

Peasant mobility, local migration, and premodern urbanization

Michael E. Smith, mesmith9@asu.edu

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Abstract

The scale of human movement at the local and regional levels in agrarian states, called “local migration” by Charles Tilly, can be quite extensive. I review several characteristics of such movement, culled from a range of disciplines and historical contexts. Three spatial patterns are examined: village nucleation; rural-to-urban migration; and intra-urban movements. The movement of people into settlements—whether villages or cities—should not be viewed as an extraordinary occurrence requiring special explanation; instead, it is the normal concomitant of broader patterns of local and regional spatial mobility. The likelihood that individuals and households would move was determined largely by economic hardship on the household and local levels.

In the 1970s historical demographers uncovered evidence for remarkably high levels of population turnover in medieval and early modern British villages. Peter Laslett (1977), for example, reported that in the villages of Clayworth and Cogenhoe, only 38% of the residents in 1688 had been present twelve years earlier. Findings like this have profound implications for understanding the dynamics of rural society and urbanization in the past. Robin Osborne (1991) first brought this material to the attention of archaeologists, and drew some implications for the study of Classical Greece. Outside of the field of medieval archaeology, however, neither the demographic research nor Osborne’s discussion have had much impact.

Osborne (1991, 234) identified two implications of the historical demographic research:

- (1) The scale of local movement in past rural societies could be considerable;
- (2) Such movement was generated by a wide variety of factors.

I add two other observations:

- (3) The likelihood that individuals and households would move was determined largely by economic hardship.
- (4) The movement of people into settlements—both village nucleation and urbanization—was not an extraordinary occurrence that requires special explanation; instead, it is the normal concomitant of broader patterns of local and regional spatial mobility.

In this paper I review evidence on local migration in agrarian states and explore its implications for archaeological research on past processes of rural dynamics and urbanization. I present archaeological and historical examples from my own research on Aztec sites in central Mexico to illustrate key points of the argument.

Local Migration and Peasant Mobility

Individuals and groups have engaged in a wide range of spatial movements throughout history. A number of scholars—mostly outside of archaeology and anthropology—have addressed this variation by breaking down movement and migration into their constituent attributes and types (e.g., Tilly 1978; Moch 2003, 2011; Prothero and Chapman 1984). This literature is valuable because it allows archaeologists to transcend the limitations of past research on ancient migration. These limitations include a narrow focus on large groups of people who undertake a definitive move from a homeland to distant place (e.g., Cabana and Clark 2011, 5; Snow 2009), and a tendency to avoid defining migration at all, evidently believing that “everybody knows” what migration means (Anthony 1990; Burmeister 2000; Frachetti 2011).

A promising framework for moving beyond these limitations is Charles Tilly’s (1978) analytical typology (figure 1). Scholars of historical migration, such as Leslie Moch (2003), have found Tilly’s typology a useful scheme, and it is easily adaptable to archaeological settings. Tilly’s types are based on two primary variables: the distance moved, and the severity of the social cleavage created by the movement. This framework resonates with current research on migration in the Southwestern United States, which emphasizes the fluidity and frequency of movements at various spatial scales (Bernardini 2011; Nelson and Strawhacker 2011; Cameron 2013). Tilly’s scheme is valuable not because it provides easy answers to tough research questions, and not because it allows one to shoehorn empirical cases into the types. Rather, Tilly’s model is a heuristic device that advances scholarly understanding of the social context of human movement by breaking it down into coherent analytical categories.

For Tilly, *mobility* refers to movement with minimal distance and minimal social breakage or disruption. While such daily moves are included in some definitions of migration (Du Toit 1990, 305), most scholars follow Tilly in distinguishing them from migration per se. Tilly does note, however, that “the line between mobility and migration is arbitrary” (Tilly 1978, 51).

Local migration “shifts an individual or a household within a geographically contiguous market—a labor market, a land market, or perhaps a marriage market ... the migrant is already quite familiar with the destination before making the move” (Tilly 1978, 51-52). Local migrations are movements within a region or a set of nearby regions. The movements into and out of farming villages outlined above are examples of local migrations. Patrick Manning (2005) uses the label “home-community migration” for local migration. Local migration has rarely been addressed by archaeologists, in part because of the difficulty in identifying the process with archaeological data. Nevertheless, its prevalence in historical and modern settings challenges traditional assumptions of demographic stability within communities.

