# **Neighborhoods and Districts in Ancient Mesoamerica**

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#### **Abstract**

We introduce urban neighborhoods and districts as archaeological concepts, and illustrate them with the example of Bhaktapur, a Hindu city in Nepal. We describe the Aztec calpolli, the best-documented case of neighborhoods in Mesoamerica, as a basis for understanding other Mesoamerican residential zones. A review of previous research on Mesoamerican neighborhoods provides a context for the contributions of the chapters in this volume. We argue that the term "barrio" is an inappropriate terms for the neighborhoods and settlements of ancient Mesoamerica. We close with suggestions for future research on three topics: neighborhoods in low-density cities; the spatial patterns of social variation in neighborhoods; and the role of the state and elites in forming and organizing urban neighborhoods and districts.

All cities known to social scientists and historians have neighborhoods. People living in urban settings universally organize important aspects of their lives at a spatial scale intermediate between the household and the city. Urban authorities also tend to organize administrative activities such as tax collection and record keeping at a similar scale. The spatial relationship between these latter units, which Smith (2010a) has called districts, and neighborhoods proper, varies among cities and time periods. Given the universality of neighborhoods and districts, it is not surprising that these were important spatial and social units in the cities of ancient Mesoamerica.

Archaeological research into Mesoamerican neighborhoods and districts has been slow to develop, for a variety of reasons. First, urban residential zones are difficult to identify and analyze with archaeological data. Perhaps not surprisingly, the most thorough analysis of ancient neighborhoods—Elizabeth Stone's (1987) *Nippur Neighborhoods*—and the most complete synthesis of neighborhood data in an ancient urban tradition (Keith 2003), both come from Mesopotamia and employ both archaeological and textual sources. Similarly, the most complete data on Mesoamerican neighborhoods are from the Aztec period, where the (rather meager) archaeological remains can be complemented by detailed historical documentation (see discussion below). The development of archaeological methods for the analysis of neighborhoods and districts is still in its infancy (Smith 2010a), and much remains to be done. The essays in the present volume make several important methodological steps forward.

A second reason for the slow progress in analyzing ancient Mesoamerican residential zones may lie in low population densities of many Mesoamerican cities. We have known for

some time that the large, dense central Mexican imperial capitals Teotihuacan and Tenochtitlan were organized into neighborhoods (see discussion below), but what about the Classic Maya? For many years, scholars such as William Sanders and David Webster denied urban status to the Classic Maya centers (e.g., Webster and Sanders 2001). But even when scholars accepted the Maya as an urban society (Ciudad Ruiz et al. 2001), they were slow to analyze Maya cities as urban settlements, and only a few archaeologist thought to ask what neighborhoods might look like in low-density cities (e.g., Arnauld 2008; Kintz 1983; Robin 2003). The emerging answer is that clusters of houses most likely served as neighborhoods in Classic Maya cities, as well as in other low-density cities of the ancient world (Smith n.d.).

In this paper we provide a comparative and theoretical context for research on ancient Mesoamerican urban neighborhoods, and we review the work that has been done to date. These sections provide a context for the case studies presented in this book. We conclude with some suggestions for future research.

### NEIGHBORHOODS AND DISTRICTS

Many preindustrial cities known from history and ethnography have two levels of residential zone: the neighborhood and the district. Neighborhoods are small units based on face-to-face social interaction, and districts are larger zones that serve as administrative units for civic authorities. As the papers in this volume make clear, neighborhoods and districts were also important units in ancient Mesoamerican cities. A well documented nonwestern example—the Hindu Newar city of Bhaktapur in Nepal—illustrates the nature of neighborhoods and districts in preindustrial cities.

### A Historical Example: Bhaktapur, Nepal

The city of Bhaktapur in Nepal has maintained many features of traditional Hindu cities into the twentieth century (Gutschow 1993; Gutschow and Kölver 1975; Levy 1990), including its organization into neighborhoods and districts. In Bhaktapur, the same term, *twa:*, is used to refer to both districts and neighborhoods (Levy 1990:182). Levy (1990:774) defines the larger type of twa: (district) as "a village-like spatial segment of a Newar town or city." Bhaktapur was divided into 24 such districts, which were part of a system of governing councils. Each twa: sent a representative to the town council (Levy 1990:61). Most were centered on a public square that was used for both commerce and agricultural activities such as drying rice (Gutschow and Kölver 1975:26). These districts had important roles in public ritual in Bhaktapur. Each twa: had a temple or shrine to the deity Ganesa (Gutschow and Kölver 1975:26; Levy 1990:220). The twa: and its Ganesa shrines also play a major role in funeral processions (Gutschow 1993). People identified with their twa: and often used it to describe their place of residence (Levy 1990:183). The average size of the 24 twa: is 270 households, with an average population of 1,600 (figure 1).

