

AN ANTHROPOLOGICAL PERSPECTIVE
ON THE ROLE OF CHINESE TRADE CERAMICS
IN THE PREHISTORY —
OF A PHILIPPINE CULTURE

by

HELENA LANGRICK

B.A., University Of British Columbia, 1982

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS

in

THE FACULTY OF GRADUATE STUDIES
(Department Of Anthropology And Sociology)

We accept this thesis as conforming
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

September 1985

© Helena Langrick, 1985

In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the head of my department or by his or her representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of Anthropology and Sociology

The University of British Columbia
1956 Main Mall
Vancouver, Canada
V6T 1Y3

Date October 10, 1985

Abstract

This study presents an analysis of Chinese trade ceramic data from a stratified burial site in the Philippines representing two main proto-historic periods in the 12th and 14th centuries A.D. An ethnographic model constructed from ethno-historical data is used to generate hypotheses which are evaluated by means of quantitative analyses designed to test for social complexity in each period. The results of analyses are then assessed in terms of symbolic patterns derived from the ethnographic model. The research framework includes the construction of a methodological structure designed to incorporate both processual and symbolic approaches to archaeological analysis.

The Pila cultural system is treated as an open, non-homeostatic system incorporating tangible and intangible elements, some aspects of which are not amenable to exact definition or measurement. Major areas of focus include the trade sub-system, the social sub-system and the ritual sub-system. Hypotheses test for social differentiation in terms of wealth, descent, social roles, and specialization of function; for hierarchy and centralization in terms of corporate control; for symbolic content of artifacts and ritual patterns; and for culture change in terms of increased social complexity in the later period. Analyses involve the evaluation of quantitative differences in amount of goods; patterns of spatial distribution throughout the site and within individual burials; and

comparisons of burial treatment between individuals and between sub-groups.

Major areas of theoretical concern include the question of status differentiation in prehistory, and the extent to which inferences can be made from mortuary patterns; the relationship between material culture, social organization and ideology; and the effects of prolonged long-distance trade on the internal complexity of a cultural group. I conclude that in Pila, mortuary patterns represent an accurate reflection of socio-cultural patterns in general. The results of the analyses support the applicability of the ethnographic model of Pila as an egalitarian society with a prominent ideological component in which Chinese ceramics played an important role. I conclude that a recursive relationship is seen to exist between material culture, social organization and ideology. In particular, that the physical characteristics of Chinese ceramics, characterized by durability, resonance, impermeability and light-reflecting glazes, caused them to become closely identified with all aspects of ritual, and to reinforce the ideological patterns of Pila. These ideological patterns include a belief in powerful ancestor and nature spirits which control all aspects of life and death. Associated with this are petitionary rituals of every kind, conducted mainly within the family circle in a one-to-one relationship with the spirits, and involving the use of Chinese ceramics as important ritual objects.

The mortuary data also indicates that culture change, characterized by a slight general increase in social complexity, occurred between the earlier and later cultural periods. This increase in social complexity appears to be associated with the long-standing trading contacts with China, in terms of economic impact as well as diffusion of certain cultural elements.

TABLE OF CONTENTS

	Page
ABSTRACT	ii
TABLE OF CONTENTS	v
LIST OF TABLES	viii
LIST OF TABLES - APPENDIX A	ix
LIST OF FIGURES	x
LIST OF FIGURES - APPENDIX B	xii
ACKNOWLEDGEMENTS	xiii
CHAPTER 1 INTRODUCTION	1
1.1. The Research Problem	1
1.2. The Site	8
CHAPTER 2 THEORETICAL BACKGROUND	16
2.1. Introduction	16
2.2. Mortuary Analysis	17
2.2.1. The Processual Approach	17
2.2.2. The Symbolic Approach	25
2.3. Systems Theory	32
2.4. Social Organization	36
2.4.1. Bilateral Kinship	36
2.4.2. Archaeological Background	43
2.4.3. Trade and Exchange	44
CHAPTER 3 THE ETHNOGRAPHIC MODEL	47
3.1. Introduction	47
3.2. Trade Sub-System	48
3.3. Social Sub-System	51
3.4. Ritual Sub-System	54
3.5. Structural Model of Pila Cultural System ..	58

CHAPTER 4 ANALYSIS: TESTING THE MODEL	62
4.1. Introduction to Methods	62
4.1.1. Nature of the Data	62
4.1.2. Implications of Theoretical Approach ..	67
4.1.3. Structure of the Analysis	70
CHAPTER 5 ANALYSIS: PERIOD II - TRADE SUB-SYSTEM	72
5.1. Introduction	72
5.2. Hypotheses: Processual	72
5.2.1. Hypothesis 1	72
5.2.2. Hypothesis 2	73
5.2.3. Hypothesis 3	73
5.2.4. Hypothesis 4	74
5.3. Analyses	75
5.4. Summary and Discussion	91
CHAPTER 6 ANALYSIS: PERIOD II - SOCIAL SUB-SYSTEM	95
6.1. Introduction	95
6.2. Hypotheses: Processual	95
6.2.5. Hypothesis 5	95
6.2.6. Hypothesis 6	96
6.2.7. Hypothesis 7	96
6.3. Analyses	97
6.4. Summary and Discussion	114

CHAPTER 7 ANALYSIS: PERIOD II - RITUAL SUB-SYSTEM	117
7.1. Introduction	117
7.2. Hypotheses: Symbolic	117
7.2.8. Hypothesis 8	117
7.3. Hypotheses: Processual	120
7.3.9. Hypothesis 9	120
7.4. Analyses	122
7.5. Summary and Discussion	138
CHAPTER 8 ANALYSIS: PERIOD III	143
8.1. Introduction	143
8.2. Hypotheses: Processual	145
8.2.10. Hypothesis 10	145
8.3. Analyses	146
8.4. Summary and Discussion	159
CHAPTER 9 DISCUSSION	166
CHAPTER 10 CONCLUSIONS	177
10.1. Conclusions Related to Pila	178
10.2. Conclusions Related to Methodology	186
10.3. Conclusions Related to Theory	187
BIBLIOGRAPHY	190
APPENDIX A TABLES	203
APPENDIX B FIGURES	242
APPENDIX C NOTES TO THE TEXT	253

LIST OF TABLES

Table		Page
4.1.	Table of inhumation and cremation burials in Agra and Mendoza, Periods I to IV	64
5.1.	Frequency of burials with each trait in Agra and Mendoza (sum, %, mean, median, qU, qL, standard deviation)	77
7.1.	Wealthy burials with sums, % and means: glaze categories	131
7.2.	Wealthy burials with sums, % and means: function categories	132
7.3.	Wealthy burials with % of different ware associations	137
8.1.	Table of mean depths (in centimetres) of burials in Period III	157

LIST OF TABLES - APPENDIX A

Table		Page
A-1	Table of trade ceramic categories at Pila (by ware and function	204
A-2	Table of non-trade ceramic categories at Pila. ..	207
A-3a	List of burials and associated grave goods: Agra (L)	208
A-3b	List of burials and associated grave goods: Agra (R)	213
A-4a	List of burials and associated grave goods: Mendoza (L)	219
A-4b	List of burials and associated grave goods: Mendoza (R)	221
A-5	Number and % of burials with each number of pots (all pots, trade ceramics, earthenwares) ...	224
A-6	Wealthy and poor groups: Agra and Mendoza (trade ceramics) - means, standard deviation, coefficient of variation	226
A-7	List of ceramic glaze categories (and codes)	227
A-8	List of functional categories: (1) containers; (2) dishes; (3) other.	228
A-9	Wealthy burials and glaze categories: Agra	229
A-10	Wealthy burials and glaze categories: Mendoza ...	231
A-11	Wealthy burials and function categories: Agra ...	232
A-12	Wealthy burials and function categories: Mendoza	234
A-13	Period III cremation burials: Agra	235
A-14	Period III cremation burials: Mendoza	239
A-15	Inhumation burials, Period III: Agra	240
A-16	Depth of burials: Period III	241

LIST OF FIGURES

Figure		Page
1.1.	Map of Philippines with ceramic sites.	2
1.2.	Map of Pila, Laguna	10
1.3.	Map of Pila excavation sites.	11
1.4.	Diagram of Pila stratigraphy.	12
3.1.	Structural Model of the Pila cultural system. ...	59
4.1.	Numbers of artifacts in total burial population at Pila: Period II.	65
5.1.	Percent of burials in Agra and Mendoza with each category of artifact: Period II.	78
5.2.	Mean numbers of artifacts per burial in Agra and Mendoza: Period II	79
5.3.	Percent of burials in total Pila population with each number of trade ceramics present: Period II	83
5.4.	Percent of burials in total Pila population, Agra and Mendoza, containing earthenware pottery: Period II.	83
5.5.	Percent of burials in Site 1 (Agra): Period II, containing (1) any pottery (ceramics or earthenware) and (2) trade ceramics only.	84
5.6.	Percent of burials in Site 2 (Mendoza): Period II, containing (1) any pottery (ceramics or earthenware) and (2) trade ceramics only.	85
6.1	Wealthy and poor groups in Agra and Mendoza: Period II, with mean numbers of ceramics, earthenwares and iron per burial.	98
6.2.	Boxplots of trade ceramic data from Agra and Mendoza: Period II. Comparing (1) total populations and (2) wealthy sub-groups.	99
6.3.	Map of excavation area, Site 1(Agra): Period II	105
6.4.	Map of excavation area, Site 2 (Mendoza): Period II.	107

6.5.	Ceramic discs from Pila: Periods II and III (actual size).	110
6.6.	Net sinkers from Pila: Periods II and III (actual size).	112
8.1.	Map of cremation burials, Site 1 (Agra): Period III.	149

LIST OF FIGURES - APPENDIX B

Figure		Page
B-1	Photo: earthenware pottery from Pila.	243
B-2	Photo of burial assemblage #98, Pila: Period II.	244
B-3	Photo of burial assemblage #28, Pila: Period II.	245
B-4	Photo of double burial, Sta.Ana.	246
B-5	Photo of burial #28 in situ, Pila: Period II. ...	246
B-6	Photo of burial #1, Pila: Period II.	247
B-7	Photo of burial #54, Pila: Period II.	247
B-8	Photo of Ming Period burial, Pila: Period IV. ...	248
B-9	Diagram of pre-Ming burial, Calatagan	248
B-10	Photo of cremation burial #74, with associated grave goods, Pila: Period III.	249
B-11	Photo of cremation jar burials (smashed), Pila: Period III.	249
B-12	Photo of crematorium structure, Pila: Period III,	250
B-13	Photo of cremation burial jars, Pila: Period III.	251
B-14	Diagram of cremation burial stoneware jars, Philippines	252

Acknowledgement

I would like to express my appreciation and gratitude to the members of my thesis committee, Dr. Richard Pearson, Dr. R.G. Matson, and Dr. Elvi Whittaker, for their patience and constructive advice during the preparation of this thesis. In particular, Dr. Pearson, as my graduate advisor, provided unfailing guidance during my three years of graduate studies.

I thank the University of British Columbia for providing facilities and financial support during my graduate program.

I also wish to thank Dr. Miguel Tecson and Mrs. Julia Tecson, who generously allowed me to do considerable research at their home in their extensive library and collection of antique Philippine ceramics. In addition, I thank Moira Irvine, for assistance and for suggestions regarding the preparation of figures for this thesis.

1. INTRODUCTION

1.1 The Research Problem

Chinese ceramics played an important part in the life of Philippine societies during the 11th- to the 16th-centuries A.D. We know this is so because hundreds of thousands of Chinese "trade ceramics", distinctive stoneware and porcelain wares, were traded into the Philippine archipelago during these centuries. The special importance of these wares in the Philippine context is indicated not only by the extraordinary numbers of the items found, but also by the fact that these wares were included in large numbers as burial goods in the graves of Filipinos throughout the length and breadth of the islands. Fig.1.1., shows a map of the Philippines illustrating the wide dispersal of archaeological sites which contained Chinese trade ceramics. Hundreds of burial sites from the centuries pre-dating the Spanish conquest have been found (Beyer 1947), almost invariably containing significant numbers of trade ceramics. In addition, the miniature size and pristine condition of many of these burial wares indicates that they were not simply favoured items of household use, but had some kind of ideological significance for the inhabitants of that period. These facts suggest that an investigation of the cultural role played by these artifacts in Philippine society would yield interesting information. The data from Pila has provided a scientific context for the analysis of Chinese ceramics from a stratified burial site in southern Luzon in the Philippines,

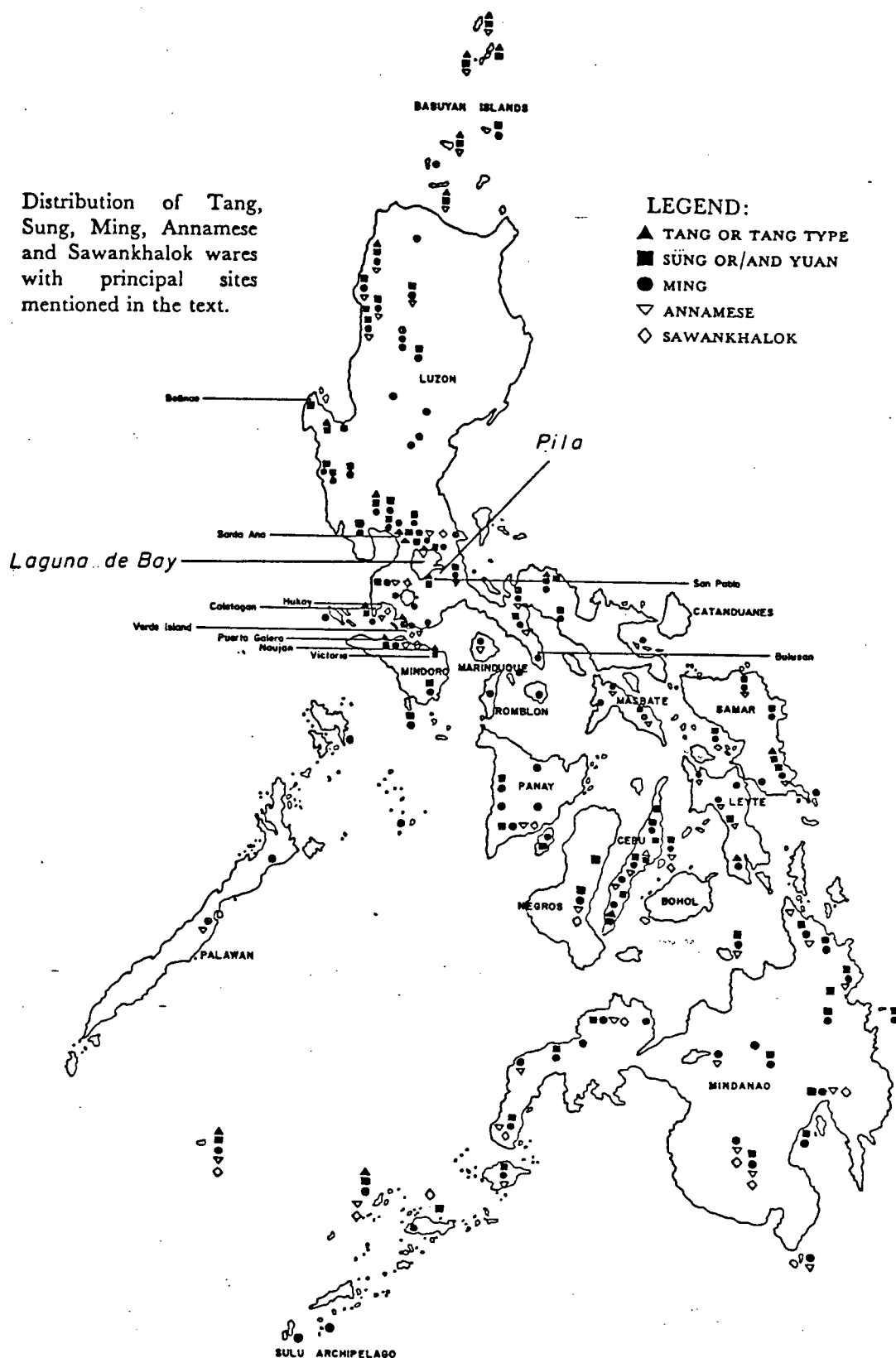


FIGURE 1.1: Map of the Philippines with ceramic sites (after Locsin and Locsin 1967:2)

representing two proto-historic periods in the 12th and 14th centuries A.D. Quantitative analyses based on the processual approach are used to test for social complexity in each period, and the results are assessed in terms of symbolic patterns derived from ethno-historical data from the same area.

The excavation by Dr. Rosa Tenazas of the 10th to 15th-century cemetery site at Pila, Laguna, in 1968, resulted in a rare, published account of an undisturbed, stratified, burial ground, containing large numbers of pre-Ming trade ceramics as burial goods. This site, excavated and recorded with careful attention to archaeological method, provided the opportunity for quantitative analyses of trade ceramic data. Prior to this, information relating to trade ceramics in Southeast Asia as a whole was concerned mainly with the art history of these wares (Addis 1968; Adhyatman 1981; Brown 1977; Cheng 1978; Chin 1978; Chung 1978; Cox 1944; Frasche 1976; Guy 1980, 1982, 1984; Howitz 1978; Locsin and Locsin 1967; Macintosh 1977; Medley 1976, 1981; Ceramic Society in Indonesia 1977; Southeast Asian Ceramics Society 1979; Van der Pijl-Ketel 1976; Yeo and Martin 1978). In part, this was due to the zeal of private collectors, who have provided a ready market for Chinese antiquities, unearthed without benefit of scientific method or documentation. As a result, there exists an enormous body of archaeological ceramics which can not be evaluated in any other way than in terms of the physical characteristics alone. The material from Pila, on the other hand, provides one of the few collections of trade ceramic data which can be evaluated in terms of cultural context and

history, as well as the physical characteristics of the artifacts and their patterning in the ground.

The focus of this research has been guided by the relatively abundant ethnographic data from the period of Spanish contact in the 16th century, a period only a few centuries removed from the burials represented in Pila. (Alip 1964; Careri 1963; Chirino, Morga, Tangco in Garcia 1979; Felix 1966; Pigafetta in Alip 1964; San Antonio 1977; Scott 1974, 1981). The value of such ethnographic analogy has been supported by the information from Chinese literary sources from the 12th and 13th centuries (Chen 1966; Felix 1966; Garcia 1979; Wu 1959), containing eye-witness accounts of contemporaneous Filipino groups and descriptions of trading encounters in various parts of the Philippine islands. In addition, contemporary ethnographic material regarding a number of social groups which ascribe particular significance to trade ceramics even today, gave an extra dimension to the interpretation of the data in the local context (Fox 1982; Jocano 1970; Chin 1978a,b; Eder 1984; Lopez 1976; Marche 1970; Scott 1974; Spoehr 1973).

The primary goal of this study is to test the applicability of the ethnographic model presented, with respect to the mortuary data from two contemporaneous sites at Pila, Laguna. The secondary goal is to combine processual and symbolic approaches to mortuary analysis and interpretation. The primary features of these approaches are described in Chapter 2, together with a number of related theoretical issues categorized

under "systems theory" (section 2.3) and "social organization" (section 2.4). The ethnographic model, based on ethno-historical data, is outlined in Chapter 3, in terms of three sub-systems: trade, social and ritual; it also incorporates a structural model of the Pila cultural system, which defines the symbolic organizing principles in Pila society. Chapter 4 outlines the methodological structure. The basic procedures followed in the analysis of Pila mortuary data are to test the data from Period II first: this is done in Chapters 5,6 and 7. In Chapter 8, the data from Period III is evaluated for evidence of the extent and nature of culture change. Chapter 9 presents a discussion of the results of the analyses from Pila. Chapter 10 outlines general conclusions related to the results of the data analyses, the methodology, and the larger theoretical issues.

Two major aspects of the cultural patterns defined for Pila are seen as being of anthropological interest. First is the role of material culture with respect to social organization and ideology. The evidence from Pila appears to support the notion recently proposed by Pader, that "there is an inextricable recursive relationship between ideology, action and material culture; material culture is not merely a residue, it influences social action and ideology as well" (Pader 1982:34). I explore this concept by means of Hypotheses 8 and 9, in Chapter 7 of this study. The second aspect of anthropological interest in the Pila data is the question of the significance of trade and exchange patterns in the development of cultural complexity.

The steady and long-lasting trade relations with China had some far-reaching effects on the Philippine culture and economy - but these effects were not always what one might have expected. For instance, centuries of trade in prestige items produced no centralized redistributive institutions or hierarchical bureaucracies, but did eventually culminate in a ranked class system by contact times. The data from Pila represents the earlier phases of long-distance trade with China, and the burial evidence indicates an egalitarian society in the Period II phase and a slight general increase in social complexity in Period III. Aspects of the trade patterns are explored in Chapter 5 and questions related to social organization are evaluated in Chapter 6.

The chief focus of archaeological interest in this study is the methodology. Being a mortuary site, the Pila data are evaluated according to some general principles of mortuary analysis already established in processual archaeology. Using procedures developed in earlier mortuary studies, reviewed in section 2.2.1, I test for the presence or absence of social differentiation in terms of wealth, status, descent, and specialization of function; the nature of the trade and exchange patterns; specific relationships between groups of grave goods; and culture change between Periods II and III. The prominent ideological component perceived in the burial data, however, indicated that the material should be evaluated in terms of the symbolic approach (reviewed in section 2.2.2) as well. This necessitated deriving a methodology which combined both the

processual and symbolic approaches to archaeological analysis. The methodological structure used is outlined in Chapter 4, section 4.1 (introduction to methods) and sections 4.1.2 and 4.1.3. The main thrust of the symbolic aspect of the analysis is to derive a unified ideological structure for Pila society, based on ethnographic data, and to look for material correlates of this symbolic structure in each section of the analysis.

As already stated above, the focus of this research is guided by the ethnographic data. I attempt to reconstruct three specific aspects of Pila society in pre-history, using data from ethnographic, historical, literary and archaeological sources; patterns of trade and exchange, social organization, and ritual. The ethnographic model constructed is described in Chapter 3. Evidence indicates that there was a remarkable continuity of basic cultural patterns from the beginning of the period of Chinese trade in the 10th and 11th centuries, to the period of Spanish colonization in the 16th century. In some areas, in fact, major cultural patterns appear to have remained unchanged until the contemporary period - for instance on Palawan and Panay Islands (Fox 1982; Jocano 1970). While inter-regional variation existed, many Spanish contact sources testify to the basic homogeneity of cultural patterns within the Philippine archipelago, especially with respect to the social, ritual and linguistic aspects (de Loarca, Chirino, de Morga, in Garcia 1979). Thus, while aspects of the ethnographic model are drawn from a variety of sources, I believe it is valid to test the model against data drawn from a single site. Pila, in the

province of Laguna, located about 75 km. south-east of Manila on the southern shore of Laguna de Bay in central Luzon (see Fig.1.1) is a central site, and can be considered to have been in the mainstream of culture history (Locsin and Locsin 1968:6). Therefore in this study I attempt to test the antiquity of the ethnographic model by analysis of the excavation data from Pila. Chapters 4,5,6,7 and 8 present the results of the analysis. Ten hypotheses are proposed and evaluated, nine relating to Period II, which represents the bulk of the data, and one relating to Period III. Chapter 5 deals with the trade sub-system (hypotheses 1 to 4), Chapter 6 deals with the social sub-system (hypotheses 5 to 7), Chapter 7 deals with the ritual sub-system (hypotheses 8 and 9), and Chapter 8 deals with Period III as a whole (hypothesis 10). The analyses in each sub-section are followed by a summary, incorporating a discussion of the symbolic significance of the results. Chapter 9 presents a discussion of the test results from Pila as a whole. Chapter 10 presents the conclusions, dealing in part with conclusion stemming from the data analyses, conclusions stemming from the methods used in this study, and conclusions related to the larger theoretical issues which formed the background for this study.

1.2 The Site

The excavations at Pila include two closely-related sites, Agra and Mendoza, which are located in the barrio, or village, of Pinagbayanan, in the township of Pila, in the province of

Laguna (see Fig.1.2). Pinagbayanan is one of some half-dozen barrios in this area in which rich burial sites have been discovered (e.g. Duhat, Gatid, Victoria and Lumbang). All the other sites, however, were quickly "dismantled" by dealers and collectors, and the wares dispersed in sales. Agra and Mendoza, together with a third, much smaller site (Mendoza Lot No. 2, as yet unpublished), are the only sites in the area which have been scientifically excavated (see Fig.1.3). Tenazas (1968:12) and Locsin and Locsin (1968:7) describe the Laguna barrio sites as being all "more or less contemporaneous" and containing an identical range of wares. The original townsite of Pila was apparently located about 30 km. to the southwest of the present town, in a place called Pagalangan (now the town of Victoria). The old town appears to have been constantly flooded by the lake and made uninhabitable. The inhabitants moved back away from the lake and transferred the town to its present site (ibid:6). Later, the lake shore receded and the older town area was repopulated. This oscillating movement of populations, dictated by the vagaries of the water table, is believed to have been typical of the conditions in the area in pre-Spanish times.

The excavations at Agra and Mendoza revealed a clearly-stratified burial ground spanning four cultural levels (see Fig.1.4). The earliest stratum, Period I, is characterized by compact, fine-grained sandy clay, and is ascribed by Tenazas to "an Iron Age date, most probably towards the end of the first millennium A.D." (Tenazas 1968:15). Three burials were found on the surface of this level, in the Mendoza area, and grave

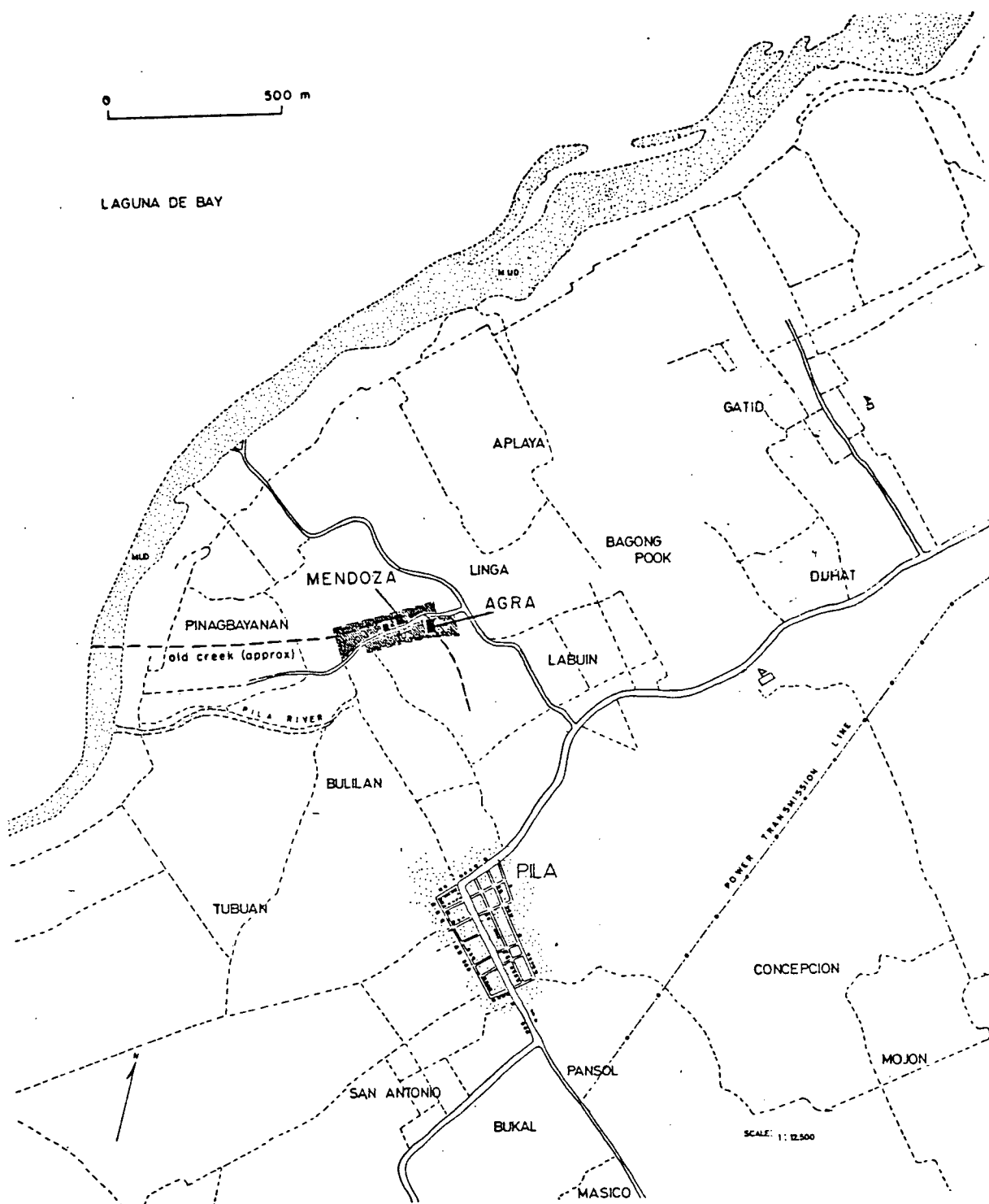


FIGURE 1.2: Map of Pila, Laguna, showing Barrio Pinagbayanan with excavation sites (Agra and Mendoza) (After Tenazas 1968: following p.12)

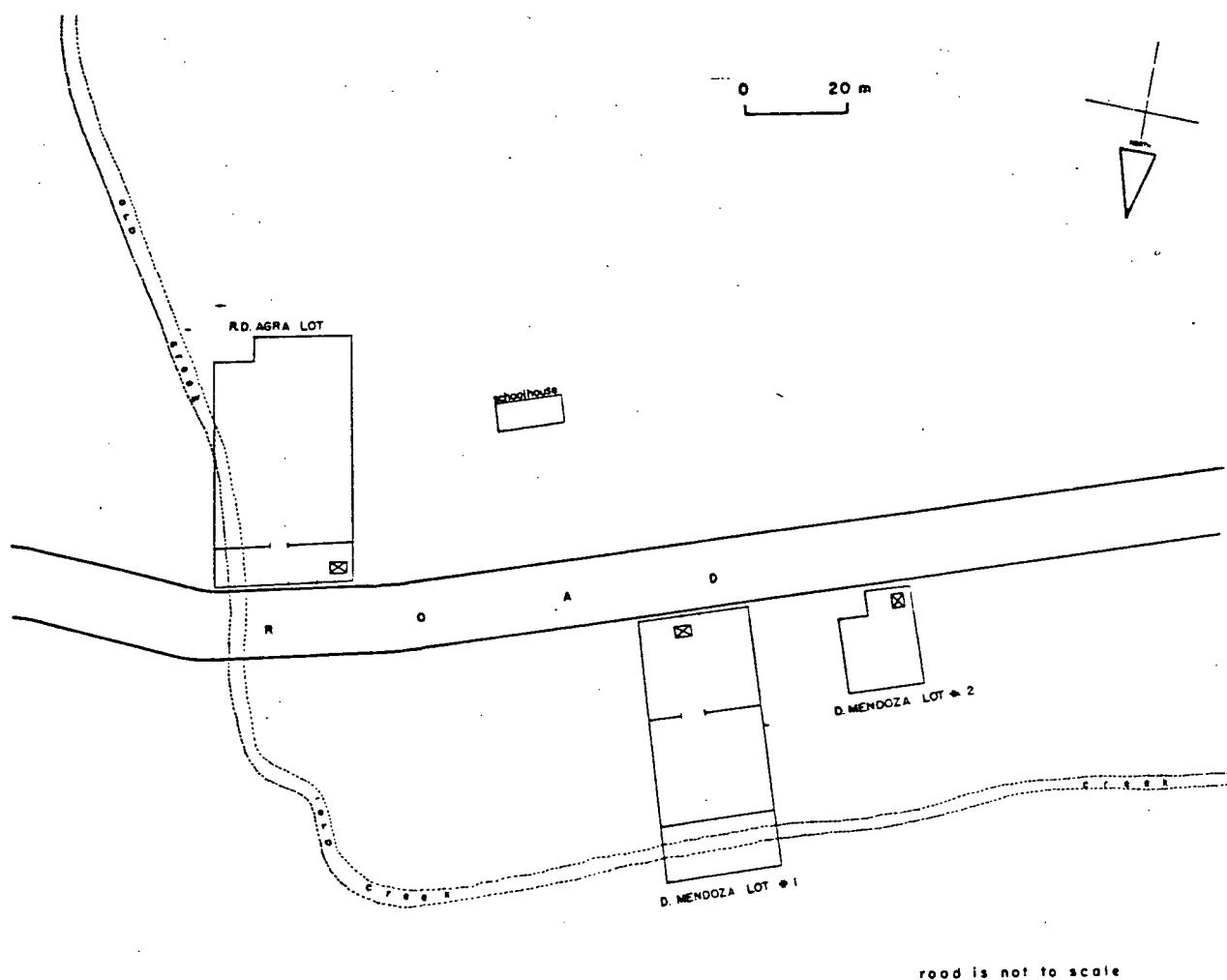


FIGURE 1.3: Map of Pila excavation sites (after Tenazas 1968: following p.12)

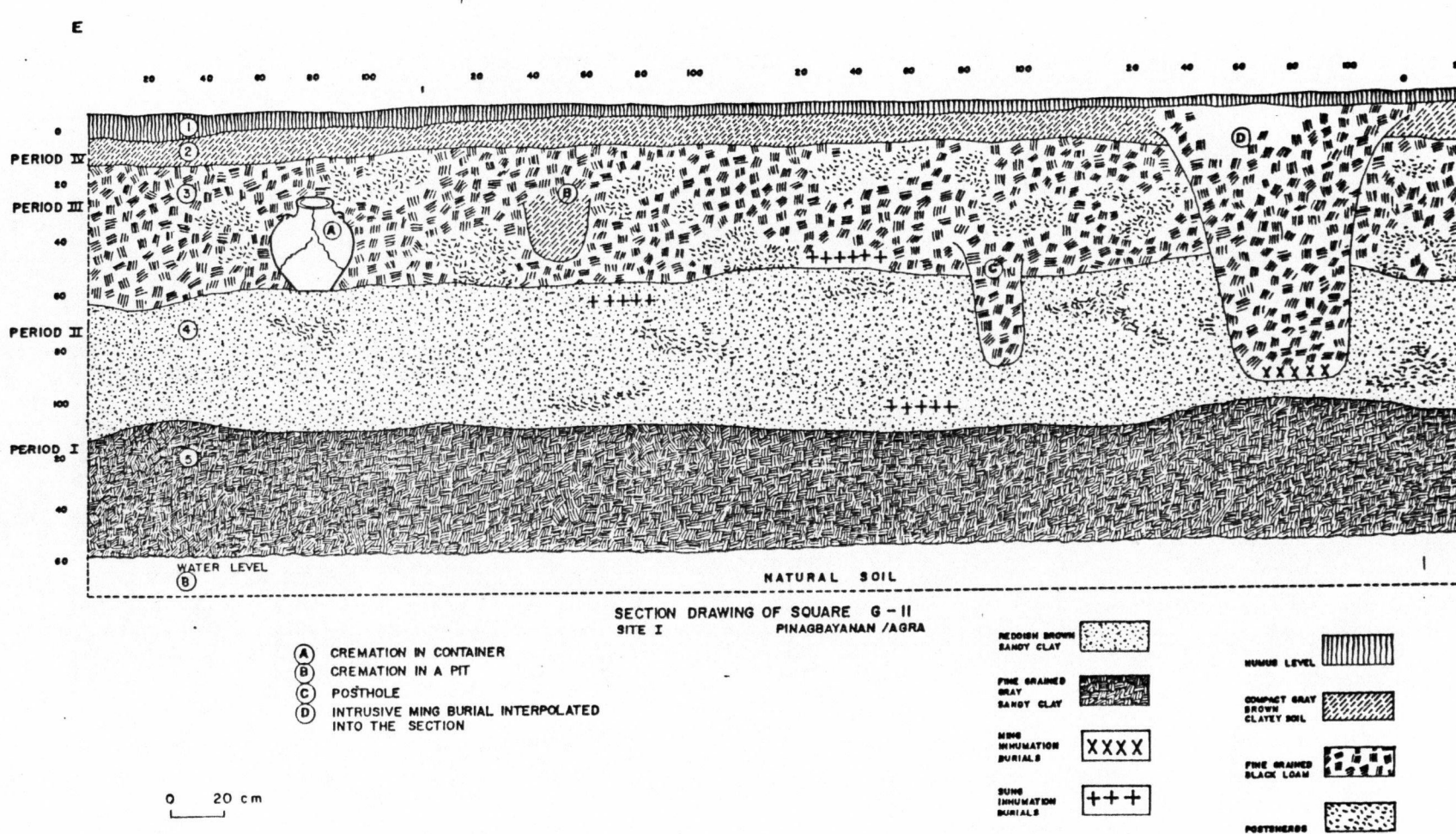


FIGURE 1.4: Diagram of Pila stratigraphy (after Tenazas 1968: Fig.3)

goods found consisted of earthenware vessels, which differed stylistically from the local earthenware pottery found in the burials of the upper layers.

The Period II stratum, characterized by medium-grained, reddish-brown, sandy clay, is dated Early Sung, about 12th century A.D. on the basis of associated Chinese ceramics and coins. (ibid:15) (the Northern Sung dynasty dates from 960-1126 A.D.). A total of 174 inhumation burials was found within this layer, two with associations of seven and nine Chinese coins each. The latest date from one of the associated coins found in one burial was 1063, and in the other burial, 1100. No other cultural materials were found in this layer other than the burial associations, and the site appears to have been used solely as a cemetery area during this period.

The Period III stratum is characterized by soft black loam, rich in organic material, animal remains, sherds, cultural material, and cultural features such as post molds and pits. This Period is dated Late Sung/Yuan, or about 14th century, on the basis of ceramic material and a radiocarbon date from a cremation burial (the Southern Sung Dynasty dates from 1127-1279 A.D.; the Yuan Dynasty dates from 1280- 1368 A.D.). A total of 55 burials were found within the Period III layer, 49 being cremation burials in jars and pits, and 6 being inhumation burials. A single radiocarbon date of 1375 ± 25 B.P. (Tenazas 1968:15) was obtained for one cremation burial. The site appears to have been used as a habitation area during this

period, as well as a burial ground.

The Period IV stratum, characterized by fine-grained black loam, is found as an intrusive horizon, intruding into the Period II layer, and marked by a large, dark patch on the reddish-brown surface of the Period II soil level. The nine inhumation burials which represent Period IV are ascribed by Tenazas to Early Ming, about 15th- to 16th-century (the Ming dynasty dates from 1368-1644 A.D.), on the basis of comparison with similar, dated, burials excavated by Robert Fox in Calatagan, Batangas province (Fox 1959). Tenazas postulates that the Ming period burials must have originated in the soil level above the black loam layer containing the Period III burials. This is a compact, fine-grained grayish-brown, clayey soil, only about 10 centimetres thick, and containing no cultural materials. Tenazas suggests that due to the intermittent flooding of the area (as noted above) variations in soil erosion and deposition appear to have resulted in the intrusion of the Period IV burials below the Period III layer and into the Period II layer (see Fig.1.4).

The chief limitations of the Pila sites are the result of the lack of organic preservation in the ground. Burials were identified on the basis of associated grave goods, but the lack of skeletal remains made it impossible to estimate the age or sex of the individuals interred. As a result, the hypotheses to be tested, and the analyses done, are related solely to the form and quantity (and wherever possible, the spatial distribution)

of the grave goods found in the burials.

2. THEORETICAL BACKGROUND

2.1 Introduction

The topic of this study relates to a number of major issues on anthropological concern: the development of cultural complexity; the dynamics of trade and exchange; and the inter-relationship between material culture, social organisation and ideology. For archaeology, a major concern is the relevance of mortuary studies to the reconstruction of cultural patterns, and the methodology used to arrive at inferences on the basis of mortuary data. The site at Pila is particularly interesting because it presents a scientific context for the analysis of trade ceramic data, and because of the availability of a variety of contemporaneous (or near-contemporaneous) written sources. In addition, ethnographic accounts, and the presence of trade ceramics among a number of social groups in Southeast Asia today (e.g. the Tagbanuwa of Palawan, the Sulod of central Panay and the Dayaks of Sarawak) make possible a deeper evaluation of the role and significance of these artifacts in the local context. (Chin 1978a,b; Eder 1984; Fox 1982; Jocano 1970; Lopez 1976; Marche 1970; Scott 1974; Spoehr 1973). Another source of information has been the literature on Chinese ceramics in the art history field. This growing body of work has contributed important information related to the technical development of ceramic manufacture, the identification and study of ancient kiln sites, and the development of stylistic and chronological typologies.

2.2 Mortuary analysis

2.2.1 The Processual Approach.

Mortuary studies based on the processual approach (Binford 1971; Braun 1977; Brown 1971; Decker 1969; Goldstein 1981; King 1969; Kirch 1980; Larson 1971; O'Shea 1981; Pearson 1981; Peebles 1971; Peebles and Kus 1977; Saxe 1970, 1971; Tainter 1975, 1973) have established a solid framework for the interpretation of burial remains. The chief gains include the development of a useful descriptive terminology, a methodological and interpretative structure for burial analysis, and the determination of a number of law-like regularities on the theoretical level. An early emphasis on the principles of scientific method led to the formulation of effective test implications regarding the identification of status levels, discrimination between achieved and ascribed social status; and the evaluation of social relationships. Some of the inferences made in the earlier studies have been questioned by later researchers, but their value remains undiminished as the groundbreakers in an increasingly important field of archaeological study. Burial remains are the remains of non-random, intentional behaviour, and as such, they will generally have something to say about the way people in that particular society categorized their world.

A basic framework was established by the cross-cultural ethnographic studies of Binford (1971), Saxe (1970) and Tainter (1973, 1975), which revealed certain regularities indicating that mortuary remains reflect the complexity of social organization and the presence of status differentiation in a given society. Binford established support for three major hypotheses. Firstly, that the complexity of social structure was reflected in the complexity of mortuary ceremonialism; important variables included age, sex, social status, sub-group affiliation, cause of death and location of death; levels of complexity were identified on the basis of the forms of subsistence postulated, such as hunting-and-gathering, shifting agriculture, settled agriculture, pastoralism, etc. (Binford 1971:18). A second hypothesis indicated that achieved versus ascribed social status could be inferred from mortuary distinctions: that among societies of minimal complexity the major dimensions for status differences are based on personal qualities, such as age, sex, and differential capacity for cultural tasks; while among more complex societies, status positions may be defined in terms of more abstract social characteristics (ibid: 18-20). In a third hypothesis, Binford argued that status levels in a society could be determined from the focus of mortuary rituals and the amount of communal activity represented (in terms of burial form, burial treatment, location and orientation of burials, and the form and quantity of burial goods); thus the greater the variety of features involved in the burial of an individual, the greater the social

status of the deceased (ibid:22). In essence, Binford's work indicated that the patterns observed in mortuary remains could be indicative of the "social persona" of the deceased - the composite of social identities maintained in life.

In another set of ethnographic studies, Saxe concluded that upon death, the surviving relatives decide which of the social identities of the deceased should be commemorated, and suggested that this was determined on the basis of the rights and duties of the survivors rather than on the personal status of the deceased (Saxe 1970:4-9). Other features were suggested by Tainter, as a result of another set of ethnographic tests conducted regarding the variations in mortuary patterns: he concluded that grave goods do not always reflect the status of the deceased, but that corporate energy expenditure in the mortuary ritual was a more accurate reflection of social rank (Tainter 1975:125). Later, Braun criticized Tainter's conclusions, on the grounds that Tainter did not test whether differences in energy expenditure also occurred among individuals of the same rank (Braun 1981:411). In another study, Kirch revealed a new variation: his work on Tongan mortuary patterns, linked with ethno-historical data, showed that differences in energy expenditure reflected differences in socio-political status rather than differences in social rank (that is, persons of high social rank who had large, elaborate grave monuments, were not necessarily those who had the greatest amount of political power), (Kirch 1980:304- 5). O'Shea examined some Plains Indian cemeteries in conjunction with

ethno-historical data, and concluded that while social ranking was clearly indicated by the wealth and energy expenditure of burials, social sub-group affiliation could not be determined from the mortuary remains (O'Shea 1981:49).

As the number of mortuary studies has increased, the evidence has pointed to the presence of greater variability in pre-historic cultural patterns than was at first supposed. Mortuary studies are constantly bringing forward new evidence which must be absorbed into the theoretical framework - not always an easy task in view of some of the conflicting sets of conclusions to be found in the literature. Studies show that grave goods or size of grave may sometimes, but not always, reflect relative status in life (Binford 1971, Randsborg 1981); that grave goods may be placed on top of the grave rather than within it, and then disappear with time (Hodder 1982a); that location of graves will often indicate status (Ucko 1969); that mortuary ritual may reflect the status of living relatives more than that of the deceased (Orme 1982); that status may be seen in either amounts of wealth or energy expenditure, or both (Chapman and Randsborg, 1981); that the cause of death may be more relevant to the form of mortuary treatment than the status of the deceased in life (Pader 1982); that certain patterns of mortuary ceremonial may be consistently repeated within one site (e.g., high status may be consistently represented by specific 'badges of rank' such as crowns, ceremonial weapons, etc.) (Larson 1971); that spatial clusters often indicate the presence of kinship groups (Bayard 1983; Goldstein 1981; Larson 1971;

Macdonald 1978); that spatial clusters will sometime indicate elite status (Gryaznov 1969); that cemeteries may present a distorted picture of social structure if they include burials from a range of surrounding communities (Hodder 1982a); that differences in burial goods may indicate either synchronous social distinctions, or change through time (Pearson 1981; Underhill 1983); that the form of the mortuary ritual may reflect a former rather than a current pattern of social structure (Pader 1982); or an ideal rather than an actual pattern of status differentiation (Hodder 1982a).

To return to the specifically processual approach to mortuary studies, there is a general involvement with the question of measuring social inequalities as a tool for estimating the size and complexity of early societies. The reasons for the development of such inequalities, and the manner in which they begin to manifest themselves in a previously egalitarian society, have become major questions of interest. Hand in hand with these concerns have gone the problem of methodology and the validity of extending inferences made from specific studies into a more general context. However, the basic regularities revealed in mortuary studies have provided a sound methodological basis for assessing the variability present in all aspects of mortuary data. How much variation or homogeneity is present within a particular burial site? What is repeated, constant, patterned? What aspects vary, and how much do they vary from each other? Is the observed variation occurring between individual burials in a site, between clusters

of burials in a site, between several sites in the same area, or between chronological levels in a site? The answers to such questions can provide valuable clues to the social organisation of the society represented in the burials.

Variability may be measured in terms of three main aspects: associated grave goods, burial treatment, and spatial organization. We can look at the nature and quantity of grave goods present, as well as the pattern of spatial distribution of various classes of goods within the cemetery. We can also look for co-variations between different types of grave goods (the pattern of associations may be continuous or discontinuous throughout the site). Variations in such features could be an indication of wealth inequalities on an individual or group level; they could reflect class differences or the presence of kin groups; utilitarian goods and animal remains could reflect subsistence patterns and division of labour; ritual artifacts can provide a picture of the nature and relative importance of the ideology.

