

List of Figures | ix

List of Tables | xiii

Mobility and Migration in Ancient Mesoamerican Cities:
An Introduction

M. Charlotte Arnauld, Christopher S. Beekman, and Grégory Pereira | 3

Part I: Bioanthropological Approaches

1. Urban and Rural Population Movement Patterns during the Late and Terminal Classic in the Belize River Valley, Belize
Carolyn Freiwald | 23
2. Classic and Postclassic Population Movement and Cultural Change in the Belize Valley, Belize
Julie A. Hoggarth, Carolyn Freiwald, and Jaime J. Awe | 43

3. The Bioarchaeology of Maya Population Mobility, Trade, and Settlement Growth during the Classic Maya Period: A View from the Yucatecan Coastal Port of Xcambo, Mexico
Andrea Cucina, Thelma N. Sierra Sosa, and Vera Tiesler | 59
4. Immigrant Lives: Mobility and Migration in Postclassic Cholula, Mexico
Meggan Bullock | 79

Part II: Classic Lowland Maya Mobility

5. Mobility as Resilience: A Perspective on Coastal to Inland Migration in the Eastern Maya Lowlands
Elizabeth Graham and Linda Howie | 109
6. Maya on the Move: Mobility and Migration in the Classic Maya Kingdom of Copan, Honduras
Nancy Gonlin and Kristin V. Landau | 131
7. Water, Land, and Ancient Maya Population Dynamics in the Puuc Hills, Mexico
Nicholas P. Dunning, Michael P. Smyth, Eric Weaver, and David Ortigón Zapata | 148
8. Maya Residential Architecture, Mobility, and the Terminal Classic Abandonment of Lowland Urban Settlements
M. Charlotte Arnauld, Eva Lemonnier, Dominique Michelet, and Mélanie Forné | 164

Part III. Late Mesoamerican Migrations

9. Coalescence at Chicoloapan, Mexico: Migration and the Making of a Post-Collapse Community
Sarah C. Clayton | 189
10. Ephemeral Cities? The Longevity of the Postclassic Tarascan Urban Sites of the Zacapu Malpaís, Mexico, and Its Consequences for the Migration Process
Grégory Pereira, Marion Forest, Elsa Jadot, and Véronique Darras | 208
11. Itza Maya Migration and Mobility: A Tale of Two (or More) Cities
Prudence M. Rice | 232
12. Cohesive Social Groups and the Formation of Enclaves in West-Central Mexico
Christopher S. Beekman | 251

Part IV: Discussion

13. Migration and Its Close Linkages

Dominique Michelet | **269**

References | **285**

Contributors | **357**

Index | **365**

Mobility and Migration in Ancient Mesoamerican Cities

An Introduction

M. CHARLOTTE ARNAULD,
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AND GRÉGORIO PEREIRA

This volume addresses human mobility and migration in ancient Mesoamerica, a complex preindustrial and agrarian society. The studies presented herein focus upon the periods and regions in which Mesoamerica was becoming increasingly urbanized. Large villages, towns, and cities dotted the landscape, and the movement of people within and between them made social interaction more dynamic than has been appreciated (figure 0.1). In this volume, we examine population movement in relation to urbanization and de-urbanization among ancient Mesoamerican societies and polities during the first fifteen hundred years AD.

In support of this project, both theoretical and methodological advances open new avenues for research. We aim to disrupt the conceptual dichotomy of sedentism versus mobility to highlight the physical dynamism embedded in Mesoamerican subsistence structures, economic activities, and political strategies. We consider *mobility* to encompass the broad range of habitual physical movements that facilitate (or complicate) social and cultural practices. *Migration* is then a form of movement that takes place under unusual circumstances (“a transgressive social act” [Cabana and Clark 2011b, 8–9]). From this perspective,



FIGURE 0.1. Map of Mesoamerica, showing major centers and locations mentioned in the chapters.

sedentism has been overly idealized as a default and absolute state (Morrissey 2015), from which embedded residential and logistical mobility (Binford 1980) takes place. In reality, changing patterns of mobility are constantly transforming society and preventing anything approaching a steady state. When we speak of *urbanism*, we refer to those settlements whose size and complexity make them the loci for multiple social institutions, but whose specific organizational and scalar thresholds will vary locally. Prior researchers have noted the idealized nature of the sedentism-mobility dichotomy (e.g., Kent 1992), though most commonly as part of research into nomadic hunters and gatherers (e.g., Sapignoli 2014). We argue that mobility is also an underappreciated aspect of town- and city-based societies in the ancient world, and that this population throughput is important for subjects as wide ranging as exchange, social organization, and political dominance.