Circular migration “takes a social unit to a destination through a set of arrangements which returns it to the origin after a well-defined interval” (Tilly 1978, 52). Common examples in agrarian societies include seasonal agricultural work and transhumance. Circular migration in the developing world was explored by geographers in the 1970’s, using the label “circulation” (Prothero and Chapman 1984). In an adaptation of this approach, Gregson Schachner (2012) analyzes migration and movement in the Zuni area of the U.S. Southwest. Circular migration remains an active topic of research in the developing world today (Deshingkar 2010).

Tilly’s next type, *chain migration*, “moves sets of related individuals or households from one place to another via a set of social arrangements in which people at the destination provide aid, information, and encouragement to new migrants” (Tilly 1978, 53). Chain migration has long been a primary mechanism of urban growth throughout history (York et al. 2011).

Finally, *career migration*, “has persons or households making more or less definitive moves in response to opportunities to change position within or among large structures: organized trades, firms, governments, mercantile networks, armies, and the like” (Tilly 1978, 54). This category can be expanded beyond its European context by including additional kinds of “large structures,” such as polities, societies, or environmental/climatic zones. Most cases of “big-groups-of-people-moving-from-one-place-to-another” (i.e., implicit narrow archaeological definitions of migration) would fit under Tilly’s career migration category, although he focuses more on individuals and households than on the larger groups typically analyzed in archaeological migration studies.

Local Migration and Population Turnover in Peasant Society

My first argument is that many peasants in premodern agrarian states were spatially mobile in that they were not tightly bound to the land; they made frequent moves. Charles Tilly (1978, 63) noted that “one of the most impressive and consistent findings of the historical demographers has been the high level of local mobility among preindustrial European people.” Osborne (1991) is an excellent synthesis of this literature up to 1991. Historians typically approach this topic through demographic studies of individual communities at different points of time. They have been able to quantify the amount of movement into and out of specific communities, particularly in the late medieval and early modern periods in Europe, finding annual turnover rates on the order of 5%. In the words of Keith Wrightson (1977, 37), “Mobility was very high indeed and in some communities a majority of the population might disappear and be replaced in a single decade.”

In addition to Laslett (1977), a source discussed by Osborne, numerous case studies present quantitative data, including Gaunt (1977), Tinley and Mills (1994) and Poos (1986). The phrase “population turnover” is often used to describe the patterns of movement. Where data are available on destinations, the principal pattern was a “high density of moves within a radius of ten miles or so but longer-distance moves rather more rare” (Poos 1986, 4); additional evidence for the predominance of short moves is provided by McClure (1979) and Postles (2000).

Moves were made for a variety of reasons. Osborne (1991, 234) notes: “The degree of population pressure, the existence and state of a land market, the current profitability of the agricultural enterprise, and the attractiveness of the particular community will all have a part to play in a decision to move from one community to another.” His study is important because the historians who publish on this topic rarely generalize or make comparisons beyond a single region. One of the most consistent regularities in the population turnover data—found in nearly all cases—is the far greater level of movement among landless individuals and households (Tilly 1978, 63; Gaunt 1977, 209; Hochstadt 1983, 210). Servants and apprentices were the most common migrants, followed by other peasants without land.

Comparative data from other time and areas are hard to come by. Erdkamp (2008) argues that the high rates of population turnover in medieval and early modern Europe, with annual rates of ca. 5% (Tinley and Mills 1994, 36), cannot apply to Republican Rome, given other demographic reconstructions. He suggests that the Roman countryside differed from medieval Britain in that more Roman peasants owned land, there were far fewer landless laborers, and the labor market was smaller. In short, the higher rates of movement in medieval times are due to

lower levels of economic opportunity and greater economic hardship as compared with the Roman countryside.

Unfortunately, few ethnographers collect the kind of multi-year demographic data needed to investigate patterns of local migration. One case in Africa does fit the European pattern of frequent village turnover. Charlesley (1970, 15) notes that the village of Kimini in Bunyoro “possessed an air of stability and permanence.” Yet in a single year, “one in every six or seven indigenous households appear to have moved in during that interval” (p.16). He also notes that high social status was correlated with residential stability. In research on mobility and migration in the developing world today, scholars often lump the categories local and circular migration, and their results parallel those discussed above. Deshingkar (2010, 5), for example, notes that [circular] “migration rates among chronically poor groups are high.”

