From: Prehispanic Domestic Units in Western Mesoamerica,
ed. Hirth & Santley, 1993

Chapter

10

Houses and the Settlement Hierarchy in Late Postclassic Morelos: A Comparison of Archaeology and Ethnohistory

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INTRODUCTION

The spatial context of houses and related features is a crucial component in the explanation of the nature and significance of ancient households and domestic groups. Archaeological research on this issue, typified by many of the papers in this volume, is based upon the fundamental archaeological principle that the spatial patterning of artifacts and features has social significance (Binford, 1982; Butzer, 1982). An important consideration in studies of spatial relationships is the scale at which patterns are sought, for different variables and processes come into play at different scales (Kowalewski et al., 1989:1-3). Two common scales employed by archaeologists in spatial studies of houses may be termed the "houselot" scale and the "house cluster" scale. Studies at the former scale analyze relationships among individual structures, features, and deposits in an attempt to elucidate domestic organization and activity patterns (e.g., Killion, 1990; Santley and Kneebone, chapter 3), while the latter scale is employed to examine relationships among houses, compounds, and patio groups for the analysis of larger scale social groups and settlement organization (e.g., Ashmore, 1981).

This chapter is a study of Prehispanic houses at the second or larger of the two spatial scales identified above. An examination of the spatial contexts of Late Postclassic houses in Morelos suggests a hierarchical classification of archaeological remains into four levels of settlement: the house, patio group, house cluster, and macrocluster. For the social interpretation of these levels, we are fortunate in having documentary sources describing the social composition of rural settlements in Morelos within 20 years of the Spanish Conquest. These sources also reveal a four-level spatial hierarchy that corresponds closely to the archaeological hierarchy. This chapter describes the two hierarchies and demonstrates their formal comparability, leading to an interpretation of the social context of the archaeological remains. The results show that the spatial distribution of archaeological features and settlements can clearly reveal significant hierarchical social groupings from the past, and they suggest that archaeologists need to consider spatial patterning on a variety of scales, from the individual deposit or structure up the region.

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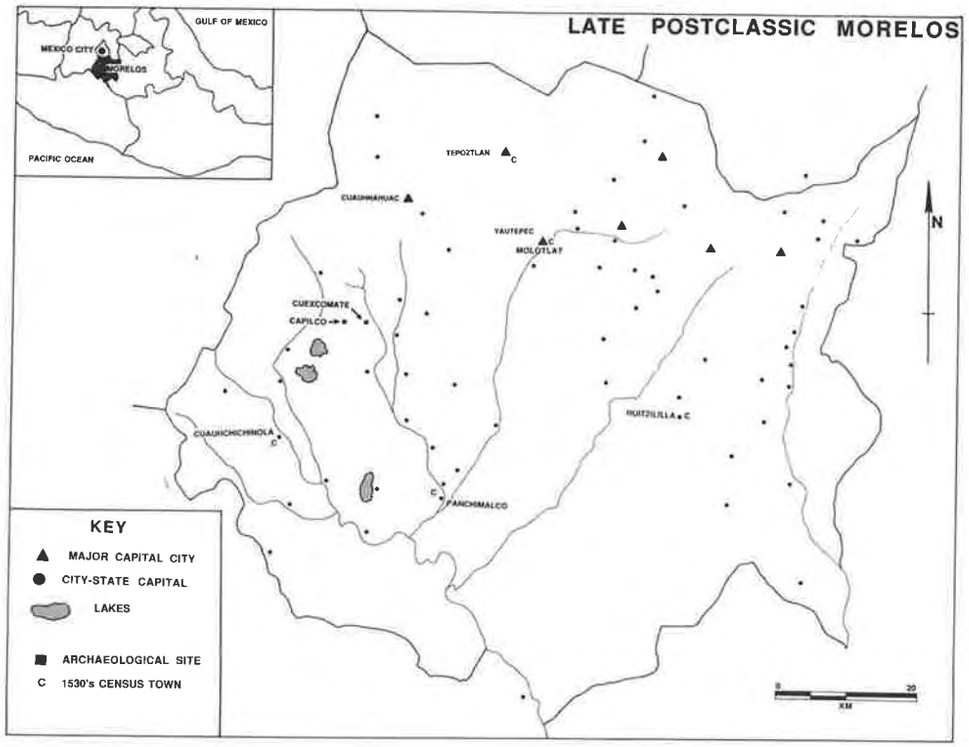

Figure 1. Map of Late Postclassic Morelos showing the study area of the Postclassic Morelos Archaeological Project and the towns represented in the Nahuatl census documents.

RESEARCH SETTING: WESTERN MORELOS

At the time of Spanish Conquest, Morelos presented a complex sociopolitical landscape. There were seven powerful "conquest-states", all but one of which included a number of subordinate conquered city-states. Figure 1 shows the locations of documented 16th-century towns (capitals of conquest-states and city-states) following the reconstructions of Gerhard (1970) and Smith (1983). The largest and most populous conquest-state, Cuauhnahuac, was incorporated into the Triple Alliance empire as a single province of the same name, while the other states (Tepoztlan, Yautepec, Huaxtepec, Totolapan, Yacapitztla, and Ocuituco) together formed the imperial province of Huaxtepec (Gerhard, 1970; Smith, 1983). Apart from these three political levels (the city-state, conquest-state, and empire), the inhabitants of Morelos were politically and economically subject to local nobles, producing a multitiered political and tributary hierarchy.

