The Sociocultural Dimensions of Mixtec Ceramics

by Michael Lind

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PREFACE

In 1970, the National Science Foundation funded the Nochixtlan Valley Project under the direction of Ronald Spores of Vanderbilt University. As one aspect of the Project, I was given the opportunity to conduct excavations in Chachoapan and Yucuita, two present-day neighboring rural communities in the Nochixtlan Valley, Oaxaca, Mexico. Chachoapan and Yucuita have roots in Prehispanic Mixtec communities whose archeological remains litter the hillsides adjacent to each of the present-day communities. The excavations conducted in these hillside ruins exposed the superimposed remains of small "palaces" at each site that were inhabited from ca. A.D. 1340 to ca. A.D. 1660. In an earlier study in this series, *Postclassic and Early Colonial Mixtec Houses in the Nochixtlan Valley, Oaxaca, Mexico*, I presented an analysis of the architectural remains of these small palaces. The current study represents a follow-up to the earlier one. Here I present a detailed analysis of the ceramic artifacts associated with the palaces.

This study represents a significantly modified and re-written version of the last six chapters of my doctoral dissertation entitled: "Mixtec Kingdoms in the Nochixtlan Valley: A Preconquest to Postconquest Archeological Perspective" (Tucson: University of Arizona, Department of Anthropology, 1977). Here I would like to express my thanks to a number of people who aided me by contributing to the completion of my dissertation and consequently to this study. The dissertation was directed by T.P. Culbert who patiently and expertly guided me through difficult stages of analysis and interpretation. Arthur Jelinek and William Rathje, members of my dissertation committee, made most helpful comments in reviewing the dissertation.

Ronald Spores not only offered me the opportunity to direct excavations at Chachoapan and Yucuita, but has graciously aided me in every way possible to bring this study to completion. In the summer of 1969, prior to initiating fieldwork in the spring of 1970, Kent Flannery helped me clarify my research objectives and develop an explicit research strategy. Michael B. Schiffer kindly made available to me a prepublication version of his article "Archaeological Context and Systemic Context" (Schiffer 1972) while we were students together at the University of Arizona. His ideas provided fundamental guidelines for this analysis.

In the field I was assisted by Richard Redding and Neal Byrd, two remarkably capable field assistants. I was also fortunate in having most competent field crews from the villages of Chachoapan and Yucuita. During the course of fieldwork, discussions with other members of the Nochixtlan Valley Project—John Broster, John Warner, Lynne Dixon, and Martha Symmes—and with participants in other projects in Oaxaca—Ignacio Bernal, John Paddock, David Peterson, Steve Kowalewski, Marcus Winter, Donald Brockington, and Maria Jorrin—were most helpful. In particular, John Paddock graciously contributed his unequalled expertise on Oaxaca archeology by reviewing and commenting on my dissertation. Recently, Bruce Byland has kindly made available to me a copy of his doctoral dissertation on his studies in the Tamazulapan Valley. Robert Schmidt of Santa Ana College undertook the task of photographing the ceramic artifacts illustrated here. I thank all of these individuals for their kindness and, since I did not

always follow their suggestions, I accept full responsibility for any errors in this study.

CHAPTER 1: INTRODUCTION

The ceramic analysis presented here differs from earlier analyses in its objectives. In it, I seek to view the function of ceramic artifacts within the context of a cultural system. Specifically, I am interested in how household activities, differences in socioeconomic status, and foreign invasions are reflected in ceramic data. Most importantly, however, cross-cutting these static, synchronic, sociocultural dimensions of ceramic analysis, I am concerned with the dynamics of culture change in household activities and differences in socioeconomic status and the effects of foreign conquests.

In undertaking this research, it was necessary to direct methods of excavation and methods of classification toward achieving these objectives. Stratigraphic test pits, that are designed to recover ceramic artifacts for constructing chronologies, were not appropriate for my objectives. Instead, block excavations, designed to expose house remains and recover ceramic artifacts from room floors and middens, provided the spatial and stratigraphic contexts necessary to achieve my particular goals.

Traditionally, ceramic analyses in Mesoamerica have been concerned with questions of chronology and culture contact or diffusion. Ceramic artifacts are classified into general wares and, sometimes, more specific type categories. These wares and types are used to define chronological phases and to serve as general indicators of diffusion or culture contact among different areas of Mesoamerica. More recently, the same general ceramic wares and types have been used as chronological markers for reconstructing settlement patterns. These classifications have tended to focus on attributes of surface finish and clay body or paste. This is because interpretive objectives were designed to identify chronological markers (surface finish), on the one hand, and to determine the point of origin (paste) of ceramic artifacts for purposes of determining culture contact or diffusion, on the other. Rarely were vessel shapes considered important except in the sense of whether or not a particular vessel shape was a chronological marker or characteristic of a certain area and therefore a possible indicator of diffusion.

Such classifications are *producer-oriented* in that the question of who produced the artifacts is important to diffusionist studies. The type-variety method of ceramic classification is a classic example of a traditional producer-oriented model of ceramic analysis.

As students, we are taught to analyze ceramic artifacts in accordance with traditional models. Certain attributes, such as paste, are assigned high priority in the hierarchy of ceramic attributes. Consequently, we often undertake analysis in accordance with traditional producer-oriented models without considering why we are doing what we are doing. My point is not that the typevariety or any other producer-oriented model of ceramic analysis is the "wrong" model, but rather that models of ceramic analysis are designed to solve particular interpretive problems and that, therefore, there is no one "correct" model of ceramic analysis designed to solve all possible interpretive problems.

Unlike producer-oriented models of ceramic analysis, the present study is *consumer-oriented*. Because it is consumer-oriented, the analysis focuses on different sets of attributes than producer-oriented models. It is doubtful that a consumer going to a market to buy ceramics is going to have paste and ware foremost in mind. That is, the consumer is not headed to the market to buy, for example, "Thin Orange Ware" vessels with micaceous paste. Instead, it seems likely that he or she would have in mind a particular vessel shape of a particular size and, perhaps, with a particular surface finish, for example, a large olla for cooking beans, a set of small dishes for serving beans, or perhaps, an incense burner for the household altar.

A consumer-oriented approach to ceramic analysis, then, views vessel shape, size, and surface finish as more important than paste or grain size. In addition, determining the function of ceramic artifacts takes precedence over determining techniques of manufacture.

Mixtec Kingdoms

The ceramic data upon which this study is based come from excavations in the Nochixtlan Valley, Oaxaca, Mexico. Located in the heart of the Mixteca Alta, the Nochixtlan Valley was the locus of six Mixtec kingdoms in Prehispanic times (Spores 1967). These kingdoms were the targets of two historically documented foreign conquests. Around A.D. 1486, the Aztec emperor Tizoc conquered the Nochixtlan Valley kingdoms. They remained tributaries of the Aztecs until ca. A.D. 1521, when Spanish conquerors took control of the Aztec empire and the Nochixtlan Valley (Fig. 1).

At the time of the Spanish Conquest, each Mixtec kingdom, or *cacicazgo*, was ruled by a royal family, headed by a "king" or "queen" who appointed close kinsmen to serve as noble administrators (Spores 1974). Peasants provided tax revenues and labor services to support the political elite. Each kingdom included either a capital center (*cabecera*) and subject communities or simply a center without subject communities. The royal family resided in a large palace in the capital. These complex structures were made of adobe faced with stone and had room floors, courtyards, walkways, and porches paved with plaster. Nobles lived in much smaller palaces located in barrios within the capital or in the subject communities that they administered. These smaller palaces were also built of adobe faced with stone and had plaster paved room floors, courtyards, walkways, and porches. Peasant houses generally consisted of a primary single adobe room with a plaster floor and one or two additional contiguous pole and thatch rooms with earthen floors.

With a population of approximately 25,000 persons, Yanhuitlan was the largest community in the Nochixtlan Valley at the time of the Spanish Conquest. Numerous smaller communities were subjects of the kingdom of Yanhuitlan, including the rural community of Yucuita that had an estimated population of 1500 persons. Other kingdom capitals were smaller than Yanhuitlan and some lacked subject communities. One small center without subject communities was Chachoapan whose population was approximately 1500 persons.

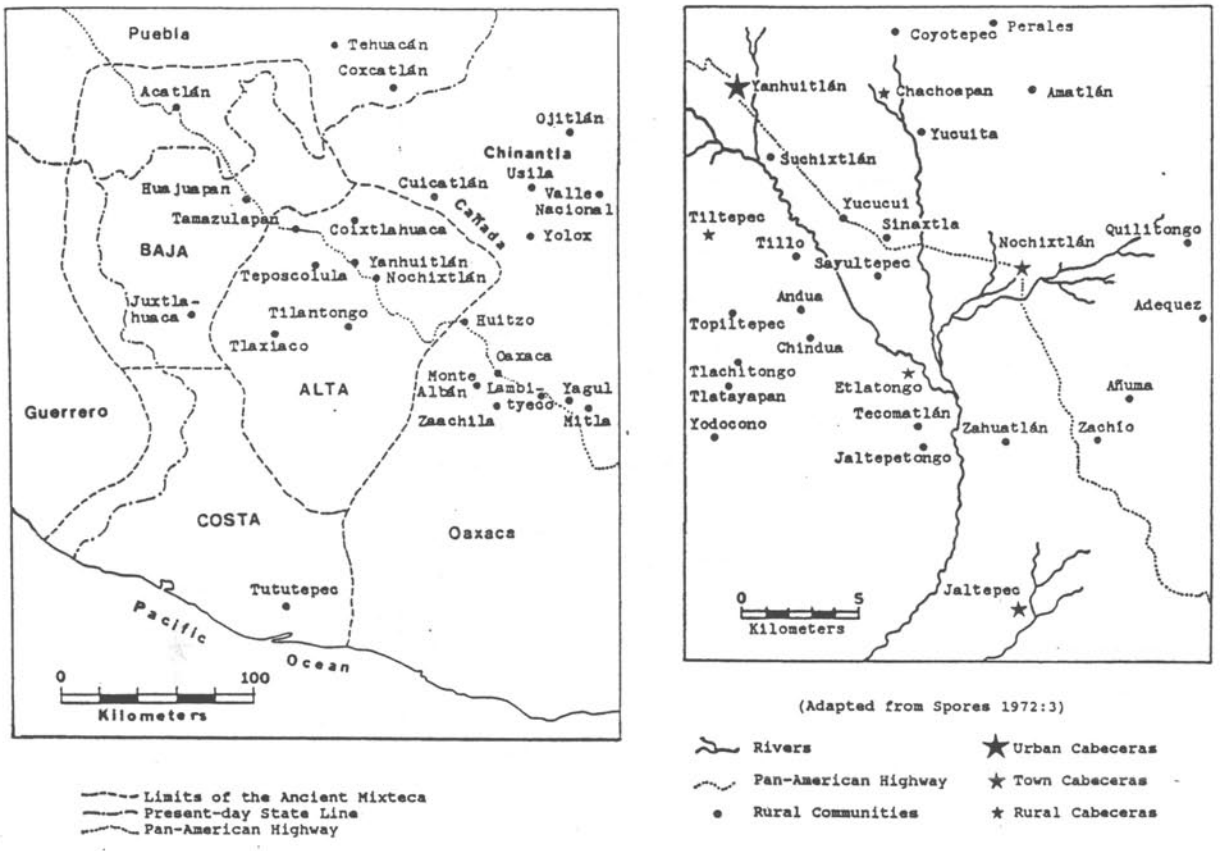


Fig. 1. Maps of the Mixtec (left) and Nochixtlan Valley (right)

In 1970, excavations at Yucuita and Chachoapan uncovered the superimposed remains of a series of small palaces that had been occupied by successive generations of noble administrators. These small palaces provided the spatial and stratigraphic contexts for the ceramic artifacts analyzed in this study.

The Palaces

The stratified palace remains at Yucuita and Chachoapan span a period from Late Natividad (ca. A.D. 1340) to Convento (ca. A.D. 1660) times (Table 1). Marcus Winter's concept of the household cluster has been most useful for analyzing the remains of these small palaces. Winter (1976:25) notes that a household cluster may include the archeological remains of a house and such associated features as middens, burials, and storage pits. Although some of these elements may be missing in a particular excavation unit (because of incomplete exploration or destruction caused by ancient or modern disturbances), the excavated units can be viewed as components of a configuration of related household activities.

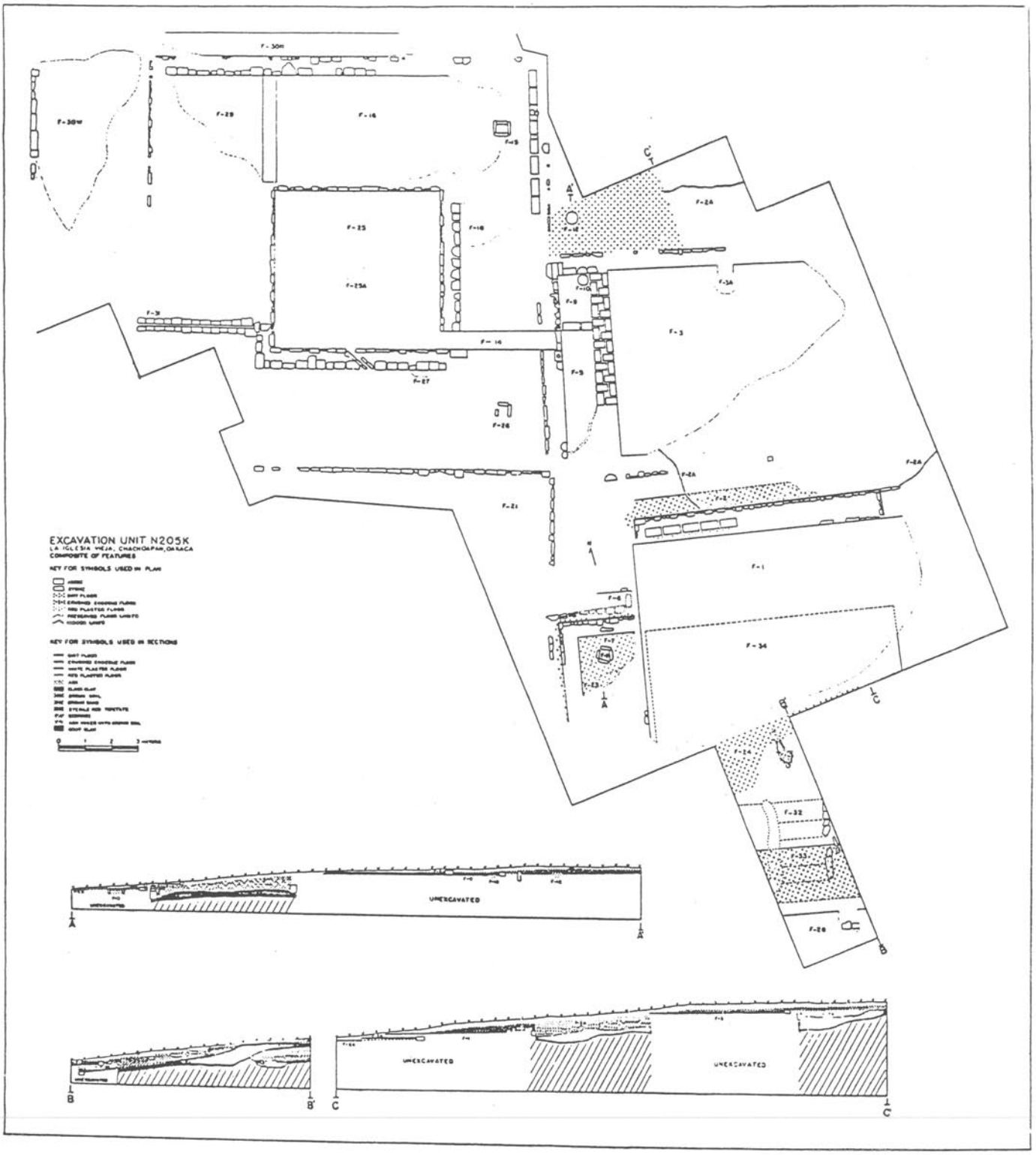


Fig. 2. Plan and Profile Drawings of the Late Postclassic "Palace" at Chachoapan (N205K)

The Limestone house represents a rebuilding of the Endeque house-II and consists of the architectural remains of a small palace with white plaster floors and adobe walls faced with limestone blocks. Its remains included a section of the courtyard and parts of the floors of a north room (F-1) and east room (F-8) off the courtyard. This structure was built shortly after the Spanish Conquest.

The Convento house is the final household cluster in the sequence at Yucuita. Its remains included fragments of a white plaster floor with a drain beneath it, built on top of part of the Limestone house, and a midden (F-10) that was deposited over the abandoned remnants of another part of the Limestone house. The Convento midden (F-10) contained wood charcoal radiocarbon dated at A.D. 1660±80.

The continuity evidenced in the superimposed household clusters at Yucuita suggests that an initial noble household group and their successive descendants were responsible for depositing the Natividad midden (F-10A) and for constructing the Endeque house-I, Endeque house-II, Limestone house, and Convento house.

Chachoapan

Most of the features uncovered at Chachoapan correspond to four superimposed palaces that include in stratigraphic order from oldest to most recent: (1) Endeque house-I, (2) Endeque house-II, (3) Limestone house, and (4) Convento house (Lind 1979).

The oldest household cluster is the Endeque house-I that consists of the architectural remains of a palace with red plaster floors and adobe walls faced with endeque blocks. The palace was only partially explored because of later palaces that were built over it. Its explored remains included a section of its courtyard floor (F-24) and part of the floor of a kitchen (F-23) located along the west side of the courtyard. Limited stratigraphic soundings beneath a walkway along the north side of the palace revealed a stratum of ash. This indicates that the palace had been built over Natividad midden deposits that probably date to ca. A.D. 1350. This structure was built during Natividad times and shares similarities of architectural detail with the Endeque house-I at Yucuita with which it was probably contemporaneous.

The Endeque house-II at Chachoapan represents a remodelling of the Endeque house-I. Its explored remains included a sector of the courtyard floor and the floor of a kitchen (F-7) with a hearth (F-8) that was located along the west side of the courtyard. It was built during Prehispanic times and was occupied until shortly after the Spanish Conquest. Its occupants deposited an extensive midden (F-2A) north of the palace. An archeomagnetic sample from the same stratigraphic zone as the midden (F-2A) gave a date of A.D. 1540 (Wolfman, personal communication, 1971).

The Limestone house represents a rebuilding of the Endeque house-II and consists of the architectural remains of a palace with white plaster floors and adobe walls faced with limestone blocks. Its remains included two courtyard floors—one on the north and one on the south. The south courtyard (F-1) was laid over the levelled remains of the Endeque house-II and had a kitchen (F-6)

along its west side. The north courtyard (F-3) was laid over the Early Postconquest midden (F-2A) and had a kitchen (F-9) with a hearth (F-10) along its west side. A porch (F-28) with a sloping plaster floor was located along the south side of the house.

The Convento house is the latest household cluster in the sequence at Chachoapan. This house had white plaster floors and walls of adobe faced with limestone blocks and was built by incorporating parts of the Limestone house. The north courtyard of the Limestone house became the east courtyard (F-3) of the Convento house. The floor of the kitchen (F-9) on the west side of this courtyard was resurfaced and converted into a corridor or east passageway (F-5) of the Convento house. The newly constructed parts of the Convento house included a west passageway (F-14) leading to a west courtyard (F-25). A kitchen (F-16) with a hearth (F-15) was located along the north side of the courtyard, and a second kitchen (F-27) was located along its south side. A large west room (F-29) with a porch (F-30W) beyond it was situated along the west side of the courtyard. Outside the palace, a compact earthen floor with a hearth (F-12) comprised a "work area."

The continuity evident in the superimposed palace remains at Chachoapan suggests that an initial noble household group and their successive descendants were responsible for constructing the Endeque house-I, Endeque house-II, Limestone house, and Convento house.

Comparisons

Architectural similarities between the palace remains from Chachoapan and Yucuita are marked. In each of the two excavation units a remarkably similar sequence of palaces was uncovered. Endeque palaces with red plaster floors, built in Prehispanic Natividad times, are succeeded by Limestone palaces with white plaster floors, built in Postconquest Convento times. It is reasonable to infer that the superimposed palaces in both communities were occupied by noble class families who established their residences at Chachoapan and Yucuita sometime around A.D. 1340. The successive descendants of these nobles, together with their families, continued to reside in Chachoapan and Yucuita into the sixteenth or seventeenth century.

The Ceramic Artifacts

A total of 8737 ceramic artifacts (excluding vessel body sherds) was recovered in association with the stratified palace remains at Chachoapan and Yucuita. Only ceramic artifacts recovered in association with well-defined features (middens, floors, and hearths) were selected for analysis. To insure equal recovery of ceramic artifacts from all features, the debris from within middens and hearths and from 10 cm above floors to the floor surfaces was sifted through a 5 mm mesh screen. Stratigraphic levels were carefully separated to control the temporal context of the artifacts between the present-day surface and the features or between features and earlier stratigraphic levels or features.

Because the soil around Chachoapan and Yucuita is not suitable for the production of ceramics (Kirkby 1972:12-13), neither the households nor the rural communities of which they were a part produced the ceramic artifacts. Instead, the households must have obtained pottery from local or regional markets where it was brought for sale. While the ancient center or centers of pottery production for the Nochixtlan Valley are not yet known, one or more of the present-day pottery-producing communities—San Miguel Adequez, Santa Inez del Rio, Santo Domingo Tonaltepec, and Rancho Buenavista of Jaltepec—all of which are located near suitable clay sources, are possible candidates (Warner 1970:19).

The Ceramic Analysis

In accordance with a consumer oriented model, it is necessary to determine how the ceramic artifacts from Chachoapan and Yucuita functioned within the cultural system. Because most ceramic artifacts recovered in the excavations were broken, the first step in this functional analysis was to determine if they represented parts of water jars, cooking pots, *comales*, serving dishes, figurines, incense burners, etc. At this point, the type of ware (for example, polychrome ware, black ware, cream ware), as is often reported in ceramic analyses, was not relevant. Because people purchase whole ceramic artifacts, not sherds, a consumer-oriented analysis need not be concerned with classifying sherds but rather with analyzing sherds as representative of the whole ceramic artifacts from which they came.

Most of the recovered ceramic artifacts are sherds from vessels. Of these, only rim sherds were used in the analysis, because rim sherds are the best determinants of vessel shapes and, by further inference, of vessel function. Furthermore, rim sherds closely approximate the relative proportions of different vessel shapes. Ceramic analyses that include body sherds often report that ollas (water jars or cooking pots) make up the bulk of the ceramic assemblage. This is not because there are actually more ollas than serving dishes, but because ollas are large. A single olla may break into numerous sherds, while serving dishes, being much smaller, break into fewer sherds. A consumeroriented analysis emphasizes relative frequencies of different vessel shapes rather than numbers of olla and serving dish sherds. Any archeologist can walk into a modern peasant house and see that serving dishes—bowls, plates, cups, etc.—far outnumber cooking pots and water jars. Rim sherds reflect these differences; body sherds do not.

Vessels with virtually identical shapes and functions may differ in their surface finish—for example, black ware, cream ware, or polychrome ware—and a consumer may choose among them. Recently, Gary Feinman has developed a method for determining the relative costs of vessels based primarily on how elaborate the surface finish is (Feinman et al. 1981). Although Feinman's method was developed long after the present analysis was completed and, therefore, was not applied in this study, it may be noted that the more elaborately finished wares, such as polychromes, would be much more expensive for the consumer than less elaborately finished wares, such as red on cream.

In determining how ceramic artifacts functioned in a cultural system, it is necessary to go beyond their utilitarian aspects to a consideration of their symbolic value. In a culture where literacy is extremely limited, and ceramic arti-

facts extensively distributed, ceramic artifacts serve as one medium for widely circulating symbols relating to political and religious values. These symbols may be manifested in design motifs painted or incised on vessels or modeled in ceramic effigies and figurines.

CERAMIC TYPES	No.	Percent
Mixteca Polychrome		
Pilitas Polychrome	149	1.71
Iglesia Polychrome	83	0.95
Burnished Red		
Aztec Burnished Red	4	0.05
Iglesia Burnished Red	29	0.33
Iglesia Burnished White	3	0.03
Mixteca Graphite on Orange	2	0.02
Yanhuitlan Fine Cream		
Yanhuitlan Red on Cream	556	6.36
Yanhuitlan Fine Cream	3398	38.89
Yanhuitlan Ladles	406	4.65
Yanhuitlan Pitchers	3	0.03
Yanhuitlan Miniatures	75	0.86
Yanhuitlan Miniature Tripod Effigy Ollas	5	0.06
Yanhuitlan Ladle Censers	9	0.10
Yanhuitlan Figurines	12	0.14
Yanhuitlan Earspools	9	0.10
Yanhuitlan Spindle Whorls	2	0.02
Cacique Burnished	1916	21.93
Miguelito Hard Fine Gray		
Miguelito Tripod Cajetes	249	2.85
Miguelito Pitchers	102	1.17
Nochixtlan Rustware Ollas	209	2.39
Chachoapan Sandy Cream		
Chachoapan Sandy Cream Ollas	888	10.16
Chachoapan Sandy Cream Patojo	1	0.01
Chachoapan Sandy Cream Comales	585	6.69
Chachoapan Sandy Cream Censer Covers	39	0.46
Chachoapan Sandy Cream Figurine Mold	1	0.01
Chachoapan Sandy Cream Circular Sherd	1	0.01
Convento Green Glaze Circular Sherd	1	0.01
TOTALS	8737	100.00

Table 2. Frequency of Ceramic Types

The Ceramic Typology

The ceramics from Chachoapan and Yucuita have been classified into twenty-six different types (Table 2). In the chapters that follow, each type is described and its function within the cultural system assessed. To facilitate this presentation, the ceramic types have been grouped under three general categories—painted vessels, plain vessels, and special forms. A separate chapter is devoted to the types within each category.

Chapter 5, that follows the discussion of the individual ceramic types presented in Chapters 2, 3, and 4, treats the ceramic assemblage as a whole. First, the distribution of ceramic artifacts within the palaces is assessed to see if certain types are associated with particular features and, therefore, indicative of different kinds of household activities carried out in various areas of the palaces. Second, the ceramics associated with the noble rural households are compared with ceramics from peasant, noble urban, and royal households to see if socioeconomic status differences are reflected in these different ceramic assemblages. Finally, the ceramics from the palaces at Chachoapan and Yucuita are scrutinized to ascertain whether the two historically documented conquests described above had an impact on the ceramic assemblage. The final chapter, Chapter 6, is devoted to a study of culture change as it is reflected in the ceramic assemblage. Both change through time in household activities and socioeconomic status and change generated by foreign conquests are considered.

CHAPTER 2: PAINTED VESSELS

Painted vessels recovered in excavations at Chachoapan and Yucuita include Pilitas polychrome, Iglesia polychrome, Aztec burnished red, Iglesia burnished red, Iglesia burnished white, Mixteca graphite on orange, and Yanhuitlan red on cream. Analysis of each of these types follows a similar pattern. A general description of the surface finish is followed by a detailed description of vessel shapes, size variants, and design motifs. The type and its corresponding vessel shapes, size variants, and design motifs are discussed with regard to their function within the ancient cultural system.

In an earlier version of this analysis (Lind 1977), each type and its vessel shapes, size variants, design motifs, and other attributes were discussed with regard to their frequency distribution in the different features of the Chachoapan and Yucuita palaces. This discussion has been eliminated from the present study because it proved to involve a considerable overlap with the information presented there in Chapter 5. Nevertheless, documenting the frequency distribution of each type and its corresponding attributes within the individual features at Chachoapan and Yucuita is important. Those who might require this information are directed to the earlier study.

Mixteca Polychrome

On the basis of his own archeological investigations, Ronald Spores reported that Mixteca polychrome was rare in excavated sites in the Nochixtlan Valley. It was noted, however, that Alfonso Caso's (1938) excavations of a midden at Las Pilitas, Chachoapan (approximately 150 meters from the palace structures at Iglesia Vieja) yielded ten thousand sherds of Mixteca polychrome. My own research, together with the Las Pilitas find and Ignacio Bernal's (1958) observation that polychrome occurred in relatively high frequency at Coixtlahuaca, strongly support the view that Mixteca polychrome is both typical and characteristic of the Mixteca.

The Mixteca polychrome from Yucuita and Chachoapan can be divided into two chronologically significant types—Pilitas and Iglesia. Both types incorporate a similar decorative technique consisting of design motifs most frequently painted in red, black, and white on an orange base color. Pilitas, the earlier of the two, is the only polychrome type found in Prehispanic Natividad deposits. Iglesia polychrome is found only in Postconquest Convento deposits. The diversity of design motifs on Pilitas and Iglesia polychrome makes it possible to give minimum vessel counts.

Pilitas Polychrome

A total of 149 rim sherds representative of at least sixty different vessels constitutes the sample of Pilitas polychrome from Chachoapan and Yucuita. Most Pilitas vessels are painted four colors—orange, red, black, and white. Pink, gray,

yellow, brown, and blue are much less common (Table 3). Tripod cajetes are the most frequent vessel shape, while tripod ollas are less frequent and censer bowls are rare (Table 4). Fourteen different design motifs are found on Pilitas polychrome (Table 5; Fig. 4).

COLORS	Vessels*	Percent
Orange	58	96.67
Red	59	98.33
Black	56	93.33
White	55	91.67
Pink	7	11.67
Gray	3	5.00
Yellow	3	5.00
Brown	1	1.67
Blue	1	1.67

*Based on 60 minimum vessels.

Table 3. Pilitas Polychrome: Colors

VESSEL SHAPES	Minimum Vessels		Total Sherds	
	No.	Percent	No.	Percent
Tripod Cajetes	44	73.33	99	66.44
Tripod Ollas	13	21.67	45	30.20
Censer Bowls	3	5.00	5	3.36
Totals	60	100.00	149	100.00

Table 4. Pilitas Polychrome: Vessel Shapes

DESIGN MOTIFS	No.	Percent
Curvilinear xicalcoliuhquis	31	38.27
Rectilinear xicalcoliuhquis	12	14.81
Feathers	9	11.11
Stylized bird or serpent heads	8	9.88
Human figures	4	4.95
Acatl glyphs	4	4.95
Flowers	3	3.70
Smoke or cloud symbols	2	2.47
Shells	2	2.47
Xonecuillis	2	2.47
Eagle heads	1	1.23
Serpent heads	1	1.23
Serpent eyes	1	1.23
Shield	1	1.23
Totals	81*	100.00

*Based on 60 minimum vessels; more than one motif may occur on a single vessel.

Table 5. Pilitas Polychrome: Design Motifs

Tripod Cajetes

In the Mixtec codices, tripod *cajetes* are depicted as receptacles for ears of corn or as vessels from which pulque and, perhaps, chocolate were drunk. They functioned, then, as serving dishes for food and drink (Fig. 5).

The rim diameter of *cajetes* ranges from 18 to 22 cm, with one example at 32 cm. Height (minus tripod supports) varies from 5 to 7 cm and rim thickness from 3 to 7 mm. Supports on *cajetes* include eagle head, serpent head, conical, slab, and notched slab tripods.

Cajetes are decorated on the interior and exterior rims. The interior base lacks decoration and is painted either red or orange. Design motifs are always present on the exterior rim, but are sometimes lacking on the interior rim of vessels whose entire interiors are painted red. Occasionally, tripod *cajetes* and tripod ollas possess identical decorative motifs. These must certainly have formed matched sets (Fig. 6).

Tripod Ollas

Tripod ollas have globular bodies and cylindrical necks. In the Mixtec Codices, they are depicted as vessels from which chocolate and, perhaps, pulque were

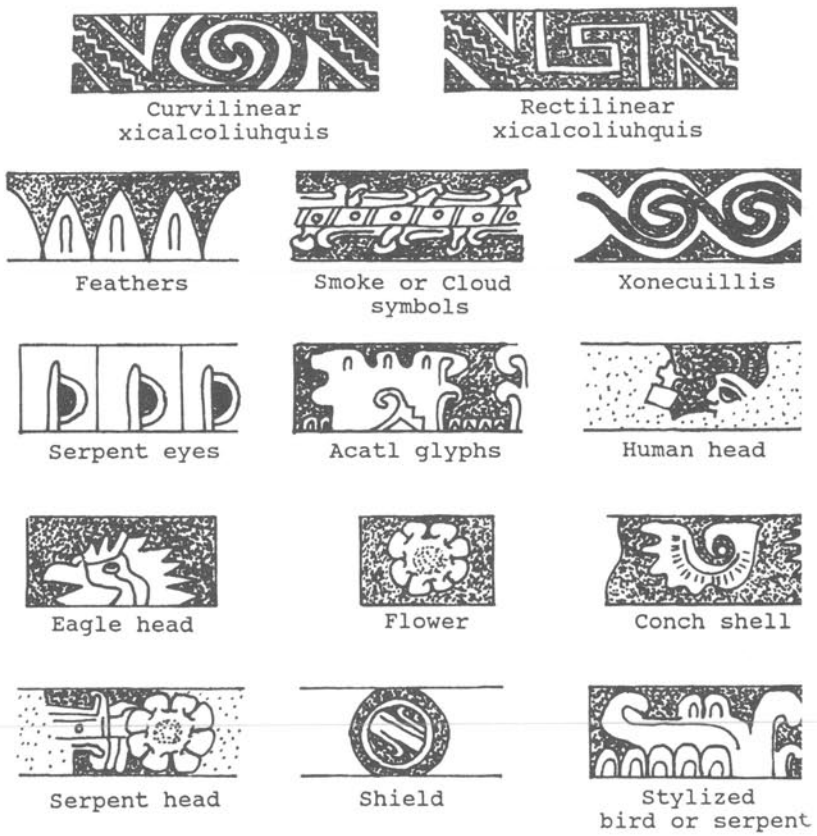


Fig. 4. Pilitas Polychrome: Design Motifs

Codex Nuttall 5 Codex Nuttall 28

Fig. 5. Tripod *Cajete* and Tripod Olla in the Mixtec Codices
(*Codex Nuttall 5* and *Codex Nuttall 28*)

drunk (Fig. 5). Ritualized chocolate and pulque drinking was an important act of formal hospitality and also played a role in community ceremonies. Tripod ollas may have functioned as formal drinking mugs, somewhat like fancy German beer steins.

Olla rim diameter ranges from 10 to 14 cm, neck height from 5 to 7.5 cm, and rim thickness from 3 to 5 mm. All ollas have conical tripod supports. They are decorated on the interior rim, exterior neck, and exterior body. A simple red band invariably encircles the interior rim, while the necks and bodies are decorated (Fig. 7).

Censer Bowls

Censer bowls have short collared rims and globular bodies with ventilation holes. They functioned as receptacles in which copal incense was burned, perhaps in front of household altars or to create a pleasant atmosphere in rooms when special guests were visiting.

The orifice diameter of censer bowls ranges from 8 to 10 cm. Rim width varies from 2 to 3 cm and rim thickness from 3 to 4 mm. It is probable that all censer bowls had tripod supports, although no examples were recovered in excavations.

Censer bowls are decorated on the interior and exterior rims and the exterior of the body. A simple red band is present on the interior rim, while either red or orange bands decorate the exterior rim. Only one sherd from the excavations was well-preserved enough to observe the exterior body decoration. Ventilation holes were cut to delineate a circle with a hole in its center. The circle was painted orange and enclosed in a white square (Fig. 7). Censer bowls virtually identical to those from Chachoapan and Yucuita were found in Late Postclassic deposits in Cholula.

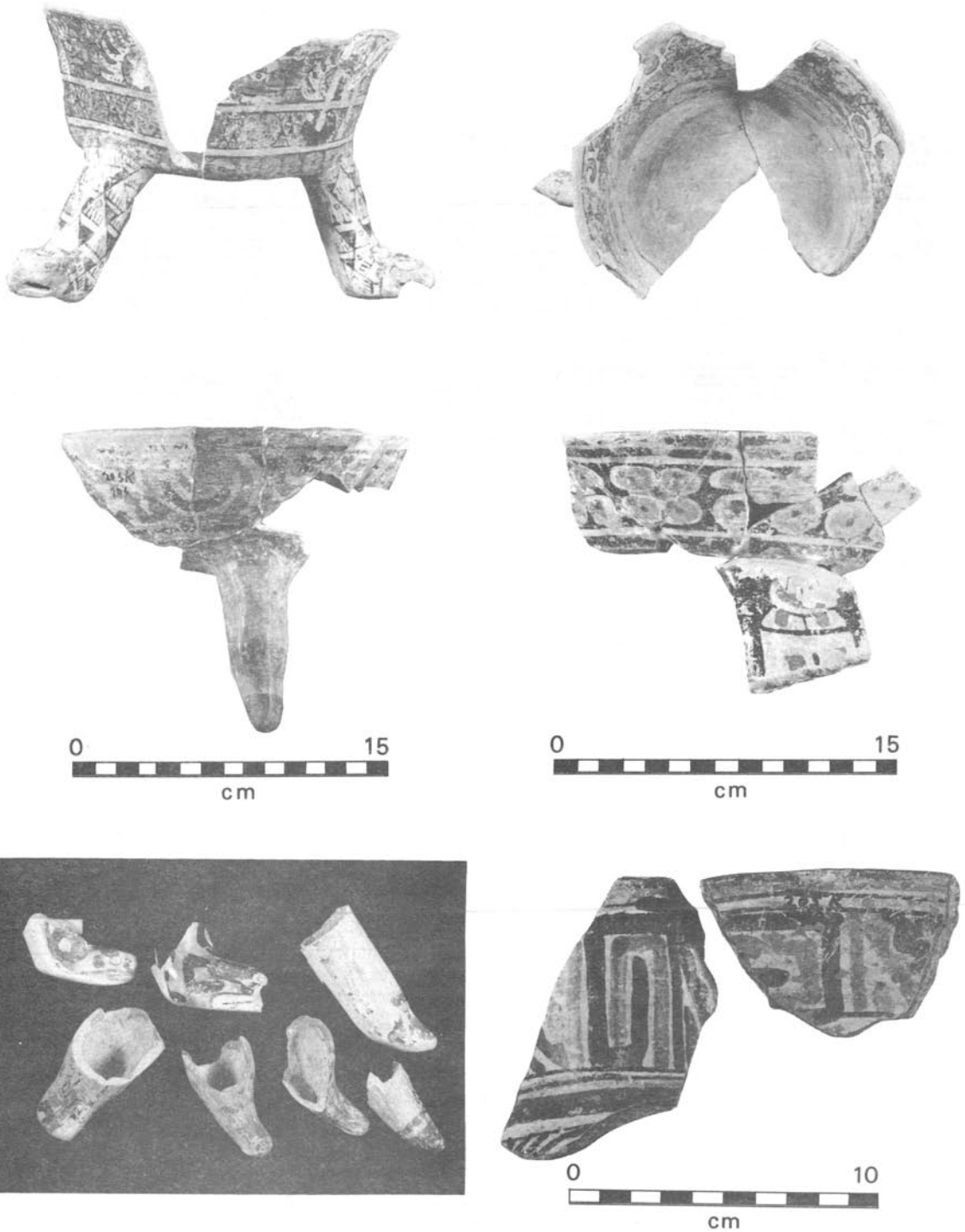


Fig. 6. Pilitas Polychrome Tripod *Cajetes*
Tripod supports from *cajetes* (lower left) and rim sherds from a tripod olla and tripod *cajete* that formed a matched set (lower right).

