

CHAPTER ONE

Introduction

Neighborhoods and Districts in Ancient Mesoamerica

MICHAEL E. SMITH AND JULIANA NOVIC

All cities known to social scientists and historians have neighborhoods. People living in urban settings universally organize important aspects of their lives on a spatial scale that is intermediate between the household and the city. Urban authorities also tend to organize administrative activities such as tax collection and record keeping on a similar scale. The spatial relationship between these latter units, which Smith (2010) 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, during which

the archaeological remains can be complemented by historical documentation. The development of archaeological methods for the analysis of neighborhoods and districts is still in its infancy (Smith 2010), and much remains to be done. The chapters of 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, 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 archaeologists 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 2011a).

In this chapter, 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 (Smith 2010). 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 chapters of this volume make clear, neighborhoods and districts were also important units in ancient Mesoamerican cities. A well-documented non-Western example—the Hindu Newar city of Bhaktapur in Nepal—illustrates the nature of neighborhoods and districts in preindustrial cities.

An Historical Example: Bhaktapur, Nepal

The city of Bhaktapur in Nepal maintained many features of traditional Hindu cities into the twentieth century (Gutschow 1993; 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 twenty-four such districts, which were part of a system of governing councils. Each *twa:* sent a representative to the town council (Levy 1990: 61). Most districts were centered on a public square 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 Hindu deity Ganesha (Gutschow and Kölver 1975: 26). The *twa:* and its Ganesha shrines also played 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 1.1).

Levy (1990: 55) notes that “in various parts of the city there are clearly differentiated *neighborhoods*.” 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.

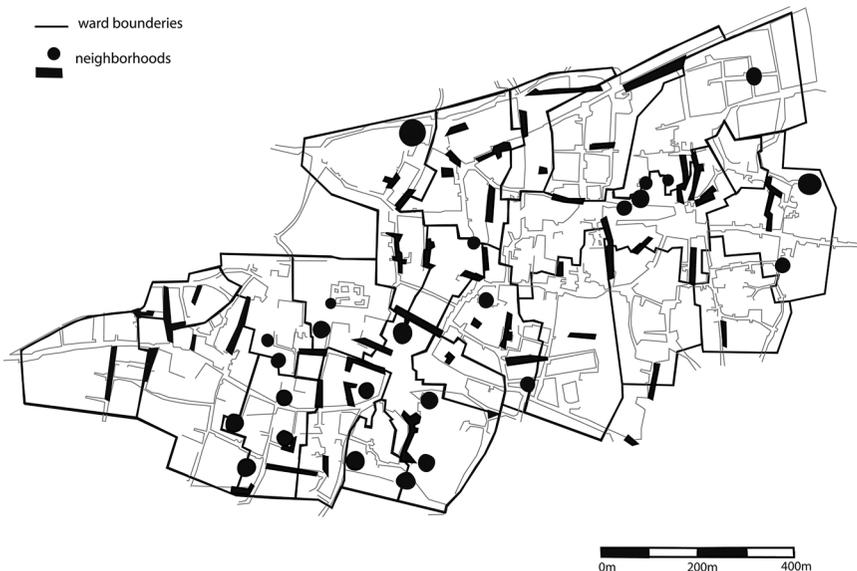


FIGURE 1.1. Twentieth-century Bhaktapur (Nepal) showing districts and neighborhoods. (Drawing by Miriam Cox, based on maps in Gutschow and Kölver 1975 and Levy 1990: 184)

The use of the term *twa*: to refer to both neighborhoods and districts adds confusion to the published literature, but such language use is by no means limited to cities in Nepal; indeed, a similar situation existed in central Mexico with the Aztec term *calpolli*.

Neighborhoods

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

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 (see figure 1.1), 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 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.

Ade Kearns and Michael Parkinson (2001) discuss contemporary urban districts as landscapes of social and economic opportunities in which 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 (neighborhoods and districts) is quite common in the literatures on both modern and historical urbanism. 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).¹ In this account, we emphasize data from the western Nahua area (the Basin of Mexico and Morelos), 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 that lived near one another and were subject to the same noble. Although some members were related by kinship, the house-by-house census data make it clearer that 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 to 30 households, and a larger unit of 100 to 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 expressions of these two levels of *calpolli* are discussed in Smith (1993). 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. *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 twelve households and seventeen households (Smith 1993).