Local Migration in Aztec-Period Central Mexico

The local movements described above can be difficult if not impossible to document archaeologically. The point of this paper is not to provide an archaeological case study, but rather to suggest the potential magnitude of local mobility in past agrarian state societies. I illustrate some of the patterns of movement from my own research on Aztec communities in central Mexico. In re-examining excavation data from several sites, I can find evidence for only one of the spatial patterns identified below (intra-urban movement). But Aztec provincial society in what is now the state of Morelos (the area around Yauhtepec and Cuexcomate; see figure 2) is also described in a series of detailed census reports compiled only two decades after the Spanish conquest. As I discuss elsewhere (Smith 1993), the archaeological and historical data match up well, and the census documents do contain information on local movements. At both rural and urban settlements, most people lived in small single-room houses built of adobe (sun dried mud) bricks, laid on stone foundation walls, and these houses were frequently arranged in groups or compounds (figures 3, 4).

Peasant mobility and population turnover were clearly important processes in this area. Peasants who belonged to a localized social group called a *calpolli* had regular usufruct to the lands administered by the calpolli council but owned by a noble (Carrasco 1976). In many cases these farmers invested in land improvements such as irrigation canals and terraces (Smith and Price 1994). Farmers who belonged to a calpolli were not mobile. But landless laborers who did not have calpolli membership lacked regular access to farmland and were dependent on nobles or other commoners to be able to farm.

Frederic Hicks (1974, 253) discusses cases where Aztec landless laborers fled their original polity and petitioned a noble in another area to settle on their land. For example, a household head newly arrived at a Morelos calpolli said to the landowner, “Give us land and we will pay rent and not return to our former town” (Carrasco 1972). Unlike serfs in medieval Europe, Aztec lords did not have the right to compel their landless laborers to remain on the estate. In one of the Morelos calpolli communities whose census documents were analyzed by Pedro Carrasco, fully 16% of the commoners were landless laborers living in the houses—and helping work the fields—of commoner calpolli members (Carrasco 1976, 107).

Spatial Patterns of Movement

Village Nucleation: Diverse Reasons for Movement

The process of settlement nucleation is perhaps the most visible archaeological manifestation of local migration as described above. Nucleation has been studied in many regions by scholars of many disciplines. The primary findings of this research are: (1) nucleation was a common settlement process in the past; and (2) there is no single driver or cause of nucleation that operates in all or even most cases. Instead, a variety of diverse forces generate nucleation and dispersal, and generalization is difficult if not impossible. I follow Glenn Stone's definitions of the relevant processes: "we define *dispersed settlement* as having households located on their fields and *nucleation or concentration* as the removal of population from agricultural plots to villages or towns" (Stone 1998, 66). Archaeologists have analyzed nucleation using a variety of terms, including aggregation (Adler, van Pool, and Leonard 1996; Birch 2013) and coalescence (Kowlaewski 2006).

Table 1 lists the most common drivers that have been proposed for episodes of nucleation.* Each of these drivers has been shown to be of major importance by several authors. The most thorough and wide-ranging discussions are those of geographer Marilyn Silberfein (1989), historian Daniel Curtis (2013), and anthropologist Glenn Stone (1998). Stone discusses economic forces that promote dispersed settlement in systems of intensive agriculture, and he frames nucleation as a process that must overcome this "pull towards dispersion;" see also Netting (1993) and Drennan (1988) on the role of intensive agriculture. In addition to sources included in Table 1, there is a rich archaeological literature on nucleation and village formation that tends to stress a different set of drivers, including population growth, environmental change, and colonization (Birch 2013; Bandy and Fox 2010).

Defense is by far the most commonly invoked reason for settlement nucleation, and for many writers this is the most important driver. Stone (1998, 84), for example, suggests that, "defense is probably the most prevalent factor that can override the pull towards dispersion," and Silberfein (1989, 261) notes that "the most consistent association is between villages and a need for defense against aggressors. In some cases these defensive villages disintegrate once a perceived threat is eliminated." For ethnographic examples of the latter process in Africa, see Udo (1965) or Silitshena (1979).

