POSTCLASSIC AND EARLY COLONIAL MIXTEC HOUSES IN THE NOCHIXTLAN VALLEY, OAXACA

By

MICHAEL LIND

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PREFACE

This small monograph represents an abbreviated and somewhat modified version of the first two chapters of my doctoral dissertation entitled: Mixtec Kingdoms in the Nochixtlan Valley: A Preconquest to Postconquest Archeological Perspective (Tucson: University of Arizona, 1977). Here I should like to express my gratitude to a number of people who aided me by contributing to the completion of my dissertation and consequently to this study. My dissertation was directed by Dr. T. Patrick Culbert who patiently and expertly guided me through difficult stages of analysis and interpretation. Dr. Arthur Jelinek and Dr. William Rathje, members of my dissertation committee, made most helpful comments in reviewing my dissertation.

Dr. Ronald Spores offered me the opportunity to direct excavations at Chachoapan and Yucuita and has graciously aided me in every way possible to bring this study to completion. In the Summer of 1969, Dr. Kent Flannery helped me to clarify my research goals and develop an explicit research strategy prior to initiating fieldwork in the Spring of 1970.

In the field I was assisted by Richard Redding and Neal Byrd, two remarkably capable field assistants. I was 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 -- Dr. John Broster, John Warner, Lynne Dixon and Martha Symmes -- and with participants in other projects in Oaxaca -- Dr. Ignacio Bernal, Dr. John Paddock, Dr. David Peterson, Dr. Donald Brockington, Maria Jorrin, and Dr. Marcus Winter -- were most helpful. In particular, Dr. John Paddock graciously contributed his unequalled expertise on Oaxaca archeology by critically reviewing and commenting upon my dissertation.

I thank all of these individuals for their kindness and, since I didn't always follow their suggestions, I accept full responsibility for any errors in this study.

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CHAPTER 1

INTRODUCTION

Discovering archeological evidence which might shed light on the origin of Mixtec kingdoms is one of the primary goals of the Nochixtlan Valley Project. The Nochixtlan Project, directed by Dr. Ronald Spores of Vanderbilt University, is a multidisciplinary study aimed at integrating archeological, ethnohistoric, ethnographic, and ecological data to further an understanding of the origin and evolution of Mixtec culture in the Nochixtlan Valley located in the State of Oaxaca, Mexico. From studies of documents written by Spanish administrators and priests, who first entered the Nochixtlan Valley during the sixteenth century, Spores (1967: 1974ab) has reconstructed the nature of Postconquest Mixtec kingdoms. Archeological evidence is necessary, however to reveal the nature of Preconquest Mixtec kingdoms.

From stratigraphic excavations in the Nochixtlan Valley, Spores (1972; 1974c) has defined five archeological phases which span three thousand years of Mixtec culture history: Cruz (1300-200 BC), Ramos (200 BC - 500 AD), Las Flores (500-1000 AD), Natividad (1000-1520 AD), and Convento (1520-1820 AD). Spores hoped that material manifestations of Mixtec kingdoms could "be identified archeologically, first for the European contact period /Convento/, then for protohistoric /Natividad/ and prehistoric times" (Spores 1972:4). From March to August of 1970, when the Nochixtlan Project received funding from the National Science Foundation, Spores gave me the opportunity of obtaining some of the necessary archeological evidence by placing me in charge of excavations at Chachoapan and Yucuita.

Chachoapan and Yucuita, two present-day neighboring peasant villages in the Nochixtlan Valley, have roots in Prehispanic Mixtec settlements. The hillsides adjacent to each village are covered with the archeological remains of these Prehispanic Mixtec settlements. Excavation in these hillside ruins revealed a series of superimposed house remains which span a period from Preconquest Natividad to early colonial Convento times. This study presents an analysis of the architectural remains of these houses. Its primary objectives are to place the social groups who built and occupied these houses within the context of Prehispanic and early colonial Mixtec society.

The Geocultural Setting

At the time of the Spanish Conquest Mixtec society encompassed the Mixteca Alta, Baja, and Costa regions of southernmost Puebla, easternmost Guerrero, and the northwestern third of Oaxaca (Fig. 1). Situated in the broad Mesa del Sur of the Sierra Madre del Sur mountains, the Nochixtlan Valley lies in the heart of the Mixteca Alta (Fig. 2). Agriculturally richest and most populous of the high mountain valleys of the Mixteca Alta, the Nochixtlan Valley forms a 600 sq. km. drainage basin immediately west of the Continental Divide.

Sixteenth century documents refer to the agricultural richness of the Nochixtlan Valley (Paddock 1964). The Mixtecs had constructed a complex series of terraces transforming hillside gullies into fertile fields. This lama bordo terrace system involved building a series of terrace walls across the course of the erosion channel which resulted in a series of check dams creating a staircase effect (Spores 1969). Sediments eroding from the hillsides into the gullies were trapped behind successive terrace walls and much of the water carrying these sediments was absorbed creating rich humid fields. Combined with well-watered alluvial valley bottomlands, the fertile lama bordo terrace fields

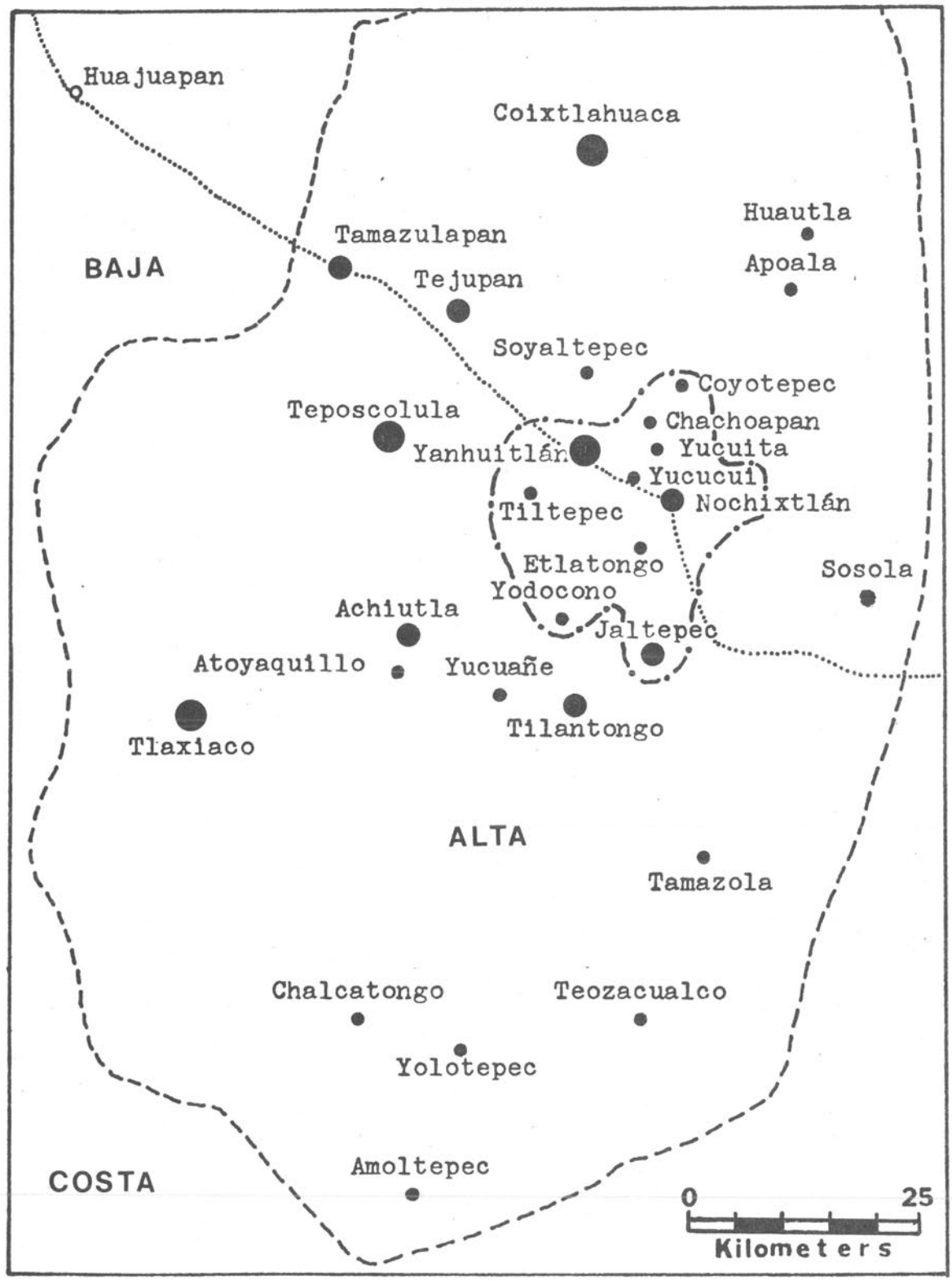

Fig. 2. Map of the Mixteca Alta

provided the richest farmlands in the Nochixtlan Valley. Hilltop lands and gently sloping valley margins were much less productive as farmland (Kirkby 1972:47).

Because of frequent winter frosts, the farming season in the Nochixtlan Valley is limited from March to October. In rich humid alluvial valley bottomlands and lama bordo terrace fields corn is planted by the cajete technique in March. The cajete technique involves planting corn deep within the soil where it is sustained by humidity for two months prior to the onset of the rainy season, which begins in late May or early June. This deep planting gives the corn a longer growing season and yields a rich harvest. The lack of humidity in hilltop fields and fields located in the gentle slopes along the margins of the valley means that these fields cannot be planted until just before the onset of the rainy season in May. Thinner soils and a shorter growing season result in lower yields in these fields.

Sixteenth century censuses suggest that communities in the Nochixtlan Valley might be grouped into four categories with regard to population size (Table 1). While by no means definitive, since population figures are open to question and smaller communities were rarely included in the censuses, these categories include: (1) urban centers, (2) towns, (3) villages, and (4) hamlets. Understanding how these different types of communities were organized and how they were able to structure their interrelationships with one another calls for an understanding of the nature of Mixtec kingdoms around the time of the Spanish Conquest.

Mixtec Kingdoms -- An Ethnohistoric Model

From analyses of scores of documents pertaining primarily to the large Nochixtlan Valley urban center of Yanhuitlan, but also to other communities in the Nochixtlan Valley and surrounding areas of the Mixteca Alta, Baja, and Costa, Spores (1967; 1974ab)

Table 1

POPULATIONS OF SOME SIXTEENTH CENTURY COMMUNITIES IN THE NOCHIXTLAN VALLEY

(Adapted from Dahlgren 1954:36-37)

Communities	16th-Century Census of Tributarios (Household Heads)	Population Estimate (Tributarios x 4)
Urban Center		
Yanhuitlan	6000	24000
Towns		
Jaltepec	1500	6000
Nochixtlan	1000	4000
Villages		
Chachoapan	400	1600
Yodocono	360	1440
Tiltepec	300	1200
Etlatongo	300	1200
Hamlet		
Yucucui	90	360

has developed an ethnohistoric model of Mixtec kingdoms as they existed at the time of the Spanish Conquest. Mixtec kingdoms were composed of either a single community or, more commonly, of several communities in which one was the principal center (cabecera) and the others subject to it (Spores 1967:100-101). Although hamlets were always subject communities and urban centers and towns consistently cabeceras, some villages were cabeceras while others were subject communities. No simplistic correlation existed, therefore, between the size of a community and its status as a cabecera or subject community.

Cabeceras in the Nochixtlan Valley and elsewhere in the Mixteca fell into three main categories with regard to population size: (1) urban cabeceras, (2) town cabeceras, and (3) village or rural cabeceras (Fig. 3). Villages which were rural cabeceras generally lacked subject communities being kingdoms in themselves, while larger town cabeceras usually had several subject communities and the even larger urban cabeceras had a very large number of subject communities. However, a direct correlation between the size of a cabecera and the number of its subject communities did not exist. Some rural cabeceras had as many as eight subject communities, while some town cabeceras lacked subject communities being kingdoms in themselves.

At the time of the Spanish Conquest, Chachoapan was one of six communities in the Nochixtlan Valley which were cabeceras of kingdoms. Included among the remaining five cabeceras were Tiltepec, Etlatongo, Jaltepec, Nochixtlan, and Yanhuitlan (Fig. 3). Chachoapan and Tiltepec were both rural cabeceras of kingdoms which lacked subject communities. Etlatongo was also a rural cabecera but of a kingdom that had eight subject communities. The towns of Nochixtlan and Jaltepec were cabeceras of kingdoms which had four and six subject communities respectively. Yanhuitlan, the only urban cabecera in the Nochixtlan Valley, was the cabecera

of a kingdom that had sixteen subject communities -- one of which was Yucuita (Spores 1967:100-101).

The cabecera was the primary political, economic, and religious center of the kingdom. The king (cacique) or queen (cacica) of the kingdom resided within a large palace in the cabecera. The cabecera was divided into neighborhoods (barrios) each of which was administered by a noble appointed by the ruler. These nobles were often the ruler's brothers or other close relatives who resided in the barrios they were chosen to govern (Spores 1974a:305-306; Dahlgren 1954:171). The barrios of the cabecera were occupied by commoners who were required to pay tribute and labor services to the nobles and ruler who governed them. The cabecera contained the main marketplace of the kingdom and the primary ceremonial precinct (Spores 1967:94).

The relationships between the cabecera of a kingdom and its subject communities were structured in a manner that is somewhat similar to the organization of a cabecera. The ruler appointed a noble, who was usually a close relative, to reside in the subject community and to collect tribute from the commoners who occupied the community. The cabecera of a kingdom, then, manifested three social classes including (1) royalty, a cacique or cacica and their family of procreation, (2) nobles, and (3) commoners (Spores 1974a:300-301). Subject communities, on the other hand, had only two social classes -- nobles and commoners (Spores 1967:94).

Throughout the Mixteca Alta, Baja, and Costa regions and even into the traditionally Zapotec Valley of Oaxaca, Mixtec rulers structured the interrelationships between their kingdoms and other kingdoms by means of complexly arranged marital alliances (Caso 1966; Spores 1974a). The manner in which ruling families established these alliances is clearly stated in Spanish

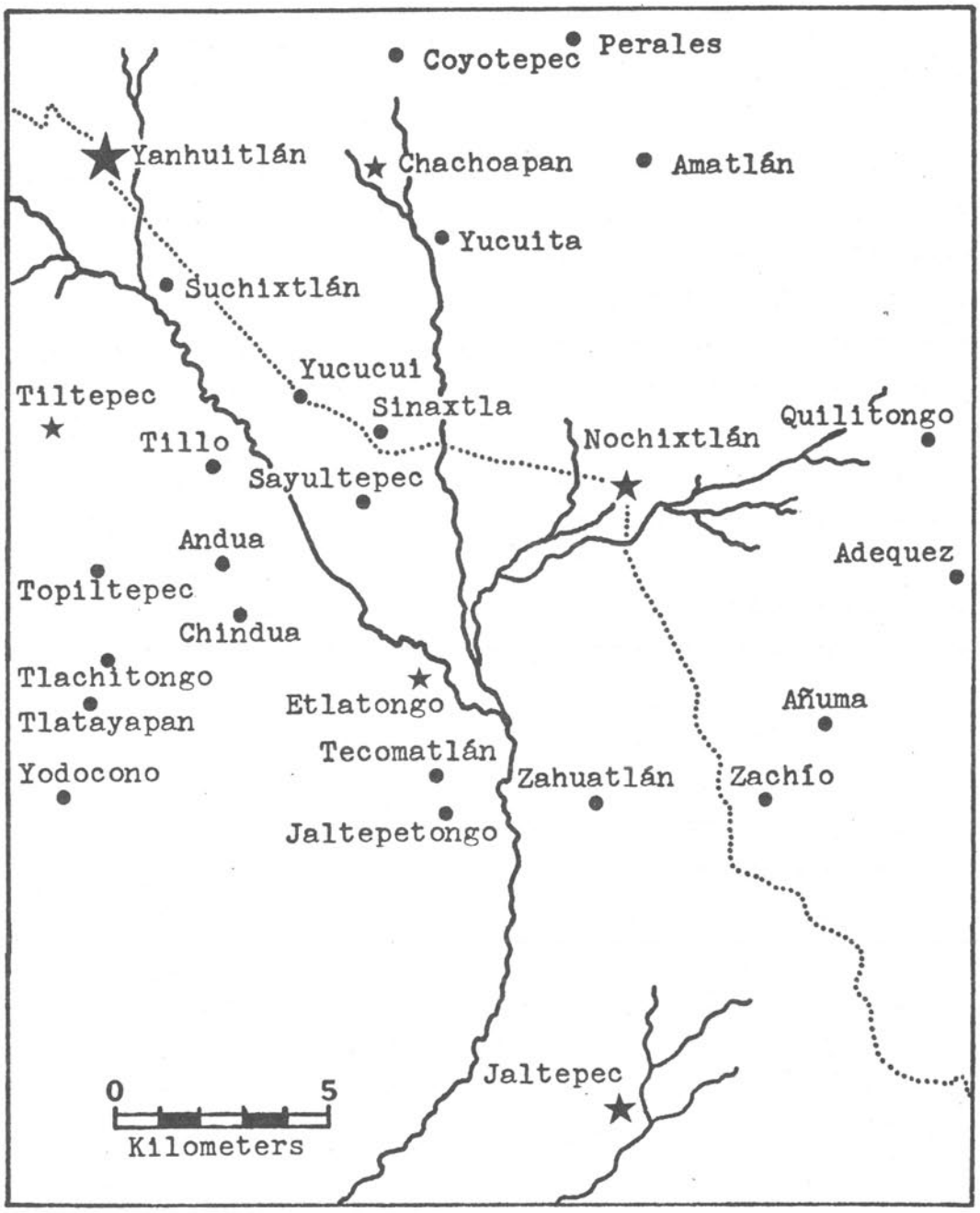

Fig. 3. Map of the Nochixtlán Valley

(Adapted from Spores 1972:3)

Rivers

Pan-American Highway

Rural Communities

Urban Cabeceras

Town Cabeceras

Rural Cabeceras

colonial documents and depicted in Mixtec genealogical manuscripts (codices). In Preconquest and early colonial times each kingdom maintained in its cabecera a codex depicting the kingdom's subject communities and a history of its ruling caciques (Spores 1967: 94-96).

Caso (1960) has succeeded in deciphering several of the extant Mixtec codices. Some of these, such as the Codex Bodley, depict the history of caciques, their wars and their marital alliances over a period of nearly a thousand years. From an analysis of the Mixtec Codex Bodley and Spanish colonial documents, Caso (1966) has identified the rulers of the kingdom of Yanhuitlan and related them to the rulers of Chachoapan around the time of the Spanish Conquest. Shortly before the Conquest, Lady One Flower "Tiger-Quechquemitl" (Cauaco), cacica of Yanhuitlan, married Lord Eight Death "Tiger-Fire-Serpent" (Namahu), a brother of the cacique of Tilantongo (Caso 1966:313). Lady One Flower and Lord Eight Death resided at Yanhuitlan and produced five children. The three youngest, either by marriage or through inheritance, became caciques at Coixtlahuaca, Teozoatlan (in the Mixteca Baja), and Tiltepec (Spores 1967:133-34).