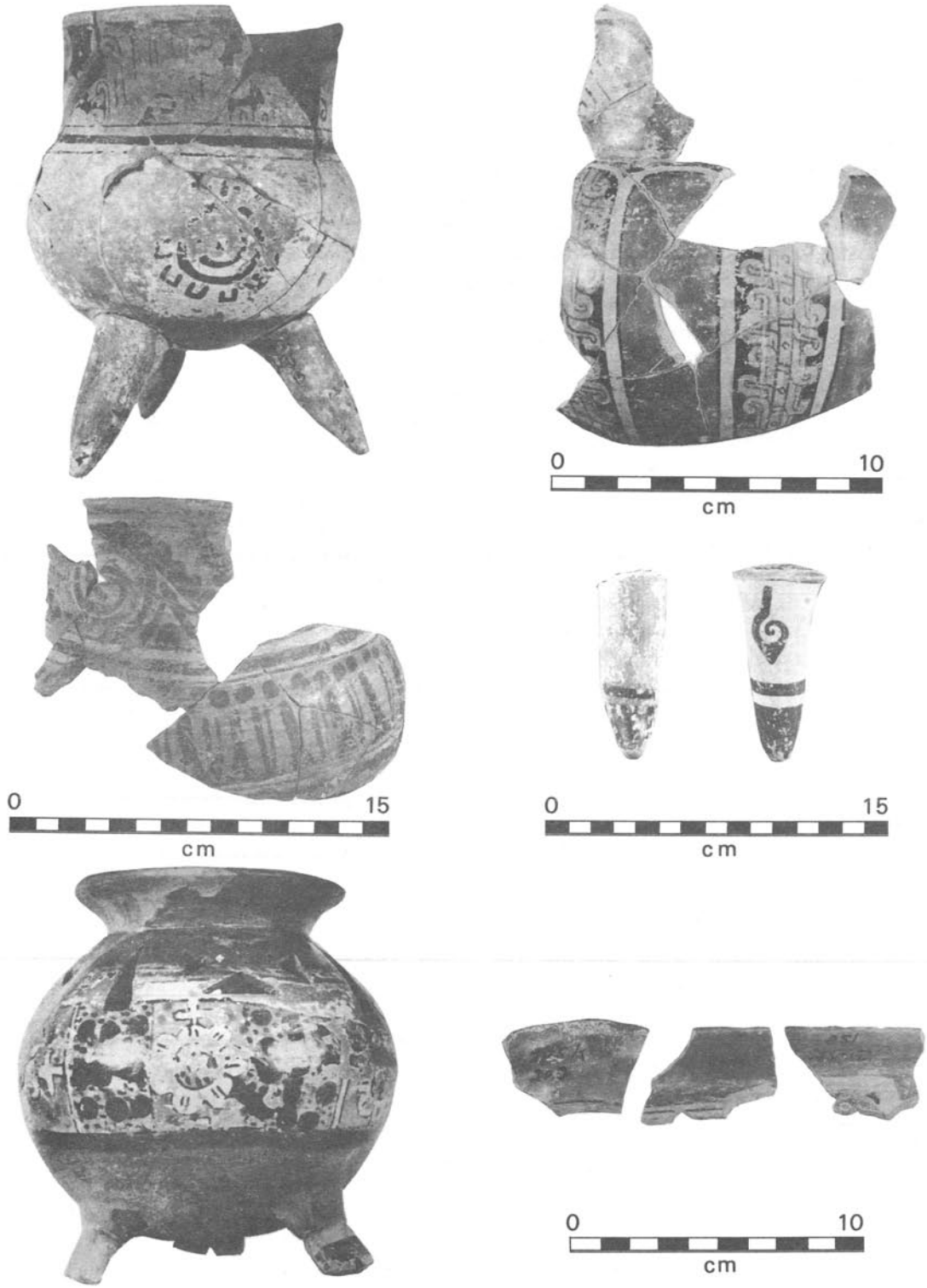


Fig. 7. Pilitas Polychrome Tripod Ollas and Censer Bowls
Tripod olla from Tomb 3, Inguiterra, Coixtlahuaca (upper left) and censer bowl from Cholula, Seler Collection #4605 (lower left)–Museo Nacional de México.

Summary

With the exception of censer bowls, Pilitas polychrome vessels are quite distinctive from vessels of the famous Cholula polychrome type. Pilitas vessels are even more easily distinguished from the polychromes of the Acatlan and Chinantla regions. Therefore, it is not feasible to consider these areas as centers of production for Pilitas polychrome (Lind 1967; 1978). The primary area of concentration of Pilitas polychrome is within the Mixteca Alta and it is probable that the Pilitas polychrome purchased by the households at Yucuita and Chachoapan was produced in the Nochixtlan Valley.

The distribution of Pilitas polychrome is not confined to the Mixteca Alta. It has also been found in the Mixteca de la Costa and as far north as Huajuapan de Leon in the Mixteca Baja. To the south of the Mixteca Alta, in the Valley of Oaxaca, Pilitas polychrome was also found at numerous sites (for example, Zaachila, Huitzo, and Yagul), but in much lower concentrations than in the Mixteca Alta (Bernal 1958). The general distribution of Pilitas polychrome closely coincides with royal marriage alliances as recorded in the Prehispanic Mixtec codices. Marriage alliances were common between kingdoms in the Mixteca Alta, but also extended to the Mixteca Baja and the Mixteca de la Costa (Caso and Smith 1966; Spores 1974a). Marriage alliances between Mixtec and Zapotec royalty also occurred, although less frequently (Caso 1966). Pilitas polychrome, then, was certainly an expensive ware (see Feinman et al. 1981:875) associated with the political elite. The immense concentration of ten thousand sherds in an obviously common-class occupation at the Las Pilitas site remains an enigma.

The design motifs on Pilitas polychrome functioned to circulate symbols of political and religious value among the elite. Caso (1960:14-22) has succeeded in deciphering numerous glyphic symbols in the Mixtec codices. His studies are relevant for understanding the function of design motifs on Pilitas polychrome. Mixtec kings and queens (caciques) were named after their day of birth in the calendrical system and also received nick-names. In the codices, caciques are depicted in human form with glyphs for both their day of birth and nickname. Once "introduced," caciques may later be represented simply by the glyphs for their day of birth and nickname without the corresponding human figure. Queens are easily distinguished from kings in the codices. For example, according to Caso (1960:14), ". . . the simplest and most constant characteristic identifying certain personages as women is that in almost every case they wear coiffures fashioned by braiding the hair with colored ribbons . . ." Glyphic elements naming kings and queens combined with composite place glyphs naming communities, priests with masks, and other attributes of gods. A variety of glyphs giving the year and day of events such as birth, marriages, deaths, wars, conquests, and rituals provided an unlimited potential for depicting specific kings, queens, gods, places, times, and events that exemplified general political and religious values.

Pilitas polychrome was an excellent medium for circulating symbols of these values. The fragmentary nature of the polychrome being analysed here makes it impossible to observe complete design configurations and thereby to define religious or political events as Eduard Seler (1939:87-90) and Charles Wicke (1966:343) have done for complete Pilitas polychrome vessels. However, the excellent data on Mixtec kings and queens provided by Caso's analysis of the Prehispanic Mixtec codices facilitate the analysis of two Pilitas polychrome sherds

from the palaces at Chachoapan and Yucuita (Fig. 8).

One polychrome sherd from the Natividad midden (F-10A) at Yucuita depicts a man in a jaguar (tiger) headdress with a torch next to it. No day of birth glyph is preserved, but the glyphs may represent the nickname "Tiger-Torch." In A.D. 1301, Lord Nine-House "Tiger-Torch-Heaven" of Tilantongo wed his eldest niece (Three-Rabbit), and the pair ". . . became rulers of Tilantongo and Yucuita" (Caso 1960:46), although they resided in Tilantongo. Lord Nine-House's youngest niece (Eight-Flint) wed a man from Yucuita, Lord Thirteen-Lizard "Bloody-Tlaloc," who was the noble administrator of Yucuita appointed by Lord Nine-House.

If the radiocarbon date of A.D. 1340 is correct for the Natividad midden, the man who occupied the palace associated with that midden may have been Lord Thirteen-Lizard, noble administrator of Yucuita and brother-in-law of Lord Nine-House, king of Tilantongo and Yucuita. The polychrome cajete depicting Lord Nine-House may represent a memento given to Lord Thirteen Lizard. Because Lord Nine-House was married on the day "Four Eagle," it is possible that the Pilitas polychrome cajete decorated with eagles (Fig. 6) that came from the same section of the Natividad midden (F-10A) is another memento given by Lord Nine-House to his noble administrator in Yucuita.

A second Pilitas polychrome sherd comes from the south courtyard floor (F-1) of the early Postconquest Limestone palace at Chachoapan. On it a woman, easily identified by her coiffure, is depicted with a flower glyph in front of her (Fig. 8). Unfortunately, no numerals or nickname glyphs were preserved. However, the

Lord Nine-House
"Tiger-Torch-Heaven"
Cacique of Tilantango
and Yucuita (A.D. 1301)
(Codex Bodley 17-V)

Lady One-Flower
"Tiger-Quechqumitl"
Cacica of Yanhuitlan
(ca. A.D. 1530)
(Codex Bodley 19-III)

Fig. 8. Lord Nine-House and Lady One-Flower

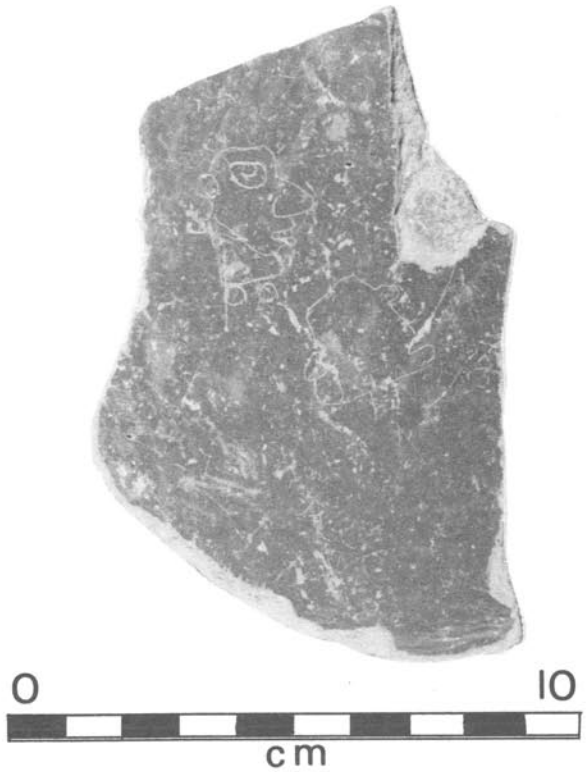


Fig. 9. Codex Style Human Heads Etched in Pilitas Polychrome Base

woman represented may be *Cauaco* (One-Flower), queen of Yanhuitlan at the time of the Spanish Conquest. The Pilitas polychrome cajete, then, may be a memento given to the noble administrator of Chachoapan by *Cauaco.*

The base of one Pilitas polychrome cajete from the early Postconquest midden (F-2A) at Chachoapan has a human head in the codex style scratched on it (Fig. 9). Below it is a crude attempt to copy the head. The noble administrator occupying the Endeque house-II at Chachoapan may have been an accomplished *tlacuilo* (scribe) who was attempting to teach a child his techniques shortly after the Spanish Conquest.

The most important religious center in the Mixteca Alta was Achiutla (Dahlgren 1954:273). The priests of Achiutla maintained a second sanctuary in the Nochixtlan Valley (Dahlgren 1954:268). The main deity, called "Heart of the People," was an idol of precious stone in the form of a bird (eagle?) with a serpent coiled around it (Dahlgren 1954:266-67). In Mesoamerican religion it was common for the eagle to represent the sun, while the serpent was a symbol for the clouds and rain. Bird feathers, precious stones, dogs, deer, and flowers were among the more common offerings for deities in the Mixteca (Dahlgren 1954:278-79). Therefore, the depiction of eagles, serpents, stylized bird and serpent heads, serpent eyes, cloud symbols, flowers, and feathers on Pilitas polychrome is consistent with symbols representative of religious values (see Fig. 4).

Iglesia Polychrome

A total of eighty-three rim sherds representative of at least thirty-eight different vessels constitutes the sample of Iglesia polychrome from Chachoapan and Yucuita. Most Iglesia vessels are of three colors—orange, red, and black. White occurs less frequently and yellow is rare (Table 6). Plates and *cajetes* are the most frequent vessel shapes, while *molcajetes* and simple hemispherical bowls with tab handles are rare (Table 7). Thirteen different primary design motifs are found on Iglesia polychrome. Two secondary motifs were also defined, but are found only below one or another of the thirteen primary motifs (Table 8; Fig. 10). Only four different design motifs could be identified on the interior bases of plates and *cajetes*, although all except one of the bases examined were decorated (Fig. 11).

Plates

Polychrome plates functioned as food serving vessels for meats, fish, or any more solid and less liquid foodstuffs. Plates lack tripod supports. Their diameter ranges from 20 to 24 cm, height from 2 to 4 cm, and rim thickness from 4 to 8 mm.

Plates are decorated on the exterior rim, interior rim, and interior base (Fig. 12). Decoration on the exterior rim is limited to a white or orange band that is commonly delineated by a red line. Designs are located on interior rims and bases.

COLORS	Vessels*	Percent
Orange	38	100.00
Black	37	97.37
Red	35	92.11
White	20	52.63
Yellow	1	2.63

*Based on 38 minimum vessels.

Table 6. Iglesia Polychrome—Colors

VESSEL SHAPES	Minimum Vessels		Total Sherds	
	No.	Percent	No.	Percent
Plates	24	63.16	48	57.83
Tripod Cajetes	12	31.58	24	28.87
Plates or Cajetes	0	0.00	7	8.43
Molcajetes	1	2.63	1	1.25
Tab Handle Bowls	1	2.63	3	3.62
Totals	38	100.00	83	100.00

Table 7. Iglesia Polychrome—Vessel Shapes

DESIGN MOTIFS	No.	Percent
Stylized bird or serpent heads	5	10.42
Sections with vertical lines	5	10.42
Floral motifs	5	10.42
Smoke or cloud symbols	4	8.33
Hooks	4	8.33
Feathers	3	6.25
Curvilineal xicalcoliuhquis	2	4.18
Diamonds	2	4.18
Circles with dots	1	2.08
Oblongs with "U's" and circles	1	2.08
Oblongs with dots	1	2.08
Cave symbols	1	2.08
Stylized serpents	1	2.08
Oblongs and circles**	4	8.33
Dots**	1	2.08
Serpent skin***	5	10.42
Floral motifs***	1	2.08
Red sun dot***	1	2.08
Hooks***	1	2.08
Totals	48*	100.00

*Based on 38 minimum vessels.
**Secondary motifs.
***Motifs on interior bases.

Table 8. Iglesia Polychrome–Design Motifs

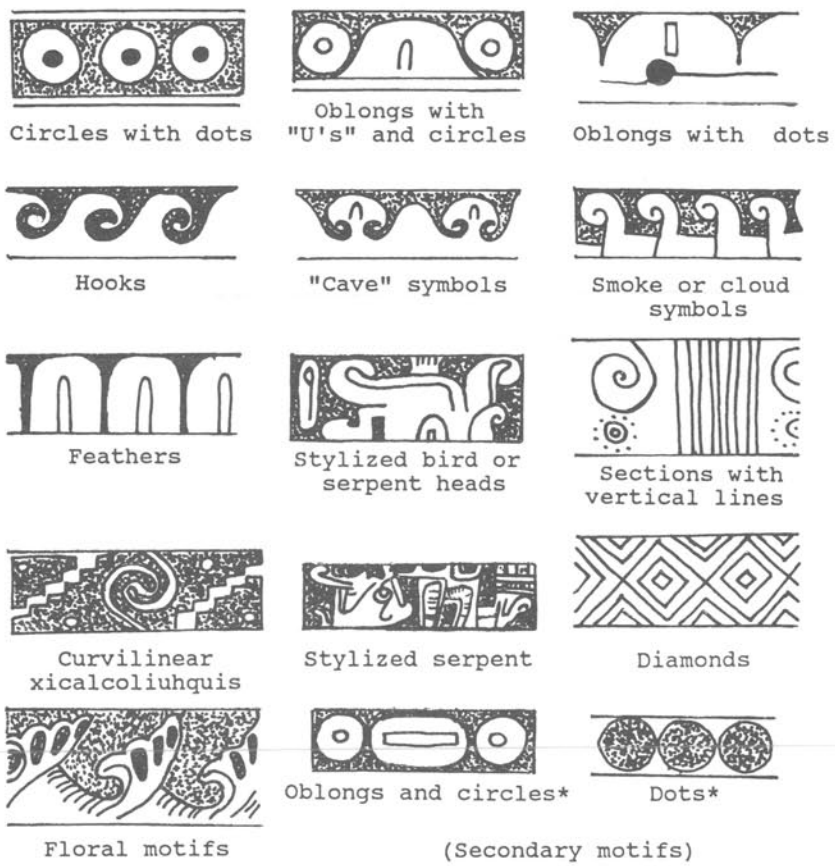


Fig. 10. Iglesia Polychrome–Interior Rim Design Motifs

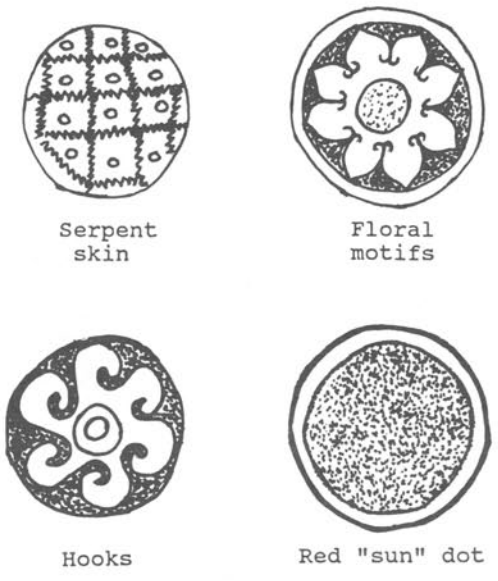


Fig. 11. Iglesia Polychrome–Interior Base Design Motifs

Cajetes

Cajetes functioned as serving vessels for food or drink. *Cajete* diameter ranges from 18 to 22 cm, height (minus tripod supports) from 5 to 6 cm, and rim thickness from 5 to 8 mm. *Cajetes* often have tripod supports that always end in highly schematized serpent heads (Fig. 12).

Like plates, *cajetes* are decorated on the exterior rim, interior rim, and interior base. Exterior rim decoration is limited to an orange band that is commonly delineated by a black or red line. Decoration is found on interior rims and bases.

Molcajete

One vessel in the shape of a tripod *cajete* had deep crosshatched incisions made in its interior base to form a grater. It was used in food preparation as a *molcajete* or grater bowl used to grate chiles and other vegetables. The *molcajete* was decorated on the exterior rim with an orange band and had designs on the interior rim (Fig. 12).

Tab Handle Bowl

One hemispherical bowl with two tab handles is included in the inventory of Iglesia polychrome. The bowl is 12 cm in diameter, 4.5 cm in height, and has a rim thickness of 6 mm. The tab handles are painted black, and the exterior rim and entire interior of the bowl reveal traces of orange, white, red, and black paint. Unfortunately, no design motifs were preserved on the bowl. Tab handle bowls may have functioned as containers for condiments served with meals. Iglesia polychrome tab handle bowls are virtually identical in form to Iglesia burnished red tab handle bowls with lids.

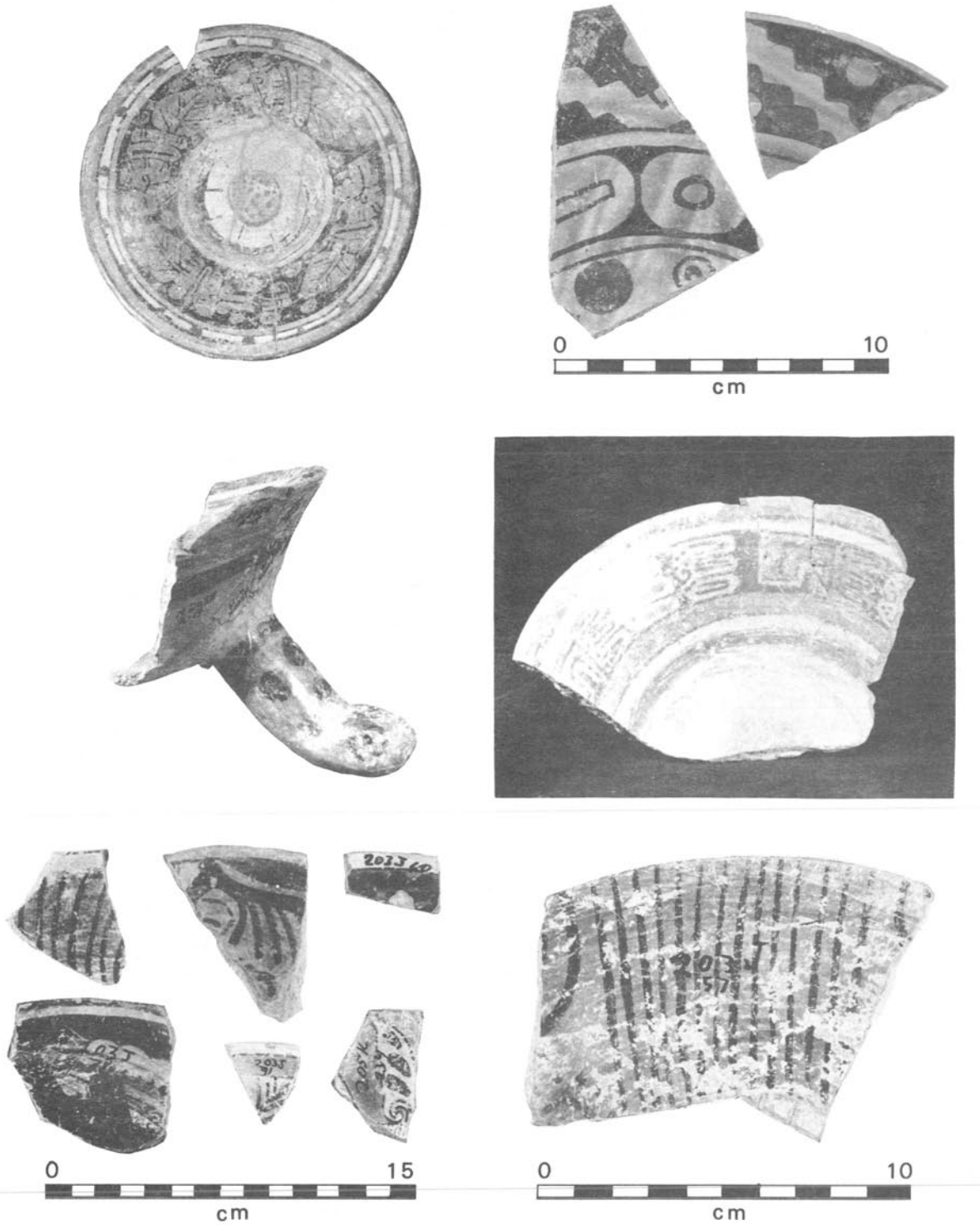


Fig. 12. Iglesia Polychrome
Plates (upper; lower left); tripod cajete (center); and molcajete (lower right).

Summary

Unlike Pilitas polychrome, Iglesia polychrome is similar in some respects to certain types of Late Postclassic Cholula polychrome. Inventories of both include a high frequency of plates and *cajetes* as vessels shapes. Furthermore, these plates and out-flaring wall *cajetes* have only simple orange or white bands decorating their exterior rims, while design motifs decorate interior rims and bases. In particular, the Iglesia polychrome plate illustrated in Fig. 12 (upper right) is similar to certain types of Cholula polychrome plates, and the Iglesia tripod *cajete* shown in Fig. 12 (center) is similar to certain types of Cholula polychrome tripod *cajetes.* Despite these similarities between Cholula and Iglesia polychromes, however, they are not identical. Therefore, it is highly unlikely that Cholula was the center of production for Iglesia polychrome.

Iglesia polychrome had a wider range of geographic distribution than Pilitas polychrome. Examples come from not only the Mixteca but also from Chinantla, the latter with its own unique type of Prehispanic polychrome. In the Chinantla, Agustín Delgado (1960:117) found an Iglesia tripod cajete very similar to the one illustrated in Fig. 12 (center) in an early Postconquest tomb (Lind 1967:59). Iglesia polychrome has also been found at Yagul in the Valley of Oaxaca in deposits radiocarbon dated at A.D. 1593 (Bernal and Gamio 1974:22; Lam. color 2c, 2e).

Most of the design motifs on Iglesia polychrome vessels are geometric and, as Caso (1938) pointed out long ago, the floral motifs on Iglesia vessels show a marked Spanish influence in the manner in which they were painted (see Fig. 12, lower left). There are no depictions of human figures on Iglesia polychrome that might have served as symbols of political propaganda. Furthermore, there are no realistic depictions of religious symbols such as eagles or serpents. Even tripod supports possess highly schematized serpent heads. Only more esoteric motifs—stylized serpent or bird heads, serpent skin, cloud motifs, feathers, red "sun" dots—served as possible symbols of religious values. The influence of Spanish priests in inhibiting the placement of any overt symbols of "paganism" is clear.

Aztec Burnished Red

Only four sherds representative of three different vessels constitute the sample of Aztec burnished red from Chachoapan and Yucuita. All have burnished red painted surfaces and design motifs painted in black and/or white (in which white is applied after firing). One supportless plate and two tripod *cajetes* are the only vessel shapes.

Plate

The plate, 22 cm in diameter, 2 cm in height, and 7 mm in rim thickness, has a red band on the exterior rim and black scallop motifs on the interior rim. It probably functioned as a food serving vessel for more solid foodstuffs.

Cajetes

The Aztec *cajetes* have notched slab tripod supports painted red and decorated with horizontal white lines and a white *xonecuilli* or S-shaped motif. One

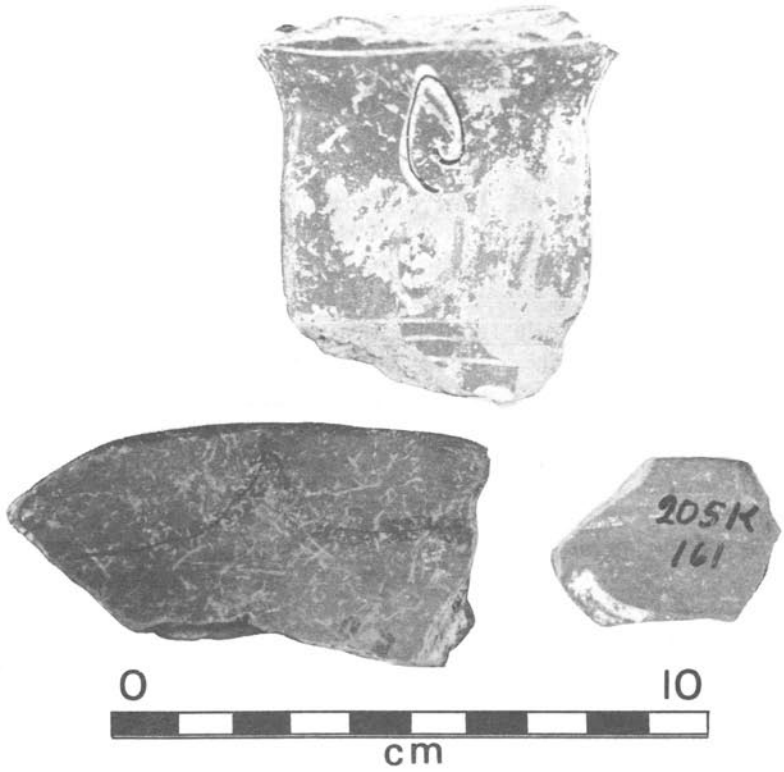


Fig. 13. Aztec Burnished Red

cajete has a red band on the exterior rim and white scallop motifs on the interior rim. The other has a red band decorated with vertical black lines on the exterior rim and horizontal black lines on the interior rim. Both *cajetes* probably functioned as vessels in which food or drink was served. The plate and the tripod *cajete* with scallop motifs may have formed a matched set (Fig. 13).

Summary

Aztec burnished red is a typical Late Postclassic ceramic type from the Valley of Mexico where it has been referred to as "Aztec black on red" or "Aztec polychrome." The distribution of Aztec burnished red outside the Valley of Mexico has never been clearly defined. However, at Coixtlahuaca, it was found in association with elite burials (Bernal 1949:36-38) and, at Zaachila, in the Valley of Oaxaca in an elite tomb (Gallegos 1963). The presence of Aztec burnished red in the Nochixtlan Valley and at Coixtlahuaca can be related to the documented Aztec conquests of these areas during the latter part of the fifteenth century. On the other hand, its presence at Zaachila may be associated with the marriage of an Aztec princess to the Zapotec king Cocijoeza shortly before the Spanish Conquest (Covarrubias 1946:199-201).

Iglesia Burnished Red

A total of twenty-nine rim sherds representative of at least ten different vessels and three different covers (lids) constitutes the sample of Iglesia burnished red from Chachoapan and Yucuita. While all vessels have burnished red surfaces, over half also have design motifs painted in black. Orange and white painted decoration is found less frequently (Table 9). Tripod supported *cajetes*

and simple hemispherical bowls with or without tab handles are the most frequent vessel shapes. One tripod olla and one *tecomate* are also included in this inventory (Table 10). Five different design motifs were identified on Iglesia burnished red vessels (Fig. 14).

Cajetes

The tripod *cajetes* probably functioned as vessels in which food or drink was served. They have highly schematized serpent head supports identical to those on Iglesia polychrome tripod *cajetes*. *Cajete* rim diameter ranges from 18 to 20 cm and height (minus tripod supports) from 5.5 to 7.0 cm. Rim thickness is 6 mm.

Decoration is located on the exterior rim, interior rim, and interior base. With the exception of one *cajete*, that has a red band, exterior rim decoration is identical to that of Iglesia polychrome plates and *cajetes* with white or orange bands delineated by red or black lines. With the exception of stepped lines, interior rims also possess the same design motifs present on Iglesia polychrome plates and *cajetes*. Interior bases have designs painted in black, but no elements could be defined with certainty because of their fragmentary nature (Fig. 15).

Bowls

The inventory of bowls includes two sizes—two are 14 cm and two are 9 cm in rim diameter. No height measurements were obtainable on the larger bowls, but the smaller ones are 4.0 and 4.5 cm in height. All Iglesia burnished red bowls have a rim thickness of 5mm.

The larger bowls have tab handles and are identical in vessel shape and size to the tab handle bowl of Iglesia polychrome. Both of the large Iglesia burnished red tab handle bowls have red exterior rims and interiors. One has a thick black line encircling the interior rim.

One of the two smaller bowls also has tab handles, and both have circular lids whose interior ridges are 8 cm in diameter so that they fit the bowls perfectly. Both the bowls and the lids have burnished red surfaces with no further decoration. A third circular lid is 89 cm in diameter. It is somewhat different in profile from the other two and is also distinctive in having two parallel black lines decorating it. All the lids evidently had handles projecting vertically from their centers—like modern sugar bowl lids. Both the large and small bowls may have functioned as containers for condiments served with meals.

COLORS	Vessels*	Percent
Red	13	100.00
Black	7	53.85
Orange	3	23.08
White	1	7.69

*Based on 13 minimum vessels.

Table 9. Iglesia Burnished Red—Colors

VESSEL SHAPES	Minimum Vessels No.	Percent	Total Sherds No.	Percent
Tripod Cajetes	4	30.76	6	20.69
Tab Handle Bowls	4	30.76	10	34.49
Lids	3	23.10	5	17.24
Tripod Ollas	1	7.69	4	13.79
Tecomates	1	7.69	4	13.79
Totals	13	100.00	29	100.00

Table 10. Iglesia Burnished Red–Vessel Shapes

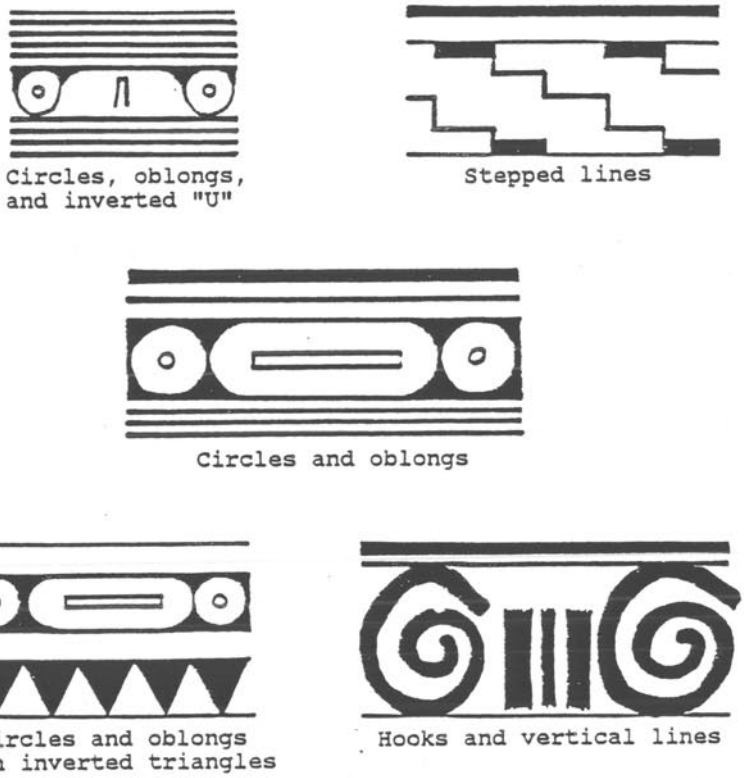


Fig. 14. Iglesia Burnished Red–Design Motifs

Tripod Olla

One tripod olla with a globular body and cylindrical neck is part of the Iglesia burnished red inventory. It is identical in vessel shape to Pilitas polychrome tripod ollas and probably served as a vessel from which chocolate or pulque was drunk. It has a rim diameter of 6 cm, a maximum body diameter of 20 cm, and a rim thickness of 4 mm. The interior rim of the olla lacks decoration, but the exterior neck is red with unidentifiable motifs painted in black. The exterior body has sections with vertical lines alternating with hooks–a common motif on Iglesia polychrome vessels.

Tecomate

One small *tecomate* of Iglesia burnished red was found. It has a rim diameter of 2 cm, an overail height of 8 cm, and a rim thickness of 3 mm. Two bands of designs painted in black on a burnished red surface and located just below the exterior vessel rim decorate the *tecomate.* The first band of motifs includes oblongs and circles--a common secondary motif on Iglesia polychrome vessels. The second band contains solid black triangles. The function of the small *tecomate* is unknown. It may have served as a container for some liquid (honey?) or for some fine grain substance (salt?).

Summary

Iglesia burnished red has only been recovered from Postconquest Convento deposits. Because this Postconquest type has never been defined, its distribution outside the Nochixtlan Valley is unknown. Iglesia burnished red is unusual because it combines attributes from several different ceramic types—Pilitas polychrome, Aztec burnished red, and Iglesia polychrome. Tripod ollas of Iglesia burnished red are identical in vessel shape, but not decoration, to Pilitas polychrome tripod ollas. The interiors of Iglesia burnished red tripod *cajetes* are virtually identical in decoration to Aztec burnished red tripod *cajetes* and plates. Turn these same Iglesia burnished red tripod *cajetes* over, and their exterior rim decoration is identical to Iglesia polychrome tripod *cajetes* and plates (Fig. 15, top).

Most of the design motifs on Iglesia burnished red vessels are identical to those on Iglesia polychrome vessels. Identical serpent head supports are also encountered on *cajetes* of Iglesia burnished red and Iglesia polychrome, and inventories of both types include tab handle bowls. These factors, combined with the Postconquest Convento contexts of both types, make it likely that Iglesia burnished red and Iglesia polychrome had a common center of production.