Calpolli as District

The size of the larger level of *calpolli* in the Morelos 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 being directly exploited 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 summoned the *calpixque* for a task: “The *calpixque*, heads of the barrios, were called” (Durán 1994: 180). 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 the discussion of these sources in Calnek (1976), Alcántara Gallegos (2004: 190–193), and Lockhart (1992: 18–19). The most commonly mentioned of these features 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 a palace and temple (figure 1.2)—corresponds to a *calpolli* (Smith 1993); furthermore, its four spatial clusters may correspond to *chinamitl*, or neighborhoods. Cuexcomate 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.

The available information on Aztec *calpolli* illustrates 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

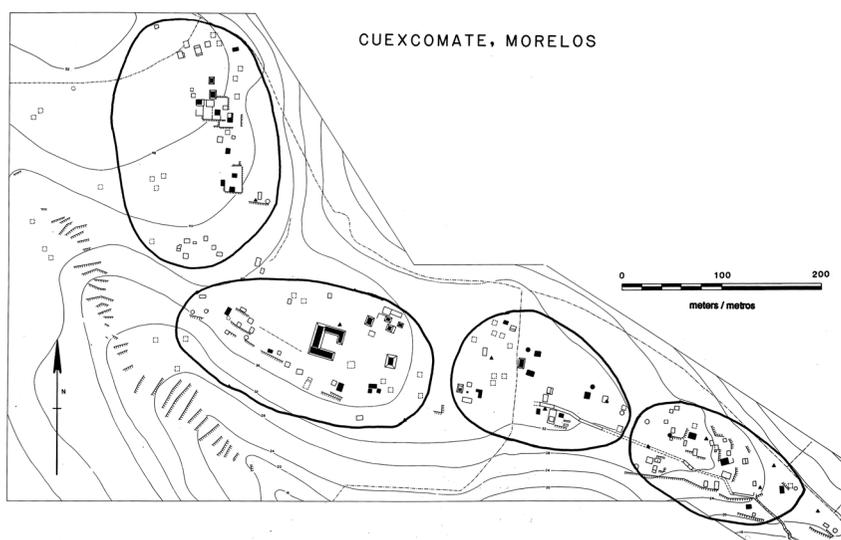


FIGURE 1.2. House clusters at Cuexcomate, an Aztec town in Morelos. The clusters represent small *calpolli* (neighborhoods) and the entire site can be interpreted as a large *calpolli* (district). (Map by the author)

other urban traditions, including the Nupe of west Africa (Nadel 1942). The *darb*, a term for neighborhood in the modern Moroccan town of Boujad, also exists in both urban and rural contexts (Eickelman 1974: 293). It is not clear, however, just how common this phenomenon is worldwide.

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

Neighborhoods and Districts in Northern Mesoamerica

Teotihuacan

Quantitative spatial research at Teotihuacan illustrates the use of sophisticated 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, but it proved difficult to identify these on the ground. Distribution maps of various artifact types recovered in the Teotihuacan Mapping Project surface collections produced suggestive patterns but little clear evidence for the artifactual differentiation of spatial zones (Cowgill et al. 1984).

In order to move beyond these studies, Ian Robertson (2001, 2005) employed a more complex procedure. He first used 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*), which 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 such as 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),

and several other ethnic enclaves have been proposed for Teotihuacan as well (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. Manzanilla (chapter 3) provides a catalog of variations in social composition and governance practices in urban districts; and Gómez Chávez (chapter 4) follows with a detailed examination of the spatial, economic, and social structure of an urban district in Teotihuacan. These 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, Widmer and Storey (chapter 5) examine the ways by which plazas and temples mark neighborhoods or districts. They also discuss how economic specialization links units together. Widmer and Storey's chapter provides a unique look at the spatial pattern of the Tlajinga neighborhoods and its district area. Storey, Márquez-Morfin, and Núñez (chapter 6) 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 actually identified neighborhoods and districts. So, strictly speaking, they are not comparing residential zones; they are comparing residences (see Smith 2010: 147 for discussion).

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 in a Mesoamerican city, Richard Blanton (1978: 66–93) analyzed districts for both early and late periods at Monte Albán. In early Monte Albán, three zones had subtle differences in the ceramic assemblage. This suggests 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 elites and commoners living near one another. Few craft activities were identified at the level of the district, although Blanton (1978: 95) did find zones of obsidian and ground stone production.

