plates and a four-legged rectangular polychrome ceramic plate from grave 74 (top left: 10.4 cm. long, 9.1 cm. wide, 3.8 cm. high [UM40-16-304]; lower left: 15.6 cm. diameter, 3.7 cm. high [UM40-16-1346]; right: 17.5 cm. diameter, 4.6 cm. high [UM40-16-266]); bottom: polychrome ceramic plates from grave 6 (right: 13.2 cm. diameter, 4 cm. high [Brooklyn Museum 33.448-28]; left: 15.1 cm. diameter, 4.1 cm. high, [Brooklyn Museum 33.448-38]).

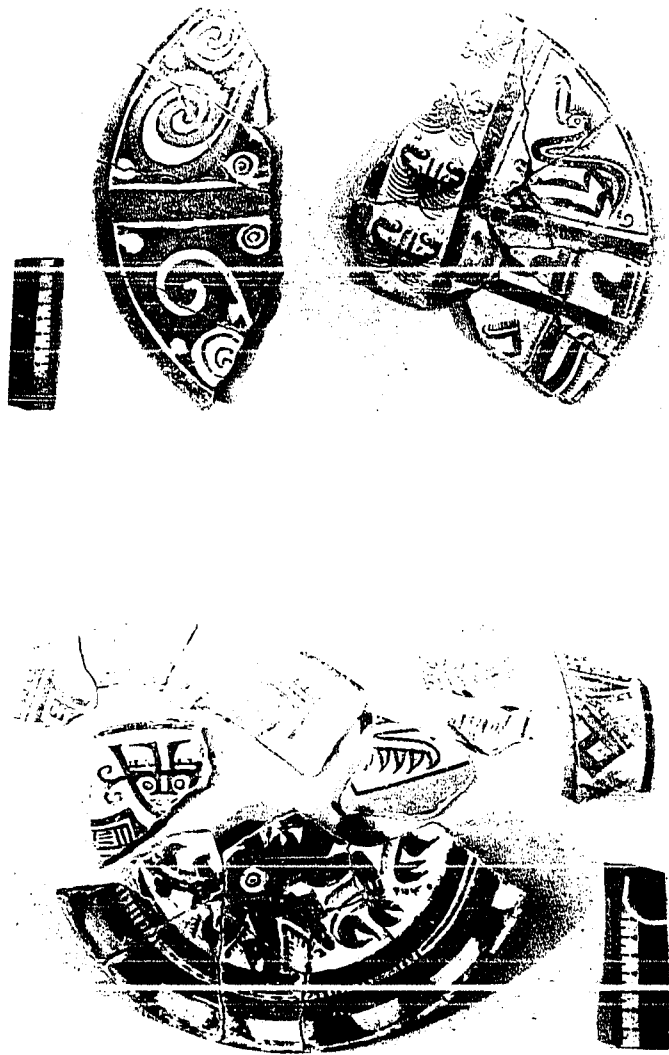


Fig. 69 Fragments of polychrome ceramic plates from graves 74, 76, 77, and 100, Sitio Conte (top [left, right]: UM40-16-1222, 688; bottom [top left, lower left, right]: UM40-16-1358, 1596, 1893).

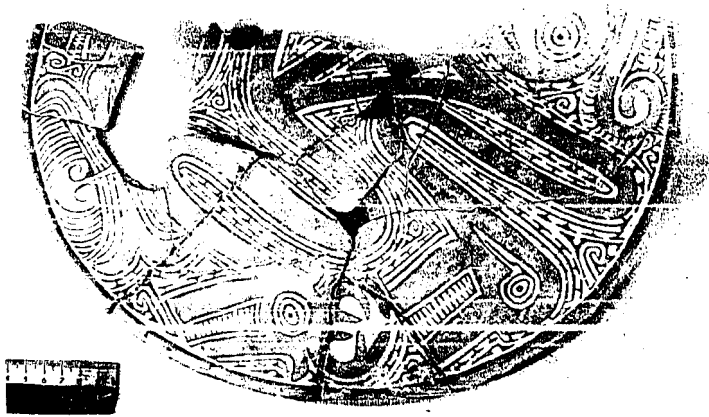


Fig. 70 Polychrome ceramic plates, Sitio Conte (top: grave 83, 30.7 cm. diameter, 2.3 cm. high [UM40-16-818]; bottom: grave 92, 36.8 cm. diameter, 3.6 cm. high [UM40-16-1048]).