Iglesia Burnished White

Only three sherds representative of two different vessels constitute the sample of Iglesia burnished white. Both vessels have burnished white painted surfaces and one has black painted decoration. Both vessels are plates 22 cm in rim diameter, 2 cm in height, and 5 mm in rim thickness. Both have white painted bands encircling their exterior rims. One has only white paint on the interior surface; the other has black lines encircling the interior rim. The plates probably functioned as serving vessels for more solid foodstuffs (Fig. 15, lower right).

Summary

Iglesia burnished white has been found only in Postconquest Convento deposits and is unlike the Late Postclassic baño blanco or negro sobre blanco identified by Bernal (1949:41-52) at Coixtlahuaca. Because Iglesia burnished white is a heretofore undefined Postconquest ceramic type, its distribution outside the Nochixtlan Valley is unknown.

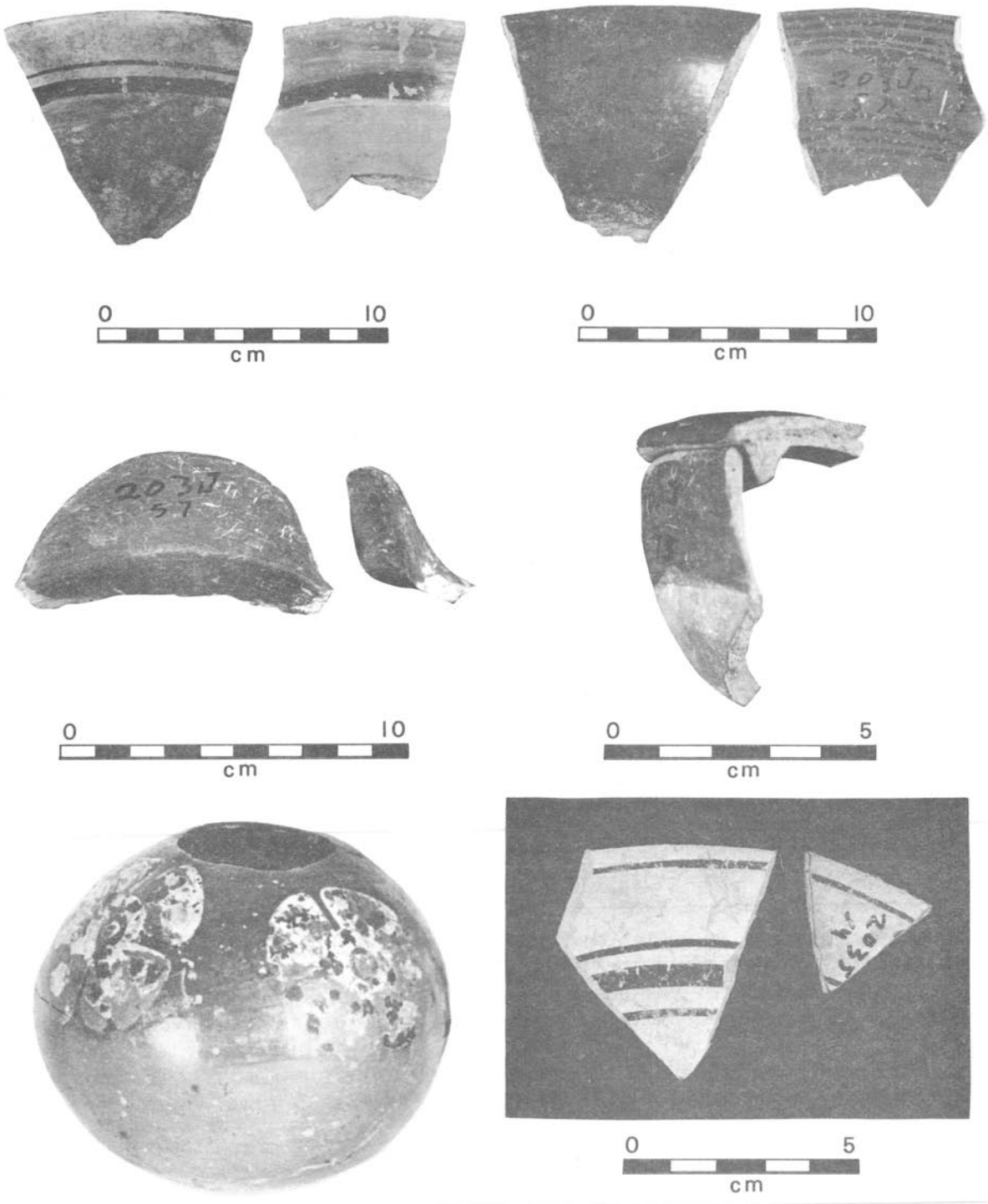


Fig. 15. Iglesia Burnished Red and Iglesia Burnished White

Iglesia burnished red tripod *cajetes* (top), tab handle bowls with lids (center), and a *tecomate* from Museo Frissel (lower left); Iglesia burnished white (lower right).

Mixtec Graphite on Orange

Only two sherds representative of two different vessels constitute the sample of Mixteca graphite on orange. An orange painted surface with decoration applied in graphite is typical of this type (Spores 1972:63). Both vessels of Mixteca graphite on orange are hemispherical bowls. One is 16 cm and the other 18 cm in rim diameter; both have a rim thickness of 6 mm. Both bowls have parallel lines, painted with graphite, around the exterior and interior rims. In the codices, hemispherical bowls are illustrated as vessels from which pulque or chocolate was drunk (Fig. 16).

Relatively high frequencies of Mixteca graphite on orange have been recovered from the Huamelulpan area of the Mixteca (Winter, personal communication, 1983). It is also a well-known Postclassic ceramic type, although not necessarily characteristic, of the Valley of Oaxaca (Bernal 1966:355, Fig. 12). The exceptionally infrequent association of Mixteca graphite on orange with the Late Postclassic palaces at Chachoapan and Yucuita may be explained in any one of several ways. Chronologically, it may be an Early, instead of Late, Postclassic ceramic type. It may also be a product of areas in which graphite is found and therefore an infrequent commodity in markets outside these areas.

Codex Vindobonensis 25-I

Codex Nuttall 30

Fig. 16. Hemispherical Bowls in the Mixtec Codices

Yanhuitlan Red on Cream

A total of 556 rim sherds constitutes the sample of Yanhuitlan red on cream from Chachoapan and Yucuita. Most vessels of this type have burnished cream-colored surfaces on which design motifs are painted in red. About 14% of the vessels lack burnished surfaces. Occasionally the surfaces are orange or chalky white, or part cream-colored and part orange or chalky white, indicating variations in oxidation and/or stacking procedures during firing. Design motifs are sometimes painted in maroon or, more rarely, black instead of red. A simple supportless *cajete* is the most frequent vessel shape, while tripod *cajetes*, simple hemispherical bowls, small ovoid bowls, and small supportless plates are rare (Table 11). Twenty-four different design motifs are identifiable on Yanhuitlan red on cream vessels (Table 12). Because of the fragmentary nature of the vessels, however, only four different design motifs can be observed on interior bases (Fig. 17).

VESSEL SHAPES	No.	Percent
Simple supportless cajetes	463	83.27
Tripod cajetes	33	5.93
Simple hemispherical bowls	28	5.04
Ovoid bowls	16	2.88
Plates	16	2.88
Totals	556	100.00

Table 11. Yanhuitlan Red on Cream–Vessel Shapes

DESIGN MOTIFS	No.	Percent
Parallel lines**	62	16.85
Diagonals and ?	55	14.95
Diagonals and hooks	52	14.13
Diagonals-rectangles-stylized birds	47	12.77
Diagonals and triangles	21	5.72
Diagonals-triangles-stylized birds	20	5.44
Eagle heads	18	4.89
Diagonals and butterflies	14	3.80
Grouped diagonals	11	2.99
Diagonals	10	2.72
Diagonals-stepped lines-hooks	6	1.63
Curvilinear xicalcoliuhquis	6	1.63
Xonecuillis	5	1.34
Triangles	4	1.09
Hooks	4	1.09
Diagonals-hooks-butterflies	4	1.09
Diagonals and feathers	3	0.82
Diagonals and dots	3	0.82
Feathers	2	0.54
Stepped lines	2	0.54
Single band	1	0.27
Stippled lines	1	0.27
"U" motifs	1	0.27
Diagonals and "X's"	1	0.27
Red circles***	6	1.63
Red sun dots***	4	1.09
Hooks***	2	0.54
Stylized birds***	2	0.54
Totals	368*	100.00

*Design motifs not discernible on 202 rim sherds.
**Comiyuchi variety of Yanhuitlan red on cream.
***Motifs on interior bases.

Table 12. Yanhuitlan Red on Cream–Design Motifs

Cajetes

Supportless *cajetes* with simple contours are present in the Yanhuitlan red on cream inventory in two sizes--large and small. Large *cajetes*, by far the more common of the two size variants, constitute nearly 78% of all *cajetes*. Their rim diameter ranges from 16 to 24 cm, height from 5 to 7 cm, and rim thickness from 3 to 8 mm. Small *cajetes* have a rim diameter ranging from 8 to 14 cm, height from 2.5 to 3.5 cm, and rim thickness from 3 to 7 mm. More than 80% of

the large *cajetes* are burnished, while over 40% of the small *cajetes* are not. *Cajetes* are decorated on the interior rim and interior base (Fig. 18).

The large *cajetes* probably functioned as serving dishes from which atole, beans, pozole, or any of the more soupy foodstuffs were consumed. The small cajetes may have been containers for condiments served with meals, or serving dishes for smaller portions of soupy foodstuffs—perhaps for children.

Comiyuchi Variety

One group of sixty-two rim sherds with distinctive attributes constitutes a variety of Yanhuitlan red on cream *cajetes* that deserves special mention. All *cajetes* of this variety have highly burnished surfaces that give them a waxy appearance. Furthermore, while other Yanhuitlan red on cream *cajetes* have either round (57%) or recessed (43%) rim forms in nearly equal proportions, all *cajetes* of this type have round rim forms decorated on the interior rim with a series of thick parallel lines (Fig. 19). Finally, stylized bird heads that are not found on other Yanhuitlan red on cream *cajetes* decorate their interior bases (see Fig. 17). These *cajetes*, then, are distinctive. They are very similar to what John Paddock (1966:208) has called Huitzo Polished Cream in the Valley of Oaxaca, and to one category (025) of what Bruce Byland (1980:204; 209-210) has called Comiyuchi red on cream in the Tamazulapan Valley.

Tripod Cajetes

Vertical wall *cajetes* with inflected rims are present in two sizes: large and small. Large *cajetes* constitute over 75% of the sample and have a rim diameter of 18 to 22 cm and rim thickness of 5 to 7 mm. The rim diameter on small *cajetes* varies from 12 to 14 cm and rim thickness from 4 to 6 mm. All tripod *cajetes* are burnished and have round rims. They are decorated on the interior and exterior rims. Only a simple red band encircles the interior rim, while design motifs are present on the exterior rim. In the codices, tripod *cajetes* are illustrated as vessels from which chocolate or pulque was drunk (Fig. 19).

Simple Bowls

Simple hemispherical bowls of the Yanhuitlan red on cream type have a rim diameter that ranges from 12 to 18 cm and rim thickness from 4 to 8 mm. Every example has a round rim and, with the exception of one, is burnished. The bowls are decorated on the interior and exterior rims. A simple red band invariably encircles the interior rim, while design motifs decorate the exterior rim. In the codices, hemispherical bowls are illustrated as vessels from which pulque or chocolate was drunk (Fig. 19).

Ovoid Bowls

Ovoid, or somewhat pear-shaped, bowls have a rim diameter of 8 to 10 cm and rim thickness of 3 to 6 mm. All ovoid bowls have round rims and all, except one, are burnished. They are decorated on both interior and exterior rims with a simple red band on the interior rim and design motifs on the exterior rim (Fig. 19).

The function of ovoid bowls is uncertain. They may have served as containers for liquids (honey?), or fine grain substances (salt?).

Plates

Small supportless plates have a rim diameter of 10 to 14 cm, height of 1 to 2 cm, and rim thickness of 4 to 6 mm. All Yanhuitlan red on cream plates present in the sample have round rims. Nearly half are unburnished. They are decorated on the interior rim and base (Fig. 19).

The small plates are more like saucers than food serving platters. They may have functioned as saucers on which condiments, such as salt or small green chiles, were placed and served during meals.

Summary

Yanhuitlan red on cream has been found throughout the Mixteca Alta. Vessels with design motifs identical to those from Chachoapan and Yucuita are among the ceramic types recovered at Coixtlahuaca (Bernal 1949:51, 69). Based on surface surveys in the Tamazulapan Valley, Byland (1980) has proposed nine different categories of Yanhuitlan red on cream. Unfortunately, the proposed categories are too vaguely described to be identifiable. Not a single example is illustrated nor are any design motifs mentioned. From the generalized descriptions, however, it would appear that all nine categories are associated with the palaces at Chachoapan and Yucuita.

The "Comiyuchi" variety of Yanhuitlan red on cream supportless *cajetes* represents only one of four categories of this variety proposed by Byland (1980:209-210). Byland has assigned the Comiyuchi variety to the Early Natividad phase (A.D. 900-1200), although he offers no stratigraphic evidence to support this claim. At Yucuita, no *cajetes* of the Comiyuchi variety were recovered in the A.D. 1340 Late Natividad midden (F-10A). On the other hand, some examples were found in association with the Early Postconquest Endeque house-II and in the A.D. 1660 Convento midden (F-10). At Chachoapan, 65% of all Comiyuchi variety *cajetes* were recovered from the floors of the Postconquest Convento house. On the basis of this evidence, it would appear that one of the categories of the Comiyuchi variety is not Early Natividad. However, because of the possibility of redeposition (see Chapter 5), this remains to be confirmed by excavations in Early Natividad deposits.

Outside the Mixteca Alta, Yanhuitlan red on cream is exceedingly rare or entirely absent. It is evidently absent in the Mixteca Baja, although a few examples have been reported from Huajuapan de Leon (Spores 1972:31). Distinctive types of red on cream are present in the Coastal Mixtec region (Brockington, personal communication, 1971) and in Chinantla (Winter, personal communication, 1979). The Huitzo Polished Cream from the Valley of Oaxaca is similar to the Comiyuchi variety supportless *cajetes* discussed here but shows few similarities with other examples of Yanhuitlan red on cream.

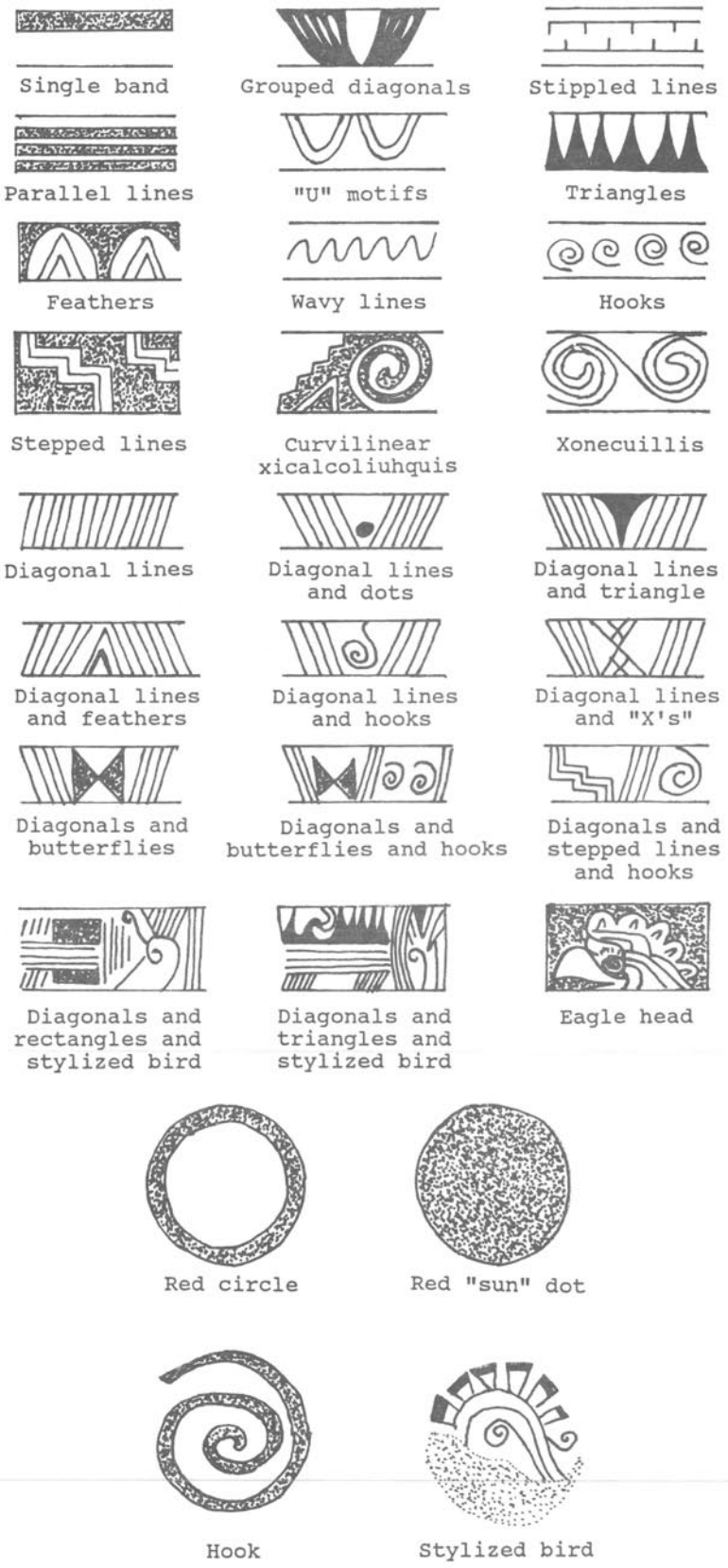


Fig. 17. Yanhuitlan Red on Cream–Design Motifs

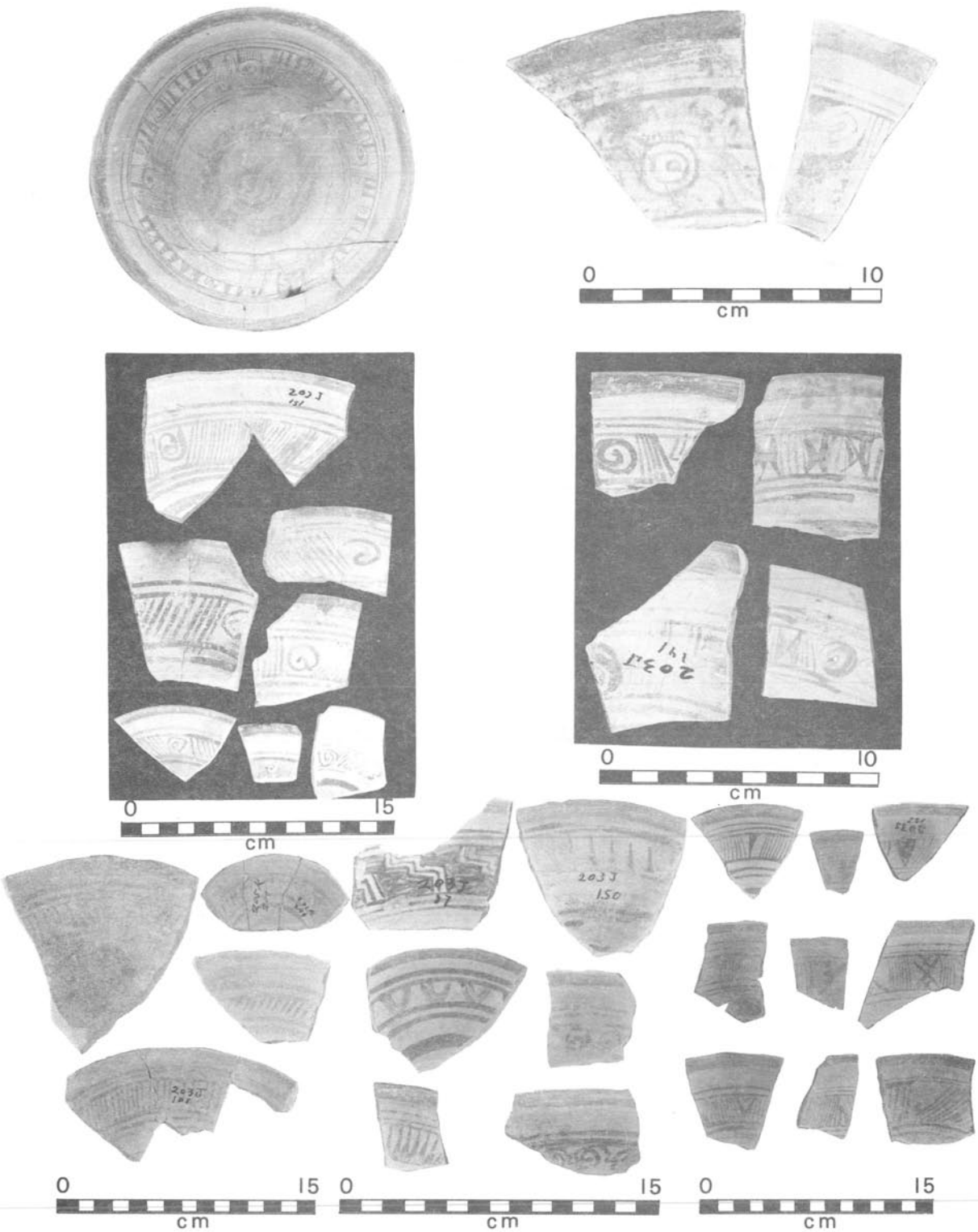


Fig. 18. Yanhuitlan Red on Cream Cajetes

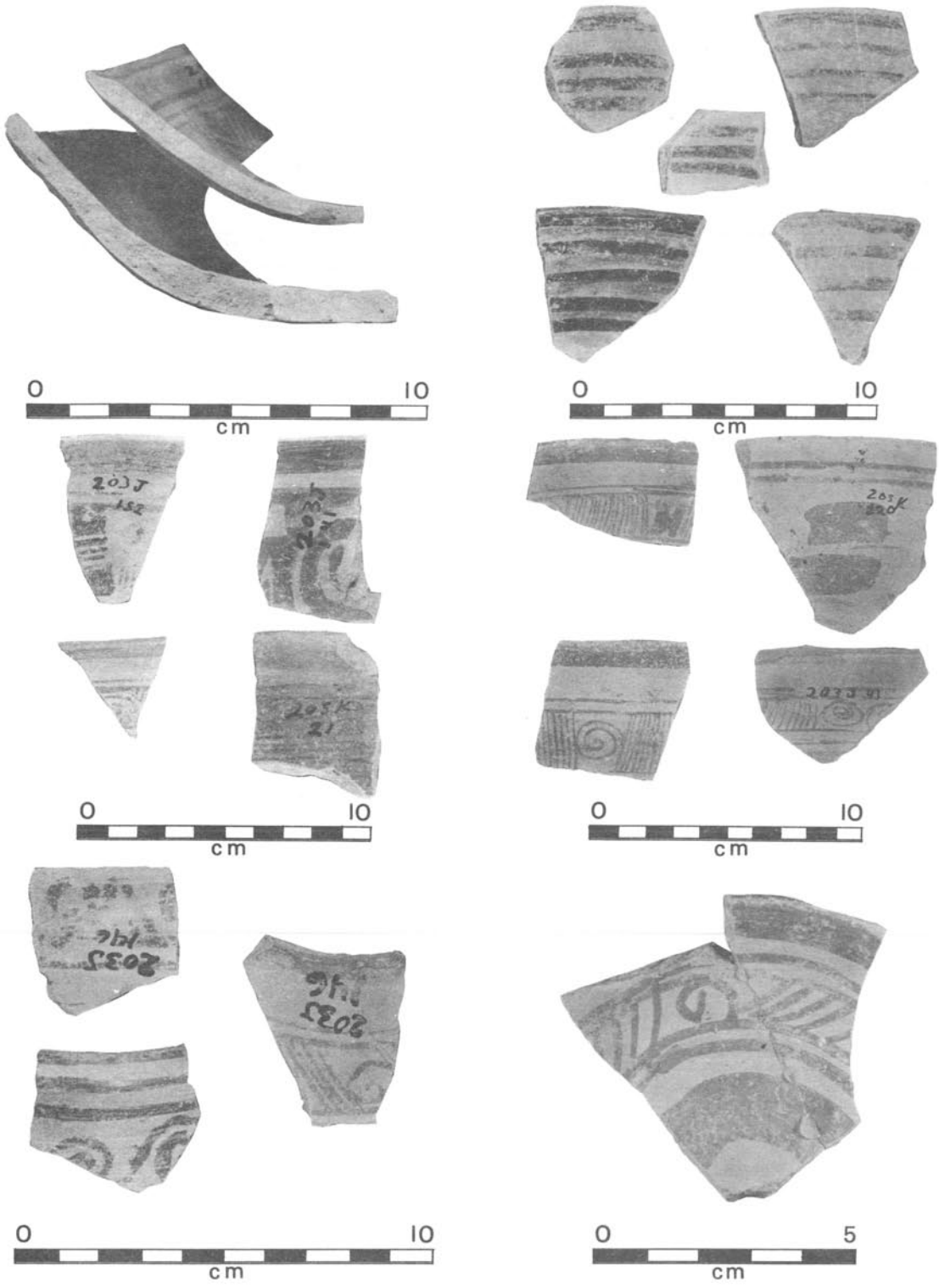


Fig. 19. Yanhuitlan Red on Cream

Cajetes with recessed and round rims (upper left); Comiyuchi variety (upper right); Tripod *cajetes* (center left); simple bowls (center right); ovoid bowls (lower left); and plates (lower right).

Yanhuitlan red on cream is confined primarily to the Mixteca Alta. The only realistic decorations on the ware are depictions of eagle heads. It is possible that these motifs are associated with eagle-serpent cult symbolism emanating from the ceremonial center Achiutla and the religious figure "Heart of the People," a bird entwined by a serpent, associated with that center. A careful examination of the elements employed in depicting the eagle head indicates that many of the other design motifs on Yanhuitlan red on cream are derived from these elements (see Fig. 17). Many of the design motifs, then, may have functioned as symbols with religious significance.

CHAPTER 3: PLAIN VESSELS

Plain vessels recovered from excavations at Chachoapan and Yucuita include Yanhuitlan fine cream, Yanhuitlan pitchers, Yanhuitlan ladles, Cacique burnished, Miguelito pitchers, Miguelito tripod *cajetes*, Nochixtlan rustware, Chachoapan sandy cream ollas, Chachoapan sandy cream *patojos*, and Chachoapan sandy cream *comales*. Analysis of each of these types follows a similar pattern. A general description of surface treatment is presented first. This is followed by a detailed description of vessel shapes and size variants. The type and its corresponding vessel shapes and size variants are then discussed with regard to their function in the context of the ancient cultural system. Frequency distribution within the individual features at Chachoapan and Yucuita are presented in my 1977 study.

Yanhuitlan Fine Cream

A total of 3398 rim sherds constitutes the sample of Yanhuitlan fine cream from Yucuita and Chachoapan. Most vessels have cream-colored surfaces, but many are orange or chalky white, or part cream-colored and part orange or chalky white. This reflects variations in oxidation and/or stacking procedures during firing. Occasionally vessel surfaces are burnished and, rarely, decorated with a simple red band painted around the rim. *Cajetes* are the most frequent vessel shape, while simple bowls and plates are very rare (Table 13).

Cajetes

Simple supportless *cajetes* are represented in three different sizes—miniature, small, and large. Small *cajetes*, the most frequent of the size variants, constitute over 70% of all Yanhuitlan fine cream *cajetes* (Table 14; Fig. 20).

Large *cajete* rim diameter ranges from 18 to 24 cm with a mode of 18 cm, height from 5 to 7 cm with a mode of 6 cm, and rim thickness from 4 to 7 mm with a mode of 6 mm. With few exceptions, all Yanhuitlan fine cream large *cajetes* are burnished over their entire interior and exterior surfaces (Table 15). Only one has a red band painted around its rim and is unburnished (Table 16).

VESSEL SHAPES	No.	Percent
Simple supportless cajetes	3348	98.53
Simple hemispherical bowls	45	1.32
Plates	5	0.15
Totals	3398	100.00

Table 13. Yanhuitlan Fine Cream—Vessel Shapes

SIZE VARIANTS	No.	Percent
Large cajetes	233	14.45
Small cajetes	1135	70.41
Miniature cajetes	244	15.14
Totals	1612*	100.00

*1736 cajetes were of indeterminant size.

Table 14. Yanhuitlan Fine Cream *Cajetes*–Size Variants

SIZE VARIANTS	Burnished		Unburnished	
	No.	Percent	No.	Percent
Large cajetes	231	99.14	2	0.86
Small cajetes	273	24.05	862	75.95
Miniature cajetes	7	2.87	237	97.13
Totals	511	31.70	1101	68.30

Table 15. Yanhuitlan Fine Cream *Cajetes*–Burnishing

SIZE VARIANTS	Red Band		Undecorated	
	No.	Percent	No.	Percent
Large cajetes	1	0.43	232	99.57
Small cajetes	12	1.06	1123	98.94
Miniature cajetes	93	38.11	151	61.89
Totals	106	6.58	1506	93.42

Table 16. Yanhuitlan Fine Cream *Cajetes*–Decoration

Small *cajetes* have a rim diameter of 12 to 16 cm with a mode of 14 cm, height of 2.5 to 5.0 cm with a mode of 3.5 cm, and rim thickness of 3 to 7 mm with a mode of 5 mm. Only 24% of the small *cajetes* are burnished, most of them only on the interior and exterior rim (Table 15). Only about 1%, all of which are unburnished, have red bands painted around their rims (Table 16).

Miniature *cajete* rim diameter ranges from 6 to 10 cm with a mode of 8 cm, height from 1.5 to 3.0 cm with a mode of 2.5 cm, and rim thickness from 3 to 6 mm with a mode of 4 mm. Most miniature *cajetes* are unburnished (Table 15).

About 38%, all unburnished, have simple red bands (Table 16). Red bands, then, are present only on unburnished cajetes of all size variants of Yanhuitlan fine cream.

The large and small supportless *cajetes* probably functioned as vessels in which food or drink was served. Those of the miniature variety may have been serving dishes for condiments.

Simple Bowls

Simple bowls are represented in two sizes--small and large. Large bowls, the more common of the two size variants, total 76% of all bowls. They have a rim diameter of 14 to 20 cm with a mode of 16 cm, height of 8 to 11 cm, and rim thickness of 4 to 7 mm. Small bowl rim diameter is from 8 to 12 cm, height from 4.5 to 6.0 cm, and rim thickness from 4 to 6 mm. All Yanhuitlan fine cream simple bowls have completely burnished exterior surfaces and unburnished interiors. None is decorated with a red band (Fig. 20).

The large bowls probably functioned as cooking pots, while the smaller bowls may have served as containers in which condiments were stored.

Plates

Only five rim sherds from small supportless plates are represented in the Yanhuitlan fine cream sample. Plate rim diameter is consistently 12 cm. Height varies from 1 to 2 cm and rim thickness is 6 mm. None of the plates is burnished, but three of the five have simple red bands decorating their rims (Fig. 20).

Like Yanhuitlan red on cream plates, the Yanhuitlan fine cream plates are more like saucers than food platters. They probably functioned as serving dishes for some types of condiments, such as salt or small green chiles, served with meals.

Summary

Yanhuitlan fine cream is confined to the Mixteca Alta and is rare or entirely absent in the Mixteca Baja, the Mixteca de la Costa, and the Valley of Oaxaca (Spores 1972:27-28). It is part of the same fine cream ware tradition as Yanhuitlan red on cream and probably had the same center or centers of production in and around the Nochixtlan Valley--San Miguel Adequez, Santa Inez del Río, Santo Domingo Tonaltepec, or Rancho Buenavista of Jaltepec. Yanhuitlan fine cream was primarily a common everyday dinnerware.

Yanhuitlan Fine Cream Ladles

A total of 406 sherds constitutes the sample of Yanhuitlan fine cream ladles. Most of these are cream-colored, but some are orange or chalky white, or part cream-colored and part orange or chalky white, indicating variations in oxidation and/or stacking procedures during firing. None of the ladles is burnished, but occasionally a simple red band decorates the rims of their dippers and handles.

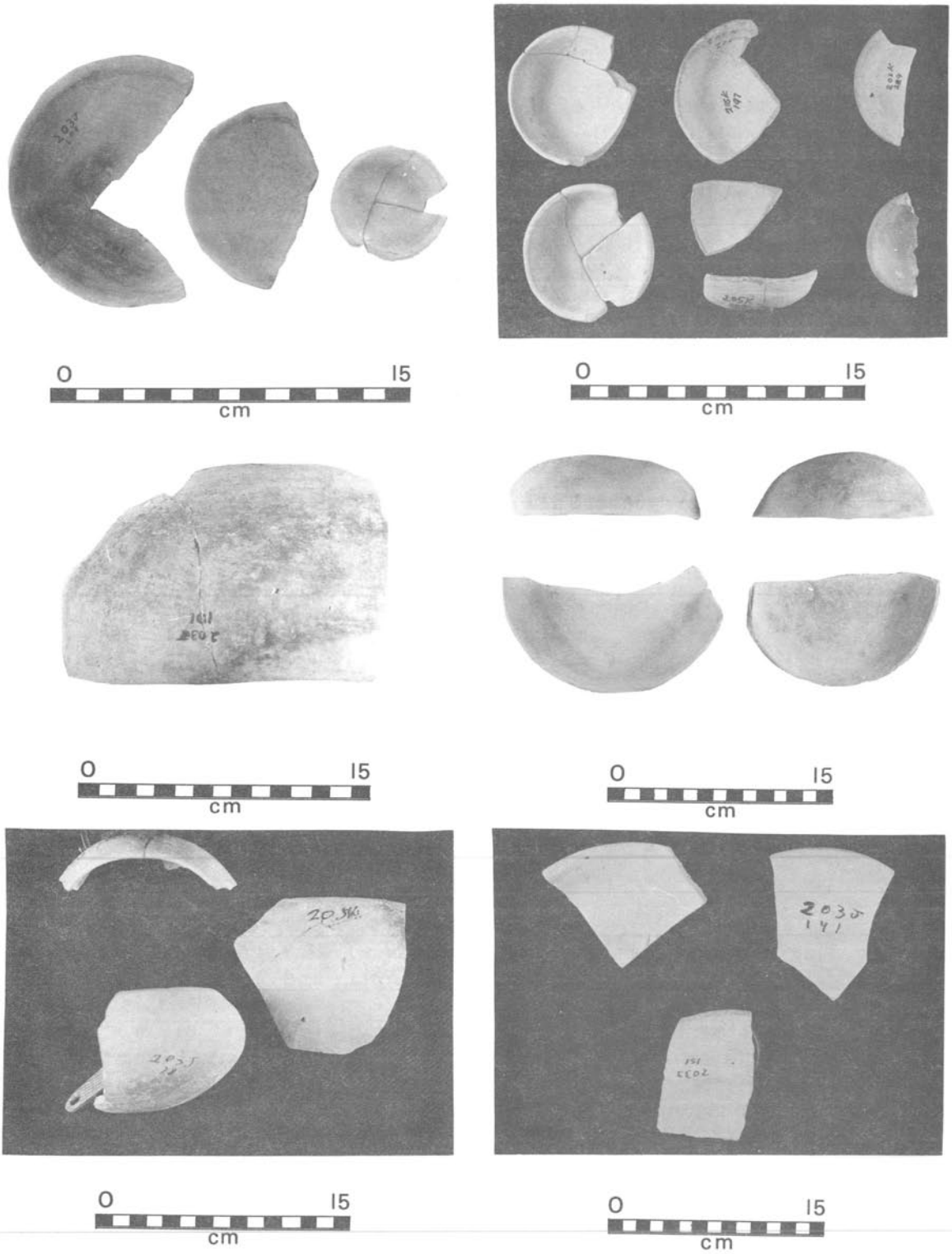


Fig. 20. Yanhuitlan Fine Cream
Cajete size variants (upper left); miniature *cajetes* (upper right); small *cajetes* (center left); large *cajetes* (center right); bowls (lower left); plates (lower right).

Yanhuitlan fine cream ladles have long tapered handles and deep bowls or dippers. They are represented in the sample in two sizes—large and small. Large ladles, the more common of the two size variants, constitute over 70% of all ladles. These large ladles have dippers that range from 8 to 12 cm in width and from 3.5 to 6.0 cm in depth. Rim thickness is from 3 to 7 mm. The dippers on small ladles are from 4 to 6 cm wide, 2.5 to 4.0 cm deep, and have a rim thickness of 3 to 6 mm. Only about 10% of the ladles are decorated with red bands. Small ladles are more frequently decorated (12%) than large ladles (8%).

Large ladles functioned both as dippers, used for obtaining drinks from water storage jars, and as ladles, used to fill serving dishes with more soupy foodstuffs (beans, atole, pozole) from cooking pots. Small ladles probably functioned as utensils for sauce-like condiments added to foodstuffs (Fig. 21).

Summary

Yanhuitlan fine cream ladles belong to the same fine cream ware tradition as Yanhuitlan fine cream and have the same areal distribution in the Mixteca Alta. Similar ladles are still made today for local use in the pottery-producing center of Santo Domingo Tonaltepec (Spores, personal communication, 1970).

Yanhuitlan Fine Cream Pitchers

Only three rim sherds from Yanhuitlan fine cream pitchers were recovered in excavations at Chachoapan and Yucuita. Like the Yanhuitlan fine cream ware from which they are made, the pitchers are cream-colored, orange, or chalky white. One of the three pitchers is burnished and two are not. One of the unburnished pitchers has a simple red band decorating its rim and two small perforated handles on opposite sides of the body directly below the neck. Pitcher orifice diameter ranges from 4 to 6 cm and rim thickness from 4 to 5 mm (Fig. 21).