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

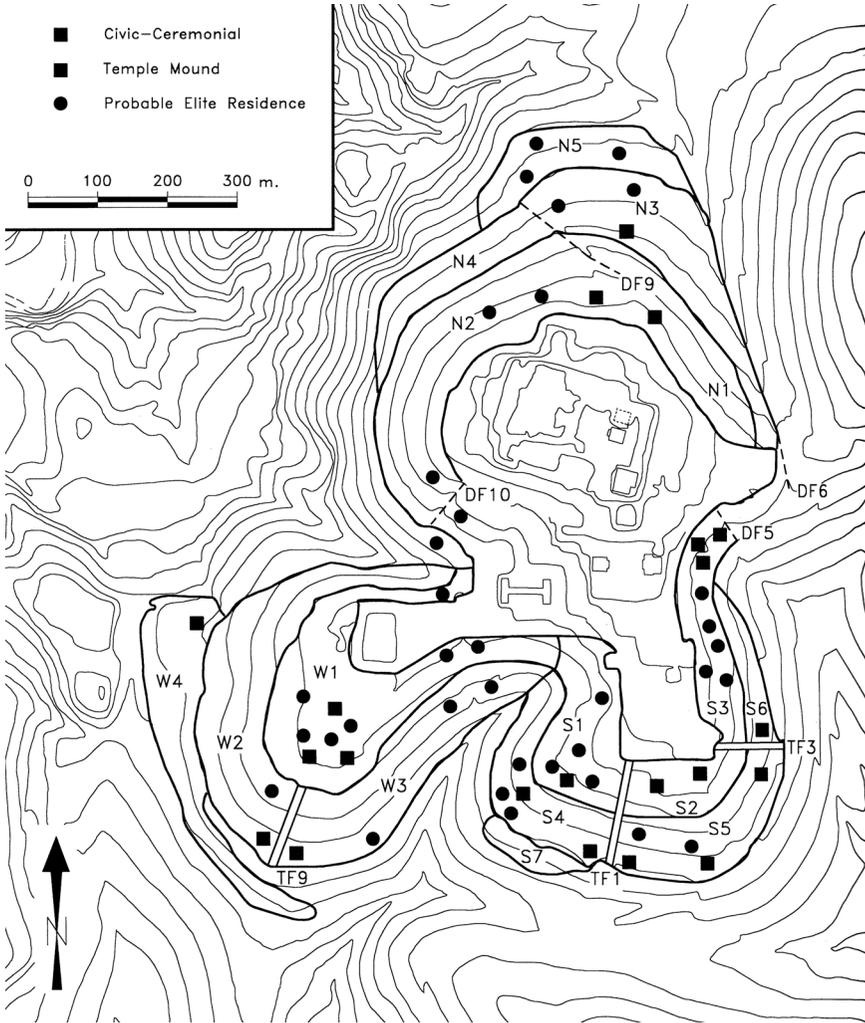


FIGURE 1.3. Xochicalco districts as identified by Hirth (2000: 238).

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 (A.D. 600–800) hilltop city of Xochicalco, Kenneth Hirth (2000: 234–239) identified fourteen residential zones that he refers to interchangeably as “barrios,” “wards,” and “ward subdivisions” (figure 1.3). 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 here. 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 *calpollis* 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 topographical considerations. On the basis of surface artifact densities, Novic identified twenty smaller zones—most likely neighborhoods—at Calixtlahuaca. The nature and dynamics of these spatial units are 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 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 the publication of 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 tended to avoid the topic of

neighborhoods because that concept was associated with the crowded cities of ancient Mesopotamia or the Islamic world. Yet, the low-density tropical cities of the Maya manifest a very different kind of urbanism (Arnauld and Michelet 2004), one that Roland Fletcher (2009) called “low-density agrarian-based urbanism.” Neighborhoods in low-density cities are by necessity different spatially from neighborhoods in cities with higher residential densities. Smith (2011a) develops a more formal argument for interpreting Maya settlement clusters as urban neighborhoods, based on comparative data and on the studies in this volume.

The chapters in part II 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 lived either in neighborhoods mixed with commoners or in 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 modern 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 (1960: 367) suggested that zones contained 50 to 100 houses and covered an area around one square kilometer. 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 part II, is now refining this pattern.

The Río Bec Region and Northwest Petén

The Río Bec region is an outstanding setting in which to examine neighborhood units in a more rural setting. As in other regions, repetitive architectural forms characterize Río Bec neighborhoods. Arnould 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 Petén 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 in a Mesoamerican city.