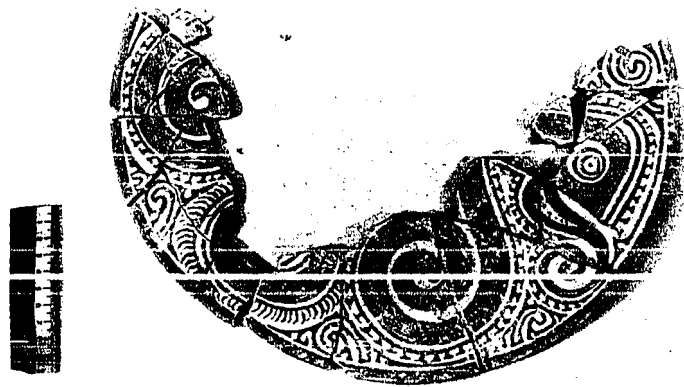
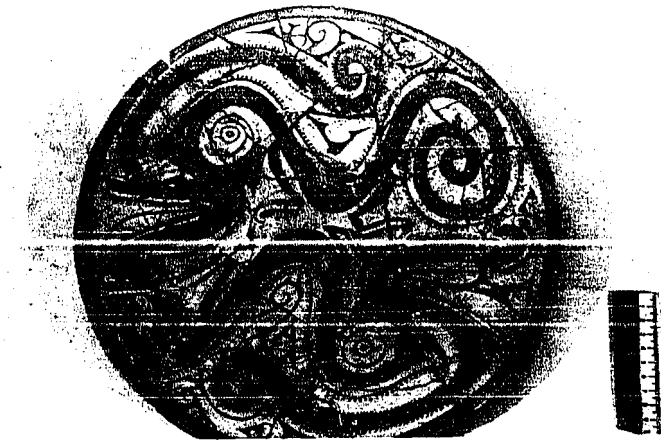


Fig. 71 Polychrome ceramic plates, Sitio Conte (top: grave 83, 29 cm. diameter, 4.1 cm. high [UM40-16-811]; bottom: grave 100, 34.7 cm. diameter, unknown height [UM40-16-1849]).

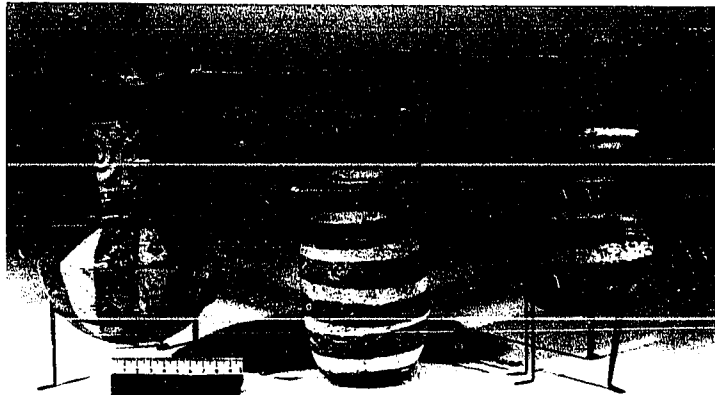


Fig. 72 Top: polychrome ceramic carafes from grave 74, Sitio Conte (10.9-11.5 cm. diameters, 13.7-14.7 cm. high [left to right: UM40-16-223, 230, 231]); bottom: polychrome ceramic carafes and jar from grave 74, Sitio Conte (left: 14.4 cm. diameter, 18.6 cm. high [UM40-16-90]; center: 9.8 cm. diameter, 16.7 cm. high [UM40-16-104]; right: 11.4 cm. diameter, 14.1 cm. high [UM40-16-102]).