PAST PERSPECTIVES

Archaeological research relies on the imposition of structure to our data—typologies of societies, settlements, and people. While categories can provide something tangible to analyze, they have outlived their usefulness when they begin to stand in the way of our understanding. One of the primary examples in archaeology is the continuum from mobility to sedentism to urbanism, the latter associated with complex political systems. But urban centers are formed and maintained by rural to urban movement, and polities possess porous boundaries

through which people regularly pass and return in the pursuit of the goods, power, and social interaction that constitute complex society.

In the renewal of migration studies following the influential paper by Anthony (1990), much has been written about how migration became discredited during the height of processual archaeology (see Cabana 2011; Cabana and Clark 2011a, 2011b). Migration was sidelined as a subject for theoretical research, because it was seen as an exogenous and unpredictable event that disturbed what were considered self-contained systems. But over the years Mesoamericanists continued to document population movements at the foundation and collapse of cities, particularly at rupture points in urban sequences when population displacement was accompanied by changes in material culture (e.g., several in Demarest et al. 2004; Fowler 1989; LeBlanc 2015).

Archaeologists have slowly recognized that not all Mesoamerican peasants stayed in one location and that large villages and cities maintained their high demographic profiles through constant in-migration (Storey 1992). Without returning to migration as an explanatory crutch, Post-processual archaeologists (in the broadest sense) acknowledged that sedentism can take various forms that still encompass mobility (e.g., “short-term sedentism” in Bernardini 2011, 34; Nelson and LeBlanc 1986; “village drift” in Darling et al. 2004; “serial migrations” in Fowles 2011, 48; “urbanized nomads” in Fox 1967). Some scholars began to analyze migration as “conscious, strategic responses to certain kinds of problems” (Beekman and Christensen 2003, 113–114). Population movement has become a topic of interest with the goal of analytical inquiry, most notably in the US Southwest, with its environmental and social dynamism (Alexiades 2009; Hard and Merrill 1992; Kent 1992; Kohler 1992; Nelson and Strawhacker 2011; Ortman and Cameron 2011; Schachner 2012; Stone 2005). Moreover, increased attention to the demographic trajectories of urban settlements revitalized the topic of population movements. “Internal” population growth had been used as a prime mover by archaeologists for decades, yet George Cowgill stressed two basic issues—that population growth (or decline) is not just the output of specific ratios between mortality and fertility, but also of population movements; and that the spatial scale of the unit under study determines whether growth and movement are external or internal:

The mathematics of population growth also have implications about the role of migration as a demographic process. Clearly we should be always explicit about the boundaries of the regions we are investigating, and we should remember that, depending on how we define the region, the same movement of people may be seen either as an internal rearrangement in population density patterns, or as another process besides birth and death that actually adds to, or subtracts from the population total. Moreover, when the unit of analysis is a single settlement . . .

in- or out-migration may play a major role or even totally swamp effects due to internal birth and death rates (Cowgill 1975, 509)

Ancient urban settlements did not therefore grow or decline solely due to the fertility/mortality balance, but primarily through population movements in and out (see also M. Cohen 2008; Davis 1973; Joyce and Winter 1996; M. E. Smith 2014, 528). Blanton and colleagues (1996) operationalized Cowgill's points in what can now be seen as a pioneering evaluation of migration in the sequence of urbanization and de-urbanization in the central valleys of Oaxaca. They emphasized the dynamics implied in the formation and construction of a central capital at Monte Alban and elsewhere in its polity. Their general argument was based on the quantification of local and regional settlement demography phase by phase (500 BC–AD 1520), and they noted the ethnohistoric evidence for poor, mobile, landless tenants (*terrazgueros*) in colonial Oaxaca. They explicitly sought convergence between preindustrial movements in Mesoamerican agrarian society, and present-day migrations triggered by changing conditions of wage labor (see C. Smith 1982; M. E. Smith 2014). Twenty years on, we can see that this research was significant for illustrating Cowgill's point as to the importance of population movement. Their work also stressed the rural/urban dimension, as well as the directly political importance of prehispanic migration processes through time and space. As they state, "The human condition in prehispanic Oaxaca was not 'naturally sedentary'" (Blanton et al. 1996, 36; see Morrissey 2015).