Burial treatment can be assessed through variations in burial form, such as the type of burial practices (e.g., primary, secondary, inhumation, cremation, flexed, extended, jar burial or coffin, etc.); patterns in types of burial could lead to inferences such as, for example, permanent or seasonal occupation. Variations in grave size, orientation of the body, depth of burial or complexity of mortuary ceremonial could lead to inferences regarding degrees of corporate energy expenditure

involved, and thus to an indication of relative status differences. Variability may also be measured with respect to spatial organization. The manner in which associated grave goods are dispersed within the grave may be significant, and the spatial patterning may be varied or constant throughout the site, leading to inferences regarding the presence of sub-groups. Individual burials may be clustered in groups within the site, and these clusters may be different from or similar to each other, in terms of size or shape (e.g. circular clusters, linear clusters, clusters with specific patterns of orientation or specific grave sizes); in addition, within the clusters, the burials may be similar in terms of wealth or social roles or have a range of variation. Differences in spatial elements could lead to inferences regarding the presence or degree of hierarchical social organization; for instance, a cluster of wealthy graves which includes individuals of varied age and sex could indicate the presence of a descent group.

Some of the main methodological problems associated with the processual approach include the difficulty of formulating "universal laws" of mortuary behaviour due to the variability of mortuary patterns between cultures and chronological periods. There is a continuing difficulty in the area of middle-range theory, the problem of relating the patterning of archaeological remains to the behavioural patterns which we postulate to have produced those remains (Raab and Goodyear 1984). The most straightforward approach, that of measuring the quantitative variability in the objects found, may not reveal significant

patterns of meaning associated with those objects. The role of material culture in general, in any specific society, may also vary in the sense that it may be essentially active or passive - the material artifacts may be principally a reflection, or a residue, of socio-cultural patterns of behaviour, or they may incorporate a more active, or recursive, function with respect to behaviour.

Another set of methodological problems involves the interpretation of intra-site variability. There may be difficulty in distinguishing variations due to sub-group differences, from variations due to culture change through time. In addition, there is the problem of determining whether a burial site represents one community or a variety of individuals from different settlements within the region, who might be linked by affinal ties rather than by co-residence. In some cases, many different statuses may be represented even though the mortuary ritual may appear essentially homogenous. In other cases, the status differences observed in burial patterns may reflect the status of the deceased's family rather than the status of the deceased person himself. Another methodological difficulty is how to categorize the complexity observed in the mortuary remains, once this has been assessed. Generally, it has been convenient in archaeological studies to categorize the levels of complexity found in terms of cultural-evolutionary stages, such as have been defined by Fried (1967) and Service (1975). However, this approach has been found by some to be overly-simplistic.

2.2.2 The Symbolic Approach.

In recent years, a new "symbolic" approach to archaeological inquiry has been emerging (Hodder 1982 a,b; Pader 1982; Trigger 1984; Rowlands 1984; Kus 1984; Pearson 1982). To a certain extent, the situation appears to be a case of the symbolists using the processual studies already done as a stepping-stone to venture out into territory not adequately covered so far, and looking back to accuse the processualists of having taken the wrong road (Trigger 1984:290). The new territory is in the realm of symbol and ritual, the ideological aspects of human cultural behaviour, and thus a realm not easily accessible to objective enquiry. Processual archaeologists were the first to initiate systematic research into ideological aspects of sociocultural life (e.g. Deetz and Dethlefsen 1972; Hill 1972; Longacre 1972). These early inquiries into the less-tangible aspects of cultural behaviour revealed some general deficiencies in knowledge and methodology and were followed by a concerted attempt by processual archaeologists to measure what was measurable, and to determine cross-cultural regularities with as much scientific rigour as possible. Now, the symbolic archaeologists are expressing dissatisfaction with the "materialist" approach, and with the self-imposed methodological limitations accepted by the processual group.

Mortuary studies have proliferated and the growing body of information regarding the details of ancient burial patterns has been added to by ethno-historical and ethno-archaeological studies aimed at testing the validity of generalizations made on the basis of excavation data. What has become increasingly clear is that past cultural systems were not so simple and clear-cut as was at first deemed to be the case. Instead, the indications are that the subtlety, complexity and variability of human life as it exists today, was qualitatively present in more ancient societies. Ethno-archaeology has revealed many examples of material culture patterning in the ground, which are the end result of unpredictable processes and far-from-simple behavioural patterns (e.g. Gould 1980). As has already been noted in the previous section, mortuary studies based on the processual approach have also shown that there is considerable variability in the patterns of cause and effect between one culture and another.

The symbolic archaeologists say that the processual approach is unable to deal with growing complexity of the subject matter. In essence, there are several areas of conflict between the two schools. Firstly, there is the concept of cause. The symbolists say that the explanation of culture change may be found in the unique ideological context of each sociocultural group and that therefore universal generalizations can not be attempted (Trigger 1984:290). The processual archaeologists maintain that the cause of change may originate in many parts of the system, but that the chief determining

factors are likely to be material/ecological and that cross-cultural regularities may be observed (Binford 1982b:162).

Secondly, the symbolists are calling for a more holistic orientation, claiming that the processualists segment a system into functional sub-systems, and "explain" it by means of modeling inter-relationships between the parts. Hodder suggests that archaeologists need to pay more attention to the symbolic principles which link the parts together:

These principles permeate the functional relationships, and they form the whole. The whole does not come from the parts but from the underlying structure. It is not adequate to separate everything ideational into a separate subsystem. Rather, idea and belief are present, and are reproduced in all action, however economic or mundane (Hodder 1982b:151).

A third area of dispute concerns the role played by material culture. The symbolists claim that material objects are not merely functional tools but should be viewed as "concrete expressions and embodiments of human thoughts and ideas" (ibid:151). Pader, for instance, suggests that the way we use "things" might be affected by our world view, and might even affect that view - that objects of material culture may be instrumental in the "creation, recreation and maintenance of social life" (Pader 1982:3-5). From this point of view, the manner in which an object is used, for instance, in its spatial distribution within or between sites, may indicate something about its symbolic value within that society, and in some cases,

something about the "structuring principles" of the society itself. If this is the case, then changes in the patterns of its use might be an indication of changes in its symbolic value, and provide clues to the kind and degree of social change present (ibid:30). A similar concept was investigated in an ethno-archaeological study by Susan Kent, analyzing artifact variability in terms of space-use within activity areas (Kent 1984:199). She suggested that an underlying ideological "organizing principle", which linked culture, behaviour and cultural material, could be seen to be reflected in the spatial patterning of activity areas and associated artifacts. For instance, cultures which favour monofunctional tools and activity areas will likely have clearly marked status distinctions and rigid divisions of labour, while cultures which use multi-purpose tools and activity areas will have very indistinct status boundaries (ibid:205).

A fourth area of dispute between the symbolic and processual groups is the methodology of archaeological analysis. It is centred on the difference between understanding and explanation. The symbolists call for a new emphasis on understanding the unique context of a given culture, including local history and the symbolic structure. Trigger argues that historical knowledge, in the sense of an understanding of how and why specific societies developed as they did in the past, is essential for explaining their current social structure (Trigger 1984:289). He accuses processual archaeologists of placing undue emphasis on universal generalizations and argues that the

deductive-explanatory methods pursued by processual archaeologists are not the only valid areas of research (ibid:291). Thus there has arisen a somewhat polarized situation, summarized by Rowlands as:

"either archaeology must be explanatory, empirical and capable of obtaining objective truth or it is intuitive and particularistic and a matter of personal interpretation" (Rowlands 1984:112).

Binford reviles the symbolists for their "denial of objectivity", maintaining that

"once such a position is adopted, no methodology of inference appears possible which does not adopt the method of 'empathetic understanding'. If this is rejected all science also must be rejected" (Binford 1982b:162).

Rowlands, however, argues that a methodological compromise must be sought, that objectivity and subjectivity should not be opposed to each other as exclusive choices but brought together in some internal relationship in a single field of inquiry (Rowlands 1984:113).

The symbolic approach as it stands today has little to offer in the way of methodology, other than ethno-archaeological techniques. Some symbolic analyses of mortuary data have been done (Hodder 1982a; Pader 1982; M. Pearson 1982; Shanks and Tilley 1982) generally on the basis of spatial orientation, distribution and arrangement of skeletal or artifactual remains.

Hodder's ethno- archaeological work in Sudan suggests that one cannot assume that mortuary data will be a direct reflection of social organization. He maintains that the ideology and the related symbolic codes of a society will determine the specific role played by material culture - either to reinforce, distort, or even mask basic aspects of cultural behaviour (Hodder 1982a:210). He also states, however, that some aspects of social organization will always be reflected in the mortuary ritual. He suggests that the first step towards a symbolic interpretation of mortuary remains would be to identify the ideology of the society with respect to death, in order to determine the degree of identification between the burial ritual and the cultural patterns of the living society. He calls for a new, contextual, approach, stating that the rules used in generating burial practices should be analyzed in relation of other spheres of activity. In the same way, evidence of status differentiation should be assessed in terms of cultural patterns of domination, power and authority (Hodder 1982b:152-153). The main problem with this is that Hodder does not suggest a method by which such cultural attitudes can be identified on the basis of archaeological data. Instead, he calls for more ethno-archaeological studies, to clarify the relationship between ideology and mortuary rituals.

Pader's study analyzing the graves in two Anglo Saxon cemeteries measures the variability in the spatial patterning of artifacts. In particular, she looks at variations in dress and bodily adornment, in relation to age, sex, skeletal position and

spatial location of graves. She concludes that status is indicated by the placement of the goods in burials, rather than the goods themselves. Pearson's study of mortuary patterns of Victorian and modern England shows that burials may represent ideal rather than actual status differences, and that the relatives of deceased individuals may misrepresent the status of those buried, in order to increase their own social standing (M. Pearson 1982:112).

Verifiability is one of the major methodological problems inherent in the symbolic approach. Trigger notes that the specific content of knowledge and beliefs is highly variable even among cultures that have similar economic systems (Trigger 1984:291). Binford points out the distinction between showing relevance, and providing explanation, and accurately observes that most "models" of the past rely more on the internal logic of presentation than on the accuracy of the methods of inference (Binford 1982b:161). Most symbolists also agree that the importance of local context makes any cross-cultural prediction very difficult, but do not appear to be disturbed by this. "The complexity of social science data seems to rule out the claim that prediction is the only legitimate form of explanation" (Trigger 1984:289). In the same way, other forms of scientific rigour are too easily avoided, or dismissed as unnecessary. The need for historical data for symbolic inference is another major problem, presenting an insurmountable difficulty in the case of most prehistoric mortuary sites, particularly in New World archaeology. In addition, symbolic studies of single mortuary

sites are generally synchronic (Hodder 1982a; Pader 1982) and therefore do not reveal evidence of any patterns of culture change.

2.3 Systems Theory

At this point, it is relevant to mention systems theory because it is pertinent to my argument with respect to my Structural Model of the Pila Cultural System (section 3.5, Fig.3.1). This model, conceptualized as an open system, was constructed as a first step in my efforts to combine the processual and symbolic approaches to archaeological analysis. Regarding systemic models, Allen states "if we set up (a model) in order to understand the evolution of a complex system, we must first set up what we consider to be the 'structure' of the system" (Allen 1982:370). A systemic model of culture constructed along processual lines is often pictured as a flow-diagram of sub-systems and associated elements, linked by lines indicating the direction of flow. The symbolists, who are insistently demanding a more holistic approach to the concept of culture, have not as yet been able to suggest a more appropriate visual concept. In order to integrate the two approaches conceptually it seemed important to attempt a visual construct of a "holistic" cultural system which would incorporate the necessary structural elements without specifying linear cause-and-effect chains. Fig.3.1 is the result. The model was developed as an extension of Steward's culture core concept (Steward 1979:6), reorganised to omit the hierarchical aspect,

while at the same time encompassing the physical environment as an integral part of the cultural system as a whole. The theoretical framework includes concepts from some current theories of open, non-linear systems (Allen 1982; Friedman 1982; Renfrew 1980; Segraves 1982) which assume a more holistic nature for systems.

Friedman, for instance, asserts that such concepts as stability, continuity and moving equilibrium are being undermined by recent developments in the natural sciences, which indicate that biological growth and change proceeds by thresholds and discontinuous change. In these terms, stability is not the result of stabilizing mechanisms (such as feedback devices) but an aspect of all structured process. Friedman relates this to theoretical advances in the field of non-equilibrium thermodynamics, which deal with "dissipative structures", systems maintained by a flow of energy at a state far from thermodynamic equilibrium (Friedman 1982:176,177). This type of systemic model is less bounded and less deterministic than the homeostatic type. It is also less predictable, being the product of both determinism and chance (Allen 1982:354).

The significance of these ideas for theories of culture and cultural evolution is that cultures can be viewed as systems, without the need to characterize them in terms of bounded, organism-like entities that respond functionally to external/environmental pressures in predictable ways, by means

of built-in homeostatic mechanisms. The difficulty with homeostatic models is that generally they cannot account for either the genesis or the transformation of social systems in systemic terms (Kristiansen 1984:73). Another difficulty is that there is an underlying assumption with such systems models that system behaviour is intelligible and predictable (Renfrew 1980:11). When faced with examples of unpredictable cultural behaviour, or with cultural developments which are highly maladaptive, it is difficult to find an adequate explanation of the process of culture change involved.

Allen develops a concept of open, non-linear systems based on bifurcation theory which provides an interesting alternative to earlier theories of culture change, in that it suggests a model which assumes variable processes of culture change, with the ability to shift from deterministic to non-deterministic at variable rates (Allen 1982:354). This type of systemic model appears to offer a good potential for use with respect to symbolic analyses of cultural systems because it does not demand the specific identification of every element in the system, nor all the inter-relationships involved. Instead, it assumes a holistic nature for the system, which allows for intangible or undefined elements without negating the validity of the model. This would tie in with a view of culture process which involves a variability from phase to phase, and minimizes the need to indicate major causal elements.

"This (model) contains both deterministic mechanisms

... and stochastic, random effects (the fluctuations), and it is these latter that are of particular importance when the system is near points at which an organization may change. These points are called 'bifurcation points' ... between two bifurcation points the system follows deterministic laws ... but near the point of bifurcation it is the fluctuations that play an essential role in determining the branch that the system chooses... Complex systems can, of course, have a whole series of bifurcation points... Such a point of view introduces the concept of 'history' into the explanation of the state of the systems... any particular state of organization results from a dynamic dialogue between the physical, social and economic laws of the moment, and a particular succession of historical accidents... whose action has marked the evolution of the system" (Allen 1982: 354).

Segraves terms such structures "self-organizing systems" and suggests that self-organization in these terms can be a transformative, evolutionary process. As the system evolves in size and complexity, a progressive differentiation in structure may be seen to occur, with a corresponding specialization of function. She suggests that a shift in the direction of increasing division into subsystems, or differentiation of functions, is a macroscopic system property amenable to measurement (Segraves 1982:291). This approach appears valuable in that it suggests a way of modeling cultural evolution without utilizing the "layer-cake" concept of evolutionary "stages", often criticized by researchers as inflexible and simplistic. In the case of many Southeast Asian societies including the Philippines, the stage concept of cultural evolution has proved to be particularly difficult to apply.

2.4 Social Organization

Cultural development in Southeast Asia is still a topic which is largely undefined. Some work, however, has already been done in the areas of social organization and trade and exchange. With respect to social organization, the focus has been on kinship structure and social differentiation, and on the manner in which these variables inter-relate with the environmental and ecological features of the region. Regarding trade and exchange, the focus has been on the problems of defining the internal and external dynamics within the local contexts.

2.4.1 Bilateral kinship patterns.

George Murdock (1960) produced the definitive work on cognatic, or bilateral, forms of social organization, the predominant form of social structure in Southeast Asia, including the Philippines. Murdock defines cognatic to mean "non-lineal" (akin by birth "on both sides" - i.e., without reference to male or female parents) (Murdock 1960:2). He names this the "Eskimo" type of system, and defines the common features of this type of structure: (1) A small domestic unit is the most important social, economic and landholding group: fully corporate in every sense; (2) The domestic unit is the independent nuclear family (which may include the "stem" family, where a child resides with his or her parents after marriage); (3) Monogamy is observed; (4) Extended families do not occur; (5) Residence is ambilocal, or sometimes neolocal; (6) Descent

is measured in terms of the dominant small family unit, and occasionally, the aggregation of near relatives or kindred; "kindred" - embraces close lineal and collateral kinsmen regardless of whether the connecting links are male or female; (7) The domestic unit is always exogamous, the kindred rarely so (Murdock 1960:2).

Murdock specifies that the "kindred" are always ego-oriented bilaterally, and that the members of a kindred, other than the core individual and his siblings, need not be, and frequently are not, related to one another. In any society, kindred necessarily overlap one another endlessly.

"They are not discrete units; a society can never be divided into separate kindreds as it can be segmented into discrete lineages, clans or communities... a kindred therefore is not, and cannot be, a descent group... Because of its lack of discreteness a kindred cannot be a corporate group" (ibid:4).

In Murdock's classification, kindreds can be seen to function as "occasional groups" - that is, they function as a group primarily at crises periods in the life cycle of the core individual, such as naming, initiations, weddings and funeral ceremonies (ibid:5).

As well as defining the structural characteristics of bilateral groups, Murdock takes care to discriminate this type of social organization from other, similar types. He points out that bilateral societies are sometimes confused with ramages, an entirely different form of organization. Ramage he defines as

strictly ambi-local, and having a rule of residence which permits a choice between two unilocal alternatives (matrilocal or virilocal). This he names the "Polynesian" type, and notes that ramages are the functional equivalents of lineages - equally consanguineal in composition and equally susceptible to segmentation (Murdock 1960:11).

Although the small nuclear family domestic unit is fundamentally a bilateral kingroup, Murdock stresses that it must be defined in such a way as to exclude any lineal principle in any discussion related to cognatic social structure (ibid:3). The concept of corporateness also requires careful definition. Murdock defines a corporate group as

"one whose members share an estate, especially one consisting of land, dwellings, or other material resources which its members have the right to use or exploit according to culturally accepted rules of tenure... (it is necessary) to restrict the concept to groups whose rights are regularly rather than sporadically exercised, especially right to the land (and its improvements) in which the members live and from which they extract their economic livelihood" (ibid:4).

The concept of the corporate group as an archaeological unit has been explored in a paper by Hayden and Cannon (1981) who adopt a definition given by Goodenough:

"corporate groups are groups that function as individuals in relation to property (and in addition) have a single administrative authority." (Hayden and Cannon 1982:134)

They note that in anthropological definitions corporate groups include a wide range of sizes, from nuclear families to entire communities, and urge that both these extremes should be excluded from the definition of archaeological corporate groups (ibid:136). They suggest that these units already constitute analytical units of great utility and power. In addition, they state that their own analyses at the household level show that

"when single artifact classes are used there are simply too many sources of variability affecting artifact and feature patterning to be able to make useful predictive or interpretive statements concerning most socioeconomic or demographic characteristics of the household, except in the more extreme cases... However, when households are grouped together to form hypothetical corporate groups with distinct social or economic characteristics, and when averages were taken for households in these groups very strong patterns emerged" (ibid:138-139).

Although Murdock's work in defining the exact structural specifications of bilateral social organization is impressively comprehensive, his conclusions with respect to causal conditions are too sweeping and cannot be taken at face value. He asserts that a review of bilateral societies around the world reveals that this form of social organization occurs throughout the full range of cultural types - from hunters and gatherers, through intermediate tillers, to European and Asiatic societies of the highest complexity (Murdock 1960:7). He lists dozens of societies, principally in Southeast Asia, Europe and the arctic regions, which he states can be characterized as bilateral, and

which he offers as evidence that

"modes of subsistence, technological attainments, elaboration of status distinctions, and levels of political integration exert little differentiating influence" (ibid:7).

A close inspection of this list, however, suggests that with the exception of modern European societies, the cultural groups cited are chiefly hunting-and- gathering societies, horticulturalists or fairly primitive agriculturalists. e.g. in all of Africa, he finds only the Khoisan hunters and the Kung Bushmen; and in Asia, the Ainu, the Ryukyu Islanders, the Chukchee and Koryak. The societies of "highest complexity" are modern European ones. Thus it is not surprising that in a later study, Winzler (see below) looks at social organization in Southeast Asia and comes to a contrasting conclusion regarding the question of possible causal factors.

He concludes that the presence of corporate, unilineal descent groups is closely associated with the development of state formation. Southeast Asia is noted for its lack of long-lasting state-level societies, and Winzler argues that the widespread occurrence of bilateral forms of social organization in this area (both in coastal and interior states) could be considered a determining, or at least closely-linked, characteristic (Winzler 1976:627-629).

"Exploitation of one group by another requires

'vertical linkages' which serve to tie, through ritual and religious obligation and political and economic necessity or benefit, individuals and families to specific localities and political/administrative divisions" (ibid:629).

Winzler looks for causal factors which might explain the widespread occurrence of bilateral social systems in Southeast Asia. He concludes that on the basis of ethnographic data from the region there is some evidence for linking such features as bilaterality, lack of corporate descent groupings, and absence of well-defined socio-economic strata to broader religious or historical traditions (Winzler 1976:629). He notes that bilateral systems predate state formations and cannot be considered a result of their emergence but rather, are independent of state development.

Instead, Winzler finds some support for concluding that bilateral social organization may correlate positively with ecological factors. He states that on the basis of cross-cultural ethnographic research, there is some indication that when the ecological base involves a balanced sexual division of labour, with men and women doing much the same work, the social organization tends to be of the bilateral type (ibid:630). Winzler points out that Southeast Asian societies tend to lack the kinds of subsistence bases most readily linked to male-centred patrilineal organizations (such as big-game hunting, large-scale animal pastoralism, or dry-grain draft-animal agriculture). Instead, there is a reliance on slash-and-burn agriculture or wet-rice agriculture, fishing and gathering. In

all these activities, men and women tend to be more or less equally involved, both in production and processing (Winzler 1976:631). Winzler acknowledges that environment and modes of subsistence represent an old argument in relation to the development of social forms, but asserts that it appears to provide the best explanation in the Southeast Asian context. He qualifies it only to say that culture history also appears to play a part in the development of Southeast Asian social organization (ibid:631). The same argument is restated in more general terms by Eric Wolf in his review of cultural processes on a global scale. Speaking from a Marxist perspective, Wolf maintains that

"production (embraces) at once the changing relations of humankind to nature, the social relations into which humans enter in the course of transforming nature and the consequent transformations of human symbolic capability" (Wolf 1982:21).

Further in his argument, Wolf again provides support for Winzler's conclusions:

"The kin-ordered mode inhibits the institutionalization of political power, resting essentially upon the management of consensus among clusters of participants... at the same time, the extension and retraction of kin ties create open and shifting boundaries of such societies" (ibid:99).

For the purposes of this study, the work of Murdock, Winzler, Wolf, Hayden and Cannon, provides a useful theoretical framework for my analysis of the data from Pila, as my ethnographic model includes all the features discussed: a pattern of shifting agriculture; a lack of marked socio-cultural stratification; a bilateral kinship structure involving small domestic units and associated kindred; and an egalitarian sexual division of labour. It must be noted that the arguments presented above stand in clear opposition to the claims of symbolic archaeologists regarding the pre-eminence of the ideological structure in cultural processes. It must also be stated, however, that in the particular case, such as the data from Pila, the ideological structure, while it may not be the determining variable, provides a key to the clearer understanding of the cultural processes involved (see Chapters 3 - 8, below).

2.4.2 Archaeological background.

There have been two archaeological studies of mortuary sites in Southeast Asia which are pertinent to my topic: the work of Macdonald (1978) on data from the Bang site in Thailand, and the analysis by Bayard (1983) of the data from Non Nok Tha. Macdonald used spatial analysis of the excavation data from the Bang site, and established support for the hypothesis that the burial site also represents a habitation area, and that the spatial distribution of graves indicates a residential pattern which can be defined in terms of intra-village subdivisions

(Macdonald 1978:36). Bayard used a functional pottery typology of the associated ceramics in the Non Nok Tha burials to define the apparent presence of two distinct classes of burial as characterized by the vessel types included in them (Bayard 1981:14). He concluded that "at least five" of the (38) types of pots present in the burials had been made specifically for funerary use, and that "the complementary distribution of these vessels reflects the presence of two distinct affiliative groups in Non Nok Tha phase society, each containing individuals of differing wealth" (ibid:16).

Another archaeological study with implications for patterns of social organization is Richard Pearson's research in the Ryukyu Islands, which indicates that social complexity in this area increased with the development of trade with China during the 13th. to the 17th. centuries. Settlement patterns became diversified and social stratification appeared, with peasants living in settlements near the shore and fields, while the elite class lived in fortified "castles" on high ridges, and used finer porcelain, stoneware and luxury goods (Pearson 1978).

2.4.3 Trade and exchange.

With respect to the question of trade and exchange in the Philippine context, Hutterer (1973, 1974, 1977) and Hutterer and Macdonald (1984), has approached the problem from various perspectives. In his earlier work, Hutterer argued that the long-distance trading interactions between overseas powers and the Philippine lowland societies played a major role in the

evolution of the local cultural groups (Hutterer 1973, 1974). Later, Hutterer developed his argument further, to suggest that the exchange interactions must be related to aspects of the internal organization of Philippine societies.

"On the basis of principles of evolutionary theory it can be postulated that the content, organization, and geographical reach of a society's exchange interactions are directly related to the degree of social, economic and political differentiation within that society" (Hutterer, ed. 1977:182).

Hutterer questioned the assumption that trade is causal to the evolution of social complexity, suggesting that questions should be asked regarding the reasons why Philippine societies wanted to import massive quantities of foreign goods.

"Changing the question from an external to an internal one has several interesting implications... among these is the a-priori suspicion that conditions of increased social complexity within the Philippines resulted in an increased demand for foreign goods" (Hutterer and Macdonald 1984:257).

Others have likewise argued that the development of status inequalities is associated with control of scarce goods to symbolize social power (Matson 1983:142; Wolf 1982:83); but that the control of scarce goods is more the result than the cause of inequalities.

Hutterer's change of emphasis to focus more attention to the internal situation of pre-trade societies is a promising one, but it could be taken a little further in the light of

symbolic archaeological theory. As well as looking for increased social complexity within Philippine societies, all other dimensions of cultural life in these groups must be examined more closely for significant elements - including, I suggest, the ideological dimension. In addition, following the work of Kent (1984), for example, it would be instructive to look for underlying "organizing principles" which might link all the dimensions of the cultural systems in some meaningful relationship, and shed a clearer light on all aspects of the cultural pattern.

3. THE ETHNOGRAPHIC MODEL

3.1 Introduction: The Ethnographic Model of Pila, Laguna

The portion of the cultural system at Pila in the 12th century A.D. in which I am interested, can be described in terms of three sub-systems: the Trade System, the Social System and the Ritual System. Because relevant information is not available in the local context, the economic system will not be a focus of the ethnographic model constructed for this study. A very general picture, however, is offered for background purposes.

Pila society in the 12th century A.D. was a society of swidden agriculturalists with a diversified and fairly secure economic base, augmented by hunting, gathering, fishing, forest products and trade. The subsistence base included upland rice, root crops such as yams, bananas of many different types, millet, and some vegetables and fruits. Cultivated bamboos were extremely important for a variety of uses, as were the palms (betel nut, buri and coconut). Fermented wines and other intoxicants were made from rice, sugar cane, and coconut palms. Domesticated animals included the pig, chicken, dog and water-buffalo. Indigo (for dyes), cotton, ramie and hemp were cultivated extensively for local use and for trade (Fox 1979:58, 59; Eder 1984:839). Forest products included aromatic gums and resins, honey, wax and fine woods. Local technology included fishing, weaving, pottery (earthenware), smelting and forging (both iron and glass) (Beyer 1979:49). Gold, found in placer

deposits within region, was worked and traded (ibid:30). Boat technology was already well-advanced, involving large, ocean-going "plank-built" canoes with outriggers (Scott 1981).

3.2 Trade Sub-System

This sub-system is one of the core components of the ethnographic model. Pila, a lake-side society on the southern shore of the well-populated Laguna de Bay, was in the mainstream of Filipino life and was a minor trade centre for both local and long-distance trade. There was already a population of some 26,000 people in the province of Laguna by the time the Spaniard Juan de Salcedo "pacified" the Laguna lake towns in 1571 (Locsin and Locsin 1968:6). Trade and exchange, conducted chiefly by barter, linked Laguna de Bay with other coastal and up-river settlements, Borneo, Indonesia, and China (Pigafetta, in Alip 1964:5-249). Laguna de Bay is a closed, fresh-water lake, but it is linked to the sea by the Pasig River, a major artery for the movement of people and goods. Even the large Chinese junks were able to navigate the Pasig River, and trade was conducted directly with the coastal and up-river settlements from on board the Chinese ships (ibid:5; Beyer 1964:6; Chin 1978a:13).

Trade was conducted by barter, on a person to person basis. The Chinese ships, owned by independent merchants, carried both bulk cargo and individual traders with independent stores of trade goods (Van der Pijl-Ketel 1976; Roxas-Lim 1966:229). In the larger settlements, the trading ship would anchor in front of the largest buildings, and the local traders would come on

board in crowds and mix freely with ship's crew (Beyer 1964:8). After bartering, the local traders would carry the goods away with them in baskets. Trading relations were friendly and honest. Even when the local traders were unknown to the ship's crew, they were allowed to take the goods away with them. Those traders who carried their wares to other islands for barter were sometimes not able to return for eight or nine months, but they were always trusted with the goods and never failed to keep their part of the bargain (Chen, Liu-Ti 1966:266). Because of this person-to-person barter, there were no on-shore marketplaces or warehouses (Fox 1979:58). The general similarity of the Filipino languages, so much alike that if one was learned, all could be spoken in a short time, made it possible for the Chinese themselves to conduct trading transactions without the use of local middlemen (Chen, Liu-Ti 1966:263; Chirino 1979:245; Tangco 1979:76-77).

The range of goods traded was wide. The Chinese ships brought quantities of prized Chinese ceramics, silk and luxury fabrics, ceremonial umbrellas, iron ingots, fish-hooks, incense-burners, gongs, bronze bells, mirrors, beads, lead sinkers, Chinese coins and small luxury goods. In return, the Filipinos traded gold metal, raw cotton, cotton cloth, hemp, forest products (such as rattan, mats, fine woods, aromatic resins, honey, bees-wax), tortoise shell, pearls, pearl-shell, sea shells, sponges, rhinoceros horn, deer hides, and a variety of other exotic local products (Chen, Liu-Ti 1966:263-270). Once regular trade was established Chinese merchants became familiar

with the type of goods most favoured locally, and the bulk of the cargo was in accord with the nature of the demand. The range of goods of each basic type, however, was quite variable.

Chinese ceramics formed the largest category of goods traded (Roxas-Lim 1966:229). The ceramics were comprised of three main groups: (1) Large, glazed stoneware jars; these were generally used as storage containers by the Chinese during the voyage, but were highly prized by the Filipinos on their own account (Brown 1977; Ceramic Society in Indonesia 1977:26,27) Medium-size wares of a type for household use (containers, dishes, bowls, platters, teapots, jars etc.); (3) Miniature ceramic wares, ranging from containers (jarlets, bottles, vases, tumblers, teapots, covered boxes) to a large assortment of dishes and bowls. These were associated with ritual ceremonies and funerary goods. This thriving trade in Chinese ceramics resulted in a loss of status for the locally-produced earthenware pottery (Roxas-Lim 1966:240). Although during the period preceding Chinese trade contacts local earthenware pots were sometimes used ritually, in jar burials, their importance declined rapidly after the arrival of the high-temperature fired (dense and durable) Chinese stoneware and porcelains. Prehistoric Filipino groups, such as those of the earlier Kalanay tradition, made beautiful and sophisticated earthenware pottery of elegant and varied shapes and skilled craftsmanship (Beyer 1947). By the 12th century they had been supplanted by the Chinese ceramics, and had declined in quality and variety (Roxas-Lim 1966:240-241). The local wares assumed a utilitarian

role. Metal-working followed a similar trend - although Filipino groups had mastered the art of smelting and forging iron early in the first millennium (Fox 1979: 49), the easy access to imported iron wares resulted in a lack of refinement of the metal-working skills.

3.3 Social Sub-System

The residential community at Pila was small, consisting of a few hundred individuals, and oriented along the lake and the small streams which drained into it (Spoehr 1973:33-34). The community was an independent social, political and economic unit. Community life and social activities were organized principally on the basis of kinship and common economic and ritual interests. There was little or nothing in the way of a formal political structure. Most individuals in the settlements were linked by blood ties, marriage and ritual kinship, and the social community was defined in terms of these factors - shared residence, common interests and experiences, and community-level ritual obligations (Fox 1979:57). The basic social, economic and ritual unit was the nuclear family, the primary unit of corporate action; occasionally, chiefly at periods of ritual importance (such as marriages, harvest festivals, funerals) the elementary family would expand to include the bilateral kindred (the consanguineal relatives of both the father and mother) (Murdock 1960:5). There were no clans, lineages, or other unilateral descent groupings. The sibling group, which was linked by residence and shared activities, was of marked

importance. The family and kindred assumed collective responsibility for its members, in the form of reciprocal rights and obligations. Blood pacts were a means of ritually expanding the bilateral kin group. Local traders, protected by ritual blood pacts, which affiliated them with different kin groups, moved safely between distant villages and districts (Fox 1979:57,58; Scott 1981:31).

Marriage patterns were monogamous and residence was ambilocal or neolocal. The family household was also the basic economic unit, and both males and females participated equally in both economic activities and ritual ceremonies (Fox 1979:56). There was no sexual division of labour and males and females were of equal status. Families worked together to clear fields, plant, harvest, build houses, and take part in hunting and gathering activities. Often the work was done with the aid of neighbours and relatives, who were provided, in return, with feasts and drinking when the work was finished (ibid:56).

Wealth was represented by territorial rights to fields and resources, and luxury goods such as Chinese pottery, silk cloths, brass bells and gongs, and gold jewellery and other artifacts (Pigafetta 1964:57,66-68,88,92-93). Leadership and authority were vested in the heads of households, and the typical community included several important men rather than one leadership figure (Fox 1979:56). An individual could gain additional power if he was supported by a strong kinship group. Conflicts arose between kin-groups of different communities

rather than between villages as a whole, and were usually related to territorial rights and obligations (Fox 1979:56). Blood-feuds were common between families of different communities, and headhunting was practiced in the belief that the heads of enemies were containers of stored power. Law and order were upheld by consensus, usually involving the heads of households and older persons in the community (ibid:56).

Chinese ceramics played an important part in most social occasions. In conflict situations, large ceramic jars ranked in importance with the heads of enemy individuals, and could on occasion function as "substitute heads" - an obligation to take a specific number of heads in an enemy village could be wiped out by payment of an equal number of ceramic jars (Cole 1912:15). Small ceramic jarlets could also act as containers for the stored spirit power of a slain enemy, and such a jarlet could be hung up on display with the trophy heads (Chin 1978b:3).

Chinese ceramics also figured prominently in all other aspects of social life - as bride-price in marriage ceremonies; as containers and offering dishes in ritual feasts and petitionary ceremonies; as heirlooms; and in healing and funerary rituals. In addition, as objects of wealth and status, they were brought out at feast and ceremonies as serving dishes and containers for food. They were also widely used for day-to-day utilitarian functions, such as the storage of water, rice, and other foods, as well as containers in which the all-

important rice-wine was fermented.

3.4 Ritual Sub-System

The ritual life at Pila was based on kinship, which extended to a network of close ancestor spirits. The ritual and ceremonial unit was the elementary family, extended on occasions to the bilateral kin group. There was no tradition of communal worship on the village level, and no facilities for communal practices, other than the family home (Fox 1979:58). The central organizing principle of ritual life was ancestor worship, and this permeated all aspects of the ideology; Ancestor spirits, who had been close relatives, had the power to influence every aspect of life and death, and were considered the principal causes of illness and disease (Fox 1982); in addition, there were numbers of environmental and nature spirits, who played a supporting role. The ancestors lived in a mirror-image world identical to the living one, except for the absence of wine and other intoxicants. The ancestor spirits dwelt in one of a number of afterworlds, depending upon the cause of death and the social status of the deceased. They had a territorial interest in their home ground and retained family affiliations in the after-world. Great emphasis was placed upon the proper conduct of rituals and "seances", which were conducted by the family unit; ritual specialists (who could be male or female, although the majority were women) were called in on particularly important occasions to act as mediums and interpreters of dreams and omens (Fox 1979:60; 1982:207). In an

environment where so much of the essential resources depended upon the vagaries of natural causes (climate, availability of fish and game, tropical diseases, etc) access to supernatural powers was a critical aspect of life.

As well as beauty and utility, Chinese ceramics had two characteristics which made them extremely important in Filipino society, and which resulted in their almost total identification with the ideological system: their durable ceramic bodies, fired at high temperatures, which gave them a ringing sound when struck; and their vitreous, light-reflecting, glazed surfaces, which were impermeable to liquids and infections, and seemingly imperishable through time. Both these characteristics caused the imported ceramics to be associated with power of the strongest kind - supernatural power (Rozas-Lim 1966; Guy 1984). The use of Chinese ceramics had from the earliest historical records become integral to the proper functioning of ritual and ceremonial occasions - first, as containers of power substances (such as sacred and aromatic oils, resins for incense, herbs, and ritual food offerings), (Pigafetta 1964:66,76); second, as pure, undefilable, offering dishes and covers. Used as covering-objects, their impermeable, durable, reflective surfaces were believed to have great protective power against all kinds of influences, from evil spirits to poisons. Such covering-objects not only protected a person or object from the attack of outside forces, but were also considered to have the power to "seal in" a departed spirit from possible escape from its body or container (Janse 1944:40).

The ringing sound emitted by ceramic dishes, bowls and jars when lightly struck or tapped with a fingernail, was seen as a magical "voice", able to attract the attention of the all-powerful ancestor spirits. The larger stoneware jars also acquired a special significance as containers for fermenting, storing and serving rice-wine, the only earthly substance not available in the after-world. It was believed that if a ceramic dish was "rung" in the context of the appropriate ritual ceremonial, the ancestor spirit would hear and be attracted to attend. It was believed that the spirit could take possession of a medium, and drink the wine "through" the medium who drank it during the ritual. This would please the spirit and cause it to look favourably on the petitions presented to it (Fox 1982:190).

The burial ritual represented the core of the ideological system, as it marked the transformation of the individual from helplessness to power. It was characterized by the need to protect the departing soul from evil influences during its journey to the after-world. This transitional phase could last for a considerable time, sometimes until the decay of bodily tissues was complete.

The relationship of the living to the dead is not one of fear, but of familiarity, intimacy and/or respect. The most prominent respect pattern is between parents and children and this embraces the dead, as well as the living" (Fox 1982:200).

Chinese ceramics functioned in all phases of the mortuary

ceremonial.

Specific information regarding the burial ritual is available from two sources: the symbolic aspects are derived from ethnology, while the material aspects of the mortuary ceremonial are derived from archaeological information. As burial goods, Chinese ceramics in the Philippines in the 12th to 14th centuries were used to cover certain parts of the body - the head and neck, hands, pelvis and feet (Janse 1944:40; Fox 1959:355,357). Small jarlets and bottles and other containers were used for ritual substances (oils, herbs, aromatic resins) and for food offerings necessary for the departing spirit (Pigafetta 1964:76). Almost every grave included at least one or two ceramics, and sometimes dozens (Guy 1984:122). Earthenware pottery was sometimes buried in the grave; it was, however, usually placed a little distance from the body, or placed outside the mat shroud which was wrapped around the body and the ceramic vessels (Fox 1959:357; Tenazas 1968:16). This local pottery was included as a utilitarian item, usually acting as a storage container for more perishable items such as silks and cloths, or food offerings (Roxas-Lim 1966:236). The ritual function of the ceramics themselves was to establish a protective area around the body: representing purity, protection and durability, these ceramics were buried in pristine condition, not having been used in daily life (Guy 1984:122; Fox 1959:363). Where large numbers of ceramics were interred, these included multiple groupings of containers and dishes, although the individual items varied as to style and type of glaze

(Tenazas 1968:Appendix III).

Iron blades, usually knives or spear-points, were also buried close to the body, though much less frequently than the ceramic wares. In some Southeast Asian societies which practice spirit cults, the use of metal is considered to have the power to keep evil spirits at bay (Legeza 1978:5); similarly in Pila the iron blades may have represented defensive power for the dead individual. Utilitarian objects of any kind were rarely included in burials, perhaps because they were viewed as unnecessary in the realm of supernatural power. The dead were buried in cemeteries set apart from the village area, usually on a rise of land, at the mouths of rivers and estuaries (Fox 1959; Janse 1945; Tenazas 1968). It was believed that the spirit of the deceased could find its way home by following the river to the burial place.

3.5 Structural Model of the Pila Cultural System

This cultural system (see Fig.3.1) is an open system with four major dimensions: physical-environmental; material-cultural (technological); social; and ideological. These dimensions are inter-penetrating. They are cross-cut by the variables, which are sets of interactions occurring throughout all of the dimensions at once. For instance, with respect to the variable of "mortuary ritual", there will be interactions in the physical/environmental dimension, involving the preparation of the burial area and funerary preparations; in the material-culture dimension, there will be interactions involving the

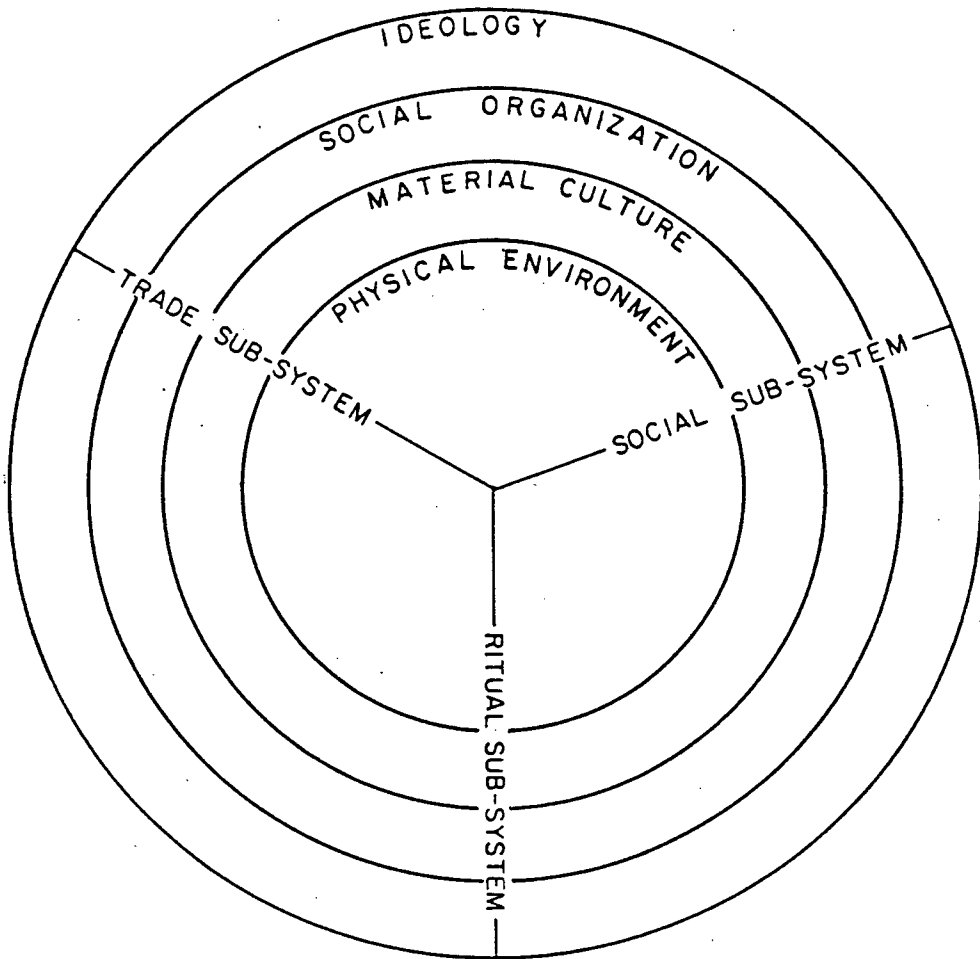


FIGURE 3.1: Structural Model of the Pila Cultural System.

preparation of the body, the grave goods, and the ritual paraphernalia; in the social-organizational dimension, there will be interactions involving the survivors of the deceased, and those members of the community linked to the deceased by ties of kinship and social relationship; in the ideological dimension, there will be interactions involving the funerary ceremonial, the ritual specialists and the kin group members participating in the burial ritual. In this way, a single variable functions as an energy focus, encompassing energy exchange and interaction within all the dimensions at once.

The physical dimension is the most tangible, and the one most bounded. The material-culture and social dimensions may extend beyond the bounds of the environment itself. The ideological dimension is the least bounded and may extend beyond the others (as in the diffusion of religious beliefs from one country to another). In this system, the ideological aspects are found to be in agreement with the other major features of the cultural system, and similarities can be observed in the functional relationships of all the sub-systems. The structural model was developed as an extension of Steward's culture core concept, reorganized to omit the hierarchical aspect, while at the same time encompassing the physical environment as an integral part of the system as a whole. A fuller explanation of the theoretical background has already been given in section 2.3, above.

In the Pila system, the ideological organizing principle is that powerful supernatural forces (mainly close ancestor spirits) regulate the function of all aspects of the living world; they are responsive to personal ritual petition; therefore the most effective strategy for the individual in all matters lies in establishing a direct link with the sources of power, especially through ritual action on one's own behalf. This direct, one-to-one relationship characterizes all aspects of the socio-cultural pattern and reflects a symbolic attitude of lack-of-boundedness, or lack of external, social, constraints. Due to their physical characteristics, Chinese ceramics became fully integrated with the ideology and ritual in Philippine societies and played an important role in all aspects of cultural life.

4. ANALYSIS: TESTING THE MODEL

4.1 Introduction to Methods

The methods of analysis used in this study have been chosen with two principal areas of concern in mind: the nature of the excavation data, and the practical implications of the two-pronged theoretical approach. I will outline the implications of these two areas first, and then proceed to a description of the structure of the analysis itself.

4.1.1 The Nature of the Data.

The excavation data consists of two contemporaneous burial grounds with identical stratigraphy, spanning four cultural levels. The chief constraint is the lack of organic preservation in the site. Little or no human skeletal material or other organic matter has been preserved. Accordingly, the hypotheses to be tested, and the quantitative analyses used, are related solely to the form and quantity (and wherever possible, the spatial distribution) of the grave goods found in the burials. (See Tables A-3 and A-4, Appendix A, for full data chart of Period II burials and associated grave goods).

A further dimension to the grave goods at Pila is the fact that the vast majority of the grave goods excavated in the total site consist of imported Chinese ceramics (78.97%) while artifacts of apparently local manufacture constitute a decided minority: earthenwares (10.33%), iron objects (5.04%), and utilitarian goods (0.88%). (See Fig. 4.1) The only other grave

goods at Pila, a few bronze and lead objects (bangles, rings, mirrors and other small items) and some elite "badges" of status (gold, coins, glass) are most likely also imported goods (3.65%).

Another significant factor regarding the site data is the division of the site into two closely related areas, Site 1 (Agra) and Site 2 (Mendoza) (See Figs. 1.2 and 1.3). As outlined in the Introduction, both stratigraphic and artifactual evidence indicates that Site 1 and Site 2 represent contemporaneous archaeological periods. The two sites are situated along the south-west bank of an old creek bed, approximately 100 metres apart (See Fig. 1.3). Evidence for contemporaneity consists of soil stratigraphy, burial form, pottery styles, and some radiocarbon samples. The existence of these two separate excavation areas stimulated a number of analyses aimed at exploring the nature of the relationship between them.