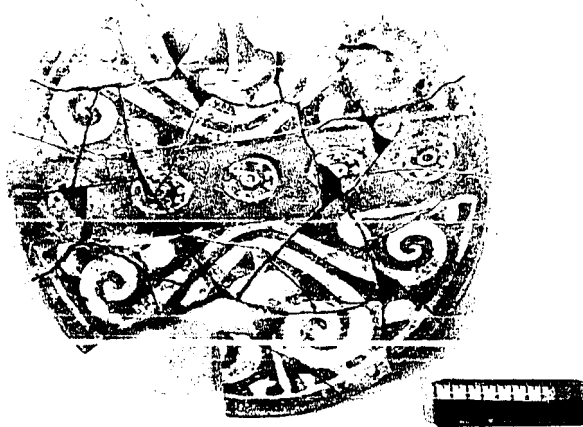


Fig. 73 Polychrome ceramic plates, Sitio Conte (top: grave 92, 34.5 cm. diameter, 4.5 cm. high [UM40-16-1036]; bottom: grave 100, 31.8 cm. diameter, 5.5 cm. high [UM40-16-1225]).

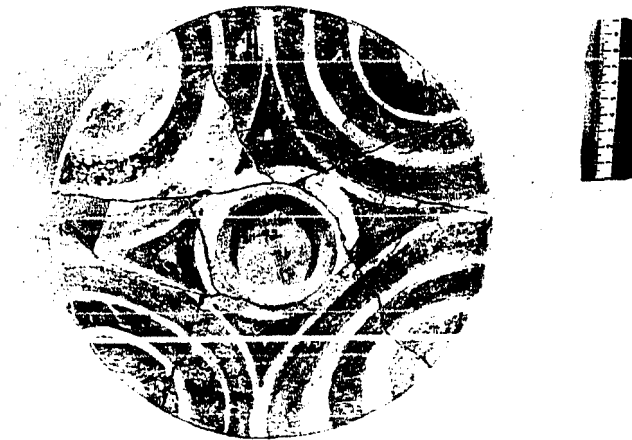
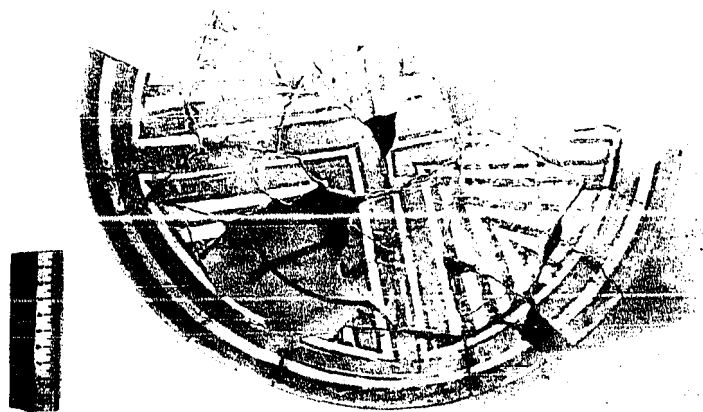


Fig. 74 Polychrome ceramic plates, Sitio Conte (top: grave 92, 31.5 cm. diameter, 5.9 cm. high [UM40-16-17881]; bottom: grave 74, 25.6 cm. diameter, 4.5 cm. high [UM40-16-1611]).