Political administration is another widespread explanation for settlement nucleation in agrarian states. As Stone (1998, 84) notes, "Both African and non-African colonial governments have created settlement concentrations to facilitate taxation and control of indigenous populations;" see also Ocitti (2011, 3). For non-colonial contexts in medieval Europe, Curtis (2013) explores this topic under his theme of "power, coercion, and lordship," and de Montmollin (1987) argues that political coercion for administration was the primary force generating settlement nucleation in the highland Maya polities of the Rosario Valley.

Other institutional forces describe two of Curtis's (2013) four themes for medieval nucleation: (a) field-systems and resource-management; and (b) urbanization and market integration. Under the first heading, Curtis discusses the debate over the relationship between

* The sources for Table 1 are: (Silberfein 1989), (Chisholm 1968), (Stone 1998), (Curtis 2013), (Drennan 1988), (de Montmollin 1987), and (Kohler and Varien 2010)

village nucleation and the establishment of open field systems in continental Europe in early medieval times. For summaries of the separate but parallel debate in Britain, see Oosthuizen (2010, 2013). Curtis's second theme focuses on increasing market integration. Also relevant here is Silberfein's (1989) discussion of the role of high land values in stimulating nucleation.

Economies of scale are commonly invoked as drivers of settlement nucleation. The first variant, *labor pooling*, describes situations in which agricultural laborers can work more efficiently if they pool their efforts; Curtis (2013) discusses this under his theme, "communalism." In a fascinating study of Jewish settlement in Palestine before 1914, Katz and Grossman (1993) attribute strong settlement nucleation to two factors. First, the open field systems permitted under the existing land tenure regime promoted collaborative labor arrangements; and second, most settlers had little farming experience and thus benefitted greatly from the increased knowledge exchange permitted by nucleated settlements.

Central place functions are a second type of economies of scale invoked by some authors to explain nucleation. In Stone's (1998, 87) words, central place functions "promote settlement concentration by the same logic that agricultural intensification promotes dispersal: the residence is pulled toward those points on the landscape that people more frequently access." Drennan (1988) and de Montmollin (1987) mention this factor, but suggest that it was of minimal importance in ancient Mesoamerica.

The literature on settlement nucleation suggests several conclusions. First, nucleation was a common process in past agrarian societies, but so was settlement dispersal; it is difficult or impossible to identify any general trends toward nucleation in the archaeological or historical records. Second, many diverse factors promote nucleation, and there is no single model that can explain all or most episodes of nucleation, even in a single region. These conclusions parallel those of Daniel Curtis (2013), who emphasizes the diversity of causes of medieval nucleation in different regions of continental Europe at different times. In Tilly's typology, nucleation processes, like other types of peasant mobility, fall under the category of "local migration."

Rural-to-Urban Migration

Rural-to-urban migration can be considered a special case of settlement nucleation. Although most of the studies discussed above describe the nucleation of dispersed farmers into villages, not cities, the drivers listed in Table 1 also apply to the process of movement into cities. Defense, political administration, economies of scale, and institutional forces have all been identified as factors promoting rural-to-urban migration in premodern times and in the developing world today (Jones and Garst 1981; Roberts 1978; Tilly 1978; Glaeser 2013). Not surprisingly, those categories of people most likely to be mobile in early modern Europe—peasants without land, servants, apprentices, and vagabonds—were those most likely to move into cities (Tilly 1978, 59; Moch 2003, 46-48). Archaeologists have documented rural-to-urban migration at a number of early cities through settlement pattern research (Adams 1981; Sanders, Parsons, and Santley 1979), and bone chemistry is now starting to provide evidence for the process at some early cities (Slater, Hedman, and Emerson 2014).

The capitalist economy and modern technology (particularly in transport and communication) add a series of complexities to rural-urban migration today. Nevertheless, several features of rural-to-urban migration systems, documented by twentieth-century ethnographers in the developing world, are highly relevant to premodern urban systems.