THEORETICAL CONSIDERATIONS: CONTRASTING MOBILITY AND MIGRATION

We accept Anthony's general position that population movement is a patterned human behavior (1990, 895). As Tilly (1978) and Osborne (1991) have shown, movement can take many forms linked to the specificities and idiosyncrasies of culture, as well as historical circumstances. Access to this diversity is, however, markedly constrained by the methodologies of detection available to archaeologists. Broad categories of movement can be defined in relation to documented social structures, economic systems, and cultural practices, as well as events with profound consequences for human communities. To begin with a simple dichotomy, mobility is an element of *habitus*—it is embedded within those structures, systems, and practices—whereas migration generally follows more disruptive events or processes. Our definition of migration largely follows that used by Tsuda et al. (2015), who focused on this disruptive aspect, but we define mobility more narrowly than Quirk and Vigneswaran (2015), who are interested in the political manipulation of all kinds of movement.

Two contributions to mobility research provide inspiration and theoretical underpinning for this volume. One is Takeshi Inomata's (2004) consideration of the mobility of nonelites among the Classic-period Maya, the second being

Michael Smith's (2014) synthesis of local migration in the context of urbanization. These studies ask us to consider the degree to which everyday practices of mobility may have shaped not only social relations but also political authority and urbanism in ancient Mesoamerica. Mobility has of course been most frequently considered in studies of nomadic hunters and gatherers (Barnard and Wendrich 2008; Binford 1982; Kelly 1995; Sellet et al. 2006; and innumerable others), or among farmers who shifted residence with the seasons (e.g., Nelson and Strawhacker 2011; Snead et al. 2011). The assumption that populations practicing intensive agriculture were stable and remained *in situ* over long periods of time has been taken for granted, leaving a significant gap in our understanding of the role of mobility in complex social formations such as urban centers. Encompassing not only intraurban but also rural/rural and rural/urban movements, mobility was (and is) "built in" to Mesoamerican societies. Multiresidence households, customary exogamic marriage, long-distance trade, ceremonial circuits, and pilgrimages—all could be associated with routine socioeconomic and religious activities in urban contexts. Mobility is used in an analogous sense in Southwestern archaeology even though urbanization had never been as intense as in Mesoamerica (see Clark 2001; Kahn 2013, 251). Anthony (1990, 901) described these modes of mobility as "short-distance movements within a local area" (see also Cameron 2013, 219). How "short" and "local" such moves may have been in the past depends on a number of parameters, among them local and regional topography, as well as physical distance between centers. This is frequently more than a two-day walk in open topography, but social embeddedness in local/regional circuits and networks defines mobility better than does distance.

Whether landless or affiliated with social groups having access to land, peasants did not necessarily become fully sedentary wherever and whenever. In tropical and temperate environments alike, traditional crop agriculture has been recognized as a risky endeavor that did not necessarily warrant or even allow residential stability (e.g., Baden 1987; Beekman and Baden 2011; Campbell and Overton 1991; Inomata et al. 2015; Killion 2013; Pohl and Pohl 1994). Complex residential arrangements linked to *milpa* agriculture—an extensive, swidden-crop system—have been analyzed in detail in ancient and modern agrarian societies (Atran 1993; S. Brown 2002; Hanks 1990; Liffman 2000; Lucero 2002; Wilk 1991). People moved from one niche to another for many reasons, including soil exhaustion (Baden 1987, 2005), tending multiple fields, and reducing the costs of transporting the harvest (Hard and Merrill 1992). People also periodically supplemented farming with part-time craft activities (Hirth 2009), and with trading expeditions that linked settlements, markets, and resources. People maintained urban residences for one or two generations and then left for the hinterlands, or split from their households to dwell for some period in the family field hut

(Arnauld 2014). Religious practices, fairs, pilgrimages, and public ceremonies drew people into centers or conversely out into the countryside (Kubler 1984; Palka 2014; Wells and Nelson 2007) and placed short-term demands for housing upon their hosts. Monthly ceremonies drew people into the centers, while markets periodically rotated between communities. Exogamous alliances, marital residence rules, and political allegiances structured these movements. Social ties as well as topographic pathways thus channeled mobility along well-worn paths within and between centers.