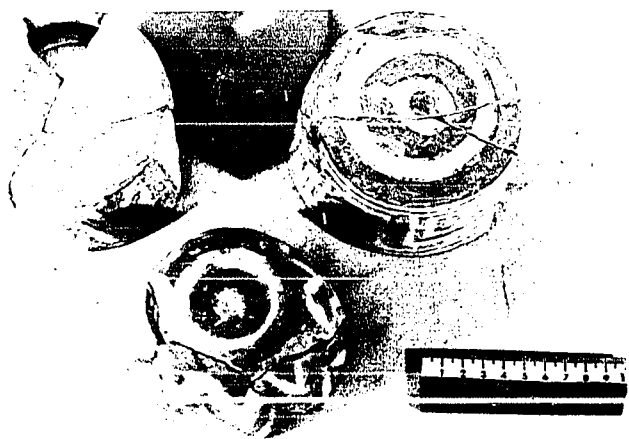
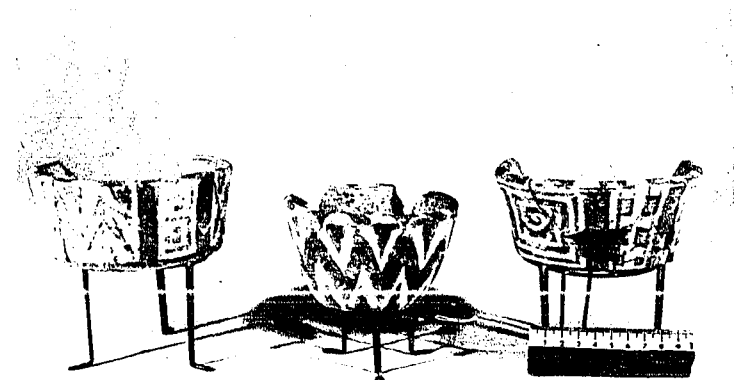


Fig. 75 Top and bottom views of polychrome plates or bowls from grave 74, Sitio Conte (left: 12.2 cm. diameter, 5.8 cm. high [UM40-16-1344]; center: 10.3 cm. diameter, 6.6 cm. high [UM40-16-262]; right: 12.4 cm. diameter, 6.1 cm. high [UM40-16-263]).

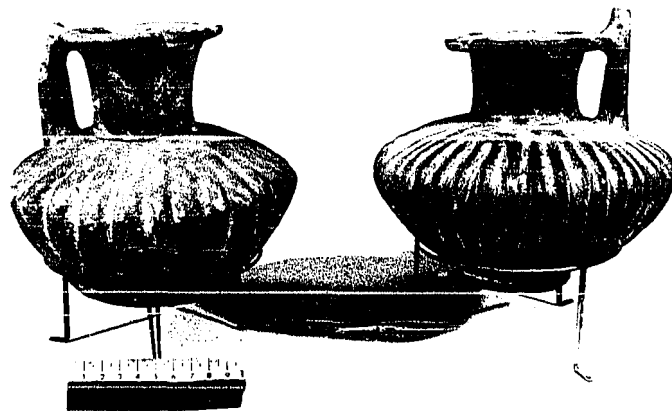
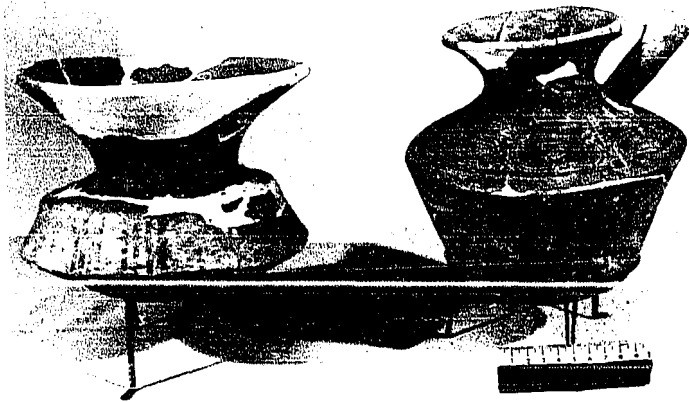


Fig. 76 Top: polychrome ceramic jars or ollas from grave 90 (left: 19.3 cm. diameter, 16.2 cm. high [UM40-15-450]; right: 18.3 cm. diameter, 18.1 cm. high [UM40-15-448]); bottom: spouted jars or ollas from grave 85, Sitio Conte (left: 17.1 cm. diameter, 15.8 cm. high [UM40-15-76a]; right: 18.3 cm. diameter, 15.3 cm. high [UM40-15-74]).