Conquest Period population levels in Morelos were quite high, with an overall regional population density in the range of 140 persons per square kilometer (Smith, n.d.). This is a very high density for a preindustrial society, and only slightly lower than Sanders' estimate of 160 persons per square kilometer for the Basin of Mexico (Sanders, 1970:430). Limited archaeological survey data points to a dramatic surge in the final Prehispanic centuries (between the Temazcalli and Cuauhnahuac Periods in western Morelos) that produced the high historically derived population densities (Smith, 1992a; Sterpone, 1988; Kenneth Hirth, unpublished notes). This population was supported by two forms of intensive agricultural production. Documentary sources depict widespread canal irrigation along the many rivers in Morelos (Maldonado, 1984), and archaeological fieldwork has revealed extensive Late

Postclassic terracing (both hillside contour terraces and cross-channel terraces or check-dams) in hilly regions (Price, 1988; Sterpone, 1988).

My approach to the correlation of archaeological and ethnohistorical data begins with the observation that these are two very different types of information, each of which must be examined and analyzed on its own terms before detailed comparisons can be made (see Smith, 1987). In this study, the ethnohistoric record provides a social classification that is used to interpret the archaeological remains. I first describe independent spatial hierarchies established from archaeology and ethnohistory. Next, formal comparisons are made to assess the similarities and differences between the two hierarchies. Finally, some of the wider implications of the analysis are discussed.

ARCHAEOLOGY

Most of the archaeological data discussed in this article derive from excavations carried out in 1986 by the Postclassic Morelos Archaeological Project under my direction. Three sites in the village of Tetlama (near Xochicalco) were excavated: Cuexcomate, a complex site of about 140 houses plus other structures covering 15 hectares; Capilco, a smaller site of 20 simple houses; and "Site 3", a small settlement consisting of two houses in an area of agricultural terracing (see Figure 1). In functional terms, these sites are interpreted as a town with low-level urban functions (Cuexcomate), a village (Capilco), and a farmstead (see Smith et al., 1989; Smith, 1992a).

The basic goal of the fieldwork and continuing analysis of data is to reconstruct rural society in this area for each of two Late Postclassic phases, Early and Late Cuauhnahuac (dated to ca. 1350 to 1430 and 1430 to 1530 A.D., these correspond to the periods before and after western Morelos was conquered by the Aztecs). Topics under investigation include agricultural systems, craft production, trade, social stratification, and the impact of Aztec imperialism. The fieldwork is described in detail by Smith (1992a). The archaeological findings from western Morelos can be arranged into four hierarchical levels of settlement with probable sociological significance: the house, the patio group, the house cluster, and the macrocluster. These are discussed in turn.

Level 1: The House

Two major types of houses are present at the excavated sites: ground-level houses and platform houses. *Ground-level houses* are rectangular structures built at the level of the ground with stone foundation walls. The walls above the stone foundations were probably constructed of adobe bricks. Floors were made of a layer of rough stone cobbles topped by a thin level of crushed tepetate soil. Nearly all ground-level houses have a single room, and a number of examples (primarily at Capilco) showed evidence of more than one construction phase. Cuauhnahuac phase ground-level houses are quite small in size, with a mean living area of only 14.1 sq m (based upon excavation of a random sample of houses at Capilco and Cuexcomate). This contrasts greatly with Aztec houses excavated elsewhere in Central Mexico. In the Basin of Mexico, rural settlements in the Teotihuacan Valley have houses in the range of 40 to 150 sq m in area (Evans, 1985, 1988), and Aztec Period houses excavated by Sisson (1973) in the Tehuacan Valley are in the same range. Whereas the large, ground-level multiroom dwelling is the norm in the Basin of Mexico and Tehuacan, no houses of this type are found in Late Postclassic Morelos. Ground-level houses comprise the most numerous category of structure in Postclassic western Morelos, and they are interpreted as the residences of the bulk of the population (Figure 2).

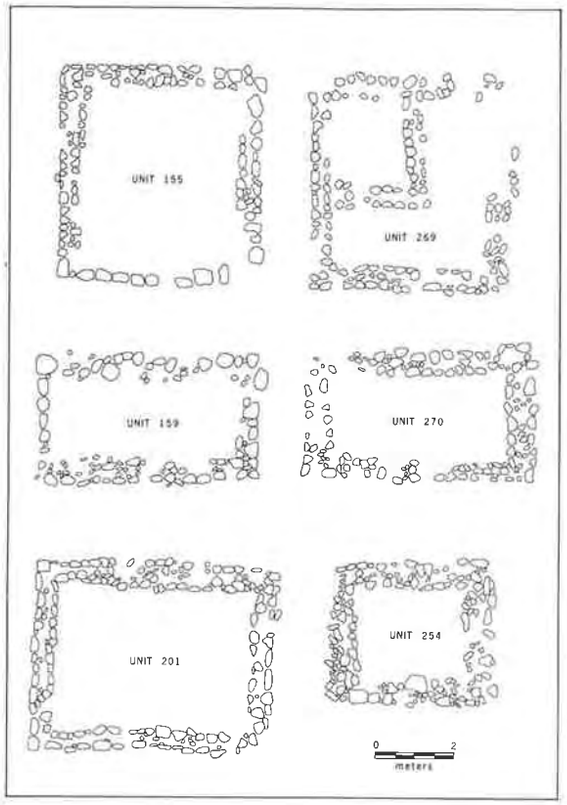

Figure 2. Cuauhnahuac phase ground-level houses from Capilco and Cuexcomate.