Mobility would then be defined as the use of temporary residences structured by an urbanized settlement system, involving circular, irregular, or regular movement that follows a seasonal, annual, or multiannual tempo. Defined in this way, ancient Mesoamerican mobility had traits in common with modern urban and rural/urban mobility. However, ancient contexts rarely encompassed modern conceptions, values, and norms of state territory (e.g., linear boundaries that defined fiscal status and citizenship). Instead, Mesoamerican mobility originated in the incomplete overlap between groups of affiliation and groups of coresidence. People attended specific socioeconomic, ritual, and/or political activities while still pertaining to a group with a shared residential locus, most explicitly laid out in the “House” model (Gillespie 2000; Lévi-Strauss 1979), but present to some extent with most corporate groups. Thus, it follows that mobility was not—and in socially appropriate contexts, still is not—chaotic and aimless wandering. Mobile individuals or groups maintained a fixed, primary residence, generally the house of older kin, as a point of return and a place to invest resources and plan future activities (Arnauld 2014). This can be observed in contemporary Mesoamerican short- and long-distance wage migration, increasingly articulated with circular mobility owing to modern transport technologies, in which individuals and groups accumulate wealth elsewhere in a conscious mobility “project” so as to invest it in a primary residence or new land at their original locale (Piedrasanta et al. 2010; Quesnel 2009). In the past, “durable houses” (Beck 2007b) were often built to be occupied, modified, and rebuilt at the same place over centuries. Beginning in the Late Formative or Early Classic periods, the stone used for public architecture was extended to private residences. In Classic to Postclassic Maya urban centers, domestic buildings came to outstrip public architecture. Elaborate and prestigious housing satisfied the increased need for creating roots, or what can be called an “anchoring process,” for mobile populations (Arnauld et al. 2017b). It follows that embedded patterns of mobility should not be confused with general “interaction.” Mobility was not just about exchanging economic and cultural values, but it encompassed the multiple strategies of people moving to resolve the contradictions embedded in, for instance, their simultaneous experience of rural landscapes and urban communities.

In contrast, some forms of movement occurred in response to a surge of problems deriving from environmental change, volcanic eruption, economic downturn, or military conquest. Cabana and Clark (2011b, 5) define *migration* as a “one-way residential relocation to a different ‘environment’ by at least one individual” (see also Tsuda et al. 2015), alternately phrased by Bernardini (2011, 31) as “a singular, disruptive event.” When faced with transgressive displacement that disrupts individual *habitus*, migrants cross political, environmental, or social boundaries, whereas mobility does not cross boundaries any more dramatic than those between the urban and the rural, or between neighborhoods or cities. Although frequent in mobility, cycles of displacement are rare in migration as it results in a new pattern of movements. In response to drastic events or circumstances, migration uproots migrants with a shift in “anchoring.” The whole system of mobility must then be rebuilt, centered on the new anchor point, or what Binford called the “residential hub” (1982, 4, 14), but it could equally be thought of as a new basis for *habitus* and the establishment of new bodily practices.

Defining migration as outside the usual range of mobility means that it is motivated by relatively disruptive phenomena. These may be rapid, catastrophic events, or more long-term processes, like extended climatic shifts that encourage movement north or south, or what Ben Nelson and colleagues (2014) call “transformative relocation” of villages and cities, by which entire social groups abandoned a place to found and build a new place. Ancient Mesoamerica is not unique in having cities whose formation, growth, and dissolution were largely politically driven. Even in relatively medium-sized towns, urbanization was simultaneously polity formation, in which previously distant groups came together. De-urbanization could similarly take place along the cleavage planes between factions (Stone 2005). More than units of consumption, distributional markets, or simple crossroads with congregated populations, Mesoamerican cities were communities and polities in and of themselves (see Houston et al. 2003). City institutions were political institutions, and urban demography was a political stake. Political leaders would have sought to attract migrants and to control both mobility and migrations (Beekman 2015, 81–87; Joyce and Winter 1996; Quirk and Vigneswaran 2015):

Mesoamerican polities, like many polities elsewhere, would have derived their power and authority from the populations that they could draw into their orbit. Governments were dependent on people for foodstuffs, construction labor, soldiers, and the products of skilled labor, such as textiles or lapidary work. Although rarely singled out as something requiring theoretical explanation, the rise and fall of many Mesoamerican centers as far back as circa 1400 BC essentially involved the attraction and eventual loss of population. (Beekman 2015, 82; see also Beekman and Christensen 2011, 160–161)