(1) *Peasants adapt well to urban conditions.* One of the most influential papers in urban anthropology was “Urbanization without Breakdown” by Oscar Lewis (1952). The paper countered the views of Louis Wirth (1938) and other sociologists who had claimed that urbanization inevitably leads to social breakdown. Lewis showed that immigrants from the village of Tepoztlan to Mexico City maintained their household and family organization in the city. Their social customs and beliefs—from religion to medical concepts to *compadrazgo* (a fictive kinship custom)—remained strong.

Although Lewis (1952, 41) provided a series of context-specific reasons for the rural-to-urban continuity in social life he documented, a more general explanation for his findings comes from research on chain migration (Tilly 1978); see Figure 1 above. Numerous urban ethnographers found the same thing Lewis observed in Mexico City: migrants engage in chain migration. That is, they tend to settle among people from their native village or region (Smith 1963; Abu-Lughod 1969; Sutton 1983), and this leads to socially clustered neighborhoods (Greenshields 1980; York et al. 2011). Even when migrants from a village are scattered around a city, they often form village associations to stay in contact with one another (Roberts 1974).

(2) *Migrants maintain strong ties to their home village.* Over half of the Tepozteco migrants studied by Lewis owned a house in Tepoztlan, and they maintained regular relationships with the village and its residents. This is a widespread pattern:

In most African countries, migrants still maintain close relations with their birth village even from a distance: they return to visit; they invest in housing, social activities, education and health amenities; they send money and sometimes receive goods or host visiting relatives (Beauchemin and Bocquier 2004).

In cases around the world, migrants return to their village of origin for festivals, to help with the harvest, and in some cases to retire (Simic 1973; Buechler 1970). In the words of Bryan Roberts (1974, 217-218), “Migration is an extension of the social and economic fields of activity of a village.” This and other research suggests that rural to urban migration is typically not a one-time extraordinary event, but rather a more dynamic process that contributes to high levels of local movement.

(3) *Costs and benefits of migration.* In place of the simplistic “push-pull” perspective—still common in archaeological treatments of migration (Burmeister 2000; Frachetti 2011)—Donald Bogue (1977) advocated a cost-benefit approach. There are both costs and benefits to moving into the city, as well as costs and benefits of remaining in the countryside. In Table 2 I illustrate this perspective with a hypothetical comparison (based on Bogue) of two categories of male farmers in rural settlements in conquest-period Morelos: a calpolli member and a dependent laborer (see discussion above). Calpolli members had regular assured access to farmland so long as they remained in their village or town, whereas dependent laborers had to work under someone else—either a noble or a commoner—to be able to farm, often with a share-crop agreement. This reconstruction is based primarily on works by Carrasco (1976), Hicks (1974), Smith (1993), and Smith and Hicks (n.d.). It describes movement into a nearby city-state capital, not to the imperial capital Tenochtitlan.

The table is set up to reflect the major distinction in peasant land tenure arrangements, between calpolli members and landless, dependent laborers. Choices and decisions would have been heavily influenced by local demography and the land to labor ratio (Domar 1970; North 1981). For example, in situations with abundant land and low population, migration to the city was less likely, whereas situations of growing land scarcity would favor migration, with dependent laborers affected before calpolli members. One notable feature of this scenario is that

the two categories differ very little in their push and pull forces, whereas they are strongly differentiated by the other forces (costs to migrate, and benefits to remain). The push and pull categories describe only some of the relevant drivers of migration, and they are not at all helpful in understanding social variation in the likelihood to migrate.

These hypothetical considerations of movement and stability lead to a conclusion in accordance with the comparative discussion above: the landless, dependent laborers were far more likely to migrate into the city than were the calpolli members, who had assured access to farmland. The calpolli members (or the calpolli organization) did not *own* the land; nobles owned all the land (Carrasco 1972, 1976). But as pointed out by Robert Netting (1993) outright ownership is typically less important than usufruct in smallholder agriculture.

Discussion. These patterns have important implications for the study of premodern urban and regional systems. First, each city was strongly embedded in its regional setting. Significant movements of people across rural areas, and between city and village, are likely in most urban systems. Second, urban dynamics such as neighborhood formation cannot be understood without reference to rural conditions and processes. Third, although rural-to-urban migration was generated by a diversity of forces, regional institutional variables such as land tenure rules and the land:labor ratio seem to be the major factors that generate regional processes of local migration and rural-to-urban migration.