Levy (1990:55) notes that "in various parts of the city there are clearly differentiated *neighborhoods*." Levy uses the term quarter and Gutschow and Kölver (1975) use neighborhood for this unit. Although the names of many neighborhoods are reported (such as "potter's quarter" or "dyer's quarter"), these and other authors provide little information about their size or their social and spatial characteristics. Levy and Gutschow imply that neighborhoods were localized areas with considerable face-to-face interaction. The use of the term twa: for both neighborhoods and districts adds confusion to the published literature, but this features is by no means limited to

cities in Nepal; indeed a similar situation existed in central Mexico with the Aztec term calpolli (see below).

## Neighborhoods

A neighborhood can be defined as a residential zone that has considerable face-to-face interaction and is distinctive on the basis of physical and/or social characteristics. This definition is a combination of two well-known published definitions by sociologists (Glass 1948:18; Suttles 1972). It is intended to be applicable to diverse geographical settings and time periods and amenable to analysis with historical and archaeological data (as well as contemporary social science data). Many definitions of neighborhood emphasize values of neighborliness and friendship that are important norms in modern western society but may or may not be important in preindustrial cities or in neighborhoods of concentrated poverty in industrialized nations today (Briggs 2008; Sampson 2004); see Smith (2010a) for further discussion.

The role of face-to-face interaction is probably stronger in structuring neighborhoods in preindustrial cities than in many contemporary cities. One historical example with particularly rich documentation is fourteenth-century Marseille, where Dan Smail (2000) has analyzed data on place of residence, occupation, and other factors:

This evidence shows that among tradesmen and commoners, sociability was constructed around relations that were literally face to face; identity was built up from public spaces, that is to say the spaces in which people came into frequent contact with neighbors and colleagues (Smail 2000:183).

### **Districts**

A district may be defined as a residential zone that has some kind of administrative or social identity within a city. In most cases, districts are larger than neighborhoods. There may be public architecture and spaces within a district, but housing predominates. As in Bhaktapur (figure 1), districts are typically composed of multiple neighborhoods. Two types of districts are common in preindustrial cities: administrative districts and social districts. Administrative districts are large residential zones that serve as administrative and/or religious units within cities. In some cases, administrative districts contain civic buildings used in administration, whereas in other cases there may be no clear architectural signal of district administration. Social districts are large residential zones, identifiable from patterns of interaction or social characteristics, which do not serve as administrative units.

Planners today use the term "institutional neighborhood" for the district: "The institutional neighborhood is a larger unit that has some official status as a subarea of the city. The institutional neighborhood provides the opportunity to focus on organization and institutional collaboration" (American Planning Association 2006:409). Ade Kearns and Michael Parkinson (2001) discuss contemporary urban districts as landscapes of social and economic opportunities where important social forces include employment, leisure interests, and social networks. This perspective can be modified for preindustrial cities: districts are zones in which people carry out many of their basic day-to-day activities, from work to leisure. This is in fact the concept that Kathryn Keith (2003:58) employs to define "neighborhood": "the neighborhood is considered a level of sociospatial patterning and is defined as the area within which local residents conducted most of their daily activities."

The notion of a spatial hierarchy of residential zones corresponding to my definitions of neighborhood and district is quite common in the literatures on both modern and historical urbanism; see Smith (2010a) for discussion. For example, historian Robert Dickinson (1961:529) suggests that in the historical cities of Europe, "There is, beyond the neighbourhood, a social-geographical grouping which is based on some kind of association through the medium of common institutions; it is organized in some degree as a community, but no face-to-face relationship of all its members is involved." He calls this unit the "community area."

### THE AZTEC CALPOLLI AS AN URBAN NEIGHBORHOOD

The *calpolli* was one of the basic units of settlement in Aztec central Mexico. After a lengthy scholarly debate about the nature of the calpolli—was it kin-based or territorial or some other kind of group? (see Offner 1983:163-175)—its nature was clarified greatly from the analysis of Nahuatl-language written documents from the decades immediately following the Spanish conquest (this research is synthesized in Lockhart 1992).<sup>2</sup> In this account, we emphasize data from the western Nahua area (Morelos and the Basin of Mexico), where the calpolli was more prominent than in the eastern Nahua zone (Puebla and Tlaxcala); see Lockhart (1992:16-19) on these regional patterns.

In the western Nahua zone, a calpolli consisted of a group of households who lived near one another and were subject to the same noble. Although some members were related by kinship, this was not a kin-based group. Two features of the calpolli are particularly interesting for the study of urban neighborhoods and districts. First, the term calpolli refers to two levels of settlement: a smaller unit of 10-30 households, and a larger unit of 100-200 households; in this sense it is similar to the Hindu twa: in Bhaktapur. The term "barrio" was used by early Spanish writers to label both neighborhoods and districts, although it was also used in other ways (Hicks 2010). Second, the calpolli was a unit of settlement in both urban and rural settings. It formed neighborhoods and districts in cities and towns, and in the countryside a calpolli was a village or hamlet. The archaeological expression of these two levels of calpolli are discussed in Smith (1993); see also Friedman (2009). Here we briefly review those data in relationship to urban neighborhoods and districts.