Postclassic Maya Cities

Among the Quiché and Pokom of the Guatemalan highlands, a political 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 *calpolli*, 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 a group of advisers. 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 *molam* of the Guatemalan highland correspond with those that would be expected of tightly knit neighborhood units. In chapter 12, Annereau-Fulbert incorporates the *chinamit* concept into her discussion of neighborhoods in the highland city of Kawinal.

Okoshi Harada (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. Okoshi Harada 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 11) refer to the *cuchteel* concept in interpreting the spatial organization in the city of Mayapán. Interestingly, despite the use of several robust empirical methods of analysis, only a few clear cases of neighborhood organization could be ascertained. Although spatial patterning was apparent for the higher politically connected strata of Mayapán 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* (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 an 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 (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 both to peasant villages and to spatial and social subdivisions of such villages. 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 1951). Redfield's interpretation of *calpolli*–*barrio* continuity was based on 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, who noted: "If it could be proven that the *calpolli* 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 *calpollis*.

Redfield was an early adherent of a line of scholarship that argued for the pre-Hispanic 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), urban neighborhoods (Granados 2008), and other institutions in colonial and modern times (Foster 1960) shows that the degree of continuity in social organization from pre-Hispanic times is much lower than that 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 pre-Hispanic 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 an 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 the following: a territorial unit based on locality, an administrative unit, a social group distinguished by ethnicity or occupation, a lineage, and a religious sodality. Second, ethnographers have used the term analytically to refer to a broad range of social-spatial groups. 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 study of three crucial topics for advancing our understanding of cities and urban life in ancient Mesoamerica: (1) the 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, and that many of the distinctive features of this kind of city were found in both Aztec and Maya cities. These features include the presence of intensive in-field agricultural cultivation within cities (Isendahl 2002) and the spatial clustering of houses (see figure 1.2; see also Lemmonier, chapter 9, and Arnauld et al., chapter 10). As presented earlier, these clusters also exhibit a set of social and spatial features that characterize neighborhoods and districts in higher density cities. These features include spatial propinquity of houses, regular 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., 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 (Watanabe 2004). If one puts Aztec and Maya cities and settlements 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. 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 part II make important advances in this area, and Smith (2011a) 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 (Sampson 2009). This topic can be broadened conceptually by focusing on a wider range of social categories (e.g., wealth, 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). A focus on neighborhood analysis, as begun by the chapters of 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? An exploratory study (York et al. 2011) identified sixteen drivers of urban social clustering, several of which are applicable to Mesoamerican and other premodern cities. These include the following: macrostructural 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., 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.

Role of the State and Elites in Neighborhood Dynamics

The existence of districts in a city signal 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 counterintuitive 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, in which 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, is far more complex, and this is precisely the realm illuminated by collective action theory.

Blanton and Fargher (2008) 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 the sample in their book—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). As in other premodern complex societies with more collective governance, agents of the state were present in urban neighborhoods. But the usefulness of collective action models will remain limited for ancient Mesoamerica until they can be translated into the kinds of archaeological remains recovered by archaeologists.

The collective action model of Blanton and Fargher illuminates aspects of a wider social dynamic: 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 2011b)—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 future research, and applications of these methods and theories will help in understanding the spatial and social processes that we have not started to identify in the neighborhoods and districts of ancient Mesoamerican cities.

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Note

1. 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.

References

Alcántara Gallegos, Alejandro

- 2004 Los barrios de Tenochtitlan: Topografía, organización interna y tipología de sus predios. In *Historia de la vida cotidiana en México, I: Mesoamérica y los ámbitos indígenas de la Nueva España*, edited by Pablo Escalante Gonzalbo, pp. 167–198. El Colegio de México and Fondo de Cultura Económica, Mexico City.