Statigraphic evidence (Fig. 1.4) shows that four cultural levels are represented at Pila. (See Table 4.1 for tabulation of inhumation and cremation burials in Period and Site). Period I was ascribed by Tenazas (1968:15) to the period prior to Chinese trade contact and has three burials, all in Site 2. Period II is dated as Early Sung, about 12th century A.D., and has 174 burials, 129 in Site 1 and 45 in Site 2. Period III is dated as Late Sung/Yuan, about 14th century A.D., and has 55 burials, 50 in Site 1 and 5 in Site 2. Period IV is ascribed by

TABLE 4.1: Inhumation and cremation burials by period and site.

PERIOD	NUMBER OF BURIALS						
	SITE 1 (AGRA)			SITE 2 (MENDOZA)			Site 1 and 2
	Inhumation	Cremation	Totals	Inhumation	Cremation	Totals	Totals
I (IRON AGE)				3		3	3
II (EARLY SUNG)	129		129	45		45	174
III (LATE SUNG/YUAN)	5	45	50		5	5	55
IV (EARLY MING)	3		3	6		6	9
TOTALS =	137	45	182	54	5	59	241

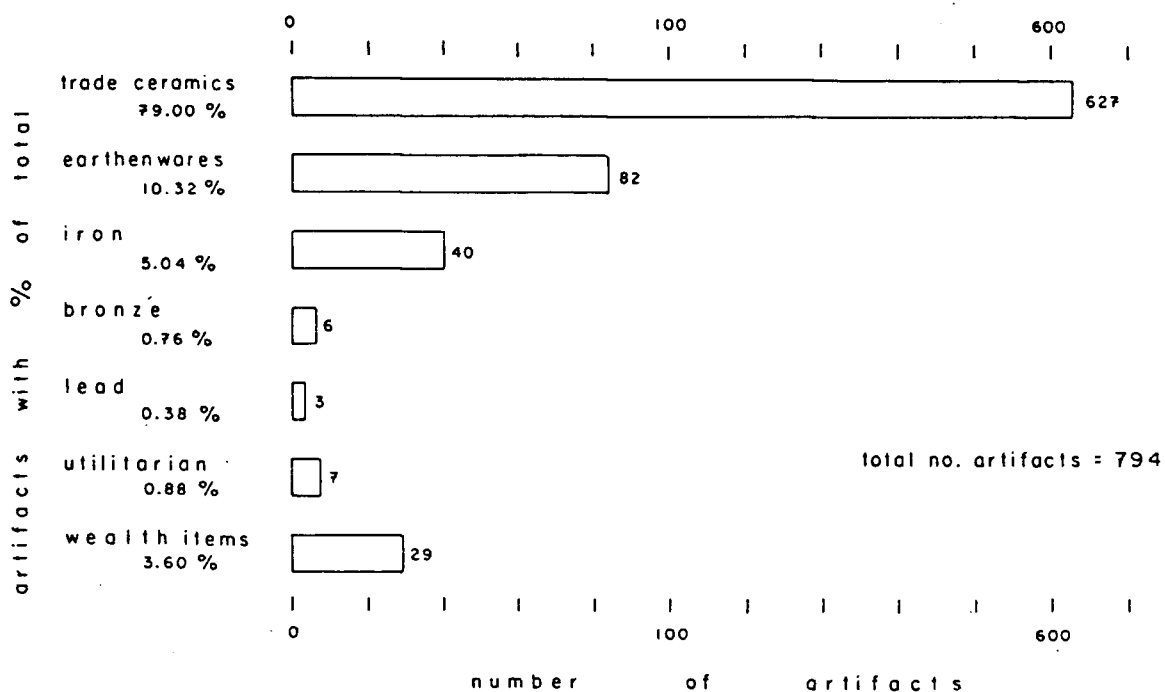


FIGURE 4.1: Numbers of artifacts in total burial population at Pila: Period II.

Tenazas to Early Ming, about 15th to 16th A.D., and has 9 burials, 3 in Site 1 and 6 in Site 2. These levels were dated on the basis of soil stratigraphy, radiocarbon dates, associated Chinese coins, and stylistically dated Chinese ceramics.

Since Period I and Period IV are represented by very few burials, it was decided to restrict the analysis to Periods II and III alone. This brings up a further area of concern. Period II is represented by primary inhumation burials with considerable quantities of associated grave goods, while Period III is represented largely by jar burials with secondary cremations and, (except for a few burials), with no other associated goods. Further, the excavation report indicates that during Period II both sites were used as cemetery areas only, whereas during Period III the sites were used as habitation areas as well as burial grounds. Evidently considerable culture change took place between Periods II and III, and the changes in burial patterns made it impossible to treat the Period II and III data with the same kinds of analyses. In addition, while Period II is represented by large numbers of burials in both sites, Period III burials were found mainly in Site 1 (50 out of 55 burials). All these factors influenced the decision to focus the bulk of the quantitative analysis on the Period II data. Analyses used incorporate statistical, spatial and stylistic tests aimed at uncovering any inter- and intra-site relationships among the Period II burials.

Period III, with far fewer data, did not lend itself to the same kinds of treatment, and the focus of the analysis here is chiefly to establish the nature of the culture change that occurred at Pila between the 12th and the 14th centuries A.D. Period III data is examined in terms of burial form and spatial patterning, chiefly in a discussion format.

4.1.2 Practical implications of the theoretical approaches used.

Since this study attempts to incorporate both the processual approach and the symbolic, it was decided to identify each hypothesis formulated as belonging to one or other category. Both the processual and symbolic aspects generated hypotheses, and all hypotheses are subjected to quantitative analysis wherever possible. Due to the limitations of the data, some hypotheses could be evaluated only by simple descriptive analysis based on a range of ethnographic and archaeological information. The symbolic domain, dealing as it does with ideological factors, did not lend itself as readily to quantitative treatment as did hypotheses based on the processual approach, but some relevant statistical analyses were done. For purposes of this study, it was decided that a deeper interpretation of the overall data could be attempted if the symbolic implications of the "hard" data were consistently to be examined for relevance of fit to the overall cultural paradigm or "general organizing principle" introduced in Chapter 3. (See Fig. 3.1, Structural Model of a Cultural System). By definition, the general ideological organizing principle must be

found to be relevant throughout all dimensions of socio-cultural life. All evidence derived from formal analyses and ethnographic data must be seen to fit the ideological paradigm in general terms or else the paradigm must be deemed to be inapplicable and a new construct attempted.

Thus in analyses based on the processual approach, I have tried to test the antiquity of the ethnographic model in terms of some general principles of mortuary analysis, the focus being on tests of social differentiation and hierarchical organization, political centralization (or corporate group action), specialization of function, and the relationship between groups of grave goods. In addition, I looked for the presence of material correlates of the ideological patterns defined in the model, as expressed in the burial ritual.

In the analyses based on the symbolic approach, I have attempted to build upon work already done in this field (Hodder 1982a, Pader 1982, Kent 1984), and upon theoretical advances proposed and summarized by such researchers as Allen (1982), Braun (1981), Friedman (1982), Segraves (1982), and Trigger (1984) in the area of system maintenance and system change. Firstly, I constructed my Structural Model of Pila society (Fig.3.1). Then I derived the "ideological organizing principle" (Kent, 1984) - the "coherent sociocultural paradigm" - on the basis of archaeological evidence, ethnography, history and ancient literary sources contemporaneous with the period in question. I defined major areas of concern, based on the

Ethnographic Model, and in each area, looked for the relevant ideological "attitudes" which might be reflected in the material data. The methodology stemming from this approach was to examine not only the nature of the burial goods themselves, but also the manner in which these goods were used and distributed.

Thus within the Trade Sub-System, I looked for attitudes towards material objects - in particular, attitudes towards the trade ceramics. What kind of objects were deemed important enough to the dead person to warrant their burial as grave goods - were they predominantly of any particular kind? Were they utilitarian goods used by the dead person in life? Were they objects denoting wealth and status? Were they symbolic or ritual objects? Was there any relationship evident between the imported and local goods? How and where would the imported goods have been obtained by the living relatives?

Within the Social Sub-System, I looked for attitudes towards individual group members, and towards power and authority, as reflected in the manner in which the material objects were used in the burial ritual. Were the dead socially bounded and constrained with respect to social roles of any kind? Was there evidence of social stratification in terms of wealth and status? Was there evidence of hierarchical social organization, such as descent groups or lineages? Was there evidence of corporate group action in the burial forms? Were the dead identifiable in terms of social roles (such as age, sex, division of labour)? Did the grave goods seem to fall into

a few, rigidly-defined groupings, or was there a wide range of variability in the quantity and type of goods?

Within the Ritual Sub-System, I looked for attitudes towards death. Did death appear to represent simple departure, or loss of status, or perhaps transition to some higher status? Were the dead equipped for a continuation of a typically earthly existence - that is, were they equipped with useful tools and utensils which they had used in life? Were they heavily armed for conflict in a hostile "underworld"? Were they protected in some specific way against danger - or against impurity? Were the grave goods themselves obvious wealth objects or did they appear to have some specific symbolic value? In what condition were these objects? How were they disposed about the body, and what did their arrangement have to say about the kind of value they represented to the dead person?

Finally, with respect to the culture change evident in Period III burials, I looked for evidence of the same attitudes that I had already found in Period II. The burial pattern had changed - did the changes indicate a corresponding change in the general sociocultural paradigm, the ideological organizing principle of Pila society?

4.1.3 Structure of the Analysis.

The analyses are categorized under Period II and Period III, as outlined under section 4.1.1, above. Period II data are analyzed in terms of the three main sub-systems defined in the

Ethnographic Model: Trade, Social and Ritual. The applicability to Pila, Laguna is tested for each sub-system by means of hypotheses and analyses. Each analysis section is followed by a summary and discussion, incorporating a brief summary of the test results, other pertinent information not included in the data analyses, and a discussion of the symbolic implications suggested by the results.

Period III is discussed in terms of the same sub-systems - Trade, Social and Ritual - but due to the limitations of the data, the analysis is more general in form.

5. ANALYSIS: PERIOD II - TRADE SUB-SYSTEM

5.1 Introduction

This sub-system relates to the nature and extent of the input of trade ceramics into the cultural system as a whole. It encompasses these main aspects: the value placed locally on the goods brought in from outside; the economic effect of the trade goods on locally produced artifacts; and the nature of the trade contacts with outside sources.

5.2 Hypotheses: Processual

5.2.1 Hypothesis 1: Wealth was expressed through differences in quantities of trade ceramics in the Pila burial site.

The most significant aspect of the model is the all-pervading importance ascribed to the Chinese trade ceramics in Philippine society. Ethnography shows there was a range of status in Philippine communities. Therefore my first, and most important, hypothesis is formulated to test the question of the value of the Chinese trade ceramics in terms of wealth and status in the Pila burials. Assuming that mortuary ritual reflects the pattern of social differentiation in the living community (Binford 1971:18) then the burials should show a range of goods reflecting differential status within the community. Assuming further that the trade ceramics were wealth indicators, then the trade ceramics will be found among the burial assemblages in greater numbers than any other category of goods, and the distribution burials in "wealthy" and "poor" groups will

depend on the amount of trade ceramics present rather than on any other variable. Further, if trade ceramics are wealth indicators, then the burials with elite items, or "badges" of rank, will be found among those burials containing the highest numbers of trade ceramics.

5.2.2 Hypothesis 2: Local earthenware pottery was a low-status item in Pila burials.

5.2.3 Hypothesis 3: Iron blades were a low-status item in Pila burials.

As corollary to the first hypothesis, it is necessary to test the relative value of the other substantial groups of artifacts found in Pila burials. The only other categories of artifact found in comparatively large amounts in Pila are earthenwares, representing 10.32% of the total grave goods, and iron blades (and fragments), representing 5.04% of the total grave goods (see Fig.4.1).

Assuming that Hypothesis 1 is correct, and trade ceramics are the chief visible indicators of wealth in Pila burials, then it must be demonstrated that earthenware and iron artifacts are independent of the wealth groupings as established in support of Hypothesis 1. In other words, it must be demonstrated that the earthenwares and iron are not only low-frequency items in Pila burials, but that the distribution of these goods among the burials is not positively correlated with the wealthiest burials.

5.2.4 Hypothesis 4: Trade ceramics in Pila burial assemblages will show great diversity of types and wares.

The final hypothesis dealing with the trade sub-system at Pila relates to the question of the trade and exchange patterns. Assuming the ethnographic model is correct, and trade was conducted without strong centralization, the range of trade ceramics in the Pila burial assemblages should be quite wide, reflecting a pattern of individual "sorting" and person-to-person contact rather than uniform "factory lots", or bulk orders. It must be recalled that in the period between 10th century A.D. and the 16th century, the ceramic trade involved the exchange of hundreds of thousands of individual pieces in the Philippines alone. Fig.1.1, a map of the Philippine Islands showing the major archaeological sites from which Chinese ceramics were recovered (before 1968), gives some illustration of the extent, and penetration, of these wares throughout the archipelago. The sheer bulk of the trade is enough to create an assumption that such vast quantities of goods were ordered and traded through centralized control agencies. However, early Chinese literary sources, such as the Chronicles of the Imperial customs official, Chao Ju-kua, written between 1209 and 1214 A.D., reveal that trade was conducted by barter by individual Chinese merchants and small local traders at the Philippine ports of call (Chao Ju-kua, in Garcia 1979:194,196). See Notes 1 and 3, Appendix C.

Thus the diversity of trade ceramics in Pila burials should encompass not only many categories of wares, but also demonstrate great variability within each category of wares. I suggest that such a pattern will support the ethnographic model of person-to-person trade in Pila at this period.

5.3 Analyses

5.3.1 Analyses related to Hypothesis 1: Wealth was expressed through differences in quantities of trade ceramics in the Pila burial site.

Fig.4.1 is a bar-chart of the total numbers of artifacts found in each category of Pila grave goods. These categories include: trade ceramics, earthenware pottery, iron blades and fragments (assumed to be fragments of blades), small bronze objects, lead objects, utilitarian goods, and wealth (elite) items. See Appendix Tables A-1 and A-2 for a detailed listing of all categories and items, together with frequencies of occurrence. The total number of burial goods found at Pila was 794. Of these 627 are trade ceramics, 82 are earthenwares, 40 are iron, 6 are bronze, 3 are lead, 7 are net sinkers and spindle whorls (utilitarian), and 29 are gold, coins, and other wealth items. Fig.4.1 clearly demonstrates that trade ceramics are by far the largest category of grave goods at Pila (79%), the next largest groups representing only 10.32% (earthenwares) and 5.04% (iron).

Appendix Table A-5 shows the number and percent of burials with trade ceramics and earthenware pottery, in frequencies ranging from 0 to 23 items per burial. This table, and the majority of subsequent tables and figures, presents the data broken down by site: Site 1 (Agra) and Site 2 (Mendoza), in order to explore similarities and differences between the two sites and to determine areas of variability among the goods found.

Table 5.1 shows the frequency of burials with each artifact group present, in Agra and Mendoza, and tabulates the percentages, means, medians, upper quartiles (qU), lower quartiles (qL), and standard deviations for each category of goods. This table demonstrates that in both Agra and Mendoza, trade ceramics occur in the largest percentage of burials, 86.8% and 82.2% respectively. In addition, the mean number of artifacts per burial is highest in the trade ceramics category in both Agra and Mendoza: 3.33 and 4.40 respectively.

Percentages of burials and mean number of artifacts per burial are presented in visual form in Figs. 5.1 and 5.2, bar charts comparing Agra and Mendoza frequencies. These charts confirm the importance of trade ceramics in comparison with all other artifact categories in Pila burials. Fig. 5.2 also demonstrates that with respect to the mean number of artifacts per burial, trade ceramics not only represent the highest frequencies, but are also the sole source of difference between Agra and Mendoza - with the exception of the numerically small

TABLE 5.1: Frequency of burials with each trait in Agra and Mendoza.
(Sum, %, Mean, q.u., q.l., Standard Deviation)

Burials	Cases	Trade Ceramics	Earthenwares	Iron	Bronze	Lead	Utilitarian	Wealth
<u>AGRA</u>	129							
Burials with this artifact type		112	47	26	4	2	3	5
%		86.8	36.4	20.2	3.10	1.60	2.30	3.90
Mean		3.33	0.47	0.23	0.04	0.02	0.04	0.23
Median		2	0.00	0.00	0.00	0.00	0.00	0.00
q.u. (upper quartile)		5						
q.l. (lower quartile)		1						
Standard Deviation		3.10	0.74	0.51	0.23	0.20	0.26	1.71
<u>MENDOZA</u>	45							
Burials with this artifact type		37	14	5	1		2	
%		82.20	31.10	11.10	2.20		4.40	
Mean		4.40	0.47	0.22	0.02		0.04	
Median		3	0.00	0.00	0.00		0.00	
q.u. (upper quartile)		6						
q.l. (lower quartile)		1						
Standard Deviation		5.44	0.87	0.67	0.15		0.21	

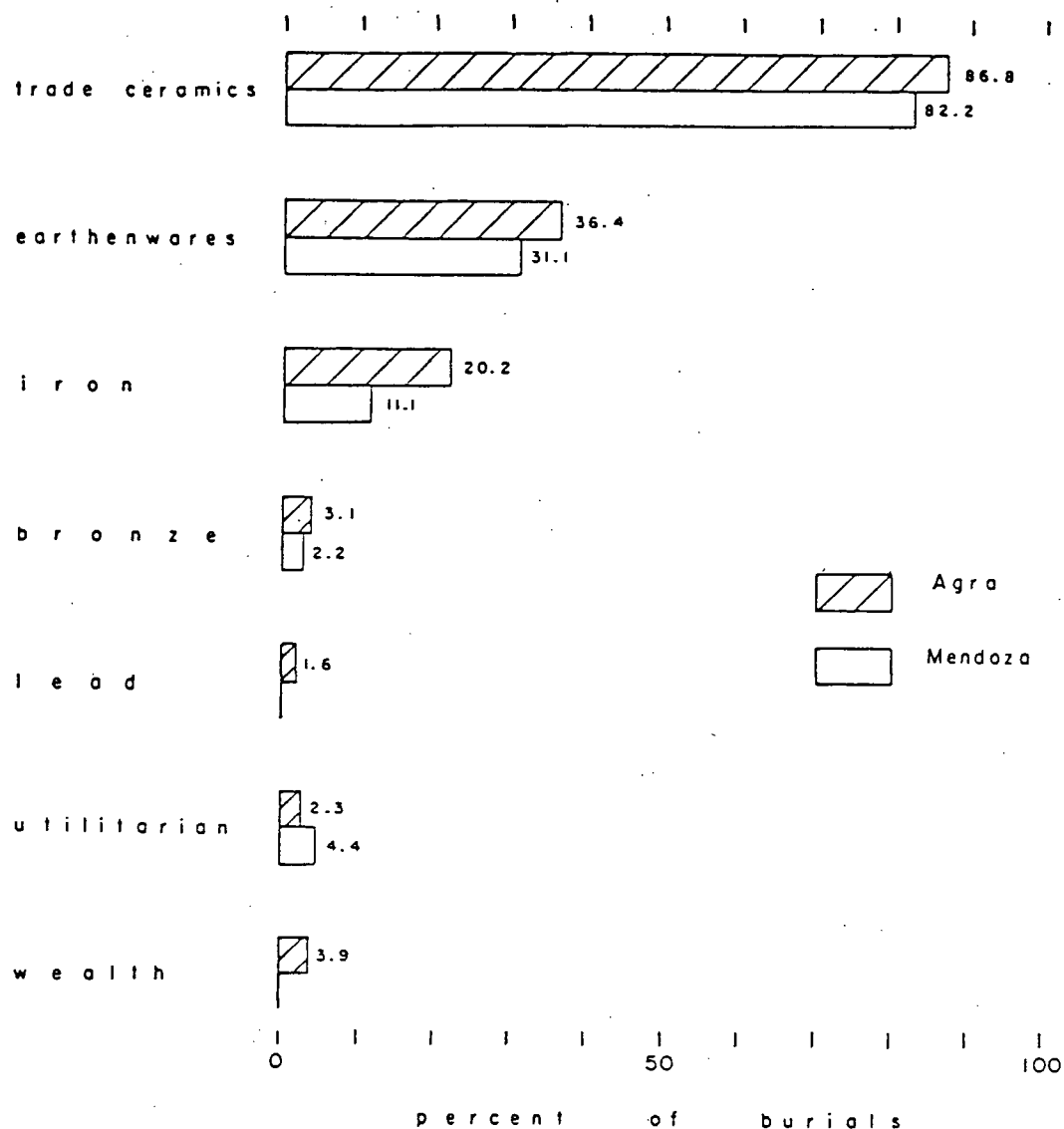


FIGURE 5.1: Percent of burials in Agra and Mendoza with each category of artifact present: Period II.

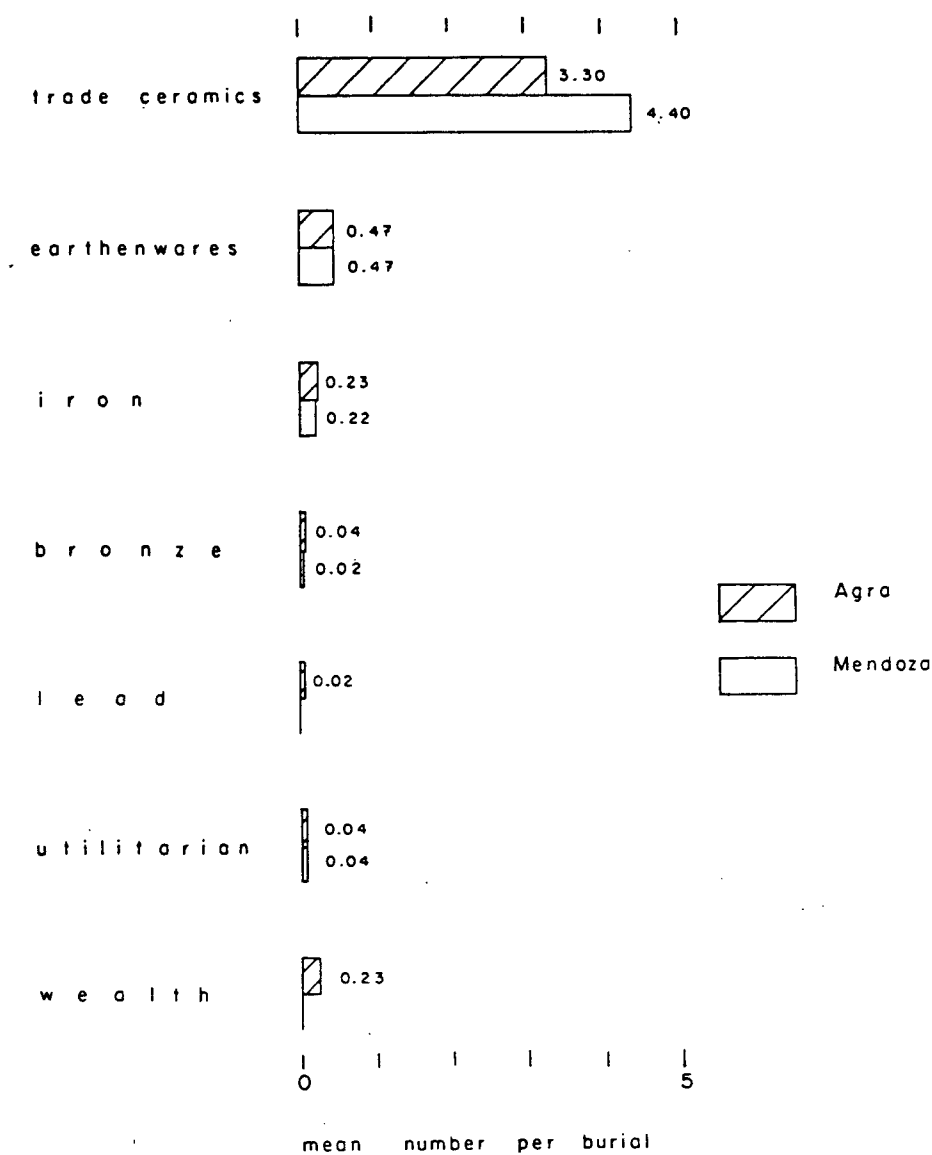


FIGURE 5.2: Mean numbers of artifacts per burial in Agra and Mendoza: Period II.

"wealth" category of artifacts. The wealth category represents elite badges of wealth and status, such as coins, gold jewelry and rare, exotic items such as glass objects, beads, and lead and bronze luxury goods (bracelets, mirrors, rings, etc.). This relationship, seen in Fig.5.2, is just one indication of the significant association which pertains between the burials with elite badges and the burials abundant in trade ceramics. There are only five burials with elite badges among the 174 burials in Period II. They are all in Agra. Four of these elite burials (#50, #83, #1, #98) are found in the very topmost rank of burials according to amount of goods in Agra, with 16, 15, 9 and 8 trade ceramics in association. The fifth "elite" burial, Agra #9, is rather marginal: it is not one of the burials with a high number of trade ceramics in association (2 trade ceramics), and its "wealth" object is a blue glass bracelet rather than gold or coins. It is somewhat debatable if it should be considered an elite badge. It was ascribed to the "wealth" category due to the novelty of the glass bracelet association. Some supporting evidence for this can be found in the literature on prehistoric trade in Southeast Asia, in reports that Chinese and Arab traders supplied glass bangles to the island communities (Harrison 1968:135, 136). The fragility of the glass bangles, together with the aspect of long-distance trade, strongly suggests that these imported goods were high status items.

A non-parametric two-sample statistical test, the Mann-Whitney-U (Conover 1971:224) was done to determine if the burials with the elite badges could be shown to come from the

same population as the burials with a high number of trade ceramics. The burials with elite badges were ranked in terms of trade ceramics. The result shows that if all five elite burials are included in the test, the average rank is 17. This is highly significant at the .01 level. If Agra #9 is ignored, the average rank is 4, showing that these burials come in the very top of the range in terms of trade ceramics. Thus the burials with wealth items have a large number of trade ceramics, showing that trade ceramics can be used as a measure of wealth at Pila.

The next step was to determine a cut-off point between burials designed as "wealthy" and "poor" in the number of associated trade ceramics. Table 5.1 lists the values of means, medians and quartiles: taking the upper quartile as the wealthy group establishes a cut-off point of 5+ trade ceramics per burial for Agra, and 6+ trade ceramics per burial for Mendoza. The common cut-off point for the "wealthy" burials at Pila is thus determined to be 5 trade ceramics per burial.

Returning to the question of the variability of grave goods at Pila, Fig.5.2 demonstrates that all other artifact categories, other than trade ceramics and wealth items, are not only much lower in frequency than the trade ceramics, but also occur in virtually identical proportions in both Agra and Mendoza. If there was variability in Pila, as the results indicate, then it will be the artifacts that are wealth indicators whose frequency will vary the most from burial to burial, and from site to site. I argue that the analyses above

support Hypothesis 1, and in addition, that they point to certain status differences between the two sites which will be explored in later section in the following chapter.

The next dimension to be tested for Hypothesis 1 is that of the distribution pattern of the trade ceramics in the burials. If the trade ceramics function as wealth indicators, then the trade ceramics will be found among the burial assemblages in greater numbers than any other category of goods (as shown), and further, the distribution of burials in the "wealthy" and "poor" sub-groups will depend on the amount of trade ceramics present rather than on any other variable. The small number of burials containing elite badges makes this variable, on its own, insufficient for measuring specific associations throughout the broad spectrum of the 174 Period II burials at Pila.

On the basis of Table A-5, histograms were constructed to map the shape of the Period II distributions: Fig.5.3, burials from the total Pila area with trade ceramics only; Fig.5.4, burials with earthenwares only: in the total Pila area, in Agra, and in Mendoza; Fig.5.5, distributions in Agra: of "all pottery" (trade ceramics plus earthenwares) and of trade ceramics only; and Fig.5.6, distributions in Mendoza: of "all pottery" and of trade ceramics only.

Fig.5.3 establishes a skewed distribution for the percentage of burials with each number of ceramics present, in Pila. Figs. 5.5 and 5.6 show that the same general distribution pattern is found in the Agra and Mendoza burials,

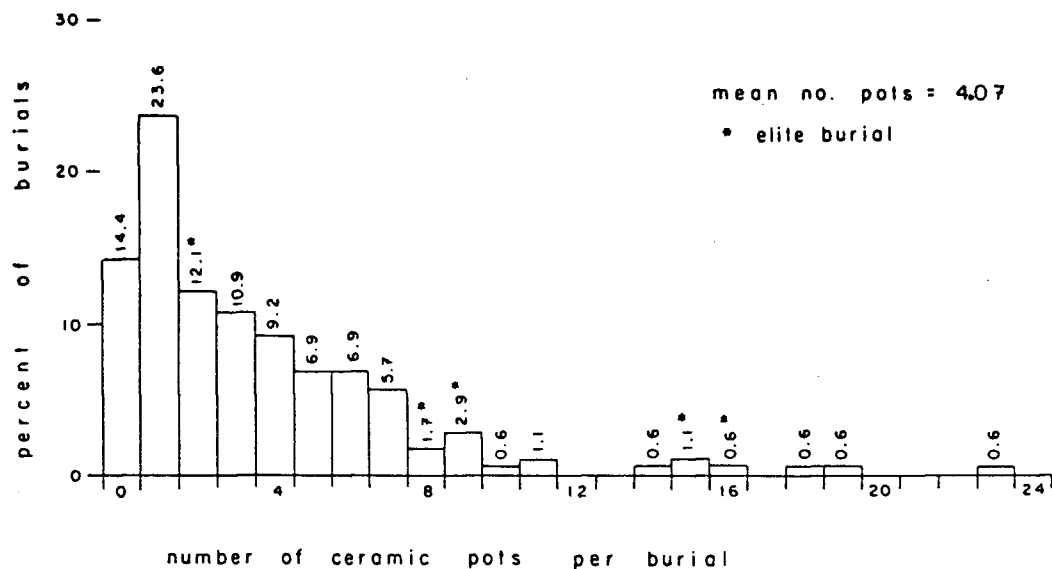


FIGURE 5.3: Percent of burials in total Pila population with each number of trade ceramics present; Period II. (Asterisk shows burials containing elite items).

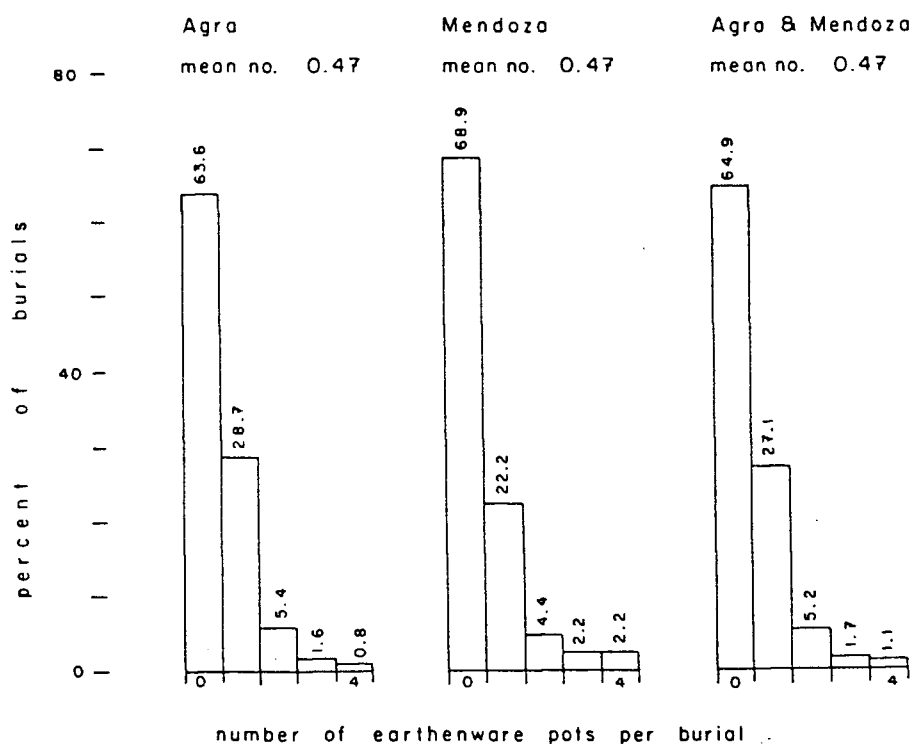


FIGURE 5.4: Percent of burials in total Pila population, Agra and Mendoza, containing earthenware pottery; Period II.

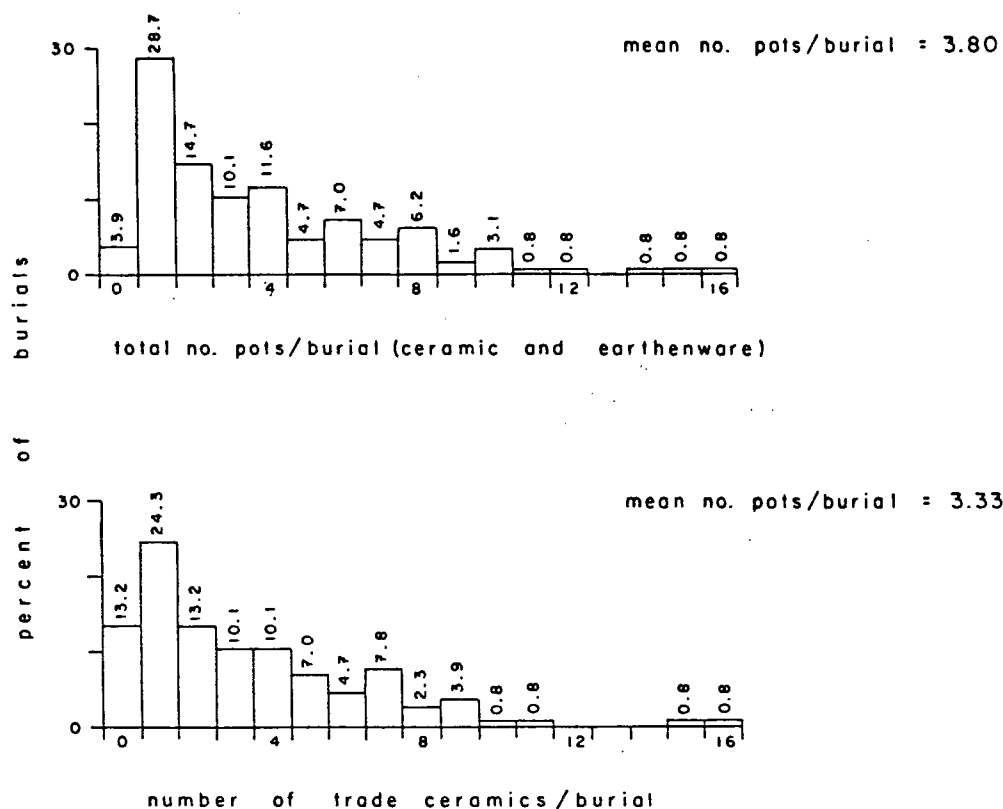


FIGURE 5.5: Percent of burials in Site 1 (Agra), Period II, containing (1) any pottery (ceramics or earthenwares) and (2) trade ceramics only.

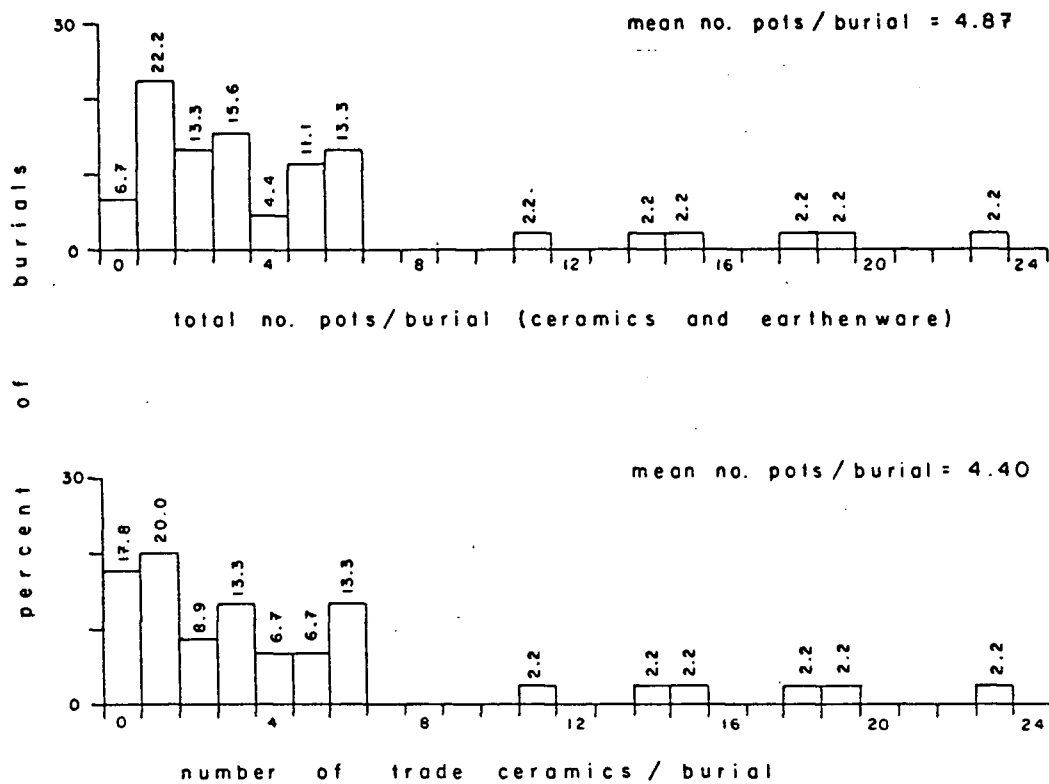


FIGURE 5.6: Percent of burials in Site 2 (Mendoza), Period II, containing (1) any pottery (ceramics or earthenwares) and (2) trade ceramics only.

and that the shape of the distributions does not alter noticeably whether the category is "all pottery" or trade ceramics only. This would appear to indicate that the presence of earthenwares in the pottery distributions is a constant ratio at each site, and unrelated to the variable distribution of the trade ceramics. Fig.5.4, which shows the distribution of earthenwares alone - in the total Pila area, in Agra and in Mendoza - confirms the indication of independence. All distributions of earthenwares are similar, and the mean number of pots per burial is identical in each case: 0.47 pots per burial.

It will be recalled that Fig.5.1 pin-pointed the source of difference between Agra and Mendoza burial associations to the categories of "trade ceramics" and "wealth". The same thing is seen when comparing Figs.5.5 and 5.6 and Table 5.1 - the source of difference between Agra and Mendoza distributions of pottery lies in the trade ceramic category. The trade ceramics are more evenly distributed among a slightly greater percentage of burials in Agra than in Mendoza; in Mendoza, a slightly smaller percentage of burials contain trade ceramics, but the mean number of pots per burial is greater: 4.40 versus 3.33. In addition, there is a greater range between burials with fewer pots and burials with large numbers of pots in Mendoza.

5.3.2 Analyses related to Hypothesis 2: Local earthenware pottery was a low-status item in Pila burials.

As already discussed under Hypothesis 1, above, Figs.5.3, 5.5 and 5.6 demonstrate that the presence of earthenwares in the burial assemblages is not correlated with the trade ceramic variable, the shape of the distributions in both Agra and Mendoza remaining unchanged whether the earthenwares are included in the numbers or not. Fig.5.4 shows that the distributions of earthenwares are of low frequency and very similar in all three groupings of the Pila burial population. Further, the mean number of pots per burial is constant in all three cases (0.47). When contrasted with the greater percentages and greater variability in the trade ceramic category, these analyses indicate that Hypothesis 2 is not supported, and earthenwares are low frequency in these burials, but neither positively nor negatively correlated with the wealthy/poor groupings established on the basis of trade ceramic frequencies.

A minor exception to this pattern is the case of the 25 burials in Pila which have no trade ceramic goods of any kind. Seventeen of these burials have earthenwares in association (i.e. 68%). This may be contrasted with the 41 burials in Pila that have just one trade ceramic object in association: only eight of these also have an earthenware pot (i.e. 19.5%). This situation suggests that the earthenwares were seen as belonging to an entirely different category of grave goods than the ceramic wares, but that in cases where not even one of the

ceramic wares was available, an effort was made to provide an earthenware pot as a substitute.

The complete data charts for the Pila burials confirm this interpretation; a simple visual inspection reveals that earthenwares are widely dispersed throughout the entire wealthy/poor continuum in both Agra and Mendoza, except for the small, localized clusters of earthenwares in the handful of burials with no trade ceramics of any kind (Tables A-3, A-4, Appendix A).

5.3.3 Analyses related to Hypothesis 3: Iron blades were a low status item in Pila burials.

Analyses used to test Hypothesis 3 are summarized in Table 5.1 and Figs. 5.1 and 5.2. The analyses show that iron objects are not only a low-frequency item in the Pila burials, but that they are irregularly associated with the trade ceramic frequencies. Table 5.1 shows that the proportion of burials with iron in Agra and Mendoza shows a different pattern from the trade ceramic frequencies. While trade ceramics are found in almost equal proportions of burials in Agra and Mendoza (86.8% and 82.2% respectively), iron objects are found in 20.2% (Agra) and 11.1% (Mendoza) of the burials. These figures are presented graphically in Figs. 5.1 and 5.2 for greater clarity. The mean number of iron objects per burial is low, and nearly identical for Agra and Mendoza (1.23 and 0.22 respectively). On the other hand, the mean numbers of trade ceramics in Agra and Mendoza are not only higher but different from each other (3.33 and 4.40

respectively). These analyses indicate that the occurrence of iron objects in Pila is irregularly associated with trade ceramics, and that Hypothesis 3 is not supported. Rather, iron must be considered as neither a low-status nor a high-status item in Pila burials, but independent of the wealthy/poor groupings established on the basis of trade ceramic frequencies. Tables A-3 and A-4 (Appendix A) confirm this result, showing that iron occurrences are scattered throughout the wealthy/poor continuum. The pattern of association between presence of iron and presence of elite items supports the results seen with respect to the trade ceramic association - only two burials (#7 and #18) of the five elite burials in Pila also contain iron.

5.3.4 Analyses related to Hypothesis 4: Trade ceramics in Pila burial assemblages will show great diversity of types and wares.

The first requirement in the consideration of Hypothesis 4 is to establish that the range of trade objects found in Pila burial assemblages shows considerable diversity. Tables A-1 and A-2, Appendix A, list the full range of artifact classes, functional type sub-groups, and frequencies of occurrence. A total of 627 trade ceramics were found at Pila, representing 56 separate glaze/function sub-groups; this gives an average of 11.19 items in each sub-group. Before considering the implication of these figures, I will present a hypothetical example by way of comparison. Suppose I have two hypothetical groups, A and B. Suppose A to have 100 objects, distributed throughout 10 classes in the following order: 91% in one class,

1% in each of the other 9 classes. Thus 91% of the total range of objects is found in one artifact class. Suppose Group B to have 100 objects in 10 classes, distributed in the following order: 10% of the objects in each of the 10 classes; or, no more than 10% of the total range of objects falls in any one class. Group B must then be considered to have a greater amount of evenness than Group A.

Returning to the Pila figures, the six major glaze categories all have substantial frequencies: lead-glazed 20, brown-glazed 143, ochre-glazed 99, gray-glazed 98, celadons 162, and white-wares 114. Though some glaze/function sub-groups are far larger than others, the overall total of 56 sub-groups in itself indicates an impressive variability. On this basis, the diversity of trade ceramics in Pila burials is judged to be great rather than small, especially in view of the fact that the sub-groups listed in Table A-1, Appendix A, represent a certain amount of lumping from the original list of burial assemblages recorded by Tenazas in 1968 (see footnote to this Table for details of lumping procedures).

While diversity alone cannot prove the truth of person-to-person contact in the trading relations at Pila, I suggest that it is adequate corroborating evidence in this case, since this aspect of the Ethnographic Model is substantiated by contemporaneous eye-witness accounts in the ancient Chinese Annals (see Appendix C, Notes to the Text, Nos.1-3).

5.4 Summary and Discussion

The test results show that a considerable difference in wealth, as indicated by the presence of ceramics and other prestige goods, did exist in Pila society. The similarity in the distributions of goods in Agra and Mendoza indicates that the observed pattern of burial assemblages was general throughout Pila.

The status of the burials, and therefore, one may assume, of the living society, was associated with the possession of trade ceramics, which are the predominant indicators of wealth in these burials. The ceramics are not in themselves obvious wealth objects. Elite badges of wealth and status, such as coins, gold jewellery, and rare, exotic items such as glass objects, are found at Pila, but appear in only five of the 174 burials in Period II. Four out of these five burials are clustered right at the top of the wealthy range; the fifth burial, Agra #9, is associated with two trade ceramics.

Thus the trade ceramics were important, and also appear to represent a symbolic rather than a utilitarian function in the burials. They are chiefly miniature rather than full-sized objects, and include small containers and open forms (dishes, plates, bowls, tops and bottoms of covered boxes) in any of 6 glaze categories, in distributions suggestive of ritual "sets". The ritual appears to have involved sets of containers and open forms, with containers being the more important, and celadon-glazed wares being the most popular. The ceramics are

frequently distributed over the body in a specific pattern - with small vessels clustered around the head and upper torso, and open forms such as dishes and bowls placed upside-down over the head, pelvic region, and feet. It is argued that this patterning indicates a protective symbolism for the ceramic wares used. In addition, there is evidence that the ceramics were wrapped close to the body in mat or cloth shrouds. The symbolic aspect of these grave assemblages is explored in detail in Chapter 7, under Ritual Sub-System.

In contrast to the imported ceramics, locally-made artifacts such as earthenware pottery and iron blades, are not specifically associated with wealth. The earthenware pottery is full-sized, and of a plain, utilitarian nature (see Fig.B-1, Appendix B, for photographs of some typical earthenwares from Pila). The earthenwares, mostly cooking pots, appear to represent a utilitarian function in the burials, a conclusion which is supported by the fact that they appear to have been commonly buried outside the matting shroud, and slightly distant from the body (Tenazas 1968:16). This difference in treatment, as well as the much lower frequency of goods, suggests that utilitarian function was considered less important than symbolic function at Pila.

The iron blades were buried next to the body within the mat shrouds. In fact, it is the mat impressions left in the iron blades and rust cakes that indicates such a mode of burial (ibid:16). The iron is a low-frequency item in the burials, and

is not correlated with the wealth groupings established on the basis of trade ceramics and elite badges. This suggests that the concept of physical protection in the next world was considered less important than the ritual protection represented by the ceramic objects. The presence of iron may reflect some specific achieved role rather than status per se as, for instance, the burial of a kingroup head, a hunter, a warrior, or the relative of such a person. The pattern of person-to-person trade at Pila is supported by the evidence of diversity in the ceramic burial assemblages, as well as by contemporaneous eyewitness accounts in Chinese annals.