Around AD 1530, shortly after the Conquest, their oldest child, Dona Maria Coquaha (Two House) inherited the kingdom of Yanhuitlan and became its cacica. A marriage was arranged between Doña María and Don Diego Nuhq (Six Motion), cacique of the kingdoms of Tamazola and Chachoapan. Don Diego had inherited the kingdoms of Tamazola and Chachoapan from his older brother, Don Domingo Cuncusi, who had died childless (Spores 1967:116). The marriage of Don Diego to Doña María took place in Achiutla, religious center for all the Mixteca Alta in Prehispanic times. "The nobility gathered there and consulted among themselves and with the families concerned. It was decided at that time that the first child of the couple would inherit Tamazola-Chachoapan. The second child was to receive Yanhuitlan" (Spores 1967:146).

Together Don Diego and Doña María resided in the rural cabecera of Tamazola and, although her remaining brother, Don Domingo de Guzman (Seven Monkey "Tiger-Torch") resided in Yanhuitlan and looked after her interests there, she was still cacica of Yanhuitlan (Caso 1966:414; Spores 1967:134). Doña María and Don Diego produced two sons. The elder son took the name Don Matias de Velasco, while the younger son took the name Don Gabriel de Guzmán. Early in the 1540s Doña María died and her second born child, Don Gabriel, became cacique of Yanhuitlan in accordance with the agreement made at the time of his parents' marriage. Since he was only a child at the time of his mother's death, Don Gabriel was too young to rule. Therefore, he was sent to reside in Yanhuitlan under the tutelage of his uncle, Don Domingo de Guzmán, who reigned as cacique-regent. When his uncle died, Don Gabriel became the ruler of Yanhuitlan. Don Francisco de Guzmán, Don Gabriel's son, inherited the kingdom of Yanhuitlan late in the sixteenth century, after his father's death, and ruled well into the seventeenth century (Spores 1967:134-38).

Also in accordance with the agreement made at the time of his parents' marriage, Don Gabriel's older brother, Don Matías de Velasco, became cacique of the kingdoms of Tamazola and Chachoapan. Don Matías continued to reside in Tamazola as did his son, Don Pedro de Velasco, who inherited the kingdoms of Tamazola and Chachoapan upon his father's death and ruled into the seventeenth century (Spores 1967:116). During the sixteenth century, then, and for an unknown number of generations before, Chachoapan was a rural cabecera without a resident cacique. Don Domingo Cuncusi, Don Diego Nuhq, Don Matías de Velasco, and Don Pedro de Velasco all remained residents of distant Tamazola. Also throughout the sixteenth century and for an unknown number of decades before, Yucuita remained a subject community of Yanhuitlan.

Placing the Prehispanic and early colonial communities of Yucuita and Chachoapan within the changing context of Mixtec society requires reference to the history of Chachoapan, outlined above, as well as application of Spores' ethnohistoric model. Deducing from the model, Chachoapan as a cabecera should manifest: (1) three social classes including royalty, nobility, and commoners; (2) barrios administered by resident nobles, (3) a market place, and (4) a ceremonial precinct. However, Chachoapan's historical status as a rural cabecera without a resident cacique during the sixteenth century and for an unknown number of generations before requires modification of these deductions.

The absence of a resident cacique makes it apparent that only two social classes -- nobles and commoners -- occupied Chachoapan throughout the sixteenth century. Furthermore, although barrios were numerous in urban and town cabeceras, rural cabeceras certainly manifested fewer barrios and it is possible that the nobles who governed these barrios resided together instead of within the barrios because of the small size of the village community. Finally, the presence of markets and ceremonial precincts in rural cabeceras is not clearly documented; and, if they did exist, their size must have been modest in comparison with those in large urban and town cabeceras.

Applying the ethnohistoric model to Yucuita is even more difficult than applying it to Chachoapan. Yucuita, as a subject community should manifest: (1) status as a rural community, village or hamlet; and (2) nobles and commoners as the only two social classes. While these two deductions require no modifications, they are as far as the model leads. There is no indication whether or not subject communities manifested barrios, markets, or ceremonial precincts. It's likely that barrios, markets, and ceremonial precincts were absent in hamlets and, perhaps, villages, but present in the larger rural communities.

Perhaps the weakest point in the ethnohistoric model for the purpose of this study is that the interrelationships among the nobles within a kingdom are not specified. How nobles secured appointments as administrators, how they structured marriage alliances among themselves, and whether or not they had the persuasion to secure positions for their offspring is unclear. Complementary data are required to elucidate the behavior patterns of nobles and the content and composition of their households. The extent to which material manifestations of these behavior patterns and others, which have been deduced from the ethnohistoric model, exist in the archeological remains of the Prehispanic and early colonial communities of Chachoapan and Yucuita determines the extent to which archeological analysis can provide these complementary data.

Chachoapan and Yucuita

Archeological remains of the Prehispanic and early colonial communities of Chachoapan and Yucuita are located about two kilometers apart in the piedmont zone on opposite sides of the Yucuita arm of the Nochixtlan Valley (Fig. 4). The archeological remains of both communities cover an area of about one square kilometer, indicating that in Preconquest and early colonial times these two communities were of comparable status with regard to population size. Since sixteenth century censuses record the population of Chachoapan as 400 tributarios, or about 1600 persons (Table 1), Yucuita, whose population was not listed in the censuses, probably manifested a population of similar size.

The Prehispanic and early colonial community of Chachoapan sat astride two piedmont spurs. These spurs, known locally as Las Pilitas and La Iglesia Vieja, project from the base of a steep mountain called Cerro Verde atop which sit the famous Classic ruins of Yucuñudahui (Caso 1938). A large barranca or gully, presently converted to fields by the lama bordo technique, separates

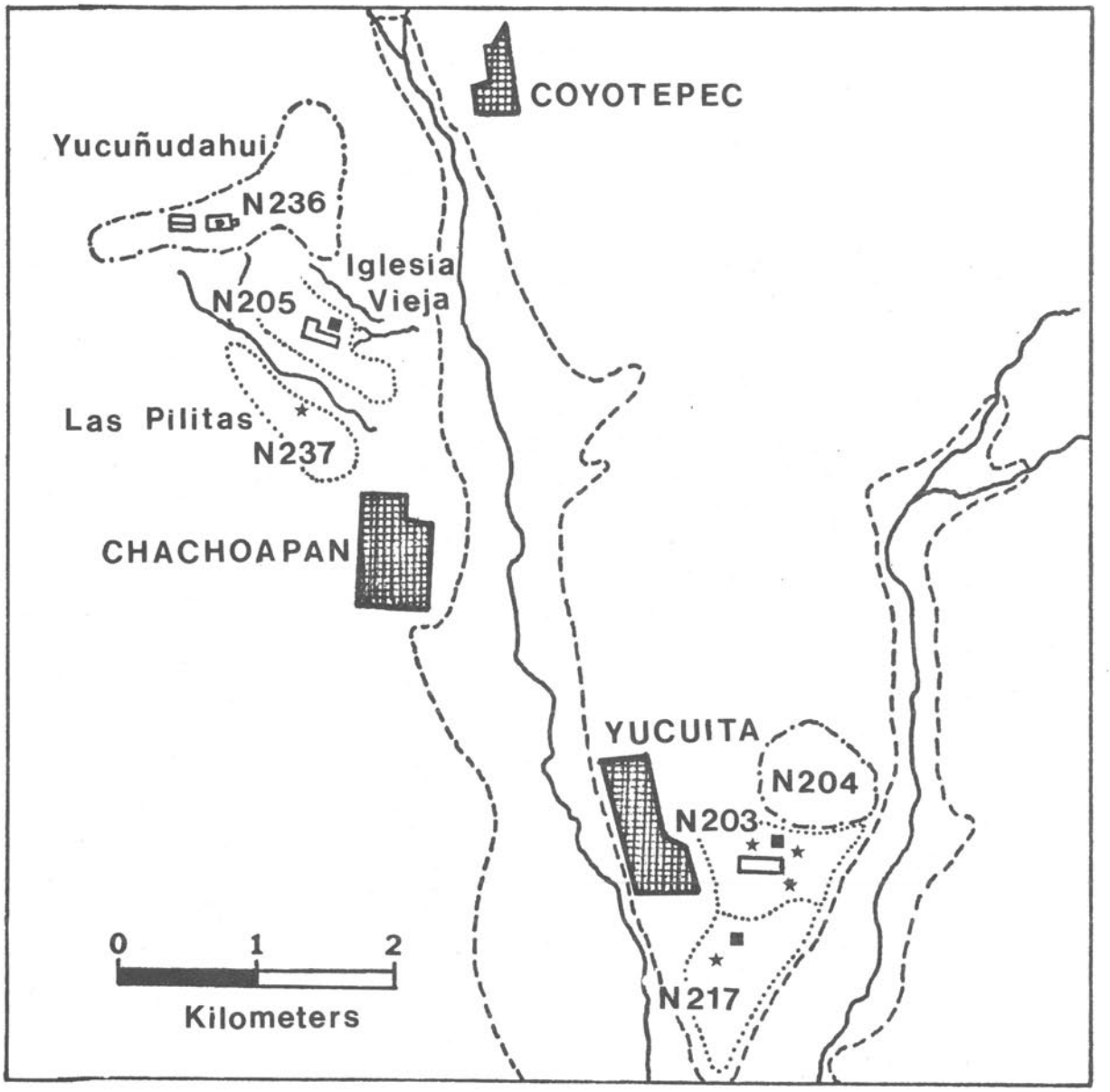

Fig. 4. Yucuita Arm of the Nochixtlán Valley

- Limits between alluvial valley and piedmont
- Limits of major Las Flores occupation
- Limits of major Natividad occupation
- Present-day communities
- N205 Site numbers
- ■ Excavation units
- ★ Obsidian workshops

the two piedmont spurs and provides Chachoapan today, as it must have in the past, with rich humid fields suitable for planting corn by the cajete technique.

Archeological remains of the Prehispanic and early colonial community of Yucuita are located on a long wide piedmont spur which extends from the base of a steep mountain called Cerro de las Flores whose summit supports impressive Classic remains. The piedmont spur delimits one side of a narrow valley which branches off the main Yucuita arm. This valley has the only perennial stream in the Yucuita arm of the Nochixtlan Valley -- the Río Perales. Although too small for any extensive irrigation, the Rio Perales makes the valley soil very humid and therefore superb for planting corn by the cajete technique. A seasonal stream, the Río de los Hermanos, bisects the alluvial valley between Chachoapan and Yucuita. The deep valley soil also retains the humidity necessary for cajete planting.

The rural character of the Prehispanic and early colonial communities of Chachoapan and Yucuita is reflected in their archeological remains. There are few obvious indications of specialized industries within the communities. A total of four obsidian workshops was found at Yucuita and one was found at Chachoapan. Chachoapan was located near an extensive deposit of high quality chert which was intensively quarried in Prehispanic times. Yucuita had nearby deposits of hematite and limonite which may have been exploited as mineral pigments. Although possible marketplaces (plazas) occur at both communities, in the absence of intensive survey and extensive excavation it was not possible to confirm their existence (Fig. 4).

Surface survey revealed no apparent indications of Preconquest Natividad temple structures within either community. However, excavations at Yucuñudahui revealed a Natividad ceremonial complex indicating that portions of the large Classic

ceremonial center on the mountain top adjacent to Chachoapan were utilized by the inhabitants of Chachoapan as a ceremonial precinct in Natividad times (Spores, personal communication). Furthermore, the ruins of a modest early colonial church occur within Chachoapan at La Iglesia Vieja (Fig. 5). The lack of comparable Prehispanic and early colonial ceremonial complexes at Yucuita is one, and perhaps the only, indicator of Chachoapan's status as a rural cabecera and Yucuita's status as a rural subject community.

Whether or not barrios existed within Chachoapan and Yucuita remains to be confirmed. The position of Chachoapan astride two piedmont spurs probably provided a convenient division of the community into at least two barrios -- Las Pilitas (N237) and La Iglesia Vieja (N205). Likewise, at Yucuita, a present-day distinction between the Cerro (N203) and La Peña (N217) may have served in the past to define two barrios (Fig. 4). However, the divisions between barrios are culturally determined and are rarely restricted to geographic boundaries alone.

Excavation revealed that both communities had noble households located high in the piedmont zone where more gentle slopes give way to steep rocky mountainsides. Extending from these noble residential zones down into the gently sloping piedmont were more modest dwellings of commoners. The presence of both noble and commoner households at Chachoapan and Yucuita confirms the existence of at least two social classes in both communities. Excavated remains of the Prehispanic and early colonial houses of nobles located in the wealthy residential sectors of Chachoapan and Yucuita provide the archeological data for this study.

Fig. 5. Ruins of an Early Colonial Church at Chachoapan. (Photo courtesy of Martha Symmes)

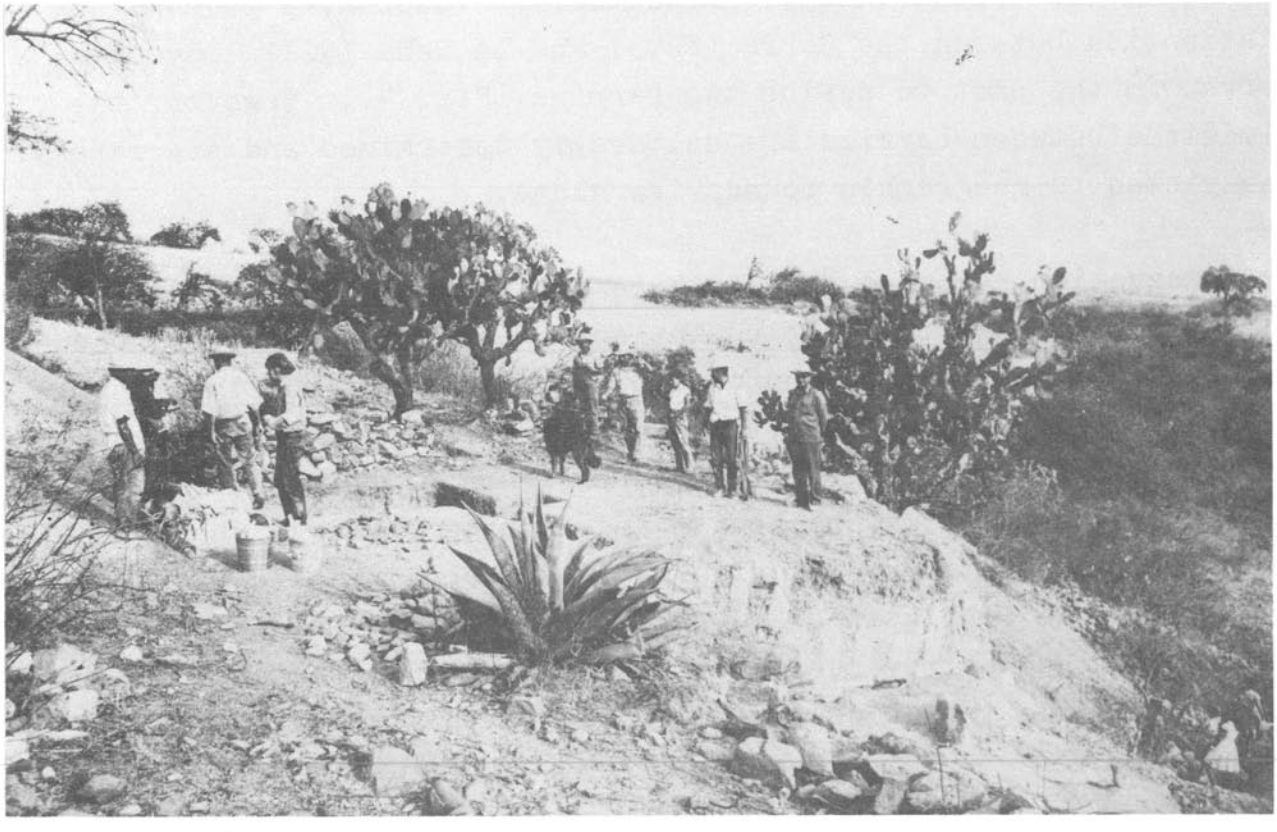

Fig. 6. Yucuita -- Excavation Unit N203J: View toward East across Upper and Lower Terraces.

CHAPTER 2

NOBLE HOUSEHOLDS AT YUCUITA

Excavation unit N203J encompasses parts of two man-made terraces located high in the piedmont zone at the base of Cerro de las Flores. Over four meters of occupational debris form the terrace fill. A half meter of early Classic Ramos deposits rests on bedrock. Above these deposits is a 15 cm. layer of sterile red tepetate followed by four meters of Natividad and Convento remains which consist of a series of superimposed floors, foundations, walls, and middens -- remnants of large houses that once occupied this locality (Fig. 6).

Most of the architectural features at N203J correspond to four houses: (1) a Natividad house built on the upper terrace in Natividad times, (2) a stratigraphically later endeque house built on the lower terrace in Natividad times and manifesting two stages of construction, (3) a limestone house built on the lower terrace around the time of the Spanish Conquest, and (4) a Convento house built on the upper terrace after the Spanish Conquest. Recent pits, dug to obtain dirt for adobes, have destroyed at least two-thirds of the remains of the houses on the lower terrace, leaving their northern third preserved in an irregular east-west section. In the not too distant past, the upper terrace was farmed and the plow destroyed most of the Convento house (Fig. 7).

The Natividad House

The Natividad house, located on the upper terrace, was only partly uncovered in two small 1 x 2-meter pits separated from one

another by four meters in an east to west direction and excavated to a depth of two meters through the terrace fill (Fig. 8). The excavated remains include part of a box-shaped stone-lined hearth (Feature 11)* set in a compact dirt floor and a section of limestone foundation (Fig. 9). The foundation, uncovered in the east pit, may represent the north wall of the room represented by the dirt floor and hearth (F-11) which was uncovered in the west pit. The floor, hearth, and foundation together probably represent a kitchen of the as yet incompletely explored Natividad house.

The Natividad Midden and the Terrace Walls

On the lower terrace, south of the Natividad house, is an extensive Natividad midden (Fig. 10). This midden (F10A), which yielded wood charcoal dated at 610±90 radiocarbon years: AD 1340 (GX-2185), was deposited shortly before the construction of two limestone walls which served to separate the upper and lower terraces (Fig. 11). The far end of the terrace wall in the east was purposefully built at an angle to conform to a ramp (or staircase?) which led from the lower to the upper terrace. A staircase (F-14), located at the eastern end of the west terrace wall, served as a second means of access between the upper and lower terraces (Fig. 12). A layer of crushed red tepetate (F-3), which extends from the base of the west terrace wall, covered the Natividad midden providing a firm surface on the lower terrace in the area around the base of the staircase.