Summary

Yanhuitlan fine cream pitchers belong to the Yanhuitlan fine cream tradition and have the same areal distribution in the Mixteca Alta. Bernal (1949:49, *Lámina* 6c) illustrates identical pitchers from Coixtlahuaca, and Winter (personal communication, 1983) found them associated with peasant burials. The exceptionally low frequencies of Yanhuitlan fine cream pitchers in association with the palaces at Yucuita and Chachoapan suggest that the elite rarely possessed this type of pitcher.

Cacique Burnished

A total of 1916 rim sherds makes up the sample of Cacique burnished. Most Cacique burnished vessels have black surfaces, but some are orange, tan, or gray, or combinations of black, tan, orange, or gray. Again, this is due to variations in oxidation and/or stacking procedures during firing. All vessels of this type are highly burnished over their entire interior and exterior surfaces. Composite *cajetes* constitute nearly 95% of the sample, while composite bowls are much less frequent.

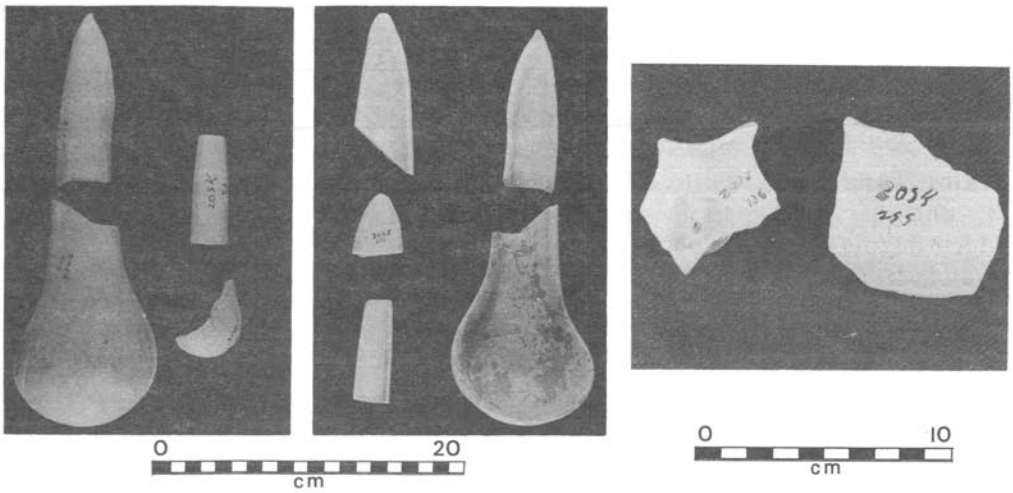


Fig. 21. Yanhuitlan Fine Cream Ladles and Pitchers

Composite Cajetes

Four different sizes are represented in the sample of Cacique burnished *cajetes*--miniature, small, large, and extra large (Table 17; Fig. 22). Miniature *cajete* rim diameter varies from 8 to 12 cm with a mode of 10 cm, height from 3.5 to 4.5 cm, and rim thickness from 3 to 5 mm. Small *cajetes*, the most frequent of the size variants, range from 14 to 24 cm in rim diameter with a mode of 18 cm, 5.5 to 7.5 cm in height, and 2 to 9 mm in rim thickness. Large *cajete* rim diameter is from 26 to 34 cm with a mode of 30 cm and rim thickness from 4 to 9 mm, while extra large *cajetes* range from 36 to 42 cm in rim diameter with a mode of 40 cm and from 5 to 9 mm in rim thickness. No height measurements could be obtained on large or extra large *cajetes*. However, Bernal (1949:54) cites whole vessels from burials at Coixtlahuaca that had rim diameters of 39 cm and heights of 18 cm.

Neck height on the composite *cajetes* varies from short to medium to tall (Table 18; Fig. 22). Short necks are from 1.0 to 2.6 cm in height with a mode of 1.3 cm and are present on nearly 60% of all vessels. Medium neck height is from 2.7 to 4.1 cm with a mode of 3.5 cm, while tall necks range from 4.2 to 5.8 cm with a mode of 4.5 cm. No simple correlation exists between neck height and size variant. All three neck heights are represented on small and large *cajetes*.

Small *cajetes* functioned as vessels in which food or drink was served. Large and extra large *cajetes* may have served as cooking pots. Miniature cajetes probably functioned as serving dishes for children or, perhaps, as serving dishes for condiments.

SIZE VARIANTS	No.	Percent
Miniature	11	4.49
Small	206	84.08
Large	18	7.35
Extra large	10	4.08
Totals	245	100.00

Table 17. Cacique Burnished Composite *Cajetes*–Size Variants

SIZE VARIANTS	Short Neck		Medium Neck		Tall Neck	
	No.	Percent	No.	Percent	No.	Percent
Miniature	11	100.00	0	0.00	0	0.00
Small	134	65.05	62	30.10	10	4.85
Large	1	5.56	9	50.00	8	44.44
Extra large	0	0.00	0	0.00	10	100.00
Totals	146	59.59	71	28.98	28	11.43

Table 18. Cacique Burnished Composite *Cajetes*–Neck Size

Composite Bowls

Composite bowls are present in the Cacique sample in three sizes–miniature, small, and large. Only 9% of these are miniatures. Rim diameter on these bowls varies from 8 to 10 cm and rim thickness from 4 to 7 mm. Small bowls, the most frequent size variant (59%), range from 12 to 16 cm in rim diameter with a mode of 16 cm and from 3 to 7 mm in rim thickness. About 32% of the bowls are large. Large bowl rim diameter is from 18 to 28 cm with a mode of 22 cm and rim thickness from 4 to 7 mm (Fig. 22).

Neck height on composite bowls is either short or medium. About 36% of the bowls have short necks that range from 1.0 to 2.6 cm with a mode of 1.5 cm. Most (64%) of the bowls are of medium neck height that ranges from 3.0 to 4.2 cm with a mode of 3.5 cm. All miniature composite bowls have short necks and all large composite bowls have medium necks. However, small composite bowls have both short and medium necks in equal frequencies.

The small and large composite bowls may have served as tureens or, perhaps, cooking pots, while the miniature bowls probably functioned as containers for condiments.

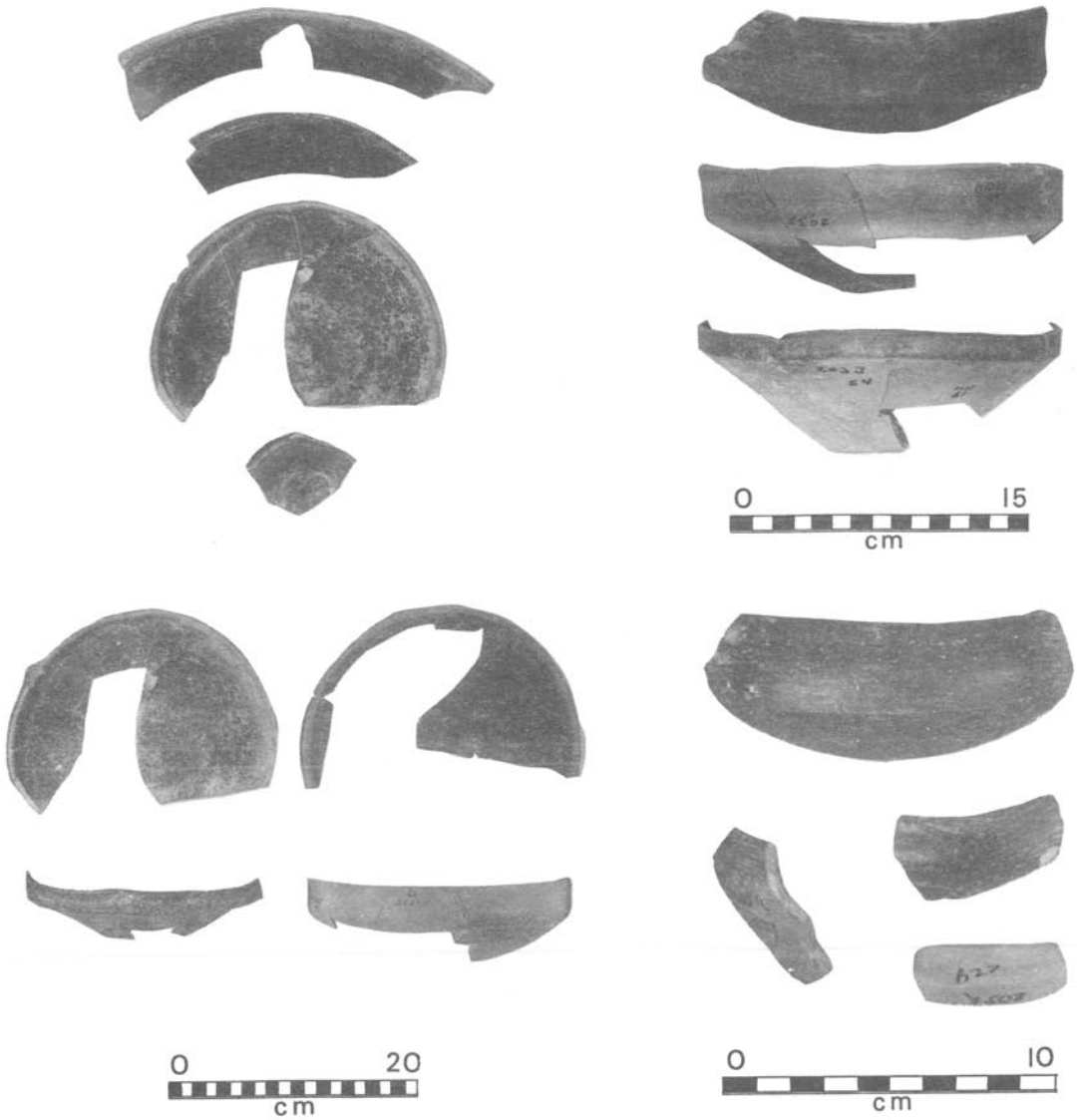


Fig. 22. Cacique Burnished
Composite *cajete* size variants (upper left) and neck variants (upper right); small composite *cajetes* (lower left); and composite bowls (lower right).

Summary

Cacique burnished is found throughout the Mixteca. At Coixtlahuaca, Bernal (1949: *Tabla* 2) found "*cajetes de silueta compuesta*" (Cacique burnished) to be very frequent as offerings in high status burials. The same vessel shapes and size variants that were recovered at Chachoapan and Yucuita were also found at Coixtlahuaca (Bernal 1949:54). The Instituto de Estudios Oaxaqueños in Mitla

possesses an example of a Cacique burnished composite *cajete* recorded as coming from a high status burial near Huajuapan de Leon in the Mixteca Baja. Outside the Mixteca, a distinctive variety of Cacique burnished was found among elite tomb offerings in Chinantla (Winter, personal communication, 1979). Bernal (1966:355; Fig. 12) also reports another distinctive variety of Cacique burnished (G-3M supportless composite *cajetes*) from Monte Albán V tombs, burials, and offerings in the Valley of Oaxaca at Yagul, Mitla, and Monte Albán. The presence of Cacique burnished and distinctive varieties of Cacique burnished in offerings associated with high status burials and tombs points to its function as a wide-spread elite status ware.

The presence of the different neck types on Cacique burnished vessels has no apparent relationship to vessel function and, therefore, may be a matter of producer or consumer preference. Medium necks are present more frequently on *cajetes* from earlier deposits, such as the A.D. 1340 Natividad midden (F-10A) at Yucuita. Short necks are much more frequent on *cajetes* from later deposits, such as the ca. A.D. 1540 Early Postconquest midden (F-2A) at Chachoapan and the A.D. 1660 Convento midden (F-10) at Yucuita. The possibility of a temporal change in production and/or consumption patterns, then, is evident. However, it is also possible that different pottery centers produced different neck types and that their access to different market outlets, or consumer access to different markets, accounts for changes in consumption patterns at Chachoapan and Yucuita.

Miguelito Hard Fine Gray

A total of 351 rim sherds comprise the sample of Miguelito hard fine gray. All vessels have highly burnished surfaces that range in color from light to dark gray and occasionally light brown. Vessel shapes of Miguelito hard fine gray include tripod supported *cajetes* and pitchers. Because these two vessel shapes are functionally distinct, they will be discussed separately.

Miguelito Tripod Cajetes

The sample of Miguelito tripod *cajetes* includes 249 rim sherds. *Cajete* rim diameter ranges from 12 to 18 cm with a mode of 14 cm, height (minus tripod supports) from 4.5 to 6.0 cm, and rim thickness from 4 to 7 mm. Two varieties of rim forms are represented. Nearly 54% have flat rims, while the remainder have round rims (Fig. 23).

Conical tripods are the most frequent supports on the *cajetes*, while tripods terminating in modeled serpent heads are rare. With the exception of one *cajete* that has a design stamped on its interior base, none of the Miguelito tripod *cajetes* is decorated (Fig. 23).

Miguelito tripod *cajetes* probably functioned as vessels from which pulque or chocolate was drunk. The Mixtec codices illustrate this function of tripod *cajetes* in general and tripod *cajetes* with serpent supports in particular (see Fig. 5).

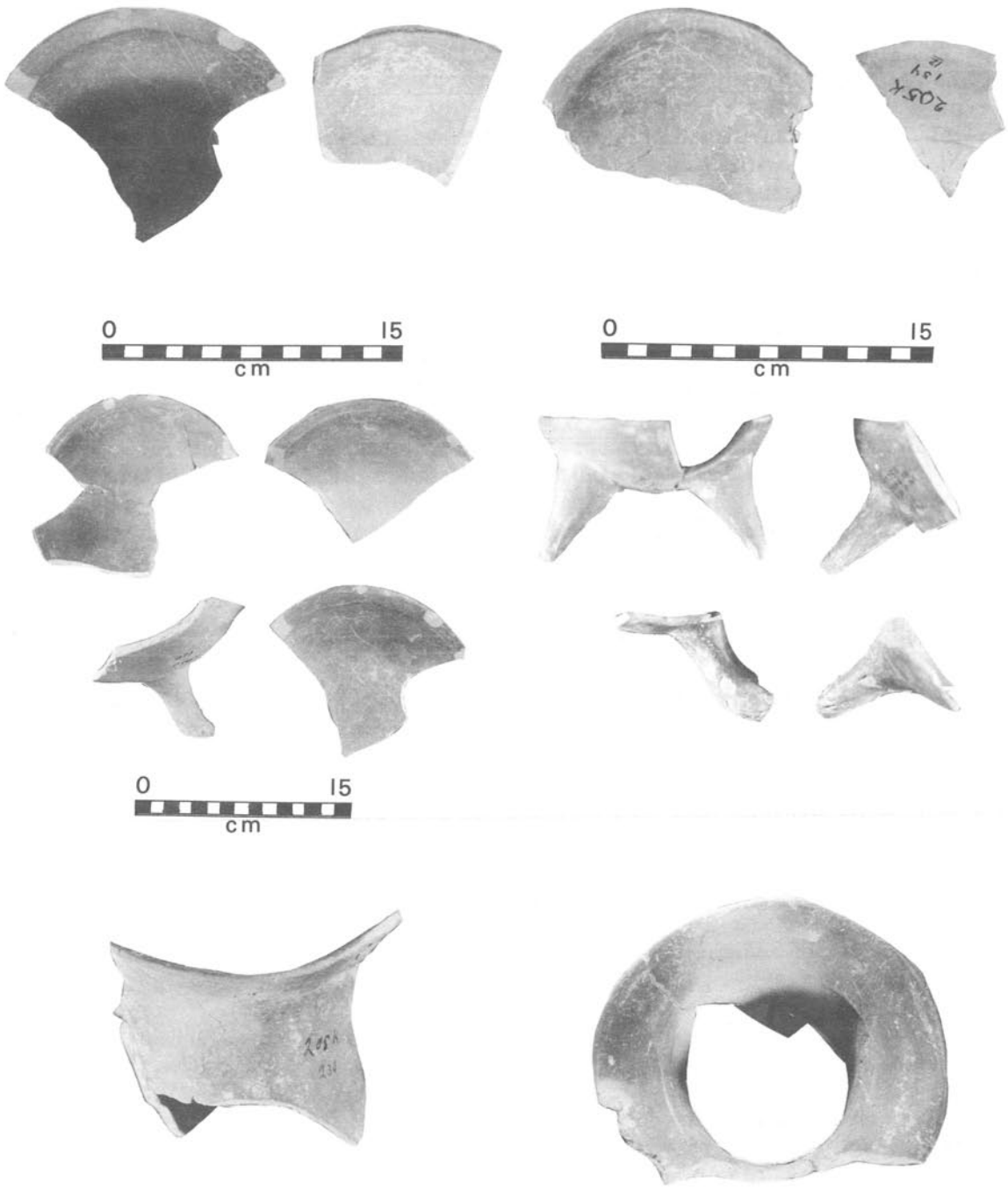


Fig. 23. Miguelito Hard Fine Gray
Tripod *cajetes* with flat and round rims (upper left) and with plain and stamped interior bases (upper right); supports on *cajetes* (center); pitchers (lower left and right).

Summary

According to Bernal (1949:42), Miguelito tripod *cajetes* (*gris pulido*) are distributed throughout the Mixteca Alta. They are also present in the Cañada region of Oaxaca and in the Tehuacan Valley (Spores 1972:46). In the Valley of Oaxaca, tripod *cajetes* very similar to Miguelito tripod *cajetes* were found at many Monte Albán V sites (Bernal 1966:355; Fig. 12).

Despite the relatively widespread distribution of Miguelito tripod *cajetes*, there is no evidence that they functioned as high status items. The presence of decoration in the form of serpent effigy supports and stamped designs (Bernal 1949:42; *Lámina* 4) suggests that occasionally Miguelito tripod *cajetes* were used as a medium for circulating symbols with religious significance.

Miguelito Pitchers

A total of 102 rim sherds from Miguelito pitchers was recovered in excavations at Chachoapan and Yucuita. These pitchers have globular bodies, cylindrical necks, and wide flaring rims with open triangular spouts. Their orifice diameter ranges from 8 to 12 cm. Flaring rims range from 3.0 to 3.5 cm in width and from 4 to 6 mm in thickness. Large vertically placed loop handles join the rim opposite the spout, and two small vertically placed strap handles are situated on either side of the body. Occasionally, Miguelito pitchers have incised parallel lines decorating the exterior body, perhaps to prevent slippage when handling the pitcher (Spores 1972:42; Fig. 10e).

Summary

Pitchers identical to the Miguelito type were found at Coixtlahuaca (Bernal 1949:42, *Tabla* 2). While Miguelito pitchers may be distributed throughout the Mixteca Alta, this remains to be confirmed. Although pitchers and tripod *cajetes* are made from the same Miguelito hard fine gray ware, their areal distribution is not necessarily the same. For example, Miguelito tripod *cajetes* are common in the Valley of Oaxaca, but Miguelito pitchers are evidently absent (Bernal 1966:355; Fig. 12).

Nochixtlan Rustware

The sample of Nochixtlan rustware contains 208 rim sherds. Most of these vessels have "rust" or reddish-brown colored surfaces and most are burnished over their entire exterior surface. A supportless flat base olla with a wide high collar rim is the only vessel shape. Two nubbin handles are located on nearly opposite sides of the olla body from 1 to 4 cm below the neck-body juncture. The handles are from 2 to 3 cm in horizontal breadth and from 1.5 to 2.5 cm in vertical width. Because they project from only 5 to 9 mm beyond the olla body surface, it is impossible to use them as appendages with which to lift the olla. However, each of the handles has a small horizontal perforation only large enough to allow for passage of a cord. Therefore, it is most likely that, like today, a string tied through the tiny handle functioned to hang the olla on the wall when it was not in use.

Three sizes are represented in the inventory of Nochixtlan rustware ollas—small, medium, and large (Fig. 24). About 22% are small and have a rim diameter of 12 to 16 cm with a mode of 16 cm, rim width of 2.0 to 3.5 cm with a mode of 3 cm, and rim thickness of 5 to 9 mm. Medium size ollas, the most frequent (49%) of the size variants, have a rim diameter that ranges from 18 to 24 cm with a mode of 22 cm, rim width from 2.5 to 5.5 cm with a mode of 4 cm, and rim thickness from 5 to 11 mm. About 29% of the ollas are large and have a rim diameter of 26 to 32 cm with a mode of 28 cm, rim width of 3.5 to 6.5 cm with a mode of 5 cm, and rim thickness of 9 to 12 mm.

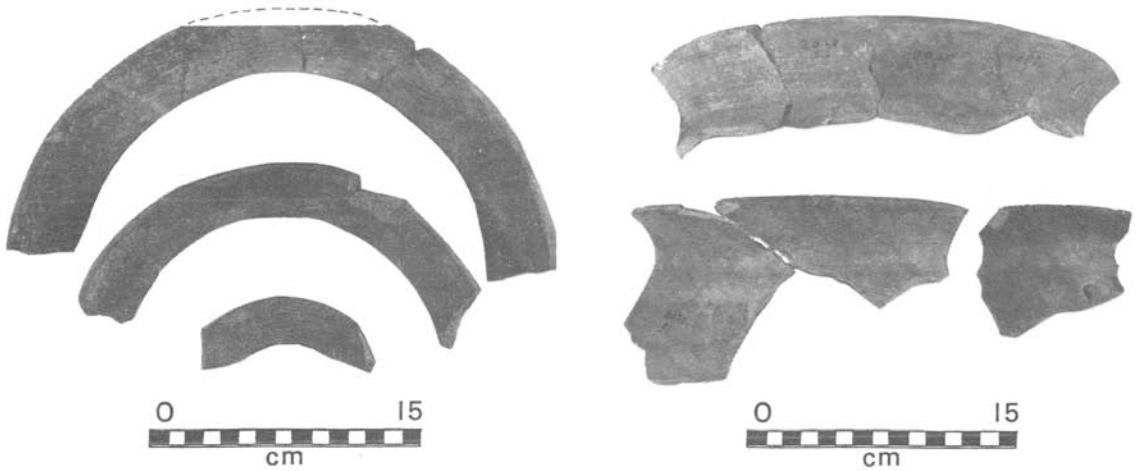


Fig. 24. Nochixtlan Rustware Ollas

Analysis of twenty-four Nochixtlan rustware olla bases from the Convento midden (F-10) at Yucuita revealed that all the bases were flat and all were burnished over their entire exterior surface. Base diameter ranges from 8 to 10 cm and base thickness from 6 to 11 mm. Nearly 88% of the bases had burnt or smoke-blackened exterior surfaces demonstrating that Nochixtlan rustware ollas functioned principally as cooking pots. About 16% of the bases had heavy accumulations of lime on their interior surfaces. The lime may have accumulated in the ollas from repeatedly boiling water in them. It is also possible that they were used as containers for soaking maize in lime water to reduce it to *nixtamal* (softened maize) prior to making *masa* (dough) for tortillas.

Summary

Bernal (1949:44) reports reddish-brown ("*café-rojizo*") ollas with nubbin handles ("*asas . . . muy pequeñas y casi simbólicas*") in his "*ollas típicas*" from Coixtlahuaca. These are certainly Nochixtlan rustware ollas. Nochixtlan rustware in the form of comales is still made today in the pottery-producing communities of San Pedro Quilitongo, San Miguel Adequez, and Santo Domingo Tonaltepec and sold in these communities and in the markets at Nochixtlan and Jaltepec (Spores 1972:68). The presence of Nochixtlan rustware ollas at Coixtlahuaca, immediately

north of the Nochixtlan Valley, suggests that in ancient times Santo Domingo Tonaltepec may have been the center of production for the Nochixtlan rustware ollas purchased by the inhabitants of Coixtlahuaca and of Chachoapan and Yucuita. Tonaltepec is in the mountains on the northern fringes of the Nochixtlan Valley, a location that would be ideal for supplying the northern half of the Nochixtlan Valley as well as the area around Coixtlahuaca.

Chachoapan Sandy Cream Ollas

A total of 889 rim sherds constitutes the sample of Chachoapan sandy cream ollas. These supportless flat base ollas have low collar rims and most have unburnished cream-colored surfaces. Two vertically placed strap handles, attached from the rim to the body, are located on opposite sides of the olla. The large, sturdy strap handles range from 4.5 to 6.5 cm in vertical length, from 2.5 to 4.0 cm in horizontal width, from 7 to 11 mm in thickness, and project between 2.5 and 4.0 cm beyond the surface of the olla body. They certainly functioned as appendages with which to lift the vessel. Occasionally, the strap handles have two or three incised parallel lines located on the exterior surface near the juncture with the rim. These incisions probably functioned to prevent the thumb from slipping off the handle while lifting the olla (Fig. 25).

Chachoapan sandy cream ollas have been found in three different sizes—small, medium, and large (Fig. 25). About 24% of the ollas are small and have a rim diameter from 10 to 16 cm with a mode of 16 cm, rim width from 1.5 to 3.0 cm with a mode of 2.5 cm, and rim thickness from 4 to 10 mm. One small olla measured only 6.5 cm in overall height. Medium size ollas, the most frequent (58%) of the size variants, have rims that vary in diameter from 18 to 24 cm with a mode of 20 cm, rim width from 2 to 4 cm with a mode of 3 cm, and rim thickness from 6 to 13 mm. Only 18% of the ollas are large. They have rims that range from 26 to 32 cm in diameter with a mode of 26 cm (one exceptionally large olla has a rim diameter of 44 cm), rim width from 2.5 to 4.5 cm with a mode of 3.5 cm, and rim thickness from 6 to 13 mm.

Analysis of thirty-five Chachoapan sandy cream olla bases from the Convento midden (F-10) at Yucuita revealed that all the bases are flat and most are unburnished. Base diameter ranges from 6.5 to 14.0 cm with a mode of 10 cm and base thickness from 5 to 11 mm. Nearly 92% of the bases had burnt or smoke-blackened exterior surfaces. Unlike Nochixtlan rustware ollas, none of the Chachoapan sandy cream ollas contains traces of lime accumulation on the interior surfaces.

Chachoapan sandy cream ollas with their unburnished surfaces, low collar rims, and strap handles present a contrast with Nochixtlan rustware ollas that have burnished surfaces, high collar rims, and nubbin handles. Although both Chachoapan sandy cream and Nochixtlan rustware ollas may have served multiple functions, the distinctions between them may relate to a general functional difference. The medium and large Chachoapan sandy cream ollas in particular would be ideal water jars. Their strap handles would facilitate handling and could be used as loops through which ropes were passed to secure jars on either end of a pole so that an individual could carry two jars of water at a time. Furthermore, their unburnished surfaces would facilitate handling when wet, and the low

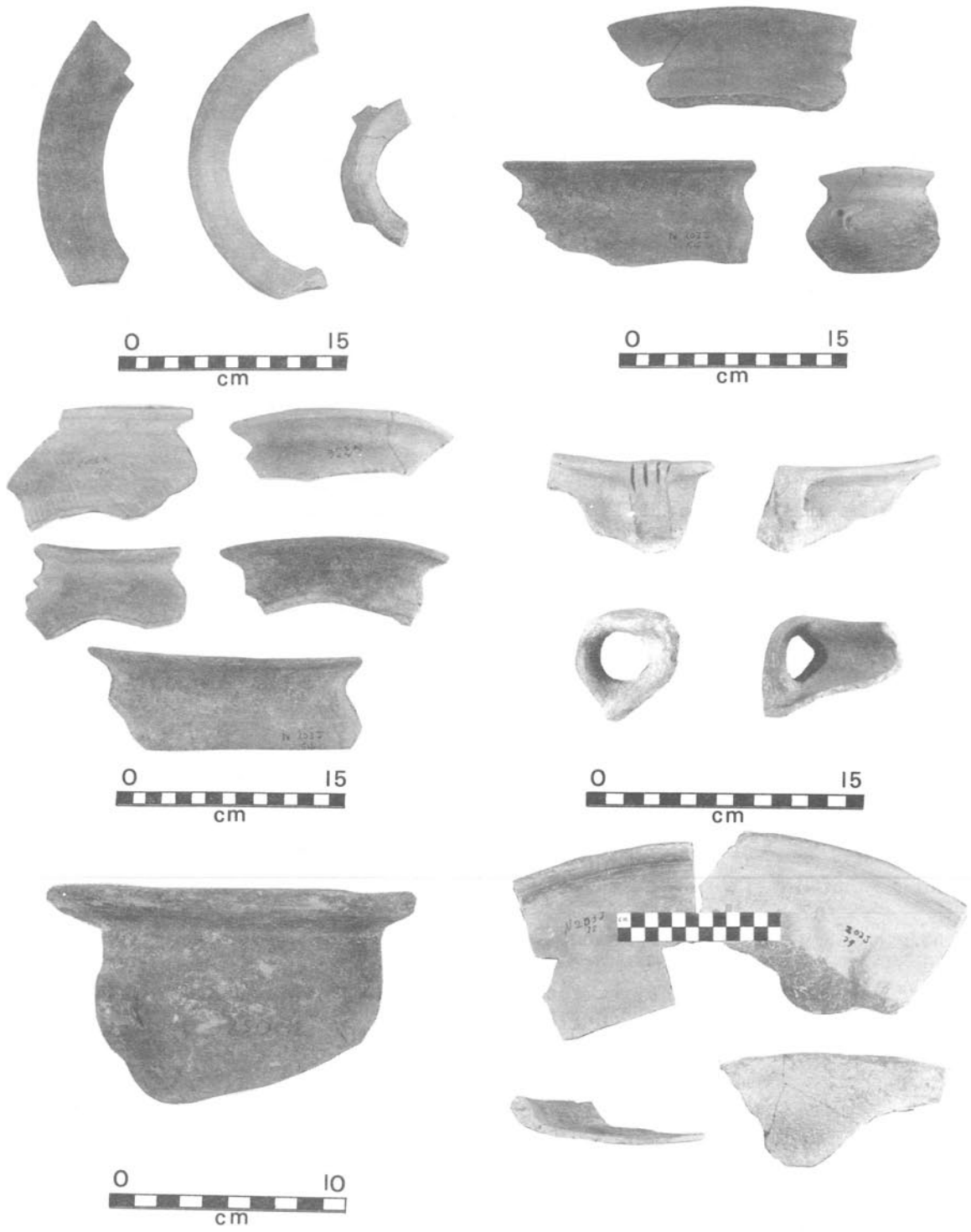


Fig. 25. Chachoapan Sandy Cream
Olla size variants (upper); strap handles (center right); *patojo* (lower left); and *comales* (lower right).

collar rims would not be easily susceptible to breakage. On the other hand, Nochixtlan rustware ollas would be ideal cooking pots. The burnished surfaces could easily be cleaned of smudge caused by placing them over charcoal cooking fires, and the high collar rims would act as funnels to facilitate filling them with foodstuffs or adding water to cooking food. Furthermore, the nubbin handles could act as grips for easier handling of the pot.

Chachoapan sandy cream ollas were used as water jars and the small ollas probably functioned as cooking pots. Nochixtlan rustware ollas served as cooking pots. The larger ollas may have functioned as storage vessels. Frequency distribution of these vessels in association with the palaces at Chachoapan and Yucuita point to functional differences. At Yucuita, the relative frequencies of Chachoapan sandy cream and Nochixtlan rustware ollas in the Natividad and Convento middens indicate that the households at Yucuita used nearly equal amounts of each type from Prehispanic to Postconquest times. At Chachoapan, the Chachoapan sandy cream ollas far outnumber those of the Nochixtlan rustware type in the Early Postconquest midden of the Endeque house-II, indicating that the households at Chachoapan used four times as many Chachoapan sandy cream ollas as Nochixtlan rustware ollas. If Chachoapan sandy cream ollas functioned primarily as water jars, these differences may relate to the fact that the Yucuita households were located much closer to water sources and needed fewer water storage jars (Table 19).

Summary

Bernal (1949:44) reports cream-colored ollas ("*crema sucio*") with strap handles ("*banda plana*") in his "*ollas típicas*" from Coixtlahuaca. These are certainly Chachoapan sandy cream ollas. Whether or not Chachoapan sandy cream ollas had the same center of production as Nochixtlan rustware is unknown.

Chachoapan Sandy Cream Patojo

A single identifiable *patojo* (shoe-shaped pot) of Chachoapan sandy cream ware is represented in the sample. It is unburnished and has a small nubbin handle located on the body opposite the "toe." Its orifice diameter is 16 cm, rim width 3.5 cm, and rim thickness 9 mm. Since *patojo* rim sherds are difficult to distinguish from olla rim sherds, it is possible that other *patojos* were classified as ollas. However, in a sample of seventy-five Yanhuitlan miniatures that are most likely toy ollas and pitchers, only one miniature *patojo* was represented. Therefore, if the miniatures are any reflection of the "real thing," *patojos* are indeed rare. According to Paddock (personal communication, 1968), the present-day Mixes of Oaxaca use *patojos* as pots for cooking beans (Fig. 25).

Chachoapan Sandy Cream Comales

A total of 585 rim sherds constitutes the sample of Chachoapan sandy cream *comales*. *Comales*, large flat circular ceramic griddles, have short thick up-turned rims, highly burnished interior surfaces, and roughened exteriors. *Comal* rim diameter ranges from 40 to 60 cm with a mode of 52 cm, rim height from 1.2 to 2.0 cm, and rim thickness from 7 to 14 mm. *Comales*, of course, functioned as

griddles for cooking tortillas and other foods (Fig. 25).

Bernal (1949:58) reports *comales* very similar to Chachoapan sandy cream *comales*. *Comales* purchased in the markets today by people from Yucuita and Chachoapan come from the pottery-producing centers of Santo Domingo Tonaltepec and San Miguel Adequez.

HOUSEHOLD MIDDENS	Sandy Cream		Rustware	
	No.	Percent	No.	Percent
YUCUITA				
F-10A: Natividad Midden	20	54.05	17	45.95
F-10: Convento Midden	46	51.69	43	48.31
CHACHOAPAN				
F-2A: Midden	414	82.97	85	17.03

Table 19. Chachoapan Sandy Cream and Nochixtlan Rustware Ollas

CHAPTER 4: SPECIAL FORMS

Included under the category of special forms recovered at Chachoapan and Yucuita are Yanhuitlan miniatures, miniature tripod effigy ollas, ladle censers, sandy cream censer covers, figurines, a sandy cream figurine mold, earspools, spindle whorls, and circular worked sherds. The analysis of each of these types is similar to the analysis of the ceramic vessels in the preceding two chapters. However, because most of the ceramic artifacts in this category are not vessels, different sets of attributes assume significance. The frequency distribution of each type and its corresponding attributes in the individual features at Yucuita and Chachoapan is presented in Tables in my 1977 study.

Yanhuitlan Miniatures

There are seventy-five tiny vessels in the sample of Yanhuitlan miniatures from Chachoapan and Yucuita. Like the Yanhuitlan fine cream ware of which they are made, most Yanhuitlan miniatures have cream-colored surfaces, but some are orange or chalky white. None of them is burnished, but about 67% have punctate, incised, and applique decorations. Tiny ollas and pitchers are the most frequent vessel shapes, while miniature *nixtamal* strainers and patojos are rare (Table 20; Fig. 26).

Ollas and Pitchers

Only the presence or absence of triangular spouts serves to distinguish miniature pitchers from miniature ollas. Because most of the tiny vessels have broken rims, it is difficult to distinguish the ollas from pitchers. Initially they are treated together, but subsequently, those that are identifiable as ollas or pitchers are discussed separately.

Ollas and pitchers have a rim diameter of 3 to 4 cm and overall height of 3 to 5 cm. Most have handles, but a few lack them. One of these has tripod supports (Table 21). Miniature ollas and pitchers are decorated on the interior rim and/or the exterior body. Circular punctation, perhaps executed with a hollow tubular reed (Bernal 1949:60-61), is the most frequent type of decoration. Occasionally, applique elements and/or incised diagonal lines are present in combination with punctate circles (Table 22; Fig. 26).

Ollas

Only seven Yanhuitlan miniatures could be definitely identified as ollas. All have flat supportless bases and flaring rims. Five have double loop handles that are attached from the rim to the body. Two of the five loop handle miniature ollas have incised parallel lines at the point where the handle joins the rim. The double loop handles are imitations of the strap handles on Chachoapan sandy cream ollas that are also attached from rim to body and occasionally have incised parallel lines at the point where the handle joins the rim (see Fig. 25). Two of the seven miniature ollas have handles with horizontal perforations. These probably represent imitations of the nubbin handles on Nochixtlan rustware

ollas.

Like the Chachoapan sandy cream and Nochixtlan rustware ollas, six of the Yanhuitlan miniature ollas lack exterior body decoration. However, one miniature has punctate circles decorating its exterior body. Also, unlike Chachoapan sandy cream and Nochixtlan rustware ollas, Yanhuitlan miniature ollas are frequently decorated on the rim with punctate circles or punctate circles and applique elements. Only two lack rim decoration.