In the symbolic realm, the functional inter-relationships observed in the trade sub-system confirm the general agreement between these cultural patterns, and the ideological paradigm as outlined in the Structural Model. The essential elements of the ideological paradigm are: the importance of the superordinate dimension; the importance of a personal, one-to-one relationship with sources of power; and the primary importance of individual ritual action by the person and his immediate family; characterizing all is a lack of social boundedness, or formal constraint. The emphasis placed on the trade ceramics and their apparent symbolic function indicates the power of supernatural spirits in this society. Associated with this is the importance of ritual action. Thus where all matters of life and death, illness and health, abundance or scarcity of food, is perceived to be under the control of ancestor spirits and other animistic entities, placating and pleasing these spirits will be seen as

matters of critical importance. In the face of supernatural power, physical elements of protection will be minimized - hence the lack of emphasis on physical protection in the form of weapons, or on material protection in the form of coffins. Adherence to the ritual requirements is sufficient for full protection of the departing soul.

The individual variability seen in the burial assemblages, both in the range of goods and the amount of goods, indicates that the ritual requirements allowed for individual choice on the personal and family level, with respect to the specifics of the items used. This supports the concept of freedom of individual action rather than the impact of some centralized authority. This picture is also in keeping with the pattern of person-to-person trade, which again reflects the one-to-one relationships basic to this society.

6. ANALYSIS: PERIOD II - SOCIAL SUB-SYSTEM

6.1 Introduction

This sub-system relates to the function of trade ceramics in the social organization of Pila society, insofar as these wealth indicators may be associated with other status-related social patterns. The main aspects relevant here follow on from the hypotheses tested for the Trade Sub-System: Hypotheses 1, 2, and 3 established that trade ceramics functioned as indicators of wealth and status in Pila burials. For the Social Sub-System, I have used the presence and frequency of trade ceramics in different groups of Pila burials to test for social stratification in terms of wealth, descent and social roles.

6.2 Hypotheses: Processual

6.2.5 Hypothesis 5: Status differentiation in Pila burials was based on wealth.

Hypothesis 5 differs from Hypothesis 1 in that the intent is to test for the presence of social differentiation in Pila, while Hypothesis 1 was designed to test the question of the value of the trade ceramics themselves. I argue that, having established the function of trade ceramics as indicators of wealth in these burials, these indicators of wealth can be used to search for evidence of status differences.

If status differentiation was based on wealth, there should be a wide range of burials in Pila with differential amounts of trade ceramics in Agra and Mendoza, and the trade ceramics

should be seen to be the chief source of variability between different sub-groups of burials (i.e., between the wealthy and poor groups, and between the wealthy groups in Agra and Mendoza). In comparison, the distribution of other grave goods in the same sub-groups should be equal or constant. The spatial distribution of wealthy and poor graves could reveal some clustering in one or both of the sites. And further, if status differentiation was based on wealth, burials in the wealthy groups might show differences in burial treatment from the poor groups, in terms of grave form, orientation, or depth.

6.2.6 Hypothesis 6: Status differentiation in Pila burials was based on descent.

If status differentiation in Pila burials was based on descent, then the distribution of burials in Agra and Mendoza may be found in spatially-defined clusters cross-cutting wealthy and poor categories in one or the other site.

6.2.7 Hypothesis 7: Status differentiation in Pila was based on social roles (sex, age, or division of labor).

If status differentiation in Pila was based on social roles then the groups of wealthy and poor burials in Agra and Mendoza would be characterized by the presence of role markers, such as male-female, youth-age, male economic function-female economic

function, etc. Hypothesis 7 is aimed at identifying the presence and extent of any visible social roles in Pila burials.

6.3 Analyses

6.3.5 Analyses related to Hypothesis 5: Status differentiation in Pila burials was based on wealth.

The histograms in Figs.5.5 and 5.6, show that a wide range of burials with differential amounts of trade ceramics does exist in both Agra and Mendoza. Fig.6.1, which compares wealthy and poor groups in Agra and Mendoza with respect to the frequency of ceramics, earthenwares and iron, shows that the differences already noted in Fig.5.2 (section 5.3.1.) lies in the wealthy groups alone, as the poor groups have very similar frequencies of all three variables. Refining the differences further, it can be seen that between the wealthy groups in Agra and Mendoza, the trade ceramics show the greatest variability: the wealthy burials in Mendoza have a mean of 10.06 ceramics per burial, while the wealthy burials in Agra have 7.35 ceramics per burial.

Another way of exploring this variability is illustrated in Fig.6.2. This is a schematic plot of the "box and whisker" type, based on the Exploratory Data Analysis techniques adapted by Erickson and Nosanchuk (1977:60). The box-and-whisker plot shows summary values in directly visual form, comparing the level (central tendency) and spread (dispersion) of four batches

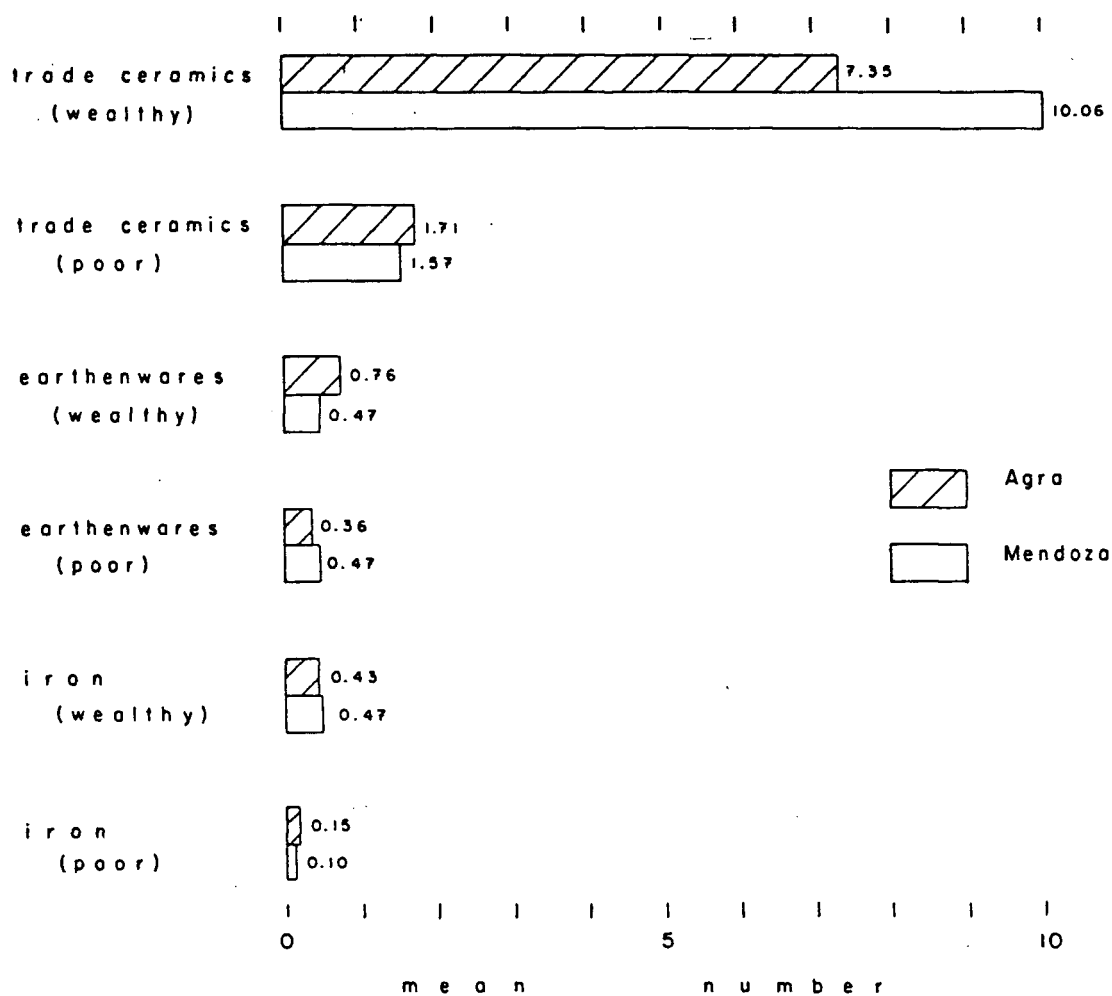


FIGURE 6.1: Wealthy and poor groups in Agra and Mendoza: Period II, with mean numbers of ceramics, earthenwares and iron per burial.

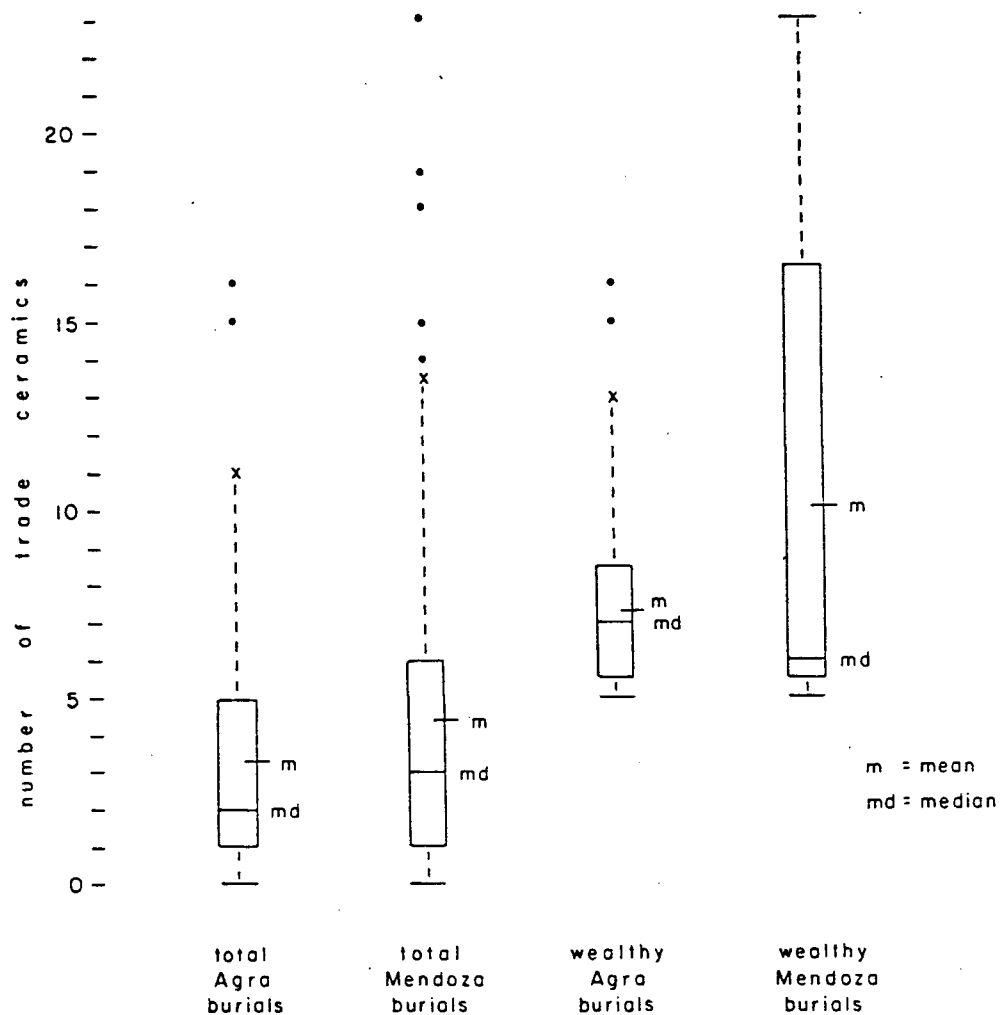


FIGURE 6.2: Boxplots of trade ceramic data from Agra and Mendoza: Period II. Comparing (1) total populations and (2) wealthy sub-groups.

of data: total burial population in Agra, total burial population in Mendoza, wealthy group of burials in Agra, and wealthy group of burials in Mendoza.

The boxes represent the midspread, the middle 50% of each population. The horizontal lines marked on the boxes represent the median (M_d) and the mean (M) in each case. The position of the median along the vertical axis presents an instant visual display of the upward or downward tendency of each batch of data. Looking at the total Agra and Mendoza burials, there is a similar pattern to the spread, showing a general upward tendency; the means and medians are higher in Mendoza, indicating greater wealth at this site. The dotted lines ending in X (the whiskers) represent a way of isolating those burials which lie well outside the main body of the data, in order to evaluate how many and how extreme they actually are. Erickson and Nosanchuk use a rule based on the work of John Tukey (the initial developer of exploratory data analysis) (Tukey 1977) - namely, the "step", which represents one and a half midspreads. The extreme values which lie outside the whisker are marked as dots. Thus one can see at a glance, that in the batches representing the total burial populations in Agra and Mendoza, Mendoza has a wider spread, higher level of values, and more extreme values in the upper range. This becomes even more significant when it is recalled that the number of burials in Mendoza is 45, while the number in Agra is 129. Clearly there is more wealth in Mendoza, and greater extremes of wealth.

The next two box-and-whisker plots in Fig.6.2 present a comparison between the wealthy group of burials in Agra and Mendoza. On the basis of the first two batches analyzed, the wealthy groups should show a greater degree of difference, and this is seen to be the case. There is smaller spread and a shorter whisker in the wealthy Agra batch, indicating lower values and a more even distribution within the group. In Mendoza, there is a much greater upward tendency (the median is right near the base of the box) and the spread is far greater, indicating that more burials have high values. Thus in the Mendoza wealthy group, the rich are richer and there are proportionately more of them. This situation is particularly interesting, because all the burials with elite badges of wealth are found in Agra, not Mendoza. Table A-6, Appendix A, which tabulates sample size, mean, standard deviation and coefficient of variation for trade ceramic frequencies in the wealthy and poor Agra and Mendoza groups, details the same picture in a different way. The wealthy group in Agra represents 28.7% of the Agra population, while the wealthy group in Mendoza represents 33.3% of the Mendoza population. As was already seen in the bar-chart in Fig.6.1 the mean numbers of pots per burial are very similar in the poor groups, and different in the wealthy groups, 7.35 in Agra and 10.06 in Mendoza. Table A-6, Appendix A, compares the amount of variance between these two sub-groups. A larger variance means that there is a larger difference between the total group mean and the sub-sample mean - i.e., the wealthy groups are different in nature from the

total groups, and this difference is greater in Mendoza. The poor groups, on the other hand, are closely similar.

Fig.6.1 shows that some variability also exists in the earthenwares category. Again, the poor groups have very similar frequencies, while the wealthy groups reveal a slightly higher mean number of earthenwares per burial in Agra (0.76) than in Mendoza (0.47). However, the overall frequencies are substantially smaller than those of trade ceramics. The frequencies of occurrence of the iron objects is very similar in all sub-groups.

The above analyses all support Hypothesis 5, that there was status differentiation based on wealth in the Pila burials. Was this wealth differentiation expressed spatially in Pila? And further, were there any differences in burial form (grave orientation, size, depth) between the wealthy and poor burials? The question of spatial distribution will be explored under Hypothesis 6. Regarding burial form, Tenazas states that poor organic preservation at the site makes it impossible to determine grave orientation with any accuracy, but where some indications exist (in the manner of dispersal of individual burial assemblages), no standard orientation appears to have been preferred in Pila (Tenazas 1968:16).

Regarding grave form, the general practice during this period appears to have been extended inhumation burials, with different assortments of trade ceramics and occasionally other objects, placed close to the body and wrapped in woven mats;

burials were directly in the ground, in fairly shallow graves. There seem to have been no differences in burial form between the wealthy and poor graves. There is ample archaeological evidence to indicate that this burial practice was general throughout the area in this period, and in some areas, up to the time of the Spanish conquest. In 1972, Robert Fox and Avelino Legaspi reported similar burial forms from Sta. Ana, Manila : inhumation burials containing brown wares, celadons, small saucers and eared jarlets, and "impressions of mats, netting and cloth also found in rust-cake of iron implements recovered from the graves". They estimated the burials to be of Southern Sung date (@ 13th. century) (Fox and Legaspi, 1972,n.d.:9). Hutterer's excavations in Cebu City, 1967, included some "early iron age" burials with the remains of iron daggers: "when the dagger was lifted, a tiny piece of cloth was found adhering to the handle. Quite probably, it was part of the shroud in which the body was wrapped when buried" (Hutterer 1973:19). In the same publication, Hutterer quotes other instances of cloth-and mat-imprints reported from excavations by H. Otley Beyer (1949) and others. The literary evidence of the 16th. century Boxer Codex also supports these interpretations of burial form: "they bury them in a hole two fathoms deep...two mats are placed on top" (Legeza 1978:11). None of the published accounts indicate any variation in burial form associated with degrees of wealth during this period.

While lack of preservation has made it impossible to estimate orientation or size of grave, the depths of the Pila burials were accurately reported during excavation. The excavation layer for Period II was 85 centimetres thick, and the burials ranged from 1.35 cm to 50 cm. deep within this layer. The mean overall depth of burial for Pila is 85.29 cm; the mean depth for wealthy and poor groups is: Agra, 94.2 cm (wealthy) and 86.8 cm (poor); Mendoza, 76.3 cm (wealthy) and 74.03 cm (poor). Wealthy burials do have a slightly greater depth than poor burials. However, an inspection of the individual depth measurements of all burials in Tables A-3 and A-4, Appendix A, reveals the considerable individual variability present among the total burial population. This individual variability seems to make the difference in sub-group means less significant.

6.3.6 Analyses related to Hypothesis 6: Status differentiation in Pila burials was based on descent.

Archaeologists have inferred descent from spatial groupings, therefore the maps of the excavation areas for Pila were searched for any signs of spatial patterns among the burials. The excavation diagrams for Agra and Mendoza (Figs. 6.3 and 6.4) were divided into quadrants of 60 excavation squares each. For the spatial distribution test, the wealthy burials in each quadrant were identified and the total numbers of wealthy burials in each quadrant were tallied. Visual inspection of Figs. 6.3 and 6.4, shows that in general, wealthy

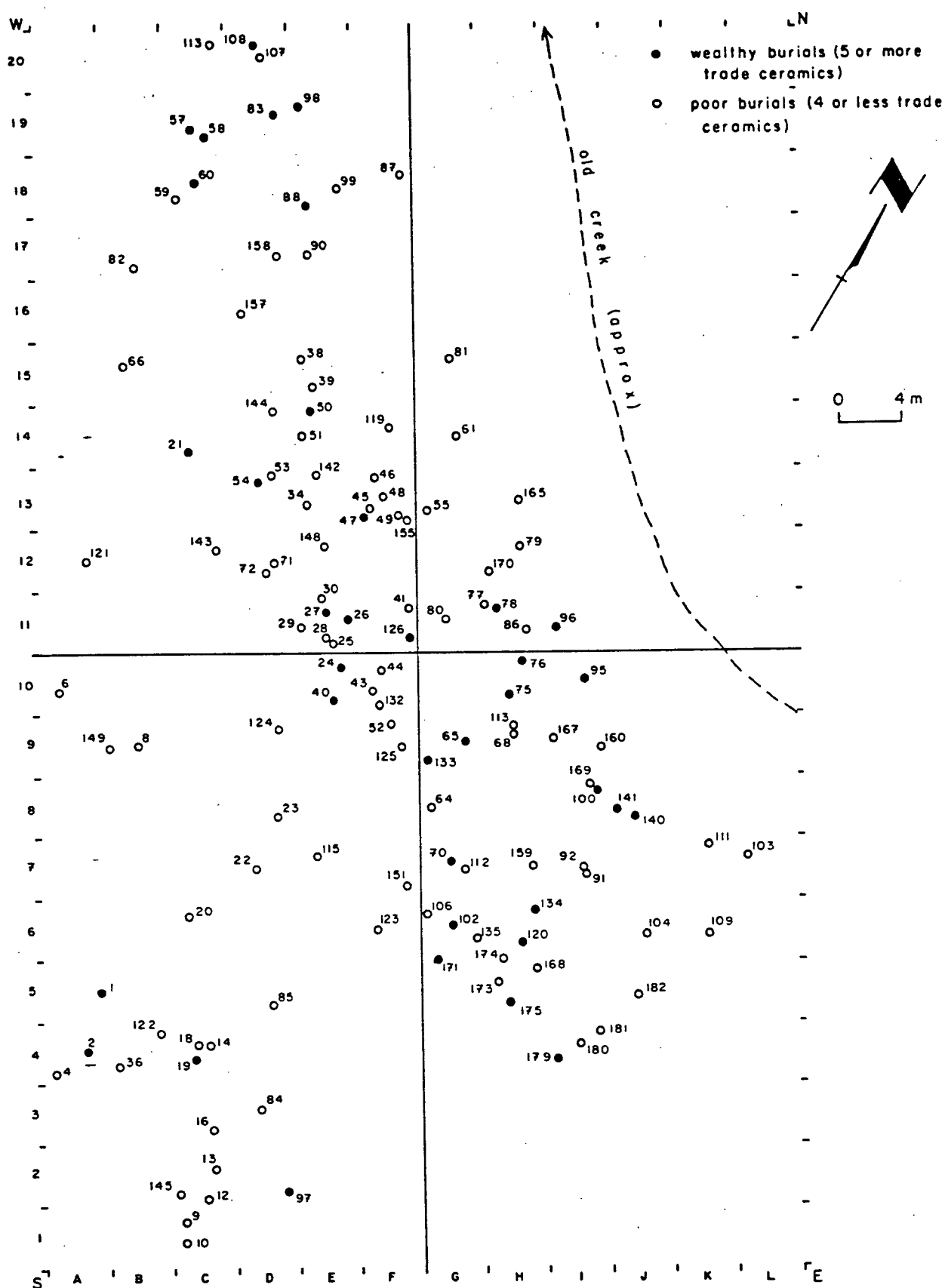


FIGURE 6.3: Map of excavation area, Site 1 (Agra): Period II
(after Tenazas 1968: Appendix IV)

and poor burials were intermingled in both sites. In Agra, no clear pattern of clustering throughout the site appears to exist, with the exception of a small, localized cluster of wealthy graves in the northern portion of the NW quadrant. This cluster of 6 wealthy burials included the only two graves in Pila in which gold objects were found: #83 and #98. The remainder of the burials Agra have a very general NW-SE distribution throughout the site, which is most likely due to the topography of the area: excavations revealed an old creek bed traversing the site (see Fig.6.3) and the bulk of the Agra burials are situated along the SW bank of the creek. Therefore the evidence from Agra does not support Hypothesis 6.

The excavation diagram for Mendoza reveals a more ambiguous picture (see Fig.6.4). The entire northern half of the burial site could be taken as one cluster, incorporating both wealthy and poor burials. Unlike Agra, the location of the creek bed does not suggest a topographical explanation for this distribution. However, lack of detailed information in the excavation report gives no indication whether the Mendoza burials are located on a localized rise of ground to account for the distribution seen on the map.

Numerically, 66.7% of the wealthy burials in Mendoza are in the NE quadrant, and 26.7% of the wealthy burials are adjacent in the NW quadrant.

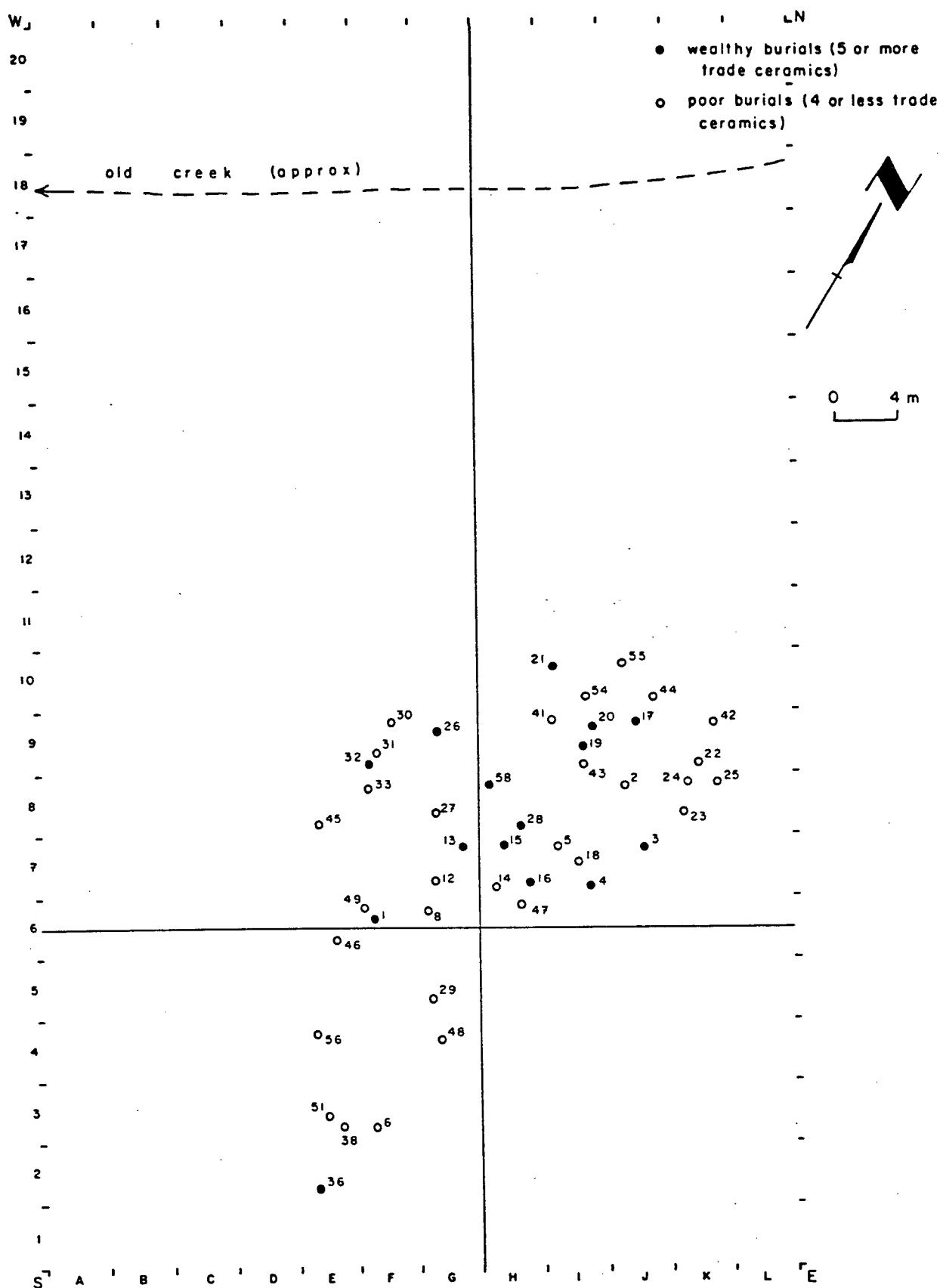


FIGURE 6.4: Map of excavation area, Site 2 (Mendoza): Period II
(after Tenazas 1968: Appendix VI)

The spatial distribution of the Pila burials therefore supports the evidence of the analyses related to Hypothesis 5: there is some kind of status differentiation based on wealth in the Pila burials, and this differentiation indicates some qualitative difference between the Agra and Mendoza burial sites. In Agra, the wealthy and poor burials seem very generally dispersed throughout the site, with the exception of the small group of wealthy burials in the southern portion. In Mendoza, the higher levels of wealth, and the rough spatial clustering of wealthy and poor burials, may indicate that the whole site represents some kind of elite cemetery during this period in Pila. Due to the comparative lack of spatial differentiation among the much larger group of burials in Agra (129), this evidence is not enough to indicate a stratified society in Pila as a whole. The wealthy burials in Mendoza may represent simply a wealthier kin-group cluster. It should be emphasized, however, that while there are qualitative differences between Agra and Mendoza, the similarities outweigh the differences. In her excavation report, Tenazas treats the site as one, and the many overall similarities, such as the context, stratigraphy, soil texture, burial form, and the type of grave goods found, indicate that the differences between the two areas are comparatively insignificant.

6.3.7 Analyses related to Hypothesis 7: Status differentiation in Pila was based on social roles (sex, age or division of labour).

Hypothesis 7 is evaluated by means of simple visual inspection of the frequency tables: Table A-3 and A-4, Appendix A. It should be noted that the burials in these tables are ranked on the basis of number of trade ceramics per burial ("ceramics" column).

Age: There are only two burials in Pila which might be categorized as child burials on the basis of the associated grave goods: burial #27 and burial #104 (both in Agra). Burial #27 contains only very small miniatures (ceramic containers and dishes, no other non-ceramic goods); burial #104 contains a collection of "pottery discs" (see Fig.6.5). "Clusters of grave goods which almost exclusively contained miniature objects or just one or two jarlets with associations of pottery disks....being interpreted as children's playthings are designated as children's graves" (Tenazas 1968: 16). Tables A-3a and A-3b, Appendix A, show that #27 belongs in the wealthy group, while #104 is in the poor group (with just one associated ceramic, a celadon jarlet). On the basis of these results, it must be concluded that there is not sufficient evidence that age was associated with status differentiation in Pila.

Sex: In the excavation report, Tenazas makes a tentative association between types of utilitarian goods and sex. "Generally, burials with associated iron implements are identified as male burials (at least 22 instances). Similarly, those with spindle whorls are believed to be female burials (at least 5 instances). Otherwise there was not much evidence by

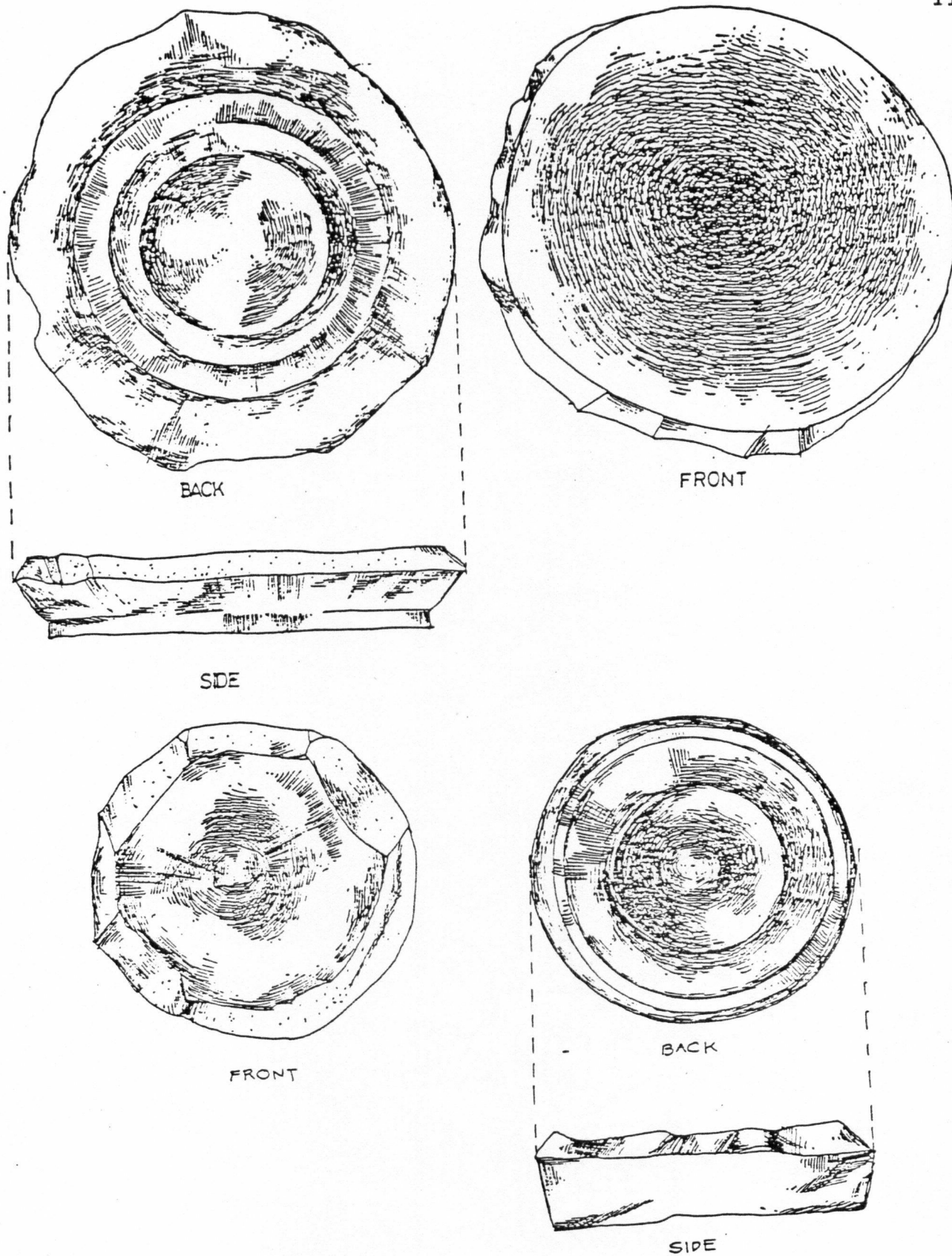


FIGURE 6.5: Ceramic discs from Pila: Periods II and III (actual size) (after Tenazas 1968: Fig.4B)

way of ornaments to distinguish the sex of the burial" (Tenazas 1968:16). However, a close inspection of Tables A-3b and A-4b, Appendix A, reveals a more ambiguous picture. Firstly, there appear to be only two burials in Period II with spindle whorls :#13 in Agra and #2 in Mendoza; #13 is associated with an iron blade, an earthenware kendi and a Te-hua ware covered box part; #2 is associated with a brown-glazed bottle, an earthenware pot, but no iron. On the basis of this evidence it can be concluded that spindle whorls were low-status items, but not that spindle whorls denote female burials and iron blades denote male burials.

Another category of utilitarian object which might be viewed as a sex-marker, is the net sinker. These net sinkers seem a safe bet to designate male burials - fishing is traditionally a male activity in SE Asia; in addition, several of the net sinkers at Pila are carved to represent phallic objects (see Fig.6.6). There are only two net sinkers in the Period II burials, both in the same grave in Agra, burial #87. They are associated with 1 gray-glazed ceramic bowl, but no iron or other goods. Again, this does not support the idea that the presence of iron denotes male burials. The net sinkers may be male markers, and if so, this single burial from the poor group indicates that sex was not specifically related to wealth and status.

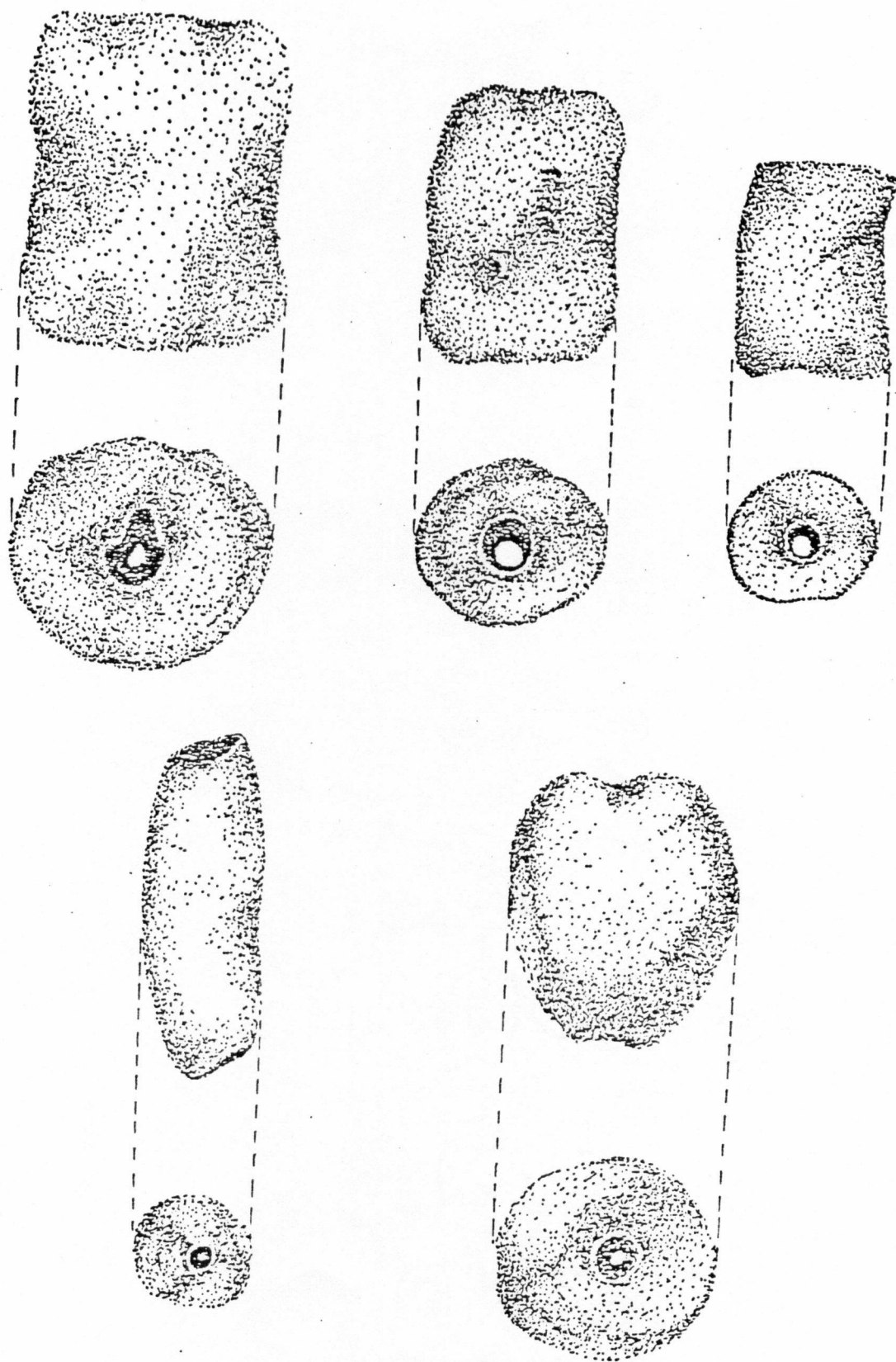


FIGURE 6.6: Net sinkers from Pila: Periods II and III
(actual size) (after Tenazas 1968: Fig.6).

Among the earthenwares at Pila, there are 6 earthenware stoves, and these were inspected for associations with other goods to test the notion that stoves might be considered to represent female utilitarian functions, and therefore might denote female burials. Of the six burials containing stoves (#28, #49, #60 and #175 in Agra and #17 and #19 in Mendoza), four are associated with iron blades or fragments, while two have no iron. On the other hand, of the 40 instances of iron blades or iron fragments found in the burials, the majority are also associated with earthenware cooking pots or kendis (which might be viewed as female markers). On the basis of this evidence, it is concluded that there was no status differentiation on the basis of sex at Pila. In addition, there is no evidence that iron blades can be assumed to denote male burials. In his Calatagan excavations in 1959, Robert Fox came to the same conclusion regarding sex markers in his 15th century site: "it was hoped that sex differences would be established from the associations of the grave furniture (e.g., a plate inverted over the pubic area found with a spindle whorl), but this has also been unsuccessful" (Fox 1959:353).

Division of Labor: The only indicators of utilitarian function at Pila, the spindle whorls and net sinkers, were all found in poor graves, indicating general low status. It was not possible to judge from the associated burial goods whether these objects were buried with males or females. The general lack of sex-specific artifacts in Pila, however, suggests that there was a corresponding lack of emphasis on the sexual division of

labor, a result which supports the ethnographic model in this respect.

6.4 Summary and Discussion

The analyses indicate that there was status differentiation based on wealth in Pila. the spatial distributions show some kind of wealthier corporate group in one of the two burial areas (Mendoza). However, there is no evidence of status differentiation in Pila based on social roles (age, sex or division of labour).

One other social feature which has been suggested as likely for this period is the possible presence of a residential group of Chinese merchants at Pila, such as was observed in the major centres by Spanish colonists in the 16th century. This claim is based on the presence, in the burial assemblages, of ceramic "water droppers". These water droppers, usually exotic and interesting shapes such as fruit or animal forms, are objects used in Chinese calligraphy. There are four water-droppers in the Pila burials, two in burial #175 and two in burial #98, both in Agra. Both are wealthy burials. #175 is also associated with five other trade ceramics (containers and dishes), an earthenware stove and an iron blade. #98 (see Fig.B-2, Appendix B) is also associated with six other trade ceramics, iron fragments, a bronze mirror, a bronze bowl, a lead bracelet, 9 Chinese coins, pieces of gold jewellery, fragments of three tiny glass bottles, three rounded pebbles, a covered box, beads, and a piece of worked stone.

#175 appears to be completely representative of all the wealthy Pila burials, in that it includes a typical assortment of ceramic containers and dishes, earthenware and iron. It is located at the northern end of the burial ground, in square H5 (see Fig.6.4). There is no reason to consider that this burial belongs to an outsider or foreigner.

However, burial #98 is an interesting case, with some atypical characteristics. Firstly, it is the wealthiest burial in Pila in terms of elite badges. Secondly, it contains no earthenwares, and the assemblage of ceramic wares includes only containers, but no dishes. Thirdly, it is located in a small cluster of wealthy burials (described above in section 6.3.6). These deviations from the average wealthy burials may indicate that it is the grave of a wealthy Chinese merchant rather than a wealthy local household head. However, the evidence is ambiguous. If this is the burial of a Chinese resident, it is one who adhered to the local beliefs and rituals sufficiently to merit being buried in accordance with the local ritual standards (with respect to grave form and the presence of ceramic containers). Also, why would a sophisticated Chinese merchant be buried with three pebbles? On the other hand, the ritual elements, grave form etc., may indicate only that the dead person's family wished to bury him or her in accordance with accepted local customs. Thus, while it was common practice in ethnographic times for colonies of Chinese merchants to be resident in Philippine trading centres, the data does not support this pattern for Pila.

In the symbolic realm, what can be inferred from the burial patterns is in keeping with the ideological paradigm defined in the Structural Model. the dead were not socially bounded in any rigid way. The individual was not subordinated to a social role. Death involved the individual in a one-to-one relationship with his personal ancestors and the correct ritual procedure was necessary to ensure his safe transition to the powerful spirit realm. There were wealth differences in Pila, expressed predominantly through the numbers of trade ceramics included as burial goods. However, these differences were not rigidly defined in clearly-marked wealth categories, but fall into a broadly-distributed continuum of wealth. Grave form was homogeneous for wealthy and poor, but the numerous small individual variations in the burial associations show that the choice of grave goods was the result of individual family decisions rather than some inflexible set of corporate "rules".

7. ANALYSIS: PERIOD II - RITUAL SUB-SYSTEM

7.1 Introduction

This sub-system relates to the function of trade ceramics in the ritual organization of Pila society, and the relationship between beliefs and the material objects used in ritual contexts. The main aspects relevant here are: the concept of trade ceramics as "inherently" ritual (symbolic) objects as well as wealth objects; their specific role in ritual action; and an evaluation of their inter-relationship with supernatural and social powers in Pila.

7.2 Hypotheses: Symbolic

7.2.8 Hypothesis 8: The nature of the trade ceramics (durable and resonant, impermeable and light-reflecting) made them an important means of expressing burial rituals in Pila.

This hypothesis was formulated to test the notion that trade ceramics, by virtue of their material attributes, acquired a unique value in Pila society, far beyond the functional and decorative; it was these material attributes that made them inherently suitable, perhaps even necessary, for use in ritual action. This concept occurs repeatedly in many ethnographic and historical accounts which recount the pre-eminent role accorded to every kind of trade ceramic ware in all ritual and ceremonial activity, and most particularly, in mortuary rituals.

In order to provide background for this hypothesis, I will present a selection of ethnographic evidence to illustrate my reasons for specifying the ceramic attributes named in the hypothesis. In the analysis section, I will evaluate the data from Pila burials insofar as relevant information is available; this will be supported by archaeological evidence from other, contemporaneous Philippine sites, ethnographic accounts from Spanish contact times, and ethnographic accounts of contemporary non-Christian groups in the Philippines which still practice ancestor worship. The ethnographic accounts will be briefly summarized in the text, and quoted in full in "Notes to the Text", Appendix C.

Legeza suggests that

"in view of the formative cultural role particularly in native ritual and burial, trade ceramics must be regarded the most important foreign product to have reached these islands in appreciable quantities between the 10th century A.D. and modern times. The arrival of the first trade ceramics from China in the late T'ang period, exported probably for the sake of their contents...marked the beginning of a new era...characterized by the extensive ritual and burial use of trade ceramics" (Legeza 1978:1).

John Guy proposed a similar view:

"there is...compelling evidence to look beyond a utility or functional explanation for the pervasive presence which trade ceramics assumed within many Southeast Asian societies. These objects clearly assumed a cultural role which transcends concerns of utility. As highly prized and valued possessions trade ceramics became an important measure of wealth

and status. They also entered the realm of ritual practice, touching on many aspects of social life" (Guy 1982:119).

Durability: Recorded accounts show that ancient Filipinos kept their Chinese pottery for such long periods that their place of origin was already forgotten by the time of the Spanish conquest. The Kelabits and Dayaks of Borneo also retained prized heirlooms, which were often given magical attributes, and greatly valued for their antiquity (Roxas-Lim 1966:231-232: Guy 1984:120) (See Note 3, Appendix C).

Resonance: The resonant ring believed to summon spirits and charge the object with spirit power made ceramics vital accessories to magic and ritual performances. Bowls and deep plates were used as percussion instruments, and while the medium was in a state of trance she continuously beat a frenetic rhythm with strings of shells or wooden drumsticks. All pottery used for these rituals acquired great importance (Roxas-Lim 1966:232). The Dayaks of Sarawak have elaborate tests against imitations:scratching the surface to examine texture, listening to the sound produced by tapping the jar, and researching the genealogy of the jar itself (Guy 1982:120) (Note 4,5 and 6, Appendix C).

Impermeable glaze: It was believed that Chinese porcelain had the property of destroying poison in the food, or indicating the presence of poison by some kind of discolouration of the food or of the ware (Janse 1944:37; Roxas-Lim 1966:229). During

rituals, performers chose the ceramic wares according to function (size and shape), the nature and colour of glazes, their porosity or imperviousness, and the relative softness or hardness of the body (Roxas-Lim 1966:234) (Note 7 and 8, Appendix C).

Light-reflecting glaze: "The equally strong belief in the spirit power of the light-reflecting quality of ceramic glazes...reinforces the magic role of ceramics in their cultures" (Legeza 1978:5).

7.3 Hypotheses: Processual

7.3.9 Hypothesis 9: The burial patterns of wealthy Pila graves indicate the general principles which governed the use of trade ceramics in the ritual activity of Pila society

Ethnography shows that ceramics were a constant ingredient of all ritual ceremonies in the Philippines during this period, and recorded accounts from Spanish contact times indicate that mortuary rituals were representative rather than anomalous in the life of the people. The ideological life revolved around a personalized relationship with ancestral and nature spirits, and, as has been shown as background to Hypothesis 8, above, the physical characteristics of trade ceramics caused them to be an integral part of all types of ritual functions: fertility and marriage ceremonies, mortuary rituals, magic and healing, harvest rituals, head-hunting ceremonies, blood pacts, and petitionary rituals of all kinds.

Many of these ritual practices still exist with contemporary groups in certain parts of the Philippines, such as the Tagbanuwa of Palawan, and the Sulod of central Panay. These groups practice ancestor worship, organized in terms of the basic social unit, the nuclear family. The rituals provide the individual and the family with an organized system for interacting with the spirits of the dead: a relationship not of fear, but of familiarity, intimacy and respect (Fox 1982:187,200). For the Tagbanuwa, one social and moral order encompasses the living, the dead, the deities and the total environment (ibid:252). Sulod life is also characterized by superordination of kinship and by primary concern with socio-religious activities (Jocano 1970:181). (Note 11, Appendix C).