## Calpolli as Neighborhood

The smaller level of calpolli is often called a *chinamitl*, and we use that term here to avoid confusion; for discussions of terminology, see Reyes García (1996). Chinamitl are always divisions of a larger calpolli. The constituent households lived close to one another and all paid taxes (in textiles and food) to a low-level official, who in turn delivered the goods to the calpolli head, a noble. Members also provided personal service (including labor, firewood, and food) to the calpolli head. The bases for interpreting some chinamitl as urban neighborhoods are the following: (1) they were spatially clustered territorial units; and (2) the urban status of their overarching calpolli is clearly indicated in the census documents (Carrasco 1964, 1976). The mean sizes of chinamitl in two Morelos communities are 12 households and 17 households (Friedman 2009; Smith 1993).

## Calpolli as District

The size of the larger level of calpolli in the census documents ranges from 120 to 188 households, with a mean size of 150 households. The noble in charge owned the agricultural land, and members obtained access to farmland through a variety of methods, including rental, sharecropping, and direct exploitation as landless laborers. As Pedro Carrasco notes, in a calpolli "the distribution of land appears to be administered by the political authorities, the local lords, or their agents" (Carrasco 1976:115). These are quite clearly administrative units with all residents subject to the noble in charge. Officials called calpixque lived in the calpolli. Durán, for example, noted in one instance that Motecuhzoma "llamaba a los calpixques—que son los mandoncillos de los barrios..." (Durán 1967:v.2., p.182). The nature of these officials and their roles in tax collection is discussed at greater length in Smith (2010b).

Although the Morelos census documents rarely mention public buildings, other primary sources describing the larger level of calpolli suggest that a number of civic buildings and features were clustered together at the center of the district; see discussion of sources in Calnek (1976), Alcántara Gallegos (2004:190-193) and Lockhart (1992:18-19). The most commonly mentioned of these are the temple, marketplace, and telpochcalli (school). Some sources suggest the presence of a public plaza, and the palace of the noble calpolli head should also be included in the list. These civic structures provide the strongest archaeological signatures of the calpolli at Aztec sites, and this feature can probably be generalized to urban districts in other Mesoamerican urban contexts.

### **Discussion**

Smith has argued elsewhere that the site of Cuexcomate—with 140 houses and a small urban epicenter with palace and temple (figure 2)—corresponds to a calpolli (Smith 1993); furthermore, its four spatial clusters may correspond to chinamitl or neighborhoods (see also Friedman 2009). Cuexcomate (estimated population of ca. 900) was a discrete settlement that can be classified as a town. Similar units are described in the census documents as subdivisions (districts) of larger urban centers such as Yautepec (estimated population of ca. 13,000).

The available information on Aztec calpolli illustrate the kinds of activities and conditions that characterize urban neighborhoods in many premodern cities. Apart from its social role as a settlement or cluster within a settlement, the members of individual calpolli shared a variety of social characteristics, including economic activities and ritual practices. The fact that a single locally-important named social group—the calpolli—served as both an urban neighborhood and a rural settlement is one of its more interesting features. This phenomenon exists in some other urban traditions, including the Nupe of west Africa (Nadel 1942); see discussion in Smith (n.d.). The *darb*, a term for neighborhood in the modern Moroccan town of Boujad, also exists in both urban and rural contexts (Eickelman 1974:239). It is not clear, however, just how common this phenomenon is worldwide.

## NEIGHBORHOODS AND DISTRICTS IN NORTHERN MESOAMERICA

We organize our discussion of archaeological research on Mesoamerican residential zones into two parts: Northern Mesoamerica and the Maya region.

#### **Teotihuacan**

Quantitative spatial research at Teotihuacan illustrates the use of sophistical spatial analytical methods to isolate residential zones on the basis of surface artifact distributions. René Millon (1973:40) initially suggested that the city was most likely divided into social neighborhoods based on artifacts recovered in the Teotihuacan Mapping Project surface collections, but it proved difficult to identify these on the ground. Distribution maps of various artifact types produced suggestive patterns but little clear evidence for the artifactual differentiation of spatial zones (Altschul 1987; Cowgill et al. 1984). In order to move beyond these studies, Ian Robertson (2001, 2005) employed a more complex procedure. He first employed cluster analysis of surface artifact types to isolate groups of artifact types with a functional relationship to one another. Spatial attributes were not included in this stage, and the resultant artifact-based clusters of surface collections (termed "A-clusters") were widely scattered across the surface of Teotihuacan. Robertson next used k-means cluster analysis to isolate a second set of clusters (termed "N-clusters") that tied the artifact data to spatial locations. The members of an individual N cluster show similar mixtures of artifact collection types and exhibit a high degree of spatial autocorrelation. Robertson infers that these spatial units correspond to social districts. Robertson's study should caution archaeologists that a simple inspection of distribution maps of individual artifact types may not be sufficient to identify meaningful spatial zones in ancient cities like Teotihuacan.