The Endeque House

The endeque** house was built on the lower terrace up against the terrace walls and on top of the crushed red tepetate surface.

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*Hereafter the feature numbers, assigned during excavations and included in the plan and section drawings herein, will be referred to as F-11, etc.

**Endeque is the locally used term for a tough caliche or duricrust which has the appearance and consistency of chalk. The word endeque almost certainly derives from the Mixtec word yuundeque which Alvarado (1962:167) defines as "piedra dura."

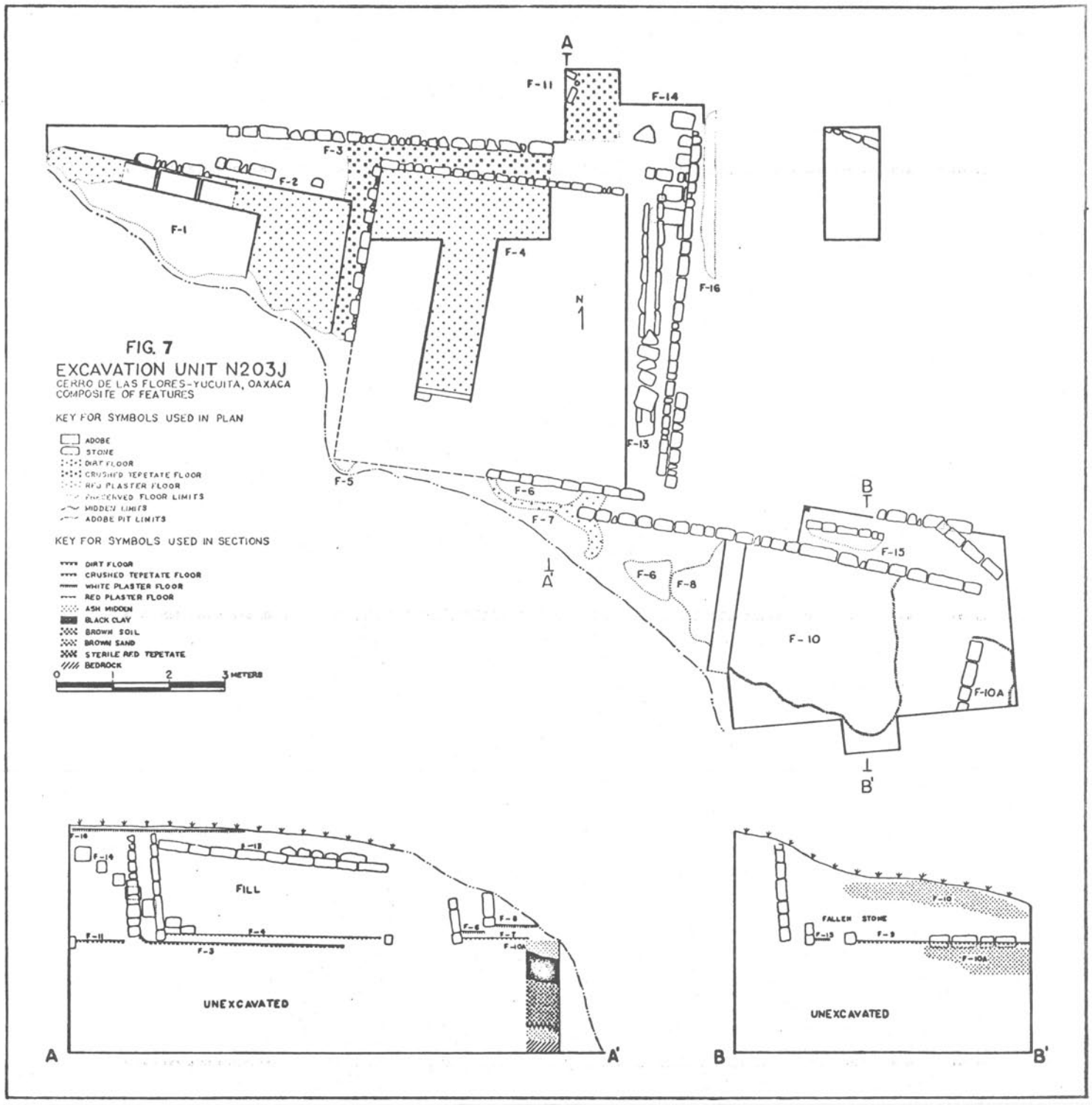


FIG. 7

EXCAVATION UNIT N203J

CERRO DE LAS FLORES-YUCUITA, OAXACA

COMPOSITE OF FEATURES

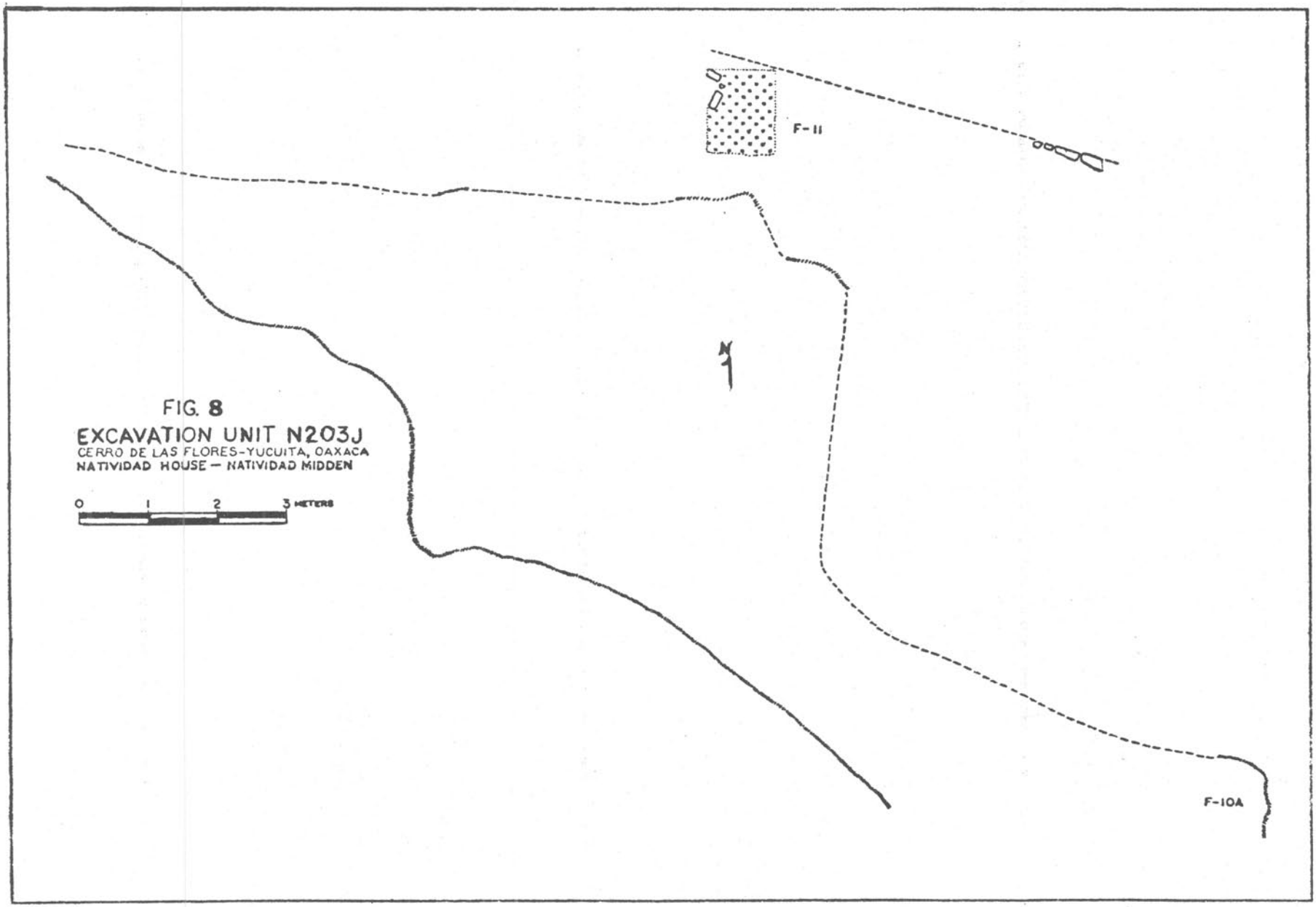


FIG. 8
EXCAVATION UNIT N203J
CERRO DE LAS FLORES-YUCUITA, OAXACA
NATIVIDAD HOUSE — NATIVIDAD MIDDEN

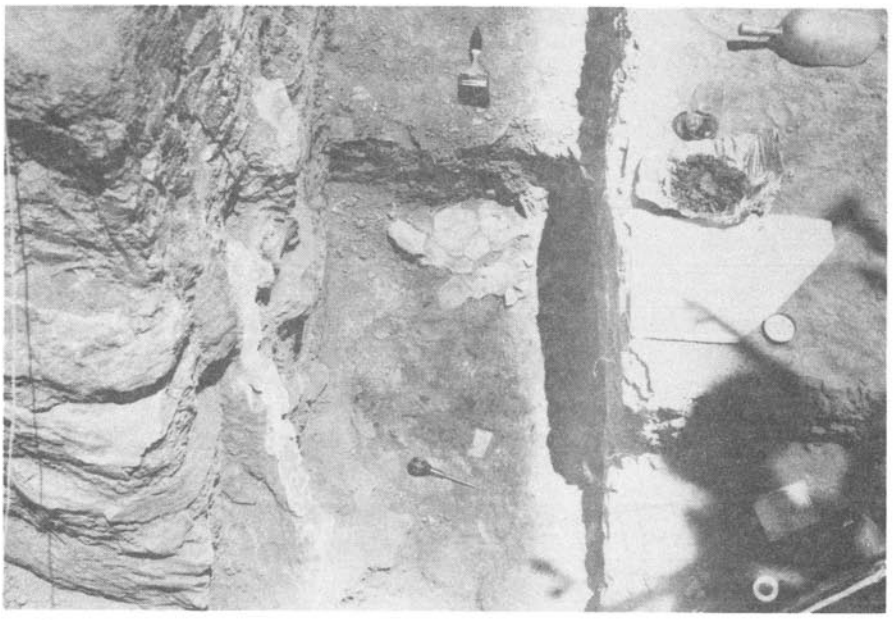


Fig. 9. Yucuita, Natividad House: Broken Jar on Floor (F-11).

Fig. 10. Yucuita, Natividad Midden (F-10A): Richard Redding Excavating Concentrations of Bones and Potsherds.

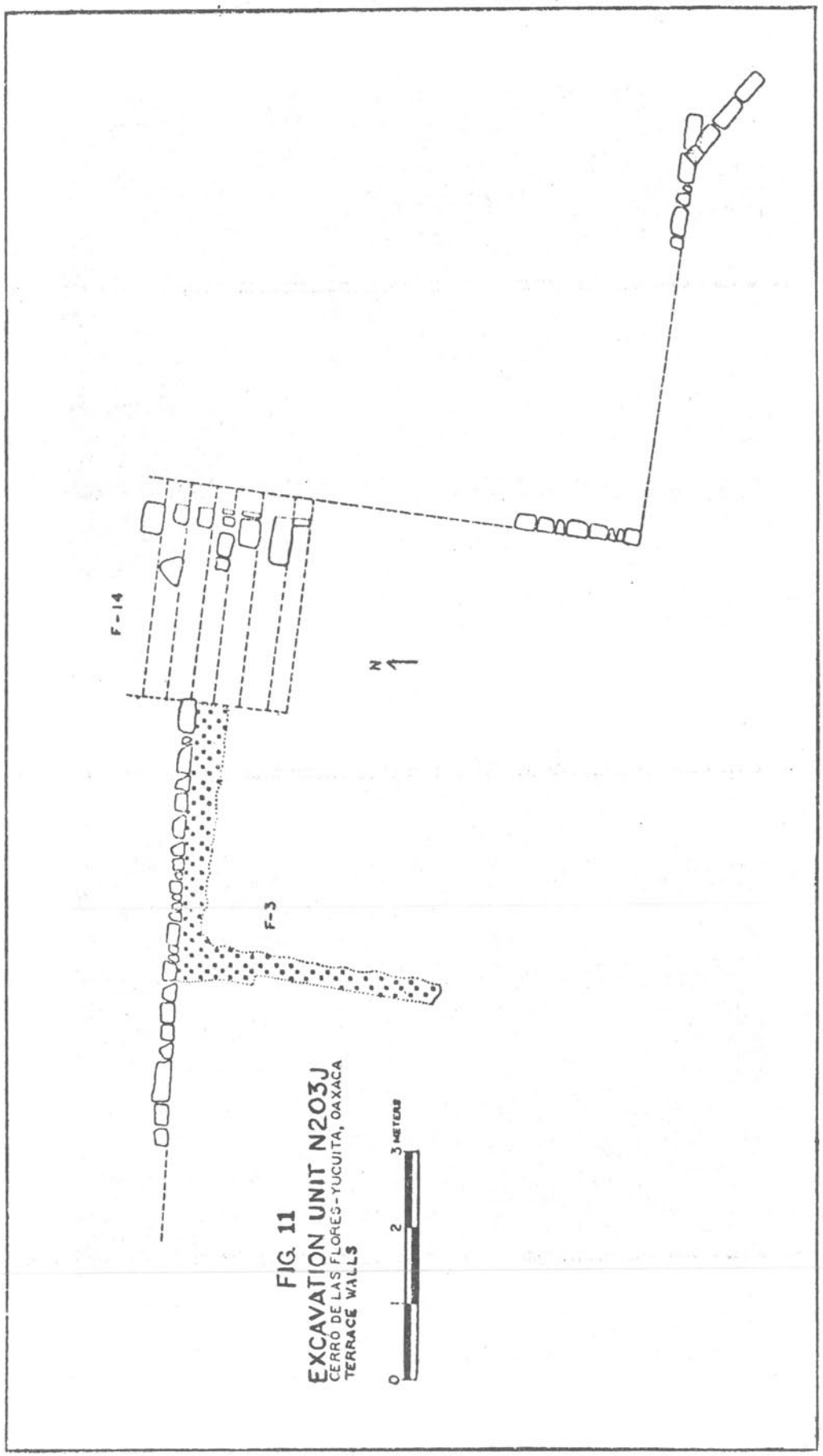


FIG. 11
EXCAVATION UNIT N203J
CERRO DE LAS FLORES-YUCUITA, OAXACA
TERRACE WALLS

The house had red plaster floors, a limestone foundation, and endeque walls. Two stages of construction activity are evident from its remains. The first construction stage is represented by a small piece of the floor of a sunken courtyard (F-5C) and four rooms (Fig. 13). The rooms on the east and north sides of the courtyard were only partly preserved because of later construction and recent destruction by adobe pitting. Only the north wall of the east room (F-7) remained intact. The wall had a limestone foundation and was built of carefully shaped endeque blocks worked into a panel design (Fig. 14). The north room (F-2) retained only a section of the limestone foundation along its north wall.

The remaining two rooms appear to be vestibules or entryways to the house. One of these (F-15) was located east of the east room (F-7) and made use of the ramp (or staircase?) as a means of access from the house to the upper terrace. The north (and only preserved wall) of this east vestibule (F-15) was a continuation of the north wall of the east room (F-7). The second vestibule, almost completely intact, was located on the northeast side of the courtyard. This northeast vestibule (F-4) made use of the earlier limestone staircase (F-14) which linked the upper and lower terraces. The north and east walls of this vestibule had the same panel design as the north wall of the east room (F-7) and east vestibule (Figs. 15-16). The west wall, on the other hand, had a different design which suggests possible remodelling. The wall was composed of large endeque slabs alternating with tiny endeque blocks (Fig. 17). Apart from this hint of remodelling, the second stage of construction activity involve only minor alterations in the house. The courtyard (F-5B) and east room (F-6) were resurfaced with new white plaster floors.

Fig. 12. A staircase (F-14), located at the eastern end of the west terrace wall, served as a second means of access between the upper and lower terraces. A layer of crushed red tepetate (F-3), which extends from the base of the west terrace wall, covered the Natividad midden providing a firm surface on the lower terrace in the area around the base of the staircase.