Mesoamerican migration must be seen within this framework of complex, urbanized societies in which many medium- or large-sized settlements had primarily political functions (with economic functions subsumed). They formed, fluctuated, and finally broke up or dissolved through displacements of population. Most large urban settlements in Mesoamerica were segmented into neighborhoods and districts (Arnauld et al. 2012; Daneels and Gutiérrez 2012; Hirth 2003; Manzanilla and Chapdelaine 2009; M. E. Smith 2010b). Those modular groupings came into existence not only through urban interaction (M. L. Smith 2003), but also through mobility and immigration, and as factions they facilitated migration into and out of the city (Brumfiel and Fox 1994; see Cameron 2013, 222–223; Stone 2015 in the Southwest). Even relatively short-distance migratory movements induced a strong “ethnic” identity due to the political orientation of constituent groups, each with an agenda that concealed or exacerbated such identity. This is well exemplified in indigenous tales of migration (Beekman and Christensen 2011, 148–149; Graulich 1981, 1984). Forced resettlement also contributed to the emergence of large cities, and consolidated territories that needed protection, especially during the Epiclassic, Postclassic, and even Colonial periods (see Beekman 2015; Cowgill 2013; Manzanilla 2005a; Pereira et al. 2005; Rivera Villanueva and Berumen Félix 2011). While migrations are unusual and likely to be preserved as historical content in tales, myths, or ceremonies (indeed, migration tales may be reshaped to give them additional symbolic significance—Boone 1991; M. E. Smith 1984; 2011, 478–480; Vapnarsky 2009), mobility due to its very banality may go unrecorded and be accessible primarily through archaeology.

The contrast or continuum that we draw between mobility and migration is a heuristically useful abstraction, but in many real cases there may be some overlap between them, making the dichotomy between *mobile* and *migrant* peoples somewhat difficult to apply (even without mentioning the term *refugees*). For example, a noble marriage that sanctions the integration of migrants into the local city may combine elements of each. Another example that shows the overlap between these categories is that of “ethnic” enclaves identified in the great Mesoamerican cities. The iconic case of Teotihuacan, where Zapotec, Veracruzano, and Michoacano barrios have been identified (Gómez Chávez 1998; Price et al. 2000; Rattray 1987; Spence 1992), demonstrates the permanent presence of foreign populations that maintained links with their homeland through what Spence (2005) calls “diaspora networks.” These imply a continuous flow of wealth, persons, and ideas between the enclaves and their place of origin, combining cyclical and continuous mobility as new members migrate in while existing members tend to assimilate (Manzanilla 2017). Peter van Dommelen (2014, 479) recently called for “exploring the multiple and interlocking scales of mobility and migration,” a topic with much potential. Mobility may for example

“pave the way” for migration in more than one sense (Nelson and Crider 2005; Quesnel 2009). Through normal patterns of mobility, groups accumulate knowledge about potential destinations (Anthony 1990, 899–900). Mobility prepares individuals and social groups for migratory movements as it anticipates and establishes an organizational framework for one-way relocations (Inomata’s [2004] “mobility as a capacity”), making movement available as a solution to crisis. Similarly, deeply etched pathways of mobility can “bound” a system (Anthony 1990; Cabana 2011, 20; Cameron 1995). But the “thick” boundary (Monod Becquelin 2012) created by habitual mobility can become a secondary system through which people may build new modes of movement. Today this is what leads to the *coyotes* in Mexico and the *passeurs* in Turkey and Greece—they frequently moved across these boundaries and ended up creating new pathways.

Migration and mobility interrelate along scalar and temporal lines as well. By defining mobility as the habitual and the recurrent, it could be seen as internal to a “system” while migration is external to it. Yet it is not true that mobility occurs on the local scale alone, as transport facilities and social embeddedness in local/regional networks frame mobility better than mere distance. Mobility and migration relate temporally as well. Migrations that appear singular and disruptive may be seen to recur when viewed at the scale of the *longue durée*, as people move in concert with millennial- (Paulsen 1976) or century-scale (Black et al. 2011) climatic changes. The scale effect is also an issue of temporal resolution in the sense that repeated mobility over the centuries could be conceptualized by the archaeologist as a single large migration. However, “the long-term directionality and near irreversibility of the transition” (Leppard 2014, 486) would still need to be explained (see one case of reversibility in Carot 2001). But these are only potentials—the intensification of mobility does not necessarily lead a population to become displaced, and conversely not all migrations originate in habitual mobility. For the archaeologist, it is a real challenge to identify the best spatial and temporal scales for analysis. It requires a deep knowledge of the cultural and historical contexts in which movements have been detected. For instance, the migration of a lineage or other corporate group into a host community requires a different detection method than the establishment of an entire settlement of migrants. The former could easily be missed by inadequate sampling procedures, and by methods designed for aggregate populations rather than individuals.