In a separate series of analyses, several archaeologists had previously identified foreign enclaves at Teotihuacan; these are perhaps the best documented urban neighborhoods in ancient Mesoamerica. The so-called "Oaxaca barrio" stands out at Teotihuacan on the basis of a variety of clear material markers of Oaxacan or Zapotec ethnicity (Rattray 1993; Spence 1992), and several other ethnic enclaves have been proposed for Teotihuacan as well (Rattray 1989; Spence et al. 2005). Cowgill (2007) reviews current understandings of the neighborhood implications of the Teotihuacan Mapping Project data as well as other research on ethnic enclaves.

In this volume, several authors return to Teotihuacan for further analysis of its neighborhoods and districts. Gómez (chapter 3) examines the spatial, economic, and social structure of an urban district in Teotihuacan. Manzanilla (chapter 4) continues with a catalog of variation in social composition and governance practices in urban districts. Both chapters provide insights into the social, political, and economic fabric of the city, although their excavation-based methods do not permit an analysis of the spatial patterns of social variation across the city. Taking an architectural view, Storey and Widmer (chapter 5) examine the ways by which plazas and temples mark neighborhoods and districts. They also discuss how economic specialization links units together. Storey and Widmer's chapter provides a unique look at the spatial pattern of the Tlajinga neighborhood and its district area. Márquez-Morfín and Storey focus on health differences between the residents of two apartment compounds, La Ventilla and Tlajinga. Although they phrase their discussion as a comparison of neighborhoods, in fact they have not identified neighborhoods or districts, so strictly speaking they are not comparing residential zones; they are comparing residences (for discussion of the issue of assuming the existence of neighborhoods without evidence, see Smith 2010a:147).

## **Mesoamerican Hilltop Capitals**

The hilltop capital city was a common urban form in ancient Mesoamerica, and researchers have investigated neighborhoods and districts at several of these settlements. In one of the first studies of residential zones at a Mesoamerican city, Richard Blanton (1978:66-93) analyzed districts for both early and late periods at Monte Alban. In early Monte Alban three

zones had subtle differences in the ceramic assemblage suggesting that neighborhoods or districts may have had distinctive patterns of shared material culture, possibly signaling some form of spatially based identity. Later periods saw an increase in urban division to fifteen architecturally visible districts. These areas were of mixed social class, with elite and commoners living near one another. Few craft activities were identified at the level of the district, although, Blanton (1978:95) did identify zones of obsidian and groundstone production. In a more recent study, González Licón (2009) discusses inequality among households at Monte Albán, with a consideration of the role of neighborhoods.

At the Oaxaca site of El Palmillo in the Classic period, residential zones were topographically distinguished and shared some economic and ritual activities (Feinman and Nicholas, chapter 7). Residents of nearby houses most likely engaged in joint work activities on common facilities such as terraces and stairs, which Feinman and Nicholas interpret in terms of collective action.

On the basis of a program of intensive surface collection and mapping at the Epiclassic period (AD 600-800) hilltop city of Xochicalco, Kenneth Hirth (2000:234-239) identified fourteen residential zones that he calls "wards" and "ward subdivisions" (figure 3). These were identified on the basis of features of the natural and built environments that impeded movement within the city, such as ravines, ditches, defensive walls, walled causeways, and steep terrace walls. When Hirth plotted the distribution of civic architecture outside of the hilltop epicenter, he found that all but one of his fourteen zones contained one or more temples or civic structures. These units correspond to districts as defined in this paper. In a recent paper, Hirth (2009) compared the distribution of obsidian tool workshops to his map of districts, and found a lack of spatial association between the two. This suggests to him that "(1) artisans did not collaborate in corporate craft activities outside the household, and (2) a craft guild did not exist at the barrio [ward or district] level" (Hirth 2009:58). In both of these works, Hirth compares the Xochicalco data to the Aztec calpolli as described in documentary sources.

Fieldwork by the authors at the hilltop city of Calixtlahuaca (Smith et al. 2009) suggests a division of the city into two districts based on topological considerations. On the basis of surface artifact densities, Novic identified twenty-four smaller zones—most likely neighborhoods—at Calixtlahuaca. The nature and dynamics of these spatial units is the focus of ongoing research (Novic 2008).