Intra-Urban Movements

Once peasants move into the city, they do not necessarily remain in one place. Intra-urban movement is quite common in cities today and in the recent historical past, and it seems logical to infer that it was a common occurrence in the distant past as well. Two strands of social science research have documented the negative social effects of urban residential mobility today, and these provide additional insights into systems of local migration in the past. In the first, sociologists have established a causal link between urban residential mobility and crime levels. This connection is strongest in poor neighborhoods, where residential mobility (called residential instability) is measured by variables such as length of residence at a single address, percent of new households within the past five years, or percent of residents who own a house (Bogges and Hipp 2010; Sampson 1991; Keene, Bader, and Ailshire 2013; Sampson, Morenoff, and Gannon-Rowley 2002).

This research includes empirical tests of predictions from social disorganization theory (Sampson 2012). Posthumus et al. (2011) summarize social disorganization theory as follows:

The basic premise of this model is that the socialization processes generating neighbourhood attachment and social control will only take place when social networks in neighbourhoods are present. Social networks in return, would above all need time to develop. The higher the residential mobility in neighbourhoods, the less time residents have to develop networks with each other. The negative effect of residential mobility will not be restricted to the formation of networks alone. Since residents are more inclined to correct each other when they know each other, residential mobility is also expected to have a negative effect on social control (Posthumus, Olt, and van Kempen 2011, 3).

In a separate scholarly tradition, residential stability has been linked to the development of strong community cohesion and organization (O'Brien 2012; Bowles and Gintis 2002). Several of the community-level variables in Elinor Ostrom's (1990, 1998) model of successful

community collective action are dependent on residential stability, including the development of reputation and trust as resulting from continuity of social interactions over time. I discuss archaeological implications of this research in Smith (n.d.).

Although data are not abundant for premodern cities, some authors have described movement or migration within cities in premodern urban traditions (Krämer 2008; Erdkamp 2001). In a study of documents from the Aztec imperial capital Tenochtitlan, Edward Calnek (1974, 45) noted a pattern of residential stability of households and neighborhoods, while individuals who were not household heads moved in and out of specific houses. My excavations have generated indirect evidence for variations in internal mobility among Aztec settlements. At three sites in Morelos (Capilco, a village; Cuexcomate, a town; and Yau-tepec, a city), houses were never abandoned once they were occupied initially, with the single exception of a noble's compound at Cuexcomate (Figure 5). At the urban settlement of Calixtlahuaca in the Toluca Valley, on the other hand, numerous houses were abandoned after each period, presumably because the residents moved to a different location. My tentative interpretation of the difference in residential stability between Calixtlahuaca and the Morelos sites focuses on two key differences: (1) resources (particularly cotton, a form of money in the Aztec economy) were more abundant, and households wealthier, in Morelos; and, (2) *calpolli* organization was stronger in that area. This topic requires further comparative study, however.

Local Migration in the Distant Past

The comparative data reviewed in this paper, culled from many historical settings and several scholarly disciplines, lead to four conclusions about local migration and urbanization in agrarian state societies. *First*, the patterns of peasant mobility, nucleation, and rural-to-urban migration all point to potentially high levels of movement in past rural societies. While few archaeologists or historians have claimed that peasants never moved, many of us have assumed that most farmers were relatively immobile, and that movement or migration was a rare occurrence. I know that my own perceptions about Aztec central Mexico changed radically after reading Robin Osborne's (1991) paper in 2013.

A *second* observation is that there are many drivers of local migration, village nucleation, and rural-to-urban migration in agrarian societies (Table 1). No single factor can explain a majority of cases, and diverse forces often generated movement within a single area. This is the conclusion of every study that has attempted a systematic account of patterns of movement within a region or historical setting (Curtis 2013; Silberfein 1989; Stone 1998).

Third, decisions about local migration by individuals and households were strongly conditioned by economic hardship. Research from a political economy perspective in many regions and time periods supports the conclusion that members of poorer peasant households—typically those without land—are and were far more likely to move locally or regionally than members of wealthier households. On a regional scale, demography plays a major role in establishing rates of movement. Relevant drivers of movement include land tenure patterns (those with secure tenure are far less likely to move), and the land-to-labor ratio (land shortages increase the frequency of local movement and other types of migration).