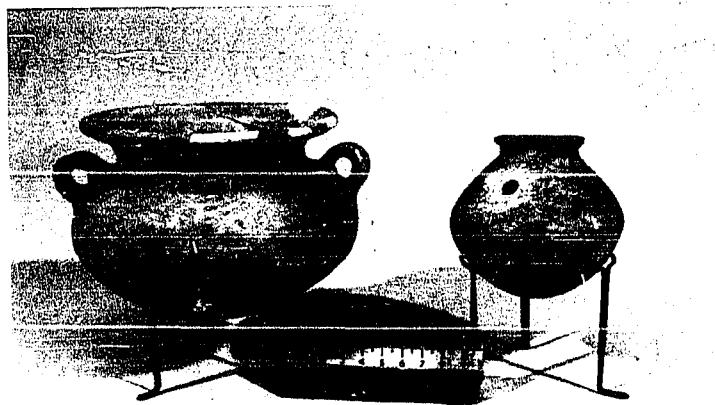
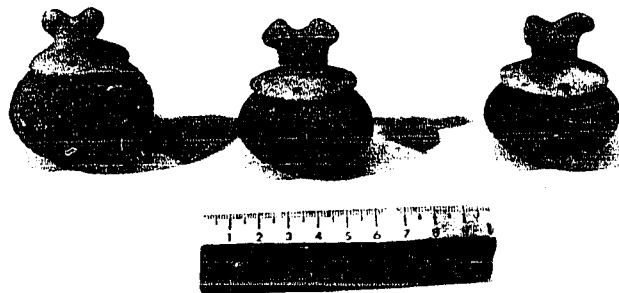


Fig. 77 Top: incised ceramic jars with lids from Mason's cache 1, Sitio Conte (4.2-5.6 cm. diameter, 6.2-6.9 cm. high [left to right: UM40-16-4, 6, 7]); bottom: jars or ollas, Sitio Conte (left: grave 82, 14.3 cm. diameter, 10.1 cm. high [UM40-16-803]; right: grave 85, 8.5 cm. diameter, 8.1 cm. high [UM40-15-891]).

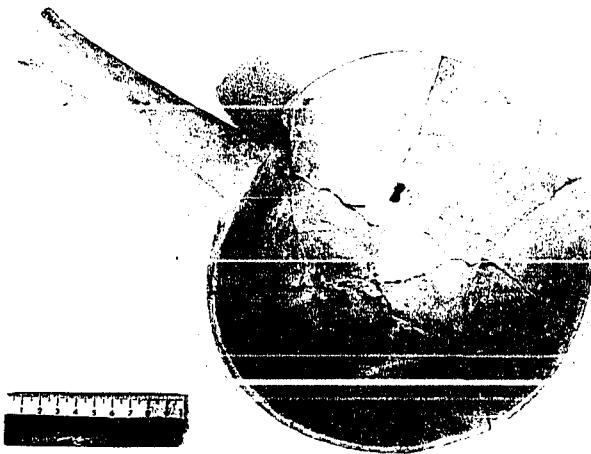
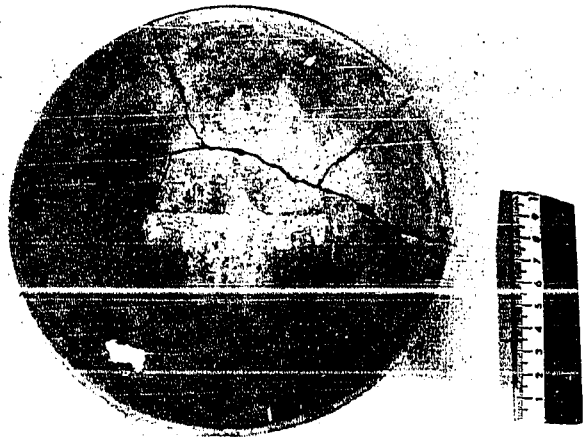