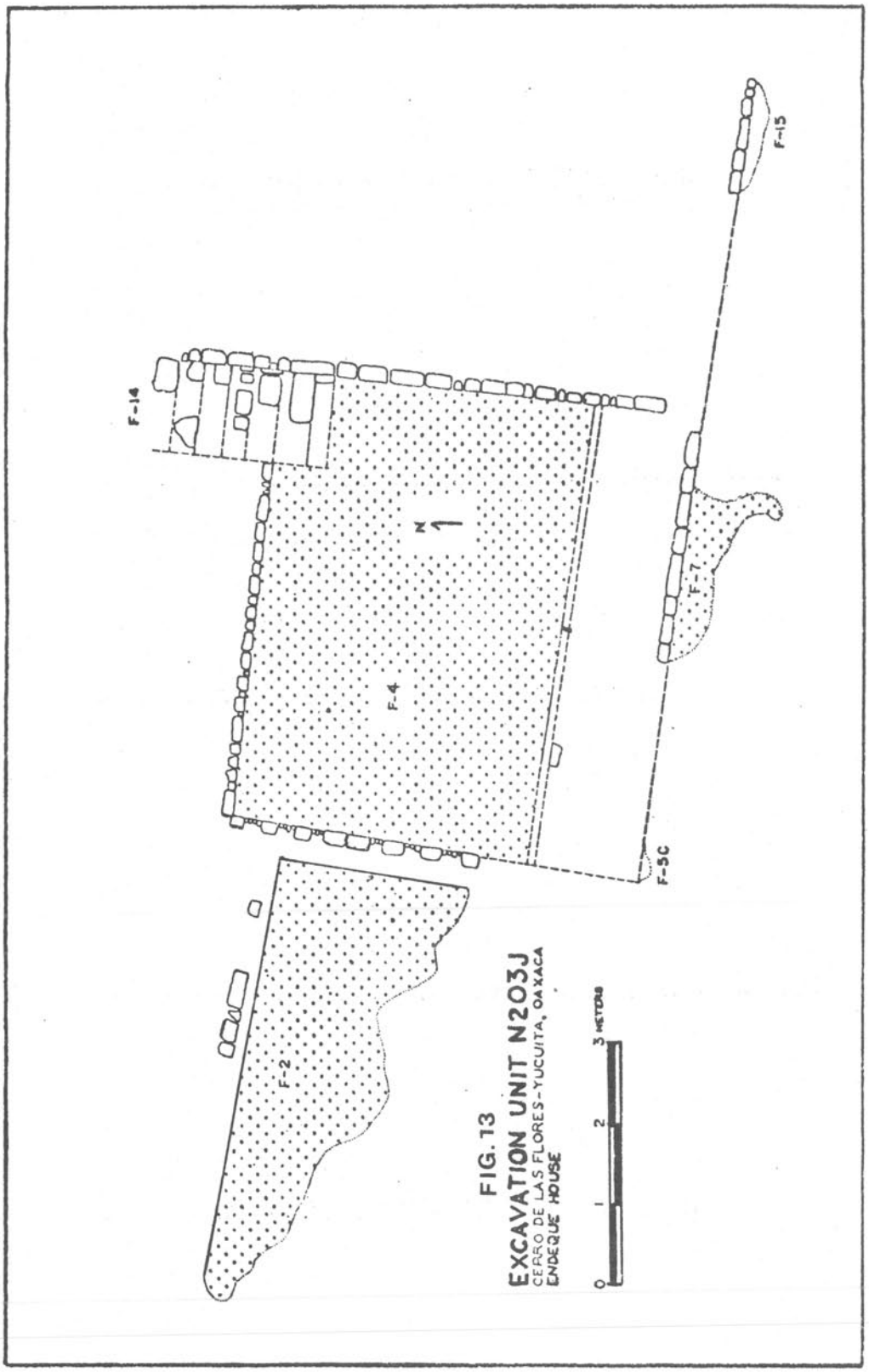


FIG. 13
EXCAVATION UNIT N203J
CERRO DE LAS FLORES-YUCUITA, OAXACA
ENDEQUE HOUSE

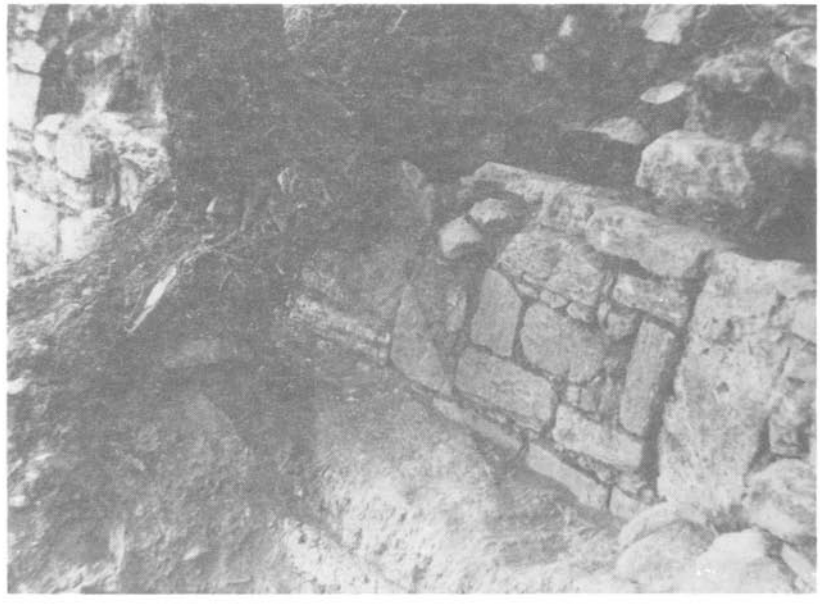


Fig. 14. Yucuita, Endeque House: North Wall of East Room (F-7).

Fig. 15. Yucuita, Endeque House: East Wall of Northeast Vestibule.

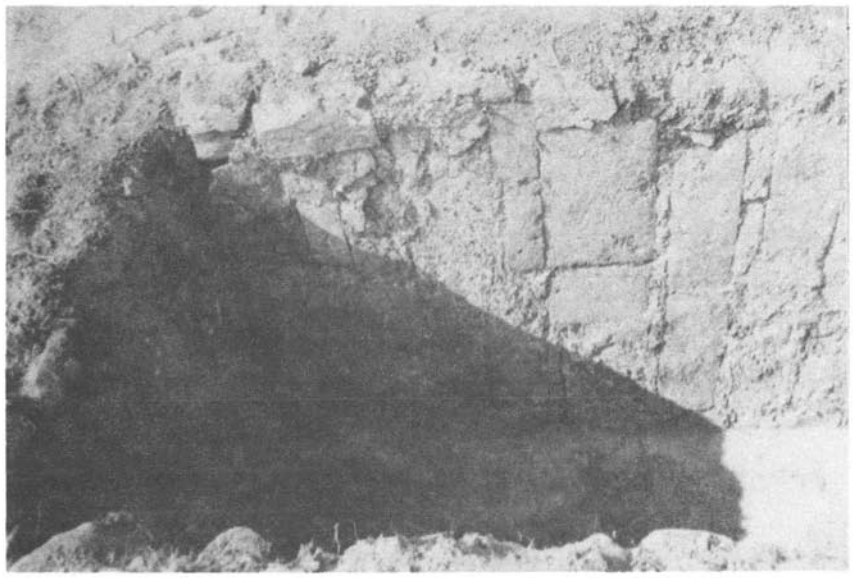


Fig. 16. Yucuita, Endeque House: North Wall of Northeast Vestibule.

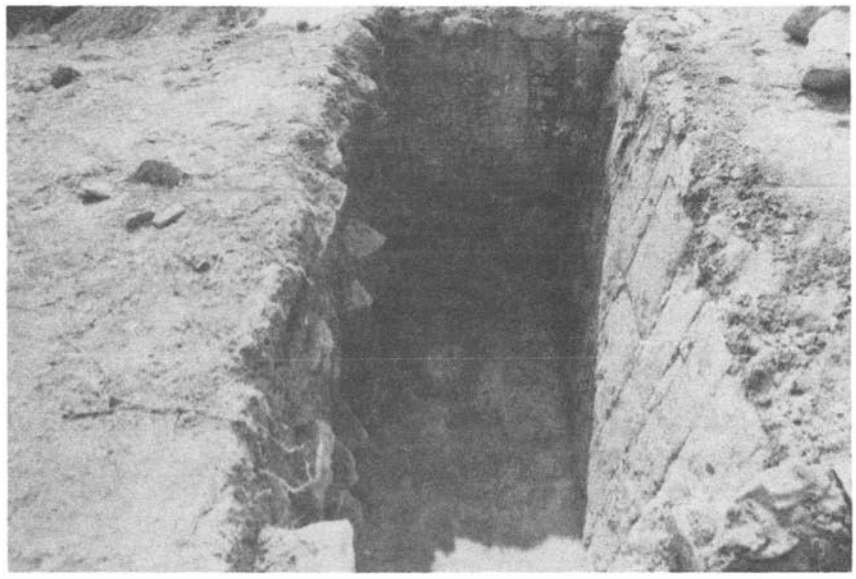


Fig. 17. Yucuita, Endeque House: West Wall of Northeast Vestibule.

The Limestone House

Subsequent construction activity involved drastic alterations in the endeque house, transforming it into a new limestone house. The northeast vestibule (F-4) and part of the north room (F-2) were filled to the level of the upper terrace with regularly placed layers of stone and trash (Fig. 18). The area formerly occupied by these rooms on the lower terrace was thus transformed into part of the upper terrace, severing the link between the upper and lower terraces and leaving the east ramp (or staircase?) as the only visible means of access between the two terraces.

The limestone house, built over the unfilled remains of the endeque house, had white plaster floors and limestone walls. The preserved remains include a piece of the floor of a sunken courtyard (F-5A) and three rooms (Fig. 19). The north room (F-1), built over the unfilled remains of the north room (F-2) of the endeque house, had interior adobe walls covered with white plaster and exterior stone walls worked into a design of alternating large limestone blocks and tiny limestone slabs. The presence of pig bones on the floor of this room suggests that the room was built, or at least occupied, after the Spanish Conquest.

The courtyard (F-5A) and east room (F-8), built over the earlier courtyard (F-5B) and east rooms (F-6 and F-7) of the endeque house, had white plaster floors (Fig. 20). The east vestibule (F-9), built over the earlier vestibule (F-15) of the endeque house, had only a dirt floor. An adobe wall separated the east room (F-8) from the vestibule (F-9), and a high limestone wall covered the earlier endeque wall (Fig. 21). The foundation of the east wall of the vestibule was laid over and partially set into the Natividad midden, resulting in the deposition of some goat or sheep bones in this area. This indicates that the limestone house was built after the Spanish Conquest.

Fig. 18. Yucuita, Limestone House: Northeast Vestibule (F-4) Filled with Alternating Layers of Large Stones and Trash.

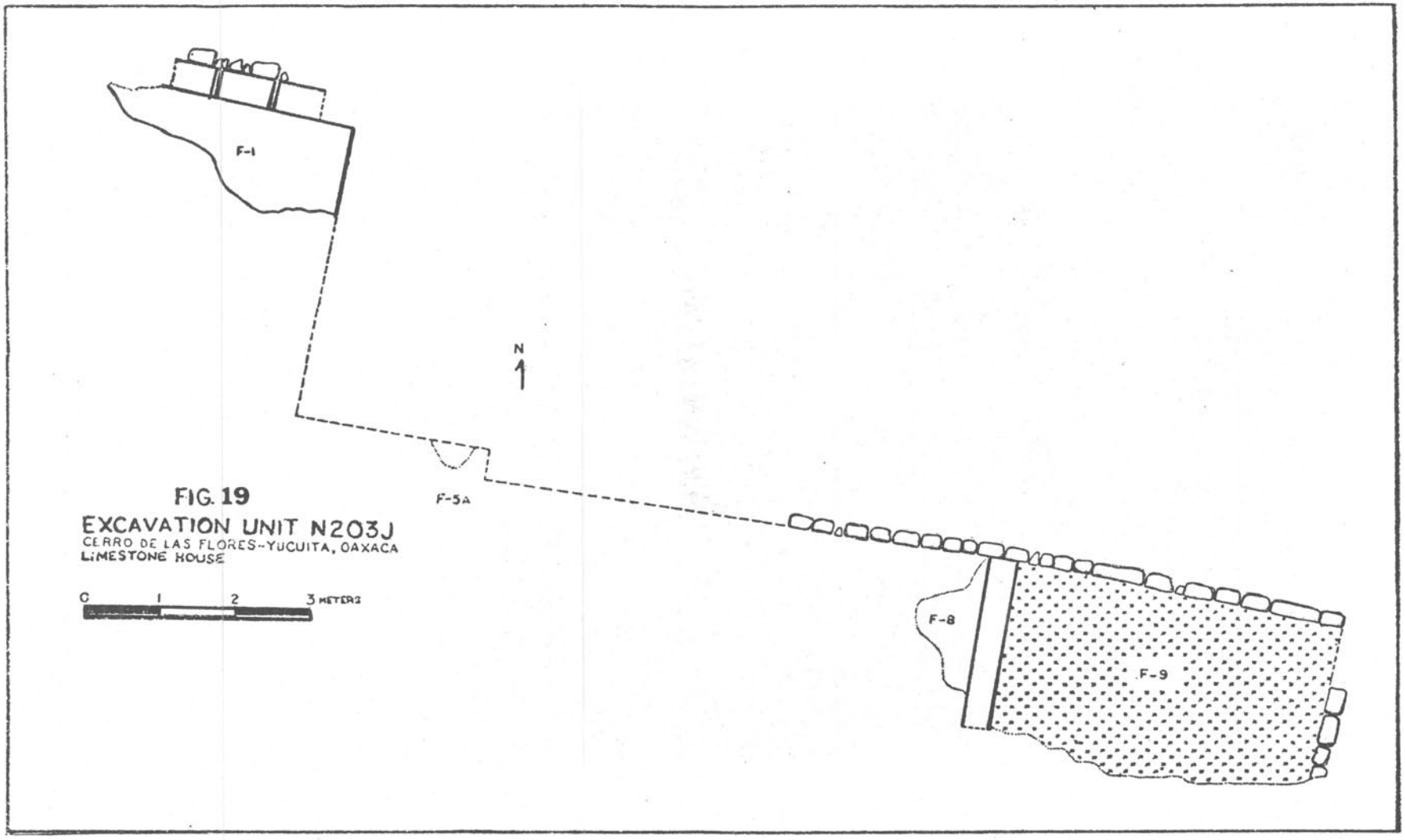


FIG. 19
EXCAVATION UNIT N203J
CERRO DE LAS FLORES--YUCUITA, OAXACA
LIMESTONE HOUSE

Fig. 20. Yucuita, Limestone House: Three Superimposed Floors and Walls of the East Rooms of the Endeque (F-7, F-6) and Limestone (F-8) Houses.

Fig. 21. Yucuita, Limestone House: East Vestibule (F-9) Illustrating the East Terrace Wall with the Walls of the Later Endeque and Limestone Houses Superimposed.

The Convento House

The last evidence of construction activity at N203J is restricted to the upper terrace where a house was built after the abandonment of the limestone house. The preserved remains include pieces of a white plaster floor, a drain which passed beneath the floor, and a midden (Fig. 22). The floor fragments (F-16) are preserved beneath a modern stone wall which marks the limits of cultivation between two fields that presently occupy the upper terrace. The drain (F-13), made of specially shaped endeques and capped with large limestone slabs, passed through the upper parts of the terrace fill, pierced the walls of the east rooms of the endeque and limestone houses, and emptied out onto the floor (F-8) of the east room of the limestone house (Fig. 22). Water pouring from the drain destroyed a section of the three superimposed floors (F-7, F-6, and F-8) that had formed the east rooms of the endeque and limestone houses (Fig. 20).

A midden (F-10), most likely trash from the Convento house, was deposited in the ruins of the east vestibule of the abandoned limestone house on the terrace below (Figs. 23-24). This midden, which yielded wood charcoal dated at 290±80 radiocarbon years: AD 1660 (GX-2093), was deposited after the collapse of the wall of the east vestibule (F-9) of the limestone house (Fig. 25). The presence of pig bones and a colonial style Christ figurine mold supports a Postconquest date for this midden.

Summary

None of the houses at N203J is well enough preserved or explored (in the case of the Natividad house) to hazard a guess at its overall plan. However, the stratigraphic relationships among the houses may be used to reconstruct the history of the household groups that built and occupied them and, perhaps, to deduce the social connections among these successive household groups. Specific documentary evidence concerning the transmission

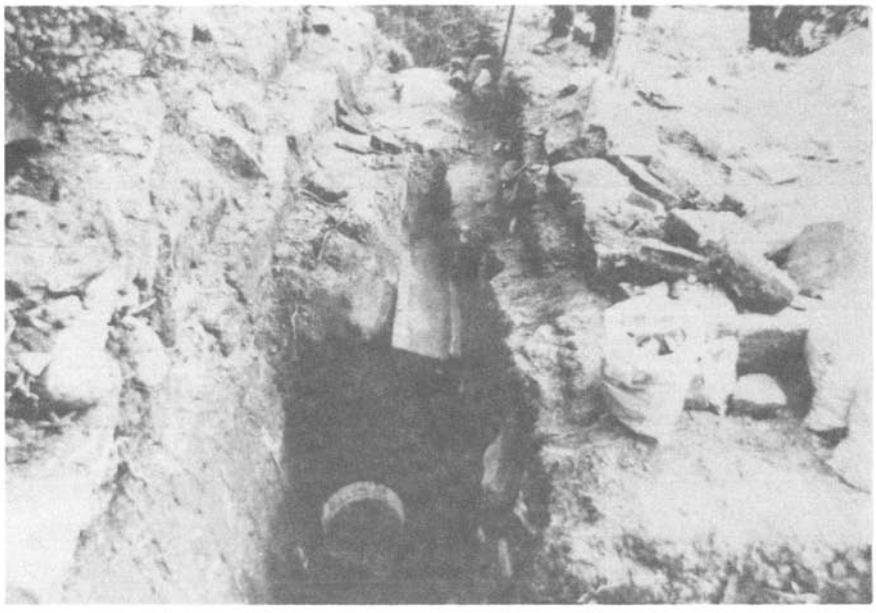


Fig. 22. Yucuita, Convento House: Endeque Drain (F-13).

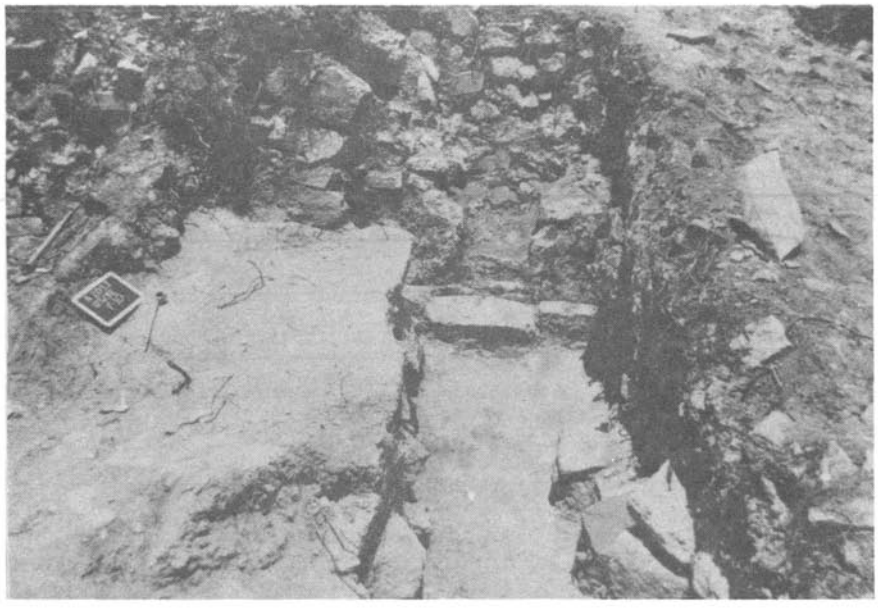


Fig. 23. Yucuita, Convento House: Convento Midden (F-10) Deposited in East Vestibule of Limestone House.