The ritual life of Pila appears to have many aspects in common with the ethnographic accounts given above. The burial patterns in Pila have the same unified aspect as the ethnographic accounts and reveal a number of similar basic characteristics: rituals were centered around a personal relationship with supernatural powers, and involved individual action by the person or his nuclear family; ritual ceremonies always included the use of trade ceramics; and the ritual paraphernalia included certain general constants (a variety of ceramic/glaze/function types) as well as considerable individual variation in the specific items chosen from these glaze/function types.

The trade ceramics in the wealthy groups of burials at Pila occur in groups of specific glaze/function types suggestive of "ritual sets". The wealthiest burials have the largest (most complete?) sets, possibly even multiples of sets in the wealthiest burials. These "sets" show, first: a pattern of 6 general glaze groups and two main functional groups; and second, a constant diversity of specific individual wares within these glaze/function groups. It is hypothesized that the nature of the wealthy assemblages suggests the basic principles of the general ritual patterns of Pila society. This hypothesis will be evaluated in two ways: examination of the relationship between wealth and ritual status, and a search for the presence of ritual "sets" among the ware associations in the burials.

7.4 Analyses

7.4.8 Analyses related to Hypothesis 8: The nature of the trade ceramics (durable and resonant, impermeable and light-reflecting) made them an important means of expressing burial rituals in Pila.

Due to the ideological component of this hypothesis, its evaluation will involve evidence drawn from many areas: the burial data from Pila, supporting evidence from other excavations of near-contemporaneous Philippine sites, and ethnographic accounts from contact times and the contemporary period.

In order not to range too far off the burial data, the evidence given will focus on four main aspects of the burial wares which appear linked to the material attributes named in

the hypothesis (durability, resonance, impermeability and light-reflecting glaze): these aspects are - the diversity of burial ceramics; their pristine condition; their miniaturization; and their protective function. I suggest that all these aspects of the burial wares reflect their special status and inherent significance. Each aspect will be discussed in turn, and evidence as available presented in the following order : first, Pila burial data; second, other excavation data; third, ethnographic accounts from contact times; fourth, ethnographic accounts from the modern era.

Diversity: Tables A-1 and A-2, Appendix A, demonstrate that there is considerable individual variation among the trade ceramic categories found at Pila. There are five glaze categories of stonewares (lead-glazed, brown-glazed, ochre-glazed, gray-glazed, and celadons) and another major category of porcelains, or white-wares (Te-hua, Ch'ing-pai, Spotted Ch'ing-pai, Early Blue-and-White, and miscellaneous ceramics). These glaze categories include 56 sub-categories of ware/function types (such as jarlets, jars, bottles, vases, tumblers, teapots, boxes, bowls, dishes, etc.). It should be noted, also, that many of these sub-categories are themselves the final product of a preliminary lumping process (see footnote, Table A-1, Appendix A, for details).

I maintain that the wide variety of wares used in the mortuary rituals in Pila indicates that every type of trade ceramic was by its nature considered at least potentially

sacred.

Pristine condition: The excavation report does not specify the condition of the pila burial wares, although the photographs of the burial assemblages show the ceramics to be in seemingly pristine condition (see Fig.B-3, Appendix B, photo of burial #28, Mendoza). This indication is supported by archaeological evidence from a variety of near-contemporaneous burial sites in southern Luzon. In Sta. Ana, Manila, a double burial of a woman and child, dated around the 14th century, contained 79 pieces of porcelain and glazed stoneware (see Fig. B-4, Appendix B). Speaking of this and other burials in the region, John Guy states:

"It is significant that the bulk of the trade ceramics excavated in the region show little or no evidence of usage before burial. Whilst many have been damaged during burial or excavation, or, as appears to sometimes be the case, been ritualistically broken, few exhibit the signs of everyday use. This feature strongly suggests that a significant aspect of the demand for trade ceramics within Southeast Asia was to satisfy mortuary requirements" (Guy 1984:122).

Robert Fox, in his report of the excavations at the 15th century burial grounds at Calatagan, southern Luzon, states:

"In Calatagan, during the pre-Spanish period, it is clear that the trade potteries were used largely, if not wholly, for ritual and/or festival purposes, one of their primary functions being for grave furniture. The surfaces of the vessels show no evidence of daily, household use, and pieces with over-the-glaze enamel painting are unmarked, although the enamel is easily removed. Breakage was probably uncommon, as compared

with earthenwares" (Fox 1959:363).

Miniaturization: Table A-1, Appendix A, lists the frequencies of the various ceramic sub-categories at Pila: counting the small and medium-sized containers alone, 359 of the 627 trade ceramics in the Pila burials are small or miniature pieces. John Guy has made some pertinent comments on this aspect of the burial ceramics:

"A curious aspect of the early Chinese ceramic trade, particularly among those found in the Philippines, was the prevalence of miniature vessels and sculptural figurines. both these forms are scarce in China and appear to have been produced largely for an export market. An alternative explanation may be that they were objects of such everyday use that they have long perished within China, whereas those exported to the Philippines have survived as grave goods....A tradition of miniaturization seen amongst Chinese trade ceramics was continued by the Thai and Vietnamese potters. Many of the waterdroppers, spouted ewers and covered boxes excavated in the Philippines and elsewhere are consciously miniaturized replicas of larger, more functional vessels. It is as if they were being manufactured expressly as symbolic substitutes, a notion compatible with the practice of grave goods as provisions for the afterlife" (Guy 1984:122-123).

The earlier excavations conducted by Olov R. T. Janse in 1940 in Batangas, Luzon, of late 14th century and early 15th century burial grounds, revealed the same pattern of miniaturization. As in Pila, the trade ceramics formed the majority of the burial goods found: "The deposits consist mainly of Chinese ceramics, such as bowls, dishes, jarlets, a few jars"

(Janse 1944:40).

Pigafetta, who sailed with Magellan in his voyage around the world and witnessed with him the discovery of these islands, described many instances of the ritual use of porcelains. In one account of a funeral ceremony of a chief they witnessed at Cebu, he wrote:

"There are many porcelain jars containing fire about the room and myrrh, storax and bezoin, which make a strong odor through the house, are put on the fire. They keep the body in the house for five or six days during those ceremonies". (Pigafetta: in Alip 1964:76).

The practice of purifying the body of the dead, and the ritual paraphernalia as well, by the use of incense and aromatic oils and gums, usually placed in small jars and saucers around the room, has lasted until the present day in some areas (Fox 1982).

Protective function: One very important aspect of the ceramic wares was their function as protective objects, which seems to have derived from their impermeable, durable and light-reflecting glazes. In the burial rituals, this function is manifested in the distribution of ceramic wares in specific ways over the body of the deceased. Figs. B-5, B-6 and B-7, Appendix B, show Pila burials and burial assemblages in situ, with grave goods arranged in typical fashion: plates and bowls arranged upside-down, over or near the head, pelvic region, and feet; small jarlets and bottles around the head, hands and feet; and

larger earthenware pots and stoves alongside the body and somewhat removed from the clusters of ceramic wares; iron blades placed alongside the body.

Tenazas states that "there does not appear to be any regular pattern for the placement of grave furniture in relation to the body" (Tenazas 1968:19) but all illustrations of the wealthier burials do indicate the pattern described above. With the poor burials it is difficult to perceive any particular order due to lack of skeletal remains to provide a point of orientation, as well as to the practice of wrapping the dead, together with ceramic grave goods, in mats or shrouds. With the disintegration of the wrapping material, the enclosed ceramic pieces have shifted and tumbled.

An intrusive Ming period burial in Pila (see Fig.B-8, Appendix B), which is in a relatively good state of organic preservation due to the later time period involved (early 15th century) provides a good illustration of the pattern of placing different grave goods in relation to the body. Similarly Fig. B-4, Appendix B, the 15th century double burial from Sta. Ana, shows the same general arrangement of grave goods (somewhat confused in this burial due to the enormous number of ceramics present); a close inspection, however, reveals the same burial form for both woman and child - bowls and dishes inverted over the pelvic and neck areas, small jarlets massed around the head and body, and earthenwares at some distance alongside.

Olov Janse excavated similarly well-reserved burials in Calatagan, as did Robert Fox later. Fox describes the Calatagan burial pattern as follows:

"The distribution of local and trade potteries in the graves followed broad patterns. Thus Chinese plates were frequently inverted over the pubic area; saucers placed beneath the hands; and small Sawankhalok jarlets arranged behind the head. In general, vessels were found around and behind the head, near the waist, and at the feet, but there were exceptions. Generally, too, smaller potteries were more frequently placed closer to the remains than the earthenwares. It would appear that the trade potteries were wrapped with the remains whereas the local earthenwares were merely placed in the graves" (Fox 1959:355,357).

Janse describes his excavations at Calatagan as follows:

"The deposits consist mainly of Chinese ceramics, such as bowls, dishes, jarlets, a few jars...it is noteworthy that the ceramics are placed over and around the body, principally behind the head, at the feet and over the abdomen and the pubic region. As a rule the dishes and bowls discovered at the latter part were place upside down..." (Janse 1944-45:40) (see Fig.B-9, Appendix B).

- 7.4.9 Analyses related to Hypothesis 9: The burial patterns of wealthy Pila graves indicate the general principles which governed the use of trade ceramics in the ritual activity of Pila society.

Analyses related to Hypothesis 1 (section 5.3.1) have already established that wealth was expressed through differences in trade ceramics at Pila. In addition, four

burials in the wealth group also contained elite badges of wealth (gold jewellery, coins and rare, exotic items). The four burials with gold and/or coins are all in the very top group of wealthiest burials, and are associated with 16, 15, 10 and 8 trade ceramics each. The nature of these wealthy assemblages shows that correct ritual procedure was of critical importance to even the wealthiest individuals, while a simple show of wealth (elite items) was perhaps more indicative of a special achieved social status among a few of the wealthiest persons. Appeasing the spirit powers was of supreme importance - and the correct ritual performance carried more power if it included the greatest possible number of trade ceramics. Thus greater wealth meant greater opportunity for the most complete ritual. Acceptance of this point gives support to Hypothesis 9, that the essential ritual patterns of Pila can be seen most fully represented in the burials of wealthy people.

While there is no real way of proving through the archaeological evidence that mortuary rituals were representative of the overall ritual life of Pila, the ethnographic eye-witness accounts, ancient and modern, presented above in relation to Hypothesis 8, indicate clearly that this was the case. Therefore, the wealthiest burials at Pila will show the most complete examples of ritual patterns.

Grave goods associations among the wealthy groups of burials: The next question is, what can be seen in the associations of trade wares and other grave goods among the

wealthy burials to indicate the general principles of Pila ritual activity? Tables A-9 and A-10, Appendix A, show the wealthy burials in Agra and Mendoza with associated grave goods; the ceramic wares are in glaze categories: lead-glazed, brown-glazed, ochre-glazed, gray-glazed, celadons, and white wares (see Table A-7, Appendix A, for detailed listing). Tables A-11 and A-12, Appendix A, show the same wealthy burials in Agra and Mendoza with associated grave goods: here the ceramic wares are in three functional categories: containers, dishes (or open forms) and "other" (including water-droppers, incense burners and figurines) (see Table A-8, Appendix A, for full list and code symbols). These tables reveal that the associated ceramics in the wealthy graves fall into sets of six glaze types, and the lead-glazed is relatively minor; of the three functional types, the third category ("other") is minor. The chief associations are between the remaining glaze/function types listed above.

The ware associations can be seen to have a number of inter-relationships, but no rigid pattern of co-occurrences. In order to determine the extent of specific inter-relationships, Tables 7.1 and 7.2 were constructed from the data in Tables A-9, A-10, A-11 and A-12, Appendix A. The data in all these tables represent only the wealthy burials with 5 or more trade ceramics, from Agra and Mendoza.

Functional forms: containers and dishes: Of the 52 burials in the wealthy groups, all have at least one container (up to a maximum of 18); and all but 3 of the 52 burials have at least

TABLE 7.1: Wealthy groups of burials with sums, percentages and means of trade ceramic glaze categories and other goods.

Categories of Grave Goods	A G R A				M E N D O Z A			
	No. of Burials	% of Group	No. of Artifacts	Mean No. of Artifacts	No. of Burials	% of Group	No. of Artifacts	Mean No. of Artifacts
LEAD-GLAZED	7	18.1	9	0.2	4	26.7	4	0.3
BROWN-GLAZED	28	75.7	49	1.3	12	80.0	47	3.1
OCHRE-GLAZED	25	67.6	39	1.1	11	73.3	28	1.9
GRAY-GLAZED	26	70.3	52	1.4	9	60.0	16	1.1
CELADON	30	81.1	79	2.1	12	80.0	31	2.1
WHITE-WARES	21	56.8	44	1.2	10	66.6	25	1.7
EARTHENWARES	20	54.1	28	0.8	3	20.0	7	0.5
IRON	13	35.1	16	0.4	4	26.7	7	0.5
BRONZE	3	8.1	4	0.1	1	6.7	1	0.1
LEAD	2	5.4	3	0.1	-	-	-	-
UTILITARIAN	-	-	-	-	-	-	-	-
WEALTH	4	10.8	28	0.1	-	-	-	-

TABLE 7.2: Wealthy groups of burials with sums, percentages and means of form and function categories

Categories	A G R A (N = 37)				M E N D O Z A (N = 15)			
	No. of Burials	% of Group	No. of Artifacts	Mean No. of Artifacts	No. of Burials	% of Group	No. of Artifacts	Mean No. of Artifacts
<u>TRADE CERAMIC CONTAINERS:</u>								
LEAD	7	18.92	7	0.19	4	26.66	4	0.27
BROWN	27	72.97	46	1.24	12	80.00	46	3.07
OCHRE	21	56.76	34	0.92	9	60.00	20	1.33
GRAY	9	24.32	13	0.35	4	26.66	8	0.53
CELADON	22	59.46	47	1.27	9	60.00	17	1.13
WHITE	4	10.81	7	0.19	5	33.33	8	0.53
<u>TRADE CERAMIC OPEN FORMS:</u>								
BROWN	3	8.11	3	0.08	1	6.66	1	0.07
OCHRE	5	13.51	5	0.14	5	33.33	8	0.53
GRAY	21	56.76	37	1.00	7	46.66	8	0.53
CELADON	23	62.16	30	0.81	10	66.66	14	0.93
WHITE	18	48.65	30	0.81	10	66.66	16	1.07
<u>TRADE CERAMIC OTHER FORMS:</u>								
LEAD	1	2.70	2	0.05	-	-	-	-
GRAY	1	2.70	2	0.05	-	-	-	-
CELADON	2	5.41	2	0.05	-	-	-	-
WHITE	1	2.70	2	0.05	-	-	-	-
<u>OTHER GOODS:</u>								
EARTHENWARE	20	54.05	28	0.76	3	20.00	7	0.47
IRON	13	35.14	16	0.43	4	26.66	7	0.47
BRONZE	3	8.11	4	0.11	1	6.66	1	0.07
LEAD	2	5.41	3	0.08	-	-	-	-
UTILITARIAN	-	-	-	-	-	-	-	-
WEALTH	4	10.81	28	0.76	-	-	-	-

one dish (up to a maximum of 7). The wealthy burials generally have multiple sets of both containers and dishes in two, three or four of the glaze groupings (none of the burials have either containers or dishes in the full range of six possible glaze categories). Overall, there are more containers than dishes, and generally, but not always, there are more containers than dishes in each burial. Within each category of glaze/function types, there is a diversity of individual forms (see Table A-1, Appendix A) for itemised lists and frequencies. There are also some differences between Agra and Mendoza in the relative proportion of containers to dishes: in the ochre-glazed and white-ware categories, there are more dishes in Mendoza; and in the gray-glazed category, there are more dishes in Agra.

Glaze categories: Celadons: Celadons are the most favoured glaze type in both sites, found in 81.1% of the wealthy burials in Agra, and 80% of the wealthy burials in Mendoza, with a mean number of 2.1 celadons per burial. Celadon wares are the only glaze category to appear equally frequently as both containers and dishes (open forms). The other glaze categories are predominantly represented by containers or dishes, not both.

Brown wares: Brown wares are the next most favoured glaze type: they are found in 75.6% of the wealthy burials in Agra, and 80% of the wealthy burials in Mendoza. There are three times as many brown wares per burial in Mendoza. The brown wares are almost all containers.

Ochre wares: Ochre wares occur in more wealthy burials in Mendoza (73.3%) than in Agra (67.6%), and the mean number of these wares per burial in the wealthy groups is higher in Mendoza (1.9) than in Agra (1.1). There are at least twice as many containers as dishes among the ochre wares.

Gray wares: Gray wares show a slight inverse relationship with the ochre wares: they occur in more wealthy burials in Agra (70.3%) than in Mendoza (60%), but the mean numbers of items per burial in the wealthy group are similar (1.4 and 1.1 respectively). There are about twice as many dishes as containers among the gray wares.

White wares: White wares are found more often in the wealthy burials in Mendoza (66.6% of burials) than in Agra (56.8% of burials), and the mean number of items per burial in the wealthy groups are 1.7 and 1.2 respectively. There are at least twice as many containers as dishes among the white wares.

Earthenwares: There are more earthenwares in the wealthy burials in Agra (54% of burials) than in Mendoza (20% of burials), and the mean number of items per burial in the wealthy groups is higher in Agra (0.76% and 0.47 respectively). This contrasts with the figures for Agra and Mendoza as a whole. Statistics for earthenwares in the total population show that earthenwares occur in a constant ratio in both sites. The differences noted above occur only in the upper quartile of each site. Almost all earthenwares are containers (generally cooking pots or kendi). Multiple frequencies of earthenwares occur only

in the wealthiest burials in each site, and taper off throughout the total burial population towards the poorest end of the scale (see Tables 3b and 4b, 4.2.2). However, among the small group of burials that have no trade ceramics of any kind, a high proportion has earthenware containers (12 out of 17 in Agra and 5 out of 7 in Mendoza). This suggest that earthenwares were ritually unimportant, except when no trade ceramics were available - in which case they may have substituted for the role usually filled by the ceramic wares.

Iron: Iron objects are found in slightly more wealthy burials in Agra (35.1%) than in Mendoza (26.7%), but the mean numbers of objects per burial in the wealthy groups are similar (0.43 and 0.47 respectively). In Agra, occurrences of iron are fairly evenly scattered throughout the wealthy groups, but in Mendoza, iron is found only among the very wealthiest burials in the wealthy group. Every occurrence of iron in the wealthy burials is associated with celadon wares - usually with at least one container and a dish, and sometimes multiples of each.

Bronze and lead: Bronze and lead are found only in the wealthy groups in both Agra and Mendoza, with one marginal exception (burial #109 in Agra, with four trade ceramics).

Utilitarian: Utilitarian items (net sinkers and spindle whorls) are found in only three (poor) burials: #2 Mendoza, #13 Agra and #87 Agra.

Wealth: Elite badges of wealth are found only in the wealthiest burials in Agra, except for one marginal case, a blue glass bracelet which was found with two trade ceramics in Agra (#9).

Multiple associations: Table 7.3 lists the multiple associations of wares in the wealthy groups, in descending order from 6 glaze categories, through 5,4,3 and 2 (four sets of paired associations): and co-occurrences between iron and celadon. Only one burial in each of the wealthy groups contains each category of glazed wares, #50 Agra and #1 Mendoza. #50 has a wealth item in association (a quartz object) but no iron; #1 has two iron objects in association but no other non-ceramic goods.

Five burials in the wealthy groups contain at least one each of five glaze categories: brown, ochre, gray, celadon and white wares. Other items associated with each of these five burials are as follows: Agra - #60 (also has 4 earthenwares, 1 iron object), #65 (1 earthenware), #141 (1 earthenware); Mendoza - #21 (also has 2 iron objects), #3 (1 bronze item).

Fifteen burials in the wealthy groups contain at least one each of four glaze categories: brown, ochre, gray and celadon. Ten of these burials are in Agra and 5 are in Mendoza.

Eighteen burials in the wealthy groups contain at least one each of three glaze categories: brown, ochre and celadon: 13 are in Agra, 5 are in Mendoza.

TABLE 7.3: Multiple associations from wealthy groups.

No. and Percent of Burials with Different Ware
Associations, and Iron.

Associated Wares	AGRA (N = 37)		MENDOZA (N = 15)	
	No. of Burials	%	No. of Burials	%
Associated wares: 6 glaze groups (Lead, Brown, Ochre, Gray, Celadon, White)	1	2.7	1	6.6
5 glaze groups (Brown, Ochre, Gray, Celadon, White)	3	8.1	2	13.3
4 glaze groups (Brown, Ochre, Gray, Celadon)	10	27.0	5	33.3
3 glaze groups (Brown, Ochre, Celadon)	13	35.1	5	33.3
Brown and Celadon	23	62.2	9	60.0
Gray and Celadon	20	54.0	8	53.3
Ochre and Celadon	20	54.0	8	53.3
Celadon and White Wares	13	35.1	8	53.3
*Celadon and Iron	17	45.9	5	33.3

* N.B. Every occurrence of Iron in the wealthy burials is associated with celadon wares).

There are four sets of paired association. Brown with celadon wares: 32 burials (23 in Agra, 9 in Mendoza); Gray with celadon wares: 28 burials (20 in Agra, 8 in Mendoza); Ochre with celadon wares: 28 burials (20 in Agra, 8 in Mendoza); Celadon with white wares: 21 burials (13 in Agra, 8 in Mendoza); Celadon wares with iron: 22 burials (17 in Agra, 5 in Mendoza).

It is difficult to see a clear-cut pattern in all this, but it is possible that a comparison with similar tabulations from other contemporaneous sites might result in some meaningful insight. With respect to those associations from Pila, the percentages of burials calculated in Table 7.3 do indicate some general trends. It should be noted that celadons were included in all the associated groupings because this is the largest of the glaze categories, found in 81.1% of the wealthy group in Agra, and 80% of the wealthy group in Mendoza. Brown wares and celadons have the highest frequencies of association (62.2% of burials in Agra, 60% of burials in Mendoza). This association is followed by gray wares with celadons, and ochre wares with celadons, both these pairs have almost identical frequencies (54.0% in Agra, 53.3% in Mendoza).

7.5 Summary and Discussion

The results of the analyses support the symbolic hypothesis (hypothesis 8), that the nature of the trade ceramics made them inherently an important means of expressing rituals. The burial rituals in Pila can be considered representative of the ritual patterns in the society as a whole, on the basis of a range of

ethnographic evidence related to the Philippines in general. Wealth was seen to be associated with ritual observance, and on this basis, the burial assemblages of the wealthy groups in Agra and Mendoza were examined for patterns of co-occurrence among the trade ceramic wares and other goods (with the aim of determining some general principles of ritual activity in Pila as a whole).

With respect to the processual hypothesis, (hypothesis 9), some inter-relationships were observed among the burial goods. The nature of the burial associations suggests that with respect to the symbolically-important trade ceramics, ritual encompassed "sets" of containers and open forms, with containers being the more important; there was some indication of particular preferences in Agra and Mendoza of specific glaze/function combinations. The general pattern of ware associations seen among the wealthy groups of burials was confirmed within the poor group of burials, which generally have at least one trade ceramic container per burial (usually a jarlet), and, if possible, have a jarlet and a dish. The most favoured glaze group for wealthy and poor burials alike is celadons, which are found equally often as containers and dishes; of the other glaze categories, brown and ochre wares are predominantly containers, while gray and white wares are mainly dishes (or open forms). There are almost none of the distinctive Chinese blue and white wares, as these wares were developed during the later periods.

Brown wares were the next most favoured glaze group after celadons, and the statistics revealed an interesting variation in this group of wares between the two sites: there were about three times as many brown wares per burial in the wealthy groups in Mendoza than in Agra (this variation occurring specifically among the top half-dozen or so of the wealthiest burials). These results support the indication of some qualitative difference in status differentiation between the Agra and Mendoza burials already noted in the analyses in section 6.3.6. The higher levels of wealth in Mendoza, together with the presence of rough spatial clustering of wealthy and poor burials in one large section of the site, appeared to indicate some kind of corporate group containing individuals of differing wealth. Possible reasons for the differences in the frequency of brown wares in the two sites may indicate family preferences, or a small chronological difference which could have affected the supply.

Earthenwares occur fairly generally scattered throughout wealthy and poor burials, with usually one, sometimes two, vessels per burial. There is a higher frequency of earthenware among the wealthy group of burials in Agra than in Mendoza. The very poorest burials, with no ceramics at all, show a consistent occurrence of earthenwares, (usually a cooking pot or a kendi - i.e., containers again). This supports the inference of the greater ritual value of containers, and suggests that the earthenwares in the poorest burials were substituting for the ritually more powerful glazed stoneware containers.

Iron appears more frequently in the wealthy burials in both sites, but some occurrences of iron are also found scattered throughout the poorest burials. For instance, burial #18 (Mendoza) has one iron blade and two iron fragments, but no other grave goods. This burial may represent an individual of little wealth but with a special achieved status (such as warrior or hunter). The pattern of iron occurrences suggests that iron was generally independent of specifically wealth or male/female roles, and instead may have denoted some acquired social status in the deceased, or even a relative of the deceased. Utilitarian goods are few in Pila burials, and are found exclusively in the poorest burials, indicating low overall status. At the other end of the scale, gold and coins are found exclusively in the wealthiest burials, indicating elite social status.

Regarding the symbolic domain, I looked at the data and analyses for attitudes to death, and concluded that death in Pila represented a transition to higher status, and thus was viewed with care and respect as a primarily serious, ideological rather than social occasion. Social markers of any kind were extremely rare in the burials, and mostly ambiguous with respect to social roles of any kind. This is consistent with the general situation in egalitarian societies. The dead were equipped with symbolic objects of power (containers of spirit substances). Worldly appurtenances (cooking pots, iron blades for defense) were incidentals, not central to the main intent of the occasion, which was to ensure a safe transition to the world

of the spirits. Protection from hostile forces was primarily a ritual not a practical matter. The dead were not physically encased in protective structures - the ceramics, objects of ritual power, wrapped close to the body in simple matting shrouds, were sufficient to create a protective area around the dead person. This clearly reflects the lack of boundedness stated in the ideological paradigm - adherence to some general principles of ritual purity was enough to ensure safety: the specifics of the individual ritual objects used were left to personal choice or availability. In this society, the individual was important on his own account, and individual, one-to-one action by the person or his immediate family was the basis of both social and ritual life.

8. ANALYSES: PERIOD III

8.1 Introduction

The context of the Period III burials indicates that considerable culture change took place between Period II and Period III. The site changed from being solely a burial ground, to a habitation area with cremation jar burials interred under, or in the vicinity of, family dwellings. The change in soil characteristics was marked, the Period II layer being characterized by medium-grained, reddish brown, sandy clay, while Period III was soft black loam (see Fig.1.4), indicating a habitation layer. There was a lack of any cultural material in the Period II layer (other than the inhumation burials), while the Period III layer was characterized by considerable numbers of pottery sherds, net sinkers, spindle whorls, pottery discs, pieces of iron slag, animal remains (horse, pig, cow) and cultural features such as post molds and pits. A radiocarbon date of 1375 ± 25 B.P (Tenazas 1968:15; lab number not supplied by excavator) was recovered from cremation burial #74. The ceramic vessels from Period III have been attributed to late Sung/Yuan on the basis of ceramic types. Identification of the ceramic types was patterned after the classification system devised by C. and L. Locsin for their excavation material from a contemporaneous Sung/Yuan site in the district of Sta. Ana, Manila (Locsin and Locsin, 1967). The post molds were not recovered during the early phase of the excavations in Pila, so it was not possible to determine patterns of house-forms for

Period III. In addition, there was some doubt whether the post molds represented house-posts or some type of fence-posts. However, the soil consistency together with the cultural materials found in the layer is sufficient to support the theory that the excavation sites in Pila were habitation areas in Period III.

Based on the nature of the ceramics found in the Period III layer, Tenazas states that culture change occurred within the original cultural group which occupied Pila during Period II, and does not represent the arrival in the area of a new cultural group. She states that ceramics which were typical of Period II persisted into Period III, with certain changes. In particular, she noted that many of the miniaturized ceramic forms so common in Period II (jarlets, teapots, small dishes, etc.), persisted into Period III - but usually as larger counterparts, such as the celadon ribbed kuan (squat, covered jar) and the bigger ovaloid ochre-glazed jars with four ears; these were used in Period III as cremation vessels.

According to Tenazas, many ceramic forms which were rare in Period II appear in abundance in Period III, and new forms are found for the first time (such as the large brown stoneware jars). The widely-distributed celadon jarlets and small brown-glazed containers so common in Period II almost disappear in the later period; but some ceramic wares - such as the celadon 2-fish dishes and the gray-glazed saucers and bowls - continue to appear in quantity in Period III.

The hypothesis of cultural continuity between the two periods is supported by the persistence of local earthenwares, which seem to show no change in technique or decoration (running diagonal lines produced by some hard, smooth-surfaced tool). New forms of earthenware containers are also found - in particular tall, ovaloid earthenware jars with shallow footrims (Tenazas 1968:16-17).

Period III involved major changes in the burial form - from inhumation burials with large numbers of associated trade ceramics and other grave goods, to ceramic jar- and pit-burials (which may represent secondary cremations). A crematory complex was excavated in Site 1 (Agra) in the Period III layer (see Fig.B-12).

8.2 Hypotheses: Processual

8.2.10 Hypothesis 10: The spatial distribution of the cremation jar burials indicates the presence of two major affiliative groups in the Pila society in Period III.

This hypothesis was formulated on the basis of the spatial distribution of cremation burials (including jar and pit burials) in Agra, and on the assumption that the two major stylistic groupings of burial jars found represent contemporaneous sub-groups of the same population, rather than successive occupations by separate cultural groups.

Assuming, further, that the cremation jar burials were interred under housefloors (as was the custom in some parts of the Philippines even to modern times: e.g. among the Sulod of

central Panay Island) (Jocano 1970:187), the residential pattern followed the same linear topographical layout seen previously in Period II burials - namely, following the bank of the old creek, along its south-east side. The jar burials fall into two main groupings: ochre-glazed vessels and brown-gray vessels, with a few occurrences of celadons, gray-glazed and earthenware jars (see Table A-16, Appendix A for detailed listing of burials by glaze type, and Table A-13, original data tabulation from the excavation report). The ochre-glazed jars are clustered in the NW portion of the site, while the brown/olive vessels are found principally in the southern and eastern portions of the site.

8.3 Analyses related to Hypothesis 10: The spatial distribution of the cremation jar burials indicates the presence of two major affiliative groups in Period III

Of the 55 burials in Period III, 50 are in Agra and 5 are in Mendoza. In Agra, of the 50 burials in the site, 5 are inhumation burials and 45 are cremation burials in jars and pits; there are 34 jar burials and 11 pit burials. In Mendoza, there are 4 burials in one pit burial.

Agra burials:

The five inhumation burials (see Table A-15, Appendix A) appear to have an identical burial pattern to that found in Period II - again, there is no skeletal preservation. The associated ceramics range in number from one to 18 and include mainly containers, with some open forms. Celadons are the most frequent glaze category and include both containers and dishes,

as in Period II. One burial has fragments of an iron blade, and one (the wealthiest burial) also contains an earthenware stove and cooking pot.

The eleven pit burials (cremations placed directly in a pit in the ground) follow a certain pattern: there are sometimes traces of red ochre in the bottom of the pit; when there are associated grave goods in the pit, they are generally placed over the top of the pit. Two of the pits have associated goods: burial #73 has a small Ch'ing-pai cover placed on top of the pit; burial #62 has a small celadon jarlet at the bottom of the pit, and a Ch'ing-pai "pilgrim's flask" on top of the pit.

The cremation jar burials usually involve a medium- or large-sized ceramic vessel which contains the cremated remains, and is frequently covered with a small ceramic dish, saucer or bowl. In one instance there were four small ceramic wares buried next to the cremation jar, as associated grave goods (burial #74, see Fig.B-10, Appendix B, photo). The 34 jar burials fall into two main groupings: 10 burials in ochre-glazed, spherical or wide-mouthed jars with 4 ears (mostly found intact, though occasionally chipped, cracked or partly broken as if from some disturbance of the ground); and 19 burials in large brown or olive-glazed stoneware jars (mostly totally smashed, with the appearance of having been ritually smashed upon burial - see Fig.B-11, Appendix B, photo).

The ochre vessels are mostly covered with a dish or shallow bowl, usually white ware or ochre-glazed. The one jar burial with associated grave goods was an ochre vessel, and the associated goods included 2 ochre bowls, 1 ochre jarlet, and a fluted celadon dish. The brown or olive-green stoneware jars are sometimes covered by, or contain, a gray-glazed dish, and in one instance, a fluted celadon dish. One of the olive jars has a small Te-hua bowl inside the smashed cremation jar.

Stylistically, then, the pattern of the cremation jar burials seems to indicate a rough grouping into two types of associations: ochre-glazed jars covered with white ware dishes, and buried intact; and brown or olive-glazed larger stoneware jars, covered (or containing) a gray-glazed dish, and ritually smashed before burial. There is an interesting comment in the report given at the Manila Trade Pottery Seminar in 1976:

"It is necessary to say something about the olive or brownish olive glazes found in many stoneware types, including jars... As there are many brown pots with this type of glaze which have fired olive on one side (or vice versa) it seems that at least in these cases there is no real difference between the olive and the brown, and that the color was dictated by firing or cooling conditions" (Grau- Abaya 1976:32).

Simple visual inspection of Fig.8.1, the map of Period III cremation burials, reveals a rough spatial distribution of these two main groupings: the ochre-glazed jars are found only in the north and west portions of the site; the brown and olive-glazed jars are found predominantly in the south and eastern portions

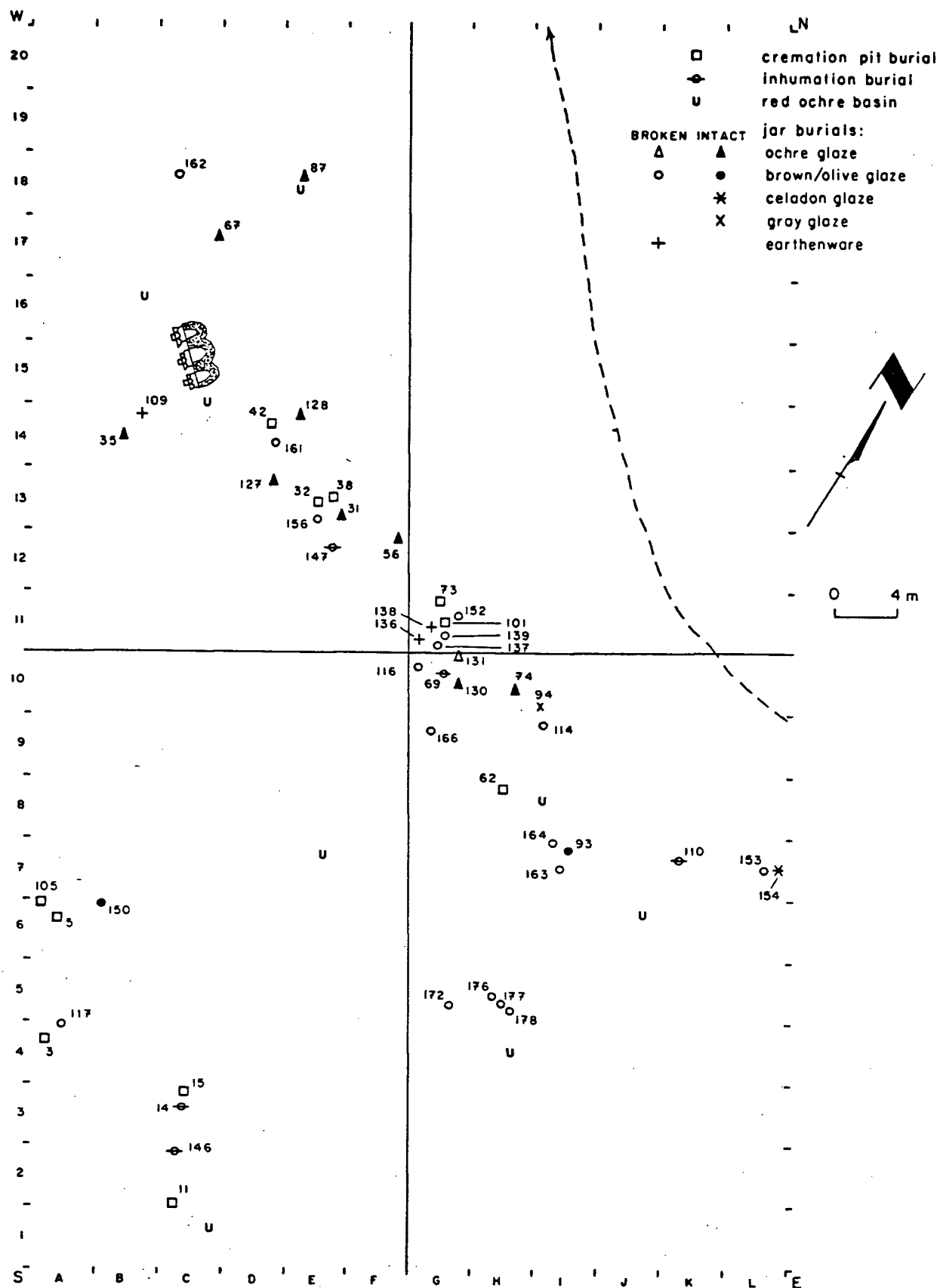


FIGURE 8.1: Map of cremation burials, Site 1 (Agra): Period III
(after Tenazas 1968:Appendix V)

of the site, though a few are scattered among the ochre jar burials in several tight, mixed clusters. The pit burials are scattered evenly throughout the site, while the few jar burials with other types of glazes (celadon, gray-glazed and earthenware jars) similarly show no specific distribution pattern.

Mendoza burials:

The five cremation burials in Mendoza include one pit burial and four cremation jar burials. Of the jar burials, two are ochre-glazed spherical jars with four ears (one smashed, one broken), and two are big, brown, stoneware jars (both smashed). None of the burials in Mendoza have any associated wares, either as covers or placed inside the jars or pit. The main features of these burials follow the same pattern as the one present in Agra.

The ochre and brown jar burial groups: contemporaneous or successive occupations?

Hypothesis 10 is based on the assumption that the two stylistic groupings of ceramic jar burials in Period III represent contemporaneous burials from the same population. Since the ceramic wares used are not "imperial quality" (see photo, Fig.B-13, Appendix B) they are unmarked as to date, dynasty or place of manufacture, and cannot be placed into a specific chronological category. Glazed stonewares such as these are far less distinctive in character than the Chinese porcelain wares, which can be categorised in terms of body,

shape, glaze, colour and type of decoration. Glazed stonewares of the kind found in the Period III cremation burials can be evaluated mainly in terms of body texture, form, technical treatment, colour and shape. Much of the evidence for the assumption of contemporaneity is thus necessarily circumstantial rather than direct. I will first bring forward evidence regarding stylistic characteristics, from the literature dealing with Chinese trade ceramics in the Philippines. Then I will discuss some specific details regarding style and association of the wares found in the Period III layer in Pila, following up with stratigraphic evidence which indicates that the cremation jar burial phase was a single, short-lived occupation.

Evidence from trade ceramics literature:

The evidence from the literature suggests that similarity of dating can be inferred from repeated patterns of associations between different kinds of wares found in a number of pre-Ming burial sites in the southern Philippines (such as Calatagan and Santa Ana in south-west Luzon, as well as a number of sites south of Laguna de Bay such as Gatid) (C. and L. Locsin, 1967). In addition, the repetition of certain forms and shapes among different types of wares suggests chronological similarity and even identical place of manufacture. It should be noted that the term "pre-Ming", frequently used by trade ceramic specialists, with respect to Southeast Asian sites, is a useful, general term to denote sites with a preponderance of Sung and/or Yuan dynasty ceramics, which cannot be more specifically dated

by direct means. The Ming dynasty (A.D. 1368 - 1644) is characterised by the overwhelming preponderance of blue-and-white wares and the relative decrease of many types of the monochrome wares developed during the Sung (A.D. 960 - 1279) and Yuan (A.D. 1260 - 1368) periods.

In a paper presented at the Manila Trade Pottery Seminar held in 1976, Consuelo Grau-Abaya detailed the characteristics of the wide range of brown wares unearthed in Philippine pre-Ming sites.

"The brown wares have many relatives among the other wares... the main point of similarity is shape, although the paste and glaze characteristics are sometimes involved as well.... The greatest number of duplications of the brown forms appears to be found among the olive and ochre wares" (Grau-Abaya 1976:31,32).

Fig.B-14, Appendix B, shows the diagrammatic representation of three typical forms of large brown wares. A comparison of these forms with the collection of Period III cremation vessels in Fig.B-13, Appendix B, reveals obvious similarities of shape. It should be noted that the highly-glazed, spouted ewer illustrated among these wares is a celadon vessel, one of only two celadon vessels found among the jar-burial group in Pila.

In their comprehensive survey of Chinese ceramics found in the Philippines, Leandro and Cecilia Locsin include an account of associations noted among a large group of brown wares recovered from the Santa Ana excavations in Manila, a pre-Ming

burial site (512 brown wares from 111 graves):

"These wares are certainly not typical of brown-glazed wares encountered in Philippine Ming-period burial sites. The positive identification of other 'questionable' wares such as the ochre-glazed wares, to which they are obviously related, and the gray-glazed wares with which they are often found, will no doubt help place these wares in the proper classification" (Locsin and Locsin 1968:56).

The ochre wares, on the other hand, were discussed in the same publication as follows:

"The closest relationship exists between ochre-glazed and brown-glazed wares. Spherical jarlets are common to both, and the combination of a beveled base rim and flat base occurs repeatedly in jars and pouring vessels of both types. The repetition of certain forms among different types of wares suggests the possibility of the same approximate date of manufacture as well as a common area of origin" (Locsin and Locsin 1968:62).

Regarding the general range of trade ceramics found in the Period III burials:

"Two pieces of pottery can be assigned with good reason to the Yuan dynasty in the Locsin-University of San Carlos excavations in the P/Agra site: (1) a foliated cover with cream-colored slip, brown painting under a clear glaze (burial #128) because of positive affinity to the large British Museum vase (of more elaborate decoration) which Brankston has attributed to Chi chou and dated 14th century, and (2) a large kuan-shaped, ribbed celadon jar (burial #154). The Chi chou foliate cover and the large celadon kuan-shaped ribbed jar were found as cremation vessels within the cremation burial complex in the black layer (the upper cultural level). The two pieces of pottery

are therefore appropriately associated with Yuan period burials in the level attributed by Mrs. Tenazas, to a time range corresponding roughly to the late Sung/Yuan periods" (Locsin and Locsin, 1968:8).

See this paper also, for a full discussion of the problems involved in the dating of trade ceramics in general (ibid:1-5).

Associated wares among Period III burials: The two main groups of burial jars, the ochre-glazed and the brown-glazed, have several occurrences of overlap of the type of wares associated with each group. In the main, the ochre-glazed vessels are found with white-ware dishes or bowls as covers or grave goods; the brown-glazed mostly have no associated wares, but five out of the 19 brown jars do have a ceramic dish or bowl in association, either as cover or as a grave good placed inside the jar. Three of these are gray-glazed dishes (#116, #137, #139). Burial #114 is a big, greenish-olive jar (smashed), with a Te-hua bowl inside (see Tables A-13 and A-16, Appendix A); this is a clear link with the ochre-jar burials #89 and #130, which have white Te-hua bowls as covers. It is also a link with Period II, since Te-hua wares are a common item in that layer. In another association, ochre-jar burial #74 was found with four associated grave goods: 2 ochre bowls, 1 ochre jarlet, and 1 fluted celadon dish; this is a link with the olive-brown-jar burial #152, which was found with a fluted celadon dish as cover.

Spatial association and depth of burial: Table A-16, Appendix A, and Fig.8.1 show that several small localized clusters of jar burials have ochre and brown jars in close spatial association, and at very similar depths of burial. For example: ochre jar-burial #31 (29 cm) and brown jar burial #156 (30 cm); in the centre of the site is a tight cluster of jar burials at very similar depths: ochre #131 (40 cm), brown #137 (34 cm), brown #139 (37 cm); olive-green #152 (48 cm). Close nearby this central cluster is another association of jars: ochre #74 (47 cm), gray #94 (40 cm), olive-brown #114 (38 cm).

Table A-16, Appendix A, confirms the similarities in depth of burial between the ochre and brown groups: mean depth of the ochre jar burials is 35.9 cm, while the mean depth of the brown jar group is 35.6 cm. The celadon jar burials have a mean depth of 36.5. The earthenware jar burials have a mean depth of 40.0 cm. The five inhumation burials in the Period III layer are also at a similar range of depths, with a mean of 39.4. It is interesting to note that the 11 pit burials in Agra Period III are found at a deeper overall level than the other burials, with a mean depth of 58.9. This could be taken to imply that the pit burials were the forerunners of the cremation burial phase in Pila; as the practice of cremation became more entrenched, the ritual may have developed into the use of ceramic vessels for burial.

Comparison of Agra and Mendoza Period III burials: Table 8.1 shows that the pit and jar burials in Mendoza occur at a generally shallower level than in Agra. It will be recalled that the same pattern occurs in Period II, where the mean depth of burials in Agra is 89 cm., while the mean depth of burials in Mendoza is 74.8 cm. I suggest that these differences are related to topography. The burial site at Mendoza is situated marginally closer to the southern shore of Laguna de Bay (see Fig.1.2) and the surface erosion of the land during the subsequent flooding of the area (postulated by Tenazas at the close of Period III) may have been greater than in Agra (Tenazas 1968:16). See following section for more detailed discussion of stratigraphy.

Stratigraphy: Tenazas states that the site stratigraphy shows that the Period III layer represents a single archaeological level characterized by a distinct and homogeneous soil layer (with respect to soil texture, colour, organic content, and type of cultural materials present throughout) (ibid: 15,16,17). She has characterised the ceramic vessels found in this layer on stylistic grounds as one group: "for this level, an original attribution of late or upper Sung/Yuan period is estimated on the basis of ceramic types" (ibid: 15). The shallowness of the Period III layer (45 cm. thick) and the small number of burials represented in the jar burial group (34 in Agra and 4 in Mendoza) suggests a short period of occupation of the site at this time. In conjunction with the evidence presented above, and the short period of occupation postulated

TABLE 8.1: Table of mean depths (in centimetres) of burials in Period III. (This layer is 15 - 20 cm. from surface and @ 45 cm. thick).
[See Appendix, Table 16 for full table of depth of burials in Period III].

Burials	No. Burials	Mean Depth
AGRA		
Inhumations	5	39.4
Ochre jar	10	35.9
Olive/brown jar	19	35.6
Other glazes	2	36.5
Earthenwares	3	40.0
Pit burials	11	58.9
MENDOZA		
Ochre jar	2	14.0
Olive/brown jar	2	25.5
Pit burials	1	34.0

by Tenazas, it is logical to infer a single occupation of the site. It may be pertinent to note that in spite of the relatively small number of burials found in the Period III layer, both Agra and Mendoza have the same mix of burial patterns and ceramic styles. Another suggestive aspect of the situation at Pila is the fact that the Period III secondary cremation jar burial complex appears to have been a relatively isolated phenomenon in this period of Philippine pre-history.

"The particular practice of secondary cremation, especially in jars, has a limited distribution... (there is) no example of a secondary cremation practice among existing primitive groups in the Philippines... the closest parallel is drawn among a tribe in Borneo called the Sihougho" (Tenazas 1968:18).