Fig. 78 Top: red ceramic plate from grave 74, Sitio Conte (17 cm. diameter, 6.3m. high [UM40-16-1364]); bottom: red ceramic censer from grave 91, Sitio Conte (33.2 cm. long, 23 cm. wide, 11 cm. wide [UM40-16-931]).

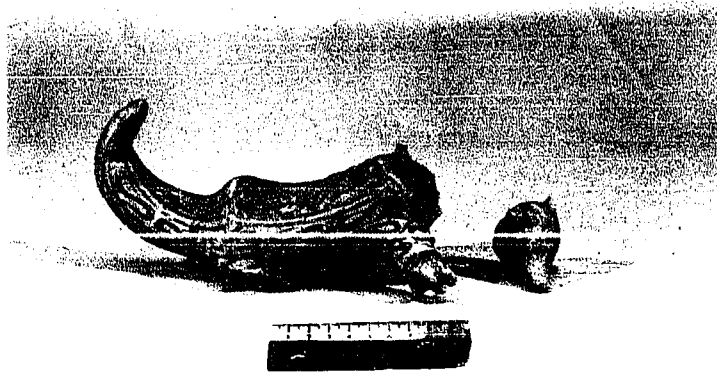


Fig. 79 Top: polychrome ceramic spouted effigy jar from grave 74, Sitio Conte (25 cm. long, 12.6 cm. wide, 12.2 cm. high [UM40-16-1378]); bottom: effigy ceramic vessel from grave 90 (26.9 cm. long, 22.8 cm. wide, 18.7 cm. high [UM40-15-481]).

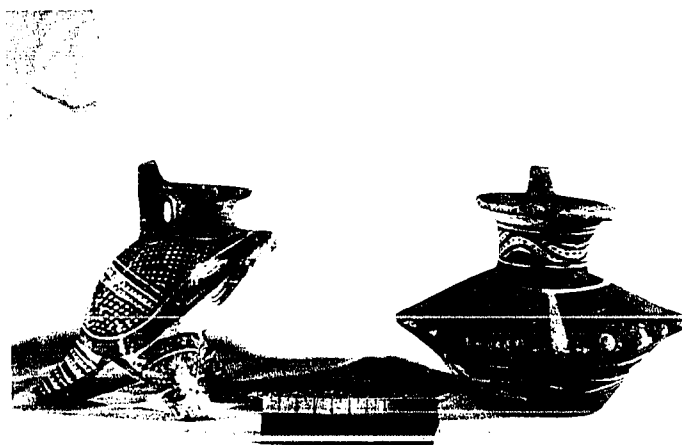
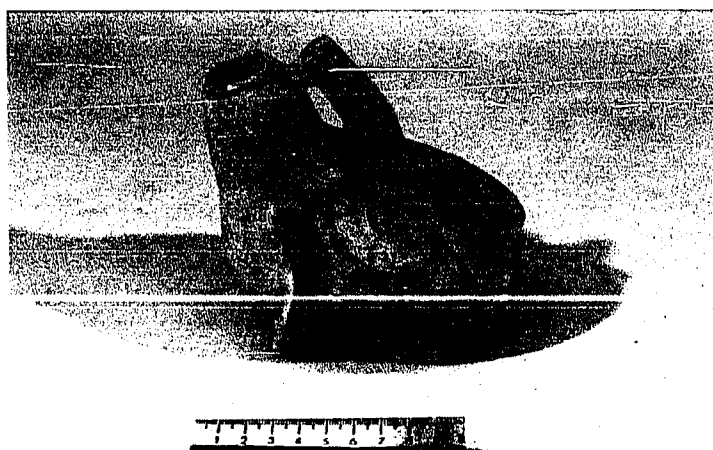