Platform Houses are structures built on raised stone platforms and situated as part of patio groups. The residential function of platform houses is inferred from (1) their occurrence in patio groups, a common arrangement among the more common ground-level houses; (2) the presence of domestic artifacts around the structures; and (3) the presence of rooms on top of the larger examples. Membership in a patio group is used to distinguish platform houses from temple platforms which are free-standing. There are two types of platform house at Cuexcomate. The first, type A, encompasses four interconnected platforms that comprise patio group 6, one of the key architectural clusters at Cuexcomate. The four platforms are approximately 0.7 m high and have a combined top area of 562 sq m and a fill volume of 482 cu m. They have a series of rooms formed by stone walls atop the platforms, and excavation of the largest structure revealed a complex history of construction employing dressed stone walls and red-painted lime plaster floors and wall coverings. The layout of group 6 — a series of rooms opening onto a central courtyard with a single entrance — corresponds to the typical plan of Aztec palaces as discussed by Evans (1991). The high quality of the construction, coupled with artifactual studies indicating high frequencies of imported and decorated ceramics, support the notion that this group was a palace compound, the residence of a high-ranking elite lord. Group 6 was constructed and occupied in the Early Cuauhnahuac phase, and then was apparently abandoned during Late Cuauhnahuac times, when group 7 became the focal residential compound at Cuexcomate.

The second type of platform house, type B, contains smaller structures generally under 0.5 m in height, not connected to other structures but integrated into patio groups. The quality of construction is clearly inferior to the large platform houses of group 6. These structures are only slightly larger in surface area than are ground-level houses. They may represent residences of wealthy households, although not on the same scale as the houses in group 6.

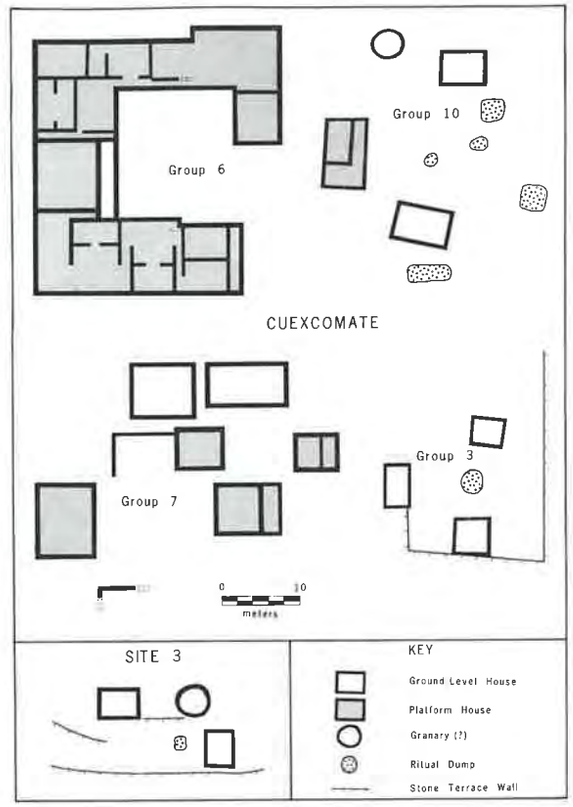

Figure 3. Patio groups at Capilco and Cuexcomate.

Level 2: The Patio Group

Most houses at Cuexcomate (65%) are part of patio groups, while another 13% are found in informal groups. Patio groups are defined by the arrangement of two or more houses around a common rectangular level area or plaza. Patio groups often have circular structures (possible granaries) and/or rock piles (ceremonial artifact dumps) as constituents. These groups give an impression of formal planning, and thus close socioeconomic connections among the households inhabiting patio groups may be inferred. Most patio groups have three or four houses, while two complex groups (groups 1 and 7) have six houses each. Several patio groups are illustrated in Figure 3. Informal groups consist of two houses located within 5 m of one another. These groups lack any surface evidence of additional structures or common plaza areas, and their social significance is problematic.

Our excavations suggest that all of the houses located in patio groups were functionally similar residential structures. Refuse deposits of typical domestic debris are found outside of all such structures and the only major architectural differentiation among rectangular structures within patio groups is found in five groups that each have a single small platform house in addition to ground-level houses. Nonresidential structures found in patio groups are limited to circular structures and rock piles, and no evidence was found for shrines as in patio groups at some Mesoamerican sites.

Patio groups 6 and 7 (Figure 3) served as elite residential compounds in the Early and Late Cuauhnahuac phases, respectively. The four type A platform houses comprising group 6 stand out from other Early Cuauhnahuac houses in their size, labor investment, and quality of construction, and these architectural distinctions are mirrored by wealth-related differences between the portable artifacts associated with this group and other houses. The architecture