METHODS FOR ADDRESSING THE PROBLEM

If population movements are not simply demographic displacement from one point to another, but also patterned behavior involving many social and cultural aspects (Anthony 1990; Cabana and Clark 2011, 6), then there must be many approaches for the detection of those movements, with variation to be observed

in human physical remains and material culture, but also in changes to settlement patterns or urban layouts. For example, the rapid emergence of a large urbanized settlement in one region is better explained by rural/urban mobility, or a single migration, than *in situ* population growth. The answer should be in the structure of the settlement itself and the demographic trajectory of each of its neighborhood components (Arnauld et al. 2012; Arnauld et al. 2017b; M. L. Smith 2003). Recurring episodes of abandonment and return in a given settlement may differentiate internal mobility from outmigration, requiring the occupational history of each residential unit to be reconstructed (M. E. Smith 2014). Epigraphy and iconography at some Classic Maya cities declare or portray rulers as foreign, requiring that new methodologies in bioarchaeology be applied to their physical remains in order to validate their presumed origins (e.g., Cucina 2015a, 2015b; Price et al. 2008, 2010; Wright et al. 2010). So far, there is no general methodology that universally distinguishes mobility from migration. Each has its own peculiarities, and the distinction between them emerges from the available evidence, inducing the archaeologist to develop specific strategies for her/his data. Hopefully the case studies will accumulate and build up reference inventories of patterned movements to be related to past Mesoamerican contexts. We are just starting to develop a cumulative record now, and face certain difficulties.

As suggested above, five broad classes of methods useful for studies of mobility and migration can be delineated:

1. those based on biogeochemical analysis of human remains, with the limitations inherent to the environmental influence on body chemistry,
2. genetic and morphological biodistance studies of human remains, though the data for human genetic variation (DNA) are particularly vulnerable to taphonomic factors,
3. those focusing on variations in material culture and behaviors, including forms of housing, burial, and other ritual practices, although they may have causes independent from mobility and/or migration,
4. those more demographic- and urban-based methods that concentrate on temporal and spatial variation in settlement size, composition, layout, and location, and
5. those more economic and geographic proxies that index changing relations between urban settlements and their hinterlands.

Fortunately, in many cases at least two of these methodological categories can be applied to the evidence. Moreover, in Mesoamerica linguistics and ethnohistory provide relevant, abundant documentation of population movement, and tap into aspects of migration that cannot be approached effectively through archaeology (Peregrine et al. 2009). It is important to note that in each

case, not all the parameters of the movement under analysis—origin, destination, size, tempo, demographic structure, motivations—can be determined. In addition, not all such parameters have the same priority or relevance to every research project.

To begin with biogeochemical approaches, isotopic analyses that reliably track immigrants in any given population depend on the spatial distribution of distinct geologic formations (Hodell et al. 2004). In geologically homogeneous regions like the western or central Maya lowlands, long-distance migrants are more easily detected, whereas short-range mobility remains obscured. But the latter can be evaluated in the much more heterogeneous eastern lowlands of Belize. Both short- and long-range movements are generally thought to be underestimated (e.g., Scherer 2007; Scherer and Wright 2015, 115). When they work, isotopic methods can tell us something about demographic structure, origins, and destination locales of mobile/migrant groups, and we can correlate them with independently documented socioeconomic and political systems to differentiate mobility from migration. The capacity of isotopic analysis to develop spatial life histories for individuals makes them particularly ideal for discerning patterns of mobility (Manzanilla 2015, 2017; Price et al. 2000). But this method is unable to identify the succeeding generation of locally born descendants, a topic that can only be addressed through morphometric, nonmetric, and genetic studies. Some biological anthropologists have shown how migrant traces may potentially disappear into their host communities after just a few generations (Frankenberg and Konigsberg 2011). Mesoamerican archaeologists are scarcely capable of documenting population age structures, due to the lack of large numbers of well-preserved human remains. However, when the opportunity arises, those structures can be impacted by migrations, for example by producing an abnormal proportion of young men or women (e.g., Cameron 2011). Finally, setting aside properly biological markers, we cannot forget that biocultural practices were common in Mesoamerica and constitute a good indicator of foreign origin. Various authors have shown how these irreversible modifications to physical appearance, whether instituted in the first years of life (head shaping) or in adolescence (dental modifications), can signify a person's foreign origin (Pereira 1999, 165–168; 2018; Serrano et al. 1993; Tiesler 2014, 2015).