Fig. 80 Polychrome ceramic effigy vessels, Sitio Conte (top: grave 68, 12.6 cm. wide, 13.6 cm. long, 12.5 cm. high [UM40-15-197]; bottom left: grave 85, 18.9 cm. long, 9.8 cm. wide, 14.5 cm. high [UM40-15-72]; bottom right: grave 87, 16.2 cm. long, 18.7 cm. wide, 13.4 cm. high [UM40-15-355]).

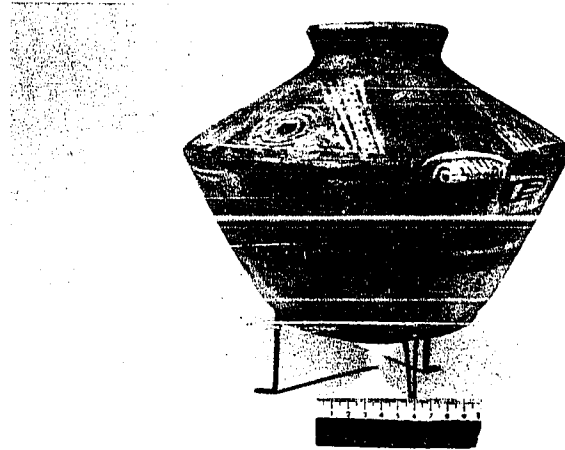


Fig. 81 Polychrome ceramic effigy vessels, Sitio Conte
(top: grave 85, 76.7 cm. circumference, 20.3 cm.
high [UM40-15-84]; bottom: grave 90, 27 cm.
diameter, 23.6 cm. high [UM40-15-472]).