### NEIGHBORHOODS AND DISTRICTS IN THE MAYA REGION

## Classic Maya Neighborhoods and Districts

The settlement cluster was a basic component of the Classic Maya settlement hierarchy. When these clusters occur within the vicinity of a major group of civic architecture, they can be interpreted as urban neighborhoods. Gordon Willey (1956) and William Bullard (1960) were the first archaeologists to define and describe Maya settlement clusters. Bullard defined a cluster as a group of five to twelve houses located near one another and separated from other houses and clusters by open spaces and/or features of the terrain. In keeping with the 1960s notion of the Maya as a predominantly rural society, he suggested that "clusters may be thought of as small hamlets" and that they "may have been occupied by a kinship group" (Bullard 1960:367).

Since Bullard's paper, several archaeologists have discussed lowland Maya settlement clusters, but without considering their possible role as urban neighborhoods (e.g., Ashmore 1981; Pyburn et al. 1998). The first to associate clusters with neighborhoods was Cynthia Robin

(2003:330-331), who notes that "neighborhood-focused research is perhaps the least-investigated direction of Maya household archaeology" (p.331). Perhaps Mayanists (prior to the research described in this book) tended to avoid the topic of neighborhoods because the concept of neighborhood was associated with the crowded cities of ancient Mesopotamia or the Islamic world. The low-density tropical cities of the Maya are examples of a very different kind of urbanism, however (Arnauld and Michelet 2004), one called "low-density agrarian-based urbanism" by Roland Fletcher (2009). Neighborhoods in low-density cities are by necessity different spatially from neighborhoods in cities with higher residential densities. Smith (n.d.) develops a more formal argument, based on comparative data, for interpreting Maya settlement clusters as urban neighborhoods.

The chapters in section two of this book break new ground in the analysis of neighborhoods and districts at ancient Maya sites, but these authors are not the first to address the topic explicitly. At Coba, for example, Kintz (1983) used the distance between architectural groups to identify neighborhoods. Elites either lived in neighborhoods mixed with commoners or as isolated residential units. At Copan, William Fash (1983) identified settlement clusters with the modern Chortí group called a *sian otot*. Freter (2004) later interpreted these groups as kinship-based, a view disputed by John Watanabe (2004:161-162), who shows that the groups are defined by residence, not kinship. Although none of these authors consider the groups as urban neighborhoods, we suggest that their activities and organization in fact correspond to neighborhoods. Hendon (chapter 8) is less sanguine about this possibility, and points to Cerro Palenque as a settlement with more convincing neighborhood organization.

If neighborhoods are under-studied in Maya archaeology, districts have received almost no attention at all. Again, Bullard was the first to identify the settlement unit that corresponds to the urban district; he called this the zone. A zone is an area of settlement composed of several clusters plus a minor ceremonial center. The latter is a modest grouping of stone public buildings such as temple-pyramids or palaces. Bullard (Bullard 1960:367) suggested that zones contained 50 to 100 houses and covered an area around one square km. The civic-ceremonial architecture in the minor ceremonial center provides evidence for administrative functions, and thus the zone can be classified as an urban district.

Although Bullard's settlement hierarchy—house, patio group, cluster, zone, and district—is too simplistic to adequately describe the variation in Classic Maya settlement patterns (Ashmore 1981), the degree of fit between his clusters and zones at Maya sites and cross-cultural evidence for neighborhoods and districts is striking. Current research on Maya urban settlement patterns, as shown in the chapters in section two, is now refining this pattern.

## The Río Bec Region and Northwest Peten

The Rio Bec region is an outstanding setting in which to examine neighborhood units in a more rural setting. Like in other regions, repetitive architectural forms characterize Rio Bec neighborhoods. Arnauld et al. (chapter 10) find socially heterogeneous and hierarchical neighborhood units that are marked by clear topographic boundaries such as drainages. They evaluate these rural neighborhoods for degree of face to face interaction and socioeconomic relationships.

For the Northwest Peten site of la Joyanca, a small city in a rural landscape, Lemonnier (chapter 9) defines neighborhood clusters using nearest-neighbor spatial statistics. She then takes her analysis a step further and defines zones that may have been districts. She explores the governance and developmental processes of these clusters and zones at La Joyanca. This is one

of the most sophisticated analyses yet published of neighborhoods and districts at a Mesoamerican city.

## **Postclassic Maya Cities**

Among the Quichean and Pokom of the Guatemalan highlands the olitical and social unit of primary importance was the *chinamit* or *molam*. This unit was based on spatial divisions that were supposedly marked by walls dividing the units (Carmack 1981:164-167). Like the Aztec capulli, the chinamit and molam units could be found in both rural and urban contexts (Hill 1996). Governance was in the form of a dominant lineage with a chief or community leader and group of advisors. The chinamit held land in common, and residents of the chinamit often practiced the same economic specialization (Hill 1984). Members of the chinamit took the surname of the community head, creating fictive kinship relationships. However, distinctions were still made between actual family members and co-chinamit persons (Hill and Monaghan 1987). The strong bonds of community found among the chinamit and molabs of the Guatemalan highland correspond with those that would be expected of tightly knit neighborhood units. In chapter 11, Fulbert encorporates the chinamit concept into her discussion of neighborhoods at the highland city of Kawinal.