- Arnauld, Marie Charlotte
- 2008 Maya Urbanization: Agrarian Cities in a Preindustrial World. In *El urbanismo en mesoamérica/Urbanism in Mesoamerica*, vol. II, edited by Alba Guadalupe Mastache, Robert H. Cobean, Ángel García Cook, and Kenneth G. Hirth, pp. 1–36. Proyecto Urbanismo en Mesoamérica/The Mesoamerican Urbanism Project. Instituto Nacional de Antropología e Historia, Pennsylvania State University, Mexico and University Park.
- Arnauld, Marie Charlotte and Dominique Michelet
- 2004 Nature et dynamique des cités mayas. *Annales, Histoire, Sciences Sociales* 59(1):73–108.
- Ashmore, Wendy
- 1981 Some Issues of Method and Theory in Lowland Maya Settlement Archaeology. In *Lowland Maya Settlement Patterns*, edited by Wendy Ashmore, pp. 37–69. University of New Mexico Press, Albuquerque.
- Blanton, Richard E.
- 1978 *Monte Albán: Settlement Patterns at the Ancient Zapotec Capitol*. Academic Press, New York.
- Blanton, Richard E. and Lane F. Fargher
- 2008 *Collective Action in the Formation of Pre-Modern States*. Springer Science and Business Media, New York.
- Briggs, Xavier de Souza
- 2004 Civilization in Color: The Multicultural City in Three Millennia. *City and Community* 3:311–342.
- 2008 On Half-Blind Men and Elephants: Understanding Greater Ethnic Diversity and Responding to “Good-Enough” Evidence. *Housing Policy Debate* 19:218–229.
- Bullard, William R., Jr.
- 1960 Maya Settlement Pattern in Northeastern Petén, Guatemala. *American Antiquity* 25:355–372.
- Calnek, Edward E.
- 1976 The Internal Structure of Tenochtitlan. In *The Valley of Mexico: Studies of Pre-Hispanic Ecology and Society*, edited by Eric R. Wolf, pp. 287–302. University of New Mexico Press, Albuquerque.
- Carmack, Robert M.
- 1981 *The Quiché Mayas of Uatlan: The Evolution of a Highland Guatemala Kingdom*. University of Oklahoma Press, Norman.
- Carrasco, Pedro
- 1961 The Civil-Religious Hierarchy in Mesoamerican Communities: Pre-Spanish Background and Colonial Development. *American Anthropologist* 63:483–497.
- 1964 Tres libros de tributos del Museo Nacional de México y su importancia

- para los estudios demográficos. In *35th International Congress of Americanists (Mexico City, 1962)*, vol. 3, pp. 373–378. International Congress of Americanists, Mexico City.
- 1976 The Joint Family in Ancient Mexico: The Case of Molotla. In *Essays on Mexican Kinship*, edited by Hugo Nutini, Pedro Carrasco, and James M. Taggart, pp. 45–64. University of Pittsburgh Press, Pittsburgh.
- Chance, John K.
- 1996 The Barrios of Colonial Tecali: Patronage, Kinship, and Territorial Relations in a Central Mexican Community. *Ethnology* 35:107–139.
- Chance, John K. and William B. Taylor
- 1985 Cofradías and Cargos: An Historical Perspective on the Mesoamerican Civil-Religious Hierarchy. *American Ethnologist* 12:1–26.
- Chase, Diane Z. and Arlen F. Chase (editors)
- 1992 *Mesoamerican Elites: An Archaeological Assessment*. University of Oklahoma Press, Norman.
- Ciudad Ruiz, Andrés, María Josefa Iglesias Ponce de León, and María del Carmen Martínez Martínez (editors)
- 2001 *Reconstruyendo la ciudad maya: el urbanismo en las sociedades antiguas*. Sociedad Española de Estudios Mayas, Madrid.
- Cowgill, George L.
- 2007 The Urban Organization of Teotihuacan, Mexico. In *Settlement and Society: Essays Dedicated to Robert McCormick Adams*, edited by Elizabeth C. Stone, pp. 261–295. Cotsen Institute of Archaeology, UCLA, Los Angeles.
- Cowgill, George L., Jeffrey H. Altschul, and Rebecca S. Sload
- 1984 Spatial Analysis of Teotihuacan, a Mesoamerican Metropolis. In *Intra-site Spatial Analysis in Archaeology*, edited by Harold J. Hietala, pp. 154–195. Cambridge University Press, New York.
- Dickinson, Robert E.
- 1961 *The West European City: A Geographical Interpretation*. Routledge and Kegan Paul, London.
- Durán, Fray Diego
- 1994 *The History of the Indies of New Spain*. University of Oklahoma Press, Norman.
- Eickelman, Dale F.
- 1974 Is There an Islamic City? The Making of a Quarter in a Moroccan Town. *International Journal of Middle East Studies* 5:274–294.
- Fash, William L., Jr.
- 1983 Deducing Social Organization from Classic Maya Settlement Patterns: A Case Study from the Copan Valley. In *Civilization in the Ancient Americas: Essays in Honor of Gordon R. Willey*, edited by Richard M. Leventhal and Alan L. Kolata, pp. 261–288. University of New Mexico Press, Albuquerque.