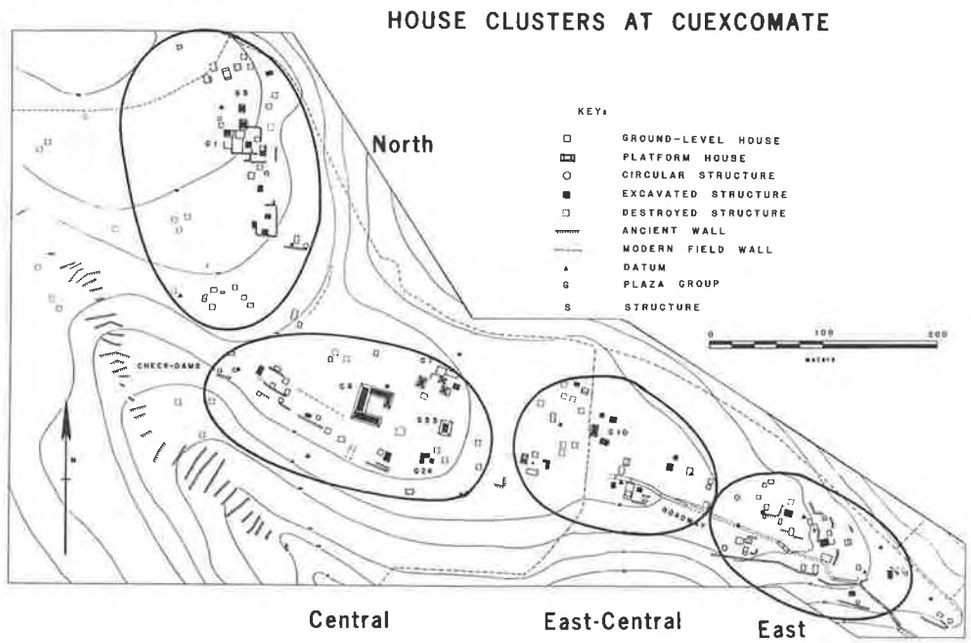

Figure 4. Map of Cuexcomate, a town settlement consisting of a single macrocluster and containing four house clusters.

of patio group 7 presents less of a contrast to other houses in the Late Cuauhnahuac phase, but this group does stand out in several respects: (1) it has seven houses, more than most patio groups; (2) it has four (type B) platform houses, three more than any other group in the Late Cuauhnahauc phase; (3) it is located on the central public plaza at Cuexcomate adjacent to the temple; and (4) its portable artifacts are distinguished from those of other houses in a similar manner as those of group 6 in the earlier period (Smith, 1992a). In addition to the patio groups located within larger settlements, these groups also form discreet isolated settlements or sites; one such unit, "Site 3", received limited test excavations.

Level 3: The House Cluster

Structures and patio groups tend to be located near other similar units, forming clusters that are sometimes spatially discreet. The site of Capilco comprises one such cluster, while Cuexcomate consists of four apparent clusters (Figure 4). The major platform structures and nearby houses in the center of Cuexcomate comprise one cluster, and houses in the northern portion of the site are clustered around patio group 1. The eastern portion of the site has houses spread along the narrowing ridgetop; this area has two apparent clusters. Based upon the hypothesis that the clusters at Cuexcomate may have socioeconomic significance, three areas were sampled separately in a probability sample of excavated houses (the east and east-central clusters were considered together); this hypothesis is being evaluated with statistical studies of the artifacts. Two of the house clusters at Cuexcomate contain complex patio groups that may have been the residences of elite households: group 1 for the north cluster, and groups 6 and 7 for the central cluster in the Early and Late Cuauhnahuac phases, respectively. The clusters shown in Figure 4 are subjective spatial groupings; more objective quantitative spatial clustering methods will be applied in the future. Capilco, without platform houses, provides an example of a discreet house cluster without a central focus.

Level 4: The Macrocluster

This level of settlement consists of two or more house clusters located adjacent to each other. The site of Cuexcomate consists of a macrocluster, and a number of these units are found in the Buenavista lomas north of Cuexcomate currently under investigation by Sterpone (1988). Until that work is completed, it may be premature to generalize about macroclusters. At Cuexcomate, and apparently at other examples in the lomas, macroclusters are nucleated around major mound groups corresponding to elite residential compounds and/or temple platforms. Thus, groups 6 and 7 and the temple platform (structure 55) serve as the focal point not only of the central house cluster, but of the entire Cuexcomate macrocluster as well. There is a difference between settlement at this level in the Postclassic Morelos Archaeological Project study area compared to the Buenavista lomas. Cuexcomate (a macrocluster) and Capilco (a cluster) are discreet settlements with relatively clear boundaries, whereas settlement in the lomas area is more continuous without clear spatial divisions. In fact, the whole notion of an archaeological "site" as a discreet bounded settlement area is not applicable to the lomas settlement patterns. Nevertheless, spatial clustering does exist, and this forms the basis for the identification of clusters and macroclusters in this area.

ETHNOHISTORY

The relevant ethnohistorical documents considered here are a series of house-by-house census records from several towns in Morelos produced within 20 years of the Spanish Conquest. These documents, written in Nahuatl, come from the communities of Tepoztlan, Molotla, Cuauchichinola, Huitzililla, Tepetenchicalcan, and Panchimalco. I rely on the articles of Pedro Carrasco (1964a, 1964b, 1968, 1972, 1976a, 1976b) who has studied and described this material. While Carrasco's articles are useful analyses that provide abundant information on kinship, tribute, and social stratification, they fall short of a comprehensive analysis of the documents. The publication of several of the documents (Hinz, Hartau, and Heimann-Koenen, 1983) represents an advance, but a full social analysis is still lacking. Nevertheless, Carrasco's studies do provide sufficient information to discuss the settlement hierarchy at these communities. Four levels of residential or territorial organization are represented in the documents: *calli* ("house"), *ithualli* ("houses grouped around a patio" or house compound), and two levels of *calpulli* ("district"), referred to here as *chinamitl* and *calpulli*, respectively. These levels are discussed in turn; this section is based on Carrasco's research (1964a, 1964b, 1968, 1972, 1976a, and 1976b).