Archaeological evidence supports this statement, as there are no occurrences of a cremation jar-burial phase intervening between Sung/Yuan period burials and early Ming burials in such Philippine sites as Calatagan (Janse 1944; Fox 1959), Santa Ana (Locsin and Locsin 1967) and Cebu City (Hutterer 1973).

Regarding the matter of climatic change, Tenazas suggests:

"Considering the shallow location of the cremation burials, sometimes only about 15 cm. from the surface it is believed that some kind of climatic change causing rapid erosion (perhaps flooding) took place, rendering the area unfit for habitation after a relatively short period of time" (Tenazas 1968:16).

Confirmation of this suggestion occurs in the Locsin paper: "

Climatic change involving changing levels of the water table and water levels in Laguna de Bay is believed to have been a recurring situation in this part of Luzon" (Locsin and Locsin, 1968:6-7).

8.4 Summary and Discussion

The appearance of two major groupings of burials, both in burial form (nature and condition of vessels used) and in spatial distribution, suggests that a certain polarization of the residential population in Pila was taking place at this time. This is clearly a culture change from the earlier, individual burial patterns in Period II, which showed no such division. On this basis, Hypothesis 10 appears to be supported, and it is concluded that the residential nuclear family kin-groups of Period II had coalesced into two distinct affiliative groups. Lineages have been inferred by other archaeologists, such as Pearson (1981), on the basis of similar data. In the Pila context, however, the two groups may represent residential groups of kindred, rather than descent groups.

The brown and olive-jar burials are more numerous, and, from the evidence of the ritually-smashed jars, possibly more ritually powerful. They also represent a new stylistic form, not a development from Period II styles. The ochre-jar group may perhaps be the wealthier group - these burials are more segregated spatially within the site (indicating a more powerful corporate image) and also the only jar burial with associated grave goods belongs to the ochre group. Another point to be

noted, which may or may not be significant, is the fact that the ochre-jar burials are clustered in the vicinity of the crematory complex, which is in the north-west quadrant of the site (see Fig.8.1). The crematorium is a sturdy structure which clearly represents a substantial corporate energy involvement and must have been the focus of important ritual activity.

Looking at the evidence of the Period III burials in terms of the three sub-systems which were the focus of the Period II analyses, some very generalized inferences can be made regarding possible details of culture change in Period III.

With respect to the Trade Sub-System, Period III does not show evidence of much culture change. Since the jar burials are overwhelmingly in trade ceramic vessels rather than local earthenwares, the great value ascribed to the imported wares in Period II clearly remained the same in Period III. Some culture change was seen in the introduction of the brown-olive-glazed cremation jars. Status was still associated with trade ceramics (particularly in view of the sole jar burial with grave goods, which were all trade ceramic wares). Equally clearly, the trade ceramics were still closely associated with ritual value. The small number of earthenware jars utilized in these burials indicates that local earthenwares had not risen in value or status. Stylistically, too, the earthenwares show clear similarities to the earthenware vessels in Period II.

The large proportion of ceramic jar burials in comparison with pit burials suggests that trade with China was still steady and voluminous, and that the local population could count on obtaining the imported wares they wanted in sufficient quantities. However, the polarization of glaze/form types as preferred vessels for the burials suggests that the pattern of person-to-person trade determined for Period II may have changed in favour of some more centralized administration and control. The ordering of the ceramic wares preferred for burials may have been taken over by some particular person or group.

Regarding the Social Sub-System, considerable culture change may be inferred from the evidence. In Period II, status differentiation in Pila was based on differences in wealth, and burial patterns appeared homogeneous for wealthy and poor alike (in terms of grave form and burial treatment). In Period III the burials indicate the presence of definite social groupings and some corporate control over ritual patterns (as expressed in grave form and burial treatment). Elite badges of wealth (such as gold, coins, jewellery) are no longer included in the burials. This suggests that ritual status is becoming more closely allied to membership in a social group rather than to individual achievement. Hodder (1982) maintains that stylistic differences may denote conflict and tension between groups. This would be in keeping with an increase in social differentiation along kin-group lines.

In the Ritual Sub-System, there is evidence of both continuity and change in the Period III burials. Trade ceramics continue to have inherent ritual value - the jar burials include not only the two main glaze groupings, but also other glaze categories (celadons and gray-glazed wares). The inclusion of trade ceramics as grave goods in burial #74 gives added support to the inference that all trade ceramics were still considered inherently suitable for ritual use.

The protective role observed in the placement of ceramics over and around the body in Period II burials is continued in Period III - as evidenced by the many instances of ceramic dishes used to cover the cremation jars. The symbolic value of the durability, resonance and high-fired glazes of the trade ceramics continued to be important throughout this period, since ethnographic evidence attests to the importance of these characteristics in contact times.

Can the jar burial complex indicate change or continuity in the general patterns of ritual activity in Pila? In Period II, the burial patterns showed no evidence of social roles, and little or no corporate identity or control over the burial ritual; this could be extended, by inference, to the conduct of ritual activity in the society at large. In Period III, evidence of corporate identity does exist in the burial patterns, in the form of the two social groupings; there is a corresponding decrease in individual variation in ritual action, as expressed in the lack of diversity in the secondary

cremations and jar burials. Similar features may have characterized Pila society in its other aspects. On the other hand, the change from inhumation to cremation burials may have made some aspects of diversity less visible in the archaeological remains, while they may still have existed in life.

In the Period III burials, in terms of the symbolic domain, there is evidence for culture change in number of aspects. In Period II, the ideological paradigm involved the overwhelming power and importance of supernatural forces, which included close personal ancestors; the power of petitionary ritual action by individuals and their immediate family groups; and a conceptual lack of boundedness, of rigid constraints, in the physical, social, material and ideological universe. In Period II, I looked at the burial data in terms of isolating material correlates of major ideological attitudes: attitudes to material objects, attitudes to individuals, and attitudes to death. In Period III, the material evidence indicates culture change - and the new material correlates observed are no longer in keeping with the ideological organizing principles determined for Period II. Therefore by definition, the ideological paradigm must also have changed. Some details of that change can be inferred, but one can only speculate about what changed first, which aspect was the determinant one in the development of the new pattern.

In Period III, the ritual treatment of the dead is still a powerful factor, indicating that supernatural forces are still of major importance in the structure of this society. However, the importance of individual action and individual freedom of variation appears to have diminished - the ideological paradigm is now more socially constrained, more bounded. Instead of a one-to-one relationship with the supernatural sources of power, the individual is becoming subordinate to a corporate identity, a social group. The material objects used in the burial ritual now mirror the importance of a group of identity, or conformity to a social persona, (in terms of style and spatial distribution). If the burial site is also a habitation site, as the evidence suggests, then the residence patterns also reflect the increased significance of identification with the larger social group, most likely a descent group. Thus the attitude to material objects and to individuals, reflects the increased importance of the corporate identity, and an increased differentiation of social structure.

In attitudes toward death, there is evidence for some continuity as well as change. The careful ritual treatment and the increased ceremonial involved in secondary cremation and jar burial, suggests that death in Period III was ideologically important, and continued to represent transition to higher status, rather than mere departure from the land of the living. The secondary jar burials continue to reflect the great respect and intimate personal relationship perceived between the living and the dead. What has changed is the style of the burial

ritual - an increase in the ceremonial itself. If Tenazas is correct in describing these jar burials as secondary cremations typical of groups which practice "bone washing" (Tenazas 1968:17,18), then the ceremonial involved in the treatment and burial of the departed person involved more energy, more time and more family group action than had been necessary in Period II. Also changed is the fact that the burial ritual now involves social markers - identification with a larger social group, in terms of the style of burial jar chosen. The dead are still equipped with symbolic objects of power (the jars) but these are now allied with social power (corporate identity).

In addition, the increased presence of constraints in the ideological paradigm in this period is evident in the greater boundedness, the greater physical envelopment of the dead in their protective containers. Whereas in Period II the presence of an assortment of small, symbolic trade ceramics, loosely wrapped in matting around the body was sufficient to cast a protective area around the deceased, in Period II the entire bodily remains, ritually prepared, are encased inside a ceramic jar, and additionally, the jar is covered by a ceramic dish or bowl to make the protection complete. Thus symbolic power alone is no longer enough; complete material encasement, as well as a social identity, are now necessary to ensure adequate protection of the departed soul.

9. DISCUSSION

My approach in this study has been aimed at forging some kind of methodological synthesis between the processual and the symbolic schools of mortuary analysis. A careful review of the literature produced the strong impression that the chief factor that might prevent an effective "blend" would lie in the nature of the available data. Clearly, where the site to be analyzed has no associated information regarding historical context or local ethnographic data, it would be difficult to apply the symbolic approach. On the other hand, a collection of archaeological data which had been excavated without this orientation would make it difficult to carry out processual analysis. The burial sites at Pila appeared to have the requisite information required for both approaches: careful attention to excavation techniques and data recording, and a considerable amount of historical and ethnographic data.

From that point, the real challenge was the formulation of appropriate questions to ask of the data. The first step was to determine the sub-systems which would be most relevant to all the data. I defined a number of testable propositions regarding the nature and amount of social complexity in the mortuary data, based on processual theory, and looked for behavioural correlates in the mortuary remains. On the basis of the ethnographic, historical and archaeological sources combined, I then defined a set of general, symbolic organizing principles or the underlying cultural paradigm, along the lines suggested by

Kent's (1984) study.

The next step was to find a way to link the ideological organizing principles with the material data. In this, I used Hodder's suggestion (Hodder 1982a:201) to look for cultural attitudes. These should be pertinent to the three sub-systems chosen for analysis, and would relate to the social organization at Pila as well as to the mortuary situation. Hodder had suggested looking for attitudes to death, (these would relate to the mortuary ritual) and attitudes to power and authority (these would relate to the social sub-system). I decided to look for attitudes to objects as well, because of the prominence of the trade ceramics in the burial assemblages (these would relate to the trade sub-system as a whole). Following this, I looked for material correlates of these attitudes: if a particular attitude had prevailed, in what way might this be reflected in the burial goods chosen and the ritual patterns followed? The final form of the questions was the result of a dialogue between the data and the relevant cultural attitudes formulated.

In testing the applicability of the ethnographic model to the data from Pila, I found that the analyses for Period II revealed that a range of status did exist in Pila, and that it was expressed in the quantity and the quality of grave goods. No other differences in burial treatment could be observed (including energy expenditure). The close correlation between large numbers of trade ceramics and the presence of elite badges of status (such as gold, jewellery and coins) showed that the

ceramics were indicators of wealth at Pila. Ethnography showed that trade ceramics were important possessions that played a significant role in all aspects of life - social, ceremonial and ritual. This was confirmed by the analyses, which indicated that the physical characteristics of the ceramics gave them inherent symbolic significance. The miniature size and pristine condition of the majority of the wares indicated that they must have been acquired specifically for funerary purposes. The wide range in the number of grave goods, together with the homogeneity of burial form throughout both sites, led to the inference that status differentiation at Pila was based on achieved status. This was supported by the small number of burials with elite badges present. These results confirmed the applicability of the ethnographic model to the Pila data.

The main limitations of the excavation data at Pila were related to the lack of organic preservation at the site. This meant that no real assessment could be made of the presence or absence of status differentiation on the basis of age or sex. Future excavations of Philippine sites of this period which do retain a significant level of organic preservation would provide a valuable testing ground for the conclusions drawn from this study. The problem of the lack of organic preservation was magnified by the almost complete absence of utilitarian goods in the burial assemblages. Even those items which might have been indicators of sex-specific functions (spindle whorls, net sinkers) proved inconclusive. The lack of clear-cut evidence regarding age and sex roles led to the conclusion that there was

no rigid system of sexual division of labour at Pila - a result which supported the applicability of the ethnographic model in this respect.

One area of variability difficult to interpret was the status of iron blades (and fragments) in the Pila burials. These were found in a minority of burials, and were not specifically correlated with any other class of artifact, or with the wealthiest ceramic assemblages. The iron was important, because it was always buried next to the body, together with the ceramic wares, inside a matting shroud. My conclusion is that iron blades denote an individual with special achieved status related to power of some kind (for instance, a great warrior, or hunter, or family protector, or even a relative of such a person). The relatively low frequency of iron blades compared with the high frequency of ceramics suggests that physical protection was viewed as less powerful than ritual protection at Pila.

Locally-made earthenwares were similarly not specifically correlated with the wealthy assemblages of trade ceramics. Ethnography shows that they were utilitarian objects, and were frequently used as packing containers for luxurious or more perishable goods (such as fabrics, foods, smaller containers, ritual substances and aromatic oils and herbs). They were buried outside the matting shrouds in the Pila graves, and set slightly away from the body. Earthenwares occur throughout the full range of burials, from wealthy to poor, in a seemingly

unpatterned fashion. The handful of very poorest burials, however, with no trade ceramics at all, generally had an earthenware container as a grave good - leading to the inference that they were substituting for the ritually more powerful ceramics. The overall indications with respect to the pattern of earthenware occurrences supports the applicability of the ethnographic model, which shows that local earthenwares diminished in status following the establishment of regular trading relations between the Philippines and China. Whereas in previous centuries local earthenware pottery of advanced design and elegant shape was produced in the Philippines (e.g. the Kalanay pottery tradition), once ceramic trade with China was well under way, the local pottery showed a noticeable drop in quality and variety.

Regarding the trading patterns at Pila, the ethnographic model provides ample evidence of person-to-person trade, with no indication of the presence of any centralized control, or redistribution of goods. The great diversity among the individual items in the ceramic assemblages supports the notion of person-to-person trade, with no evidence of "bulk orders" or factory lots. This diversity of wares in the Period II burials reveals a number of patterns of minor co-occurrences of glaze/function types. Most of the burials have some combination of containers and dishes (or open forms), with containers being more important. The wealthiest burials have multiple "sets" of containers and dishes. The most favoured glaze type for wealthy and poor alike are celadons, which are found equally often as

containers and dishes; brown and ochre wares are predominantly containers, while gray and white wares are mainly dishes. There is an almost complete absence of blue-and-white ceramic wares, as these burials are ascribed to the 12th century, a period predating the full development of this type. The few blue-and-white jarlets found give the impression of being early attempts to develop control of the new styles and techniques.

Slightly different combinations of glaze/function types occur in Agra and Mendoza, although there is considerable overlap. This variation in ware/function types may indicate that the two burial sites represent some degree of segregation along affiliative lines, but the patterns of association are not strong enough to denote lineages (a form of social organization rarely found in this area of Southeast Asia in any case). This may reflect the presence of bilateral kindred, "occasional" groups which become active only in ritual or "crisis" situations, such as funerary ceremonials (see Murdock, section 2.4.1). A comparison could be drawn with Bayard's results at Non Nok Tha (see section 2.4.2) which showed the presence of two affiliative groups; the Non Nok Tha evidence, however, was far more clear-cut and conclusive in this respect. Another explanation for the differences in ceramic types between Agra and Mendoza may be a small chronological difference - even a period of 10 or 20 years may have affected availability of specific ceramic types.

On the inter-site level, there was some difference between Agra and Mendoza in the range of wealth represented in Period II. The burials in Mendoza are a smaller group (45 burials) but have higher levels of wealth; the burials in Agra, however, which are somewhat less wealthy in terms of trade ceramics present, include all the burials in Pila which contain elite badges of status (gold, coins, etc.). The patterns of spatial distribution are also rather curious. The Agra burials appear to show no spatial clustering of any kind; in Mendoza, however, almost all of the wealthiest burials show a general clustering in one large section of the site (poorer burials are also scattered throughout this section). The spatial distribution may be another indication of some general segregation of the burials along affiliative lines.

In the analyses dealing with Period III, an attempt was made to assess the nature and extent of the culture change indicated by the mortuary treatment. The main problem was the question of contemporaneity of the two principal types of ceramic jars utilized in the cremation burials. The evidence, however, supports the claim of contemporaneity rather than successive occupations. On this basis, it is concluded that Period III burials reflect not only culture change with respect to burial treatment, but also culture change with respect to social organization. The presence of two clearly-defined sub-groups indicates the development of corporate social groups in Pila society; and the change in burial patterns reflects a change in the basic ideological organizing principles.

Regarding the change in burial patterns, the most prevalent explanation suggested by other researchers, is diffusion of ritual patterns from southern China. Tenazas suggests that the Pila cremations in Period III are secondary cremations (Tenazas 1968:18). She points out that while secondary burials, especially in jars, are quite commonly practiced in many parts of Southeast Asia, this is not the case with secondary cremations in jars. The method used in secondary cremations is to have a primary burial as a first stage; after allowing the remains to decompose, the bones are then collected and burned in a ritual (a practice known as "bone washing" in some areas). A crematory structure was excavated in the Period III level at Pila (see Fig. B-12, Appendix B). Roxas-Lim also argues that the jar burial tradition in general must have originated in China, and reached the Philippines through an indirect route via Indochina and Borneo (Roxas-Lim 1966:237). Janse has pointed out similarities to the Philippines in the ritual patterns of South China and Indo-China, such as burial with ceramic containers, and the use of ceramic dishes placed upside-down over parts of the body to contain the spirit of the deceased (Janse 1944:35-36). Roxas-Lim also states that jar burial was practiced in China both in pre-Buddhist (before 200 A.D.) and Buddhist times. She notes that the cremation and preservation of Buddhist priests was a general practice, usually utilizing large, glazed brown pottery urns decorated with dragon motifs (ibid:238).

Chin reports that secondary jar burial was traditionally practiced by the Melanaus in Sarawak, with the bones eventually collected and buried inside a large Martabani (brown stoneware) jar. Occasionally, an assortment of Chinese ceramic plates, jarlets, bowls and beads accompanied the burial as grave goods (Chin 1978b:5). There are, in fact, many similarities in the cultural patterns of northern Borneo and the Philippines, and both ancient Chinese and Spanish sources testify to the existence of long-term contacts between the two regions (Laufer 1979:145; Pigafetta 1964:94; Reynolds 1967). It is interesting to note that secondary jar burials following a bone-washing ceremony in sea water are an old tradition in Okinawa, where the traditional religion also involves a belief in ancestor spirits and a mortuary ceremonial which includes wine-drinking, food-offerings, funeral feasts, and female religious specialists (Lebra 1966:66-68). Okinawa, as has already been noted above in section 2.4.2, was exposed to trade contacts with China at about a similar period as the Philippines (R. Pearson 1969). Ethnography shows that both Okinawa and the Philippines possessed an ideology involving ancestor worship and animism prior to Chinese trade, which would suggest that the jar burial tradition represents a selective acceptance of foreign ritual elements in keeping with local beliefs, but not a whole-sale importation of foreign ideology.

With respect to the culture change in social organization indicated in the Pila burials in Period III, the material patterning suggests the increased importance of the social

dimension. The homogeneous treatment of burials in Period II changes to the differentiation of burials on the basis of some kind of social identity (expressed in terms of differences in the glaze colour of the burial jars). This change is not accompanied by any visible increase in differences of wealth and status, suggesting that there has not been much change in the egalitarian status patterns at Pila. The ritual, however, has become less personal and more corporate. There is an increase in the ceremonial, as indicated by the presence of the cremation structure and the change to secondary cremation burials (a process which entails more energy expenditure). The wellbeing of the deceased person now requires complete encasement in a protective ceramic container, usually covered by another ceramic dish or bowl. The containers themselves, the burial jars, fall into two main stylistic groupings: the ochre-glazed group and the brown/olive glazed group (Table A-16, Appendix A). In addition, the mortuary treatment discriminates between the two groups: the ochre jars are buried intact, the brown/olive jars are ritually smashed. On the other hand, the diversity in grave goods vanishes (only one of the burials in Period III has a cluster of grave goods in association). Instead of a one-to-one relationship with the supernatural sources of power, the individual is subordinate to a corporate identity. The dead are still equipped with symbolic objects of power (the burial jar, and the ceramic cover) but these are now allied with social power, a social persona, and the individual variability with respect to the details of the burial goods has gone.

While the Period III burials show a decrease in the personal power of the individual and an increase in the importance of social identity, the ritual action itself is decreasing in symbolic power. Whereas in Period II the presence of an assortment of small, symbolic trade ceramics, loosely wrapped in a mat shroud around the body, was sufficient to create a protective area around the deceased, in Period III complete material encasement of the bodily remains, is required; the bones, ritually prepared, must be put inside a jar and usually covered by another ceramic container for full protection. Thus symbolic power is not enough to ensure safety; physical protection of the remains, as well as a social identity, are now required. This indicates that a change in the ideological paradigm of one-to-one relationship with the sources of power has taken place, that social action has increased in power and importance, while the power of individual and ritual action has declined.

10. CONCLUSIONS

The principal goal of this study has been to test the applicability of the ethnographic model presented, with respect to the mortuary data from two contemporaneous sites at Pila, Laguna. The secondary goal has been to combine processual and symbolic approaches to mortuary analysis and interpretation. The primary features of these approaches were described in Chapter 2, together with a number of related theoretical issues categorized under "Systems Theory" (section 2.3) and "Social Organization" (section 2.4). The ethnographic model was outlined in Chapter 3, in terms of three sub-systems: trade, social and ritual; it also incorporates a structural model of the Pila cultural system, which defines the ideological paradigm, or general symbolic organizing principle of the society.

The basic procedures followed in the analysis of Pila mortuary data (Chapters 4,5,6,7 and 8) have been to test the data from Period II first, and then to look at Period III for evidence of the extent and nature of culture change. Hypotheses stemming from the ethnographic model were tested by analyzing the excavation data, using procedures developed in processual archaeology. The focus of the approach was to look for the presence or absence of status differentiation based on wealth, descent, social roles, and specialization of function; the nature of the trade and exchange patterns; specific relationships between groups of grave goods; and culture change

between Periods II and III. The results of the analyses were evaluated in terms of the symbolic structure presented in the ethnographic model.

In this study I have not emphasized the considerable social and utilitarian functions of the Chinese ceramics in the Philippines. These aspects are visible in the ethnographic accounts, but since my study deals with burials, the focus of the research was restricted to those cultural patterns most relevant to mortuary data.

10.1 Conclusions related to the Pila Data Analyses

Trade Sub-System and material culture:

The diversity of ceramic wares present, in conjunction with contemporaneous ethno-historical evidence, confirmed the antiquity of the ethnographic pattern with respect to the pattern of person-to-person trade. Trade was already well-established by Period II, which is dated to the 12th century A.D. The evidence presented gives qualified support to the suggestion made by Hutterer (section 2.4), that the demand for the goods brought by the Chinese traders was stimulated by the increasing social complexity within the Pila cultural system. The results of this study, however, indicate that it was partly the prominent ideological component of this cultural system which stimulated the ever-increasing demand for Chinese trade wares. The physical characteristics of the Chinese ceramics caused them to become closely identified with symbolic

attributes. The more frequently they were used in rituals and ceremonies, the more indispensable they would have become (in view of the fact that there was nothing similar manufactured locally in the Philippines). The result would have been a naturally intensifying circle of supply and demand. Hutterer's suggestion is therefore supported in this respect that these internal developments in Pila society were partly responsible for the increase in long-distance trade. There is a recursive relationship present here, a two-way pattern of influence, which makes it difficult to pin-point a single determining factor. In this respect the symbolic theories of Hodder and Pader, regarding the recursive impact of material culture upon ideology and socio-cultural patterns in general, appear to be supported by the data from Pila. It is clear as well, that the trade relations had an economic impact, particularly with respect to local technological development. Period III also shows a change in social complexity, with the appearance of two main sub-groups of burials, distinguished by differences in style and treatment.

It is interesting to evaluate the role of ceramics in relation to the ideology and cultural patterns of this society from another perspective. Because the ceramics functioned in a specific and powerful way in the culture of Pila, is not to say that it may be assumed that the very same objects would "automatically" function in the same way in another cultural context. There is, in fact, clear evidence in the literature to refute this notion. In the Philippines, the ceramics are seen as finite objects, with specific physical attributes and

functional properties which give the object, as a whole, value in the context of local beliefs and cultural practices. In China, on the other hand, the place of origin and manufacture of these goods, the situation is completely different. The work of Ursula Franklin in the field of bronze technology and its relation to ceramic manufacturing techniques, suggests that in China the ceramic artifact represents a process rather than a finite object. It is the process which is the significant aspect of the artifact in China, because it is a process which underlies other important technology in that culture, and in essence, underlies the fabric of society itself. In China, it is the corporate identity which is the core of the ideological structure: and its associated elements include hierarchical organization, specialization of function, and the subordination of the individual to the collective process (Franklin 1983;pers. comm. 1984). The ceramics in the Chinese context represent a collective technological process, the end product of many specialists, to be enjoyed and valued, but without the ideological connotations which give the same objects such power and impact in the Philippine context. In this respect, I conclude that Hodder's and Pader's assertions, that the same material object may have different meanings in different contexts, is supported by the data from Pila.

Social Sub-System:

With respect to Period II, the analyses supported the applicability of the ethnographic model in all aspects tested. It was concluded that status differentiation in Pila was based on wealth, which was expressed by the quantity and quality of grave goods (principally trade ceramics), but not in differences in energy expenditure or burial form. The homogeneity of the burial treatment indicated that Pila society was basically egalitarian, bilateral and placed no emphasis on the sexual division of labour. The social patterns involved one-to-one relationships between individuals. Males and females possessed equal status and engaged in the same kinds of tasks. Sub-group affiliation was confined to the nuclear family and, occasionally, a network of kindred (non-lineal). Spatial distribution patterns were minimal - only one of the two sites showed any evidence of clustering (Mendoza), in that the majority of wealthy burials were located in one large area of the site. Some of the poorer burials were also located within the same area. It was concluded that there may have been some segregation related to the wealthier kindred groups.

With respect to Period III, there is evidence for culture change in the form of increased social complexity. Whereas in Period II the burial ritual does not indicate the presence of distinct social sub-groups, in Period III there is clear evidence of differentiation into two major sub-groups, as indicated by the style of cremation jar (intact or smashed). The lack of associated grave goods makes it impossible to judge whether the individual variability present in Period II, as

expressed in the burial assemblages, is missing or merely not visible in Period III. The polarization of the community into two major social groups, however, is clearly a new element in Pila. Tenazas suggests the change to secondary cremation jar burials indicates diffusion of cultural elements from South China; the corresponding differentiation into two social groups may reflect another aspect of cultural diffusion from China - an increased emphasis on descent groups in the form of lineages. A similar phenomenon was observed by R. Pearson in his study of Ryukyu archaeology. After regular trade contacts started with China in the 14th century, the settlement patterns became diversified, and social stratification appeared (R. Pearson 1969:136).

Another likely explanation which also involves diffusion of cultural elements from China, is the possibility that the two styles of jar burial in Period III may represent male and female burials. While Period II shows no evidence of differentiation along sexual lines, social differentiation between males and females was a powerful element of Chinese culture by this period, and this may have had an impact on Pila culture; part of the same pattern which stimulated the change in burial style from inhumations to cremation jar burials. The fact that the cremation jar burials were only a temporary phase in Pila society (the burial patterns revert to inhumation burials in the succeeding layer in Pila in Period IV, or early Ming period) suggests that some of these changes may have been borrowed and did not have the deep-rooted staying power of local custom. In

his study of Okinawan folk religion, William Lebra reports that a change from egalitarian social roles occurred in Okinawa after regular contact took place between Okinawa and China. This change included a loss of status for females and a marked increase in the hierarchical element in all aspects of social organization (Lebra 1966:105,107).

Ritual Sub-System:

The ethnographic model defined an ideological pattern of ancestor worship, petitionary ritual, and the personal conduct of ritual affairs on the individual or nuclear family level. The Pila evidence from Period II supports this pattern. The burial assemblages reflect the great importance of the supernatural powers: the ritual element is the most visible one, reflected in the symbolic significance of the grave goods (and the corresponding lack of utilitarian goods or social markers). The homogeneous mortuary treatment - the wrapping of the deceased in a shroud, together with a collection of symbolic ceramic wares of the type sanctified by use in the most important ritual ceremonies - represents a procedure designed to cast a protective area of ritual purity about the body. Clearly the deceased is making a transition to a higher status. Once the deceased person becomes an ancestor, he/she will have the ability to influence all aspects of the life and well-being of the surviving family members. The entire family would have a strong vested interest in making sure the transition to the spirit world was smooth and successful, thus careful attention

to ritual requirements would be regarded as critically important.

Regarding the aspect of individual/family responsibility in the mortuary process, I suggest the proof lies in the variability of the details, when contrasted with the homogeneity of the burial treatment. The proper ritual process must be followed, but it is up to the individual members to decide which specific wares will be entombed, based no doubt on what they can afford and on personal choice and availability. Within this ritual, the surviving members are participating in a one-to-one relationship with the all-powerful supernatural forces. In essence, the ritual patterns reveal a lack of boundedness, an absence of rigid, formal constraints in the structure of beliefs and in the conduct of ritual affairs. Similarities to this ideological pattern may be found in other, egalitarian, non-agricultural societies, in particular with respect to the pattern of one-to-one relationships and the lack of social boundedness. The powerful role attributed to personal ancestor spirits in this society, however, makes the mortuary ritual a focus of particularly great energy and power, to an extent not always found in other egalitarian societies.

In Period III, the ritual pattern shows evidence of culture change. The burials reveal an increased emphasis on social roles. The essential elements of burial treatment are still homogeneous in terms of ritual and energy expenditure - the majority of burials are cremations and all jar burials appear to

be accorded very similar treatment of bodily remains. This may indicate that the egalitarian aspect of Pila has not yet changed to any great level of status differentiation. Increased social complexity, however, can be seen in the presence of the two major sub-groups, characterized by differences in style and treatment of burial jars. The lack of boundedness has been replaced by some social constraints, as already noted in the section on the social sub-system, above. The ritual itself reflects a more physically constrained aspect. The protective role of ritual per se, as seen in Period II, is now augmented by the demarcation of a social identity (the style and treatment of the burial jars). In addition, there is a new emphasis on physical protection of the remains: the symbolic protection of the ceramic wares is increased by physical protection in the form of complete encasement within the burial jar. Thus in Period III, the ideological paradigm shows a decrease in the importance of purely symbolic power, and an increase in the importance of social and material power.

It is possible to make a number of predictions on the basis of the analyses done of the data from Pila. I predict that future excavations of Sung/Yuan burial sites will reveal little or no spatial patterning of burials at the site level; that burial treatment will be homogeneous throughout the site and involve the consistent use of trade ceramics as grave goods; that there will be little or no utilitarian goods among the burial associations; that there will be no intervening cremation jar burial phase between the Sung/Yuan and Ming period levels of

stratified burial sites; and that social differentiation will be measurable in terms of mortuary treatment and spatial organization in later Ming period sites.

10.2 Conclusions Related to Methodological Issues

The results from Pila indicate that mortuary remains do reflect social organization and social complexity. Spatial elements are important in mortuary data, but in the case of Pila, the quantity and quality of grave goods are also an important indication of wealth and status. When one class of grave goods, such as the trade ceramics, is present in the vast majority of burials, but varies in style and quantity from grave to grave, I maintain that it indicates a range of status in the burials and in the living community. Where there is little status differentiation between males and females in a society, the nature of the grave goods, and the burial treatment, is likewise homogeneous for both sexes. Spatial organization is an important aspect of the Pila burials. The overall organization of the cemetery areas led to some conclusions about the nature of social complexity in Pila in that there is little or no spatial patterning at the site level in Period II, but some spatial patterning on stylistic grounds is present in Period III.

Energy expenditure in a burial site with respect to status differences may be a variable subject to individual differences from society to society. In Pila, there are no differences in energy expenditure from burial to burial, either in Period II or

Period III. There is, however, an overall difference in energy expenditure from Period II to Period III. This seems to point to a general increase in social complexity in Period III, but not yet any great increase in internal social stratification. Period III in Pila may thus represent a rather transitional phase in the general development of Philippine culture. The Ming period burials which followed in Period IV are inhumation burials of the same pattern of mortuary treatment as those in Period II. The Period III cremation jar burial phase, which includes a total of 55 burials, may represent a temporary cultural phase which for some reason did not last.

I suggest that the evidence from Pila supports the notion that there is a unifying set of organizing principles in keeping with the material patterning of this cultural system, and that there is a high degree of identification between the ideology and the mortuary data. This conclusion supports the claims made by the symbolic archaeologists, that it is possible to approach the study of past cultural systems from a more holistic perspective. On the other hand, the entire argument is only made possible by the analytical framework built up by following the procedures of the processual approach.

10.3 Conclusions Related to Theoretical Issues

Regarding the issue of trade and social complexity, the evidence from Pila suggests that long-distance trade had some important effects and was one of the elements responsible for a general increase in sociocultural complexity between the earlier

and the later periods. The specific determining aspects are difficult to identify due to a process of mutual reinforcement which appears to have been in operation between the various sociocultural processes present. The cultural patterns show that the use of Chinese ceramics in all ceremonial events was connected with the loss of status and quality of locally-made earthenware pottery; and the same may be true of other elements of material culture, such as metal-working. Ownership of imported ceramics represented wealth which was differentially distributed throughout the population.

There is no indication that the regular trade and exchange relations with China led to a centralization of power, or to any redistributive focus, as such features seem to be alien to the ideological patterns of Pila society. The Pila evidence suggests that certain internal sociocultural patterns acted as a stimulant to maintain or increase the long-distance trade. Ethnography shows that the economic base was an important element: shifting agriculture and a mixed hunting/gathering economy had accustomed the local inhabitants to a mobile existence and created a long-standing familiarity with exchange relations at the local regional level (cf. Eder's study of the Batak of Palawan: 1984, for a good ethnographic case study of a similar ecological adaptation). This type of subsistence pattern would have created a receptive climate for the initial trade contacts with foreign merchants, as well as establishing appropriate social mechanisms to handle inter-group contact. The rituals of ancestor worship and animism prevalent in

Philippine ideology became closely linked with the perceived functional properties of the ceramic wares, and this stimulated an increasing demand for these artifacts.

I conclude that this study supports the potential of the new theoretical approaches to systems theory, for the study of culture process. When cultural systems are viewed as open systems which maintain themselves in conditions of non-equilibrium, and which show differential patterns of self-organization, we are provided with a useful model which combines elements of determinism, history and chance (as in the models derived from bifurcation theory: by which a small change or a general instability, from a variety of causes, can lead to a system change in unpredictable directions). I suggest that such a model gives us a theoretical framework for dealing with cultural patterns difficult to relate to the more convenient stage levels of cultural evolution.

BIBLIOGRAPHY

Addis, J.M.

- 1968 The dating of Chinese porcelain found in the Philippines: A historical retrospect. Philippine Studies Vol. 16, No. 2, April: 371-380.

Adhyatman, Sumarah

- 1981 Antique Ceramics Found in Indonesia. Jakarta: The Ceramic Society of Indonesia.

Alip, Eufronio M. (ed)

- 1964 The Philippines of Yesteryears. Philadelphia: Alip and Sons, Inc.

Allen, P.M.

- 1982 The genesis of structure in social systems: the paradigm of self-organization. In Theory and Explanation in Archaeology, ed. Colin Renfrew, Michael J. Rowlands and Barbara A. Segraves. Pp. 347-374. New York: Academic Press.

Bayard, Donn

- 1983 Rank and Wealth at Non Nok Tha: The Mortuary Evidence. Paper presented at Symposium KIE, XV Pacific Science Congress, Dunedin, New Zealand.

Beyer, H. Otley

- 1947 Outline Review of Philippine Archaeology by Islands and Provinces. Philippine Journal of Science pp. 205-390.
- 1964 Philippine prehistoric contacts with foreigners. In Chinese Participation in Philippine Culture and Economy, ed. Shubert S.C. Liao. Manila: Bookman.
- 1979 The Philippines before Magellan. In Readings in Philippine Prehistory, ed. Mauro Garcia, pp.8-34. Manila: The Filipiniana Book Guild.

Binford, L.R.

- 1971 Mortuary practices: their study and their potential. In Approaches to the Social Dimensions of Mortuary Practices, ed. J.A. Brown. Memoirs of the Society for American Archaeology 25: 6-29.
- 1982a Objectivity - explanation - archaeology 1981. In Theory and Explanation in Archaeology, ed. Colin Renfrew, Michael J. Rowlands, B.A. Segraves. Pp.125-138. New York: Academic Press.

- 1982b Meaning, inference and the material record. In Ranking, Resource and Exchange, ed. Colin Renfrew, Stephen Shennan. Pp.160-163. Cambridge: Cambridge University Press.

Braun, David P.

- 1981 A Critique of some recent North American Mortuary Studies. American Antiquity 46(2):416-420.

Brown, James A. (ed)

- 1971 Approaches to the Social Dimensions of Mortuary Practices. Memoirs of the Society for American Archaeology 25.

Brown, James A.

- 1981 The search for rank in prehistoric burials. In The Archaeology of Death, ed. Robert Chapman, Ian Kinnes, Klaus Randsborg, pp.25-37. Cambridge: Cambridge University Press.

Brown, Roxanna M.

- 1977 The Ceramics of Southeast Asia: Their Dating and Identity. Oxford in Asia Studies in Ceramics. Kuala Lumpur: Oxford University Press.

Careri, G.F.G.

- 1963 A Voyage To The Philippines. Manila: Publications of the Filipiniana Book Guild II.

Casal, Fr. Gabriel, Regalado Trota Jose Jr., Eric S. Casino, George R. Ellis, and Wilhelm G. Solheim.

- 1981 The People and Art of the Philippines. Museum of Cultural History. Los Angeles: University of California Press.

Ceramic Society in Indonesia

- 1977 Tempayan di Martavans in Indonesia. Djakarta: P.T. Pangeran Djayakarta.

Chapman, Robert, Ian Kinnes and Klaus Randsborg (eds.)

- 1981 The Archaeology of Death. Cambridge: Cambridge University Press.

Chen, Liu Ti

- 1966 The junk-trade relations in the porcelain age. In The Chinese in the Philippines: 1570-1770, Vol.1, ed. A. Felix, Jr. Pp.252-285. Manila: Solidaridad.

Chen, Matthew

- 1966 The Ming records of Luzon. In The Chinese in the Philippines: 1570-1770, Vol.1, ed. A. Felix Jr. Pp.246-251. Manila: Solidaridad.

Cheng, Te-K'un

- 1978 The export of Chinese ceramic wares. Paper presented at Symposium on Trade Pottery in East and Southeast Asia. Hong Kong, September 1978. Unpublished manuscript.

Chin, Lucas

- 1978a Trade pottery discovered in Sarawak from 1948 - 1976. Symposium on Trade Pottery in East and Southeast Asia. Hong Kong, September 1978, Unpublished manuscript.
- 1978b Impact of trade ceramic objects on some aspects of local culture. Paper presented at Symposium on Trade Pottery in East and Southeast Asia. Hong Kong, September 1978, Unpublished manuscript.
- 1980 Cultural Heritage of Sarawak. Kuching: Sarawak Museum.

Chirino, Pedro

- 1979 Relation of the Philippine Islands. In Readings in Philippine Prehistory, ed. Mauro Garcia. Pp. 241-265. Manila: The Filipiniana Book Guild.

Chung Yang-mo

- 1978 Ceramic wares salvaged from seabed off Sinan. Paper presented at Symposium on Trade Pottery in East and Southeast Asia, Hong Kong, September 1978. Unpublished manuscript.

Cole, Fay-Cooper

- 1912 Chinese pottery in the Philippines. Field Museum of Natural History Publication 162. Vol. XII, No. 1.

Conover, W.J.

- 1971 Practical Nonparametric Statistics. New York: John Wiley & Sons, Inc.

Cox, Warren E.

- 1944 The Book of Pottery and Porcelain. Vol. I. New York: Crown Publishers.

Decker, Dean A.

- 1969 Early archaeology on Catalina Island: potential and problems. Archaeological Survey Annual Report 11:69-84. Department of Anthropology, University of California, Los Angeles.

Deetz, James F. and Edwin S. Dethlefsen

- 1972 Death's Head, Cherub, Urn and Willow. In Contemporary Archaeology, ed. Mark P. Leone. Pp. 402-412. Carbondale and Edwardsville: Southern Illinois University Press.

Eder, James

- 1984 The impact of subsistence change on mobility and settlement pattern in a tropical forest foraging economy: some implications for archaeology. American Anthropologist. Vol.86(4):837-853.

Erickson, B.H. and T.A. Nosanchuk

- 1977 Understanding Data. Toronto: McGraw-Hill Ryerson Ltd.

Felix, Alfonso, Jr.

- 1966 The Chinese in the Philippines: 1570 - 1770, Vol. 1. Manila: Solidaridad.

Fox, Robert B.

- 1959 The Calatagan Excavations. Philippine Studies Vol. 7, No. 3.

- 1970 The Tabon Caves. Manila: Monograph of the National Museum, No. 1.

- 1979 The Philippines in prehistoric times. In Readings in Philippine Prehistory, ed. Mauro Garcia. Pp.35-61. Manila: Filipiniana Book Guild.

- 1982 Tagbanuwa: Religion and Society among the Tagbanuwa of Palawan Island. National Museum of the Philippines, Monograph No. 9, Manila.

Fox, Robert B. and Alfredo E. Evangelista

- n.d. Pre-Spanish Manila Through Archaeology. Progress Report. Phase I & II: Excavations at the Sta. Ana Parish Church and Along Old Lamayan Road. Manila: Philippine National Museum. Mimeographed.

Fox, Robert B. and Avelino M. Legaspi

- n.d. Excavation at Sta. Ana, Manila (1972). Unpublished manuscript, Manila: National Museum of the Philippines.

Franklin, Ursula

- 1983 On Bronze and Other Metals in Ancient China. In The Origins of Chinese Civilization, ed. D.N. Keightley. Berkely: University of California Press. Pp.279-296.

Frasche, Dean F.

- 1976 Southeast Asian Ceramics 9th - 17th Century. New York: Asian House Gallery.

Fried, Morton H.

- 1967 The Evolution of Political Society. New York: Random House.

- Friedman, Jonathan
 1982 Catastrophy and Continuity in Social Evolution. In Theory and Explanation in Archaeology, ed. Colin Renfrew, Michael J. Rowlands, and Barbara A. Segraves, pp.175-196. New York: Academic Press.
- Garcia, Mauro (ed.)
 1979 Readings in Philippine Prehistory. Manila: The Filipiniana Book Guild.
- Goldstein, Lynne
 1981 One-dimensional archaeology and multi-dimensional people: spatial organization and mortuary analysis. In The Archaeology of Death, ed. Robert Chapman, Ian Kinnes, Klaus Randsborg, pp.53-69. Cambridge: Cambridge University Press.
- Gould, R.A.
 1980 Living Archaeology. Cambridge: Cambridge University Press.
- Grau-Abaya, Consuelo
 1976 The Brown Wares. In Manila Trade Pottery Seminar. Manila: The Research Foundation in Philippine Anthropology and Archaeology, Vol.1-9, pp.1-33.
- Gryaznov, M.P.
 1969 Ancient Civilizations of Southern Siberia. Leningrad: The Hermitage Museum.
- Guy, John
 1980 Oriental Trade Ceramics in Southeast Asia. 10th-16th Century. Melbourne: National Gallery of Victoria.
 1982 Vietnamese trade ceramics. In Vietnamese Ceramics. Singapore: Southeast Asian Ceramic Society.
 1984 Trade ceramics in Southeast Asia and the acculturation process. Trade Ceramics Studies No. 4, Japan Society for the Study of Oriental Trade Ceramics. Pp. 117-126.
- Harrison, B. and T.
 1970 The Prehistory of Sabah. Sabah Society Journal, Vol. IV. Kota Kinabalu, Malaysia.
- Harrison, Tom
 1968 A rare ceramic bangle from Borneo. Asian Perspectives, Vol.XI:135-136.
- Hayden, Brian and Cannon, Aubrey
 1982 The corporate group as an archaeological unit. Journal of Anthropological Archaeology 1:132-158.

Hill, James N.

- 1972 A prehistoric community in eastern Arizona. In Contemporary Archaeology, ed. Mark P. Leone. Pp.320-332. Carbondale and Edwardsville: Southern Illinois University Press.

Hodder, Ian

- 1982a Symbols in Action. Cambridge: Cambridge University Press.
- 1982b The identification and interpretation of ranking in prehistory: a contextual perspective. In Ranking, Resource and Exchange, ed. Colin Renfrew and Stephen Shennan. Pp.150-154. Cambridge: Cambridge University Press.

Hodder, Ian (ed)

- 1982c Symbolic and Structural Archaeology. Cambridge: Cambridge University Press.

Howitz, Pensak C.

- 1978 Two ancient shipwrecks in the Gulf of Thailand. Paper presented at Symposium on Trade Pottery in East and Southeast Asia, Hong Kong, September 1978. Unpublished manuscript.

Humphreys, S.C. and Helen King (eds.)

- 1981 Mortality and Immortality: The anthropology and archaeology of death. San Francisco: Academic Press.

Hutterer, Karl

- 1973 An Archaeological Picture of a Pre-Spanish Cebuano Community. San Carlos Publications, Series A, No. 9. Cebu City: Philippines.
- 1974 The Evolution of Philippine Lowland Societies. Mankind Vol. 9, No. 4: 287-299.

Hutterer, Karl (ed.)

- 1977 Economic Exchange and Social Interaction in Southeast Asia. Michigan Papers on South and Southeast Asia, 13. Ann Arbor: U. Of Michigan.

Hutterer, Karl and W.K. Macdonald (eds.)

- 1984 Houses Built on Scattered Poles. Prehistory and ecology in Negros Oriental, Philippines. Cebu City: University of San Carlos Press.

Janse, Olov R.T.

- 1944 Notes on Chinese Influences in the Philippines in Pre-Spanish Times. Harvard Journal of Asiatic Studies, Vol. 8:33-62.

- Jocano, F. Landa
 1970 Death, bone washing and jar burial among the Sulod of Central Panay, Philippines. In The Tabon Caves, by Robert Fox. Pp.181-188. Manila: National Museum, Monograph No.1.
- Kent, Susan
 1984 Analyzing Activity Areas: An Ethnoarchaeological Study of the Use of Space. Albuquerque: University of New Mexico.
- King, Linda
 1969 The Medea Creek Cemetery (LAN-243): an investigation of social organization from mortuary practices. Archaeological Survey Annual Report 11:23-68. Los Angeles: Department of Anthropology, University of California.
- Kirch, Patrick V.
 1980 Burial structure and societal ranking in Vavala, Tonga. The Journal of the Polynesian Society 89(3):291-308.
- Kristiansen, Kristian
 1984 Ideology, and material culture. In Marxist Perspectives in Archaeology, ed. Matthew Spriggs. Pp.72-100. Cambridge: Cambridge University Press.
- Kus, Susan
 1984 The spirit and its burden: archaeology and symbolic activity. In Marxist Perspectives in Archaeology, ed. Matthew Spriggs. Pp.101-107. Cambridge: Cambridge University Press.
- Larson, Lewis, Jr.
 1971 Archaeological implications of social stratification at the Etowah Site, Georgia. In Approaches to the Social Dimensions of Mortuary Practices, ed. James A. Brown. Memoirs of the Society for American Archaeology 25:58-67.
- Laufer, Berthold
 1979 The relations of the Chinese to the Philippine Islands. In Readings in Philippine Prehistory, ed. Mauro Garcia. Pp.142-177. Manila: The Filipiniana Book Guild.
- Lebra, William P.
 1966 Okinawan Religion. Honolulu: University of Hawaii Press.

Legeza, I.L.