Okoshi (chapter 13) emphasizes the importance of understanding regional variation in emic concepts of neighborhood. The Yucatec Maya *cuchteel* is often viewed as an emic corollary to the neighborhood. Okosh demonstrates that the cuchteel is one of several non-territorial political units in Postclassic Yucatec Maya society. Each of these units wove together a set of loyalties and affiliations that cross-cut each other in a complex political game. Masson and Hare (chapter 12) refer to the cuchteel concept in interpreting the spatial organization at the city of Mayapan. Interestingly, despite the use of several robust empirical methods of analysis, only a few clear cases of neighborhood organization could be ascertained. While spatial patterning was apparent for the higher politically connected strata of Mayapan society, the non-territorial aspect of cuchteel organization may have impacted the form of the city.

### PROBLEMS WITH THE TERM "BARRIO"

Although early colonial Spanish writers used the term barrio to describe Aztec calpolli (both large and small) in urban and rural settings, this is not an appropriate analytical term to apply to ancient Mesoamerican neighborhoods and districts. To start, Hicks (2010) shows that this term had far too many meanings in early sources on the Aztecs to be useful as analytical concept. The term barrio is occasionally used in Latin American nations today to refer to urban neighborhoods and districts (Gravano 2005), although the term vecindario is generally preferred by social scientists to describe neighborhoods (Keller 1979; Safa Barraza 1998). The term barrio has entered the English language, where it is primarily used to denote Spanish-speaking neighborhoods in U.S. cities. The use of the term barrio was adopted by Mesoamerican ethnographers to refer to both peasant villages and to spatial and social subdivisions of such villages (see discussion below). In 1928 Robert Redfield made an explicit comparison of the modern barrio in Tepoztlan with the Aztec calpolli (Redfield 1928), and this has been cited by Joyce Marcus (2009:261) to justify the use of "barrio" for ancient urban neighborhoods.

Unfortunately, Redfield's association of the modern barrio with the Aztec calpolli was one of the numerous ethnographic and historical errors committed in his research at Tepoztlan (Leeds 1984; Lewis 1952, 1953). Redfield's interpretation of calpolli-barrio continuity was

based upon a faulty interpretation of a modern oral folktale. Oscar Lewis, in contrast, analyzed numerous colonial- and national-period documents on Tepoztlan and its (modern) barrios, and concluded, "While there can be no doubt that the village is pre-Hispanic, I believe that the present-day layout with its barrio divisions is almost certainly post-Conquest" (Lewis 1951:20). This finding has been generalized to other central Mexican peasant barrios by Hugo Nutini, "If it could be proven that the calpulli was an ambilateral, endogamous clan, it would bear some resemblance to the barrios of Tepoztlán today (Redfield 1928:283-294), in which barrio membership is hereditary" (Nutini 1961:67). As Nutini suggests, Redfield had a poor understanding of the nature of the calpolli (not surprising for 1928).

Redfield was an early adherent of a line of scholarship that argued for the Prehispanic origins of many traits in the social organization of modern Mesoamerican peasant communities, from the cargo system to the barrio. Others following this approach include Carrasco (1961) and Ingham (1971). In recent decades, however, this view has been largely overturned. Historical research on the historical development of the cargo system (Chance and Taylor 1985), peasant barrios (Chance 1996; Hunt and Nash 1967), urban neighborhoods (Granados 2008), and other institutions in colonial and modern times (Foster 1960) show that the degree of continuity in social organization from Prehispanic times is much lower than argued by Redfield and others advocating the "continuity" approach. The current forms of these institutions owe much more to the impact of centuries of domination and exploitation at the hands of colonial and national governments and elites than they do to their ancestral, Prehispanic, forms.

Furthermore, it is now commonly argued that "barrio" is not a useful concept for the analysis of modern Mesoamerican rural societies. By the end of the twentieth century scholars recognized two fundamental problems with the term barrio as an anthropological concept. First, the use of barrio as a emic, folk term among Mesoamerican peasants varies tremendously across the area. Thomas (1979) identifies eight distinct local meanings of the term in peasant communities, including a territorial unit based on locality; an administrative unit; a social group distinguished by ethnicity or occupation; a lineage; or a religious sodality. Second, ethnographers have used the term analytically to refer to a broad range of social-spatial groups (see discussion in Mulhare 1996). Because of this complexity in both the ethnographic record and the scholarly literature, Eileen Mulhare (1996) has proposed that anthropologists abandon the term. She suggests a broad analytical category—the "customary social unit"—to take the place of the barrio as a social-spatial group intermediate between the household and the *municipio*.