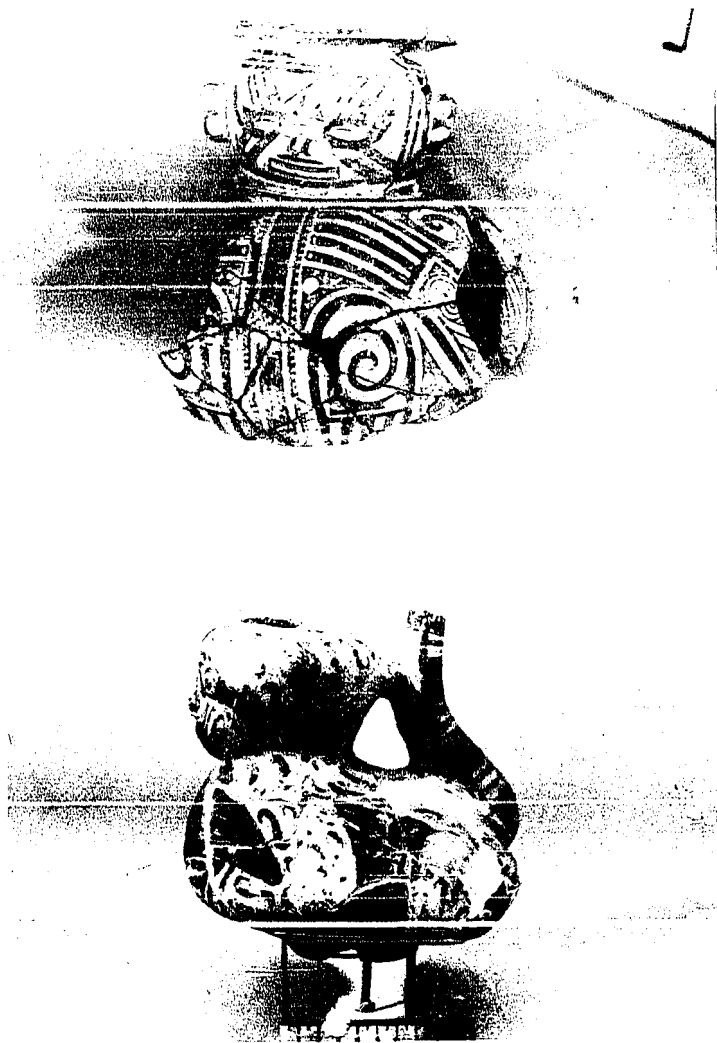


Fig. 82 Polychrome ceramic effigy vessels, Sitio Conte (top: grave 74, 19.5 cm. rim diameter [UM40-16-472]; bottom: grave 92, 17.2 cm. long, 17.3 cm. wide, 17.7 cm. high [UM40-16-1047]).



Fig. 83 Polychrome ceramic effigy vessel from Mason's cache 2, Sitio Conte (12 cm. wide, 21.6 cm. high [UM40-16-14]).

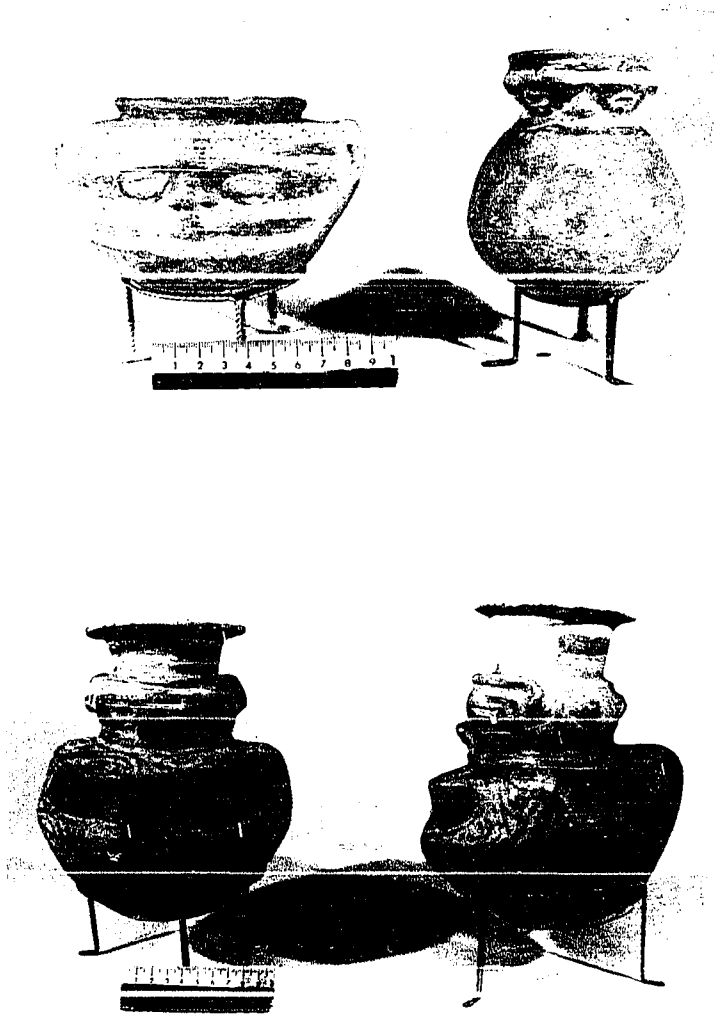


Fig. 84 Polychrome ceramic effigy vessels from grave 74, Sitio Conte (top left: 12.9 cm. diameter, 8.6 cm. high [UM40-16-217]; top right: 9.1 cm. diameter, 10.5 cm. high [UM40-16-233]; bottom left: 16.1 cm. long, 16.3 cm. wide, 20.6 cm. high [UM40-16-1318]; bottom right: 16.5 cm. long, 16.7 cm. wide, 21.8 cm. high [UM40-16-1319]).