Fourth, the high levels of both rural and urban spatial mobility documented in the present and the recent past suggest that moving into a village or town or city was not an extraordinary achievement in the past. The “urban graveyard effect”—the high levels of

mortality in premodern cities—has been recognized for many decades, along with its dramatic implication: that rural-urban migration was necessary to maintain urban population levels (McNeill 1976, 55ff; Sjoberg 1960, 84; Bairoch 1989). But the linkages between this process and the high levels of rural movement have yet to be explored in detail. The research reviewed in this paper finds few demographic or social structural barriers to urban growth through immigration in premodern societies. While the economic and political drivers of urbanization differ greatly between contemporary and ancient cities, and while individuals in the past and present probably had very different motivations to move into cities, such movement was a regular part of regional demographic processes in the hinterlands of both contemporary and ancient cities.

The implications are clear: people in past agrarian states probably moved within regions more frequently than many archaeologists have acknowledged. The forces driving this movement were highly varied, yet the outcomes were similar. The populations of many villages turned over at a high rate; villages were formed and abandoned; people moved into and out of cities with ease; and movement within cities was not uncommon. Many of these processes were likely driven by forces identified in modern studies, particularly patterns of household wealth and regional demography. It is time for archaeologists to acknowledge the prescient observations of Robin Osborne (1991) and to begin to develop methods and concepts to document and explain these movements.

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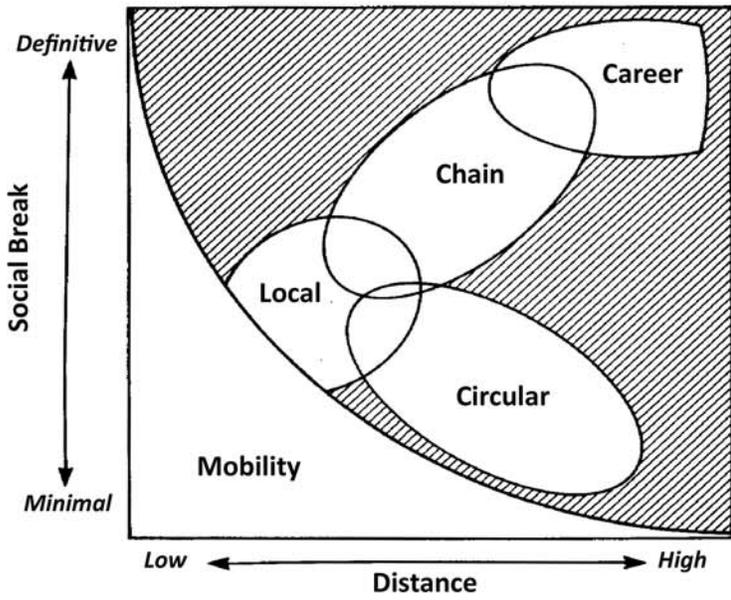