This short review of the use of the term barrio in Mesoamerican studies has two immediate implications. First, archaeologists should avoid analogies between modern ethnographic peasant barrios and urban neighborhoods, except in very carefully controlled cases. Two analogical studies that may fit this requirement are Fash (1983) and Hill (1984). Second, archaeologists should not use the term barrio to describe or interpret ancient settlement zones. The case studies in this book provide numerous examples of the kind of productive research that can be done without resorting to the inappropriate term "barrio" as a label for ancient neighborhoods.

### FUTURE DIRECTIONS IN MESOAMERICAN NEIGHBORHOOD RESEARCH

The chapters that follow put the study of ancient Mesoamerican neighborhoods on a firm foundation and set the stage for continued productive research. We suggest three topics whose study can significantly advance our understanding of cities and urban life in ancient Mesoameirca: (1) neighborhoods in low-density cities; (2) the spatial patterns of social variation

in neighborhoods; and (3) the role of the state and elites in forming and organizing urban neighborhoods and districts.

## **Neighborhoods in Low-Density Cities**

Low-density cities have been neglected by scholars of both modern and historical urbanism. Roland Fletcher's (2009) comparative analysis of "low-density agrarian-based urbanism" is a step forward, but his category is quite limited, and the only Mesoamerican example is the lowland Classic Maya. Isendahl and Smith (2011) argue that most ancient Mesoamerican cities had low densities (compared to Old World cities), and that many of the distinctive features of this kind of city were found at both Aztec and Maya cities. These features include the presence of intensive infield agricultural cultivation within cities (Isendahl 2002), and the spatial clustering of houses (figure 2; see also Lemmonier, chapter 9, and Arnauld et al., chapter 10). As argued above (see also Smith 2010a), these clusters have the social and spatial features that characterize neighborhoods and districts in higher-density cities; these features include spatial propinquity of houses; interaction among residents; and shared economic and social attributes.

Mesoamerican house clusters are notable for their lack of rigorous social analysis by archaeologists. Although Ashmore (1981) proposed a spatial typology of Maya house clusters, no one else has employed this typology to help understand clusters in social terms. The basic assumption by Mayanists, from Bullard (1960) onward (e.g., Freter 2004; Hageman 2004) has been that clusters were kinship groups. The basis for this interpretation was, in some cases, a faulty analogy with modern Maya ethnographic data (see discussion by Watanabe 2004). If one puts Aztec and Maya cities and settlement into the same spatial and social framework, however, the interpretation of house clusters as neighborhoods becomes more compelling: Aztec clusters (calpolli) were *not* kinship-based, and we know that they served as neighborhoods (see above). The study of Mesoamerican house clusters and their social, economic, political, and religious roles as urban neighborhoods and rural zones, needs much more attention. The chapters in section 2 below make important advances in this area, and Smith (n.d.) assembles comparative data on clusters as neighborhoods in African cities. But more work is needed before we can fully understand these basic building-blocks of Mesoamerican urban social structure.

## **Spatial Patterns of Social Variation in Neighborhoods**

A major issue in the study of neighborhoods in contemporary western cities is segregation—the spatial clustering of ethnic and racial groups and the factors that act to increase or decrease the spatial separation among people of distinct social categories (Massey and Denton 1993; Sampson 2009). This topic can be broadened conceptually by focusing on a wider range of social categories (e.g., wealth, occupation, religion) and leaving out the ideological connotation of modern racial segregation as something imposed on one group of people by another. A few archaeologists have employed this broader approach in studies of the concentration of craft groups or social classes in ancient cities (Chase and Chase 1992; Kenoyer 1992). A focus on neighborhood analysis, as begin by the papers in this book, has the potential to greatly expand our knowledge of social variation in ancient Mesoamerican cities.

How common is the spatial concentration or clustering of occupations, or wealth, or ethnicity within cities? The extent of empirical variation in such clustering in premodern cities is presently unknown, but targeted fieldwork and analysis could illuminate the situation in Mesoamerica. What forces cause or drive urban social clustering by neighborhood? In an

exploratory study (York et al. 2011), we identify sixteen drivers of urban social clustering (for modern and premodern cities), several of which are applicable to Mesoamerican and other premodern cities. These include macro-structural forces such as premodern commercialization, state policies, local institutions such as the practices of urban elites, and bottom-up processes such as chain migration and neighborhood self-regulation.

Most theorizing and comparative research about social clustering either ignores premodern cities, or else relies on such poor data that conclusions on historical and ancient cities are baseless (e.g., Marcuse 2002; Wood and Landry 2008). Several reasonable models have been proposed (Briggs 2004; Grillo 2000), but these are of limited scope. In short, there is tremendous potential for Mesoamerican neighborhood research to make important contributions to our understanding of urban social clustering in premodern cities.