- Fletcher, Roland
 2009 Low-Density, Agrarian-Based Urbanism: A Comparative View. *Insights (University of Durham)* 2: article 4. <http://www.dur.ac.uk/ias/insights/volume2/>.
- Foster, George M.
 1960 *Culture and Conquest: America's Spanish Heritage*. Viking Fund Publications in Anthropology, vol. 27. Wenner-Gren Foundation for Anthropological Research, New York.
- Freter, AnneCorinne
 2004 Multiscalar Model of Rural Households and Communities in Late Classic Copan Maya Society. *Ancient Mesoamerica* 15:93–106.
- Glass, Ruth
 1948 *The Social Background of a Plan: A Study of Middlesbrough*. Routledge and Kegan Paul, London.
- Granados, Luis F.
 2008 *Cosmopolitan Indians and Mesoamerican barrios in Bourbon Mexico City: Tribute, Community, Family and Work in 1800*. Ph.D. dissertation, Department of History, Georgetown University.
- Gravano, Ariel
 2005 *El barrio en la teoría social*. Espacio Editorial, Buenos Aires, Argentina.
- Grillo, Ralph D.
 2000 Plural Cities in Comparative Perspective. *Ethnic and Racial Studies* 23:957–981.
- Gutschow, Niels
 1993 Bhaktapur: Sacred Patterns of a Living Urban Tradition. In *Urban Form and Meaning in South Asia: The Shaping of Cities from Prehistoric to Precolonial Times*, edited by Howard Spodek and Doris Meth Srinivasan, pp. 163–183. Studies in the History of Art, Center for Advanced Study in the Visual Arts, Symposium Papers XV, vol. 31. National Gallery of Art, Washington, DC.
- Gutschow, Niels and Bernhard Kölver
 1975 *Ordered Space Concepts and Functions in a Town of Nepal*. Steiner, Wiesbaden, Germany.
- Hageman, Jon B.
 2004 The Lineage Model and Archaeological Data in Late Classic Northwestern Belize. *Ancient Mesoamerica* 15:63–74.
- Hicks, Frederic
 2010 Labor Squads, Noble Houses, and Other Things called “Barrios” in Aztec Mexico. *Nahua Newsletter* 49:13–21.
- Hill, Robert M., II
 1984 Chinamit and Malob: Late Postclassic Highland Maya Precursors of Closed Corporate Community. *Estudios de Cultura Maya* 15:301–328.
 1996 Eastern Chajomá (Cakchikel) Political Geography. *Ancient Mesoamerica* 7:63–87.

- Hill, Robert M., II and John Monaghan
1987 *Continuities in Highland Maya Social Organization: Ethnohistory of Sacapulas, Guatemala*. University of Pennsylvania Press, Philadelphia.
- Hirth, Kenneth G.
2000 Public Architecture, Site Planning, and Urban Community Organization. In *Archaeological Research at Xochicalco. Volume 1: Ancient Urbanism at Xochicalco: The Evolution and Organization of a Pre-Hispanic Society*, edited by Kenneth G. Hirth, pp. 210–243. University of Utah Press, Salt Lake City.
2009 Household, Workshop, Guild, and Barrio: The Organization of Obsidian Craft Production in a Prehispanic Urban Center. In *Domestic Life in Prehispanic Capitals: A Study of Specialization, Hierarchy, and Ethnicity*, edited by Linda Manzanilla and Claude Chapdelaine, pp. 43–66. *Memoirs*, vol. 46. University of Michigan, Museum of Anthropology, Ann Arbor.
- Ingham, John M.
1971 Time and Space in Ancient Mexico: The Symbolic Dimensions of Clanship. *Man* 6:615–629.
- Isendahl, Christian
2002 *Common Knowledge: Lowland Maya Urban Farming at Xuch*. *Studies in Global Archaeology*, vol. 1. University of Uppsala, Department of Archaeology and Ancient History, Uppsala, Sweden.
- Isendahl, Christian and Michael E. Smith
2011 *Urban Agriculture and Dispersed Housing in the Low-Density Cities of Mesoamerica*. Paper presented at the 2011 Annual Meeting of the Society for American Archaeology, Sacramento, CA.
- Kearns, Ade and Michael Parkinson
2001 The Significance of Neighborhood. *Urban Studies* 38(12):2103–2110.
- Keith, Kathryn
2003 The Spatial Patterns of Everyday Life in Old Babylonian Neighborhoods. In *The Social Construction of Ancient Cities*, edited by Monica L. Smith, pp. 56–80. Smithsonian Institution Press, Washington, DC.
- Kintz, Ellen R.
1983 Neighborhoods and Wards in a Classic Maya Metropolis. In *Coba: A Classic Maya Metropolis*, edited by William J. Folan, Ellen R. Kintz, and Laraine A. Fletcher, pp. 179–190. Academic Press, New York.
- Leeds, Anthony
1984 Cities and Countryside in Anthropology. In *Cities of the Mind: Images and Themes of the City in the Social Sciences*, edited by Lloyd Rodwin and Robert M. Hollister, pp. 291–312. Plenum, New York.
- Levy, Robert I.
1990 *Mesocosm: Hinduism and the Organization of a Traditional Newar City in Nepal*. University of California Press, Berkeley.