Most archaeological studies of population movements hope to identify them through formal variations in material culture, but this has well-known weaknesses (e.g., Tourtellot and González 2004). Archaeologists have long passed the point where we accept that material culture simply reflects identity, as people may choose to stand out or blend in with their new neighbors based on many factors (Beekman and Christensen 2011; Hegmon et al. 2016; Stone and Lipe 2011). Thus, portable material culture, house forms, and ritual behaviors may or may not vary between those who have moved and their new neighbors. But mobility

should be inherently more difficult to identify in this manner. While we define migration as non-systemic and into areas with which the migrants may have only had narrowly structured prior contact, mobility involves repeated, cyclical movements among people who are already familiar with one another, and the transplants may feel little need to express difference from others through material culture (Beekman 2015, 77–78; Beekman and Christensen 2011, 160–161; Bernardini 2011, 32). We may be able to address this difficulty through the recognition of a “focal residence” (Anthony 1990, 904), around which regular mobility revolves. But in any case, it is important that we break with the older expectation that movement should be directly reflected by formal changes in artifacts.

As a more idiosyncratic movement that breaks with normal mobility, migration is expected to be more dramatic and to result in more visible variation in material culture. Even so, migrants can be absorbed into communities when the advantages of rapid and complete integration at the destination locale are seen as important, or when local efforts to enforce homogenization and assimilation are strong (Beekman and Christensen 2011; Clayton 2013; Cowgill 2013; Hegmon et al. 2016; Stone 2003). It is probable that migrants will still be visible through demographic variation in settlement composition, private behaviors such as food preparation, or unconscious practices embedded in technological style (Clark 2001). Furthermore, material culture signatures exist not only at the destination, but also at the origin locale where the decision to migrate may have been accompanied by specific behaviors such as rituals of abandonment, which may take the form of patterned destruction including the extraction of buried ancestral remains (Barrientos et al. 2014; Lamoureux-St-Hilaire 2015). This last example illustrates well how migration provokes a disruption in residential life by forcing the migrants to decouple from one location and reestablish themselves in a new place, and that migrants may be distinguished by evidence subtler than artifact styles.

Demographic assessments of urban settlements should incorporate settlement size, composition, and density using a multiscale approach that considers residential units, neighborhoods, large districts, and the whole community. In spite of the diversity and abundance of Classic/Postclassic Mesoamerican urban forms, studies of this type have been developed mainly at Teotihuacan (Cowgill 2015a; Manzanilla 2015; Manzanilla and Chapdelaine 2009), Monte Albán (Blanton 1978; Blanton et al 1996), Copan (Webster et al. 2000), and to a certain extent Tikal (see Chase et al. 1990). “Population surges” indicative of pronounced immigration events are sometimes discussed (Arnauld et al. 2017b; Blanton et al. 1996; Webster 2014), but methods of evaluating population density and variation through time and space are still the subject of many disagreements. This is, however, one of the most promising avenues of research when combined with demography, urban studies, and the politico-ideological process

of “place-making” (Fash and López Luján 2009). Place-making creates archaeological signatures through ideologically designed city layouts and selective placement on the landscape. Fundamental changes to city layouts may be the results of concepts imposed by migrants, while accretionary changes may be accommodations to the demands of mobility. The concept of “transformative relocation” similarly confers upon migration a primary role in polity formation and dynamics: “As in the Mimbres, Hohokam, and Classic Maya cases, in the La Quemada example people stopped living in large settlements in what had been their main area of occupation, and many families must have relocated to form new social configurations” (Nelson et al. 2014, 177). This must be seen as particularly prevalent in the Mesoamerican Epiclassic and Postclassic periods, and as such studied in detail (Manzanilla 2005b). It underlines the often-subtle aspects of human migration, even though coercion and forced resettlements in wartime may also have been part of many Mesoamerican stories.