## The Role of the State and Elites in Neighborhood Dynamics

The existence of districts in a city is a signal of some kind of official concern with the affairs of urban residents, but the nature and extent of that concern vary widely both among and within urban traditions. Sometimes the state and its institutions are heavily involved in the lives of urban residents and sometimes neighborhoods flourish without much intrusion from authorities. How can we understand this variation? A major breakthrough in scholarly understanding of these and related issues came with the publication of *Collective Action in the Formation of Pre-Modern States* (Blanton and Fargher 2008). By applying insights from collective action theory (from political science) to premodern states, Blanton and Fargher make great strides toward understanding political variation among states and the complex relationship between states and the lives of their subjects. In chapter 2, these authors turn the lens of their collective action data and concepts on neighborhood dynamics.

Blanton and Fargher (chapter 2) find a positive association between the level of collective action in states and the degree of state intrusion into the affairs of urban neighborhoods. This may sound counter-intuitive to archaeologists who have a simplistic view of ancient states. In our traditional models of states, we tend to contrast despotic states, described as polities whose rulers try to control people's lives, with more open states, where commercial forces come to the fore and administrative control is diminished. But in fact the nature of state power, and the relationships between states and their subjects, are far more complex, and this is precisely the realm illuminated by the insights of collective action theory.

Blanton and Fargher's book (2008) is a real breakthrough in the scholarly understanding of premodern states, and their contribution in chapter 2 below greatly advances our understanding of how states interact with people in urban neighborhoods. Nevertheless, they have yet to address the question of how to operationalize the collective action approach with archaeological data. Can we make reliable inferences about the degree of collective action that likely characterized Teotihuacan, the Classic Maya, Monte Albán, and other Mesoamerican states? Or does this topic require the richer data of historical documents? The one Mesoamerican society in their sample—Aztec—falls toward the more collective end of the scale, and their characterization fits well with other recent analyses of Aztec society (e.g., Smith 2008, 2010b). As in other premodern complex societies with more collective governance, agents of the state (calpixque) were present in urban neighborhoods (calpolli). But the usefulness of collective action models will remain limited for ancient Mesoamerican until they can translated into the kinds of archaeological remains recovered by archaeologists.

The collective action model of Blanton and Farther is one manifestation of a wider phenomenon: the roles of top-down and bottom-up processes in the structuring of social dynamics and life in urban neighborhoods. Other theoretical approaches to ancient cities, including environment-behavior theory, generative planning theory, and other manifestations of empirical urban theory (Smith 2011), complement collective action theory in suggesting ways to disentangle the forces of states, elites, and civic authorities, on the one hand, from the forces of individual actions and local collective behavior on the other. This will be an exciting area of research in the future, and applications of these methods and theories will help us understand the spatial and social processes that we are not starting to identify in the neighborhoods and districts on ancient Mesoamerican cities.

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We thank Linda Manzanilla and Charlotte Arnauld for organizing the symposium at the 2008 Annual Meeting, Society for American Archaeology. This paper was written as part of a transdisciplinary research project, "Urban Organization through the Ages: Neighborhoods, Open Spaces, and Urban Life" (<a href="http://cities.asu.edu/">http://cities.asu.edu/</a>). We thank the other project members, whose work and interaction has contributed to our knowledge and ideas about cities and neighborhoods: ASU faculty members Christopher Boone, George Cowgill, Sharon Harlan, Barbara Stark, and Abbie York; and students Cinthia Carvajal, Maricha Friedman, Katrina Johnston, and Ben Stanley. We also thank several colleagues for their helpful comments on an earlier draft of this paper: Helen Pollard, Barbara Stark, George Cowgill, Ian Robertson, and Cynthia Robin. Our research at Calixtlahuaca, which has stimulated our interest in neighborhoods and districts, is supported by the National Science Foundation and Arizona State University.

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- Fig. 3 Xochicalco districts as identified by Hirth (2000:238).

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<sup>&</sup>lt;sup>1</sup> This section is based on Smith (2010a), which goes into more detail about the concepts of neighborhood and district.

<sup>&</sup>lt;sup>2</sup> The richest of these documents is a series of censuses of various towns in Morelos in the 1540s. Although they provide extraordinarily rich data on household composition, landholding, and taxation, they reveal little information about craft production or social interactions (Lockhart 1992; Smith 1993). Mesoamericanists should be cautious about using the descriptions and syntheses of the calpolli and other urban phenomena by James Lockhart (1992), whose idiosyncratic model of Aztec urban organization is completely at odds with the abundant archaeological record of Aztec urbanism (Smith 2008:chap. 3). Fortunately, the Morelos census records and several useful studies are available in published form.