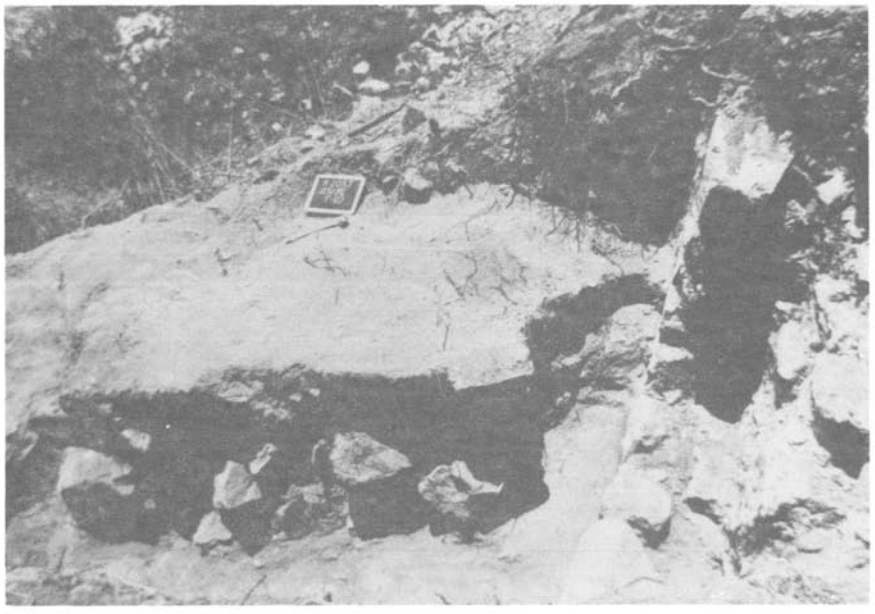


Fig. 24. Yucuita, Convento House: Convento Midden (F-10) Deposited over Collapsed North Wall of East Vestibule of Limestone House.

Fig. 25. Yucuita, Convento House: Sherds in Convento Midden Overlying Limestone Blocks from Collapsed Wall of East Vestibule.

of houses from one generation to the next is not presently available for Nochixtlan Valley communities. In its absence, complementary data from contemporary ethnographic research must suffice.

The present-day Santo Domingo barrio of Juxtlahuaca in the Mixteca Baja "... is located on the site of a pre-Columbian Mixtec town and represents a continuation of many aspects of Mixtec culture up to the present" (Romney and Romney 1966:1). The majority of households in the Santo Domingo barrio are composed of joint families who occupy a commonly owned compound separated from other similar compounds by an adobe wall. The compound is a large area containing the houses of individual nuclear families arranged around a common courtyard (Romney and Romney 1966:42-43).

> A house may last for generations, and many a barrio member is born and dies in the same one and passes it on to his children. A young couple may live with the husband's parents, in which case another fireplace in the cook shack and perhaps another room on the main house are added. The couple will, sooner or later, build their own separate house /within the compound/ (Romney and Romney 1966:40).

Whether or not the houses at N203J represent the remains of successive household groups who occupied this "compound" over generations remains to be deduced from the archeological record.

Lack of exploration precludes any definitive statement on the ill-defined Natividad house. Its location deep within the upper terrace makes it appear unlikely that the occupants of this house deposited the Natividad midden or built the terrace walls. Instead, the household group, who deposited the Natividad midden and who were probably descended from the occupants of the Natividad house, most likely occupied one of three houses located on a section of the upper terrace immediately east of the midden and Natividad house. Three superimposed red plaster floors were partly excavated by Martha Symmes in 1970 and appear to post-date the Natividad house but pre-date the endeque house. In the absence

of radiocarbon dates, however, confirmation of an association between the Natividad midden (F-10A) and any one of the houses is lacking.

The Natividad midden appears to have been deposited only shortly before placement of the crushed red tepetate surface (F-3) which covered the midden. This suggests that the household group who deposited the midden also laid the crushed red tepetate surface and built the staircase (F-14) and terrace walls. Again, this household group most likely lived in one of the three successive houses excavated by Symmes on the upper terrace. The staircase at the end of the west terrace wall provided this household with an eastern entryway from the terrace below, while the ramp (or staircase?) at the end of the east terrace wall served as a southern entryway from the terrace below.

Construction of the endeque house up against the terrace walls and on top of the crushed red tepetate surface indicates that the household group who built the terrace walls, or their immediate descendants, also built the endeque house. Incorporation of the staircase (F-14) at the end of the west terrace wall into the northeast vestibule (F-4) of the endeque house tends to confirm this supposition. Subsequent resurfacing of the floors of the courtyard and east room of the endeque house was certainly the work of the original household group or their immediate descendants. Likewise, the household group or descendants of the household group, who were last to occupy the endeque house, probably built the limestone house. Much of the original plan of the endeque house was retained in the construction of the limestone house. The walls and the floors of the courtyard, north room, east room, and east vestibule of the limestone house were built over their earlier counterparts in the endeque house.

Coincident with the construction of the limestone house, the northeast vestibule (F-4) and part of the north room (F-2) of the endeque house were filled to the level of the upper terrace. This action anticipated construction of the Convento house on the upper terrace which suggests that the household group who built the limestone house or their immediate descendants, also built the Convento house. Deposition of the Convento midden (F-10) in the abandoned and collapsed east vestibule (F-9) of the limestone house and placement of the endeque drain (F-13), which emptied out onto the floor of the east room (F-8) of the limestone house, indicate that the limestone house was abandoned subsequent to the construction of the Convento house.

The continuity manifested in the archeological remains suggests that an initial household group and their successive descendants were responsible for depositing the Natividad midden, building the terrace walls, and constructing the endeque, limestone, and Convento houses at Yucuita. Whether or not descendants of the occupants of the Natividad house occupied one of the three successive houses excavated by Symmes and were responsible for initially depositing the Natividad midden is less certain. More extensive excavation and a series of radiocarbon dates are required to confirm an association and bridge the apparent hiatus between the Natividad house and the Natividad midden at N203J.

Although not consistent with the continuity evidenced in the relative sequence of house remains, the radiocarbon dates are open to interpretation in estimating how many years elapsed from the initial deposition of the Natividad midden in AD 1340±90 to final deposition of the Convento midden in AD 1660±80. If the dates are accurate, then a total of 320 years (1660-1340) separates the Natividad and Convento middens. Adjusting the radiocarbon dates one standard deviation in either direction would result in a date of AD 1430 (1340+90) for the Natividad midden and a date of AD 1580 (1660-80) for the Convento midden, reducing the time span between

the Natividad and Convento middens to 150 years (1580-1430).

These adjusted dates may more faithfully reflect the continuity evidenced in the archeological remains. The presence of pig bones and sheep or goat bones associated with the construction and occupation of the limestone house, and the lack of Postconquest remains associated with the endeque house, suggest that the latter was built before the Conquest (ca. AD 1480) but after deposition of the Natividad midden (ca. AD 1430), while the former was built after the Spanish Conquest (ca. AD 1540) but before deposition of the Convento midden (ca. AD 1580). If these adjusted dates are accepted, then a total of six successive generations of household groups, spanning 150 years (at 25 years per generation), occupied in succession six different houses -- three excavated by Symmes on the upper terrace and the three houses (endeque, limestone, and Convento) excavated at N203J.

A single household group, then, succeeded by their descendants, may have been responsible for depositing the Natividad midden, building the terrace walls, and constructing the endeque, limestone, and Convento houses at Yucuita. While the house remains are not well enough preserved to ascertain the changing social composition of the successive household groups who built and occupied the houses through time, continuous construction, remodeling, and rebuilding indicate the persistence of these household groups over a period of at least six generations. The most notable architectural change effected during this time span was a shift from constructing endeque houses with red plaster floors to constructing limestone houses with white plaster floors -- a shift which was coincident with the change from Preconquest to Postconquest times.

CHAPTER 3

NOBLE HOUSEHOLDS AT CHACHOAPAN

Excavation unit N205K encompasses a section of man-made terrace in the upper reaches of a piedmont spur at Chachoapan. The piedmont spur takes the name of La Iglesia Vieja after an old sixteenth century church located on the terrace immediately below the excavation unit (Fig. 5). Slightly more than a meter of debris forms the terrace fill in the south, while bedrock rises near the surface in the north.

Within the lower levels of occupational debris and in old erosion channels cut through bedrock, ceramics of the late Classic Las Flores period occur. No Las Flores architectural features were uncovered, but a simple burial, lacking an offering, and a midden, containing domestic pottery, are suggestive of a nearby peasant house (Fig. 26). Bone collagen from the burial yielded a date of 355±90 radiocarbon years: AD 1595 (GX-2094) which was rejected as totally incompatible with the archeological stratigraphy. A second sample of wood charcoal from the Las Flores midden overlying the burial was submitted and yielded a date of AD 695 which is most compatible with the stratigraphy (Spores, personal communication).

The zone of Las Flores occupation at N205K probably represents the remains left by a peasant household group whose members blocked erosion channels in order to establish a field. This is the earliest evidence available archeologically for the inception of the lama-bordo technique. The beginning of lama-bordo agriculture is assumed to be associated with the rise of Postclassic Mixtec kingdoms (Spores 1969; Kirkby 1972). The radiocarbon date

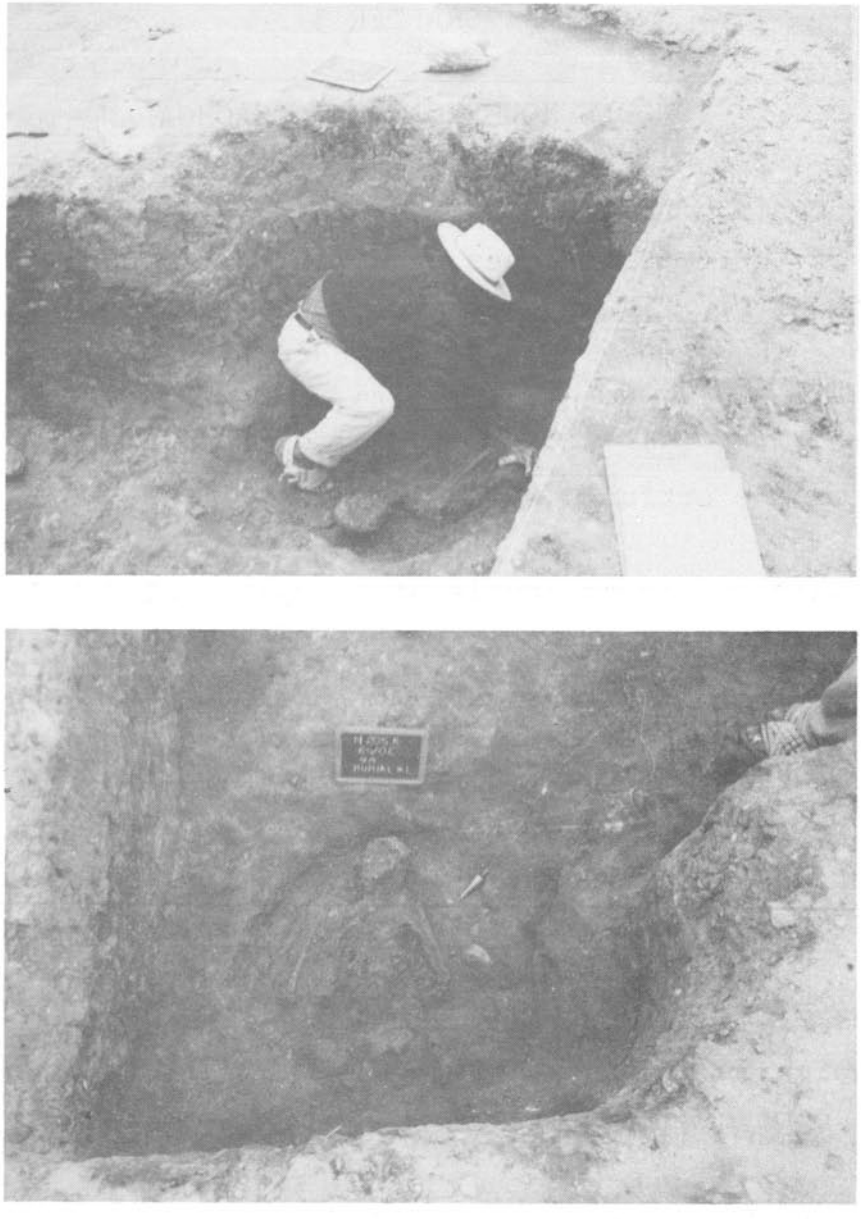


Fig. 26. Chachoapan, Las Flores Burial: Below Courtyard Floor (F-24) of Endeque House-I.

of AD 695 for the inception of lama-bordo agriculture at Chachoapan is remarkably close to Caso's date of AD 692 for the legendary origins of Mixtec kingdoms as recorded in the Codex Bodley (Caso 1960).

The remaining archeological materials recovered at N205K belong within the Natividad and Convento periods. The architectural features excavated at N205K correspond to three large houses: (1) an endeque house built in Natividad times and occupied until shortly after the Spanish Conquest, (2) a limestone house built after the Spanish Conquest, and (3) a stratigraphically later Convento house. Plowing has destroyed much of the southeastern half of the endeque house and parts of the southeastern sections of the limestone and Convento houses (Fig. 27).

The Endeque House

The endeque house, located on the southern part of the terrace, was built over more than a meter of Las Flores and Natividad deposits. Two stages of construction activity are evident from its remains. Initially, the house consisted of three rooms with red plaster floors arranged around a sunken courtyard (F-24) paved with crushed endeque (Fig. 28). The rooms had interior adobe walls covered with red plaster and exterior walls of carefully shaped endeques worked into a design of alternating large and small blocks (Fig. 29).

The north and east rooms of the endeque house were destroyed by later construction and the southern two-thirds of the west room was destroyed by the plow. The intact part of the west room (F-23), which was probably a kitchen, contained a box-shaped stone-lined hearth (F-8). A staircase (F-32), centrally located on the south side of the courtyard, provided the house with an entryway from the terrace below. At the base of the staircase, a sloping endeque pavement (F-33) served as a wide porch along the south side of the house, while a narrow endeque pavement

(F-2) provided a narrow walk around the house. A radiocarbon date of AD 1340 obtained on wood charcoal from midden deposits underlying the walk indicated that the endeque house was built after AD 1340 (Spores, personal communication).

The second stage of construction activity was most likely provoked by a fire. From its blackened floor it appears that the west room or kitchen (F-23) burnt. A new red plaster floor (F-7) was laid directly over the burnt floor of this room and its exterior endeque wall was covered by a limestone wall (Fig. (Fig. 30). It was most likely at this time that the endeque courtyard was resurfaced with a new white plaster floor (F-34) and a low limestone wall was erected flanking the endeque walk along the north side of the house (Fig. 31).

The Limestone House

The limestone house, built in two successive stages, had white plaster floors and limestone walls. Its preserved remains include two courtyards, one in the south and one in the north, each with a single room raised on its west side. The south courtyard, whose southeastern section was destroyed by plowing, was built over the endeque house. The space formerly occupied by the north and east rooms of the endeque house was leveled, and a new white plaster floor (F-1) covered the earlier courtyard floor (F-34) and expanded the courtyard into the leveled area. The exterior endeque wall along the north side of the house was left intact but extended eastward by the addition of a limestone wall (Fig. 32). The west room (kitchen) of the earlier endeque house was covered, hearth and all, by a new room (F-6) with a white plaster floor and a new box-shaped stone-lined hearth. Plowing destroyed all but a small section of the floor along the north side of the room, and all but one of the stones of its hearth were ripped out by the plow.

Three new steps were added to the southern extreme of the staircase (F-32) south of the courtyard, and a new white plaster floor (F-28) covered the earlier endeque pavement and extended the porch southward (Fig. 33). A midden (F-2A) was deposited north of the courtyard up against the endeque wall and above the endeque walk (Fig. 34). The presence of pig bones indicates that the midden, which probably represents trash from the final occupation of the endeque house, was deposited after the Spanish Conquest. A date of 205±85 radiocarbon years: AD 1745 (GX-2189) obtained on wood charcoal from the midden was rejected as too recent (Fig. 35).

The white plaster floor of the north courtyard (F-3) of the limestone house was laid directly over the Postconquest midden (F-2A), indicating that the limestone house was, indeed, built after the Spanish Conquest. The north courtyard floor was destroyed in its southeastern section by plowing, although much of its northwestern section remained intact (Fig. 36). The foundation of the north wall of the courtyard was composed of large limestone blocks with bits of red plaster adhering to them. The red plaster was preserved near the base of the stones where it would not have been visible had it been intended for public view. This indicates that the limestone blocks were reused from an earlier construction, most likely from the limestone foundation of the leveled north and east rooms of the endeque house.

The courtyard's interior walls were of adobe covered with white plaster (Figs. 37-38). Midway along the north edge of the courtyard floor, a short section of adobe wall with a circular post hole behind it jutted out into the courtyard (Fig. 39). This suggests that the western half of the courtyard was roofed and may have served as a shed or a room with its eastern side open. Behind this roofed area, a single room (F-9) with an unlined circular hearth (F-10) ran the entire length of the west side of the courtyard (Fig. 40). The eastern edge of this room

FIG. 27
EXCAVATION UNIT N205K
LA IGLESIA VIEJA, CHACHOAPAN, OAXACA
COMPOSITE OF FEATURES

KEY FOR SYMBOLS USED IN PLAN

KEY FOR SYMBOLS USED IN SECTIONS

UNEXCAVATED

UNEXCAVATED

UNEXCAVATED

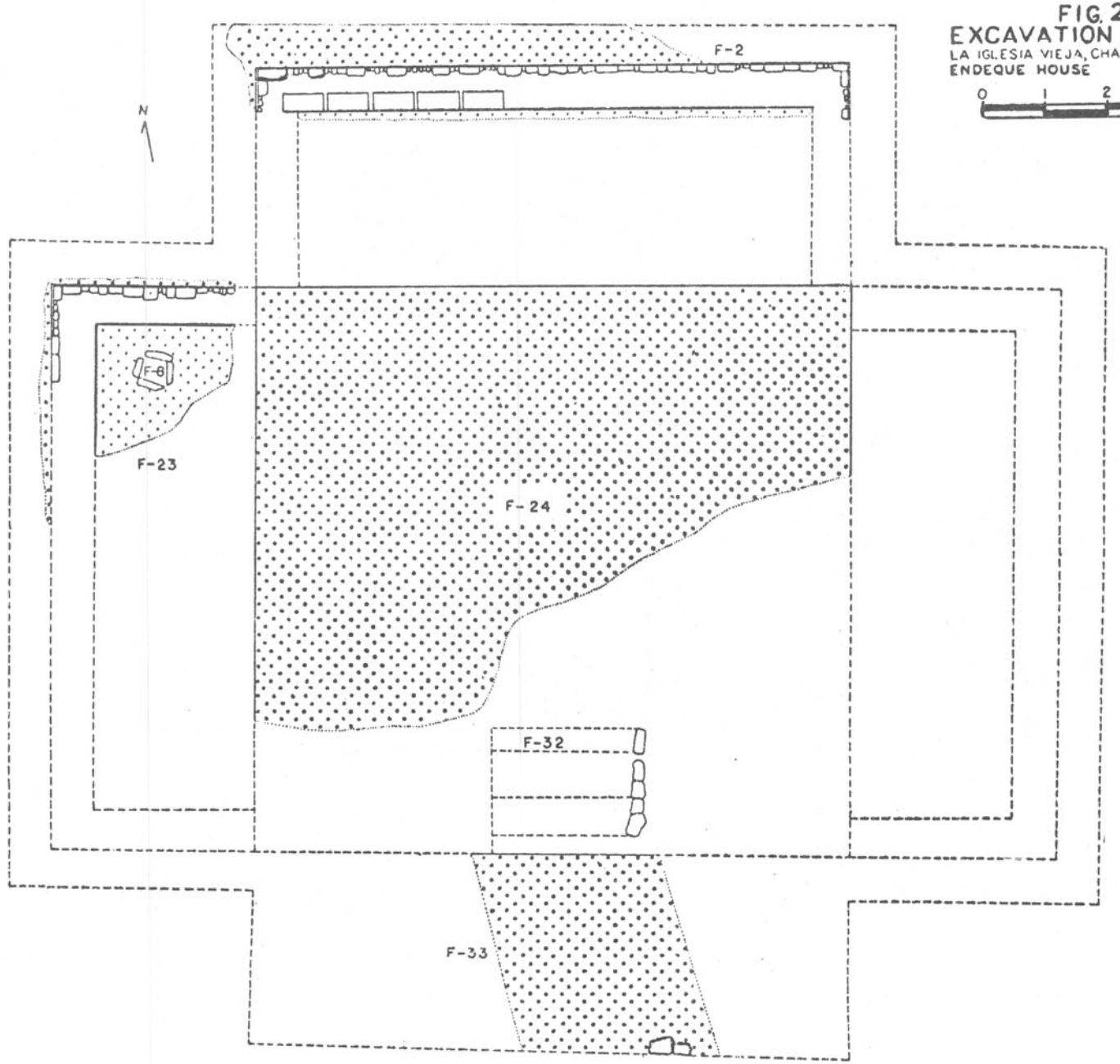


FIG. 28
EXCAVATION UNIT N205K
LA IGLESIA VIEJA, CHACHOAPAN, OAXACA
ENDEQUE HOUSE

0 1 2 3 METERS

Fig. 29. Chachoapan, Endeque House: Wall along North Room of House with Alternating Large Endeque Slabs and Tiny Endeque Blocks.