VESSEL SHAPES	No.	Percent
Ollas	7	9.33
Pitchers	10	13.33
Ollas or Pitchers	53	70.68
Nixtamal Strainers	4	5.33
Patojo	1	1.33
Totals	75	100.00

Table 20. Yanhuitlan Miniatures: Vessel Shapes

HANDLE TYPES	No.	Percent
None	6	8.57
Perforated	36	51.43
Single Loop	5	7.14
Double Loop	5	7.14
Indeterminant	18	25.72
Totals	70	100.00

Table 21. Yanhuitlan Miniatures: Handle Types

DECORATION	Rim		Body	
	No.	Percent	No.	Percent
None	40	57.14	24	34.28
Circles	8	11.43	17	24.29
Circles-applique	5	7.14	9	12.86
Circles-diagonals	0	0.00	6	8.57
Circles-diagonals-applique	0	0.00	4	5.71
Indeterminant	17	24.29	10	14.29
Totals	70	100.00	70	100.00

Table 22. Yanhuitlan Miniatures: Decoration

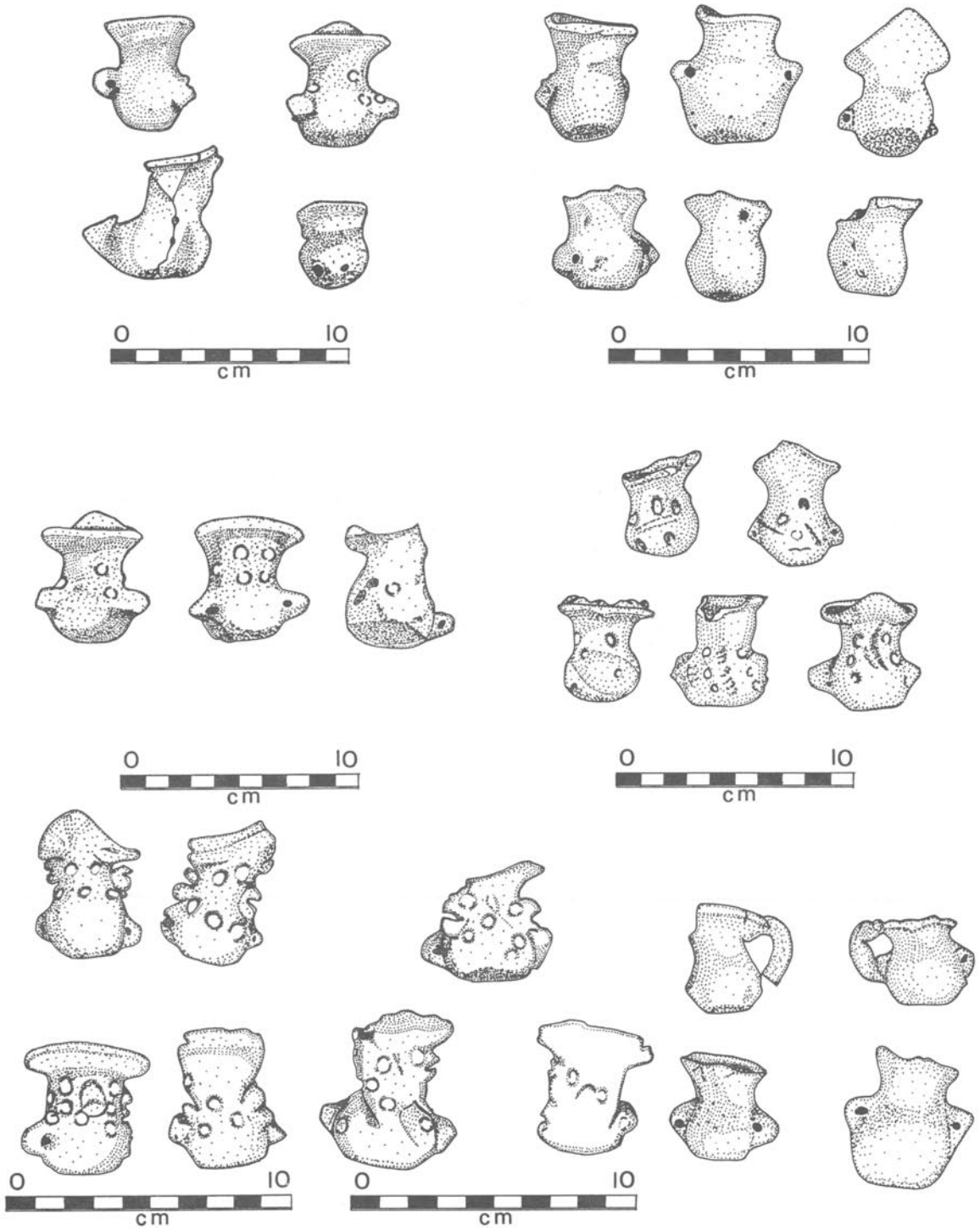


Fig. 26. Yanhuitlan Miniatures

Pitchers

Ten Yanhuitlan miniatures could be definitely identified as pitchers. Like Miguelito hard fine gray pitchers, Yanhuitlan miniature pitchers have flat supportless bases and open triangular spouts. Unlike the miniature ollas, they lack double loop handles and, in contrast to the infrequent occurrence of perforated handles on the miniature ollas, nine of the ten pitchers have handles with horizontal perforations. It was not possible to identify the type of handle on the tenth pitcher. The perforated handles attached to the bodies of Yanhuitlan miniature pitchers are imitations of the strap handles on pitchers of the Miguelito type that are also attached to the pitcher body. Unlike Miguelito pitchers, however, none of the miniatures has a vertical loop handle. Five miniatures have single vertical loop handles but none was definitely identifiable as either a pitcher or olla because their rims were broken.

Like Miguelito pitchers, three of the miniature pitchers lack decoration on the exterior body. Two miniature pitchers, but no miniature ollas, are decorated with incised diagonal lines on the exterior body. This is significant because occasionally Miguelito pitchers are decorated with incised diagonal lines on the exterior body (Spores 1972:42; Fig. 10E). Three miniature pitchers, but no miniature ollas, have punctate circles and applique elements on the exterior body. This type of decoration is not present on Miguelito pitchers. Nine out of ten miniature pitchers lack decoration on the rim. Only one has punctate circles decorating the interior rim.

Nixtamal Strainers

Miniature *nixtamal* strainers in the form of ollas with perforated bodies and bases have a rim diameter of 3 to 4 cm and overall height of 3 cm. None of these miniature *nixtamal* strainers is decorated and none has handles. However, each has a single perforation in the rim (Fig. 26).

The apparent absence of large *nixtamal* strainers, that served to strain softened maize (*nixtamal*) from the lime water in which it was soaked, reflects the hazards inherent in a ceramic analysis based on rim sherds alone. It is likely that large *nixtamal* strainers were present among the ceramic artifacts from Chachoapan and Yucuita but went undetected because their rims cannot be distinguished from those of ollas. However, an analysis of over two thousand olla body sherds from the Convento midden (F-10) at Yucuita revealed only two small sherds from *nixtamal* strainers.

Patojo

Like the Chachoapan sandy cream *patojo*, a single Yanhuitlan miniature *patojo* is present in the sample. This miniature *patojo* has a rim diameter of 4 cm, an overall height of 4 cm, and is 6 cm long. It is not decorated but it does show evidence of having had a loop handle connecting the "toe" with the rim (Fig. 26).

Function

The above analysis indicates that Yanhuitlan miniatures are toy replicas of

larger ceramic vessels. The marked similarities between Yanhuitlan miniature ollas and both Chachoapan sandy cream and Nochixtlan rustware ollas, between Yanhuitlan miniature pitchers and Miguelito hard fine gray pitchers, and between the Chachoapan sandy cream *patojo* and the Yanhuitlan miniature *patojo* make it evident that Yanhuitlan miniature *nixtamal* strainers must also be toy replicas of larger *nixtamal* strainers. The nature of the vessel shapes–ollas, pitchers, *nixtamal* strainers, and *patojos*–demonstrates that these miniatures are toy replicas of ceramic vessels used in food preparation activities. Therefore, it is most likely that Yanhuitlan miniatures functioned as toys in play activities and served as an aid in the enculturation process by which young girls came to assume the adult female role.

Summary

Yanhuitlan miniatures are frequently present at sites throughout the Nochixtlan Valley. Outside the Nochixtlan Valley, at Coixtlahuaca, Bernal (1949:60-61) found miniature vessels ("*ollitas con incisíon tubular*") that are identical to Yanhuitlan miniatures. These miniatures have been found throughout the Mixteca Alta and at least one was recovered by Caso in the house above Tomb 7 at Monte Albán in the Valley of Oaxaca (Caso, Bernal, and Acosta 1967:460). Since Yanhuitlan miniatures were toys for young girls, their relative frequency in household middens may be used as an indicator of the presence and relative number of female children in the household. A high frequency of Yanhuitlan miniatures in the Early Postconquest midden (F-2A) of the Endeque house-II at Chachoapan contrasts with low frequencies in the Natividad (F-10A) and Convento (F-10) middens at Yucuita (see Table 36). The high frequency at Chachoapan suggests that the Endeque house-II may have been blessed with a large number of female children.

Yanhuitlan Miniature Tripod Effigy Ollas

Five Yanhuitlan miniature tripod effigy ollas were found in the Early Postconquest midden (F-2A) of the Endeque house-II at Chachoapan, but none has been discovered elsewhere at Chachoapan or Yucuita. Like Yanhuitlan fine cream vessels, Yanhuitlan miniature tripod effigy ollas have unburnished cream-colored, orange, or chalky white surfaces. They have an orifice diameter of 4 cm and overall height (minus tripod supports) of 6 cm. Unfortunately, the tripod supports are broken off of all the ollas.

Two small modeled animal heads, one of which has modeled forelimbs, project from opposite sides of the olla body. Most of the modeled heads appear to represent birds with open beaks and eyes formed by an applique element with a punctate circle in its center. However, in one example in which the head is broken off, the modeled forelimbs appear to represent the forelegs of a dog.

On two of the five Yanhuitlan miniature tripod effigy ollas paint that was applied after firing is present. One of these has only red painted lines decorating and circumscribing the bird (duck?) effigy on the olla body. The other has red paint over the entire exterior surface, except for the base, and has motifs painted in black. The motifs, contained in panels outlined in black on the olla body, include a crude rectilinear *xicalcoliuhqui*, black dots simulating jaguar skin, ver-

tical black lines, and a feather. Since these are design motifs that are present on Mixteca polychrome and Iglesia burnished red, it is possible that Yanhuitlan miniature tripod effigy ollas are crude toy approximations of high status decorated wares. Like Yanhuitlan miniatures, they probably functioned as toys in girls' play activities (Fig. 27).

Summary

Outside the Nochixtlan Valley, at Coixtlahuaca, Bernal (1949:60) reports miniature tripod ollas ("*ollitas con pintura fugitiva*") similar to Yanhuitlan tripod effigy ollas. Similar examples are probably distributed throughout the Mixteca Alta like the Yanhuitlan fine cream ware of which they are made.

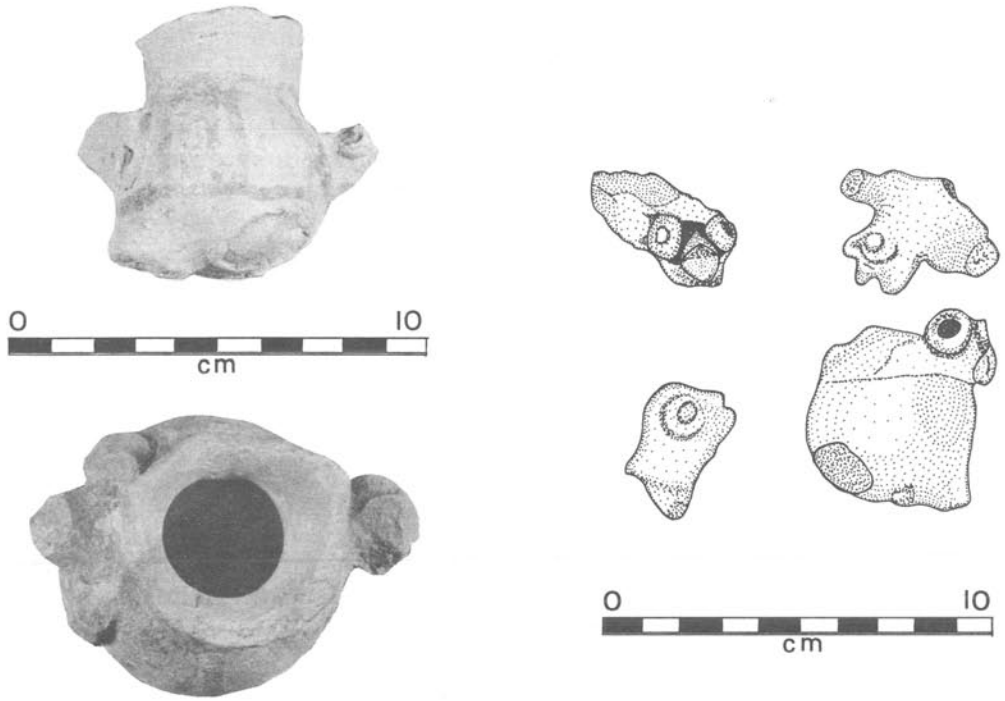


Fig. 27. Yanhuitlan Miniature Tripod Effigy Ollas

Yanhuitlan Figurines

A total of twelve fragments of Yanhuitlan figurines were recovered in excavations at Chachoapan and Yucuita. Like Yanhuitlan fine cream vessels, Yanhuitlan figurines are cream-colored, orange, or chalky white. Most of the figurines are anthropomorphic, but some represent dogs. Of the anthropomorphic figurines, most have traces of white, red, orange, and black paint. Very few of the dog figurines show signs of having been painted. All of the anthropomorphic figurine heads are solid and mold-made, while all of the dog figurines and at least parts of the bodies of the human figurines are modeled.

Dog Figurines

Of the four figurine fragments representing dogs, two are fragments of heads and two are fragments of bodies. Both dog heads are crudely modeled and both have circular eyes formed by punctation. One head is 2 cm long (nose to back of head) and 2.1 cm wide (ear to ear). It shows no sign of decoration of any kind. The second head is much smaller than the first, measuring 1.3 cm in length and 1.8 cm in width. It is decorated with red paint and has an applique circle on its neck.

Neither of the dog bodies appears to have been attached to either of the dog heads. One body is 2.7 cm long (tail to chest), 2.7 cm wide (side to side), and 2.2 cm thick (stomach to back). Its tail is pointed to the right side of the body. The head is also turned to the right. The second body is smaller–4.2 cm long, 1.6 cm wide, and 1.7 cm thick. Its tail is pointed to the right and its head turned to the right. An applique circle decorates the left side of the neck and the entire body appears to have been painted (Fig. 28).

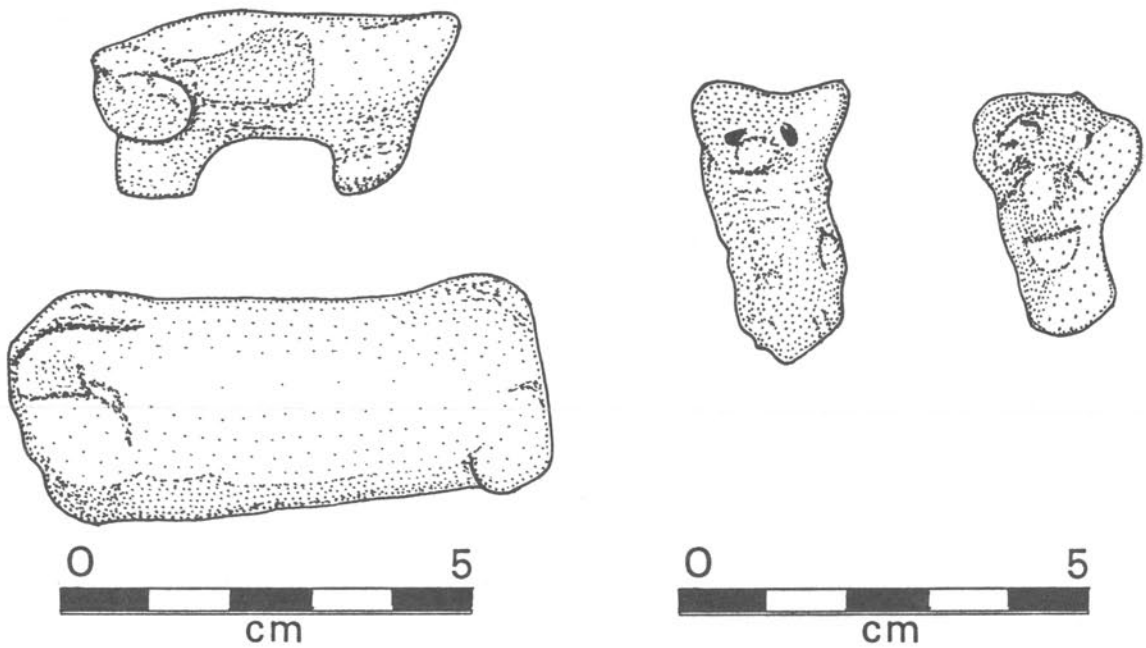


Fig. 28. Dog Figurines

Anthropomorphic Figurines

Of the eight figurine fragments representing humans, six are fragments of heads and two of bodies. Although all the figurine heads are mold-made, earspools and headbands (when present) were added after the figurine was removed from the mold. The figurine body fragments, broken at the neck and waist, reveal a perforation, perhaps made by a stick, that transverses the body internally from below the waist to the chest region. The fact that no perforation trans-

verses the neck regions of either heads or bodies suggests that the head, neck, and upper part of the body were formed in a single mold. The presence of the perforation may reflect the necessity of using a stick to maintain the rigidity of the upper part of the body while modeling the lower part to it. Four varieties of Yanhuitlan anthropomorphic figurine heads (Mixtec man, Mixtec lady, Mixtec lord, and Mixtec cacique) and two varieties of bodies (open-arm and closed-arm) are identifiable (Fig. 29).

Mixtec Man

Mixtec man figurines have very small heads with two large circular earspools on a large flat plain headdress. Two figurines of this variety were found and both are 1.7 cm thick (nose to back of head), 4 cm wide (earspool to earspool), and 2 cm high (chin to top of head). These or similar varieties of figurines have been found elsewhere in the Nochixtlan Valley and appear to have had flat neckless bodies with only rudimentary arms and legs (Spores 1972:75; Fig. 22 F, G). Similar figurines were also present at Coixtlahuaca (Bernal 1949:67; *Lámina* 11-44).

Mixtec Lady

The Mixtec lady figurine is identifiable as a female on the basis of the headdress. Two large plain earspools are situated on either side of the head at the level of the eyes. This is an unusually high position for earspools since they are most frequently placed lower, in the region of the mouth. The Mixtec lady figurine head is 2 cm thick, 3.8 cm wide, and 2.5 cm high. Similar figurines have also been found at Coixtlahuaca (Bernal 1949:63; *Lámina* 10a).

Mixtec Lord

Two Mixtec lord figurines, 2.2 cm thick, 5 cm wide, and 3.5 cm high, are present in the inventory of anthropomorphic figurines. The better preserved head has two large circular earspools decorated with punctate circles and a head band that is decorated with three applique circles. The other head lacks the punctate circles on its large circular earspools, and its headband was broken off.

This is perhaps the most common variety of anthropomorphic figurine in the Nochixtlan Valley. Examples have been found showing that at least some Mixtec lord figurines had open-arm bodies (Spores 1972:75; Figs. 22 B, E, K). Bernal (1949:67; *Lámina* 11-43) illustrates a figurine mold from Coixtlahuaca that was used for producing figurines identical to Mixtec lord figurines. However, the mold from Coixtlahuaca was for making Mixtec lord figurines with closed-arm bodies.

Open-Arm Body

The open-arm body is from a Mixtec lord figurine. It is 3.1 cm wide and 2.3 cm thick at the waist, and 4 cm tall (from waist to neck). The body is that of a male dressed in a loincloth secured by a sash at the waist. More complete examples from the Nochixtlan Valley (Spores 1972:75; Figs. 22 E, K, L) show that the arms are spread open and the palms of the hands turned upward as if in greeting.

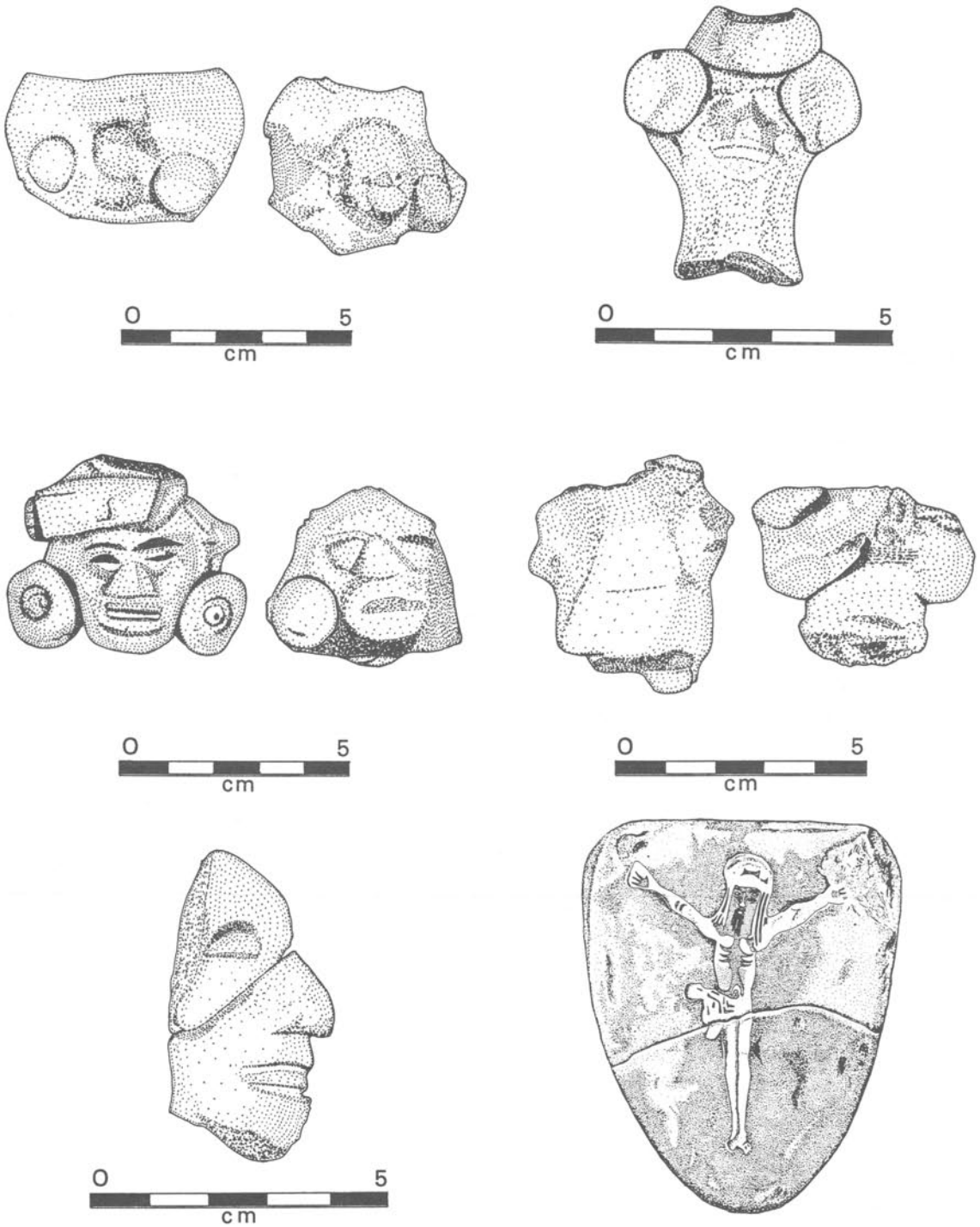


Fig. 29. Yanhuitlan Figurines
Mixtec Man (upper left); Mixtec Lady (upper right); Mixtec Lord (center); and Mixtec Cacique (lower left). Christ Figurine Mold (lower right).

Closed-Arm Body

The closed-arm body, also of a Mixtec lord figurine, is 2.5 cm wide, 2.2 cm thick, and 3 cm tall. It also represents a male dressed in a loincloth secured by a sash at the waist. The lower halves of two large circular earspools are situated on either side of the neck. The arms converge, but do not cross, at the chest and extend upward in a parallel manner toward the face.

Mixtec Cacique

The Mixtec cacique figurine is a very realistic depiction of a man with a prominent nose. It is considerably larger than the other figurine heads, measuring 2.5 cm in thickness, approximately 4 cm in width (side of face to side of face), and 5.5 cm in height. A similar figurine head, but with nose ornament and jaguar headdress, was found on a house floor at excavation N428A in Nochixtlan. No similar figurine heads are reported by Bernal from Coixtlahuaca.

Function

Despite their diversity, all the Yanhuitlan human figurine heads from Chachoapan and Yucuita, as well as similar examples from elsewhere in the Nochixtlan Valley and from Coixtlahuaca, have a number of common characteristics. Among these are the so-called "Mixtec mouth" that has prominent lips tightly drawn to expose the upper row of teeth in a sardonic smile, closed eyes with bulging eyeballs in sunken sockets, and hollow cheeks (Fig. 29). These attributes suggest that the anthropomorphic figurine heads portray dead persons.

Both the Mixtec codices and archeological evidence demonstrate that the Mixtecs buried their dead in a seated position with the arms drawn together at the chest and extended upward toward the face, and the legs bent at the knees and drawn up to the chest. Closed-arm anthropomorphic figurines portray the burial position and provide further evidence that at least some of the Yanhuitlan anthropomorphic figurines depict dead persons (Bernal 1949:23-24; 63; *Lâmina* 101).

At Coixtlahuaca, Bernal (1949:40; Tabla 2) found ceramic figurines in a number of high status burials. This demonstrates that figurines sometimes functioned as burial offerings. Unfortunately, Bernal (1949:62) does not specify whether the figurines in the burial offerings were anthropomorphic, zoomorphic, or both. Because the Yanhuitlan anthropomorphic figurines from Chachoapan and Yucuita represent dead persons and because they were not found in the context of burial offerings, it is very likely that they functioned in a ritual context—perhaps in celebrations in honor of dead kings or queens (caciques). The *Códice de Yanhuitlân* states that a celebration was held each year commemorating the death of a king named "Calcii" (Dahlgren 1954:349). Yanhuitlan anthropomorphic figurines may have functioned as part of such celebrations.

Yanhuitlan dog figurines also may have functioned in a ritual context. At Coixtlahuaca, Bernal, (1949:24) found dog skeletons in association with a number of high status burials. Like the Aztecs, the Mixtecs believed that dogs guided the dead on their difficult journey through the underworld (Dahlgren 1954: 348-49). It is possible, therefore, that some of the dog figurines may have func-

tioned in celebrations in honor of the dead as well as in burial offerings. In fact, the more finely decorated small dog figurine body, that was painted and wore an applique neck ornament, was located close to the open-arm Mixtec lord figurine body near the center of the west courtyard (F-25) of the Convento house at Chachoapan. Their presence together suggests that they formed a set symbolizing the dead ruler guided by his dog through the underworld.

All four varieties of Yanhuitlan anthropomorphic figurines—Mixtec man, Mixtec lady, Mixtec lord, and Mixtec cacique—were recovered from the Early Postconquest midden (F-2A) at Chachoapan. Since they were widely separated in the midden, the presence of the four varieties need not indicate that four different individuals are represented. If they were used in annual rituals, analogous to the figurines used in present-day Nativity scenes, it is possible that they were replaced when broken by whatever variety of figurines were available in the market.

Summary

Yanhuitlan figurines are present throughout the Nochixtlan Valley. Figurines similar to Mixtec man, Mixtec lady, Mixtec lord, and closed-arm bodies have also been found at Coixtlahuaca in association with modeled dog figurines (Bernal 1949:62). Figurines that are similar to Yanhuitlan figurines are probably distributed throughout the Mixteca Alta like the Yanhuitlan fine cream ware of which they are made. The relatively widespread distribution of the standardized mold-made anthropomorphic figurines suggests that these figurines were not made to depict realistically any specific individual. Rather, they probably functioned in cyclical rituals associated with celebrations commemorating the dead.

Christ Figurine Mold

A single ceramic figurine mold of Chachoapan sandy cream ware was found in the A.D. 1660 Convento midden (F-10) at Yucuita. The figurine mold contains a representation of a crucified Christ depicted in the Spanish colonial style. The fact that no cross is portrayed suggests that the crucified Christ figurines were attached to modeled crosses after removal from the figurine mold (Fig. 29).

The presence of the Christ figurine mold in the Convento midden (F-10) at Yucuita is surprising because the clays around Yucuita are not suitable for producing ceramic artifacts. Since no ceramic figurines of Christ were found, it is possible that the mold was used for producing figurines from other kinds of materials.

Yanhuitlan Ladle Censers

Nine Yanhuitlan ladle censers were found at Chachoapan and Yucuita. Like Yanhuitlan fine cream vessels, Yanhuitlan ladle censers have unburnished cream-colored, orange, or chalky white surfaces. All the Yanhuitlan ladle censers are in the form of "frying pans" with hollow cylindrical handles and shallow dish-shaped pans.

Two different varieties of handles for Yanhuitlan ladle censers are represented—plain and serpent head. Seven of the nine censers have plain handles. Their pans have a rim diameter of 12 cm, overall height of 3.5 cm, and rim thickness of 4 to 6 mm. Their cyclindrical handles are from 2.4 to 3.0 cm in diameter and from 14 to 16 cm in overall length. Each of the handle ends has a small loop through which a string may have been tied to hang the censer when it was not in use.

All of the plain handle censers are decorated with black paint that was applied after firing. One pair of black parallel lines partially encircles the handle near its end and a second pair partially encircles the handle near its juncture with the pan. The rims of the pans are circumscribed by a thick black line, and from three to five thick black lines, emanating from a convergence point on the interior rim near the juncture with the handle, fan out across the interior base of the pan.

This decoration on the interior base of the pans of Yanhuitlan plain handle ladle censers probably represents a stylization of the so-called "Tlaloc moustache" that is actually a frontal view of a bifurcate serpent tongue with two serpent fangs on either side. "Tlaloc moustaches" symbolize the rain-god (Tlaloc to the Aztecs, Dzahui to the Mixtecs) and are common decorations on the pans of the elaborately decorated polychrome ladle censers found in an offering from the Templo Mayor in the Aztec capital of Tenochtitlan.

Yanhuitlan ladle censers of the serpent head variety possess hollow cylindrical handles from 2.6 to 3.0 cm in diameter. Although the handles on serpent head censers were probably longer than those on plain censers, none was complete enough to obtain an overall length measurement for comparison. Unfortunately, no pans of the serpent head variety of Yanhuitlan ladle censers were recovered.

Serpent head censers have handles that terminate in the form of mold-made serpent heads with open mouths and extended bifurcate tongues. The serpent heads are 8 cm long, 5.3 cm wide, and 2.6 cm high. They are hollow and open on their underside and were attached to the end of the handle after having been removed from the mold. After firing, they were painted with white and black paint. Mold-made elements in the form of "bow ribbons" were also attached to the handles after having been removed from the mold. Handles terminating in serpent heads and decorated with "bows" are also common on the elaborately decorated polychrome censers from offerings at the Templo Mayor (Fig. 30).

Function

Unlike Pilitas polychrome censer bowls, that were probably set on room floors or in front of altars as containers for burning copal incense, Yanhuitlan ladle censers were meant to be carried in religious processions. Ladle censers, similar to both plain and serpent head varieties of Yanhuitlan ladle censers, are depicted in the Mixtec codices where they are used by individuals to carry burning copal incense in religious observances (Fig. 30). Since the serpent heads on the handles of Yanhuitlan serpent head ladle censers and the "Tlaloc moustaches" on the pans of Yanhuitlan plain ladle censers are symbols of the rain-god Dzahui, the ladle censers were probably carried in religious processions pertaining to the rain-god.

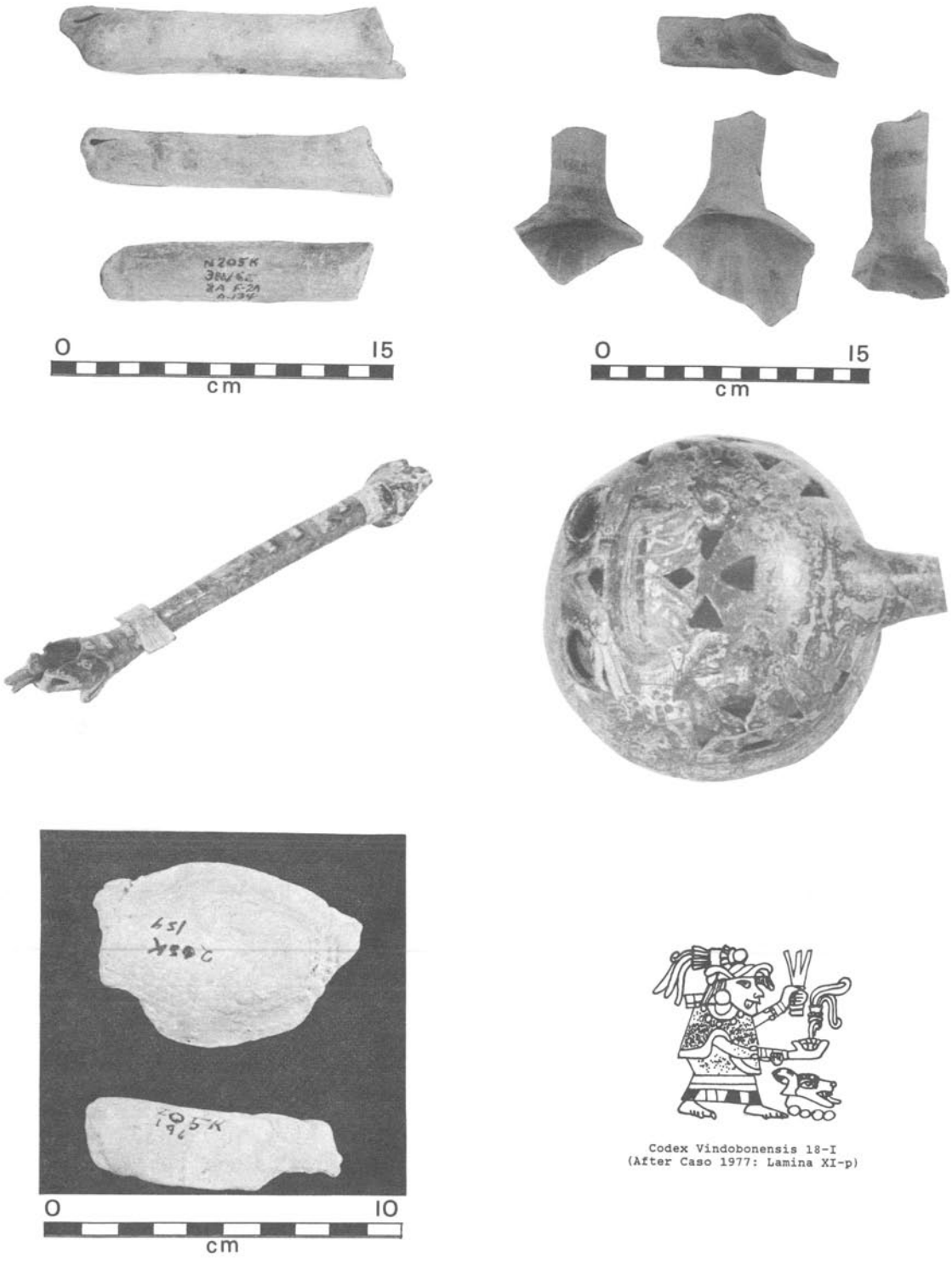


Fig. 30. Yanhuitlan Ladle Censers

Plain handle censers (upper); polychrome serpent head ladle censers from the Calle de las Escalerillas, Templo Mayor, Tenochtitlan–Museo Nacional de México (center); Yanhuitlan serpent head ladle censers (lower left); ladle censers in Mixtec codices (lower right).

Summary

Yanhuitlan ladle censers have been found throughout the Nochixtlan Valley. Outside this area, at Coixtlahuaca, Bernal (1949:40; *Tabla* 2; 56-58) reports ladle censers ("*sahumadores*") very similar to both varieties of Yanhuitlan ladle censers. Similar ladle censers are probably distributed throughout the Mixteca Alta like the Yanhuitlan fine cream ware of which they are made.

Chachoapan Tripod Censer Covers

A total of thirty-nine Chachoapan tripod censer covers is included in the sample from Chachoapan and Yucuita. All thirty-nine are made of Chachoapan sandy cream ware and are decorated by incision, punctation, applique, or painting. Chachoapan tripod covers may be likened to inverted dishes on which the "rim" with attached tripod supports is the lower edge of the cover and the "base" is the top of the cover. These covers consistently have a "rim" or lower edge diameter of 14 cm and height (from the "rim" of the lower edge to the top) of between 4 to 6 cm. All the covers possess tripod supports that raise the cover's lower edge 3.5 cm off the ground. All of these also have solid cylindrical "basket" handles attached to the top. Unfortunately, the handles were all broken off the Chachoapan tripod covers recovered from excavations.

Chachoapan tripod censer covers are represented in three basic contour variants—simple, compound, and composite (Table 23; Fig. 31). Covers with simple or compound contours have either flat or dome-shaped tops, while covers with composite contours always have flat tops. All the covers have tripod supports in the form of thick wide inverted triangles that are either solid or have hollow bulbous ends that contain pellets and function as rattles. Four varieties of decoration are represented on Chachoapan tripod censer covers—incised, punctate, applique, and graphite on red (Table 24; Fig. 32).

Incised Covers

Incised covers have either simple or compound contours and unburnished tops whose centers are circumscribed by two concentric incised lines and whose rims are decorated by four different types of incised decoration. The most common of these decorations consists of diagonal and vertical lines with horizontal dashes between them. One cover has groups of vertical lines alternating with groups of diagonal lines on its rim and tiny incised diagonal lines in groups of three around the edge of the rim. Another example has vertical lines on its rim and triangular notches cut out all the way around the edge of the rim. All the incised tripod covers have unburnished solid tripod supports and all, except one, have dome-shaped tops and are undecorated on their sides. The exception has a flat top and is decorated on its side with groups of incised diagonal lines that alternately slant from left to right.