- 1978 Trade ceramics in the local cultures of the South Sea (Nan hai) islands. Paper presented at Symposium on Trade Pottery in East and Southeast Asia, Hong Kong, September 1978. Unpublished Manuscript.

Liao, Shubert S.C. (ed.)

- 1964 Chinese Participation in Philippine Culture and Economy. Manila: Bookman.

Locsin, Cecilia and Leandro

- 1967 Oriental Ceramics Discovered in the Philippines. Tokyo: Tuttle.

- 1968 Some thoughts on the pre-Ming trade potteries found in the Philippines. In A Report on the Archaeology of the Locsin-University of San Carlos Excavations in Pila, Laguna, by Rosa C.P. Tenazas. Manila.

Longacre, William A.

- 1972 Archaeology as anthropology: a case study. In Contemporary Archaeology, ed. Mark P. Leone. Pp.316-319. Carbondale and Edwardsville: Southern Illinois University Press.

Lopez, Violeta B.

- 1976 The Mangyans of Mindoro: An Ethnohistory. Quezon City: University of Philippines.

Macdonald, William K.

- 1978 The Bang Site, Thailand: An alternative analysis. Asian Perspectives, Vol. XXI, No. 1: 30-51.

Macintosh, Duncan

- 1977 Chinese Blue and White Porcelain. Vermont: Tuttle-Rutland.

Marche, Alfred

- 1970 Luzon and Palawan. Vol. XVII Chapters V, XV. Manila: The Filipiniana Book Guild.

Matson, R.G.

- 1983 The relationship between sedentism and status inequalities among hunters and gatherers. Paper presented at the 16th Chacmool Conference, Calgary. Unpublished manuscript.

McGuire, Randall H,

- 1984 Breaking down cultural complexity: inequality and heterogeneity. In Advances in Archaeological Method and Theory, Vol.6, ed. Michael B. Schiffer. Pp.91-142. New York: Academic Press.

Medley, Margaret

1976 The Chinese Potter: A Practical History of Chinese Ceramics. New York: Charles Scribner's Sons.

1981 Tang Pottery and Porcelain. London: Faber and Faber.

Morga, Antonio de

1979 Relation of the Philippine Islands and of their natives, antiquity, customs, and government. In Readings in Philippine Prehistory, ed. Mauro Garcia. Pp.266-306. Manila: The Filipiniana Book Guild.

Murdock, George Peter

1960 Cognatic forms of social organization. In Social Structure in Southeast Asia, ed. George P. Murdock. Pp.1-14. Chicago: Quadrangle Books.

Orme, Bryony

1981 Anthropology for archaeologists. Ithaca, New York: Cornell University Press.

O'Shea, John M.

1981 Social configurations and the archaeological study of mortuary practices: a case study. In The Archaeology of Death, ed. Robert Chapman, I. Kinnes, K. Randsborg, pp.39-52. Cambridge: Cambridge University Press.

1984 Mortuary Variability. New York: Academic Press.

Pader, Ellen Jane

1982 Symbolism, Social Relations and the Interpretation of Mortuary Remains. BAR International Series, 130.

Pearson, Michael P.

1984 Social change, ideology and the archaeological record. In Marxist Perspectives in Archaeology, ed. Matthew Spriggs. Pp.59-71. Cambridge: Cambridge University Press.

Pearson, Michael P.

1982 Mortuary practices, society and ideology: an ethno-archaeological study. In Symbolic and Structural Archaeology, ed. Ian Hodder; Pp.99-113. Cambridge: Cambridge University Press.

Pearson, Richard J.

1969 Archaeology of the Ryukyu Islands. Honolulu: University of Hawaii Press.

1978 Chinese trade and its effect on local organisation in the Ryukus. Paper presented at the Symposium on Trade Pottery in East and Southeast Asia, Hong Kong, September 1978. Unpublished manuscript.

- 1981 Social Complexity in Chinese Neolithic Sites. Science Vol. 213, September: 1078-1086.
- Peebles, Christopher and Susan M. Kus
1977 Some archaeological correlates of ranked societies. American Antiquity 42(3): 421-448.
- Peebles, Christopher
1971 Moundville and surrounding sites: some structural considerations of mortuary practices II. In Approaches to the Social Dimensions of Mortuary Practices, ed. James A. Brown. Memoirs of the Society for American Archaeology 25:68-91.
- Pigafetta, Antonio
1964 First voyage around the world. In The Philippines of Yesteryears, ed. Eufronio M. Alip, pp.5-249. Manila: Alip & Sons.
- Raab, L. Mark and Albert C. Goodyear
1984 Middle range theory in archaeology: a critical review. American Antiquity Vol. 49, No. 2: 255-268.
- Randsborg, Klavs
1981 Burial, succession and early state formation in Denmark. In The Archaeology of Death, ed. R. Chapman, I. Kinnes and K. Randsborg, pp.105-121. Cambridge: Cambridge University Press.
- Renfrew, Colin
1973 The Explanation of Culture Change: Models in Prehistory. London: Duckworth Press.

1980 Explanation revisited. In Theory and Explanation in Archaeology, ed. Colin Renfrew et al. Pp.6-24. New York: Academic Press.
- Renfrew, Colin, Michael J. Rowlands and Barbara A. Segraves (eds.)
1980 Theory and Explanation in Archaeology. New York: Academic Press.
- Reynolds, Hubert
1967 Why Chinese Traders approached the Philippines late - and from the south. In Studies in Philippine Anthropology (In honour of H. Otley Beyer), ed. Mario D. Zamora, pp.463-479. Quezon City: Alemar Phoenix Publishers.
- Rowlands, Michael
1984 Objectivity and subjectivity in archaeology. In Marxist Perspective in Archaeology, ed. Matthew Spriggs. Pp.108-113. Cambridge: Cambridge University Press.

Roxas-Lim, Aurora

- 1966 Chinese pottery as a basis for the study of Philippine proto-history. In The Chinese in the Philippines:1570-1770, Vol. 1, ed. A. Felix Jr. Pp.223-245. Manila: Solidaridad.

San Antonio, Fray. J.F. De

- 1977 The Philippine Chronicles of Fray San Antonio (Bk. I) Trans. D. Pedro Picornell. Historical Conservation Soc., XXIX, Manila: The Franciscan Fathers.

Saxe, Arthur A.

- 1970 Social Dimensions of Mortuary Practices. Unpublished Ph.D. Dissertation, Department of Anthropology, University of Michigan.
- 1971 Social dimensions of mortuary practices in a Mesolithic population from Wadi Lalfa, Sudan. In Approaches to the social dimensions of mortuary practices, ed. James A. Brown. *Memoirs of the Society for American Archaeology* 25:39-57.

Scott, William Henry

- 1974 The Discovery of the Igorots. Spanish contacts with the pagans of N. Luzon. Quezon City: New Day Publishers.
- 1981 Boatbuilding and Seamanship in Classic Philippine Society. Anthropological Papers No. 9, Manila: National Museum of the Philippines.

Segraves, Barbara A.

- 1982 Central Elements in the Construction of a general theory of the evolution of societal complexity. In Theory and Explanation in Archaeology ed. Colin Renfrew, Michael J. Rowlands and Barbara A. Segraves, pp.287-300. New York: Academic Press.

Service, Elman R.

- 1975 Origins of the State and Civilization. New York: W.W. Norton & Co.

Shanks, Michael and Christopher Tilley

- 1982 Ideology, symbolic power and ritual communication: a reinterpretation of Neolithic mortuary practices. In Symbolic and Structural Archaeology, ed. Ian Hodder. Pp.129-154. Cambridge: Cambridge University Press.

Southeast Asian Ceramic Society

- 1979 Chinese Celadons and Other Related Wares in Southeast Asia. Singapore: Southeast Asian Ceramic Society.

Spoehr, Alexander

- 1973 Zamboanga and Sulu. An archaeological approach to ethnic diversity. Ethnology Monographs No.1. Pittsburgh: University of Pittsburgh.

Spriggs, Matthew (ed.)

- 1984 Marxist Perspectives in Archaeology. Cambridge: Cambridge University Press.

Steward, Julian H.

- 1979 Theory of Culture Change. Urbana: University of Illinois Press.

Tainter, Joseph A.

- 1973 The social correlates of mortuary patterning at Kalako, North Kona, Hawaii. Archaeology and Physical Anthropology in Oceania VIII(1):1-11.
- 1975 Social inference and mortuary practices: an experiment in numerical classification. World Archaeology 7(1):1-15.
- 1981 Reply to "A critique of some recent North American mortuary studies". American Antiquity 46(2):416-420.

Tangco, Marcelo

- 1979 Racial and cultural history of the Filipinos. In Readings in Philippine Prehistory, ed. Mauro Garcia, pp.62-77. Manila: The Filipiniana Book Guild.

Tenazas, Rosa C.P.

- 1968 A Report on the Archaeology of the Locsin-University of San Carlos Excavations in Pila, Laguna. Manila.

Trigger, Bruce G.

- 1984 Archaeology at the crossroads: what's new?. Annual Review of Anthropology Vol.13:275-300.

Tukey, John W.

- 1977 Exploratory Data Analysis. New York: Addison-Wesley.

Ucko, Peter J.

- 1969 Ethnography and archaeological interpretation of funerary remains. World Archaeology 2(2):262-280.

Underhill Kingscott, Anne

- 1983 A Mortuary Analysis of the Dawenkou Cemetery Site, Shadong, China. Unpublished M.A. Thesis, University of British Columbia, Department of Anthropology and Sociology.

- Van der Pijl-Ketel (ed.)
 1976 The Ceramic Load of the Witte-Leeuw. Rijksmuseum, Amsterdam.
- Winzler, Robert L.
 1976 Ecology, Culture, Social Organization and State Formation in Southeast Asia. Current Anthropology 17(4):623-640
- Wolf, Eric R.
 1982 Europe and the People Without History. Berkeley: University of California Press.
- Wood, John J. and R.G. Matson
 1973 Two models of sociocultural systems and their implications for the archaeological study of change. In, The Exploration of Culture Change, edited by C. Renfrew, pp.673-684. London: Duckworth.
- Wu Ching-Hong
 1959 A study of references to the Philippines in Chinese sources from the earliest times to the Ming Dynasty. Philippine Social Sciences and Humanities Review XXIV (January-June), No. 1-2: 75-76.
- Yeo, S.T. and Jean Martin
 1978 Chinese Blue and White Ceramics. Singapore: Arts Orientalis.
- Zamora, Mario D. (ed)
 1967 Studies In Philippine Anthropology (In honour of H. Otley Beyer). Quezon City: Alemar Phoenix Publishers.

APPENDIX A

Tables

TABLE A-1: Table of Trade Ceramic Categories at Pila by Type and Function (with code symbol in brackets). Total number of ware/types = 56. Total number of items = 627.

	No. of Items
TRADE CERAMIC GLAZE TYPES	
Lead-glazed (L)	20
Brown-glazed (B)	143
Ochre-glazed (O)	99
Gray-glazed (G)	98
Celadon (C)	162
White-wares (W):	
Te-hua (T)	71
Ch'ing-pai (CH)	12
Spotted Ch'ing-pai (SCH)	10
Early blue-and-white (BLWHITE)	3
Miscellaneous ceramics (MISCCER)	9
Total =	<u>627</u>
TRADE CERAMIC FUNCTIONAL CATEGORIES	
Lead-glazed:	
Jarlet (LJARLET)	13
Teapot (LTEAPOT)	5
Water dropper (LWATERDR)	2
Total =	<u>20</u>
Brown-glazed:	
Jarlet (BJARLET)	48
Jar (BJAR)	6
Bottle (BBOTTLE)	60
Tumbler (BTUMBLER)	18
Teapot (BTEAPOT)	4
Vase (BVASE)	2
Covered-box part (BBOX)	3
Bowl (Temmoku)(BBOWL)	2
Total =	<u>143</u>

TABLE A-1: Continued.

	No. of Items
Ochre-glazed:	
Jarlet (OJARLET)	37
Jar (OJAR)	7
Tumbler (OTUMBLER)	32
Bowl (OBOWL)	13
Saucer (OSAUCER)	7
Bottle (OBOTTLE)	1
Teapot (OTEAPOT)	1
Kendi (OKENDI)	1
Total =	99
Gray-glazed:	
Bowl (GBOWL)	34
Dish (GDISH)	14
Saucer (GSAUCER)	17
Jarlet (GJARLET)	19
Teapot (GTEAPOT)	3
Water-dropper (GWATERDR)	2
Kuan (GKUAN)	2
Flower-pot (GFLOWERP)	2
Covered-box part (GBOX)	5
Total =	98
Celadon:	
Jarlet (CJARLET)	81
Dish (CDISH)	33
Saucer (CSAUCER)	13
Bowl (CBOWL)	16
Kuan (CKUAN)	7
Incense-burner (CINCENSE)	2
Covered-box part (CBOX)	4
Cup (CCUP)	3
Teapot (CTEAPOT)	3
Total =	162
White-wares:	
Te-hua	
Bowl (TBOWL)	35
Dish (TDISH)	12
Saucer (TSAUCER)	5
Vase (TVASE)	4
Covered-box part (TBOX)	15
Total =	71

TABLE A-1: Continued.

	No. of Items
White-wares - cont'd.	
Ch'ing-pai	
Teapot (CHTEAPT)	4
Cup (CHCUP)	3
Bowl (CHBOWL)	3
Covered-box part (CHBOX)	2
Total =	<hr/> 12 <hr/>
Spotted Ch'ing-pai	
Figurine (SCHFIG)	2
Jarlet (SCHJARLT)	2
Balimbing (fruit-shaped jarlet)	
(SCHBALIM)	1
Kuan (SCHKUAN)	3
Double-gourd (SCHGOURD)	2
Total =	<hr/> 10 <hr/>
Early Blue-and-white	
Balimbing (BLWHITE)	3
Total =	<hr/> 3 <hr/>
Miscellaneous ceramics (MISCER)	
Bowl (MISCER)	3
Saucer (MISCER)	5
Covered-box part (MISCER)	1
Total =	<hr/> 9 <hr/>

FOOTNOTE TO TABLE 1:

Lumping procedures (from original data tables in Tenazas report):

- Contracted "medium" and "large" types.
- Contracted "plates" and "dishes" (e.g. 2-fish dish, 1-fish dish, etc.) under "dishes".
- Contracted various types of larger jars (e.g. tall, wide-mouth jar, spherical jar, etc.) under "jars".
- Contracted "small" and "medium" types of vases and bottles under "vase" or "bottle".
- Contracted covers and bottoms of "covered-box parts" under "cover box part".
- Earthenwares: included 1 flowerpot under "pots".

TABLE A-2: Table of Non-ceramic Artifact Categories at Pila
(with code symbol in brackets).

	No. of Items
EARTHENWARES	
Pot (EPOT)	46
Kendi (EKENDI)	26
Bowl (EBOWL)	2
Stove (ESTOVE)	6
Cover (ECOVER)	1
Pot Stand (EPOTSTAN)	1
Total =	82
IRON	
Blade (IBLADE)	25
Fragments (IFRAG)	15
Total =	40
BRONZE OBJECTS	
	6
Ring (BRONZE)	
Fragment (BRONZE)	
Bowl (BRONZE)	
Mirror (BRONZE)	
Disc (BRONZE)	
Total =	6
LEAD	
Bracelet (LBRACELT)	1
Object (LOBJECT)	2
Total =	3
MISCELLANEOUS POTTERY OBJECT (MISCPOT)	
	3
Total =	3
UTILITARIAN OBJECT	
Spindle Whorl (SPINDLE)	2
Net Sinker (NSINKER)	2
Total =	4
MISCELLANEOUS WEALTH OBJECTS (WEALTH)	
	29
Coins, gold, beads, glass bracelet, glass bottles, worded stone objects, pebbles, quartz object.	
Total =	29

TABLE A-3a INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
 PERIOD II: SITE 1 (AGRA)
 Categories: Lead, Brown, Ochre, Grey, and Celadon Wares

Site	Burial	Ceramics	Depth	L J A R L E T	L T E O T	L W A T P E O R D	B J A R T	B J A R T	B B O U T M E E	B T T O U T E E T	B V A S X L	B B O W L	O J A R E T	O J A R E T	O T U O M B L E R	O B O U T E E N D E R	O S A U T A N T P L O I	O O O O O O O	G B O W L	G D I O S H	G S A U C E R	G J A R A E L E E T	G T A T P E N D R	G W U L O X	G F L O P	C J A R E T	C D I R S H	C S A U C E R	C B O W L	C K U N C E	C I B O X	C O A C E	C T E P O T			
1	50	16	85	1	.	.	1	.	1	.	.	1	.	.	2	2	1	2	.	.	1	.	.	1	.	.
1	83	15	115	3	1	.	.	.	1	4	.	.	1	.	.	.	1	.
1	78	11	103	.	1	1	2	2
1	60	10	103	.	.	.	2	.	1	1	1	2	.	.	1	.	1	.	.
1	1	9	109	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.	1	1	2	1	.	.	.	.	.
1	19	9	111	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	1	3	1	.	.	.	.	.	.	.	.	.	.	.	.
1	26	9	93	1	1	2	.	1	.	1	.	.	1	.
1	65	9	95	.	.	.	1	.	.	.	.	.	.	2	.	.	.	.	.	.	1	1	1	1	.	.	.	.	1	.	.	.	.	.
1	95	9	95	.	.	.	.	2	.	.	.	.	.	.	1	.	.	.	.	.	1	.	2	.	1	.	.	.	1	.	1	.	.	.	.
1	96	8	83	1	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.	.	1	1	.	.	.	.	.	.
1	98	8	103	.	.	.	2	.	.	.	.	1	.	1	.	.	.	.	.	.	.	.	.	2	.	.	.	2	.	.	.	.	.	.	.
1	171	8	95	.	1	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	1	.	.	1	1	.	.	.
1	2	7	101	.	.	.	1	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	3	1	.	1	.	.	.	.	.
1	54	7	134	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
1	58	7	88	.	.	.	1	1	1	1
1	70	7	111	.	.	.	1	.	1	1	1	1	1	1	.
1	100	7	59	.	.	.	2	.	.	.	.	.	.	.	.	1	.	.	.	.	1	1	.	.	.	.	.	2	.	.	.	.	.	.	.
1	102	7	65	.	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	2	.	2	.	.	.	.	.	.	.
1	134	7	78	.	.	.	1	1	1	1
1	140	7	81	1	.	.	.	.	.	.	.	.	.	1	2	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
1	175	7	109	1	.	2	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	1	.	.	.	.	.	.
1	179	7	82	.	.	.	.	3	.	.	.	.	.	.	1	.	.	.	.	.	1	.	.	.	.	.	.	1	.	.	1	.	.	.	.
1	75	6	101	.	.	.	.	.	2	.	.	.	.	3	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	76	6	100	.	.	.	.	.	.	.	.	.	.	1	.	.	.	1	.	.	.	1	.	.	.	.	.	2	.	1	.	.	.	.	.
1	88	6	56	.	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.	.	.	.	2	.	.	.	.	.
1	97	6	110	.	.	.	1	.	.	.	.	.	.	.	1	.	.	.	.	.	1	1	.	.	.	.	.	1	1	.	.	.	.	.	.
1	120	6	96	1	.	.	.	3	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	1	.	.	.	.	.
1	126	6	87	.	.	.	1	.	1	.	.	.	.	.	.	.	1	.	.	.	.	1	.	.	.	.	.	1	1	.	.	.	.	.	.
1	21	5	97	1	1
1	24	5	85	.	.	.	.	1	.	.	.	.	.	1	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.

TABLE A-3a INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
 PERIOD II: SITE 1 (AGRA)
 Categories: Lead, Brown, Ochre, Grey, and Celadon Wares

Site Burial Ceramics Depth				L L L	B B B B B B B B	O O O O O O O O	G G G G G G G G	C C C C C C C C
				J T W	J J B T T V B B	J J T B S B T K	B D S J T W K F B	J D S B K I B C T
				A E A	A A O U E A O O	A A U O A O E E	O I A A E A U L O	A I A O U N O U E
				R A T	R R T M A S X W	R R M W U T A N	W S U R A T A O X	R S U W A C X P A
				L P E	L T B P E L	L B L C T P D	L H C L P E N W	L H C L N E
				E O R	E L L O	E L E L O I	E E O R E	E E N O
				T T D	T E E T	T E R E T	R T T D R	T R C T
				R	R	R	R P	E
1	27	5	96	.	.	1	1	.
1	40	5	100	.	.	1	1	2
1	47	5	125	.	.	1	.	2
1	57	5	95	.	1	1	.	1
1	108	5	50	.	1	1	1	.
1	133	5	101	.	.	.	2	.
1	141	5	89	.	1	1	1	.
1	25	4	55	.	.	1	.	.
1	28	4	104	.	1	.	1	2
1	30	4	96	.	.	1	2	.
1	34	4	98	1	.	.	.	1
1	39	4	95	.	.	1	1	.
1	45	4	78	1	.	1	.	2
1	59	4	61	.	1	1	.	.
1	109	4	95	1	1	.	.	.
1	111	4	53	.	1	.	.	.
1	125	4	109	.	.	.	1	1
1	158	4	80	.	.	1	1	.
1	173	4	107	.	1	.	.	1
1	180	4	102	.	3	.	1	.
1	8	3	.	.	.	1	1	.
1	38	3	75	.	2	1	.	.
1	43	3	122	.	.	.	.	1
1	44	3	106	.	1	.	1	1
1	64	3	20	.	.	.	1	1
1	77	3	75	.	1	.	1	1
1	79	3	110	.	.	.	2	.
1	82	3	100	.	.	.	.	1
1	90	3	55	.	.	.	1	1
1	106	3	100	.	1	.	.	1

TABLE A-3a INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
 PERIOD II: SITE 1 (AGRA)
 Categories: Lead, Brown, Ochre, Grey, and Celadon Wares

Site	Burial	Ceramics	Depth	L	L	L	B	B	B	B	B	B	B	O	O	O	O	O	O	O	G	G	G	G	G	G	G	G	C	C	C	C	C	C	C	C			
				J	T	W	J	J	B	T	T	V	B	J	J	T	B	S	B	T	B	D	S	J	T	W	K	F	B	J	D	S	B	K	I	B	C	T	
				A	E	A	A	A	O	U	E	A	O	A	A	U	O	A	O	E	E	O	I	A	A	E	A	U	L	O	A	I	A	O	U	N	O	U	E
				R	A	T	R	R	T	M	A	S	X	R	R	M	W	U	T	A	N	W	S	U	R	A	T	A	O	X	R	S	U	W	A	C	X	P	A
				L	P	E	L	T	B	P	E	L		L	B	L	C	T	P	D		L	H	C	L	P	E	N	W		L	H	C	L	N	E		P	
				E	O	R	E	L	L	O				E	L	E	L	O	I			E	E	O	R	E			E	E			N			O			
				T	T	D	T	E	E	T				T	E	R	E	T				R	T	T	D	R	P			T	R			C			T		
				R										R																									
1	113	3	70	1	1	1
1	159	3	83	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	168	3	70	.	.	.	.	.	.	.	.	.	.	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	4	2	98	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	9	2	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	12	2	105	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
1	49	2	115	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	1	.	.	.	.	.	.	.
1	66	2	70	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	80	2	95	.	.	.	.	.	1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	81	2	95	.	.	.	.	.	.	.	.	.	.	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	84	2	84	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
1	107	2	83	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
1	112	2	77	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
1	115	2	80	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
1	135	2	91	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
1	160	2	78	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	167	2	95	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	169	2	120	.	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	181	2	85	1	1
1	182	2	98	1	1
1	6	1	95	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	13	1	110	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	16	1	89	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	17	1	68	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	18	1	102	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	22	1	83	1
1	29	1	79	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
1	46	1	83	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	48	1	127	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	51	1	99	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

TABLE A-3a INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
 PERIOD II: SITE 1 (AGRA)
 Categories: Lead, Brown, Ochre, Grey, and Celadon Wares

Site	Burial	Ceramics	Depth	L J A L E T	L T E R T	L W A T P E O R D	B J A R L E T	B J A R L E T	B B O T T M E T	B T T M E T	B V A S X L	B B O O W L	O J A R L E T	O J A R L E T	O T U R M B L E R	O B O A U T E R	O D O E T R E T	O D O E T R E T	O D O E T R E T	G B O W L	G D I W S	G S A U R C E R T	G J A R A T E O R T	G T A T E O R D	G W A T E N D R	G K U A O W E R P	G F L O X	C J A R L E T	C D I S R H C E T R	C S A O W L N E C E	C B K I U N C E N C E	C C I N O X P A P O T	C C T E U P A P O T						
1	52	1	92	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	53	1	69	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	55	1	67	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	61	1	78	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	68	1	63	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	71	1	66	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	72	1	89	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	85	1	111	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	87	1	56	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	91	1	54	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	92	1	85	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	103	1	102	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	104	1	72	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	118	1	105	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	119	1	80	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	142	1	58	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	143	1	56	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	145	1	85	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	149	1	81	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	151	1	57	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	155	1	107	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	174	1	101	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	10	.	89	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	20	.	95	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	23	.	91	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	36	.	114	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	41	.	102	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	86	.	106	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	99	.	87	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	121	.	74	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

TABLE A-3a INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
 PERIOD II: SITE 1 (AGRA)
 Categories: Lead, Brown, Ochre, Grey, and Celadon Wares

Site	Burial	Ceramics	Depth	L	L	L	B	B	B	B	B	B	B	B	O	O	O	O	O	O	O	G	G	G	G	G	G	G	C	C	C	C	C	C	C							
				J	T	W	J	J	B	T	T	V	B	B	J	J	T	B	S	B	T	K	B	D	S	J	T	W	K	F	B	J	D	S	B	K	I	B	C	T		
				A	E	A	A	A	O	U	E	A	O	O	A	A	U	O	A	U	T	A	N	A	O	I	A	A	E	A	U	L	O	A	I	A	O	U	N	O	U	E
				R	A	T	R	R	T	M	A	S	X	W	R	R	M	W	U	T	A	N	W	S	U	R	A	T	A	O	X	R	S	U	W	A	C	X	P	A		
				L	P	E	L	T	B	P	E	L	L	B	L	C	T	P	D	L	H	C	L	P	E	N	W	L	H	C	L	N	E	P	O	T						
				E	O	R	E	L	L	O	E	L	E	L	O	I	E	L	E	L	O	I	E	E	O	R	E	R	P	E	T	R	E		N		O					
T	T	D	T	E	E	T	T	E	R	E	T		T	E	R	E	T				R	T	T	D	R	P				C		T										
						R			R					R																												
1	122	.	87	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	123	.	66	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	124	.	112	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	132	.	105	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	144	.	95	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	148	.	68	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	157	.	92	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	165	.	78	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	170	.	100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

TABLE A-3b INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
PERIOD II: SITE 1 (AGRA)
Categories: Whitewares, Miscellaneous ceramics, Earthenwares,
Iron, Bronze, Lead, Utilitarian, and Wealth

Site	Burial	Ceramics	Depth	T B O L	T D I H	T S A U S C E R	T V A O X E	T B O T P T	C H T C U P	C H B B W L	C H B B O X	S C H F I G T M	S C H J A R L I N	S C H B K A U I N R E	S B C L H W O I T E	M I S C E R	E P O T I D I	E K E O N W L I	E B O T O V E R T A N	E S C O V E R T A N	I B L A D G E	I F R A A D G E	B R O N Z E	L B O R A J C E C L T	L B O R A J C E C L T	S P I N C K P L E R T	S I S N C K P L E R T	M I S C E R	WE AL TH *			
1	50	16	85	1	1											1																1
1	83	15	115		3	1																										2
1	78	11	103		1		1	1					1				1															
1	60	10	103														1		2		1	1										
1	1	9	109	1														1														7
1	19	9	111	1													1															
1	26	9	93	2														1					1									
1	65	9	95														1															
1	95	9	95															1	2													
1	96	8	83	1	1													1														
1	98	8	103																			1		1								18
1	171	8	95																			3										
1	2	7	101															1				1										
1	54	7	134					2	1			1			2			1														
1	58	7	88	1	1	1												3				1										
1	70	7	111																													
1	100	7	59	1														1														
1	102	7	65																		1											
1	134	7	78	1			1																									
1	140	7	81	1																												
1	175	7	109																	1		1										
1	179	7	82																			1										
1	75	6	101																													
1	76	6	100															2				1										
1	88	6	56															1						2								
1	97	6	110																													
1	120	6	96																1					1								
1	126	6	87																													
1	21	5	97								1	1		1																		
1	24	5	85	1	1																											

* See Key (following Table 3.b)

TABLE A-3b INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
PERIOD II: SITE 1 (AGRA)
Categories: Whitewares, Miscellaneous ceramics, Earthenwares,
Iron, Bronze, Lead, Utilitarian, and Wealth

[illegible]

* See Key (following Table 3.b)

TABLE A-3b INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
 PERIOD II: SITE 1 (AGRA)
 Categories: Whitewares, Miscellaneous ceramics, Earthenwares,
 Iron, Bronze, Lead, Utilitarian, and Wealth

Site	Burial	Ceramics	Depth	T B O W L	T D I S H	T S A U S C E R	T V A O X E	T B O T X E A P T	C H H C U O P L	C H H B O W L	C H H B O X I G	S C C H F I R L T M	S C C H H J A L I N M	S C C H H B K U O I R E	S B C L H W H I O U T E D	M I S C E R	E P O T D L I	E K E O N W D L	E B O T O V E R E	E S C O V E R T A N	E P O V E R T A N	I B L A D G E	I F R A D G E	B R O N Z E	L B O R B A J C E C L T	S P I I S N N C D K P L E O E R T	N M I S C P O E R T	WE AL TH *						
1	113	3	70
1	159	3	83	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	168	3	70	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	4	2	98	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	9	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
1	12	2	105	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	49	2	115	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	66	2	70	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	80	2	95	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	81	2	95	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	84	2	84	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
1	107	2	83	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	112	2	77	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	115	2	80	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	135	2	91	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	160	2	78	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	1	.	.	.	.	.	.	.	.
1	167	2	95	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	169	2	120	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	181	2	85	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	182	2	98	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	6	1	95	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	13	1	110	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	1	.	.	.	.	.	1	.	.	.	
1	16	1	89	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	17	1	68	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	18	1	102	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	22	1	83	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	29	1	79	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	46	1	83	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	48	1	127	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
1	51	1	99	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

* See Key (following Table 3.b)

TABLE A-3b INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
 PERIOD II: SITE 1 (AGRA)
 Categories: Whitewares, Miscellaneous ceramics, Earthenwares,
 Iron, Bronze, Lead, Utilitarian, and Wealth

Site	Burial	Ceramics	Depth	T	T	T	T	C	C	C	C	S	S	S	S	B	M	E	E	E	E	E	I	I	B	L	L	S	N	M	WE
				B	D	S	V	B	H	H	H	C	C	C	C	C	I	P	K	B	S	C	P	B	F	B	O	P	S	I	AL
				O	I	A	A	O	T	C	B	B	H	H	H	H	S	O	E	O	T	O	O	L	R	R	B	I	I	S	TH
				W	S	U	S	X	E	U	O	O	F	J	B	K	C	T	N	W	O	V	T	A	A	A	J	N	N	C	*
				L	H	C	E		A	P	W	X	I	A	A	U	O		D	L	V	E	S	D	G	C	E	D	K	P	
								E	P	L		G	R	L	A	U	E		I	E	R	T	E		E	E	C	L	E	O	
								R	T				L	I	N	R	E									E	C	L	E	O	
												T	M	D												T					
1	52	1	92	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	53	1	69	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	55	1	67	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	61	1	78	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	68	1	63	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	71	1	66	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	72	1	89	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	85	1	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	87	1	56	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	91	1	54	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	92	1	85	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	103	1	102	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.
1	104	1	72	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	118	1	105	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	119	1	80	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	142	1	58	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	143	1	56	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	145	1	85	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	149	1	81	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	151	1	57	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	155	1	107	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	174	1	101	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	10	.	89	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	20	.	95	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	23	.	91	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	36	.	114	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
1	41	.	102	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.
1	86	.	106	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
1	99	.	87	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1	121	.	74	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.

* See Key (following Table 3.b)

TABLE A-3b INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
PERIOD II: SITE 1 (AGRA)
Categories: Whitewares, Miscellaneous ceramics, Earthenwares,
Iron, Bronze, Lead, Utilitarian, and Wealth

[illegible]

* See Key (following Table 3.b)

FOOTNOTE TO TABLE A-3b

Key to Wealth column:

Burial #50: 1 quartz object

Burial #83: 2 gold earrings

Burial #1: 7 coins (Chinese)

Burial #98: 9 coins; pieces of gold jewellery; fragments
of 3 tiny glass bottles; 3 rounded pebbles;
beads; 1 small piece of worked stone.

Burial #9: 1 opaque glass bracelet.

Key to Bronze column:

Burial #98: 1 bronze mirror

Burial #88: 1 bronze disc; 1 bronze bowl.

Burial #120: 1 bronze ring

Burial #109: 1 bronze ring

Key to Miscellaneous Pottery (Miscpot) column:

Burial #104: 2 pottery discs

TABLE A-4a INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
 PERIOD II: SITE 2 (MENDOZA)
 Categories: Lead, Brown, Ochre, Grey, and Celadon Wares

Site	Burial	Ceramics	Depth	L J A L E T	L T E T	L W A T P E R	B J A L E T	B J A R T	B B O T T E E	B T T M L O E T	B V A S X W L	B B O O X L	O J A R L E T	O J A R R E T	O T U M B L E R	O B S U O M W L E R	O S U T C L E R	O B T A N T P D O I	O K E E N D I	G B O W L H	G D I S C E R	G S A U R C E R	G J A R A L E T	G T E A T P E N D R	G W U A O L O X	G K F B O X	G F L O X	C J A R L E T	C D I S C E R	C S A O W L E R	C B O U N D E N C E	C K U N A C N C E	C I N O X E	C B O U P O T	C T E A P O T				
2	28	23	98	.	1	.	5	1	6	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	3	2	.	1	.	.	.	.	.	.
2	21	19	75	.	.	.	.	1	3	2	.	2	.	.	.	1	1	.	.	.	.	2	.	.	.	.	.	.	3	.	.	.	.	1	.	.	.	.
2	20	18	.	1	.	.	4	.	1	1	.	.	.	.	1	4	2	1	.	.	.	1	.	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.
2	17	15	99	.	.	.	2	.	3	.	.	.	1	.	1	2	.	1	.	.	.	1	.	.	.	.	.	.	3	.	.	1	.	.	.	.	.	.
2	3	14	93	.	.	.	1	.	1	1	.	.	.	.	.	3	.	.	.	.	.	.	1	.	.	.	.	.	1	1	.	1	.	.	.	.	.	.
2	1	11	78	1	.	.	2	.	.	.	.	.	.	.	1	.	1	.	.	.	.	.	2	1	.	.	.	.	1	.	.	1	.	.	.	.	.	.
2	4	6	80	1	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.
2	15	6	80	.	.	.	2	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	19	6	70	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	1	.	1	.	2	.	.	.	.	.	.	.
2	26	6	76	.	.	.	1	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	3	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
2	32	6	73	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
2	58	6	100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
2	13	5	61	.	.	.	.	.	1	.	.	.	.	.	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	16	5	71	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	1	.	.	.	.	.	.
2	36	5	91	.	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
2	6	4	73	1	1
2	22	4	88	.	.	.	.	.	.	1	.	1	.	.	1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	27	4	75	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	5	3	60	.	.	.	1	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	12	3	58	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	14	3	64	1	1	1
2	25	3	115	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.
2	41	3	92	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	45	3	70	.	.	.	.	.	.	1	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	31	2	53	1	1
2	42	2	87	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	43	2	89	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	44	2	15	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	2	1	54	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	8	1	83	1

TABLE A-4a INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
 PERIOD II: SITE 2 (MENDOZA)
 Categories: Lead, Brown, Ochre, Grey, and Celadon Wares

Site Burial Ceramics Depth				L L L	B B B B B B B	O O O O O O O	G G G G G G G G	C C C C C C C C
				J T W	J J B T T V B B	J J T B S B T K	B D S J T W K F B	J D S B K I B C T
				A E A	A A O U E A O O	A A U O A O E E	O I A A E A U L O	A I A O U N O U E
				R A T	R R T M A S X W	R R M W U T A N	W S U R A T A O X	R S U W A C X P A
				L P E	L T B P E L	L B L C T P D	L H C L P E N W	L H C L N E P
				E O R	E L L O	E L E L O I	E E O R E	E E N O
				T T D	T E E T	T E R E T	R T T D R	T R C T
				R	R	R	R P	E
2	23	1	96	.	.	.	.	.
2	29	1	70	.	.	.	.	.
2	33	1	80	.	.	1	.	.
2	38	1	87	.	.	.	.	1
2	46	1	70	.	.	1	.	.
2	47	1	52	.	1	.	.	.
2	56	1	54	.	.	1	.	.
2	18	.	96	.	.	.	.	.
2	24	.	95	.	.	.	.	.
2	30	.	70	.	.	.	.	.
2	48	.	67	.	.	.	.	.
2	49	.	81	.	.	.	.	.
2	51	.	42	.	.	.	.	.
2	54	.	90	.	.	.	.	.
2	55	.	95	.	.	.	.	.

TABLE A-4b INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
 PERIOD II: SITE 2 (MENDOZA)
 Categories: Whitewares, Miscellaneous ceramics, Earthenwares,
 Iron, Bronze, Lead, Utilitarian, and Wealth

Site	Burial	Ceramics	Depth	T B O W L	T D I S H	T S A S U C E R	T V A O X	T B O X	C H T E P T	C H C B U P L	C H B O W X	C H O F I G L I N T M	S C C H J A R L I N D	S C C H B K A U O I N R E	S C C H G H O I D	B L W H I T E	M I S C E R	E P O T D I	E K E N W L I	E B S T O V E R T A N	E C P O V E S T A N	I B L R A D G E	I F R A D G E	B R O N Z E	L B O R A C E L T	L O R A J C E L T	S P I N N C D L E R T	N S I N C P O T	M I S C E R T	WE AL TH *				
2	28	23	98	1	.	.	.	.	.	.	.	.	.	.	1	.	.	.	1	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
2	21	19	75	.	1	.	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	20	18	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.
2	17	15	99	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	1	.	1	.	.	2	.	.	.	.	.	.	.	.
2	3	14	93	3	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
2	1	11	78	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.
2	4	6	80	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	15	6	80	.	.	.	1	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	19	6	70	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.
2	26	6	76	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	32	6	73	1	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	58	6	100	.	.	.	.	.	.	2	1	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	13	5	61	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	16	5	71	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	36	5	91	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	6	4	73	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	22	4	88	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	27	4	75	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
2	5	3	60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	12	3	58	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	14	3	64	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	25	3	115	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	41	3	92	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	45	3	70	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	31	2	53	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	42	2	87	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	43	2	89	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	44	2	15	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	2	1	54	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
2	8	1	83	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

* See Key (following Table 3.b)

TABLE A-4b INHUMATION BURIALS AND ASSOCIATED GRAVE GOODS
PERIOD II: SITE 2 (MENDOZA)
Categories: Whitewares, Miscellaneous ceramics, Earthenwares,
Iron, Bronze, Lead, Utilitarian, and Wealth

[illegible]

* See Key (following Table 3.b)

FOOTNOTE TO TABLE A-4b

Key to Bronze column:

Burial #3: fragments of bronze ornament.

Key to Miscellaneous Pottery (Miscpot) column:

Burial #48: phallic pottery object.

TABLE A-5. BURIALS WITH POTTERY IN AGRA AND MENDOZA

	ANY POTS (TRADE CERAMICS AND/OR EARTHENWARE)				TRADE CERAMICS				EARTHENWARE			
	AGRA		MENDOZA		AGRA		MENDOZA		AGRA		MENDOZA	
No. of Pots Per Burial	No. of Burials	%	No. of Burials	%	No. of Burials	%	No. of Burials	%	No. of Burials	%	No. of Burials	%
0	5	3.9	3	6.7	17	13.2	8	17.8	82	63.6	31	68.9
1	37	28.7	10	22.2	21	24.8	9	20.0	37	28.7	10	22.2
2	19	14.7	6	13.3	17	13.2	4	8.9	7	5.4	2	4.4
3	13	10.1	7	15.6	13	10.1	6	13.3	2	1.6	1	2.2
4	15	11.6	2	4.4	13	10.1	3	6.7	1	0.8	1	2.2
5	6	4.7	5	11.1	9	7.0	3	6.7				
6	9	0.7	5	11.1	6	4.7	6	13.3				
7	6	4.7			10	7.8						
8	8	6.2	1	2.2	3	2.3						
9	2	1.6	5	3.9								
10	4	3.1	1	2.2								
11	1	0.8	1	2.2	1	0.8	1	2.2				
12	1	0.8										

TABLE A-5. BURIALS WITH POTTERY IN AGRA AND MENDOZA

	ANY POTS (TRADE CERAMICS AND/OR EARTHENWARE)				TRADE CERAMICS				EARTHENWARE			
	AGRA		MENDOZA		AGRA		MENDOZA		AGRA		MENDOZA	
No. of Pots Per Burial	No. of Burials	%	No. of Burials	%	No. of Burials	%	No. of Burials	%	No. of Burials	%	No. of Burials	%
13												
14	1	0.8	1	2.2			1	2.2				
15	1	0.8	1	2.2	1	0.8	1	2.2				
16	1	0.8			1	0.8						
17												
18			1	2.2			1	2.2				
19			1	2.2			1	2.2				
20												
21												
22												
23			1	2.2			1	2.2				
N=	129		45		129		45		129		45	

TABLE A-6: Sample size, mean, standard deviation (S.D.) and coefficient of variation (C.V.) of trade ceramics from wealthy and poor groups in Agra and Mendoza

Site or group	Sample Size	% of Total	Total No. of Pots	Mean No. of Pots per burial	S.D.	Variance	(%) C.V.
AGRA							
Total group	129	100	429	3.3	3.1	9.6	93.2
Wealthy group	37	28.7	272	7.4	2.5	6.4	34.4
Poor group	92	71.3	157	1.7	1.3	1.7	76.6
MENDOZA							
Total group	45	100	198	4.4	5.4	29.6	123.7
Wealthy group	15	33.3	151	10.1	6.1	101.3	60.9
Poor group	30	66.7	47	1.6	1.4	1.8	86.6

TABLE A-7: List of trade ceramic categories by glaze type.

L	=	LEAD
B	=	BROWN
O	=	OCHRE
G	=	GRAY
C	=	CELADON
W	=	WHITEWARES: TE-TUA, CH'ING-PAI, SPOTTED CH'ING PAI, · EARLY BLUE and WHITE, MISC. CERAMICS

TABLE A-8: List of trade ceramic categories by function.

1. CONTAINERS	2. DISHES	3. OTHER
L1 = LJARLET LTEAPOT	L2 = 0	L3 = LWATERDR
B1 = BJARLET BJAR BBOTTLE BTUMBLER BTEAPOT BVASE	B2 = BBOX BBOWL	
O1 = OJARLET OJAR OTUMBLER OBOTTLE OTEAPOT OKENDI	O2 = OBOWL OSAUCER	
G1 = GJARLET GTEAPOT GKUAN GFLOWERP	G2 = GBOWL GDISH GSAUCER GBOX	G3 = GWATERDR
C1 = CJARLET CKUAN CCUP CTEAPOT	C2 = CDISH CSAUCER CBOWL CBOX	C3 = CINCENSE
W1 = WVASE CHTEAPOT CHCUP SCHJARLET SCHBALIM SCHKUAN SCHGOURD BLWHITE	W2 = TBOWL TDISH TSAUCER TBOX CHBOWL CHBOX	W3 = SCHFIG

TABLE A-9. WEALTHY BURIALS AND ASSOCIATED ARTIFACTS (GLAZE CATEGORIES)

PERIOD II: SITE 1 (AGRA)

Categories: Lead, Brown, Ochre, Gray, Celadon, Whitewares

Site	Burial	Ceramics	L	B	O	G	C	W	E A R T H W A R	I R O N	B R O N Z E	L E A D	U T I L	WE AL TH
1	50	16	1	3	2	3	4	3	.	.	.	.	.	1
1	83	15	.	.	3	2	6	4	.	.	.	2	.	2
1	78	11	1	.	1	.	4	5	.	.	.	.	.	.
1	60	10	.	3	1	1	4	1	4	1	.	.	.	.
1	1	9	.	1	.	4	3	1	1	1	.	.	.	7
1	19	9	.	2	.	5	.	2	.	.	.	.	.	.
1	26	9	.	1	1	.	5	2	1	1	.	.	.	.
1	65	9	.	1	2	4	1	1	1	.	.	.	.	.
1	95	9	.	2	1	4	2	.	3	.	.	.	.	.
1	96	8	1	1	.	2	2	2	1	.	.	.	.	.
1	98	8	.	3	1	2	2	.	.	1	1	1	.	18
1	171	8	1	2	.	.	5	.	.	3	.	.	.	.
1	2	7	.	1	1	.	5	.	1	1	.	.	.	.
1	54	7	.	.	.	1	.	6	1	.	.	.	.	.
1	58	7	.	1	1	.	2	3	3	1	.	.	.	.
1	70	7	.	2	1	1	3	.	.	.	.	.	.	.
1	100	7	.	2	.	2	2	1	1	.	.	.	.	.
1	102	7	.	2	.	3	2	.	1	.	.	.	.	.
1	134	7	.	1	.	2	2	2	.	.	.	.	.	.
1	140	7	1	.	4	.	1	1	.	.	.	.	.	.
1	175	7	3	2	.	1	1	.	1	1	.	.	.	.
1	179	7	.	3	1	1	2	.	.	1	.	.	.	.
1	75	6	.	2	4	.	.	.	.	.	.	.	.	.
1	76	6	.	.	2	1	3	.	2	1	.	.	.	.
1	88	6	.	2	.	2	2	.	1	.	2	.	.	.
1	97	6	.	1	1	2	2	.	.	.	.	.	.	.
1	120	6	1	3	.	1	1	.	1	.	1	.	.	.
1	126	6	.	2	1	1	2	.	.	.	.	.	.	.
1	21	5	.	1	.	.	1	3	.	.	.	.	.	.
1	24	5	.	1	1	1	.	2	.	.	.	.	.	.

TABLE A-9. WEALTHY BURIALS AND ASSOCIATED ARTIFACTS (GLAZE CATEGORIES)
 PERIOD II: SITE 1 (AGRA)
 Categories: Lead, Brown, Ochre, Gray, Celadon, Whitewares

Site	Burial	Ceramics	L	B	O	G	C	W	E A R T H W A R	I R O N	B R O N Z E	L E A D	U T I L	WE AL TH
1	27	5	.	.	3	1	.	1	.	.	.	.	.	.
1	40	5	.	.	2	.	3	.	1	1	.	.	.	.
1	47	5	.	.	1	.	4	.	1	2	.	.	.	.
1	57	5	.	1	1	.	2	1	1	1	.	.	.	.
1	108	5	.	2	1	1	.	1	.	.	.	.	.	.
1	133	5	.	.	1	3	.	1	1	.	.	.	.	.
1	141	5	.	1	1	1	1	1	1	.	.	.	.	.