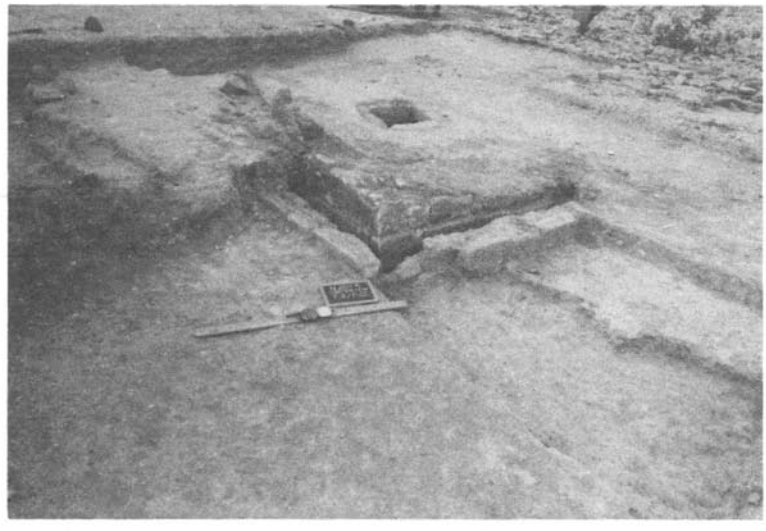


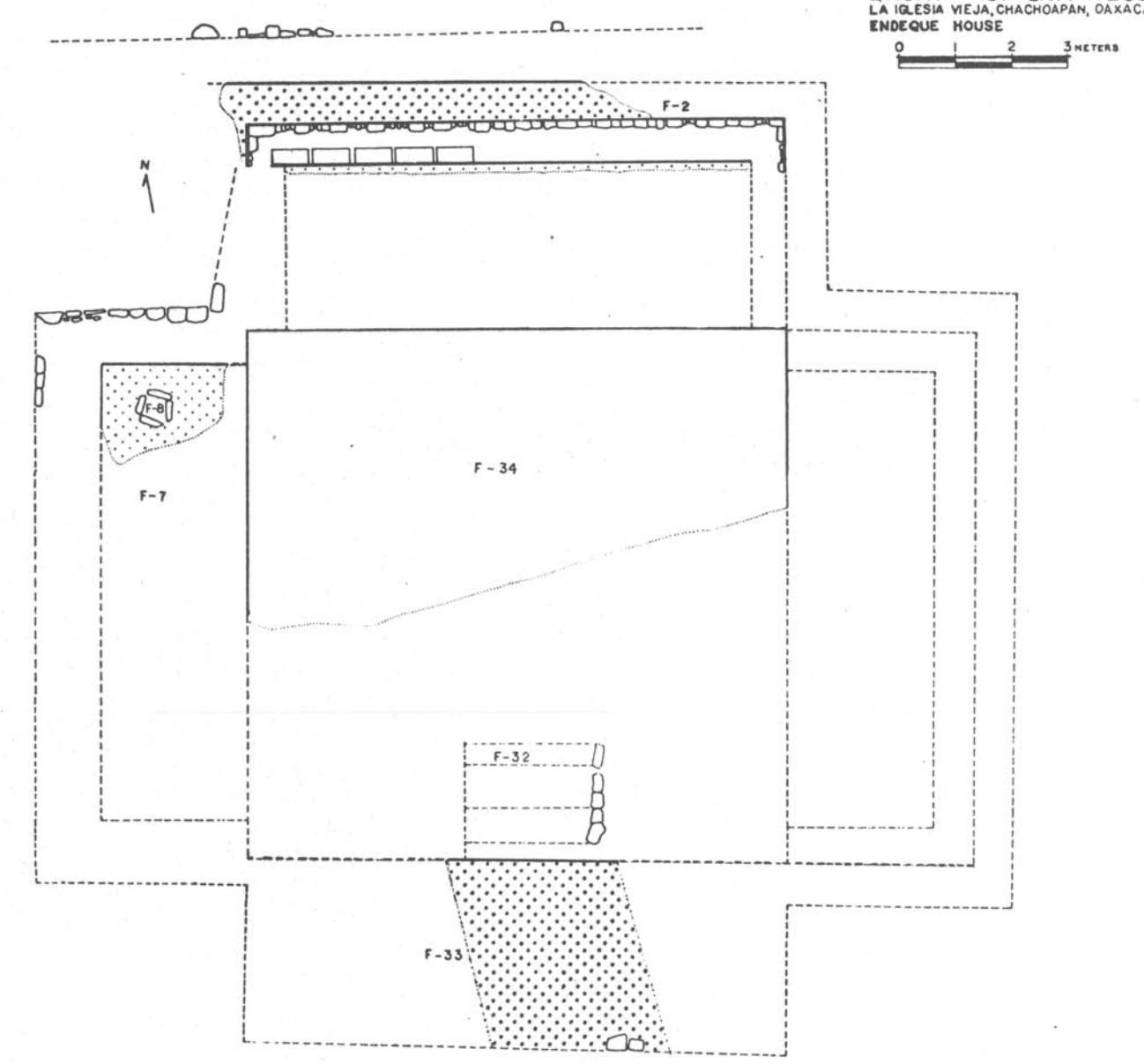
Fig. 30. Chachoapan, Endeque House: Limestone Wall covering Earlier Endeque Wall of Burnt Kitchen (F-7) with Hearth (F-8).

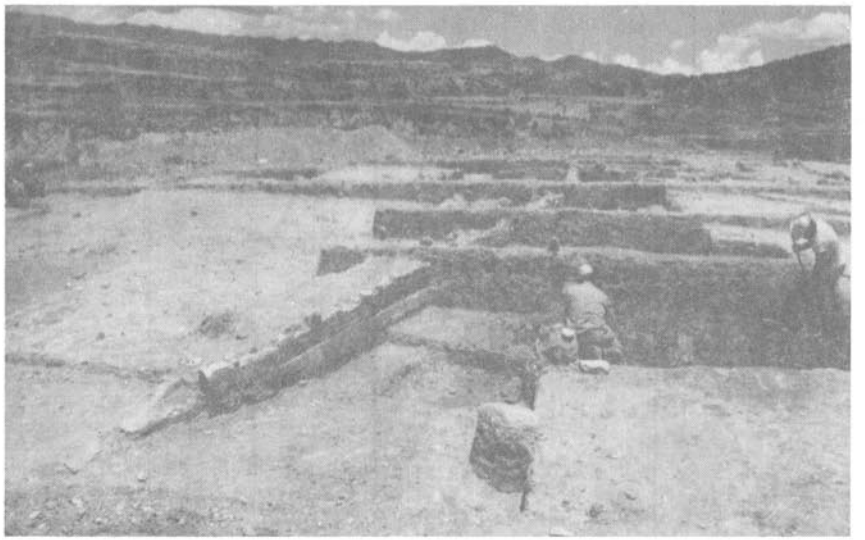
FIG. 31

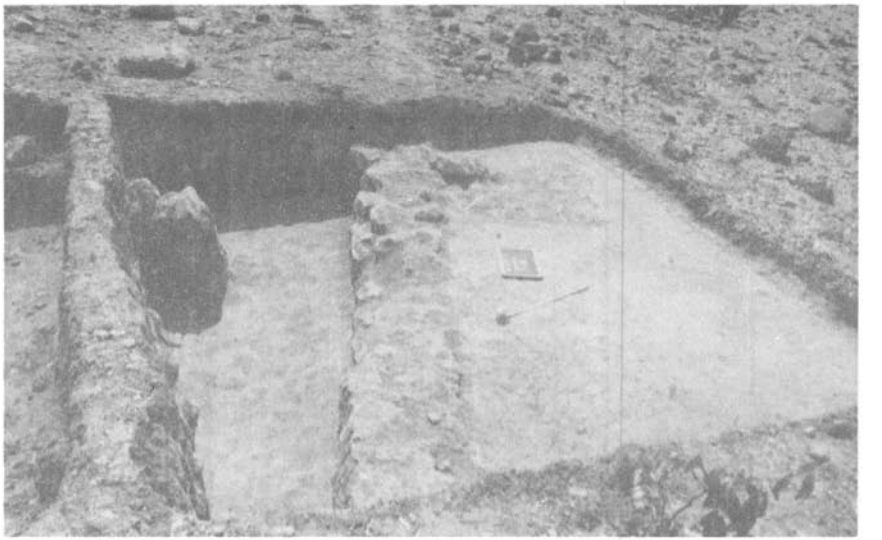
EXCAVATION UNIT N205K

LA IGLESIA VIEJA, CHACHOAPAN, OAXACA

ENDEQUE HOUSE







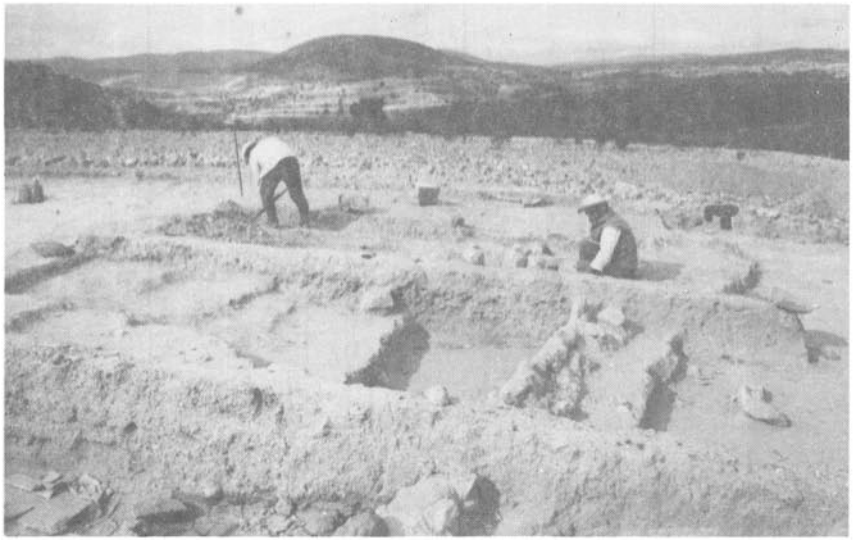


Fig. 32. Chachoapan, Limestone House: Extension along North Wall of South Courtyard (F-1). (Top Left)

Fig. 33. Chachoapan, Limestone House: Porch (F-28). (Top Right)

Fig. 34. Chachoapan, Limestone House: Early Postconquest Midden (F-2A) Beneath North Courtyard Floor (F-3). (Bottom Left)

FIG. 35
EXCAVATION UNIT N205K
LA IGLESIA VIEJA, CHALCATZINGO, OAXACA
LIMESTONE HOUSE

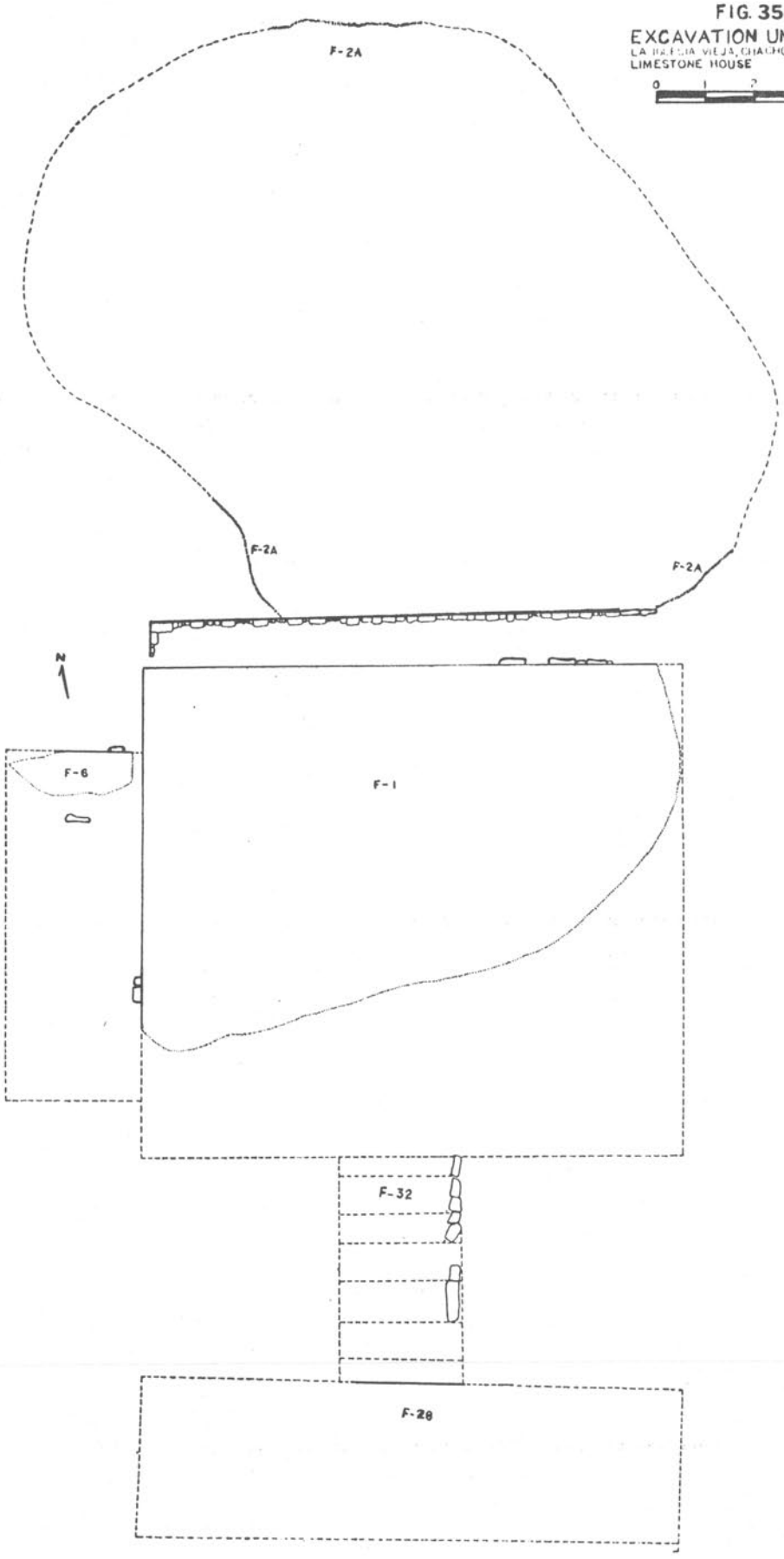
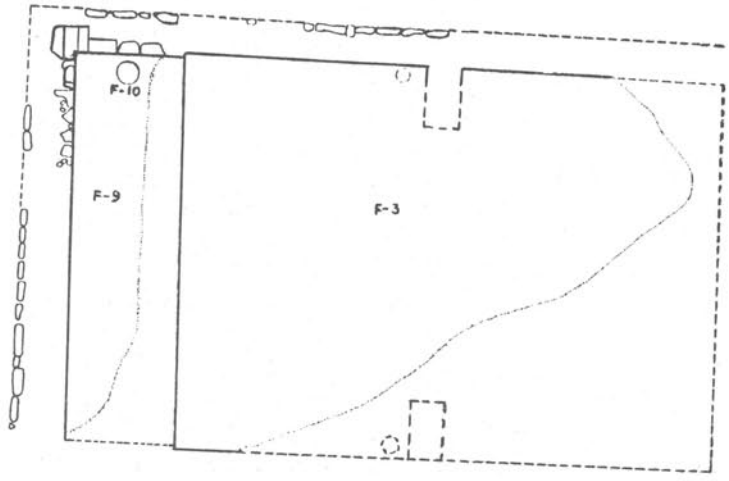
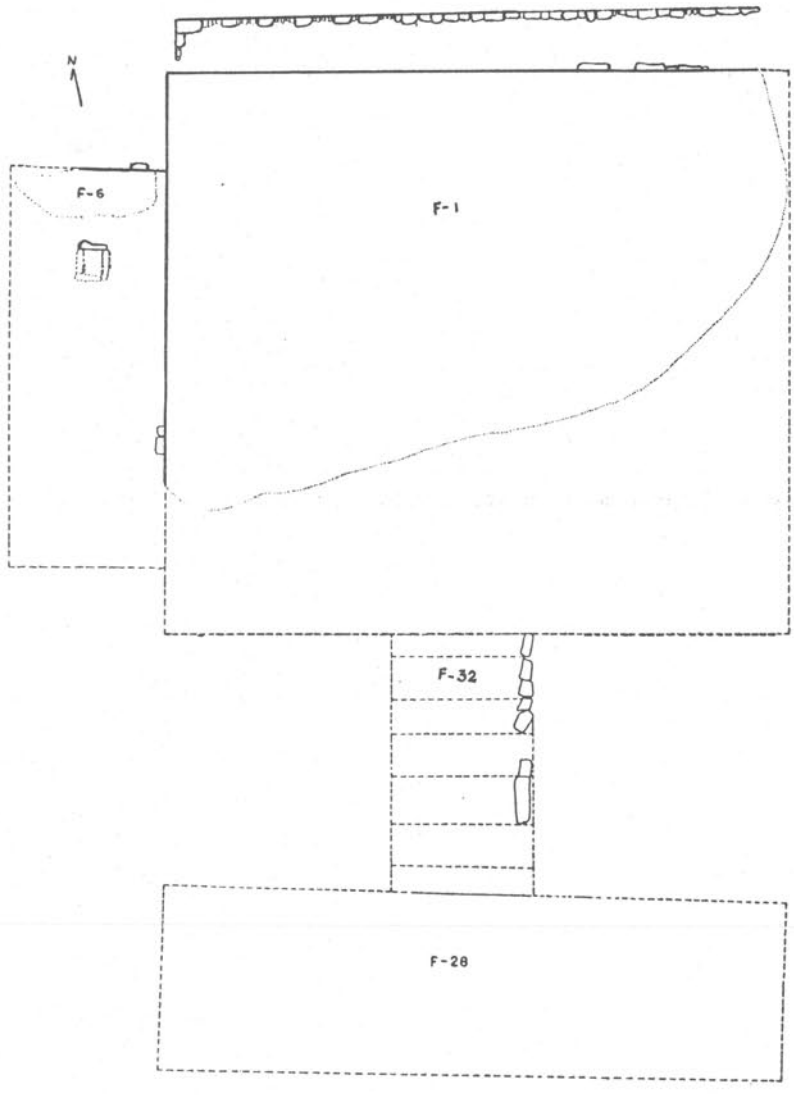