Lewis, Oscar

- 1951 *Life in a Mexican Village: Tepoztlan Restudied*. University of Illinois Press, Urbana.

Lockhart, James

- 1992 *The Nahuas After the Conquest: A Social and Cultural History of the Indians of Central Mexico, Sixteenth Through Eighteenth Centuries*. Stanford University Press, Stanford, CA.

Marcus, Joyce

- 2009 Understanding Houses, Compounds, and Neighborhoods. In *Domestic Life in Prehispanic Capitals: A Study of Specialization, Hierarchy, and Ethnicity*, edited by Linda Manzanilla and Claude Chapdelaine, pp. 255–266. *Memoirs*, vol. 46. University of Michigan, Museum of Anthropology, Ann Arbor.

Millon, René

- 1973 *Urbanization at Teotihuacan, Mexico. Volume 1: The Teotihuacan Map, Part 1: Text*. University of Texas Press, Austin.

Mulhare, Eileen M.

- 1996 Barrio Matters: Toward an Ethnology of Mesoamerican Customary Social Units. *Ethnology* 35:93–106.

Nadel, S. F.

- 1942 *A Black Byzantium: The Kingdom of the Nupe in Nigeria*. Oxford University Press, Oxford, UK.

Novic, Juliana

- 2008 *Reaching the City Limits: Identifying Settlement Boundaries at Calixtlahuaca, Toluca, Mexico*. Paper presented at the 2008 Annual Meeting of the Society for American Archaeology, Vancouver, BC.

Nutini, Hugo G.

- 1961 Clan Organization in a Nahuatl-Speaking Village of the State of Tlaxcala, Mexico. *American Anthropologist* 63:62–78.

Offner, Jerome A.

- 1983 *Law and Politics in Aztec Texcoco*. Cambridge University Press, New York.

Pyburn, K. Anne, Boyd Dixon, Patricia Cook, and Anna McNair

- 1998 The Albion Island Settlement Pattern Project: Domination and Resistance in Early Classic Northern Belize. *Journal of Field Archaeology* 25:37–62.

Rattray, Evelyn C.

- 1993 *The Oaxaca Barrio at Teotihuacan*. *Monografías Mesoamericanas*, vol. 1. Instituto de Estudios Avanzados, Universidad de las Américas, Puebla, Mexico.

Redfield, Robert

- 1928 The Calpolli-Barrios in a Present-Day Mexican Pueblo. *American Anthropologist* 30:282–294.