TABLE A-10. WEALTHY BURIALS AND ASSOCIATED ARTIFACTS (GLAZE CATEGORIES)
 PERIOD II: SITE 2 (MENDOZA)
 Categories: Lead, Brown, Ochre, Gray, Celadon, Whitewares

Site	Burial	Ceramics	L	B	O	G	C	W	E A R T H W A R	I R O N	B R O N Z E	L E A D	U T I L	WE AL TH
2	28	23	1	13	1	.	6	2	1	1	.	.	.	.
2	21	19	.	8	2	2	4	3	.	.	.	.	.	.
2	20	18	1	6	8	1	2	.	.	2	.	.	.	.
2	17	15	.	6	4	1	4	.	4	2	.	.	.	.
2	3	14	.	3	3	1	3	4	.	.	1	.	.	.
2	1	11	1	2	2	3	2	1	.	2	.	.	.	.
2	4	6	1	2	.	1	2	.	.	.	.	.	.	.
2	15	6	.	2	1	.	.	3	.	.	.	.	.	.
2	19	6	.	1	.	2	3	.	2	.	.	.	.	.
2	26	6	.	1	1	4	.	.	.	.	.	.	.	.
2	32	6	.	.	2	.	1	3	.	.	.	.	.	.
2	58	6	.	.	.	.	1	5	.	.	.	.	.	.
2	13	5	.	1	3	.	.	1	.	.	.	.	.	.
2	16	5	.	.	1	.	2	2	.	.	.	.	.	.
2	36	5	.	2	.	1	1	1	.	.	.	.	.	.

TABLE A-11. WEALTHY BURIALS AND ASSOCIATED ARTIFACTS (BY FORM AND FUNCTION)

PERIOD II: SITE 1 (AGRA)

Categories: Lead, Brown, Ochre, Gray, Celadon, Whitewares
(1=Containers, 2=Openforms, 3=Other)

Site Burial Ceramics			L B O G C W	B O G C W	L G C W	E I B L U WE
			1 1 1 1 1 1	2 2 2 2 2	3 3 3 3	A R R E T A L
						R O O A I T H
						T N N D L
						H Z
						W E
						A
						R
1	50	16	1 2 2 3 4 .	1 . . . 2	. . . . .	. . . . . 1
1	83	15	. . 3 1 6 .	. . 1 . 4	. . . . .	. . . 2 . 2
1	78	11	1 . 1 . 2 2	. . . 2 2	. . . . .	. . . . .
1	60	10	. 3 1 . 1 .	. . 1 2 .	. . 1 . .	4 1
1	1	9	. 1 . 1 2 .	. . 3 1 1	. . . . .	1 1 7
1	19	9	. 2 . . . .	. . 5 . 1	. . . . .	. . . . .
1	26	9	. 1 1 . 4 .	. . . 1 2	. . . . .	1 1
1	65	9	. 1 2 1 . .	. . 3 1 .	. . . . .	1
1	95	9	. 2 1 1 . .	. . 3 2 .	. . . . .	3
1	96	8	1 1 . 1 1 .	. . 1 1 2	. . . . .	1
1	98	8	. 2 1 . 2 .	1 . . . .	. 2 . . .	. 1 1 1 . 18
1	171	8	1 2 . . 3 .	. . . 1 .	. . 1 . .	. 3
1	2	7	. 1 . . 3 .	. 1 . 2 .	. . . . .	1 1
1	54	7	. . . . . 3	. . 1 . 2	. . . 1 .	1
1	58	7	. 1 1 . 1 .	. . . 1 3	. . . . .	3 1
1	70	7	. 2 . . 2 .	. 1 1 1 .	. . . . .	. . . . .
1	100	7	. 2 . . 2 .	. . 2 . 1	. . . . .	1
1	102	7	. 2 . 3 2 .	. . . . .	. . . . .	1
1	134	7	. 1 . . . .	. . 2 2 2	. . . . .	. . . . .
1	140	7	1 . 3 . . .	. 1 . 1 1	. . . . .	. . . . .
1	175	7	1 2 . . . .	. . 1 1 .	2	1 1
1	179	7	. 3 1 . 1 .	. . 1 1 .	. . . . .	. 1
1	75	6	. 2 4 . . .	. . . . .	. . . . .	. . . . .
1	76	6	. . 2 . 2 .	. . 1 1 .	. . . . .	2 1
1	88	6	. 2 . . . .	. . 2 2 .	. . . . .	1 . 2 . . .
1	97	6	. 1 1 . 1 .	. . 2 1 .	. . . . .	. . . . .
1	120	6	1 3 . . . .	. . 1 1 .	. . . . .	1 . 1 . . .
1	126	6	. 2 . . 1 .	. 1 1 1 .	. . . . .	. . . . .
1	21	5	. . . . 1 1	1 . . . 1	. . . 1 .	. . . . .
1	24	5	. 1 1 . . .	. . 1 . 2	. . . . .	. . . . .

TABLE A-11. WEALTHY BURIALS AND ASSOCIATED ARTIFACTS (BY FORM AND FUNCTION)

PERIOD II: SITE 1 (AGRA)

Categories: Lead, Brown, Ochre, Gray, Celadon, Whitewares

(1=Containers, 2=Openforms, 3=Other)

Site Burial Ceramics

L B O G C W
1 1 1 1 1 1B O G C W
2 2 2 2 2L G C W
3 3 3 3E I B L U WE
A R R E T AL
R O O A I TH
T N N D L
H Z
W E
A
R

1	27	5
1	40	5
1	47	5
1	57	5
1	108	5
1	133	5
1	141	5

.	.	3	1	.	.
.	.	2	.	2	.
.	.	1	.	2	.
.	1	1	.	2	1
.	2	.	1	.	.
.	.	1	.	.	.
.	1	1	.	.	.

.	.	.	.	1
.	.	.	1	.
.	.	.	2	.
.
.	1	.	.	1
.	.	3	.	1
.	.	1	1	1

.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

.
1	1	.	.	.	.
1	2	.	.	.	.
1	1	.	.	.	.
.
1	.	.	.	.	.
1	.	.	.	.	.

TABLE A-12. WEALTHY BURIALS AND ASSOCIATED ARTIFACTS (BY FORM AND FUNCTION)

PERIOD II: SITE 2 (MENDOZA)

Categories: Lead, Brown, Ochre, Gray, Celadon, Whitewares

(1=Containers, 2=Openforms, 3=Other)

Site Burial Ceramics

			L B O G C W	B O G C W	L G C W	E I B L U WE
			1 1 1 1 1 1	2 2 2 2 2	3 3 3 3	A R R E T AL
						R O O A I TH
						T N N D L
						H Z
						W E
						A
						R
2	28	23	1 13 . . 3 1	. 1 . 3 1	. . . .	1 1
2	21	19	. 8 . . 3 1	. 2 2 1 2	. . . .	. . . . .
2	20	18	1 6 5 . 1 .	. 3 1 1 .	. . . .	. 2
2	17	15	. 5 3 . 4 .	1 1 1 . .	. . . .	4 2
2	3	14	. 3 3 1 1 .	. . . 2 3	. . . .	. . 1 . . .
2	1	11	1 2 1 3 1 .	. 1 . 1 1	. . . .	. 2
2	4	6	1 2 . . 2 .	. . 1 . .	. . . .	. . . . .
2	15	6	. 2 1 . . 1	. . . . 2	. . . .	. . . . .
2	19	6	. 1 . 1 1 .	. . 1 2 .	. . . .	2
2	26	6	. 1 1 3 . .	. . 1 . .	. . . .	. . . . .
2	32	6	. . 2 . . 1	. . . 1 2	. . . .	. . . . .
2	58	6	. . . . . 4	. . . 1 1	. . . .	. . . . .
2	13	5	. 1 3 . . .	. . . . 1	. . . .	. . . . .
2	16	5	. . 1 . 1 .	. . . 1 2	. . . .	. . . . .
2	36	5	. 2 . . . .	. . 1 1 1	. . . .	. . . . .

TABLE A-13: Period III cremation burials: Agra (Tenazas 1968: Appendix III)

BURIAL NO.	PERIOD	DEPTH IN CM.	LEVEL	SQUARE	BURIAL DIRECTLY IN PITS	BURIAL IN VESSELS	ASSOCIATED GRAVE GOODS	R E M A R K S
105	III	66	4	A-5	X			Located near western corner of southern baulk and in close proximity to cremation burial #5 above in the same square.
11	III	60	4	C-1	X			Found in the b'aulk near western corner.
15	III	38	3	C-3	X			Located near northeast baulk.
42	III	65	4	D-14	X			Located about half a meter northwest from cremation burial #161 in a big broken stoneware jar. Both burials were found near northwest baulk.
32	III	81	4	E-13	X			Located just a few centimeters from cremation burial #33 (below) also in a pit. This appears to be one of the earliest cremation burials encountered. Two other cremations in vessels (#31 and #156) were found in a higher level in the same square.
33	III	75	4	E-13	X			Located near cremation burial #32 (above), and possibly contemporary.
73	III	56	4	G-11	X		Small <u>Ch'ing-pai</u> cover found on top of the pit.	One of two cremation burials in pits in close proximity to five other cremation burials either in broken big stoneware jars or tall ovaloid earthenware jars in the same square.
101	III	56	4	G-11	X			Found near eastern corner of southeast baulk. Cremation burials #136, #137, #138 and #139 all in jars were later discovered when the baulk was partly taken down.
62	III	26	3	H-8	X		<u>Ch'ing-pai</u> pilgrim's flask and celadon jarlet.	The white flash was found on top of the cremation pit which had a depth of about 9 inches. Near the bottom of the pit a celadon jarlet was recovered. In the bottom of the pit traces of red ochre pigments were recovered.

TABLE A-13 (continued)

BURIAL NO.	PERIOD	DEPTH IN CM.	LEVEL	SQUARE	BURIAL DIRECTLY IN PITS	BURIAL IN VESSELS	ASSOCIATED GRAVE GOODS	REMARKS
153	III	28	3	L-7		Big brown stone-ware jar.		Smashed. Located just a few centimeters from cremation burial #154 in a large celadon ribbed kuan.
154	III	33	3	L-7		Large celadon ribbed kuan with large gray dish as cover.	1 gray-glazed dish.	Broken. Located a few centimeters east of cremation burial #153, in a big broken jar.
156	III	30	3	E-13		Big brown stone-ware jar.		Smashed. Located near cremation burial #31 in an ochre-glazed spherical jar. Fragments of charred bones were found in the jar.
161	III	51	3	D-14		Big brown stone-ware jar		Smashed. Located approximately one meter away from cremation burial #42 directly in a pit. Fragments of charred bones were recovered from the jar.
162	III	40	3	C-18		Big brown stone-ware jar.		Smashed. Found in the northwest baulk under a coconut tree.
163	III	25	3	I-7		Big brown stone-ware jar.		Smashed. Located less than half a meter south-east of cremation burial #93 in tall brown jar. Traces of charred bones recovered.
164	III	26	3	I-7		Big brown stone-ware jar.		Smashed. Located about a meter west of cremation burial #93 in a tall brown jar.
166	III	29	3	G-9		Big brown stone-ware jar.		Smashed. Scattered remains of upper part of jar found about a meter east near a big stone.
150	III	37	3	B-6		Big olive-glazed jar with impressed character marks alternating with the 4 ears.		Whole. Near southwest baulk. Examination of contents disclosed just a piece of worked bone. Jar is typical of the smashed cremation vessels. Whether this had a direct connection with the cremation burial complex remains a question.
172	III	45	3	G-5		Big brown stone-ware jar.		Smashed. Located partly in the baulk near east peg.
176	III	26	3	H-5		Big brown stone-ware jar.		Smashed. Located in close proximity to cremation burial #177 and #178 (below). All three are aligned in East-West orientation from eastern corner of the square.
177	III	29	3	H-5		Big brown stone-ware jar.		Smashed. Located between cremation burials #176 and #178.
178	III	27	3	H-5		Big brown stone-ware jar.		Smashed. Located near eastern corner of the square.
3	III	50	3	A-4	X			Found a few centimeters south of cremation burial #117 in big broken brown stoneware jar.
5	III	75	4	A-6	X			Located about one meter east of cremation burial #105 in a pit.

TABLE A-13 (continued)

BURIAL NO.	PERIOD	DEPTH IN CM.	LEVEL	SQUARE	BURIAL DIRECTLY IN PITS	BURIAL IN VESSELS	ASSOCIATED GRAVE GOODS	R E M A R K S
128	III	42	3	E-14		Ochre-glazed spherical 4-eared jar. Painted Tsu-chou-type foliated cover found covering the mouth.	1 painted Tsu-chou cover.	Unbroken. Found in southwest baulk near west peg. Very near cremation burial #42 in a pit, and cremation burial #161 in big broken stoneware jar in square D-14.
114	III	38	3	I-9		Big greenish-olive stoneware jar with 4 ears.	1 T8-hua bowl.	Smashed. Unbroken T8-hua bowl recovered inside the jar. Located near cremation burial #94 in a wine pot in adjacent square.
116	III	45	3	G-10		Big olive brown stoneware 4-eared jar	1 gray-glazed saucer with unglazed ring in the center.	Smashed. Fragments of upper part of body found in the lower half of jar. Broken fragments of a gray-glazed dish were also recovered inside the jar. Found in the same square with cremation burials #130 and #131.
129	III	30	3	B-14		Tall ovaloid earthenware jar.		Slightly cracked. Found lying just over a meter north of cremation burial #35 in an ochre-glazed spherical jar, also broken.
130	III	31	3	G-10		Ochre-glazed ovaloid wide-mouthed jar with 4 ears. White T8-hua bowl as cover.	1 T8-hua bowl.	Slightly cracked. Located in northeast baulk near east peg. Near cremation burial #131 and #116 in the same square and the cluster of cremation burials in the southeast baulk of square G-11.
131	III	40	3	G-10		Ochre-glazed spherical jar with 4 ears.		Smashed. Found in the northwest baulk near north peg, and just a few centimeters near the cluster of cremation burials in square G-11.
136	III	34	3	G-11		Tall ovaloid earthenware jar.		Cracked. Lip rim pressed outwards giving the impression of heavy pressure from above causing the breakage. Found near southeast corner of baulk.
137	III	34	3	C-11		Big brown jar. Large gray-glazed dish as cover.	1 gray-glazed dish.	Broken. Less than a meter east of cremation burial #136 in the same baulk. Had a gray dish as cover, also broken, the fragments of which were recovered inside the jar. This burial forms a rough triangle with cremation burials #138 and #139.
138	III	56	3	G-11		Tall ovaloid earthenware jar		Smashed or cracked. Lying on its side, situated slightly lower than cremation burials #137 and #139. The bottom lies near cremation burial #152.
139	III	37	3	G-11		Big brown stoneware jar, gray-glazed dish as cover.	1 gray-glazed dish.	Broken. Found lying on one side. Mouth facing cremation burial #137. Gray-glazed dish lying vertically near the lip must have served as cover.
152	III	48	3	G-11		Big olive brown stoneware jar; celadon dish, fluted in the interior, may have been a cover.	1 celadon dish.	Smashed. Located near cremation burials #136, #137, #138 and #139. Beside it was a broken celadon dish which may have been a cover or a grave good recalling cremation burials #114 and #116.

TABLE A-13 (continued)

BURIAL NO.	PERIOD	DEPTH IN CM.	LEVEL	SQUARE	BURIAL DIRECTLY IN PITS	BURIAL IN VESSELS	ASSOCIATED GRAVE GOODS	REMARKS
# 31	III	29	3	E-13		Ochre-glazed spherical jar with 4 ears.		Broken near the lip. Laid sideways. Found northwest of cremation burial #156 in big broken jar.
35	III	49	3	B-14		Ochre-glazed spherical jar with 4 ears.		Broken. Situated south of cremation burial (?) #129 in a tall ovaloid earthenware jar in the same square.
56	III	35	3	F-12		Ochre-glazed spherical jar with 4 ears.		Jar almost whole lying a little sideways near the junction of the northeast and northwest baulks.
67	III	37	3	C-17		Small ochre-glazed wide-mouthed 2 eared jar. This had ochre-glazed bowl as cover.	One ochre-glazed bowl.	Except for the broken ochre-glazed bowl which served as a cover, the vessel itself was intact. Burial was laid upside down.
74	III	47	3	H-10		Ochre-glazed wide-mouthed ovaloid-jar with 4 ears. Orange celadon tub-like dish with fluted interior as cover.	2 ochre-glazed bowls. 1 ochre-glazed jarlet. 1 celadon dish.	The only cremation burial in a vessel with an association of clustered grave goods. The vessel was found whole.
89	III	16	3	E-18		Ochre-glazed spherical jar with 4 ears. White Tō-hua dish as cover.	1 Tō-hua bowl.	Broken. Found in southwest baulk sitting in the center of a red ochre basin.
93	III	32	3	I-7		Tall brown ovaloid jar with 2 pairs of adjacent ears & almost pointed bottom.		Vessel whole. Located close to cremation burial #163 in big broken jar with traces of charred bones. This burial was found flanked by cremation burial #163 to the east and cremation burial #164 also in broken big jar to the northwest.
94	III	40	3	I-10		Gray-glazed pouring vessel		Section of lip broken, probably struck by the spade when uncovered. Located in close proximity to cremation burial #114 in big broken stoneware jar in adjacent square.
117	III	50	3	A-4		Big olive-brown stoneware jar with 4 ears.		Smashed. Remains of charred skeletal materials were found scattered around the broken fragments of the jar.
127	III	33	3	D-13		Ochre-glazed spherical 4-eared jar. A deep cream-tinted white bowl as cover	1 white bowl.	Found in northeast baulk. Jar was found cracked.

TABLE A-14: Period III cremation burials: Mendoza (Tenazas 1968: Appendix VII)

BURIAL NO.	PERIOD	DEPTH IN CM.	SQUARE	BURIAL DIRECTLY IN PITS	BURIAL IN VESSELS	ASSOCIATED GRAVE GOODS	R E M A R K S
37	III	34	H-8	X			Found near western corner of the square close to cremation burial #50 in big broken stoneware jar.
39	III	16	E-10		Ochre-glazed spherical jar with 4 ears.		Smashed. Found beside cremation burial #40 in the same square.
40	III	12	E-10		Ochre-glazed spherical jar with 4 ears.		Vessel broken. Found in close proximity to cremation burial #39 in smashed spherical jar.
50	III	32	H-8		Big brown stoneware jar (broken)		Smashed. Found in close proximity to cremation burial #37 in a pit.
59	III	19	D-8		Big brown stoneware jar (broken)		Smashed. Found in similar condition to cremation burial #50.

TABLE A-15: Inhumation burials, Period III: Agra (Tenazas 1968: Appendix III)

BURIAL	SQUARE	PERIOD	DEPTH IN CM.	LEVEL	LEAD-GLAZED WARES	BROWN-GLAZED WARES	OCHRE-GLAZED WARES	GRAY-GLAZED WARES	CELADONS	TE-HUA	CH'ING PAI	SPOTTED CH'ING PAI	EARLY BLUE-AND-WHITE	EARTHEN-WARES	MISCELLANEOUS
14	C-3	III	44	3		1 semi-squat jarlet with 2 ears		1 deep bowl							Fragments of an iron blade.
69	G-10	III	36	3					1 jarlet						
110	K-7	III	30	3		1 tall ovoid jar with small bottom and 2 pairs of adjacent ears. 2 squat jarlets.	2 jarlets	3 bowls 1 saucer 1 deep "flower pot" type	3 jarlets 1 2-fish dish	1 small bottom of cover box 3 shallow bowls				1 round bottomed cooking pot. 1 large stove with foot-rim	
146	C-2	III	45	3		1 miniature water dropper	1 tiny jarlet								
147	E-12	III	42	3					1 dish 1 bowl						

TABLE A-16: Depth of burials : Period III. (Depth in centimetres).
This layer is 15 - 20 cm. from surface @ 45 cm. thick.

Inhumation Burials		Ochre Jar Burials		Brown or Olive-brown jar Burials		Other Glazes		Earthenware		Pit Burials	
Burial No.	Depth	Burial No.	Depth	Burial No.	Depth	Burial No.	Depth	Burial No.	Depth	Burial No.	Depth
A G R A											
14	44	128	42	153	28	154	33	129	30	105	66
69	36	130	31	156	30	94	40	136	34	11	60
110	30	131	40	161	51	Total = 73		138	56	15	38
146	45	31	29	162	40	Mean = 36.5		Total = 120		42	65
147	42	35	49	163	25			Mean = 40		32	81
Total = 197		56	35	164	26					33	75
Mean = 39.4		67	37	166	29					73	56
		74	47	150	37					101	56
		89	16	172	45					62	26
		127	33	176	26					3	50
		Total = 359		177	29					5	75
		Mean = 35.9		178	27					Total = 648	
				114	38					Mean = 58.9	
				116	45						
				137	34						
				139	37						
				152	48						
				93	32						
				117	50						
				Total = 677							
				Mean = 35.6							
M E N D O Z A											
		39	16	50	32					37	34
		40	12	59	19						
		Total = 28		Total = 51							
		Mean = 14		Mean = 25.5							

APPENDIX B

Figures

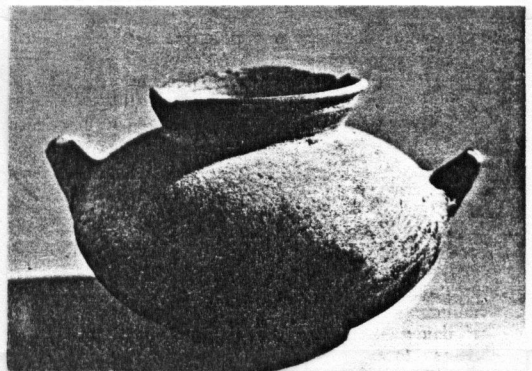
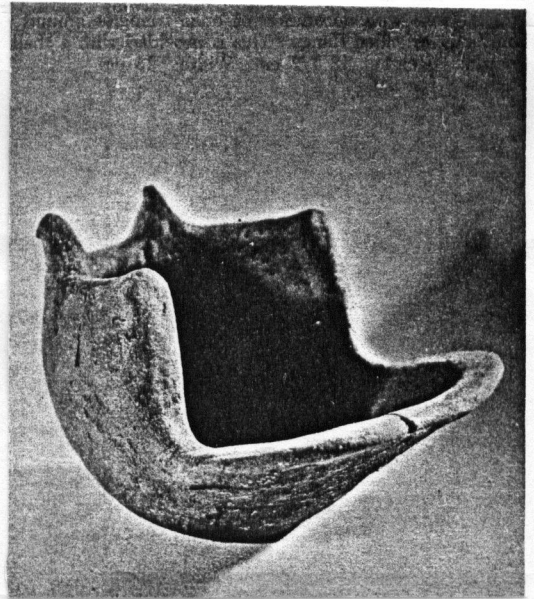
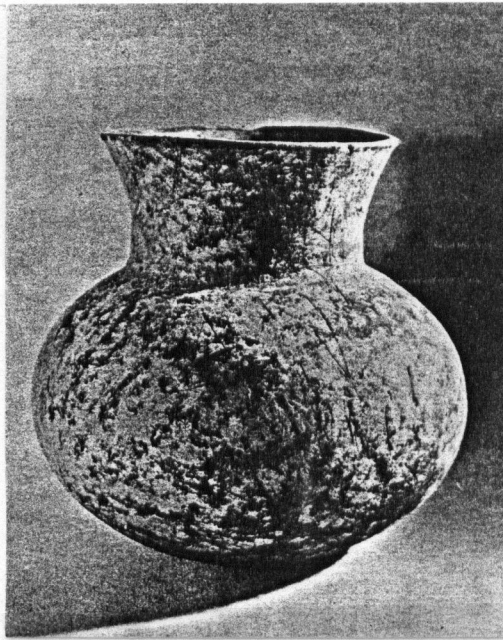


FIGURE B-1: Photo of earthenware pottery from Pila
(Tenazas 1968: Pl.36-39, p.39)

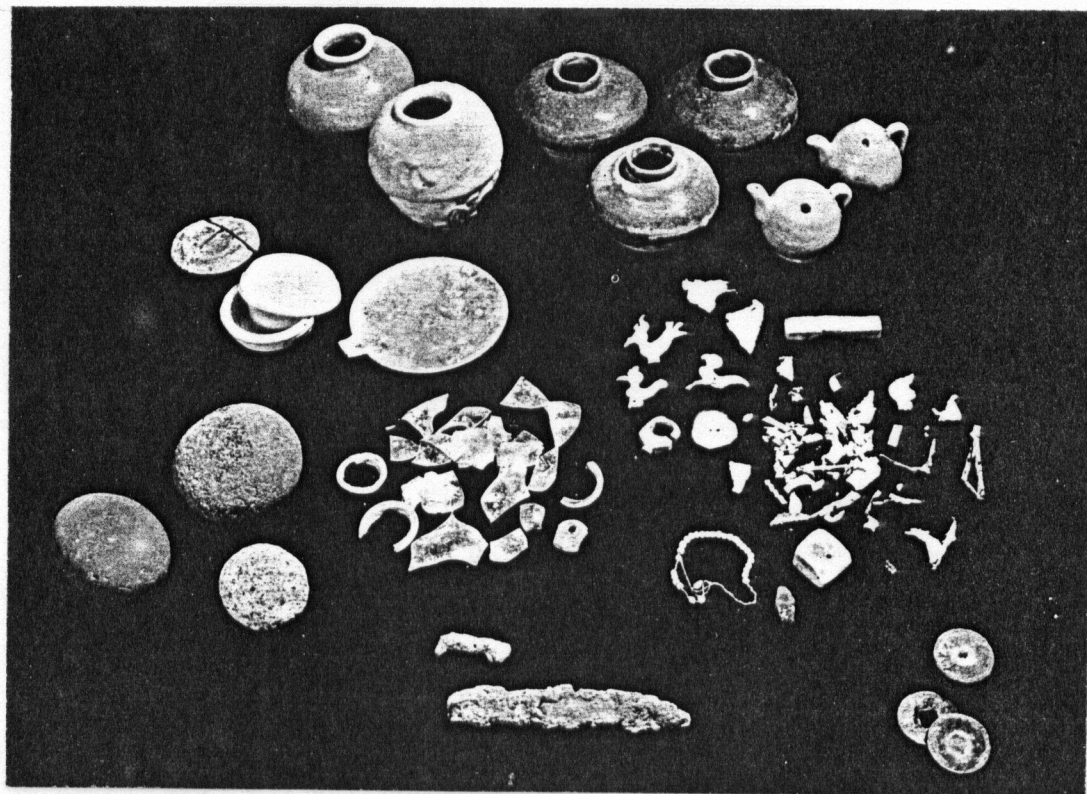


FIGURE B-2: Photo of burial assemblage #98, Pila: Period II
(Tenazas 1968:Pl.8, p.28)



FIGURE B-3: Photo of burial assemblage #28, Pila: Period II
(Tenazas 1968: Pl.9, p.29)



FIGURE B-4: Photo of double burial, Sta. Ana (Guy 1984:122)



FIGURE B-5: Photo of burial #28 in situ, Pila: Period II
(Tenazas 1968: Pl.16, p.32)

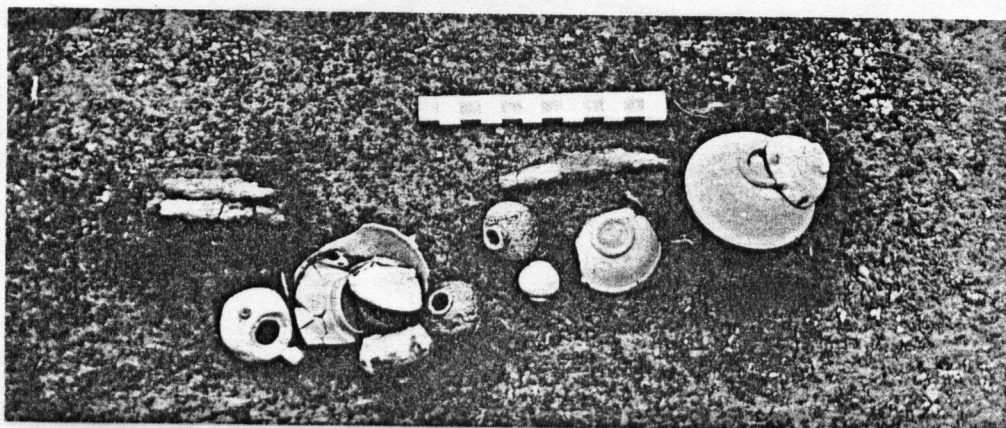


FIGURE B-6: Photo of burial #1 in situ, Pila: Period II
(Tenazas 1968: Pl.14, p.31)



FIGURE B-7: Photo of burial #54 in situ, Pila: Period II
(Tenazas 1968: Pl.10, p.30)

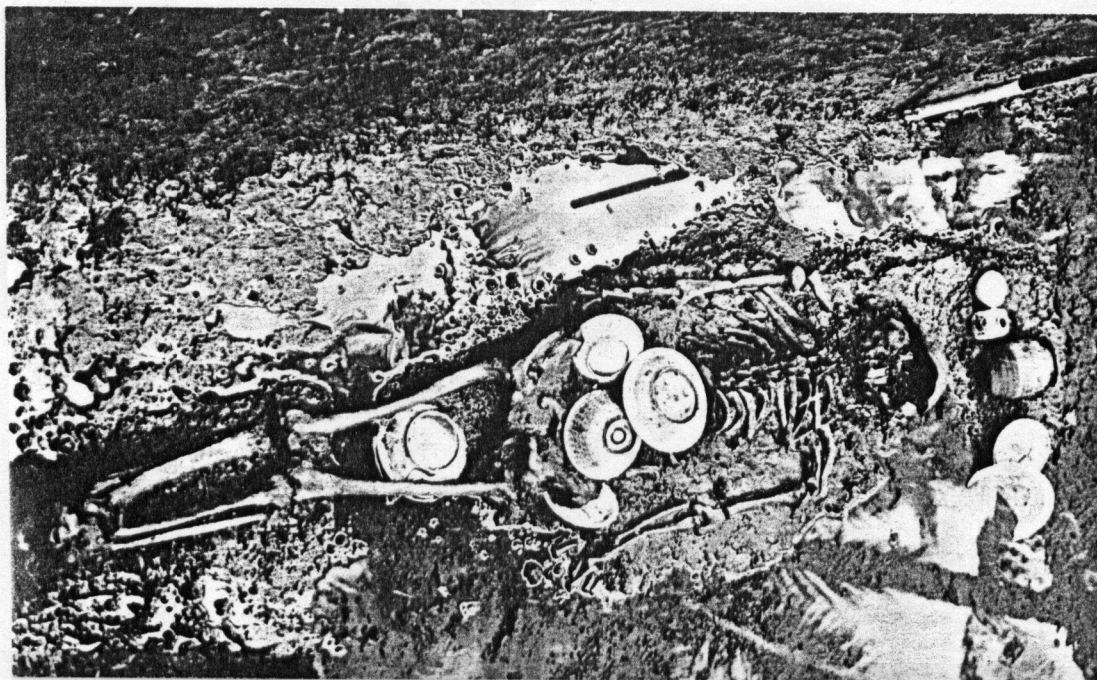


FIGURE B-8: Photo of Ming Period burial, Pila: Period IV
(Tenazas 1968: Pl.17, p.32)

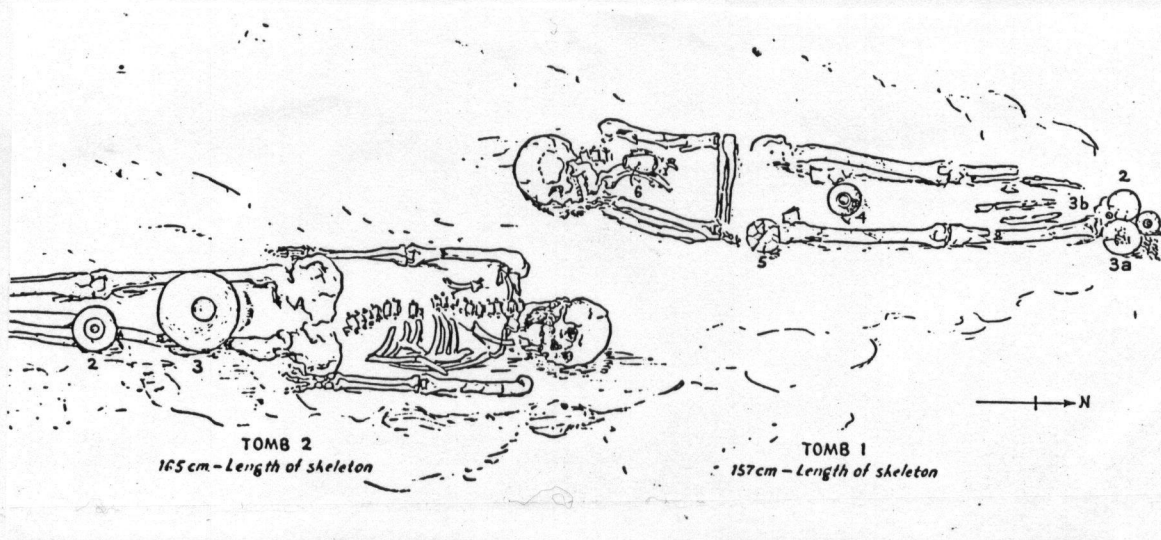


FIGURE B-9: Diagram of Pre-Ming burial, Calatagan
(Janse 1944: Appendix)



FIGURE B-10: Photo of cremation burial #74, with associated grave goods, Pila: Period III (Tenazas 1968: Pl.19, p.33)



FIGURE B-11: Photo of cremation jar burials (smashed),
Pila: Period III (Tenazas 1968: Pl.20, p.33)

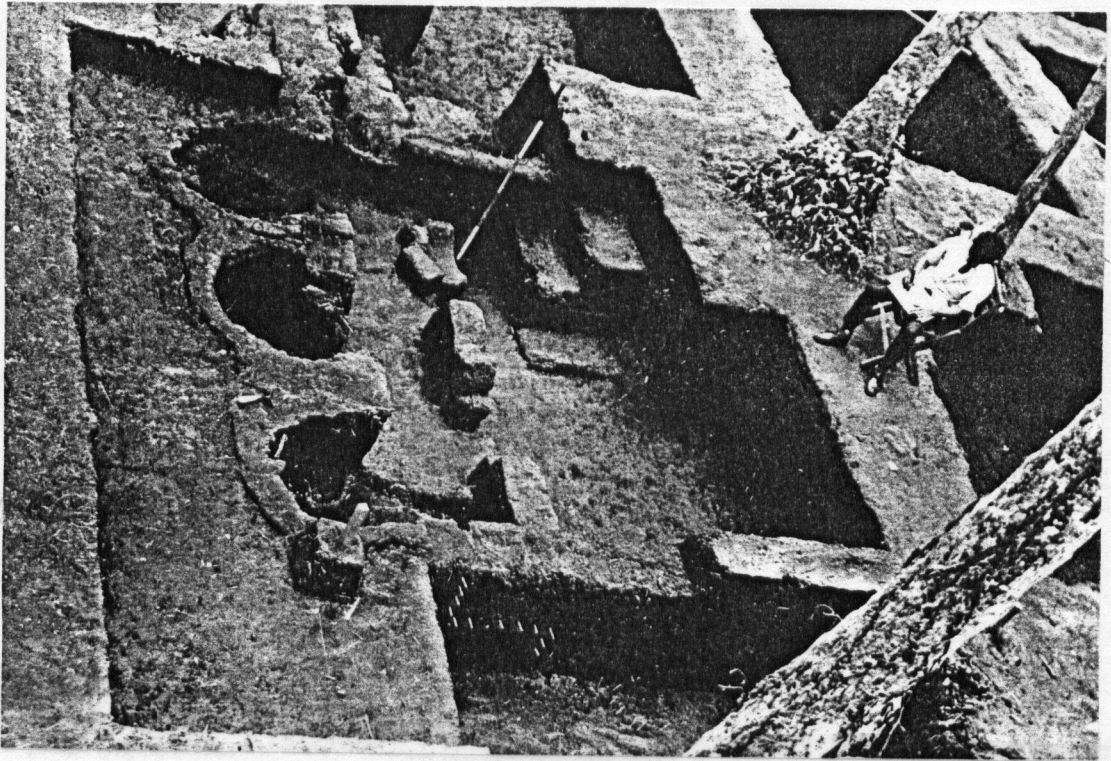


FIGURE B-12: Photo of crematorium structure, Pila: Period III
(Tenazas 1968: Pl.5, p.26)

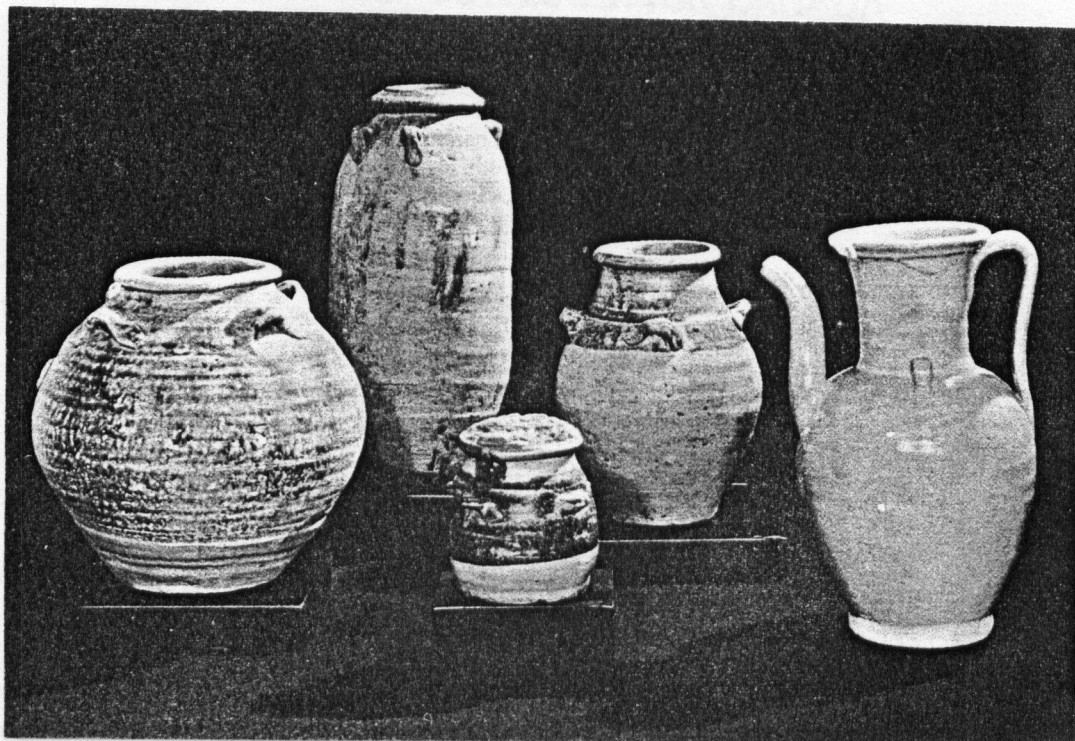
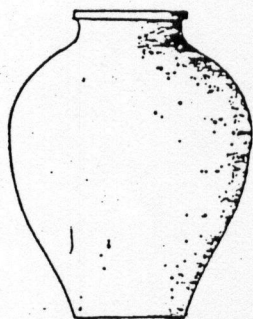
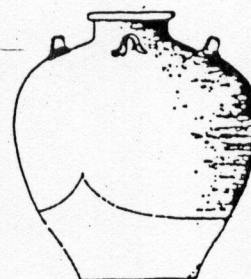


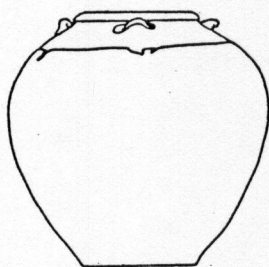
FIGURE B-13: Photo of cremation burial jars, Pila:
Period III (Tenazas 1968: Pl.6, p.27)



Type A: Ovoid jar
without ears



Type B: Large
globular jar



Type B: Globular jar
with no neck



Type C: Attenuated
dragon jar

FIGURE B-14: Three types of large, brown/olive ceramic jars found in the Philippines (After Grau-Abaya 1976:16)

APPENDIX C

Notes to the Text

1. "In the country of 'Ma-i' (thought to be the island of Mindoro)', the custom of the trade is for the savage traders to assemble in crowds and carry the goods away with them in baskets; and, even if one cannot at first know them, and can but slowly distinguish the men who remove the goods, there will yet be no loss. The savage traders will after this carry these goods on to other islands for barter, and as a rule, it takes them as much as eight or nine months till they return, when they repay the traders on shipboard with what they have obtained. (Chao Ju-Kua, in Garcia 1979: 194). Mindoro lies just to the south-west of Luzon, not far from the entrance to Laguna de Bay.

2. Some three hundred years later, in 1570, the Chinese merchants were observed by Salcedo and his Spaniards, by this same island of Mindoro. "On May 8, 1570, the Spaniards who were on their way to Manila from Panay, passed by the island of Mindoro where they learned of two anchored Chinese vessels. Salcedo was dispatched to reconnoiter the ships and to request their friendship but the Chinese were hostile so that the Spaniards who fought back were able to take possession of the junks. They found many articles: silks, porcelains, cotton cloth, gilded porcelain bowls, gilded water jugs, gold thread and musk. The decks were full of earthen jars and crockery, large porcelain vases, plates and bowls and some fine porcelain jars which they call sinoritas" (Roxas-Lim 1966:229)

3. Another account from the same Chronicles, regarding the trade in San-Su (thought to be Calamian, Palawan and Basuanga Islands): "Whenever foreign traders arrive at any of the settlements, they live on board the ship before venturing to go on shore, their ships being moored midstream, announcing their presence to the natives by beating drums. Upon this the savage traders race for the ship in small boats, carrying cotton, yellow wax, native cloth, cocoanut-heart mats, which they offer for barter. If the prices (of goods they may wish to purchase) cannot be agreed upon, the chief of the (local) traders must go in person, in order to come to an understanding... After that they go on shore to traffic... A ship will not remain at anchor longer than three or four days, after which it proceeds to another place; for the savage settlements along the coast of San-Su are not connected by a common jurisdiction (i.e., are all independent)... The following articles are exchanged in barter: porcelain, black damask and various other silks, beads of all colours, leaden sinkers for nets, and tin" (Chao Ju-Kua, in Garcia 1979:196). These islands lie just to the south-west of Mindoro.

4. Durability: "Recorded accounts specify that ancient Filipinos kept imported pottery, mostly from China, for such a length of time that its initial place of origin was already forgotten by the time of the Spanish conquest... Like the Tinguians and the Subanuns (of the Philippines), the Kelabits

and the Dayaks (of Borneo) preferred large jars which they passed on to their children as heirlooms. The jars occupied the most prominent space in their homes and are shown off to every visitor who happens to drop by, their economic value and age being often exaggerated. It is not unusual that such jars, particularly those which have been used for ceremonies for the dead and for the ailing, be given magical attributes, a fact that applies not only to jars but to other types of pottery, bowls, plates, saucers and jars which are used for religious rituals: (Roxas-Lim 1966:231-232). The same point was made by John Guy: "The spiritual potency of a vessel was usually related to its supposed antiquity, or it may have acquired, through some specific incident, great power. In such cases the jars were treated with great reverence" (Guy 1984:120).

5. Resonance: "The resonant ring believed to summon spirits and charge the object with spirit power made ceramics vital accessories to magic and ritual performances. Some of these ancient rites have still survived among isolated ethnic groups. The most frequently quoted are the Tagbanuwas in the Philippine island of Palawan who still believe that the ringing sound produced by the tapping of ceramic bowls and dishes is magical and powerful enough to summon the spirits invoked." (Legeza 1978:4) "The use of pottery as percussion instruments in order to conjure the spirits during the ceremonies for the ailing or for the dead involved more often bowls and deep plates on which the medium (a baylan, or a shaman) beat a string of

shells or pieces of wooden drumsticks. While the medium was in a state of trance, she continuously beat a frenetic rhythm on the bowl or plate which was meant to summon the spirit to partake of the offering of food or masticatory preparations or wine, or all of this. This was a universal practice among many of the non-Christian minorities and was as widespread as the ceremonial drinking from large jars. All pottery which was used for this ritual acquired an extraordinary importance and was never sold or given away unless to another person who would perform similar rites. Many of these wares must have been used also as mortuary furniture" (Roxas-Lim 1966:232).

6. John Guy relates a statement made by Tom Harrison: "The Dayaks of Sarawak have the most elaborate tests against imitations. These include scratching the surface to examine the texture, and listening to the noise produced by tapping the jar. The resonant quality of porcelain appears to have been a key element in their appeal... In addition to careful physical examination of glazed ceramics, some groups, such as the Dayaks, also endeavour to obtain an actual genealogy of any jar offered to them in barter or debt settlement. The spiritual potency of a vessel was usually related to its supposed antiquity, or it may have acquired, through some specific incident, great power" (Guy 1982:120).

7. Impermeable glaze: "It was generally believed that Chinese porcelain had the property of 'destroying poison in the

food'" (Janse 1944:37). "Since porcelain wares are more hygienic than wooden and coconut vessels, and do not affect the taste of food, beside being easier to clean than earthenware, there arose in the Philippines... the belief that such wares would indicate the presence of poison in food by some kind of discoloration... the author's information comes from potters and vendors from Pasig, Riza and Apalit, Pampanga, who believe (even today) that the unique quality of stoneware and porcelains is their ability to indicate poisoned food by some form of discoloration of the food itself or of the ware" (Roxas-Lim 1966:229).

8. Regarding provenience, there is this account: "They did not consider important the country of origin of these wares, or ... their technology... Reliable reports of the rituals which involved the imported pottery, state that the ritual participants did not make any noticeable distinctions between Chinese, Sawankhalok, Annamese, Cambodian or native pottery... Whatever distinctions they made concerned their actual serviceability for the ritual being performed. For example, large stoneware or porcellanous stoneware jars were used for wine-drinking; bowls and deep plates for food offering; jarlets for oils and perfumes; and teapots with spouts for pouring liquids... distinctions were made by the performers regarding the shapes and sizes of vessels, the nature and color of the glazes, their porosity or imperviousness, and the relative hardness or softness of the body" (Roxas-Lim 1966:234).

9. Many of these ritual practices still exist in the ritual life of the Tagbanuwa of Palawan: "The nave of Tagbanuwa religion is the cult of the dead which is organized in terms of the basic social unit, the nuclear family... This cult is formalized by rituals, which provide the individual and the family with an organized system for dealing and interacting with the spirits of the dead. Rituals are family affairs... The relationship of the living to the dead is not one of fear but of familiarity, intimacy and/or respect. The most prominent respect pattern is between parents and children, and this embraces the dead, as well as the living" (Fox 1982: 187,200).

10. "The relationships of the Tagbanuwa with the proximate environment are organized in terms of their own social life. They make no distinction between a social world and a "natural" environment. They see in the environment countless deities and malign spirits as well as one class of spirit-relatives who are subject to social control. In treating the environment as social, they are provided with an ordered explanation of 'natural phenomena'. In short one social and moral order encompasses the living, the dead, the deities and the total environment (ibid:252).

11. F. Landa Jocano has studied the customs of another extant Philippine group which still practices ancestor worship - the Sulod of Central Panay, another society which seems to have

much in common with Pila society of proto-historic times.

"Sulod lifeways have not changed basically in recent times.

Social life is characterized by superordination of kinship and by primary concern with socio-religious activities. Death, being the last rite of passage is a major event in Sulod life, surrounded by elaborate ritual prescriptions - bone washing and jar burial being among these" (Jocano 1970:181).