Punctate Covers

Chachoapan covers with punctate decoration all have dome tops. They most frequently have simple contours, although one example has a compound contour. All have unburnished tops whose centers are circumscribed by two concentric

CONTOUR VARIANTS	No.	Percent
Simple Contour	14	35.90
Compound Contour	9	23.08
Composite Contour	11	27.18
Indeterminant	5	13.84
Totals	39	100.00

Table 23. Chachoapan Tripod Covers: Contour Variants

DECORATION	No.	Percent
Incised	10	25.64
Punctate	5	13.84
Applique	9	23.08
Graphite-on-red	4	10.26
Indeterminant	11	27.18
Totals	39	100.00

Table 24. Chachoapan Tripod Covers: Decoration

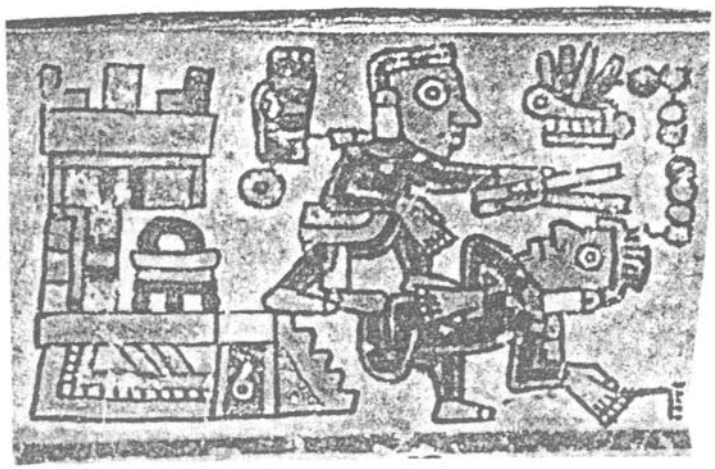
rows of punctate dots. No other decoration is present either on the tops or on the sides. All the punctate tripod covers have unburnished solid tripod supports.

Applique Covers

Chachoapan tripod covers with applique decoration all have composite contours and flat tops that are undecorated except for burnishing. Their burnished sides are decorated with a single row of hemispherical applique studs that occasionally have punctate circles in their centers. Applique tripod covers possess burnished tripod supports with hollow bulbous ends that functioned as rattles.

Graphite on Red Covers

Graphite on red tripod covers have simple contours and flat burnished tops whose centers are not painted and are separated from the painted rims by a graphite band or by concentric incised lines alternating with concentric rows of punctate triangles. The rims are painted red and decorated with smoke or cloud symbols in graphite. The sides of graphite on red covers are unburnished and undecorated. Their tripod supports have hollow bulbous ends that function as rattles.



Codex Bodley 14-I

Fig. 31. Chachoapan Tripod Censer Covers: Contour Variants
Complex, simple, and composite contours (left); Chachoapan tripod censer covers in the Mixtec codices (right).

Function

Chachoapan tripod covers were designed to be placed over the pans of Yanhuitlan ladle censers. The "inverted dish-shaped" undersides of the covers are burnt and smudged from the copal incense burnt in the censer pans beneath them. A comparison of the dimensions of the censer pans with those of the covers indicates that the covers were a perfect fit for the pans. The interior diameter of the covers is 14 cm, an ideal size for covering the 12 cm pan. Furthermore, the tripod supports give the cover's lower edge a consistent clearance of 3.5 cm that is also the overall height of the censer pans.

While Yanhuitlan ladle censers were designed to be carried, they were also laid down as offerings before idols in public ceremonies. It is at this time that the Chachoapan tripod covers, easily carried along in the processions because of their basket handles, were placed over the censer pans. The tripod supports

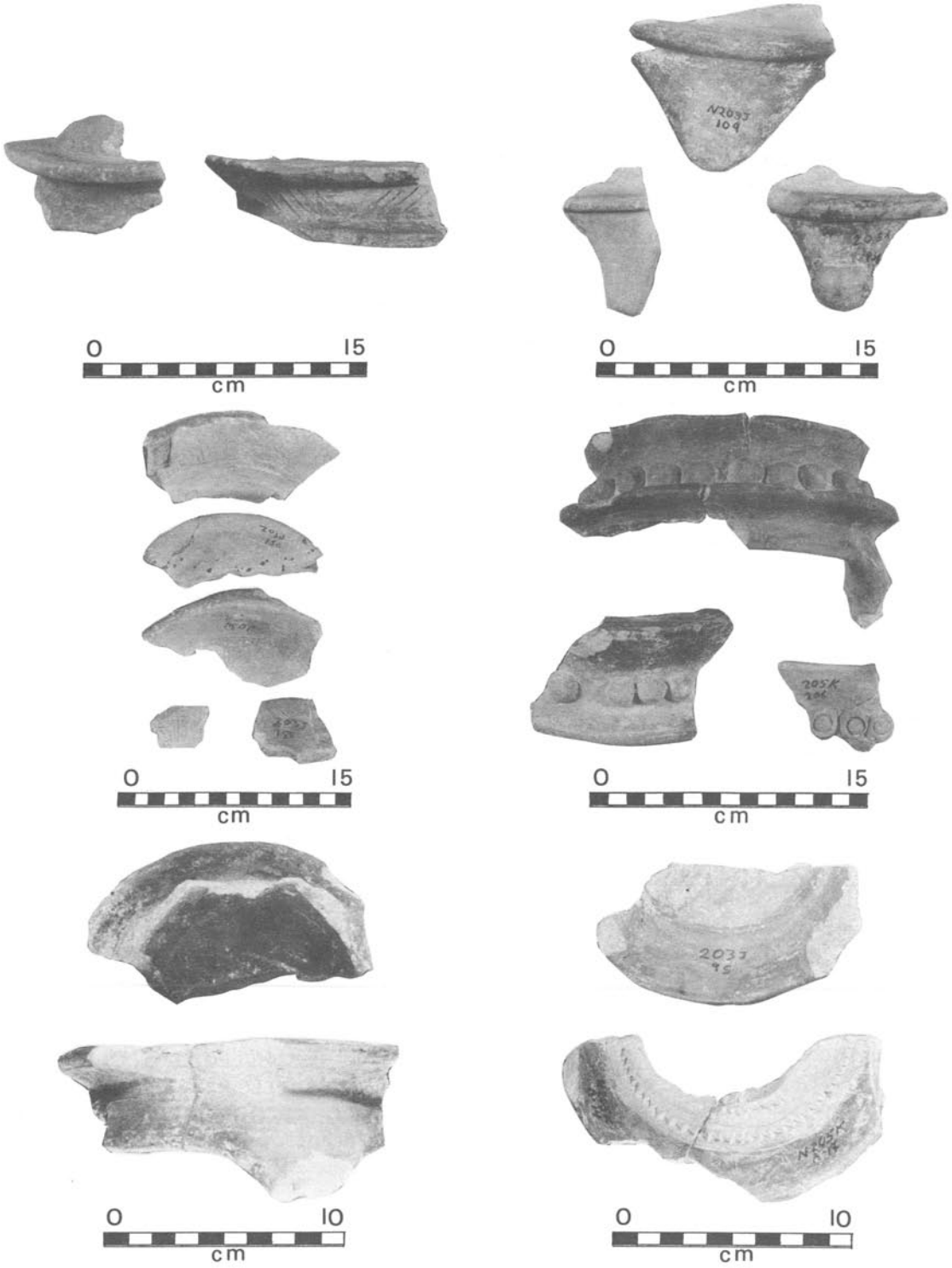


Fig. 32. Chachoapan Tripod Censer Covers
Dome-shaped and flat tops (upper left); tripod supports (upper right); incised and punctate decoration (center left); applique decoration (center right); graphite on red decoration (lower).

prevented the covers from resting directly on the rims of the censer pans, allowing oxygen to enter and the smoke of the copal incense to accumulate under the inverted dish-shaped cover before slowly streaming out. The basket handles also facilitated the placement and removal of the tripod covers.

Summary

Chachoapan tripod censer covers are distributed throughout the Nochixtlan Valley. Outside this area, at Coixtlahuaca, Bernal (1949:40; *Tabla* 2; 55-57) reports tripod covers similar to the incised ("*tapas incisas*"), applique, and graphite on red ("*cafe con rojo*") varieties of Chachoapan tripod censer covers. With the exception of incised parallel lines, however, the decoration on the Coixtlahuaca varieties is significantly different from that on Chachoapan tripod censer covers. For example, at Coixtlahuaca, the covers have incised wavy lines, have different applique elements that are present on tops instead of sides, and are apparently lacking in graphite decoration on the burnished red bands painted around the tops (Bernal 1949:56-57). Bernal does not mention the presence or absence of punctate decoration.

It is probable that tripod covers similar to Chachoapan tripod censer covers are present throughout the Mixteca Alta, but the precise nature of their variation and their distribution remains to be defined. At least one tripod censer cover similar to those from Chachoapan and Yucuita was found in Monte Albán V deposits at the Mitla fortress in the Valley of Oaxaca (William Bittler, personal communication, 1970). Despite the apparently wide-spread distribution of tripod censer covers, however, the differences in decoration certainly suggest a localized orientation that reflects their probable function as censer covers used in community ritual activities.

Yanhuitlan Earspools

Nine Yanhuitlan earspools were recovered from Chachoapan and Yucuita. Like Yanhuitlan fine cream vessels, most Yanhuitlan earspools are cream-colored, orange, or chalky white. They all have a circular perforation from 4 to 6 mm in diameter that passes through the center and probably functioned as a means by which fancy tassels could be fastened to the earspool, as illustrated in the Mixtec codices (Paddock 1966:318; Fig. 10). Three different varieties of Yanhuitlan earspools are represented: simple, concave, and burnished black (Fig. 33).

Simple Earspools

The five simple earspools have slightly concave large ends that range from 1.3 to 1.8 cm in diameter. The small ends are consistently 1.1 cm in diameter, and the overall length of the earspools ranges from 1.6 to 2.0 cm. All the simple earspools are burnished and all are painted, although only traces of white paint remain visible.

Concave Earspools

The three concave earspools have markedly concave or "dish-shaped" large ends that reach a depth of 7 mm and measure from 1.8 to 2.0 cm in diameter.

Two of the concave earspools have cylindrical shafts that extend from the base of the "dish-shaped" large end. Two notches are present in the "base" on opposite sides of the shaft. Unfortunately, the cylindrical shafts, that measure 9 mm in diameter, are broken. Therefore, it was not possible to determine the overall lengths of these two earspools nor to discern the form or diameter of their small ends. Both earspools were found in the Natividad midden (F-10A) at Yucuita and may have formed a matching pair.

The third concave earspool is different in contour from the other two, and its small end is modeled in the form of tiny twin bird heads with stubby open beaks and eyes formed by two concentric punctate circles. The modeled end is 1.2 cm in diameter and the overall length is 2.2 cm. All the Yanhuitlan concave earspools are burnished and have traces of white paint.

Burnished Black Earspools

The single burnished black earspool has a slightly convex large end that is 2.6 cm in diameter. It is burnished and painted black over its entire surface except for a small area around the perforation in the large end. Unfortunately, its small end is broken off and prevents diameter and overall length measurements. However, the diameter at the point of the break is 1 cm, and its contour may be reconstructed on the basis of comparisons with similar earspools from Coixtlahuaca (Bernal 1949:40; *Tabla* 2—unlabeled last column).

Summary

Yanhuitlan earspools are distributed throughout the Nochixtlan Valley. Outside that area, Bernal (1949:61-62) reports several varieties of earspools ("*adornos*") from Coixtlahuaca. Some of these varieties are similar in form to the varieties of Yanhuitlan earspools (Bernal 1949:40; *Tabla* 2—unlabeled last column) and, like the Yanhuitlan earspools, all the earspools from Coixtlahuaca are painted. Those from high status burials at Coixtlahuaca still retained post-fire painting in white, blue, and black that was carefully applied in a thin layer (Bernal 1949:62). Earspools similar to Yanhuitlan earspools are probably also distributed throughout the Mixteca Alta like the Yanhuitlan fine cream ware of which they are made.

Yanhuitlan Spindle Whorls

Three Yanhuitlan spindle whorls were found at Chachoapan and Yucuita. Two are "custom-made" of Yanhuitlan fine cream ware, and one is a "make-shift" spindle whorl manufactured from the body sherd of a Chachoapan sandy cream olla. All three are unburnished and have one flat (upper) surface. Each has a central perforation from 5 to 6 mm in diameter (Fig. 33).

The make-shift spindle whorl has a diameter of 2.5 cm and a thickness of 6 mm. One of the custom spindle whorls also has a diameter of 2.5 cm, but its thickness is 8 mm. A fine line is incised around its edge, and its convex lower surface has a second incised fine line that encircles the central perforation. The third spindle whorl is larger than the other two and has a diameter of 3.5 cm and a thickness of 1 cm. Its lower surface has a vertically grooved conical center. Spindle whorls were used in the process of converting fibers into spun yarn,

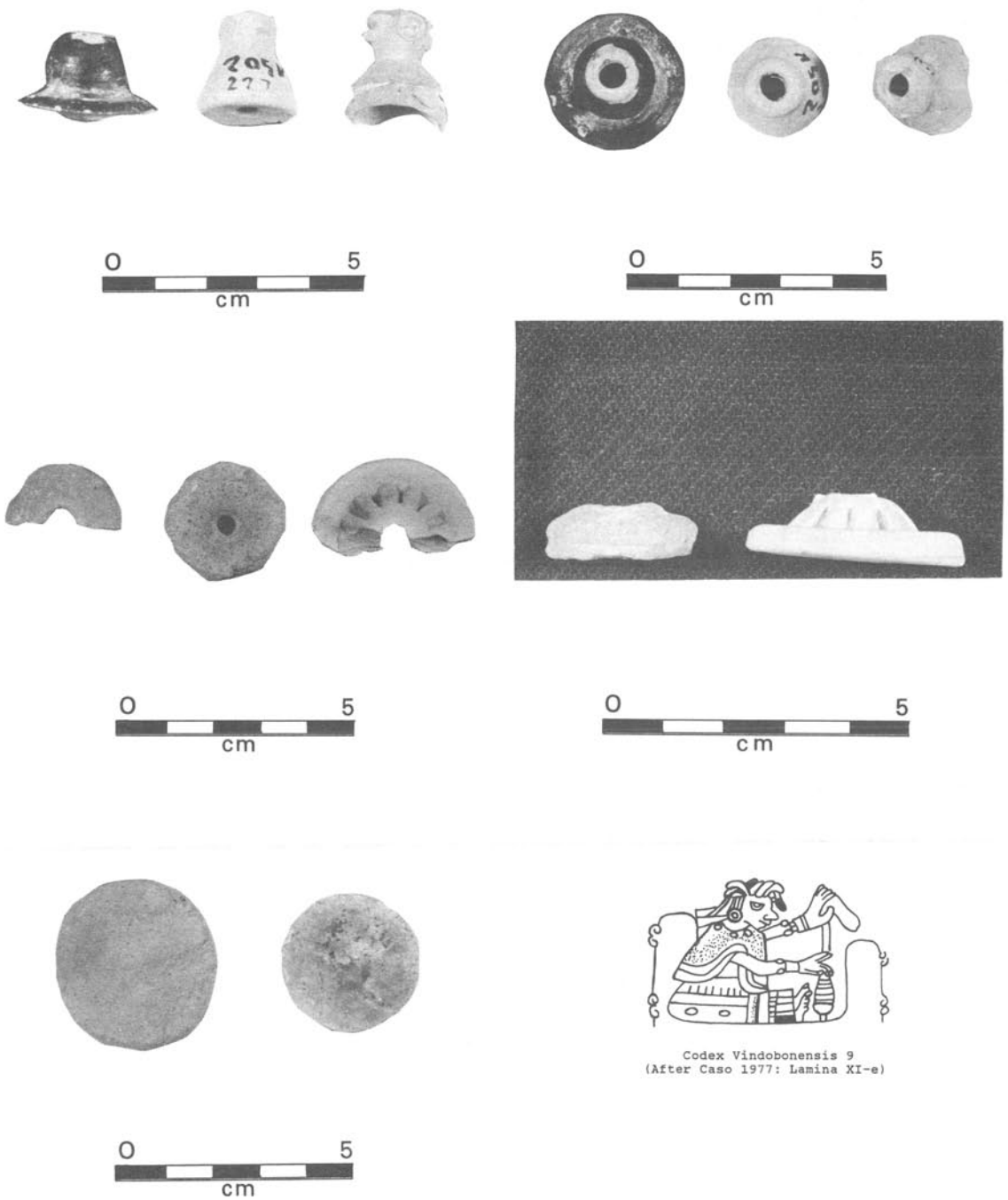


Fig. 33. Earspools, Spindle Whorls, and Circular Sherds
Burnished black, simple, and concave earspools (upper); spindle whorls (center); circular sherds (lower left). Spindle whorl in the Mixtec codices (lower right).

as illustrated in the Mixtec codices (Paddock 1966:203; Fig. 236). The small size of the spindle whorls suggests that they were used to spin fine fibers, probably cotton, into yarn.

Summary

Spindle whorls have been found throughout the Nochixtlan Valley. The very low frequency of their occurrence at Chachoapan and Yucuita may be explained by the fact that neither of these communities is known as a center of weaving. Apparently no spindle whorls similar to the spindle whorls from the Nochixtlan Valley were found at Coixtlahuaca (Bernal 1949:61).

Circular Sherds

Two circular or disk-shaped sherds come from the Early Postconquest midden (F-2A) at Chachoapan. One is made from the body sherd of a Chachoapan sandy cream olla and is 3.5 cm in diameter and 1 cm thick. The other is made from the body sherd of a vessel with a white glazed interior and a green glazed exterior. It measures 3 cm in diameter and is 6 mm thick. The function of these circular sherds is unknown, although they may have served as markers in games of patolli (Fig. 33).

Summary

Circular sherds are common in the Central Highlands of Mexico and are present in many different phases (Noguera 1954:155-56). The presence of the circular glazed sherd in the Early Postconquest midden at Chachoapan is the only example of glazed ware in any of the Postconquest contexts at Chachoapan and Yucuita. However, several varieties of Convento green glaze ware were recovered from in Postconquest contexts at the Convento in Yanhuitlan (Spores 1972:23-24).

CHAPTER 5: HOUSEHOLD CERAMIC CONSUMPTION PRACTICES

Ceramic artifacts that can be properly associated with house remains serve as a basis for reconstructing household ceramic consumption practices. These practices, in turn, provide evidence of household activities, socioeconomic status, and foreign contact. In order to reconstruct household ceramic consumption practices, however, it is necessary to demonstrate that the ceramic artifacts found in and around the small palaces at Chachoapan and Yucuita were actually obtained and used by the noble household groups. Demonstrating this requires assessing the distribution of the ceramic artifacts within the palaces to determine which archeological contexts provide information on household consumption practices and which do not.

The Archeological Context

A total of 8737 ceramic artifacts (excluding vessel body sherds) was recovered in and around the palaces at Chachoapan and Yucuita. The Chachoapan palaces yielded 6298 ceramic artifacts, while only 2439 came from those at Yucuita. Understanding how these artifacts came to rest in particular features in and around the palaces requires an explicit discussion of the nature of the archeological contexts in which they were found. A chart, illustrating the relative frequencies of ceramic artifacts in different features, serves as a starting point (Table 25).

FEATURES AT CHACHOAPAN	No.	Percent	FEATURES AT YUCUITA	No.	Percent
Endeque house-I:			Pre-endeque house:		
F-24: Courtyard	23	0.37	F-10A: Natividad midden	739	30.30
F-23: Kitchen	2	0.03			
			Endeque house-I:		
Endeque house-II:			F-5C: Courtyard	1	0.04
F-7: Kitchen	6	0.09	F-7: East room	10	0.41
F-8: Hearth	11	0.18			
F-2A: Midden	4966	78.85	Endeque house-II:		
			F-2: North room	10	0.41
Limestone house:			F-6: East room	51	2.09
F-1: Courtyard	185	2.94	F-4: Northeast vestibule	939	38.50
F-6: Kitchen	31	0.49			
F-28: Porch	6	0.09	Limestone house:		
F-9: Kitchen	14	0.22	F-1: North room	56	2.30
F-10: Hearth	5	0.28	F-8: East room	6	0.25
Convento house:			Convento house:		
F-3: East courtyard	122	1.94	F-10: Convento midden	627	25.70
F-5: East passageway	24	0.38			
F-14: West passageway	5	0.08	Totals	2439	100.00
F-25: West courtyard	292	4.64			
F-27: Kitchen	49	0.78			
F-16: Kitchen	184	2.92			
F-15: Hearth	1	0.01			
F-29: West room	181	2.88			
F-30W: Porch	190	3.02			
F-12: Work area/hearth	1	0.01			
Totals	6298	100.00			

Table 25. Frequency of Ceramic Artifacts in Features

Middens

At both Yucuita and Chachoapan, most of the ceramic artifacts were recovered from middens. The Natividad (F-10A) and Convento (F-10) middens account for 56% of all ceramic artifacts from Yucuita. Apart from midden-related construction fill in the northeast vestibule (F-4) of the Endeque house-II, none of the floors yielded more than 3% of the total. At Chachoapan, nearly 79% of all ceramic artifacts were found in the Early Postconquest midden (F-2A) associated with the Endeque house-II, while none of the hearths or floors of rooms, kitchens, courtyards, passageways, or porches accounts for more than 5% of the total (Table 25).

At both Chachoapan and Yucuita, middens consisted of heavy concentrations of fine powdery gray ash mixed with charcoal and replete with artifacts. The ashy layer, easily distinguished from surrounding deposits, was extensive in its horizontal spread but rarely reached more than 30 cm in depth. Informal observation of the formation of a present-day midden over a six month period provides insight into the process by which the excavated middens at Chachoapan and Yucuita may have been formed.

Each day en route to excavations we passed an isolated single-room house located toward the back of a terrace high in the piedmont zone between Nochixtlan and Yucuita. On numerous occasions, the woman of the house was observed discarding basketfuls of trash across the front part of the terrace. Most of the trash consisted of fine powdery gray ash originating from periodic cleanings of the household hearth to remove the ash that had accumulated from charcoal cooking fires (similar to our barbecues). However, broken ceramic vessels and other items of trash were also observed being discarded with the ash. Over a six month period, an extensive layer of ash had accumulated, forming a midden that began only a few meters from the front door of the house and expanded in either direction covering the front part of the terrace and partially spilling over its edge.

The presence of fine powdery gray ash mixed with charcoal in the middens at Chachoapan and Yucuita suggests that they were formed in a manner similar to that described above. The fact that the kitchen hearths (F-8, F-10, and F-15) at Chachoapan all contained fine powdery gray ash mixed with charcoal confirms the idea that the ash in the middens came from periodic cleanings of the hearths. Furthermore, numerous whole or nearly whole ceramic vessels were reconstructed from sherds in the middens. This demonstrates that the households at Chachoapan and Yucuita disposed of their broken and no longer useful ceramic artifacts in the middens and that the sherds from these vessels remained where they had been discarded and were not redeposited elsewhere. The middens at Chachoapan and Yucuita, then, constitute an excellent context for assessing household ceramic consumption practices since the ceramic artifacts within them were obtained and used by the nobles who occupied the palaces.

Construction Fill

Apart from middens, large numbers of ceramic artifacts were found in the fill of the northeast vestibule (F-4) of the Endeque house-II at Yucuita (Table 25).

This construction fill consisted of layers of large stones alternating with layers of trash. Unlike the ashy middens, however, the trash in the construction fill contained more earth and less ash. Furthermore, no whole ceramic vessels could be reconstructed from sherds in the fill. Consequently, the fill represents trash obtained from household middens and secondarily redeposited as construction fill.

Comparisons were made to determine if the fill originally came from noble household middens (Table 26). The noble household middens (F-10A and F-10) at Yucuita contained much higher frequencies of elite wares–Pilitas and Iglesia polychrome, Iglesia burnished red, and Cacique burnished–while the construction fill contained significantly higher frequencies of common wares–Yanhuitlan red on cream and Yanhuitlan fine cream. Furthermore, the noble household middens had higher frequencies of Nochixtlan rustware ollas and much lower frequencies of Chachoapan sandy cream ollas than the construction fill. The fill, then, did not come from noble household middens.

Because the construction fill did not come from noble household middens, comparisons were made to determine if it came instead from peasant household middens. In excavation unit N217B in Yucuita, Spores (1974b:28) dug a stratigraphic test pit one level (1a) of which penetrated a peasant household midden. Level 1a yielded 2448 sherds of which 1796 were classifiable and provide a basis for comparison. However, Spores used body sherds as well as rim sherds in his analysis. Because the present study was based solely on rim sherds and because the inclusion of body sherds greatly alters the relative frequencies of ceramic types (especially ollas), it is not possible to compare the frequencies on a one to one basis. Nevertheless, it is possible to make comparisons of selected pairs of ceramic types on a proportional basis. For example, the relative proportions of Nochixtlan rustware and Chachoapan sandy cream ollas should remain constant whether one compares all (both body and rim) sherds of Nochixtlan rustware to all sherds of Chachoapan sandy cream or only rim sherds of Nochixtlan rustware to rim sherds of Chachoapan sandy cream. On the basis of proportional frequencies of selected pairs of ceramic types, then, comparisons between the peasant household midden and the construction fill are possible (Table 27).

Comparisons were made using those ceramic types that served to differentiate the construction fill from the noble household middens in the first place. Since Spores (1974b:28-29) did not distinguish between Pilitas and Iglesia polychrome, these two types were lumped together under Mixteca polychrome. With one exception, the construction fill clearly follows the pattern of the peasant household midden and contrasts with the noble household middens by having significantly higher proportions of the common wares–Yanhuitlan red on cream and Yanhuitlan fine cream–and much lower proportions of the elite wares–Mixteca polychrome and Cacique burnished (Table 27).

The exception concerns the relative proportions of Nochixtlan rustware and Chachoapan sandy cream ollas. The peasant household midden and the construction fill do have significantly higher frequencies of Chachoapan sandy cream ollas than the noble household middens, but the relative proportions of Nochixtlan rustware and Chachoapan sandy cream are not the same for the peasant household midden and the construction fill. However, since the relative proportions of Nochixtlan rustware (as cooking pots) and Chachoapan sandy cream (as water jars) are functions of the household's proximity to water sources, and

CERAMIC TYPES	Midden Totals (F-10A/F-10)	Construction Fill (F-4)	Room Floor Totals (All Houses)
PAINTED VESSELS			
Pilitas Polychrome	1.10	0.43	0.00
Iglesia Polychrome	4.32	0.00	0.00
Aztec Burnished Red	0.00	0.00	0.00
Iglesia Burnished Red	1.61	0.00	0.00
Iglesia Burnished White	0.22	0.00	0.00
Mixteca Graphite on Orange	0.00	0.11	0.00
Yanhuitlan Red on Cream	4.76	14.16	5.97
PLAIN VESSELS			
Cacique Burnished	19.69	3.20	5.97
Yanhuitlan Fine Cream	41.73	52.71	57.46
Yanhuitlan Ladles	4.69	3.30	1.49
Yanhuitlan Pitchers	0.00	0.11	0.00
Miguelito Tripod Cajetes	3.73	4.15	3.73
Miguelito Pitchers	0.88	0.11	0.00
Nochixtlan Rustware Ollas	4.39	2.45	4.48
Chachoapan Sandy Cream Ollas	4.83	12.99	16.42
Chachoapan Sandy Cream Comales	6.59	5.22	4.48
SPECIAL FORMS			
Yanhuitlan Miniatures	0.51	0.21	0.00
Yanhuitlan Miniature Tripod Effigy Ollas	0.00	0.00	0.00
Yanhuitlan Ladle Censers	0.15	0.00	0.00
Chachoapan Tripod Censer Covers	0.37	0.75	0.00
Yanhuitlan Figurines	0.07	0.11	0.00
Christ Figurine Mold	0.07	0.00	0.00
Yanhuitlan Earspools	0.22	0.00	0.00
Yanhuitlan Spindle Whorls	0.07	0.00	0.00
Circular Sherds	0.00	0.00	0.00
Totals	100.00	100.00	100.00

Table 26. Frequency of Ceramic Types at Yucuita

CERAMIC TYPES	Peasant Household Midden		Construction Fill		Noble Household Middens	
	No.	Percent	No.	Percent	No.	Percent
Mixteca Polychrome	2	3.92	4	2.92	74	53.24
Yanhuitlan Red on Cream	49	96.08	133	97.08	65	46.76
Cacique Burnished	0	0.00	30	5.71	269	32.06
Yanhuitlan Fine Cream	703	100.00	495	94.29	570	67.94
Nochixtlan Rustware Ollas	187	32.47	23	15.86	60	47.62
Chachoapan Sandy Cream Ollas	389	67.53	122	84.14	66	52.38

Table 27. Relative Proportions of Selected Pairs of Ceramic Types

since for this reason even noble household middens vary dramatically in the relative proportions of these two types (see Table 19),the differences between the peasant household midden and the construction fill with regard to their relative proportions are neither unexpected nor significant in the present context.

The above comparisons confirm the supposition that the fill in the northeast vestibule of the Endeque house-II at Yucuita was a secondary redeposition of trash from peasant household middens. This archeological evidence demonstrates that peasants provided both labor services and construction fill when building houses for nobles. The ceramic artifacts in the fill, however, do not provide information on the noble households' consumption practices with regard to obtaining and using ceramic artifacts to carry out household activities.

House Floors

Archeologists study artifacts from house floors to discover the kinds of activities carried out in different rooms of the house. Such studies rest on the assumption that, when the house was abandoned, the artifacts were left on the floors of the rooms in which they were used (Schiffer 1972). This assumption must be questioned with regard to the ceramic artifacts from the house floors at Chachoapan and Yucuita.

In marked contrast to middens and midden-related construction fill, a very low frequency of ceramic artifacts occurs on floors and in hearths at Chachoapan and Yucuita (Table 25). This is to be expected since the households discarded most of their no longer useful ceramic artifacts in middens instead of leaving them on floors or in hearths to obstruct daily activities. The question is why there are any ceramic artifacts at all on floors and in hearths. At least three explanations may account for this: (1) modern disturbances, (2) elements of nature, and (3) ancient activities perpetrated by the occupants of the houses or by inhabitants of the communities of which they were part.

Modern Disturbances

At Yucuita, recent pits dug to obtain earth for adobes ravaged the rooms and courtyards of the Endeque and Limestone houses, leaving only irregular intact sections of floor where diggers failed to penetrate the underlying deposits. It is difficult to determine to what extent the adobe diggers may have disturbed ceramic artifacts on the intact sections of floor, or the extent to which ceramic artifacts may have spilled from their shovels onto the intact sections of floor as they removed earth from midden deposits directly beneath the floors. Failure to locate clusters of sherds from whole or nearly whole ceramic vessels suggests considerable disturbance.

Plowing affected most of the features at Chachoapan with the notable exceptions of all intact hearths (F-8, F-10, F-12, and F-15), the floors of a porch (F-28) and kitchen (F-9) of the Limestone house, and a courtyard (F-25) of the Convento house. The preserved sections of three sunken courtyards (F-24, F-1, and F-3) and a passageway (F-5) were untouched by the plow except on their extreme southeastern fringes. Consequently, the ceramic artifacts on their sur-

faces are in undisturbed contexts. However, the plow-marked surfaces of the remaining floors at Chachoapan attest to considerable disturbance from plowing, although to what extent the plow moved ceramic artifacts onto or off of the intact surfaces of these plow-scarred floors is difficult to ascertain.

Elements of Nature

A number of ceramic artifacts on floors and in hearths probably eroded out of the adobe walls that had collapsed over the floors subsequent to the abandonment of the houses. A clear example of this process is illustrated by excavations carried out to uncover a peasant house in excavation unit N217H in Yucuita. Because of a very high concentration of Ramos phase sherds on the floor of this house, that was partially in and partially just below the plow zone, it was initially believed that the house belonged to the Ramos phase. However, subsequent excavation beneath the intact floors of the house yielded Late Natividad sherds, demonstrating that the house was built during or after Late Natividad times.

The mystery of the high concentration of Ramos phase sherds on the floor of a Natividad house was solved with an eye to the present. Present-day adobe houses at Yucuita and Chachoapan contain numerous sherds from Natividad times embedded in the adobes composing their walls. This is because the earth used for making the adobes is procured from Natividad sites, such as N203J in Yucuita where the activities of adobe diggers have already been noted. If and when future archeologists excavate the remains of these houses, they are going to be surprised by the large number of Natividad sherds on the floors.

The activities of present-day adobe diggers are by no means a recent phenomenon. A short distance from the peasant house at N217H in Yucuita, a huge pit was dug into Ramos phase deposits during Natividad times, and earth bearing Ramos sherds was removed to make adobes. It was calculated that the Natividad adobe diggers would have needed 27 cubic meters of earth to make enough adobes to build the walls of their house at N217H to a height common in present-day houses at Yucuita. They had removed 30 cubic meters from the huge pit. After digging the adobe pit into Ramos phase deposits, the members of the Natividad house at N217H used the pit to deposit trash. Like their modern counterparts, only perhaps more so, the Natividad adobe diggers were adept at putting to practical use deposits left by their ancestors.

The high concentration of Ramos sherds on the floor of the Natividad house, then, is certainly due to the collapse of the adobe walls over the floor of the house where erosion, and later plowing, resulted in the deposition of a large number of sherds, together with the earth from the disintegrated adobes, on the floors of the house. The importance of the excavations of N217H is that the sherds embedded in the adobe walls belonged to a different phase than the ceramic artifacts being used by the houshold. Unfortunately, the sherds embedded in the adobe walls of the palaces at Chachoapan and Yucuita are of the Natividad phase and make it difficult to determine to what extent the ceramic artifacts may have eroded out of their collapsed adobe walls.

Ancient Activities

Apart from purposeful construction fill, several other ancient activities perpe-

trated by the inhabitants of the palaces or by members of their communities may account for the presence of ceramic artifacts on floors or in hearths. First, upon abandoning their houses, the ancient occupants may have also abandoned their no longer useful, and no longer desired, ceramic artifacts on floors or in hearths. Subsequently, the abandoned ceramic artifacts were either preserved beneath the collapsed adobe walls or beneath construction fill deposited prior to building a new house on top of the old one. There are several excellent examples from Chachoapan that illustrate this.

The kitchen floor (F-9) and hearth (F-10) of the Limestone house contained ceramic artifacts in an abandonment context. A complete, but broken, Iglesia polychrome plate (see Fig. 10) was found on the kitchen floor next to the hearth. Beside the plate were bones from a turkey wing and the lower part of a deer leg. Within the hearth, a broken comal rested on three stones. The ceramic artifacts on the floor and in the hearth of the Limestone house kitchen, then, were most likely abandoned by the last occupants of the house and later preserved when the adobe walls collapsed over the floor.

A nearly whole Iglesia polychrome tripod cajete (see Fig. 10) was found next to a hearth (F-12) in the work area outside the Convento house. Also near the hearth was a broken tripod-supported metate. These artifacts were abandoned by the last persons to occupy the Convento house and were later preserved beneath the rubble from collapsing walls.

Finally, a nearly whole Yanhuitlan fine cream cajete was reconstructed from sherds contained in an ashy layer within the hearth (F-8) of a kitchen (F-7) of the Endeque house-II. The hearth clearly contained a compact layer of mottled brown and white clay composing a stratum above the ashy layer. The material in this stratum is identical in appearance to the adobe forming the kitchen walls and probably represents debris from the north wall that was levelled and spread over the floor prior to building the larger kitchen (F-6) of the Limestone house. The adobe then sealed the hearth (F-8) containing the remains of charcoal and fine powdery gray ash from the last cooking fire. The broken, and no longer useful, Yanhuitlan fine cream cajete had been discarded in the ashy layer by the last household group to occupy the Endeque house-II.

Another possible explanation for the presence of ceramic artifacts on floors and in hearths is that subsequent to abandonment of the palaces, the former occupants, or members of their community, may have deposited trash on the floors of abandoned rooms. Although none of the floors at either Chachoapan or Yucuita had concentrations of ash and artifacts that would suggest trash deposits, modern disturbances, such as plowing, may have obliterated clearly discernible pockets of trash.

Summary

Floors and hearths account for only a very low percentage of the total number of ceramic artifacts at both Chachoapan and Yucuita. However, assessing the reasons for their presence is complex. At least a few of the ceramic artifacts were abandoned on floors and in hearths by members of the ancient households when they abandoned their houses. They were clearly procured, used, and abandoned by the ancient occupants of the palaces. Other ceramic artifacts on floors,

however, may have eroded out of collapsed and disintegrating adobe walls and therefore do not represent artifacts purchased and utilized by members of the noble households to carry out household activities.

Yucuita House Floors

The frequencies of ceramic types on the room floors at Yucuita present both similarities and differences in relation to their frequencies in middens and construction fill (Table 26). Like the construction fill, room floors yielded high frequencies of Yanhuitlan fine cream and Chachoapan sandy cream, but low frequencies of polychrome. Therefore, some of the ceramic artifacts on room floors probably represent either construction fill or erosion of disintegrating adobes that had collapsed over the floors after the house was abandoned.

On the other hand, like the noble household middens, the room floors yielded a very low frequency of Yanhuitlan red on cream and at least significantly higher frequencies of Cacique burnished than the construction fill. Therefore, some of the ceramic artifacts on room floors were either left on the floors by members of the ancient households when they abandoned the palaces or they fell from the shovels of present-day adobe diggers as they ravaged the floors and penetrated the midden deposits directly beneath the floors. The ceramic artifacts on room floors at Yucuita, then, may have been deposited by a combination of ancient activities, elements of nature, and modern disturbances and, therefore, fail to provide conclusive information concerning household ceramic consumption practices.