Level 1: *Calli* (House)

Houses were inhabited by households or domestic groups, and these social units have been a major topic of analysis by Carrasco. On this level, considerable variability in size and structure is found in the census data. Both nuclear and joint families are present, and within the latter category there is a range of household structure including both affinal and descent ties between constituent family units and a few examples of unrelated constituent families. In most cases, joint families constituted a single economic unit in terms of agricultural activities and tribute assessments.

Although Carrasco does not address this point, information scattered in his articles suggests that the major determinants of household size within communities (including both joint vs. nuclear structure and the number of members within these types) are: (1) social class (noble households are generally larger than those of commoners; Carrasco, 1972); (2) amount of agricultural land worked by commoner households (Carrasco, 1972:243); and (3) the

effects of demography and development cycles (Carrasco, 1964a:206f, 1976b:63). Comparative evidence from other agrarian states reveals the same determinants of household size and suggests that the second determinant (amount of land worked per household) relates to two distinct though related variables — labor requirements and individual household wealth (see Yanagisako, 1979; Wilk and Netting, 1984).

Level 2: *Ithualli* (House Compound)

In all settlements except Tepoztlan, houses were often grouped together around patios to form house compounds (*ithualli*); these were considered social units with the residents of a compound referred to as *cemithualtin*. In the *calpulli* of Molotla, for example, 42 of the 128 houses were grouped into 16 compounds of 2 to 4 houses each. Each of these units had a compound head of greater wealth and status than the other household heads, who were considered dependent upon him. Typically, the head distributed land to his dependents for their own cultivation in exchange for help with tribute and services. Individual households received and cultivated separate plots, and the compound members did not participate in a common or joint economy. Only about half of the dependent families in the Molotla compounds were related to the head by kinship bonds, and those kin ties that did exist often were not close. As Carrasco suggests (1976b:63), the tribute system may have been as important as kinship as a major factor structuring social organization at this level.

Level 3: *Chinamitl* or Small *Calpulli*

The term *calpulli* in the census documents is used to refer to two levels of socioterritorial organization (this terminological ambiguity has long been recognized in the Basin of Mexico; see Sanders, 1965:64ff; Offner, 1983:163ff). For example, the Molotla *calpulli* with 128 households "was subdivided into nine groups also called *calpulli* or *chinamitl*, ranging in size from 32 households to only one" (Carrasco, 1976b:46); similarly, the *calpulli* of Tepetenchicalcan consisted of 120 households arranged in seven smaller calpulli (Carrasco, 1964b, 1968). Following usage in the census documents, the term *chinamitl* will be used for the smaller unit, with *calpulli* reserved for the larger territorial units.

The distribution of the *chinamitl* units in space is not always clear in the documents, although they appear to represent spatially localized settlements or districts (*barrios*) of larger settlements. They had noble headmen (*tecuhtli* or *tlacochtecuhtli*) to whom all constituent households paid tribute in goods and/or services, either directly or indirectly (e.g., through compound heads); presumably, these headmen were subject to the higher-ranking noble in charge of the larger *calpulli* units. In eastern Morelos, the *chinamitl* was apparently referred to as a *tequitato* (Visita, 1946:253), and in the Basin of Mexico the term "*barrio pequeño*" is sometimes used (see Sanders, 1965:66). Sanders suggests that these settlements were often of a dispersed nature and usually did not contain civic or ceremonial architecture (Sanders, 1965:87).

These settlements apparently exhibited a marked lack of spatial separation between residences of the noble and commoner classes. The nature of service obligations (part of the tribute system) is probably one factor preventing a spatial segregation of classes. In addition to providing nobles with grains, prepared food, firewood, textiles, and other goods, commoner households provided a variety of personal services for noble households. Among the more significant of these was the obligation of non-servant commoner women to grind maize and manufacture cotton textiles for noble households. The grinding was done at the nobles' houses, while the location of cloth production (spinning, weaving, and dying) is not mentioned. This latter service is separate from household cloth production for personal use and tribute payment; the textiles produced were *not* counted as part of the normal textile tribute that many commoner households paid to their superiors (see especially Carrasco, 1968, 1972, 1976a).

Level 4: *Calpulli*

The larger *calpulli* units in the Morelos censuses contained from 120 to 188 houses (Carrasco, 1976a:104). As mentioned above, these units were internally stratified and were under the control of a noble headman, the *tecuhtli*. The organization of these *calpulli* contrasts greatly with the model of an egalitarian organization of commoners who controlled their own land that is described by Zorita (1963) and some other early writers. As pointed about above, all of the land in the constituent *chinamitl* was owned or regulated by nobles, and none of the commoners were outside of the strong influence of a noble. With reference to the larger *calpulli*, Carrasco comments:

> The distribution of land appears to be administered by the political authorities, the local lords or their agents; it is not easy to apply the concept of an egalitarian and democratic *calpulli* that has been promoted using Zorita's information. Workers paid tribute according to the amount of land they possessed, which fits well with the unequal distribution of land. We find *tecuhtli* inside the organization of the *calpulli*, and as an important part of the *calpulli* (Carrasco, 1976a:115-116; author's translation).

Beyond basic demographic facts, there is little information in Carrasco's articles on the spatial organization or composition of the *calpulli*. In the Basin of Mexico, Sanders (1965:86) and Evans (1985), following Zorita (1963), suggest that *calpulli* settlements should exhibit pyramid temples, civic buildings (e.g., a *telpochcalli*), and a chiefly residence. There appears to be no mention of these features in the census documents, although the presence of a chiefly residence or palace may be inferred from the existence of a high-ranking noble *calpulli* head.