FIG. 36
EXCAVATION UNIT N205K
LA IGLESIA VIEJA, CHACHOAPAN, OAXACA
LIMESTONE HOUSE





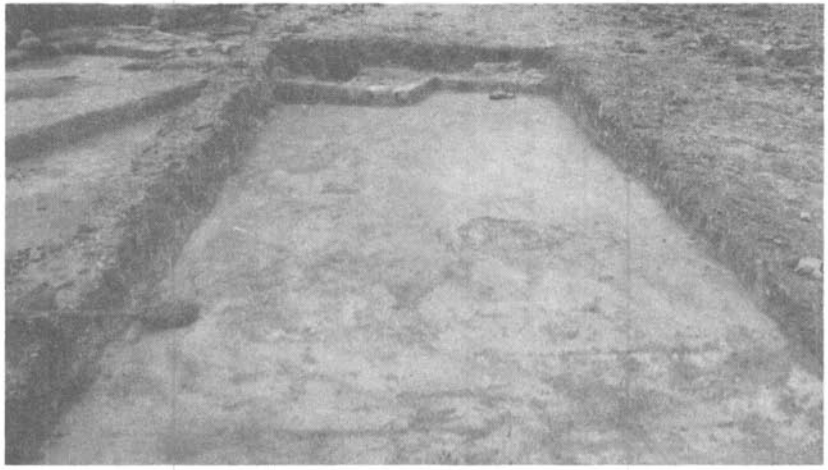


Fig. 37. Chachoapan, Limestone House: North Courtyard (F-3) "Roofed" Western Half.

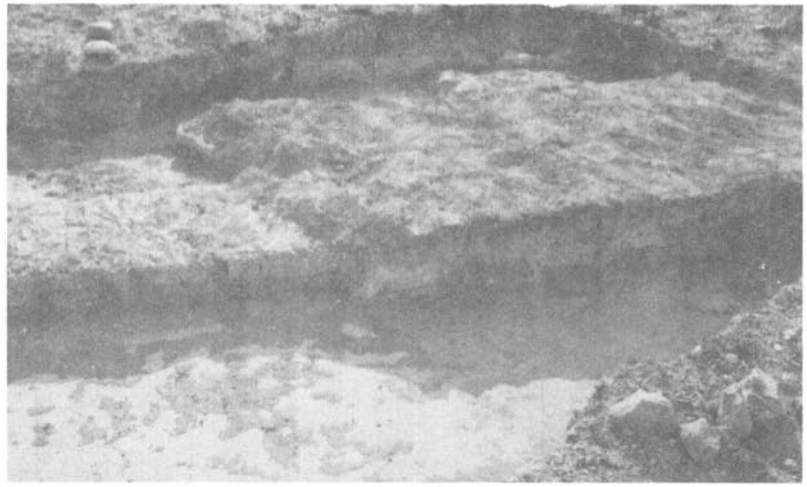


Fig. 38. Chachoapan, Limestone House: White Plaster Adhering to the Adobe Wall along Western Edge of Courtyard.

Fig. 39. Chachoapan. Limestone House: Eastern Half of North Courtyard (F-3).

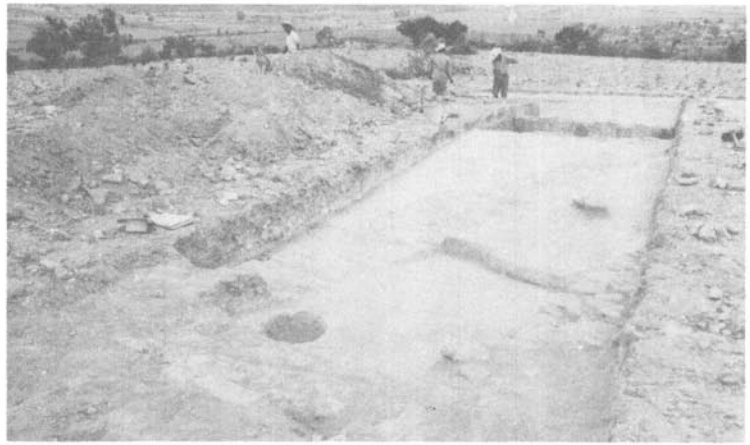


Fig. 40. Chachoapan, Limestone House: West Room or Kitchen (F-9) with Circular Hearth (F-10).

was destroyed by later construction, and its southern tip was destroyed by the plow. However, this room's function as a kitchen can scarcely be doubted. A broken comal rested on three stones within the hearth, and a broken but complete polychrome serving dish rested on the floor next to the hearth.

The Convento House

In its southern sections, the Convento house was built over middens, while in the north it rested nearly on top of bedrock. The Convento house has white plaster floors and walls of alternating large limestone blocks and small limestone slabs. Its preserved remains include two sunken courtyards, one in the east and one in the west, and five rooms (Fig. 41). With minor modifications, the north courtyard of the limestone house became the east courtyard (F-3) of the Convento house. The roofed area of this courtyard remained, but a thick adobe wall was built separating the courtyard from the earlier kitchen (F-9) on its west side. The end of the kitchen that had contained the hearth (F-10) was blocked off by a narrow adobe wall, perhaps converting it into a small storeroom, and a new white plaster floor (F-5) was laid over the rest of the kitchen (F-9) converting it into a narrow passageway. An endeque pivot stone marks a doorway in the northwest corner of this east passageway, and a step up through the doorway opens onto a second passageway (F-14) which leads to a small west courtyard (Fig. 42).

Most of the rooms cluster around the west courtyard (F-25) which, like the west passageway (F-14) that leads to it, is virtually intact (Fig. 43). A large circular area (F-25A) in the center of the courtyard contained what appeared to be decayed wood, suggesting that a large tree may have stood in the center of the courtyard. An intact endeque drain (F-31) opens off the southeast corner of the courtyard (Fig. 44). This drain passed beneath both a west room (F-29) and a wide porch (F-30W), located

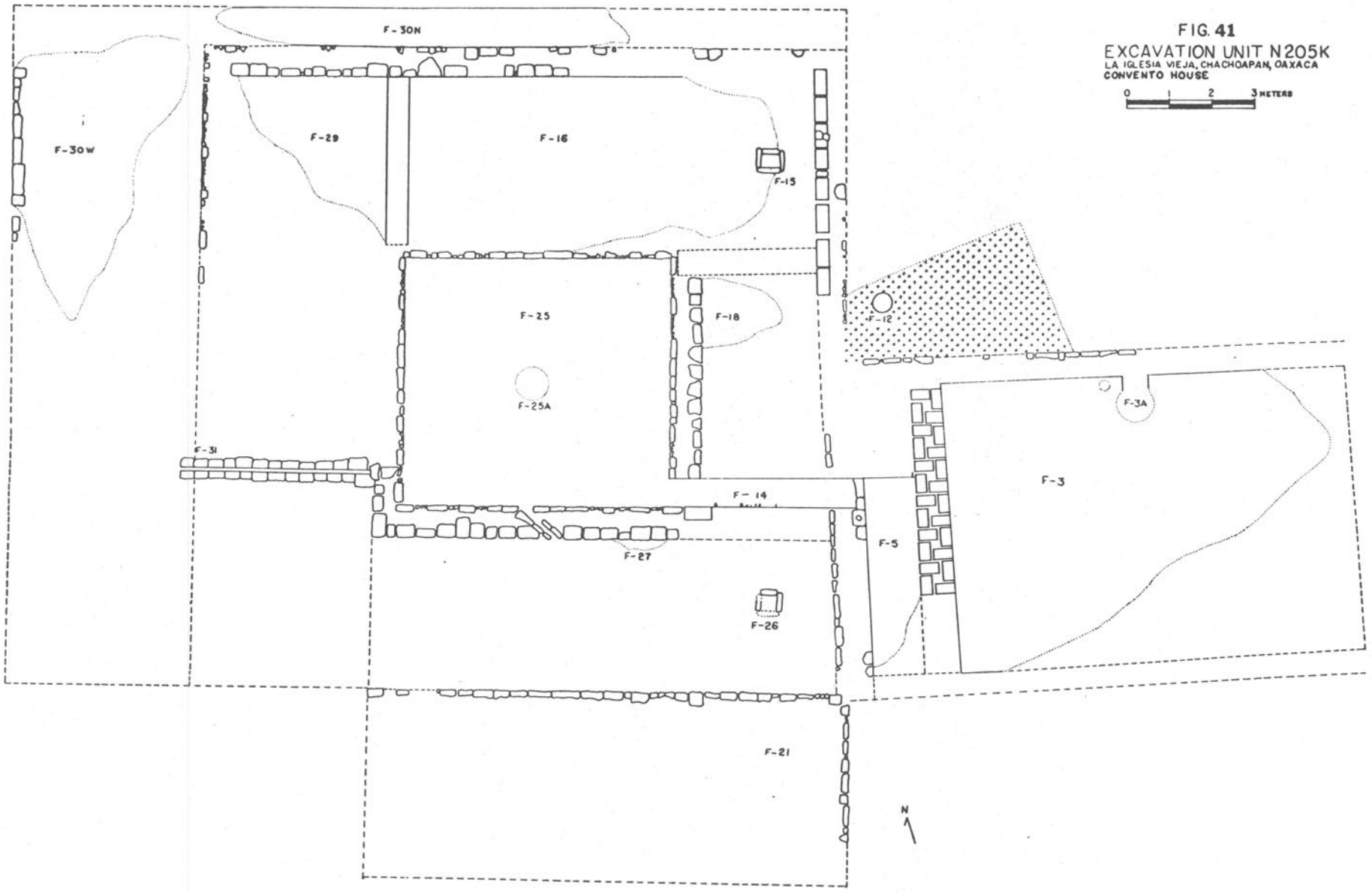


FIG. 41
EXCAVATION UNIT N205K
LA IGLESIA VIEJA, CHACHOAPAN, OAXACA
CONVENTO HOUSE
0 1 2 3 METERS

Fig. 42. Chachoapan, Convento House: Neal Byrd Stands with Stadia Rod in West Passageway (F-14) Leading toward West Courtyard (F-25). Dan Wolfman Stands in East Passageway (F-5) and Workman Clears Dirt from Floor of East Courtyard (F-3).

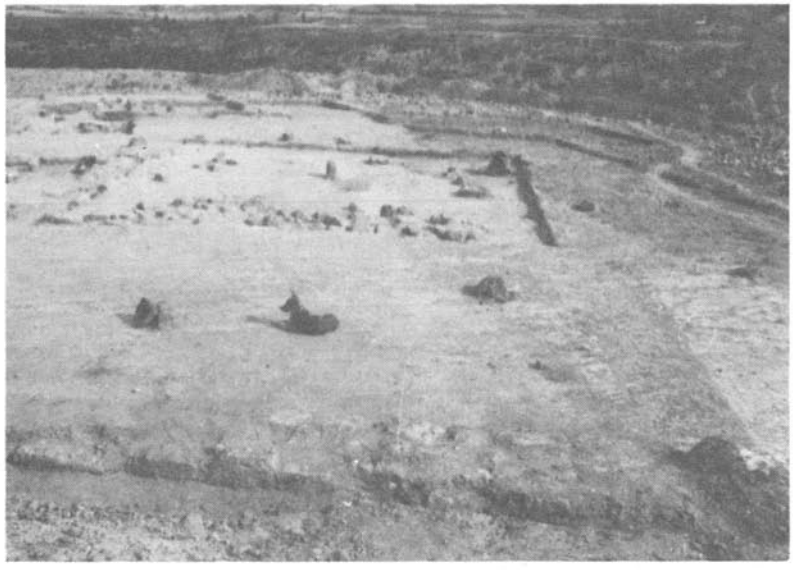


Fig. 43. Chachoapan, Convento House: Rooms Surrounding West Courtyard (F-25). Dog "Happy" Lies on Floor of North Kitchen (F-16).

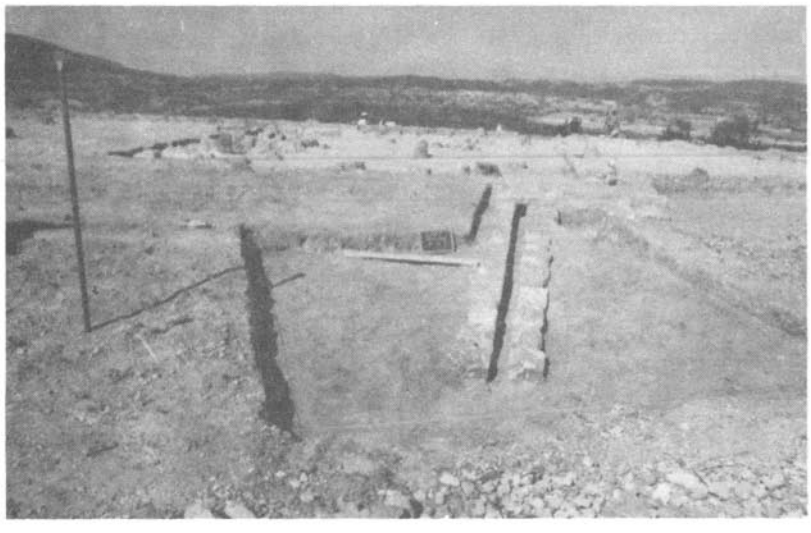


Fig. 44. Chachoapan, Convento House: Endeque Drain (F-31) of West Courtyard.

along the west side of the house, and terminated even with the outer edge of the porch.

The rooms on the north and south sides of the west courtyard have box-shaped stone-lined hearths indicating that they probably functioned as kitchens. The north kitchen (F-16) had its floor partly destroyed by plowing in the east section and its entire remaining floor was heavily plow-marked. Thick adobe walls separated this kitchen from the rooms to its east (F-18) and west (F-29). The west room (F-29) was probably very large although its southern limits could not be defined because they had been plowed away. The small east room (F-18), whose white plaster floor was virtually destroyed by plowing, was separated from the south kitchen by the narrow west passageway (F-14).

The kitchen on the south side of the courtyard had a small drain which opened out onto the courtyard at an angle oriented toward the courtyard drain. Except in a very small section along its north wall, this kitchen (F-27) had its entire floor destroyed by plowing and its hearth (F-26) had one of its four stones plowed away. A second large room (F-21) was located directly behind (south of) the south kitchen. The floor of this room had been entirely destroyed by the plow together with its southern and eastern walls.

Outside the house, north of the east courtyard (F-3) and east of the east room (F-18), a hard dirt surface with an unlined circular hearth (F-12) suggests a work area. The hearth had a broken tripod supported polychrome serving dish beside it and a broken tripod metate near it. A sloping white plaster floor (F-30W) provided a wide porch along the north side of the house, and a narrow white plaster walkway (F-30N) ran along the north side of the house. Plowing destroyed the walk both in its eastern and western extremities, and the porch retained only a small intact section of floor in the northwest.

An archeomagnetic sample from an intensely burnt and highly oxidized section of decomposed bedrock underlying the floor of the porch (F-30W) was taken by Dan Wolfman who tentatively dates the burning at ca. AD 1560. If accurate, this date indicates that the Convento house was built after AD 1560 which is compatible with its stratigraphic position. Several other archeomagnetic samples from the bottom of box-shaped stone-lined hearths in the Convento, limestone, and endeque houses turned out to be too incompletely oxidized for dating.

Summary

Evidence of continuous repairing, remodeling, and rebuilding suggests that a single household group and their descendants were responsible for constructing the three houses at N205K. The radiocarbon date of AD 1340 from midden deposits below the endeque house indicates that the house was built after AD 1340 but before the Spanish Conquest. Repairs to the endeque house after a fire had destroyed the kitchen were certainly carried out by the group that built the house or their immediate descendants. These repairs probably took place before the Spanish Conquest.

The household group that last occupied the endeque house, or their immediate descendants, also built the limestone house. The south courtyard (F-1) was laid over the earlier courtyard of the endeque house, and the west room (F-6), or kitchen, was built over the earlier kitchen of the endeque house. Material salvaged from leveling the north and east rooms of the endeque house was used in constructing the wall of the north courtyard of the limestone house. Trash from the last phase of cccupation of the endeque house was used to level the terrace, and the white plaster floor (F-3) of the north courtyard of the limestone house was laid right on top of the midden. The presence of pig bones in the midden indicates that the limestone house was built shortly after the Spanish Conquest.

The Convento house was certainly built by the household group who last occupied the limestone house or by their immediate descendants. Incorporation of the north courtyard (F-3) of the limestone house into the Convento house without resurfacing the courtyard floor indicates that a very short span of time separates the limestone and Convento houses. With the construction of the Convento house, the west room (F-9) of the limestone house ceased to function as a kitchen and was converted into a passageway with a storeroom on one end. The south courtyard of the limestone house and its kitchen were probably abandoned at the same time, suggesting that the limestone house was built anticipating construction of the Convento house whose two kitchens eliminated the need for the two kitchens of the "short-lived" limestone house.

Relatively good preservation of the houses at N205K provides ample data for defining nearly complete floor plans and, consequently, for deducing the social composition of the successive household groups who built and occupied these houses. In the absence of published documentary evidence pertaining to the social composition of household groups in the Nochixtlan Valley, complementary data from Carrasco's analysis of a very detailed sixteenth century census of households in the Tlacatecpan barrio of Tepoztlan, Morelos, and the Romneys' present-day study of the Santo Domingo barrio of Juxtlahuaca must suffice.