Chachoapan House Floors

A comparison of the relative frequencies of ceramic types on room floors and in the Early Postconquest midden (F-2A) of the Endeque house-II at Chachoapan reveals that the room floors have significantly higher frequencies of Yanhuitlan red on cream and much lower frequencies of Cacique burnished than the noble household midden. Since high frequencies of Yanhuitlan red on cream and low frequencies of Cacique burnished are characteristic of peasant household middens, this suggests that many of the ceramic artifacts on the room floors at Chachoapan eroded out of disintegrating adobe after the walls collapsed over the floors (Table 28).

A further comparison was made of the relative proportions of Mixteca polychrome and Yanhuitlan red on cream, Cacique burnished and Yanhuitlan fine cream, and Nochixtlan rustware and Chachoapan sandy cream on room floors and in peasant (N217B) and noble (F-2A) household middens. This comparison revealed that the relative proportions of Nochixtlan rustware and Chachoapan sandy cream are approximately the same for the room floors and the noble household midden, while the relative proportions of Mixteca polychrome and Cacique burnished are much lower than would be expected in noble household middens, but much higher than expected in peasant household middens (Table 29).

Instances have been cited of whole Iglesia polychrome vessels that were left in the features of the Limestone and Convento houses at Chachoapan. Most of

the Mixteca polychrome on the room floors is of the Iglesia type (Table 28). Since Iglesia polychrome is both an elite ware and a Postconquest type, its presence in the features of the Postconquest Limestone and Convento houses demonstrates that members of these ancient households left the no longer useful, or no longer desired, Iglesia polychrome vessels on the room floors when they abandoned the palaces. However, failure of clear cut correspondences to emerge from the comparative studies suggests that any ceramic artifacts that might have been left in their use context on room floors of abandoned houses were later mixed with sherds that had eroded out of disintegrating adobes after the walls of the houses tumbled onto the floors. The ceramic artifacts from room floors, then, do not provide reliable information on noble household ceramic consumption practices at Chachoapan.

Household Activities

The noble households at Chachoapan and Yucuita procured ceramic artifacts to carry out household activities. Most of these were eventually discarded in middens. The middens, therefore, provide the most reliable archeological context for reconstructing household ceramic consumption practices and household activities.

CERAMIC TYPES	Midden (F-2A) Totals	Room Floor Totals
PAINTED VESSELS		
Pilitas Polychrome	2.46	0.60
Iglesia Polychrome	0.10	1.43
Aztec Burnished Red	0.08	0.00
Iglesia Burnished Red	0.00	0.52
Iglesia Burnished White	0.00	0.00
Mixteca Graphite on Orange	0.00	0.08
Yanhuitlan Red on Cream	2.72	16.14
PLAIN VESSELS		
Cacique Burnished	29.40	11.19
Yanhuitlan Fine Cream	36.65	32.73
Yanhuitlan Ladles	5.14	4.05
Yanhuitlan Pitchers	0.04	0.00
Miguelito Tripod Cajetes	2.05	3.90
Miguelito Pitchers	1.29	1.88
Nochixtlan Rustware Ollas	1.71	2.55
Chachoapan Sandy Cream Ollas	8.36	19.82
Chachoapan Sandy Cream Comales	7.71	4.28
SPECIAL FORMS		
Yanhuitlan Miniatures	1.31	0.08
Yanhuitlan Miniature Tripod Effigy Ollas	0.10	0.00
Yanhuitlan Ladle Censers	0.14	0.00
Chachoapan Tripod Censer Covers	0.40	0.52
Yanhuitlan Figurines	0.14	0.23
Christ Figurine Mold	0.00	0.00
Yanhuitlan Earspools	0.12	0.00
Yanhuitlan Spindle Whorls	0.04	0.00
Circular Sherds	0.04	0.00
Totals	100.00	100.00

Table 28. Frequency of Ceramic Types at Chachoapan

CERAMIC TYPES	Peasant Household Midden		Chachoapan Room Floors		Noble Household Midden	
	No.	Percent	No.	Percent	No.	Percent
Mixteca Polychrome	2	3.92	27	11.16	127	48.47
Yanhuitlan Red on Cream	49	96.08	215	88.84	135	51.53
Cacique Burnished	0	0.00	149	25.47	1460	44.49
Yanhuitlan Fine Cream	703	100.00	436	74.53	1822	55.51
Nochixtlan Rustware Ollas	187	32.47	34	11.41	85	17.00
Chachoapan Sandy Cream Ollas	389	67.53	264	88.59	415	83.00

Table 29. Relative Proportions of Selected Pairs of Ceramic Types at Chachoapan

The ceramic artifacts from the middens may be grouped into six general functional categories: (1) dinner ware, (2) kitchen ware, (3) ritual ware, (4) recreational ware, (5) costume ware, and (6) production ware. Dinner ware and kitchen ware account for nearly 98% of all ceramic artifacts consumed by the noble households (Table 30).

Dinner Ware

The ceramic artifacts most frequently obtained by the noble households were dinner wares, that is, ceramic vessels from which food or drink was directly consumed—plates, cajetes, bowls, tripod cajetes, and tripod ollas. Supportless cajetes or shallow bowls—ranging from 12 to 24 cm in rim diameter and made of Cacique burnished, Yanhuitlan red on cream, and Yanhuitlan fine cream—were clearly the preferred types of food serving dishes and account for over 90% of all dinner ware. Plates of Aztec burnished red, Iglesia polychrome, Iglesia burnished red, and Iglesia burnished white—all with rim diameters of 20 to 24 cm, making them similar in size to our common dinner plates—were very uncommon and rarely used forms. Tripod cajetes of Pilitas polychrome, Iglesia polychrome, Aztec burnished red, Iglesia burnished red, Yanhuitlan red on cream, and Miguelito hard fine gray were the favored forms of pulque drinking vessels, while Yanhuitlan red on cream bowls were rarely used. Fancy chocolate drinking mugs or "steins" of Pilitas polychrome and, more rarely, Iglesia burnished red tripod ollas were uncommon and thus reflect their limited and specialized use in ritual chocolate drinking on ceremonial occasions (Table 31).

Kitchen Ware

Ceramic artifacts used in the preparation, storage, or dispensing of food and drink—water jars, cooking pots, *comales*, *molcajetes*, ladles, pitchers, and small containers for condiments—make up the kitchen ware and represent the second most frequent category of ceramic artifacts acquired by the noble households at Chachoapan and Yucuita. Sauce dishes, similar in size and shape to modern Oaxa-

CATEGORY	No.	Percent
Dinner ware	3901	61.61
Kitchen ware	2292	36.20
Ritual ware	47	.74
Recreational ware	79	1.25
Costume ware	9	.15
Production ware	4	.06
Totals	6332	100.00

Table 30. Frequency of Functional Categories of Ceramic Artifacts

CATEGORY	No.	Percent
DINNER WARE		
Dinner Plates	47	1.21
Cajetes	3524	90.34
Bowls	6	0.15
Tripod Cajetes	295	7.56
Tripod Ollas	29	0.74
Totals	3901	100.00
KITCHEN WARE		
Water Jars	480	20.94
Cooking Pots	366	15.97
Comales	473	20.64
Molcajete	1	0.04
Ladles	319	13.93
Pitchers	78	3.40
Sauce Dishes (Miniature cajetes)	526	22.95
Saucers (Miniature plates)	8	0.35
Tab Handle Bowls with Lids	12	0.52
Tiny Bowls	23	1.00
Tiny Jars (Tecomates and Ovoid Bowls)	6	0.26
Totals	2292	100.00
RITUAL WARE		
Censers	14	29.79
Censer Covers	25	53.19
Figurines	8	17.02
Totals	47	100.00
RECREATIONAL WARE		
Toys (Yanhuitlan miniatures)	77	97.47
Game Pieces (Circular sherds)	2	2.53
Totals	79	100.00
COSTUME WARE		
Earspools	9	100.00
PRODUCTION WARE		
Spindle Whorls	3	75.00
Figurine Mold	1	25.00
Totals	4	100.00

Table 31. Frequency of Category-specific Ceramic Artifacts

can dishes used as containers for sauces of red or green chiles, were the most frequent items of kitchen ware used by the noble households. The small sauce dishes, 6 to 12 cm in rim diameter, were in the form of miniature supportless *cajetes* or tiny shallow bowls of Yanhuitlan red on cream, Yanhuitlan fine cream, and Cacique burnished. Other small condiment containers—tiny cup-like bowls (8 to 11 cm in rim diameter) of Yanhuitlan fine cream and Cacique burnished, small tab handle bowls with lids (9 to 14 cm in rim diameter) of Iglesia polychrome and Iglesia burnished red, saucers or small plates (10 to 14 cm in rim diameter) of Yanhuitlan red on cream, and small jars in the form of Iglesia burnished red *tecomates* and Yanhuitlan red on cream ovoid bowls—were used infrequently.

The second most frequently used items of kitchen ware were water jugs (Chachoapan sandy cream ollas) and *comales*, both of which were acquired in nearly equal proportions by the noble households. Cooking pots in the forms of Nochixtlan rustware ollas, large bowls of Yanhuitlan fine cream and Cacique burnished, and Chachoapan sandy cream *patojos* were the next most frequently used items of kitchen ware, followed by Yanhuitlan fine cream ladles and Miguelito hard fine gray pitchers. The single ceramic *molcajete* of Iglesia polychrome is a rarity, since most *molcajetes*, or grinding bowls, used by the noble households were made of stone (Table 31).

Ritual Ware

Less than 1% of the ceramic artifacts possessed by the noble households were directly associated with ritual activities. These included incense burners in the form of Pilitas polychrome censer bowls and Yanhuitlan ladle censers, Chachoapan censer covers, and Yanhuitlan figurines. The infrequent occurrence of these items is related to their limited and specialized use in household and community rituals or ceremonies (Tables 30 and 31).

Recreational Ware

Ceramic artifacts used in games or play activities represent slightly more than 1% of all ceramic artifacts obtained by the noble households (Table 30). Miniature toy replicas of kitchen ware—ollas, pitchers, *patojos*, and *nixtamal* strainers—were the most common form of recreational ware purchased. Game pieces (*patolli* markers?) in the form of make-shift circular sherds were infrequently utilized (Table 31).

Costume Ware

Ceramic artifacts used for personal adornment constitute the costume ware and represent a fraction of a percent of all ceramic artifacts purchased by the noble households (Table 30). Only Yanhuitlan earspools are included in this category. Presumably, most items of personal adornment worn by nobles were made of non-ceramic materials.

Production Ware

The ceramic artifacts least commonly purchased by the noble households were production wares—ceramic artifacts used as tools to manufacture products (Table 30). Only a single mold used to produce figurines and three spindle whorls used

in converting fibers into thread were recovered from the noble household middens. Noble households were clearly not the principal locus of spinning and figurine-making activities (Table 31).

Summary

Spanish documents relate that Mixtec royalty was obliged to entertain large numbers of retainers as dinner guests (Spores 1967:162-164). The ample supply of dinner ware found in association with the noble households leaves little doubt that nobles likewise held frequent dinner parties for retainers. The frequency of dinner ware is nearly double that of any other category of ceramic artifacts. These households, however, were not only involved in obtaining ceramic artifacts for mundane functions. They were also concerned with acquiring ceramic artifacts of types befitting their particular socioeconomic status.

Socioeconomic Status

In recent years Mesoamerican archeologists have become interested in ceramic artifacts as indicators of socioeconomic status differences. Generally, it has been assumed that more elaborately finished ceramic types are "elite wares," while less elaborately finished types are "common wares." Ceramic artifacts, then, whether subjectively or objectively analyzed, have been used as primary indicators of socioeconomic status differences (for further discussion see Feinman et al. 1981).

There are several problems inherent in current approaches that use ceramic artifacts as indicators of socioeconomic status differences. First, there is no reason to assume that "elite wares" will not be found in non-elite contexts or that "common wares"will not be present in elite contexts. In an earlier discussion of archeological context, it was demonstrated that common wares were contained in the construction fill and embedded in the adobe walls composing the elite residences. Shortly, it will be demonstrated that elite wares have also been found in non-elite contexts. Second, the distinction between "elite" and "non-elite," or nobility and peasantry, is overly simplistic and implies the existence of only two socioeconomic classes in the complex cultures of Mesoamerica. As was pointed out in the introduction, Mixtec culture had at least three different socioeconomic classes—royalty, nobility, and peasantry. Using an "elite" vs. "non-elite" dichotomy fails to reveal the actual complexity of these status differences. Last, and most important, using ceramic artifacts as the principal indicators of socioeconomic status differences is methodologically unsound. Architectural, not ceramic, data are the principal indicators of such status differences.

In virtually every class structured society, the most obvious indicator of socioeconomic status differences is the architectural nature of residences. Upper class members of society generally occupy large and elaborate residences. Lower class members, on the other hand, usually live in smaller, plainer abodes. In an earlier study (Lind 1979), the architectural remains of the small palaces occupied by nobles at Chachoapan and Yucuita were clearly distinguished from the architectural remains of peasant houses and royal palaces. These architectural remains provide the archeological context for defining socioeconomic differences in household ceramic consumption practices.

The noble households at Chachoapan and Yucuita consumed ceramic artifacts in keeping with their socioeconomic status within the communities and kingdoms of which they were a part. Provided care has been taken to properly reconstruct household consumer patterns in obtaining ceramics, comparisons should reveal the socioeconomic status differences among peasants, noble, and royal households with regard to the use of ceramic artifacts. Unfortunately, archeologists have paid little attention to identifying the archeological contexts that provide the basis for reconstructing these practices. Consequently, information on peasant and royal household consumer patterns is limited, making comparisons with the noble households difficult.

At excavation unit N217H in Yucuita, a peasant house built in Late Natividad times and remodelled after the Spanish Conquest was explored together with a large midden associated with it. Spores (1972) used ceramic artifacts from this midden to illustrate most of his Natividad phase ceramic types. In addition, ceramic artifacts from a nearby peasant household midden (N217B) have already been used to assess relative proportions of selected pairs of ceramic types. The above information, then, provides limited but reliable data on the consumer practices of peasant households.

Little or no information is available on ceramic artifacts that can be clearly associated with royal households for Late Natividad times. However, Bernal's (1949) excavations in the Inguiteria sector of Coixtlahuaca that, like Yanhuitlan, was a major urban center with resident royalty, uncovered a small palace (Edificio 1) similar to those from Chachoapan and Yucuita, and a number of high status burials. Bernal also explored some temple complexes. Because he grouped all ceramic artifacts from his excavations together for analysis, it is not always possible to determine the specific contexts from which they came. Nevertheless, since the ceramic artifacts show a wider range of types and vessel shapes than those from Chachoapan and Yucuita, it is possible that they are representative of urban noble or, perhaps, royal household ceramic use in Natividad times.

Despite the limited nature of the data, comparisons reveal some clear-cut differences among peasant, noble, and royal household patterns of purchasing ceramics. But because the available data are limited, it is not possible to specify frequency differences. Therefore, ceramic types are here simply designated as present or absent. To facilitate comparisons the ceramic artifacts have been treated under three general categories—painted vessels, plain vessels, and special forms (Tables 32, 33, 34, and 35).

Painted Vessels

During Late Natividad times, only royal or noble urban households utilized Tenochtitlan black on orange and Aztecoid dinner wares. The former may have been imported from the Aztec capital of Tenochtitlan, while the latter represents a local, and superior, imitation (Bernal 1949:36-40). Access to these elite dinner wares seems to have been beyond the means of the rural nobility at Chachoapan and Yucuita (Table 32).

Both royal and noble households alike acquired the elaborate Aztec burnished red that, like Tenochtitlan black on orange, may have been imported from Tenochtitlan. However, royal or noble urban households used much greater quantities

CERAMIC TYPES	Peasantry	Nobility	Royalty*
TENOCHTITLAN BLACK ON ORANGE (AZTEC III)	-	-	+
AZTECOID	-	-	+
AZTEC BURNISHED RED	-	+	+
Plates	-	+	?
Tripod Cajetes	-	+	?
Supportless Cajetes	-	-	+
Pitchers	-	-	+
Vases	-	-	+
PILITAS POLYCHROME	+	+	+
Tripod Ollas	+	+	+
Tripod Cajetes	-	+	+
Censer Bowls	-	+	+
Supportless Ollas	-	-	+
Circular Supported Bowls	-	-	+
Eagle Head Effigy Tecomates	-	-	+
YANHUITLAN RED ON CREAM	+	+	+
Tripod Cajetes	-	+	+
Supportless Cajetes	+	+	+
Simple Hemispherical Bowls	+	+	+
Ovoid Bowls	+	+	?
Plates	+	+	+

*Includes ceramic types and vessel shapes from Coixtlahuaca (Bernal 1949).

Table 32. Prehispanic Painted Ceramic Types Consumed by Peasantry, Nobility, and Royalty

CERAMIC TYPES	Peasantry	Nobility	Royalty
Majolica	-	-	+
Ming Porcelain	-	-	+
Maroon Wash	-	-	+
Red Paint Ceremonial	-	-	+
Convento Olive Jars	-	-	+
Convento White Glaze	-	-	+
Convento Green Glaze	-	+	+
Iglesia Polychrome	-	+	+
Iglesia Burnished Red	-	+	+
Iglesia Burnished White	-	+	?
Yanhuitlan Red on Cream	+	+	+

Table 33. Posthispanic Painted Ceramic Types Consumed by Peasantry, Nobility, and Royalty

and a wider range of vessel shapes of Aztec burnished red than the rural nobility at Chachoapan and Yucuita. Furthermore, the few vessels of Aztec burnished red at Chachoapan may have been a gift or memento (they formed a matched set) given by a cacique or urban noble to the rural noble at Chachoapan in

celebration of a special occasion or as payment for special services rendered (Table 32).

Elite Pilitas polychrome was used during Late Natividad times by peasant, noble, and royal households alike. However, peasants purchased only Pilitas tripod ollas or received them as gifts or mememtos from nobles on special occasions or for services provided. Noble households used much greater quantities of Pilitas polychrome and a wider range of vessel shapes than peasant households. Royal or noble urban households probably purchased even greater quantities of Pilitas polychrome and certainly used a wider range of vessel shapes than noble rural households (Table 32).

Based on a detailed analysis of Mixteca polychrome from the Mixteca de la Costa, Donald Brockington and Maria Jorrin (personal communication, 1971) believe they can distinguish a very elaborate codex style polychrome from a more ordinary polychrome. The elaborate codex style polychrome may have been produced by a small itinerant guild of highly skilled artisans who were commissioned by royalty to produce special polychromes for special occasions. In support of this contention is the fact that the elaborate codex style polychrome has a typological unity throughout the Mixteca de la Costa, despite the fact that it is made from the local pastes in each area where it occurs. The ordinary polychrome, on the other hand, appears to have local stylistic attributes and is much less elaborate. These factors suggest that it was produced by local artisans for consumption by local nobles.

Brockington and Jorrin's observations deserve more detailed study both in the Mixteca de la Costa and elsewhere in the Mixteca. A similar situation may have obtained in the Mixteca Alta where elaborate codex style polychromes were commissioned by royalty for special occasions (deaths, marriages, conquests, etc.) and given as mementos to nobles. Nobles probably purchased ordinary polychromes and, in turn, gave peasants these ordinary types on special occasions. The presence of Pilitas polychrome in association with peasant, noble, and royal households, then, probably reflects interactions among these three socioeconomic classes within the kingdom as much as it represents socioeconomic differences.

Yanhuitlan red on cream was also obtained by households of all three socioeconomic classes during Late Natividad and Early Convento times. However, peasant households owned the greatest amounts of this common painted dinner ware, while noble and royal households used fewer vessels of this type. Although peasants used large quantities of Yanhuitlan red on cream, evidently only royal and noble households acquired elaborate tripod cajetes of Yanhuitlan red on cream. The presence of Yanhuitlan red on cream in association with peasant, noble, and royal households probably reflects their common participation in the broad-based religious sphere of Achiutla, since eagle motifs, apparently symbolizing "Heart of the People," are common decorations on Yanhuitlan red on cream (Table 32).

With the exception of Yanhuitlan red on cream, all the Natividad painted ceramic types ceased being produced during Early Convento times following the Spanish Conquest (Tables 32 and 33). Late Natividad types, such as Pilitas polychrome and Aztec burnished red, were replaced by similar but distinctive Early Convento types, such as Iglesia polychrome and Iglesia burnished red. Furthermore, a whole series of Spanish ceramic types appear in Early Convento con-

texts–Majolica, Maroon wash, Convento olive jars, Red paint ceremonial, Convento white glaze, Convento green glaze, and even imported Ming porcelains (Table 33).

During Convento times, marked differences appear among royalty, nobility, and peasantry with regard to the acquisition of these new types of painted ceramic vessels. Only royal households had access to new Spanish and imported types. With the exception of a single circular sherd of Convento green glaze, the total absence of Spanish and imported types in Convento contexts at Chachoapan and Yucuita indicates that noble rural households did not have access to these new ceramic types (Table 33).

Noble rural households used large quantities of Iglesia polychrome and Iglesia burnished red, Convento types that were also purchased by royal households. The only painted ceramic type acquired by peasant households during Convento times is Yanhuitlan red on cream that was also used by noble and royal households, although infrequently (Table 33).

Plain Vessels

All the plain Natividad ceramic types continued to be produced during Convento times. Noble and royal households used large quantities of the elite Cacique burnished dinner ware that was either used in small amounts or not at all by peasant households. In contrast, peasant households used greater quantities of the common Yanhuitlan fine cream dinner ware than did noble and royal households. The only apparent distinction between royal and noble households with regard to the acquisition of plain ceramic types relates to Miguelito hard fine gray. Royal or noble urban households used a much wider range of vessel shapes of Miguelito hard fine gray than did noble rural households (Table 34).

Special Forms

During Late Natividad times, a wide range of special forms was used by all three household types. Yanhuitlan miniatures, which functioned as children's toys, were among these widely used special forms. Only royal and noble households, however, obtained the more elaborate Yanhuitlan miniature tripod effigy ollas and the miniature polychromes that were purchased for royal class children. Yanhuitlan miniatures and Yanhuitlan miniature tripod effigy ollas, then, reflect extensions of status differences among the children of peasants, nobles, and royalty during Late Natividad times (Table 35).

The elaborate polychrome ladle censers with bipod supports were used only by royal or noble urban households during Late Natividad times, as were Yanhuitlan serpent head ladle censers and elaborate graphite-on-red and applique varieties of censer covers. The peasant households used only Yanhuitlan plain handle ladle censers and the incised and punctate varieties of censer covers (Table 35).

The differences among royalty, nobility, and peasantry with regard to the acquisition of censers and censer covers served to reinforce status differences during participation in community or kingdom religious ceremonies. The fact that royal and noble households also utilized plain handle ladle censers and the punctate and incised varieties of censer covers is most likely explained by assuming

CERAMIC TYPES	Peasantry	Nobility	Royalty
Cacique Burnished	-	+	+
Yanhuitlan Fine Cream	+	+	+
Yanhuitlan Ladles	+	+	+
Yanhuitlan Pitchers	+	+	+
Miguelito Hard Fine Gray	+	+	+
Nochixtlan Rustware Ollas	+	+	+
Chachoapan Sandy Cream Ollas	+	+	+
Chachoapan Sandy Cream Comales	+	+	+
Chachoapan Sandy Cream Nixtamal Strainers	+	+	+
Chachoapan Sandy Cream Patojos	?	+	?

Table 34. Plain Ceramic Types Consumed by Peasantry, Nobility, and Royalty

SPECIAL FORMS	Peasantry	Nobility	Royalty*
YANHUITLAN MINIATURES	+	+	+
YANHUITLAN MINIATURE TRIPOD EFFIGY OLLAS	-	+	+
YANHUITLAN LADLE CENSERS	+	+	+
Plain Handle	+	+	+
Serpent Head Handle	-	+	+
Coixtlahuaca Polychrome Bipod Censers	-	-	+
CHACHOAPAN TRIPOD CENSER COVERS	+	+	+
Punctate Decoration	+	+	+
Incised Decoration	+	+	+
Applique Decoration	-	+	+
Graphite on Red Decoration	-	+	+
YANHUITLAN FIGURINES	+	+	+
Mixtec Man	+	+	+
Mixtec Lady	+	+	+
Mixtec Lord	+	+	+
Mixtec Cacique	-	+	?
Other Anthropomorphic	-	-	+
Dogs	+	+	+
Birds	-	-	+
Other Zoomorphic	-	-	+
YANHUITLAN EARSPOOLS	+	+	+
Simple	+	+	+
Burnished Black	+	+	+
Concave	-	+	+
YANHUITLAN SPINDLE WHORLS	+	+	+
Custom	+	+	+
Make-shift	+	+	-
CIRCULAR SHERDS	+	+	?

*Includes special forms from Coixtlahuaca (Bernal 1949).

Table 35. Prehispanic Special Forms Consumed by Peasantry, Nobility, and Royalty

that younger or lesser ranking members of royal and noble households used these varieties in public ceremonies, while higher ranking members or household heads used more elaborate varieties.

Stereotyped Mixtec man, Mixtec lord, Mixtec lady, and dog varieties of Yanhuitlan figurines were used by royal, noble, and peasant households during Late Natividad times. Presumably these varieties of figurines were included in displays placed on household altars to honor dead caciques or nobles with the dogs that were to guide them to the hereafter. It is possible that Mixtec man figurines represent nobles, while Mixtec lord and lady figurines represent royalty. Noble, but not peasant, households also acquired the elite Mixtec cacique figurines that, unlike the stereotyped varieties, were realistic portraits of dead caciques. Whether or not Mixtec cacique figurines were acquired by royal households is not known. However, royal or noble urban households procured a wider range of both anthropomorphic and zoomorphic figurines than did noble rural households (Table 35).

All household types purchased Yanhuitlan earspools of the simple variety during Late Natividad times. However, whereas adult peasants adorned themselves with simple earspools, only the children of nobles and royalty utilized this variety of earspool. This is indicated by size differences. The burnished black variety of earspools was also acquired by all household types during both Late Natividad and Early Convento times. However, nobles used larger size burnished black earspools than peasants. And the elaborate and delicate Yanhuitlan concave earspools decorated with modeled effigies and post-fire painting were acquired only by noble and royal households during Natividad times. During Late Natividad times, then, peasants, nobles, and royalty utilized distinctive varieties of ceramic earspools that symbolized their differing statuses (Table 35).

Only a few special forms continued to be produced during Convento times following the Spanish Conquest. These included Yanhuitlan miniatures and Yanhuitlan miniature tripod effigy ollas, Yanhuitlan spindle whorls, and circular sherds. Special forms associated with bodily adornment (earspools) were less frequent forms. Ritual items—censers, censer covers, and most figurines—apparently ceased to be produced. The only new special form introduced in Early Convento times was the Christ figurine mold (Table 35).

Summary

Spanish documents identify three socioeconomic classes among the ancient Mixtecs—royalty, nobility, and peasantry (Spores 1974a). An analysis of residential architecture clearly reveals the existence and persistence of these three socioeconomic classes from Late Natividad to Early Convento times (Lind 1979). Despite the limited nature of comparative data, the ceramic analysis has also revealed differences among royalty, nobility, and peasantry from Late Natividad into Early Convento times. Once care has been taken to properly reconstruct royal, noble, and peasant household ceramic consumption practices, differences among royalty, nobility, and peasantry should become even more evident. However, rather than simply refining descriptions of similarities and differences, explanations should be sought as to why household ceramic consumption practices differ in some ways among classes and are similar in others.

Current approaches that involve simply examining ceramics and deciding *a priori* whether or not these ceramic artifacts are "elite" or "common" wares are of limited and questionable value for analyzing socioeconomic status differences. An approach, such as that used here, that involves examining ceramic artifacts in association with residential architecture has several contributions to make: 1) it allows for reconstruction of actual household ceramic consumption practices; 2) it lends itself to an accurate definition of the socioeconomic status differences related to household ceramic consumption practices; and 3) it makes a significant contribution toward achieving an understanding of the sociocultural signifance of similarities and differences among socioeconomic classes with regard to ceramic consumption practices.

Foreign Conquests

Perhaps no subject has generated as much controversy in Mesoamerican archeology as interpretations of conquests based on ceramic data. Older generations of archeologists almost universally treated the presence of foreign ceramics or local ceramics influenced by foreign attributes as evidence of foreign conquests. Archeologists today scoff at these older interpretations and sarcastically refer to "invading armies of potsherds conquering local potsherds and mixing with them to produce hybrid potsherds." Presumably, these archeologists can accept potsherds organizing themselves into localized descent groups and socioeconomic classes, but not into invading armies. It is probably fair to state that most are extremely conservative in their approaches to interpreting the presence of foreign ceramics in a region and would immediately think of economic trade, instead of conquest, as a basis for interpretation. Present-day archeologists are definitely "doves," and not "hawks."

A great deal of argument has centered on the economic trade vs. foreign conquest approaches to interpreting the presence of foreign ceramics or foreign-influenced ceramics. A handful of foreign sherds is generally considered to be inadequate evidence for conquest, and foreign influenced local ceramics scarcely rate consideration. The "purity" and quantity of foreign sherds must be assessed and, even then, large quantities of pure foreign ceramics may be considered as evidence of extensive trade. There would seem to be no sound way to determine conclusively whether foreign influenced "exotic" ceramics should be interpreted as evidence of conquest or of trade. One would think, with all the controversy generated by the debate, that someone would have studied the problem under the controlled conditions of the historically documented Aztec and Spanish conquests throughout Mesoamerica. Yet, to date, no such study has been made. Historically documented Aztec and Spanish conquests provide the controlled conditions necessary for examining the nature of the ceramic evidence for the Nochixtlan Valley.

Aztec Conquests

There are two documented Aztec conquests of kingdoms in the Nochixtlan Valley. Yanhuitlan was conquered in A.D. 1486 by the Aztec Emperor Tizoc. In A.D. 1506, rebellion broke out against Aztec domination. But it was put down by the Aztec Emperor Moctezuma Xocoyotzin (Moctezuma II), who subsequently ordered one thousand captives from Yanhuitlan to perish as sacrificial victims in Tenochtitlan (Spores 1967:64-68). Yanhuitlan and the kingdoms of the Nochixtlan

Valley, then, were under Aztec subjugation from A.D. 1486 until the Spanish Conquest of the region in ca. A.D. 1522-1523.

At Chachoapan and Yucuita, ceramics of Aztec manufacture are extremely uncommon in the noble household middens. Only four sherds of Aztec burnished red were recovered and these account for only 0.05% of the entire ceramic assemblage. Aztec influenced ceramic types, such as the Aztecoid reported by Bernal (1949:36-40) from Coixtlahuaca, are entirely absent from the ceramic assemblage at Chachoapan and Yucuita. The only Aztec influence on local ceramics is found in the presence of slab and notched slab tripod supports on two Pilitas polychrome tripod *cajetes* from Chachoapan.

The Spanish Conquest

In the absence of specific references to battles with kingdoms in the Nochixtlan Valley, it appears that the conquest of these kingdoms by the Spaniards was either by peaceful negotiation or without remarkable incidents. As early as A.D. 1519-1520, Cortes sent Gonzalo de Umbria on an exploratory mission into the Mixteca Alta with maps and guides provided by Moctezuma Xocoyotzin. In A.D. 1522-1523, he sent Pedro de Alvarado with a sizable force to pacify the Mixtecs and Zapotecs in Oaxaca, and Spanish domination of the region was successfully established (Spores 1967:68-70).

Ceramic artifacts of Spanish manufacture are even more uncommon in the noble household middens at Chachoapan and Yucuita than are Aztec ceramics. Only a single sherd of Convento green glaze ware, shaped to a circular form, and a figurine mold of Christ were found and these account for scarcely 0.02% of the entire ceramic assemblage. Furthermore, there are no apparent imitations of Spanish ceramic types. Spanish influence on local ceramic types is limited to floral motifs painted on some Iglesia polychrome vessels, as Caso (1938) astutely observed years ago, and a high frequency of plates as vessel shapes in Iglesia polychrome (dinner plates are typical of Spanish, not Mixtec, vessel shapes).

Summary

It might be argued that Chachoapan and Yucuita, as rural "hinterland" communities, would not be expected to yield much ceramic evidence of foreign conquests. After all, large urban centers, such as Yanhuitlan and Coixtlahuaca, were the principal targets of Aztec and Spanish conquerors. There is clearly more ceramic evidence of these foreign conquests at these sites than at Chachoapan and Yucuita. Therefore, perhaps "really good" ceramic evidence for conquests ought to be sought at large, important sites.

This argument, however, does not alter the fact that Chachoapan and Yucuita were under foreign dominion. Furthermore, non-ceramic data from Chachoapan and Yucuita revealed ample evidence for the Spanish Conquest. Pig, goat, and sheep bones were discovered in the middens at both sites. A large number of carbonized wheat kernels were found at Chachoapan and some peach pits were found at Yucuita. A two pronged Spanish iron fork was also recovered at Chachoapan and, not 50 m from the Chachoapan palaces, a Spanish colonial church, "La Iglesia Vieja," was constructed. Caso's (1938) excavations in midden deposits adjacent to this church yielded a Spanish sword handle, but not a single sherd

of Spanish manufactured ceramics. Evidence of the Spanish Conquest, then, is much more extensive than the ceramic data would tend to indicate.

Even the most adamant of archeologists who view the presence of foreign ceramics as evidence of foreign conquests would balk at interpreting the ceramic data from Chachoapan and Yucuita as indicative of two separate foreign conquests. Of the total ceramic assemblage, only 0.05% was Aztec and only 0.02% Spanish. The remaining 99.93% were local products. Yet, historically, we know there were two separate foreign conquests. Therefore, either we conclude that ceramic artifacts are not good indicators of foreign conquests, or we accept the fact that our approach to the problem of interpreting foreign conquests from ceramic data is inadequate.

CHAPTER 6: CONQUEST AND CULTURE CHANGE

Archeological data are best suited to the study of culture change, yet, most excavation reports written over the last decade have placed heavy emphasis on synchronic analyses of the excavated remains. They do little more than identify the chronological block of time to which these remains correspond. The analysis of household activities, socioeconomic status differences, and evidence of foreign conquests presented in the preceding chapter (Chapter 5) is an example of the type of functional, static, synchronic approach that has appeared in archeological reports with increasing frequency over the past ten years. However, archeological studies should not be limited to, nor have as their principal focus, sychronic analyses. Instead, as Fred Plog (1973) advocates, diachronic analyses–studies of culture change–must be the primary objective of archeological research.

If archeologists in recent years have been remiss in their studies of culture change in general, they have shown a decided aversion to studies of culture change involving conquest or contact situations in particular. Cultural anthropologists participating in the 1953 Social Science Research Council Summer Seminar on Acculturation defined acculturation as: ". . . culture change that is initiated by the conjunction of two or more autonomous cultural systems" (Broom et al. 1967:256). They went on to say the following about archeological approaches to the study of culture contact situations:

> Archeological materials do not lend themselves to the extensive analysis that is envisaged . . . for observed or historically documented contacts. The data of archeology . . . do offer . . . instances of the consequences of acculturation, but the evidence for the meeting of autonomous [cultural] systems and their conjunctive relations must be inferred. Despite these limitations, the same theoretical framework might be applicable both to ethnology and to archeology, and what is revealed by contact phenomena in the former should illuminate some kinds of problems presented by the latter. Acculturative changes can, for example, sometimes be inferred from shifts in pottery traditions, art styles, or house types . . . Archeological research alerted to the multidimensional concepts of acculturation will probably require both the careful formulation of research problems and hypotheses . . . and a close contextual analysis of archeological remains (Broom et al. 1967:285-86).

Archeologists participating in a 1955 seminar on culture contact situations had this response to cultural anthropologists:

> . . . it is our belief that archaeology has much to contribute to anthropological theory on its own ground as soon as archaeologists become interested in comparative studies of their data. We are, as it were, specialists in time, and we should have something to offer in the discussion of problems in which time is an important factor. In culture contact situations, we can, for example, look for factors influencing the results of contact under different circumstances, taking advantage of the fact that we can observe the before, during, and after with equal perspective (Willey et al. 1956:26).

To this comment, however, archeologists were forced to add lamely:

> Comparatively few of the known examples of culture contact have been adequately recorded and analyzed. The most important desideratum is the carefully controlled excavation of more sites whose histories are known from written records, to provide a sound basis for analogical inferences in interpreting the evidence at fully prehistoric sites (Willey et al. 1956:25).

In the more than thirty years that have passed since these discussions took place, archeology has progressed a great deal in developing methods, research strategies, and theories, especially with regard to "contextual" or synchronic analyses. With a few notable exceptions (Flannery 1968; Spencer 1982), however, very little progress has been made in the study of culture contact situations or the culture change generated by them. This is especially evident in the paucity of archeological research strategies that have addressed this problem.

The Impact of Foreign Conquests

Foreign conquest inevitably generates culture change in the behavior patterns of the conquered society. The Aztec and Spanish conquests of the Mixtec kingdoms in the Nochixtlan Valley are well documented. It is normally assumed that archeological remains, as well as written documents, are sensitive indicators of processes of culture contact and change. It can be assumed, in the case of the Nochixtlan Valley, therefore, that archeological data will provide parallel, complementary, and/or supplemental evidence to conventional historical data with respect to contact and acculturation processes (Spores 1972:187-94; Spores 1984). The Nochixtlan Valley material is quite instructive with respect to the interface of archeological and ethnohistorical methods, evidence, and inferences.

Aztec Conquest

Although the nature of Aztec warfare and the impositions placed on conquered peoples are well known (Barlow 1949; Vaillant 1953; Soustelle 1961; Peterson 1959), details of the Aztec conquests of the Nochixtlan Valley kingdoms are sketchy. The Aztecs did not completely annihilate the Mixtec political elite nor greatly alter the structure of the Mixtec political system (Spores 1967:3-29; Spores 1984:64-96). Before the Aztec conquest, the Mixtec political elite had an established system for collecting taxes ("tribute") and for organizing labor services. The Aztecs effectively allowed the subjugated Mixtec political elite to govern the Mixtec populace and to channel tribute into Aztec coffers. Mixtec religion was unaltered by the Aztecs with the probable exception of the requirement that Mixtecs perform rituals and sacrifices honoring the Aztec patron deity, Huitzilopochtli.