COMPARISONS

It should be clear by now that there is a very high degree of comparability between the archaeological and ethnohistorical settlement hierarchies. It is worth emphasizing that the archaeological hierarchy was established independently of the documentary data in order to permit this comparison of independent sources. The following brief formal comparisons focus on the size, spatial configuration, and organization of the various settlement levels. Figure 5 presents a schematic depiction of the four-level settlement hierarchy; a summary of relevant quantitative data is presented in Table 1.

Level 1: The House

The excavated ground-level houses are small structures (compared to the large multiroom Aztec houses in the Basin of Mexico), probably the residences of single domestic groups. In spite of the occurrence of joint family households and multiple families per house (Carrasco, 1976b), the mean inhabitants per house in the documents is not large[1] [Table 1; data in this table are taken from Carrasco, (1964b:377)]. These data fit well with the size of the archaeological houses. Noble households were considerably larger than those of commoners (Carrasco, 1964a:190; 1972:232), just as the group 6 platform houses are much larger than any other houses (Table 1). In short, the kinds of households depicted in the documents could easily have

[1] I have elsewhere criticized the concept of "household" as an inappropriate ethnographic analog for most archaeological settings (Smith, 1992a). The basic problem is that the archaeological remains of houses, features, and deposits typically pertain to a whole succession of inhabitants of long-lasting houses, often including many temporally separate household groups. Given the compressed nature of time represented in most archaeological deposits (Binford, 1986) and the level of temporal refinement in most archaeological chronologies (Smith, 1992a), it is usually impossible for the archaeologist to isolate or identify the remains of an individual, temporally-discreet "household" from the past. Most archaeological remains thus correspond to what I term a "household series", or the succession of households that inhabited a given house over time.

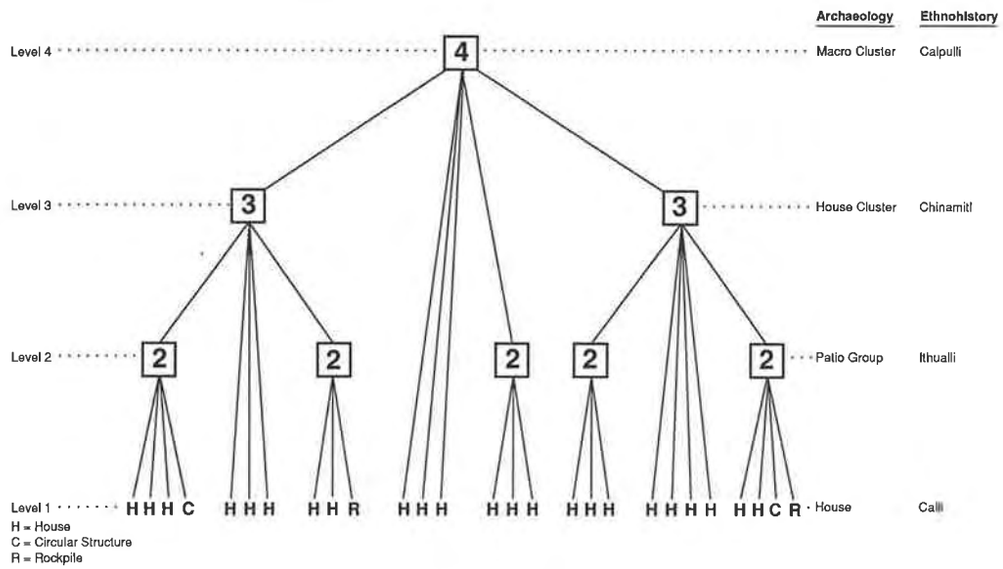

Figure 5. Schematic representation of the Late Postclassic settlement hierarchy in western Morelos as documented by archaeology and ethnohistory.

inhabited the kinds of houses found at Late Postclassic sites. This is not to say that separate traces of temporally discreet individual households can be isolated in the archaeological remains, but it does permit the lower level inference that social groups much like the households described in the documents probably inhabited the archaeological houses.

Level 2: The Patio Group

In spatial terms, the archaeological patio groups and the ethnohistorical compounds are identical: both consist of two or more houses arranged around a common patio or plaza area. The number of houses per group (Table 1) is slightly different comparing Molotla, the only community whose figures are given by Carrasco (mean of 2.6), to Cuexcomate and Capilco (mean of 3.4). There are some differences in the prevalence of groups at these settlements: at Molotla, 32% of the houses are in groups, while the archaeological figures are 38% for Capilco and 65% for Cuexcomate. The documents apparently make no reference to nonresidential features associated with compounds (archaeologically, we have possible granaries and ritual dumps in addition to burials and other offerings). There is some archaeological evidence for the houses of compound heads, who clearly were more wealthy and powerful than the other residents; 4 of the 31 nonelite patio groups at Cuexcomate have one platform house, and in the 2 non-elite groups where all houses were tested, one house in each stands out as having an artifact inventory with more wealth markers (see Smith, 1992a).