Carrasco (1964:190-91) defined four types of households in the Tlacatecpan barrio of Tepoztlan: (1) non-family households, composed of unrelated persons; (2) consanguineal households, composed of persons connected by purely consanguineal ties; (3) nuclear family households, composed of a married couple and usually including their children and/or other unmarried relatives; and (4) joint family households, composed of two or more married couples, usually two or more married brothers or a father and his married son or sons.

Nuclear and joint family households constituted 98% (531) of the 549 households in the Tlacatecpan barrio with nuclear family households accounting for slightly more than 26% and joint family households for nearly 72% of the total (Carrasco 1964:191). Comparative data from the present-day Santo Domingo barrio of Juxtlahuaca are quite compatible with Carrasco's sixteenth century data, since joint family households account for about 77% of the total and nuclear family households 23% (Romney and Romney 1966:xxi, Chart IV).

Within these two dominant household types -- joint and nuclear family households -- household size was about 4.4 persons (296 households with 1298 persons) per nuclear family household and about 7.3 (235 households with 1727 persons) per joint family household in Tepoztlan. However, other analyses led Carrasco (1964:209) to point out that household size in the Tlacatecpan barrio was well below average for Central Mexico. In the Santo Domingo barrio of Juxtlahuaca average nuclear family size was 6.5 persons, while joint family household size averaged 12.6 persons (Romney and Romney 1966:xx-xxi, Charts III-IV).

From his analysis, Carrasco defined a cycle whereby nuclear family households become joint family households with the passage of time. A nuclear family household, composed of a married couple and their children, became a joint family household of the "head-with-sons" type when the sons married and remained in their father's compound. With the death of the father, the eldest son became the household head and together with his younger married brothers formed a joint family household of the "head-with-brothers" type. "We see then the main cycle in family development from nuclear towards joint families of the head-with-sons and later of the head-with-brothers types, only occasionally growing to larger types" (Carrasco 1964:208).

A similar situation obtains in the Santo Domingo barrio of Juxtlahuaca today. As pointed out earlier, a young married couple will build their house within the husband's father's compound. However, "the major determinant as to whether or not a newly married couple will reside near the husband's family is the availability of space in the prospective compound" (Romney and Romney 1966:43). If space is not available to build a house, the couple will seek a place as near as possible to the family compound. Unlike Tepoztlan, the present-day Juxtlahuaca household groups have no institutionalized household head. "Rather, the adult men who are still in the prime of life all maintain more or less equal status" (Romney and Romney 1966:50).

If Carrasco's sixteenth century data from Tepoztlan are comparable with the Nochixtlan Valley in the sixteenth century, then we may assume that there is a 98% chance that the houses at Chachoapan were occupied by either nuclear or joint family households instead of non-family or consanguineal households. Assuming that each nuclear family maintained its own kitchen (room with hearth), as they do in Juxtlahuaca today, allows for distinguishing between nuclear and joint family households. Utilizing Naroll's (1962:587-89) figure of ten square meters of floor space per person with LeBlanc's (1971:210-11) qualification that it be "roofed" floor space allows for an estimation of the number of persons occupying each house. Finally, the cycle of household development may be determined from the stratigraphic sequence of houses.

The endeque house at Chachoapan appears to have had three rooms with a total of approximately 60 square meters of room floor space, or about six persons composing the household group. Since two of the rooms were destroyed, it is impossible to determine whether or not they were kitchens. However, the single preserved room contained a hearth indicating that it functioned as a kitchen. If this was the only kitchen, then a nuclear family

household most likely occupied the house. Since an average family in Juxtlahuaca contained about 6.5 persons, the endeque house was probably occupied by a nuclear family household.

The limestone house had three rooms (including the roofed area) with a total of approximately 70 square meters of room floor space, or about seven persons occupying the house. Two of the rooms were kitchens. The Convento house had five rooms with a total of approximately 145 square meters of room floor space, or about fourteen persons composing the household group. The presence of two kitchens suggests that a joint family household composed of two married couples were the occupants of the house.

The stratigraphic sequence of houses at Chachoapan appears to coincide with the main household development cycle outlined by Carrasco. A nuclear family household, most likely composed of a married couple and their children, occupied the endeque house. A joint family household, composed of a father and his (recently married?) son, occupied the limestone house. A joint family household, probably composed of a father and his married son with children or two married brothers with children, occupied the Convento house.

The number of persons composing the household groups appears to be consistent with the main cycle of household development as well. Six persons occupying the endeque house is consistent with the average nuclear family household in Juxtlahuaca. Seven persons occupying the limestone house is consistent with the addition of a daughter-in-law to the household group, as is the addition of a second kitchen for the newly married couple. Fourteen persons in the Convento house is consistent with the average of 12.5 persons per joint family household in Juxtlahuaca. A single household group and their immediate descendants, then, may have been responsible for constructing the endeque, limestone, and Convento houses at Chachoapan.

CHAPTER 4

THE SOCIOCULTURAL DIMENSIONS OF MIXTEC HOUSES

Close correspondence of the Chachoapan houses to Carrasco's cycle of household development and evidence of continuous repairs, remodeling, and rebuilding in both excavation units lend support to the hypothesis that two household groups, one in Chachoapan and one in Yucuita, and their respective descendants were responsible for building the houses in each of these communities. In each of the two excavation units a remarkably similar sequence of houses occurs. Endeque houses with red plaster floors, built in Natividad times, are succeeded by limestone houses with white plaster floors, built in Convento times. In both instances, Post-conquest remains occur initially with the construction of limestone houses.

The architectural similarities between the houses are marked. The endeque houses in both communities have red plaster floors and walls of carefully shaped endeques. With one exception, the walls of the endeque house at Yucuita manifest a panel design (Figs. 14-16). The exception, probably a later remodeling of the endeque house at Yucuita, has a design of alternating large and small endeque blocks identical to the design of the endeque house at Chachoapan (compare Figs. 17 and 29). The limestone houses in both communities have white plaster floors and walls of large limestone blocks alternating with small limestone slabs. Despite the scanty remains of the Convento house at Yucuita, its drain of carefully shaped endeques is virtually identical to the endeque drain of the much better preserved Convento house at Chachoapan (compare Figs. 22 and 44). Close similarities in the architectural details of the houses and similar stratigraphic sequences, then,

suggest that the groups that built and occupied the houses were probably contemporaries.

The location of the houses high in the piedmont zone at both Yucuita and Chachoapan combined with close architectural similarities indicate that the two household groups and their descendants enjoyed a similar socioeconomic status within their respective communities. To clarify the nature of their socio-economic status comparisons are necessary.

Peasant and Noble Households

Low in the piedmont zone on La Peña at N217H in Yucuita (Fig. 4), Broster uncovered the superimposed remains of two modest houses composed of a single room with a narrow porch along its west side. The earlier house, probably built in Natividad times, had a red plaster floor. The later house, probably built in Postconquest times, was constructed immediately on top of the earlier house and had a white plaster floor and a limestone foundation composed of alternating large and small blocks. The narrow sloping porch running the length of the west side of the house also had a white plaster floor. These successive houses, then, give the impression of modest imitations of larger houses, such as the endeque, limestone, and Convento houses at Chachoapan with their foundations of alternating large and small stones and their wide sloping porches with white plaster floors.

Today many modest dwellings in Yucuita and Chachoapan have one room with a concrete floor, the remaining rooms having dirt floors. This room, often with a small concrete slab providing a "porch" outside the entrance, houses the family altar and serves as a dining room used on fiesta days or for entertaining special guests. Present-day houses of the wealthy in both communities have several rooms with concrete floors including the kitchen. "Porches" and walkways paved with stone or concrete provide entry-ways to the houses and connect with room entrances. If the

present-day distinction between wealthy and modest houses is valid for the sixteenth century, then the houses uncovered by Broster represent peasant households, while the houses at N203J and N205K, which have many rooms with plaster floors and paved porches, walkways, and entryways, represent the large and elaborate houses of nobles.

Within the context of the rural community, then, it appears that the houses at Chachoapan (N205K) and Yucuita (N203J) were the wealthy residences of nobles. However, a rural community where population numbers scarcely two thousand does not provide the same social setting for a wealthy residence as a more urban community where population numbers over ten thousand. Whether or not the houses of the nobility in urban centers were similar to those in rural communities, then, remains to be determined by comparisons.

Noble Rural and Urban Households

Comparative data are provided from Bernal's excavations in the Inguiteria sector of the Mixteca Alta urban center of Coixtlahuaca, located immediately north of the Nochixtlan Valley (Fig. 2). The architecture of the houses at Coixtlahuaca was very similar to the Chachoapan and Yucuita houses. Bernal (1949:7) notes that: "El sistema de construcción es el típico Mixteco o sea que los muros están formados por algunas piedras grandes planas y otras pequeñas generalmente también planas y bien talladas, que ocupan los espacios intermedios (foto 1)." Likewise, kitchens in the Coixtlahuaca houses had box-shaped stone-line hearths (tlecuiles). At least one of the houses (Edificio 1) excavated by Bernal proved to be a wealthy residence (Bernal 1949:19-20). This house had a limestone foundation and white plaster floors, similar to the limestone and Convento houses at Chachoapan and Yucuita. The rooms of the Coixtlahuaca house (Edificio 1) appear to have been arranged around two or three courtyards, and paved porches, walkways, and vestibules bordered the house and provided entryways

(Bernal 1949:19-20). The presence of three kitchens (rooms with hearths or tlecuiles) indicates that a joint family household, composed of three nuclear families, occupied the Coixtlahuaca house.

Despite the fact that it is located in an urban center, the Coixtlahuaca house (Edificio 1), which certainly is a wealthy residence, is no more elaborate than the wealthy houses at Chachoapan and Yucuita. This suggests that the urban elite occupied houses which were virtually identical to the houses of the rural gentry. In either context, then, urban center or rural community, the houses of nobles are of comparable status and are distinctive from peasant households. However, whether or not the houses of nobles can be distinguished from the houses of caciques or royalty must be determined by comparing royal and noble house remains.

Royal and Noble Households

According to a sixteenth century document, the palace of the cacique of Yanhuitlan had nine courtyards surrounded by elaborately furnished rooms (Spores, personal communication). The remains of this palace still stand in Yanhuitlan, and Spores (1972:96-97) describes it as follows:

> This is the large and elaborate "palace" built during the mid-sixteenth century for don Gabriel de Guzmán, Cacique of Yanhuitlan ... The original complex ... may have been as much as 90 - 95 meters long and 65 meters wide. Despite the fact that much of the facing stone has been removed, the standing walls are still more than 1 meter thick. Arches, domes, doorways, plaster walls, well coursed masonry, plaster floors, and mixed stone and adobe construction are abundantly evident. Many architectural features found in the Cacique's house are also found in the Yanhuitlan Convent. This is an architectural indicator of the close tie between the Yanhuitlan Cacique and the Dominican Friars, the former seeing to the provision of native labor and services and the latter furnishing the design for both the Convent and the Cacique's sumptuous quarters.

Both the Convento house at Chachoapan and the Coixtlahuaca house measure about 20 meters in width and 30 meters in length which is only about one third the size of the cacique's house at Yanhuitlan.

A clear-cut distinction, then, obtains between the houses of nobles and the royal palaces of caciques. Furthermore, Cortes's report that his soldiers "...habían visto una casa de aposentamiento y fortaleza que es mayor y mas fuerte y mas bien edificado que el castillo de Burgos" (Dahlgren 1954:134) in reference to the palace of the cacique of Tamazulapan indicates that large and massive palaces were not restricted to Yanhuitlan nor to early colonial times. However, since no royal palace in the Mixteca has been extensively excavated, an embarrassing gap exists in the archeological record of Postclassic and early colonial Mixtec houses. Excavations of royal palaces, such as the palaces of the caciques of Yanhuitlan and Tamazulapan, are desperately needed to clarify the nature of royal households.

Conclusions

The only apparent archeological distinction between Chachoapan as a rural cabecera and Yucuita as a rural subject community lies in the presence of Preconquest and early colonial ceremonial precincts at Chachoapan and the absence of comparable ceremonial precincts at Yucuita. Both rural communities manifested two social classes -- nobles and peasants. The apparent absence of royalty (caciques) at Yucuita is consistent with its status as a subject community of Yanhuitlan. The apparent absence of royalty (caciques) at Chachoapan, while inconsistent with its status as a rural cabecera, is consistent with its history as a cabecera without a resident cacique throughout the sixteenth century and for an unknown number of generations before.

The houses at Chachoapan and Yucuita, while much more elaborate than peasant houses, are modest in comparison with the palaces of caciques and therefore must represent the houses of

nobles appointed as administrators. The location of the Chachoapan Convento house adjacent to the early colonial church presents a pattern which also obtains in the urban center of Yanhuitlan where the cacique's palace was located adjacent to the church (Spores 1972:96). Since the cacique of the kingdoms of Tamazola and Chachoapan remained a resident of the distant cabecera of Tamazola, it is likely that the Chachoapan houses were occupied by successive noble administrators appointed by successive caciques to oversee their interests at Chachoapan. The architectural similarities between the Chachoapan and Yucuita houses suggest that the Yucuita houses were also occupied by important noble administrators appointed by the caciques of Yanhuitlan to govern the subject community of Yucuita.

The continuity of successive house remains at Chachoapan and Yucuita attests to the persistence of these noble families over a period of several generations with no change in their social status. This suggests that caciques appointed nobles to serve as administrators for life and that, precluding gross misconduct or incompetence, these administrators had the persuasion to secure appointments for their offspring. While the manner in which noble administrators may have secured appointments for their offspring is unclear from documentary sources, it may be argued that intrakingdom marital alliances among nobles, analogous to interkingdom marital alliances among caciques, played an important role.

For example, if the brother of a cacique were appointed to rule a subject community, such as Yucuita, it is conceivable that this appointment was made in conjunction with a marriage arranged between the cacique's brother and the daughter of the previous administrator who, himself, may have been an uncle (father's brother) of the cacique who was appointed by the cacique's father. If the married couple, the cacique's brother and the daughter of the previous administrator, produced a son, it is likely that the

son would be appointed by his cousin, the cacique in the next descending generation, as administrator of the same subject community. Thus, noble administrators secured appointments for their children and grandchildren and remained as the noble administrative family of the subject community over successive generations.

The continuity of noble administrative families and their successive descendants for several generations at Chachoapan and Yucuita, reflected in the successive remains of houses, then, may be a result of establishing successful marital alliances with the untitled siblings of caciques and noble families in other communities. Community exogamy on the part of noble families may account for the presence of houses of comparable status in both rural communities and urban centers with intermarriage preventing development of a marked contrast between an urban elite and a rural gentry. The persistence of noble administrative families and their successive descendants from Preconquest to Postconquest times in both Chachoapan and Yucuita is also reflected in the house remains and supports Spores's (1967:96) contentions that the Postconquest custom of caciques appointing nobles to administrative positions represents the continuation of a Preconquest practice.

Despite the continuity evidenced in the persistence of noble administrative families and their successive descendants at Chachoapan and Yucuita, a number of changes take place in house architecture from Preconquest to Postconquest times. Perhaps the most dramatic shift in house architecture at both Chachoapan and Yucuita is the Preconquest to Postconquest change from endeque houses with red plaster floors to limestone houses with white plaster floors -- a pattern which deserves special attention with regard to house construction activities.

Endeque, like chalk, is relatively soft and light-weight. Kirkby (1972:15) describes endeque as a duricrust deposit of calcrete:

> Like other duricrust deposits, it has the texture of soil as long as it is beneath the surface in the soil, and may be cut with a spade or similar implement. Once exposed to the air and allowed to dry out, it hardens to an almost rock-like material which allows it to be used as a building stone ... of low to moderate strength.

To quarry endeque, then, simply requires carving out blocks of the desired shape and size. After the blocks are removed and allowed to dry, they may be transported easily because of their light-weight with respect to volume, and to further shape them is not difficult because of their chalky consistency. All the large endeque slabs used in constructing the endeque houses at Chachoapan and Yucuita were carefully shaped into a rectangular form with perfectly flat surfaces. While the process of quarrying and shaping endeques must have been technologically simple, it must also have been a very time-consuming process.

Limestone, unlike endeque, is relatively hard and heavy. To quarry limestone, however, is fairly simple. Richard Redding examined a limestone quarrying site at Yucuita, which was quarried in Prehispanic times, and found that a sturdy blow releases a limestone block along the natural fractures in the outcrop. The block is fairly regular along the fracture surface and requires no additional shaping for wall construction. An examination of the limestone blocks used in the limestone and Convento houses at Yucuita and Chachoapan indicates that the stones had not been shaped but, instead, manifested the natural fracture surface. The procurement of limestone for house construction, then, was probably much less time consuming than the procurement of endeque.

Sources of endeque and limestone are available at both Chachoapan and Yucuita, and quarrying operations are evident in a limestone outcrop on the Cerro directly behind excavation unit

N203J at Yucuita. However, surprisingly enough, Richard Redding's examination of the limestone from the Cerro indicated that the limestone blocks used in the construction of the limestone house at Yucuita did not come from the outcrop on the Cerro (N203). Instead, they came from limestone outcrops on the Peña (N217) where Broster uncovered the remains of peasant households. This suggests that peasants must have been involved in quarrying limestone blocks for the construction of the noble's house at N203J.

Caciques obtained labor services from peasants for any necessary house repairs or construction, and the above information indicates that nobles were also provided with such services by the local community. A sixteenth century document voices complaints by the cacique of Yanhuitlan that his household labor supply was not sufficient (Spores 1967:162-64). The Dominican's active campaign of church building drew heavily on the labor supply that had once been available to caciques and nobles.

The Preconquest to Postconquest change from endeque to limestone in house construction, then, may reflect a Preconquest to Postconquest reduction in the nobility's access to labor services. Utilizing limestone eliminated the time consuming task of carefully shaping endeques, and the change from red to white plaster floors eliminated the additional steps of procuring and preparing pigment to color the floors. A drastic reduction in labor supply during construction of the early colonial church at Chachoapan may, in fact, be reflected in the utilization of stones from the endeque house to build the small limestone house. Construction of the Convento house may have been possible only after completion of the church.

The houses at Chachoapan and Yucuita appear to have been occupied by noble administrators who, together with their families, established their residences at Chachoapan and Yucuita around AD 1340. The successive descendants of these noble administrators,

together with their families, continued to reside in Chachoapan and Yucuita and ruled as noble administrators into the sixteenth or seventeenth century (AD 1660). Peasants in the rural communities appear to have accorded labor services to these noble administrators throughout Preconquest and Postconquest times. Independent confirmation of the noble status of the households at Chachoapan and Yucuita and the nature of the activities carried out by these households will be presented in a detailed analysis of the ceramic artifacts associated with the house remains forthcoming in this series.

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