Spanish Conquest

The impact of the Spanish conquest on Mixtec culture is more fully documented. Like the Aztecs, the Spaniards did not completely annihilate the Mixtec political elite. Throughout the 16th century and beyond, caciques continued to be recognized by the Spaniards as rightful lords (*señores naturales*) of kingdoms and

were allowed to govern the Mixtec populace. However, the Spaniards also instituted a new political form--the *cabildo* or town council, headed by a governor, and composed of a group of lesser officials including *alcaldes, regidores, mayordomos, escribanos, alguaciles*, and *cantores*.

> The governor and *cabildo* were agencies of local control set alongside the cacique system. Personnel for these offices were very largely derived from the native nobility, the *principales*, an element of society which the Crown carefully sought to preserve in the sixteenth century. This reflected a desire to maintain existing channels of power and control over the native population . . . Thus authority at the local level was to remain where it had been traditionally, that is, in the hands of the nobility. Only the directing force at the top of the hierarchy had been shifted or extended. Whereas power in pre-Conquest times had been vested in local kings or princes, the chain of authority now extended from the local *cabildo*, governor, or cacique through an *alcalde mayor* or *corregidor* to the viceroy and *audiencia* and, ultimately, to the Spanish Crown. From the standpoint of the native in the Indian community, however, authority descended from the traditional source, the native lords, princes, or caciques, and the supporting nobility (Spores 1967:120).

Although the offices of governor and cacique were separate and distinct, the caciques of Yanhuitlan were also governors of the *cabildo* throughout the sixteenth century (Spores 1967:135-36).

The Spaniards also instituted the *encomienda* system whereby a Spaniard was given the right to collect tribute and draw on labor services from local communities. As early as A.D. 1523, Cortes appointed his cousin, Francisco de las Casas, *encomendero* of Yanhuitlan (Spores 1967:77-79). By A.D. 1570, *encomenderos* of other Nochixtlan Valley communities included Salinas at Tiltepec, Valdivieso at Etlatongo, Villafaña at Jaltepec, and Benavides at Chachoapan (Dahlgren 1954:36).

Mixtec religion was severely altered by the Spaniards and the Mixtec priesthood was virtually annihilated. Certainly the most pervasive force of Spaniards to enter the Nochixtlan Valley were missionaries of the Dominican Order. Fray Gonzalo Lucero and Fray Bernardino de Minaya were the first to enter the valley in A.D. 1529-1530. The latter established the first mission in Yanhuitlan and baptized Don Domingo de Guzmán, cacique-regent of Yanhuitlan. Within a year the mission was abandoned. Missionary work did not resume until the years A.D. 1535-1536 when Fray Domingo de Santa María established a friary at Yanhuitlan. From A.D. 1536-1541, ". . . the Dominicans took active measures to combat and eradicate the continuing practice of native religion . . ." (Spores 1967:86).

By 1541, the Dominicans were forced to retreat from Yanhuitlan, having incurred the hostilities of both Don Domingo de Guzmán, cacique-regent of Yanhuitlan, and the Spanish encomendero, Francisco de las Casas. After Don Domingo was forced to spend a year (1544-1545) in a Mexico City jail before the Inquisition, and after Francisco de las Casas was forced to relinquish his encomienda in 1546 to his son, Gonzalo de las Casas, the Dominicans returned to Yanhuitlan in full force and remained firmly in control thereafter (Spores 1967:87). Both Gonzalo de las Casas and Don Gabriel de Guzmán, who in 1558 succeeded

his uncle Don Domingo as cacique of Yanhuitlan and governor of the Indian cabildo, lent vigorous support to the Dominicans.

In 1563, complaints were issued to the visitor-general of New Spain accusing the Dominicans of conspiring with Don Gabriel to exploit the Indians. Charges specified that ". . . the Dominicans were forcing the Indians to work long hours in the stone quarries for little or no pay, assessing fines for missing Mass or fiestas, carrying on monopolies in certain commodities [and] charging excessive prices for goods and services . . ." (Spores 1967:87). Don Gabriel, unlike his uncle, not only supported the Dominicans, but was himself culturally a Spaniard. "He was an exemplary Christian, spoke Spanish, wore the clothing of a Spaniard, was known 'throughout New Spain,' and was said to be as honest, righteous, and intelligent a man as any Spaniard (Spores 1967:136).

Summary

The Aztec and Spanish conquests of the Mixtecs show one striking similarity. The subjugated Mixtec political elite were retained and effectively used to govern the Mixtec populace and to channel tribute to the conquerors. The advantages to the conquerors of retaining an established political elite are obvious. It was the least costly and most efficient means of collecting tribute and governing the defeated populace. Any uncooperative member of the subjugated political elite could be easily identified and quickly punished or eliminated. On the other hand, members of the defeated political elite who cooperated with the conquerors were allowed to survive and retain their privileged status within the conquered community. They governed the defeated populace and generated the tribute revenues.

The Mixtec royalty and nobility who were not killed in battle (a situation the political elite the world over are adept at avoiding) and who did not have the chance to secure asylum elsewhere were faced with the problem of dealing with the conquerors. If they were to survive, they had to respond appropriately to the conquest situation. Willingly or not, overt cooperation with the conquerors was the most logical survival strategy and the most appropriate response. In the process of responding to successive foreign conquests over half a century, Mixtec culture in the Nochixtlan Valley underwent a series of changes. The successive generations of Mixtec nobility, who occupied the small palaces at Chachoapan and Yucuita, lived through and participated in these changes in Mixtec culture.

The Chronological Context

Ceramic artifacts from the noble household middens at Chachoapan and Yucuita are best suited for a study of changes in noble household ceramic consumption practices because the middens were successively depositied between ca. A.D. 1340 and ca. A.D. 1660, a time span during which the two foreign conquests of Mixtec culture in the Nochixtlan Valley occurred. The noble household middens, then, provide the best chronological context for assessing the impact of foreign conquests.

The Natividad midden (F-10A) at Yucuita was deposited ca. A.D. 1340±90, a time period well before the A.D. 1486 and A.D. 1506 Aztec conquests of the autonomous Mixtec kingdoms in the Nochixtlan Valley. Ceramic artifacts from

CERAMIC TYPES	Natividad Midden*	Chachoapan Midden*	Convento Midden*
PAINTED VESSELS			
Pilitas polychrome	1.35	2.46	0.80
Iglesia polychrome	0.00	0.10	9.40
Aztec burnished red	0.00	0.08	0.00
Iglesia burnished red	0.00	0.00	3.51
Iglesia burnished white	0.00	0.00	0.48
Yanhuitlan red on cream	5.14	2.72	4.30
PLAIN VESSELS			
Cacique burnished	13.80	29.40	26.64
Yanhuitlan fine cream	59.95	36.61	20.25
Yanhuitlan ladles	4.87	5.14	4.47
Yanhuitlan pitchers	0.00	0.08	0.00
Miguelito tripod cajetes	3.79	2.05	3.67
Miguelito pitchers	0.41	1.29	1.43
Nochixtlan rustware ollas	2.30	1.71	6.86
Chachoapan sandy cream ollas	2.70	8.34	7.34
Chachoapan sandy cream patojo	0.00	0.02	0.00
Chachoapan sandy cream comales	3.79	7.71	9.89
SPECIAL FORMS			
Yanhuitlan miniatures	0.54	1.31	0.48
Yanhuitlan miniature effigy tripod ollitas	0.00	0.10	0.00
Yanhuitlan ladle censers	0.27	0.14	0.00
Chachoapan censer covers	0.68	0.40	0.00
Yanhuitlan figurines	0.00	0.14	0.16
Christ figurine mold	0.00	0.00	0.16
Yanhuitlan earspools	0.27	0.12	0.16
Yanhuitlan spindle whorls	0.14	0.04	0.00
Circular sherds (includes 1 Convento green glaze)	0.00	0.04	0.00
Totals	100.00	100.00	100.00

*The Natividad midden (F-10A) at Yucuita dates ca. A.D. 1340 during Mixtec autonomy. The Chachoapan midden (F-2A) dates ca. A.D. 1540 following the Aztec conquests. The Convento midden (F-10) at Yucuita dates ca. A.D. 1660 following the Spanish conquest.

Table 36. Preconquest to Postconquest Changes in Ceramic Types

this midden, then, provide information on noble household ceramic consumption practices during a time period when Mixtec nobility enjoyed autonomy. The Early Postconquest midden (F-2A) at Chachoapan was deposited ca. A.D. 1540. Ceramic artifacts from this midden provide information on noble household ceramic consumption practices during a time period when the effects of the Aztec conquests had been fully absorbed, but before the A.D. 1546 through 1563 time span when the Spaniards, in particular the Dominicans, had asserted the full force of their control over the Mixtec kingdoms. The Convento midden (F-10) at Yucuita was deposited even later, ca. A.D. 1660±80. Ceramic artifacts from this midden provide information on noble household ceramic consumption practices during a time span when the full impact of the Spanish conquest affected the Nochixtlan Valley kingdoms.

A comparison of the ceramic types in the three noble household middens

shows that there was a considerable amount of continuity in Mixtec noble household ceramic consumption practices between ca. A.D. 1340 and A.D. 1660. All of the fifteen different ceramic types obtained by Mixtec nobles around A.D. 1340 continued to be acquired around A.D. 1540. Twelve of these types continued to be produced and purchased or exchanged in 1660 (Table 36).

Despite this evidence of continuity, however, a number of changes in noble household ceramic consumption practices took place after the Aztec and Spanish conquests. Following the Aztec conquest, a new ceramic type (Aztec burnished red) was acquired by Mixtec nobles. And following the Spanish conquest, at least three previously available ceramic types (Pilitas polychrome, Yanhuitlan ladel censers, and Chachoapan censer covers) ceased to be produced or consumed, and at least five new ceramic types (Iglesia polychrome, Iglesia burnished red, Iglesia burnished white, Convento green glaze, and Christ figurine mold) were acquired. Apart from the elimination of some ceramic types and the addition of others, even those ceramic types that continued in use from ca. A.D. 1340 to A.D. 1660 were purchased or exchanged with differing degrees of frequency following the Aztec and Spanish conquests. These changes are related to others that were brought about by the foreign conquests, for example, changes in household activities and socioeconomic status differentiation.

Changes in Household Activities

Mixtec nobles obtained ceramic artifacts to carry out a variety of household activities. Most of them served as dinner and kitchen ware. A dramatic decline in the frequency of dinner ware and marked increase in the frequency of kitchen ware occurred following both the Aztec and Spanish conquests (Table 37).

FUNCTIONAL CATEGORIES	Natividad Midden	Chachoapan Midden	Convento Midden
Dinner Ware	71.04	60.77	57.09
Kitchen Ware	27.06	36.83	41.95
Ritual Ware	0.95	0.79	0.16
Recreational Ware	0.54	1.45	0.48
Costume Ware	0.27	0.12	0.16
Production Ware	0.14	0.04	0.16

Table 37. Preconquest to Postconquest Changes in Functional Categories of Ceramic Artifacts

Kitchen Ware

Spanish documents record that certain neighborhoods or barrios provided domestic services for Mixtec nobles. Married couples from these service barrios were required to alternate in providing domestic services for a specified period of time each month. Males undertook the chores of carrying water and fire wood, while their wives had the task of cooking tortillas and catering (Spores 1967:232). Following the Spanish conquest, Mixtec nobles voiced numerous com-

plaints about the restrictions the Spaniards had placed on access to these domestic services (Spores 1967:162-164).

The rise in consumption of kitchen ware by noble households following the Aztec and Spanish conquests was a response to reductions in access to the domestic services previously provided by peasants in service. More food preparation activities had to take place within the confines of their own households because of reduced access to catering services from these service barrios. Kitchen ware rose from 27.06% under Mixtec autonomy to 36.83% following the Aztec conquest and 41.95% following the Spanish conquest (Table 37). The ceramic evidence makes it apparent that complaints by Mixtec nobles to Spanish authorities about intolerable reductions in domestic services were not idly conceived.

Dinner Ware

A very different preconquest to postconquest trajectory occurred in dinner ware. Constituting 71.04% of all ceramic artifacts consumed under conditions of Mixtec autonomy, dinner ware decreased sharply to 60.77% following the Aztec conquest and 57.09% following the Spanish conquest (Table 37).

According to Spanish documents, Mixtec nobles were obliged to entertain their retainers at large dinner parties or banquets that lasted several days. These banquets appear to have been on the order of Hawaiian luaus or Northwest Coast Indian potlatches. After the Spanish conquest, Mixtec nobles registered numerous complaints with Spanish authorities concerning their inability to finance these obligatory banquets as a result of inadequate allotments of funds from Spanish officials (Spores 1967:162-164).

The dramatic decline in noble household consumption of dinner ware following the Aztec and Spanish conquests, therefore, was a response to reductions in funds ("tribute"). Large and frequent banquets require substantial amounts of dinner ware. The reduction in the amount of dinner ware suggests that Mixtec nobles gave fewer and smaller banquets following the Aztec and Spanish conquests.

Ritual Ware

Although it accounts for less than 1% of all ceramic artifacts, ritual ware, like dinner ware, shows a preconquest to postconquest decline. The trajectory of this decline, however, is considerably different from that of dinner ware. Noble household use of ritual ware was little changed following the Aztec conquest, but plummeted following the Spanish conquest. The differing impacts of the conquests on household and community religious activities are obvious (Table 37).

Aztec and Mixtec theologies were based on similar cosmological principles, many of which were pan-Mesoamerican. Similar deities were venerated by both cultures. Differences did exist, however. For example, the bloody cult of Huitzilopochtli, the Aztec patron deity, was not recognized by the Mixtecs or any other Mesoamerican culture until after the Aztecs had imposed it on them.

A great deal of continuity is evidenced in the Mixtec nobility's use of ritual ware following the Aztec conquest. Virtually the same types of Yanhuitlan ladle

censers and Chachoapan censer covers purchased under Mixtec autonomy continued to be used after the Aztec conquest (Table 36). Ritual ware declined in use only slightly from 0.95% in times of Mixtec autonomy to 0.79% under Aztec domination (Table 37). If the Aztecs imposed the cult of Huitzilopochtli on the Mixtecs, there is little evidence for it. None of the painted pottery types, such as Pilitas polychrome, manifests representations or attributes of Huitzilopochtli.

The impact of the Spanish conquest on Mixtec noble household ritual activities was of an entirely different order. Spanish and Mixtec theologies were based on vastly different cosmological principles. The Spaniards viewed Mixtec religion as the very antithesis of Christianity. Mixtec deities were viewed as manifestations of the devil himself. Spanish priests, therefore, took active measures to eradicate Mixtec religion and impose Christianity in its place.

There was a dramatic decline in the use of ritual ware by Mixtec nobles to 0.16% after the Spanish conquest (Table 37). Even this drastic decline, however, understates the nature of the change. There was, in fact, no continuity. For example, Yanhuitlan ladle censers and Chachoapan censer covers ceased to be utilized under Spanish rule and were entirely absent in the ca. A.D. 1660 Convento midden at Yucuita (Table 36). In fact, the only ritual ware in this midden was a single very eroded Mixtec man figurine that may have been accidentally redeposited. Cessation of the production and consumption of censers, censer covers, and Prehispanic figurines represents the elimination of the Prehispanic rituals in which these items were used, and illustrates the effectiveness with which Spanish priests eradicated Mixtec religion. The Christ figurine mold in the Convento midden also demonstrates this zealousness on the part of Spanish priests to impose Christianity on Mixtec nobles.

The Spanish priests, however, did not limit themselves to eradicating items of ritual ware. They thoroughly purged the ceramic artifacts of any overt symbols of paganism from design motifs painted on vessels to effigies modeled on tripod supports. In particular, recognizable representations of eagles and serpents, that Spanish priests could easily relate to the infamous idol of Achiutla ("Heart of the People," an eagle with a serpent coiled around it) were targeted for eradication. Eagle heads, the only identifiable symbols of paganism painted on Yanhuitlan red on cream, are present on vessels produced and utilized in Prehispanic but not Posthispanic times. Serpent head effigies modeled on Miguelito tripod cajete supports were also present in Prehispanic contexts, but were replaced by conical supports following Spanish dominion.

The most significant change, however, was in the use of the elite Mixteca polychromes. In Prehispanic times, Mixtec nobles used the elegant Pilitas polychrome that had design motifs that included many representations symbolizing Mixtec religious themes. Likewise, tripod supports on Pilitas polychrome cajetes consisted of modeled effigies of eagles and serpents. Following Spanish dominion, Pilitas polychrome ceased to be produced and was replaced by Iglesia polychrome. The design motifs on this type of polychrome are totally devoid of any overtly recognizable representations symbolizing Mixtec religious themes. Furthermore, tripod supports on Iglesia cajetes do not have modeled effigies. It appears that Spanish priests were exceptionally thorough in their purge.

Summary

The Aztec and Spanish conquests had a direct impact on the household activities of Mixtec nobles. Although they retained their privileged status following the conquests, the Mixtec political elite paid a price for their loss of autonomy. Tribute, that formerly went exclusively to them, was re-directed to their conquerors. Consequently, they had to economize in their consumption practices and reduce their personal demands on the labor services of the populace to meet the tribute demands of their conquerors. No longer was it possible for them to freely engage in conspicuous consumption by financing prolonged and lavish banquets for their retainers. They also no longer had unlimited access to catering and domestic services from peasants in service barrios. In response to these conditions, Mixtec nobles undertook more food preparation activities within their households and gave fewer and smaller banquets. This resulted in a rise in noble household consumption of kitchen ware and a decline in consumption of dinner ware.

Furthermore, the Aztec and Spanish conquests had different impacts on Mixtec noble household ritual activities. The Aztec conquests had little impact, while the Spanish conquest resulted in the obliteration of traditional Mixtec ritual activities and the imposition of Christianity. Ceramic artifacts, such as censers and censer covers, that were used in Prehispanic pagan rituals, ceased to be produced; design motifs representing pagan religious symbols were replaced by motifs that lack overt symbols of paganism; and the pagan effigies modeled on tripod supports were replaced with simple conical support forms. The presence of a Christ figurine mold in Posthispanic contexts marks the shift to Christianity.

Changes in Socioeconomic Status Differentiation

Mixtec nobles obtained ceramic artifacts not only for mundane utilization but also as indicators of their particular socioeconomic status. This is not readily apparent in their acquisition of dinner ware—the ceramic items most frequently and most ostentatiously exposed to public view. Paradoxically, while there is a decided preconquest to postconquest *decline* in the overall consumption of dinner ware, there is a phenomenal *rise* in noble household consumption of elite dinner ware over common dinner ware (Table 38).

Elite vs. Common Dinner Ware

Dinner plates, simple and composite cajetes within certain size ranges, some simple bowls, tripod cajetes, and tripod ollas constitute the vessel shapes of dinner ware. Elite varieties of these vessels are made of Pilitas polychrome, Cacique burnished, Aztec burnished red, Iglesia polychrome, Iglesia burnished red, and Iglesia burnished white. Common varieties are made of Yanhuitlan red on cream, Yanhuitlan fine cream, and Miguelito hard fine gray.

For the period during which the elite were autonomous, elite dinner ware accounts for only 15.80% of all dinner ware acquired by Mixtec nobles, while common ware represents 84.20%. Following the Aztec conquests, elite ware makes a quantum leap to account for 44.14% of all dinner ware acquired by Mixtec nobles, while common dinner ware plunges to 55.86%. For the Spanish period,

MIDDENS	Elite* Dinner Ware	Common** Dinner Ware
Natividad Midden ca. A.D. 1340	15.80	84.20
Chachoapan Midden ca. A.D. 1540	44.14	55.86
Convento Midden ca. A.D. 1660	59.51	40.49

*Pilitas polychrome, Aztec burnished red, Iglesia polychrome, Iglesia burnished red, Iglesia burnished white, and Cacique burnished.
**Yanhuitlan red on cream, Yanhuitlan fine cream, and Miguelito hard fine gray tripod cajetes.

Table 38. Preconquest to Postconquest Changes in the Relative Consumption of Elite and Common Dinner Wares

elite ware increases to account for 59.51% of all dinner ware obtained by Mixtec nobles, while common dinner ware decreases to 40.49% (Table 38). The preconquest to postconquest decreases in noble household consumption of common dinner ware and the corresponding increases in the consumption of elite dinner ware reflect efforts by Mixtec nobles to augment material manifestations of their elite status.

Nobility vs. Royalty and Peasantry

Although comparative data from royal and peasant households are limited, the preconquest to postconquest trends toward greater socioeconomic status differentiation among royalty, nobility, and peasantry are clear. Bernal's (1949) excavations at Coixtlahuaca show that, following the Aztec conquest, royal or noble urban households distinguished themselves from the rural noblilty at Chachoapan and Yucuita by acquiring a wider variety of elite dinner wares, such as Tenochtitlan black on orange and its local imitation—Aztecoid (see Table 32). Spores' (1974b) excavations at the cacique's postconquest palace in Yanhuitlan demonstrate that, following the Spanish conquest, royal households obtained a large number of Spanish and imported dinner wares—including Majolica and Ming porcelains—that served to distinguish them from nobles (see Table 33).

In preconquest times, peasant households had limited access to the elite Pilitas polychrome. But for the period following the Aztec and the Spanish conquests, peasant households indicate a total lack of access to elite dinner wares. No Aztec style ceramics—Aztec burnished red, Tenochtitlan black on orange, or Aztecoid—and no Posthispanic elite or imported dinner wares—Iglesia polychrome, Iglesia burnished red, Iglesia burnished white, Majolica or Ming porcelains—were acquired by peasant households.

Summary

Sixteenth century documents indicate that Spaniards were continually requiring caciques to validate their royal status (Spores 1967: Chapter 6). On the other hand, nobles were continually confronting Spanish authorities with proof of their noble ancestry and their consequent right to rule as noble administrators (Smith 1973:43). Under conditions of autonomy, the Mixtec political elite could maintain their status differences with a degree of laxity. In order to survive and retain their elite status under conquest conditions, however, they had to insure that their conquerors identified and continued to recognize them as members of the political elite. The pronounced preconquest to postconquest increases in noble household consumption of elite vs. common dinner wares represent postconquest trends on the part of the nobility to maintain and augment clear-cut manifestations of the socioeconomic status differences between themselves and peasants. Similar trends on the part of royalty relate to efforts at increasing the social distance between themselves and nobles.

Foreign Ceramics and Culture Change

Traditional ceramic analyses that interpret the presence of foreign ceramics as evidence of conquest do not treat the problem of culture change. The traditional conquest interpretation is concerned only with the narrow problem of "explaining" the presence of these ceramics. The explanation is that foreign ceramics appeared because there was a conquest. Economic trade might equally well "explain" the appearance of foreign ceramics. Neither of these interpretations, however, address the problem of culture change nor the obviously different kinds of changes that would be expected in a culture that experienced the impact of a foreign conquest instead of simply engaging in trade.

Aztec Conquests

Aztec and Aztec-influenced Mixtec ceramics were present in the Chachoapan midden from the period following the Aztec conquest. Four sherds representative of three dinner ware vessels of Aztec burnished red are the only purely Aztec ceramics. Aztec influence on Mixtec ceramics is most apparent in Pilitas polychrome tripod cajetes. Under conditions of Mixtec autonomy, Pilitas polychrome tripod cajetes were rather deep and had vertical walls. None had slab or notched slab tripod supports. But following the Aztec conquest, many Pilitas polychrome tripod cajetes underwent a change in form, becoming shallower, with outward-slanting walls and slab or notched slab tripod supports (see Fig. 6). Shallow cajetes with outward-slanting walls and slab or notched slab tripod supports are characteristic of Aztec III or Tenochtitlan black on orange tripod cajetes.

The presence of Aztec and Aztec-influenced Mixtec ceramics in the noble household midden at Chachoapan is not in itself proof for Aztec conquests of the Mixtecs. However, the Aztec and Aztec-influenced ceramics are directly associated with a ceramic assemblage in the noble household midden at Chachoapan that indicates the types of shifts in household activities and socioeconomic status differentiation (cited above) that are expected to occur under circumstances of conquest rather than economic trade. Viewed within this context, therefore, the Aztec and Aztec-influenced Mixtec ceramics become significant evidence for the

Aztec conquest of the Mixtecs.

Spanish Conquest

Spanish and Spanish-influenced Mixtec ceramics were present in the early postconquest midden at Chachoapan and the Convento midden at Yucuita. Only two purely Spanish-derived ceramic artifacts were present in the noble household middens. A Convento green glaze sherd shaped to a circular form was found in the Chachoapan midden, and a figurine mold with a representation of Christ was present in the Convento midden.

Spanish influence is most apparent in three ceramic types that first appeared following the Spanish conquest–Iglesia polychrome, Iglesia burnished red, and Iglesia burnished white. Caso (1938), in a well-reasoned analysis, has noted that floral motifs on Iglesia polychrome are derived from Spanish models. The manner in which flowers and leaves are depicted and the techniques used in shading their edges are all of Spanish, not Mixtec, style.

Spanish influence is also evident in vessel shapes of Iglesia polychrome, Iglesia burnished red, and Iglesia burnished white. Iglesia polychrome and Iglesia burnished white dinner plates are a Spanish, rather than a Mixtec, form. In times of Mixtec autonomy, dinner plates were non-existent. They first appear in the early postconquest midden at Chachoapan that was deposited shortly after the Spanish conquest, but account for only 0.20% of all dinner ware found in that context. Under Spanish dominion, however, dinner plates increased substantially in frequency and in the Convento midden represent 11.45% of all dinner ware. Likewise, Iglesia polychrome and Iglesia burnished red tab handle bowls with lids are Spanish forms that are unknown for times of Mixtec autonomy, but account for 4.56% of all kitchen ware under Spanish dominion (Table 39).

MIDDENS	Dinner Plates	Tab Handle Bowls with Lids
Natividad Midden ca. A.D. 1340	0.00	0.00
Chachoapan Midden ca. A.D. 1540	0.20	0.00
Convento Midden ca. A.D. 1660	11.45	4.56

Table 39. Trajectories in the Acquisition of Spanish Vessel Shapes

Most of the Spanish-influenced ceramic artifacts were recovered from the Convento midden that represents Mixtec noble household ceramic consumption practices following the establishment of Spanish control over the Mixtecs. Again, like the Aztec ceramics, the Spanish and Spanish-influenced ceramics are not in themselves proof of Spanish conquest and dominion. However, they are directly

associated with a ceramic assemblage in the Convento midden that shows the types of changes in household activities and socioeconomic status differentiation (cited above) that are expected under conditions of conquest, but not economic trade. Therefore,the Spanish and Spanish-influenced ceramics are significant evidence for the Spanish conquest of the Mixteca.

Summary

Under conditions of conquest, the defeated Mixtec political elite lived under circumstances of cultural discrimination and danger, whereby provoking the displeasure and annoyance of their conquerors could cost them their lives or at least bring heavier demands upon them. Apparent cultural differences served as touchstones for discrimination and could easily cause displeasure or annoyance to none-too-understanding conquerors. By modifying behavior patterns, dress, material possessions, and even speech to emulate the conquerors, the defeated political elite reduced the potential for discrimination and the risk of raising the ire of their conquerors and increased their chances for survival and even for promoting a sense of "near equality" with their conquerors. The Spaniards' praise of Don Gabriel de Guzmán, cacique of Yanhuitlan, as cited above, was directly related to his ability to act like a Spaniard. "Imitation," it has been said, "is the highest form of flattery." In the final analysis, the consumption of foreign or foreign-influenced material items may relate to a survival strategy involving attempts by a defeated political elite to reduce the obvious cultural differences between themselves and their conquerors, and thereby reducing the potential for conflict and increasing the opportunity for being perceived as "near equals" with their conquerors.

It is significant that Mixtec nobles confined their consumption of Aztec and Spanish influenced ceramics almost exclusively to dinner wares—the ceramic items most frequently and ostentatiously exposed to public view. It is apparent that when Mixtec nobles were obliged to entertain their conquerors as dinner guests, they had the "appropriate" dinner wares with which to serve them. Greater varieties and higher frequencies of foreign and foreign-influenced dinner wares were present in royal or noble urban households than in the noble rural households at Chachoapan and Yucuita. This difference certainly relates to more frequent encounters between royal or noble urban elites and members of the conquering culture than occurred between the rural nobility and their conquerors. Apart from dinner wares, a single item related to Christianity was recovered—the Christ figurine mold. The acquisition of this item by the Mixtec nobility represents an adaptation to the pressures of Spanish priests.

Conclusions

The value of applying a consumer-oriented, rather than a producer-oriented, model of ceramic analysis is that it provides a new and broader perspective of the sociocultural dimensions of ceramic artifacts. Instead of being limited to somewhat desultory discussions of pottery making techniques, it opens the way for studies of how ceramic artifacts function within a cultural system. By shifting the emphasis from production to consumption, a whole new array of cultural data become amenable to archeological ceramic analysis.

Methods of excavation designed to carefully control the spatial and stratigraphic contexts of ceramic artifacts within household clusters are necessary prerequisites for a consumer-oriented analysis. It is imperative for determining which archeological contexts provide information on household ceramic consumption practices and which do not. Stratigraphic test pits are inadequate for this. Likewise, simply recovering ceramic artifacts from house floors is not sufficient. Middens that can be clearly related to house remains provide the best archeological contexts for reconstructing household ceramic consumption practices.

A reconstruction of ceramic consumption practices provides information on the kinds of activities carried out by households—from the mundane activities in kitchens to the sacred activities of household rituals. It also provides for an accurate definition of the nature of socioeconomic status differences with regard to the consumption of ceramic artifacts, such as dinner ware, and the areas of activity in which these status differences are most prominently expressed. In addition, it allows for an assessment of the proportions of such foreign and foreign-influenced ceramic artifacts as serving dishes or items of ritual ware that were consumed by the household and the areas of activity in which these ceramics are used.

Perhaps the greatest contribution of a consumer-oriented model of ceramic analysis, however, is that it provides a basis for studies of culture change. A change in household ceramic consumption practices can be related to alterations in the kinds of activities carried out by the households and to modifications in the frequencies with which certain activities are performed. Trends or trajectories toward greater or lesser degrees of socioeconomic status differentiation can also be revealed by such alterations. Finally, the dynamics of culture contact situations can be determined from this type of analysis.

Ceramic artifacts are the archeologist's principal source of information for interpreting culture contact situations. However, determining whether or not the presence of foreign ceramics represents economic trade or conquest has been a dilemma. The solution to this dilemma is relatively elementary when viewed in the context of a consumer-oriented model of ceramic analysis. Conquest would certainly be expected to stimulate different kinds of culture change than situations involving ceramic trade.

The inadequacies of traditional approaches for studying culture contact situations have led archeologists in recent years to ignore the problem and to treat cultures as if they evolved in isolation. For a culture to evolve in isolation, however, would be truly exceptional. Ignoring the problem does nothing to advance our understanding of its role as a process of culture change. New approaches for evaluating this problem need to be developed. Unfortunately, few have been forthcoming.

Two notable exceptions are studies in Oaxaca archeology by Kent Flannery (1968) and Charles Spencer (1982). The models of culture contact situations that are developed in these studies are significant contributions that fully support the claim ". . . that archaeology has much to contribute to anthropological theory on its own ground . . ." (Willey et al. 1956:26).

Flannery, citing a number of substantive examples, has shown that, through

trade, emerging elites will seek to bolster their positions by acquiring status items associated with established elites in neighboring regions. One source of archeological data he uses as evidence of interregional trade is ceramics. By applying my consumer-oriented model of ceramic analysis, it would be possible to reconstruct household ceramic consumption practices for time periods directly preceding and following evidence of contact to determine whether the expected changes occurred. In such cases of economic trade, pre-contact to post-contact changes would be expected to show trajectories toward greater socioeconomic status differentiation and, perhaps, increases in activities involving conspicuous consumption and access to domestic services.

Spencer has shown that interregional trade in exotic and high status items among the political elite of chiefdoms may, under certain conditions, become a prelude to conquest and, consequently, an important process in the formation of the state. One of Spencer's principal sources of evidence for both trade and conquest is ceramics. Again, by implementing a consumer-oriented model of ceramic analysis it would be possible to reconstruct household ceramic consumption practices encompassing time periods directly preceding evidence of contact, during the proposed stage of economic trade, and following conquest to see if the expected types of changes occurred.

Flannery and Spencer approach culture change in a constructive manner. As Spencer points out, in order to understand culture change it is necessary to adopt an interregional perspective. Cultures do not evolve in total isolation, but in conjunction with developments among their neighbors. The nature of these conjunctive relations are aptly evident in Flannery and Spencer's work.

Although the study of Nochixtlan Valley ceramics has developed as its broader goal an approach to the sociocultural dimensions of ceramics, it has also provided a method that is useful for studies of culture contact situations, in general, and conquests, in particular. The results obtained from an analysis of the ceramic evidence for the Aztec and Spanish conquests of the Mixtecs serve as important points that deserve consideration in archeological approaches to the study of such situations. These results challenge current archeological perspectives on what constitutes ceramic evidence for conquest. They also point out the importance of considering the kinds of ceramic changes that would be expected under these conditions.

Many recent archeological studies have made the *a priori* assumption that, unless large quantities of purely foreign ceramics are found, the presence of foreign and foreign-influenced local ceramics represents economic trade rather than conquest. For example, Richard Blanton (1978), in his discussion of the presence of Teotihuacan style ceramics at Monte Albán, states that some pure Teotihuacan types were recovered and that evidence of Teotihuacan influence on local Monte Albán ceramics is generic and diffuse. He categorically rejects the idea that these ceramic data could possibly be construed as evidence for a Teotihuacan conquest at Monte Albán and, instead, opts for an economic trade interpretation. Most archeologists today would probably agree with Blanton's preference for this type of interpretation, but, insofar as it is based on an *a priori* assumption, it is totally without foundation. The Aztec and Spanish conquests of the Mixtecs make it apparent that the presence of only a few purely foreign ceramics and a "diffuse and generic" foreign influence on local ceramics are fully

consistent with a conquest interpretation.

Conquests cannot be distinguished from economic trade simply on the basis of greater or lesser amounts of foreign ceramics. It is virtually impossible to make such a distinction by focusing analysis solely upon foreign ceramics. Instead, foreign ceramics must be studied in the context of changes through time in elite household ceramic consumption practices to isolate the types of changes that would be expected to occur under conditions of economic trade or in conquest situations.

Analyses of the Aztec and Spanish conquests of the Mixtecs show the types of changes that occur when a complex culture overpowers another and retains the defeated political elite to govern the subjugated populace. Changes in noble household ceramic consumption practices show: 1) preconquest to postconquest trajectories toward greater socioeconomic status differentiation, 2) the adoption of limited amounts of foreign and foreign-influenced ceramics, 3) reductions in access to labor services, 4) reductions in activities involving conspicuous consumption, and 5) variable alterations in ritual activities. Each of these changes is predictable under conquest conditions in which the defeated political elite is retained to govern the subjugated populace, and is detectable archeologically through a consumer-oriented model of ceramic analysis.

In order to maintain their privileged status under conditions of conquest, a defeated political elite must insure that their conquerors identify and continue to recognize them as members of this elite group. Their behavior, dress, residences, and other material possessions are visible signs of their elite status. Under foreign domination it would be expected that they would take pains to maintain and emphasize the elite status that served to differentiate them from the populace. Archeological manifestations of this would be expected in changes in material culture that reflect more pronounced socioeconomic status differentiation within the conquered culture.

While a defeated political elite must insure the distinction between themselves and commoners, they must also attempt to reduce obvious cultural differences between themselves and their conquerors. By modifying behavior patterns, dress, material possessions, and even speech to emulate the conquerors, the defeated political elite reduce the risk of offending them and increase their opportunity for being perceived as "near equals." Archeological manifestations of this would be expected to reflect the adoption or imitation of foreign or foreign-influenced material items used by the conquerors.

Although they may retain their privileged status in conquest situations, a defeated political elite also pay a price for their loss of autonomy. Tribute, that formerly went exclusively to them, is re-directed to their conquerors. Therefore, it is not possible for a defeated political elite to freely engage in conspicuous consumption. They must economize in their consumption practices and reduce their personal demands on the labor services of the populace to meet the tribute demands of their conquerors. Changes reflecting a decrease in material items associated with conspicuous consumption and in material evidence for a reduction in acess to labor services and tribute goods would be expected in the archeological record.

Alterations in the ritual activities of a conquered culture depend upon the extent to which they differ from those of the conquering culture. If few differences exist, no, or only slight, alterations may take place, as was the case in the Aztec conquest of the Mixtecs. If differences are great, changes may be profound, as they were in the Spanish conquest of the Mixtecs. Whether slight or great, however, alterations in the ritual activities of a conquered culture would be expected, since most conquering cultures view their specific religious practices as superior to others. The expected archeological manifestations of this would be in either modification or eradication of items of ritual ware and in the evidence for consumption of foreign items of ritual ware.

While there is a great need to develop new approaches to studying conquest situations, there is always a danger that they might degenerate into *de facto* archeological assertions. To state that "This, this, and this has occurred; therefore, there was a conquest," is the type of *de facto* assertion that would reduce to banality any archeological approach to conquest. The importance of studying conquests is not simply to know that they happened but to assess their implications for culture change. To do this, however, it is necessary to stop regarding conquests as mere "events" and to begin perceiving them as processes. As Spencer (1982) has demonstrated in his Cuicatlan study, conquests bring about significant changes not only in the subjugated culture, but also in that of the conquerors. Conquest is a two-way process of culture change. A consumer oriented model of ceramic analysis provides a method for studying such change in both conquering and conquered cultures.

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