[1] (contd.)While strong comparative arguments can often be made that social groups like the ethnographic household did indeed inhabit archaeological houses, our inability to recover the imprints of individual households may make this an inappropriate social concept for archaeological interpretation. The significance of this temporal limitation on archaeological interpretation should not be underestimated. In the present case study, we have some of the most detailed and direct documentary data on ancient households to be found anywhere in Mesoamerica, coupled with ceramic phases that are among the shortest in Mesoamerica, yet the excavated houses and deposits do not permit the identification of individual households within a household series. What is needed now is a comparative investigation of the social and cultural characteristics of the household series in Mesoamerica, for this will permit more accurate social interpretations of the archaeological remains that we excavate (the above argument is developed further in Smith, 1991a).

TABLE 1. Quantitative Comparisons of Settlement Hierarchies

Archaeology		Ethnohistory	
Level 1			
Mean house size:		Mean inhabitants per house:	
Ground-level houses:	14 m^2	Tepoztlan:	5.4
Group 6 platform houses:	134 m^2	Tepetenchicalan:	6.8
Other platform houses:	36 m^2	Panchimalco:	7.2
		Cuauchichinola:	7.2
		Molotla:	7.9
		Huitzila:	7.9
Level 2			
Houses per patio group:		Houses per ithualli (Molotla):	
2 houses:	5 groups	2 houses:	8 groups
3 houses:	8 groups	3 houses:	6 groups
4 houses:	7 groups	4 houses:	2 groups
5 houses:	3 groups		
6 houses:	2 groups		
Level 3			
Number of houses per cluster:		Number of houses per *chinamitl*:	
Capilco:	21	Molotla:	32
Cuexcomate, north:	32	8 others:	12 (mean)
Cuexcomate, central:	39	Tepetenchicalcan:	17 (mean)
Cuexcomate, east-central:	30		
Cuexcomate, east:	27		
Level 4			
Number of houses per macrocluster:		Number of houses per *calpulli*:	
Cuexcomate:	140	Tepetenchicalan:	120
		Molotla:	135
		Cuauchichinola:	135
		Panchimalco:	168
		Huitzila:	188

Level 3: The Cluster or *Chinamitl*

The number of houses per cluster averages around 30, while most *chinamitl* contain fewer houses (Table 1). There are two sources of bias, however, which if corrected would yield more comparable figures. First, the site maps and house frequencies in Table 1 include all structures. This is probably an accurate estimate of occupation for the Late Cuauhnahuac phase, when every structure in a random sample of houses, except patio group 6, was occupied. However, fewer houses were occupied in the Early Cuauhnahuac phase, perhaps indicating a lower number of houses per cluster at that time. Second, Early Colonial disease epidemics had started by the time the census documents were compiled, which would lower the number of households in most *chinamitl*.

The documents reveal the presence of both nobles and commoners in many *chinamitl*, and this agrees with the situation at Cuexcomate. There is clear evidence of a noble compound in the central cluster (group 6), and group 1 stands out as a special or key compound for the north

cluster. The other two clusters have no clear focal compound. There is no evidence for an elite at Capilco, although preliminary artifactual studies suggest that one house stands out as having artifacts suggestive of wealthier inhabitants during Early Cuauhnahuac times.

Level 4: The Macrocluster or *Calpulli*

The number of houses at Cuexcomate (140) matches almost exactly the mean number of houses per *calpulli* at 5 settlements (Table 1). Carrasco's analyses do not go into the spatial organization of the *calpulli*, nor do they mention the possible presence of nonresidential structures. Sanders' and Evans' work on the architectural composition of *calpulli* (following Zorita, 1963) suggests the presence of a number of special structures, all of which appear to be present at Cuexcomate. These are a temple (structure 55), possible civil buildings like a *telpochcalli* (group 24), and noble compounds for each phase, groups 6 and 7 (see Smith et al., 1989).

Carrasco's analyses show that the large *calpulli* was a widespread form of settlement in 16th-century Morelos, and ethnohistoric sources from throughout the Central Highlands attest to its importance over a large area. However, the problem of regional variation in *calpulli* structure and significance has yet to be addressed adequately (see Hicks, 1986). One characteristic that does stand out in both the documents and at Cuexcomate is the importance of the nobility as a central element in these settlements. The macrocluster of Cuexcomate consists of houses grouped around a central public/ceremonial zone consisting of elite residences, the main temple, and possible civic buildings all arranged around a large public plaza, and this pattern is replicated at a number of other Cuauhnahuac phase sites in western Morelos. In short, the elite were at the center of society both spatially and socially.

Higher Levels

The four levels discussed above do not complete the social or settlement hierarchy for Late Postclassic Morelos. The *city-state* with a small urban core and associated rural settlement is a crucial higher level (Smith, 1989), and in the domain of political administration the *conquest-state* and *imperial province* need to be considered. Unfortunately, both archaeological and documentary data on these higher levels are quite scarce for Morelos (see Gerhard, 1970; Smith, 1986) and they are beyond the scope of this article.

IMPLICATIONS

Conquest Period Society in Morelos

The close correspondence between the four levels of settlement identified by archaeology and ethnohistory for western Morelos has a number of implications for studies of social organization in Conquest Period Morelos. First, the archaeological findings confirm beyond a doubt that this is a Prehispanic pattern little influenced by the two decades of Spanish control prior to the origin of the census documents. Second, this pattern of settlement appears to be quite widespread in Morelos, suggesting that it represents basic social and economic principles that operated over a large area.

The most important implication of this exercise for Late Postclassic Morelos, however, concerns the possibilities of further joint archaeological/ethnohistorical studies of rural society that go beyond the relatively narrow domain of settlement patterns. We have identified a hierarchical pattern of settlement (and, by implication, a pattern of society) about which archaeology and ethnohistory can both make significant and complementary observations.