Fig-1.jpg

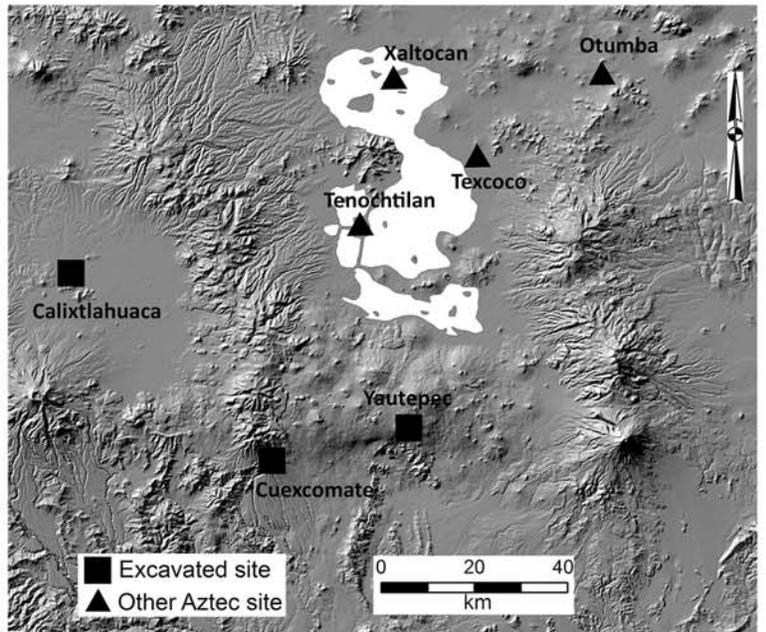


Fig-2.jpg



Fig-3.jpg



Fig-4.jpg

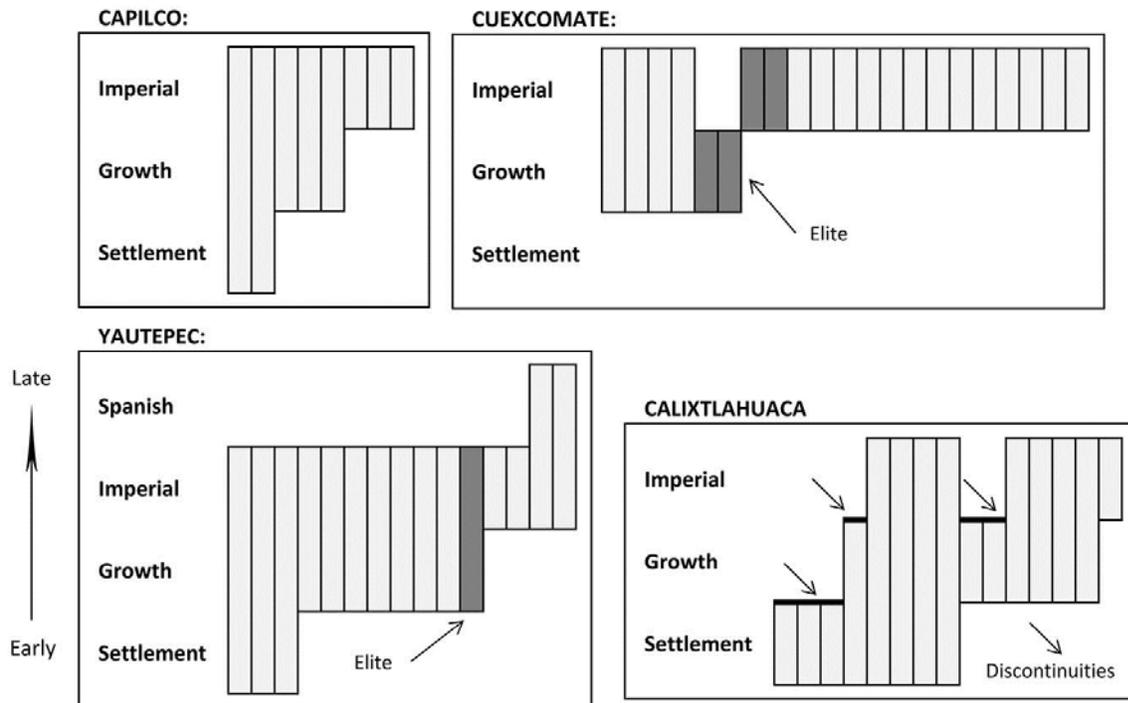


Figure 5.

Table 1. Drivers of settlement nucleation in agrarian economies

	Sources:						
	A	B	C	D	E	F	G
Defense	x	x	x		x		x
Political administration	x	x	x	x	x	x	
Other institutional forces	x			x			
Economies of scale:							
Labor pooling			x	x	x		x
Central place functions			x		x	x	

Key to sources:

A: Silberfein (1989) E: Drennan (1988)
 B: Chisholm (1968) F: de Montmollin (1987)
 C: Stone (1998) G: Kohler & Varien (2010)
 D: Curtis (2013)

Table 2. Hypothetical urban migration choices of Aztec peasants

Costs and benefits	Calpolli member	Dependent laborer
Costs to migrate	Closer scrutiny by officials Disruption of social networks Fields may be more distant	Closer scrutiny by officials
Benefits to migrate ("pull" factors)	Greater access to information Greater access to ceremonies More economic opportunities	Greater access to information Greater access to ceremonies More economic opportunities
Costs to remain ("push" factors)	Inadequate agricultural land	Inadequate agricultural land Restricted access to land
Benefits to remain	Social networks remain stable Continued access to land	