- Robertson, Ian G.
- 2001 *Mapping the Social Landscape of an Early Urban Center: Socio-Spatial Variation in Teotihuacan*. Ph.D. dissertation, Department of Anthropology, Arizona State University.
 - 2005 Patrones diacrónicos en la constitución social de los vecindarios Teotihuacanos. In *Arquitectura y urbanismo: pasado y presente de los espacios en Teotihuacan*, edited by María Elena Ruiz Gallut and Jesús Torres Peralta, pp. 277–294. Instituto Nacional de Antropología e Historia, Mexico City.
- Robin, Cynthia
- 2003 New Directions in Classic Maya Household Archaeology. *Journal of Archaeological Research* 11:307–356.
- Safa Barraza, Patricia
- 1998 *Vecinos y vecindarios en la ciudad de México: Un estudio sobre la construcción de las identidades vecinales en Coyoacán, D.F.* CIESAS and Miguel Ángel Porrúa, Mexico City.
- Sampson, Robert J.
- 2004 Neighborhood and Community: Collective Efficacy and Community Safety. *New Economy* 11:106–113.
 - 2009 Racial Stratification and the Durable Tangle of Neighborhood Inequality. *Annals of the American Academy of Political and Social Science* 621:260–280.
- Smail, Daniel Lord
- 2000 *Imaginary Cartographies: Possession and Identity in Late Medieval Marseille*. Cornell University Press, Ithaca, NY.
- Smith, Michael E.
- 1993 Houses and the Settlement Hierarchy in Late Postclassic Morelos: A Comparison of Archaeology and Ethnohistory. In *Prehispanic Domestic Units in Western Mesoamerica: Studies of the Household, Compound, and Residence*, edited by Robert S. Santley and Kenneth G. Hirth, pp. 191–206. CRC Press, Boca Raton, FL.
 - 2008 *Aztec City-State Capitals*. University Press of Florida, Gainesville.
 - 2010 The Archaeological Study of Neighborhoods and Districts in Ancient Cities. *Journal of Anthropological Archaeology* 29(2):137–154.
 - 2011a Classic Maya Settlement Clusters as Urban Neighborhoods: A Comparative Perspective on Low-Density Urbanism. *Journal de la Société des Américanistes* 97: 51–73
 - 2011b Empirical Urban Theory for Archaeologists. *Journal of Archaeological Method and Theory* 18: 167–192.
- Smith, Michael E., Juliana Novic, Angela Huster, and Peter C. Kroefges
- 2009 Reconocimiento superficial y mapeo en Calixtlahuaca. *Expresión Antropológica* 36:39–55.

- Spence, Michael W., Christine C. White, Evelyn C. Rattray, and Frederick J. Longstaffe
 2005 Past Lives in Different Places: The Origins and Relationships of Teotihuacan's Foreign Residents. In *Settlement, Subsistence and Social Complexity: Essays Honoring the Legacy of Jeffrey Parsons*, edited by Richard E. Blanton, pp. 155–197. Cotsen Institute of Archaeology, UCLA, Los Angeles.
- Stone, Elizabeth C.
 1987 *Nippur Neighborhoods*. Studies in Ancient Oriental Civilization, vol. 44. Oriental Institute, University of Chicago, Chicago.
- Suttles, Gerald D.
 1972 *The Social Construction of Communities*. University of Chicago Press, Chicago.
- Thomas, Norman D.
 1979 The Mesoamerican Barrio: A Reciprocity Model for Community Organization. In *From Tzintzuntzan to the "Image of Limited Good": Essays in Honor of George M. Foster*, edited by Margaret Clark, Robert V. Kemper, and Cynthia Nelson, pp. 45–58. Papers, vol. 55–56. Kroeber Anthropological Society, Berkeley, CA.
- Watanabe, John M.
 2004 Some Models in a Muddle: Lineage and House in Classic Maya Social Organization. *Ancient Mesoamerica* 15:159–166.
- Webster, David and William T. Sanders
 2001 La antigua ciudad mesoamericana: teoría y concepto. In *Reconstruyendo la ciudad maya: el urbanismo en las sociedades antiguas*, edited by Andrés Ciudad Ruiz, María Josefa Iglesias Ponce de León, and María del Carmen Martínez Martínez, pp. 43–64. Sociedad Española de Estudios Mayas, Madrid.
- Willey, Gordon R.
 1956 Problems Concerning Prehistoric Settlement Patterns in the Maya Lowlands. In *Prehistoric Settlement Patterns in the New World*, edited by Gordon R. Willey, pp. 107–114. Viking Fund Publications in Anthropology, vol. 23. Wenner-Gren Foundation for Anthropological Research, New York.
- Wood, Phil and Charles Landry
 2008 *The Intercultural City: Planning for Diversity Advantage*. Earthscan, London.
- York, Abigail, Michael E. Smith, Benjamin Stanley, Barbara L. Stark, Juliana Novic, Sharon L. Harlan, George L. Cowgill, and Christopher Boone
 2011 Ethnic and Class-Based Clustering Through the Ages: A Transdisciplinary Approach to Urban Social Patterns. *Urban Studies* 48: 2399–2415.