Carrasco's analyses of demography, kinship, tribute, and stratification using the census documents are already major contributions to the literature on Conquest Period society, but these documents say little about such topics as farming methods, craft production, ritual practices, and external economic and political connections. These latter topics are strengths of the archaeological record, and the continuing analyses of the Postclassic Morelos Archaeological Project and other projects are directed at such issues. The complementarity between archaeology and ethnohistory in this area is remarkable, and in place of the common practice of using ethnohistorical data to explain archaeological findings (or the reverse), we can use both sets of data to document and explain the nature of Prehispanic society in Morelos.

Kinship and Social Stratification as Determinants of Settlement Patterns

One of the significant implications of the census data is a recognition of the pervasive importance of social stratification as a factor shaping settlement dynamics in Morelos. Stratification influenced settlement primarily through land tenure arrangements and tribute obligations. Commoners had to live near nobles in order to receive land, and labor service was also facilitated by residential proximity. As Carrasco points out, nobles were present in all of the *chinamitl* and *calpulli*, and their presence provided a social and spatial structure for these settlement units. Many of the patio groups also contained a mixture of nobles and commoners. These patterns also characterize the archaeological remains at Cuexcomate where the entire settlement is organized around the centrally located elite compounds, and some of the house clusters also have focal elite patio groups. Similarly, a number of patio groups have one house that stands out above the others.

The great importance of stratification and tribute as determinants of settlement goes along with a lower level of significance for kinship. Kin ties played a role in patio groups and higher levels, but none of the units above the household can be called a kin grouping. This finding contrasts with the common assumption that Classic Maya patio groups and house clusters were organized primarily on the basis of kinship (e.g., Willey, 1981; Tourtellot, 1988). While the Morelos census data cannot provide direct interpretations for Classic Maya archaeological patterns, they do suggest that the role of kinship as a determinant of Mesoamerican settlement patterns should not be assumed without testing, and that other possibilities should be investigated. Additional determinants of settlement patterns in western Morelos include agricultural methods, soils, and topography. These factors are important, but they are beyond the scope of this article (see Smith, 1992a).

Houses and Society in Ancient Mesoamerica

This study has a number of additional implications for the study of domestic groups in Mesoamerica and other agrarian states that can be summarized here. First, the detailed comparisons between archaeology and ethnohistory demonstrate that the archaeological patterning of residences observed at Cuauhnahuac phase sites has clear social significance. These data suggest that archaeological analyses of the spatial distribution of houses, house groups, and compounds can lead to realistic models of ancient social organization.

A second implication of the Morelos case study is that archaeologists need to look at patterning on a variety of spatial scales in order to construct adequate models of past social systems (see Kowalewski et al., 1989:1-3). Houses and domestic artifacts are important units in the study of ancient society, but they cannot be understood without reference to their occurrence (or nonoccurrence) in groups, clusters, settlements, and other larger units. Again, spatial patterning is crucial, but it must be addressed at a series of levels from the individual deposit to the house up through larger constructs like regions (see Flannery, 1976 for an example of social analyses of archaeological data at varying spatial scales).

The Morelos settlement hierarchy parallels other patterns found in Mesoamerica outside of the Central Highlands. The lowland Maya hierarchy of structure, patio group, cluster, ceremonial center (Ashmore, 1981) is quite similar, as are ethnographic models from various areas. Starr (1954), for example, describes a hierarchy from the Tuxtlas area of Veracruz consisting of households, dooryard groups, neighborhoods, villages, *municipios*, and the region, and similar patterns are found in western Guatemala and other areas (Hunt and Nash, 1967). There is not space to explore these parallels here, but the reader is referred to Sanders (1967, 1971), Hunt and Nash (1967), and Drennan (1988) for relevant discussions.

A final implication of this study concerns our views of rural society in Mesoamerica. Archaeological attention has focused heavily on urban contexts, and rural areas have been addressed primarily through survey data. This has led to a tendency to view Mesoamerican peasants as relatively simple farmers toiling away to feed the urban masses and support the nobility. When rural sites are excavated, however, we learn that rural life was considerably more complicated than this. Craft production was carried out in rural areas, peasants were tied into far-flung exchange networks, nobles were living in villages and towns, and there is a high level of social variation within rural society (Evans, 1988; Smith et al., 1989; Webster and Gonlin, 1988). The extent of social heterogeneity in rural Mesoamerica can be addressed most directly with excavations, and then most profitably with excavations of domestic contexts. Residential excavations carried out in non-urban settings will not simply add to our knowledge of ancient Mesoamerica, but may well serve to overturn some of the received wisdom on the nature of Mesoamerican societies.

ACKNOWLEDGMENTS

The Postclassic Morelos Archaeological Project was supported by the National Science Foundation, the National Endowment for the Humanities, and Loyola University. Permission was granted by the Instituto Nacional de Anthropologia e Historia, Mexico City. I am grateful to Osvaldo Sterpone for sharing with me his observations on settlement patterns in the Cuernavaca lomas region, and to Pedro Carrasco and Fred Hicks for discussions on the Morelos census documents. A version of this paper was presented at the 1989 Annual Meeting of the American Society for Ethnohistory, Chicago, Illinois. Elizabeth Brumfiel, Pedro Carrasco, Cynthia Heath-Smith, Kenneth G. Hirth, and Robert S. Santley provided helpful comments on earlier versions of this paper. Figures 1 and 5 were produced by the Loyola University Center for Instructional Design.

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