Finally, mobility (more than migration) can be detected by reviewing the relationships between cities and their hinterlands, and can be documented through pedestrian or remote-sensing surveys, geographical assessments of landscape diversity, and through paleoenvironmental proxies documenting local human land-use. As demonstrated by Southwestern archaeologists, mobility patterns are dependent upon this type of knowledge, linking archaeological and environmental evidence to various residential systems along with specific mixes of crop agriculture or other subsistence modes. Dual residences (anchor houses, field huts) involving a high degree of mobility may have the same archaeological signature as stable social groups with strongly marked hierarchy (e.g., such as the use of slave labor at the site of agricultural production). The longevity of a household in a single locale may show frequent gaps in occupation resulting from regular mobility, but mobility that only involves a part of the social group may be undetectable.

Other disciplines may have a role to play (Beekman and Christensen 2003), but only with careful attention paid to their relative strengths and weaknesses. Different temporal and spatial scales often make it difficult to synchronize different datasets. Linguistic reconstruction is most applicable at the regional scale (e.g., Hill 2015), unless specific inscriptions are available. Ethnohistoric accounts can provide quite specific details and insights into perceived motivations for movement, but may also assign symbolic significance to migrations by working them into archetypal myths. Whether this is a plus or a minus depends on one’s research question.

HOW OUR CONTRIBUTORS ADDRESSED THE PROBLEM

Even though all the chapters in this volume combine several of the approaches that we briefly delineated above, the four of them that form the volume’s first

part illustrate primarily bioanthropological methodologies. The four chapters that then follow combine more archaeological and geographical approaches to mobility in the Classic (AD 250–950) Maya lowlands. The last part assembles four archaeological studies of migration over Mesoamerica, mostly in post-Teotihuacan times (AD 550–1520), with attention given to ethnohistorical sources. Finally, Dominique Michelet presents a useful, factual, and realistic discussion in the last chapter.

Chapter 1 by Carolyn Freiwald uses isotopic analyses applied to a broad corpus of data with further attention to burial patterns, while in chapter 2 Julie Hoggarth, Carolyn Freiwald, and Jaime Awe supplement these proxies with distinct bioanthropological markers, burial patterns, and variation in material culture (cuisine ceramics and lithics). Each chapter documents primarily regional-scale mobility in the eastern Maya lowlands, along with some possible late immigrations during the Postclassic period (after AD 900). They both show a clear concern for the issue of “visibility” of mobile people versus stable people in terms of material culture, suggesting that mobility may have actually engaged a high proportion of the studied population at any given moment.

Another two chapters by Andrea Cucina et al. and Meggan Bullock, respectively, combine isotopic sourcing with osteological analyses. Andrea Cucina and colleagues (chapter 3) take a much broader perspective on composite movements across the Yucatán peninsula, as they use the proxies of dental nonmetrics and isotopic assessments from a large series of skeletal remains obtained at the seaport of Xcambo in northern Yucatán. They assess temporal variation from the Early Classic (AD 200–600) to the Terminal Classic (AD 800–1000) periods. The authors consider variation in settlement layout, composition, and proximity to salt production sites. They conclude that the population was composed of diverse but relatively local groups.

Meggan Bullock (chapter 4), after reviewing ethnohistorical and archaeological information about the role of Cholula in Classic/Postclassic Central Mexico to assess the relevance of migration and mobility at the site, applies isotopic, paleodemographic, and paleopathological analyses to skeletal remains obtained from a low-status cemetery located in the epicenter of the great city. Bullock summons large sets of ethnohistoric data bearing on group migrations into Postclassic Cholula, while also discussing mobility induced by marriage moves, urban “enclaves,” neighborhoods and their “homelands,” along with pilgrimage and market “visits.” She concludes that there were numerous individual and family migrations into the city, stressing that the corresponding burial practices do not stand out from those of the local population.

The following chapters dedicated to the Maya switch their focus to the relationship between city and hinterland, primarily addressing mobility. Elizabeth Graham and Linda Howie (chapter 5) present a synthetic approach to the issue

of Terminal Classic/Postclassic trade and mobility in northern Belize. They find contrasting datasets, namely a marked heterogeneity in visible material culture and burial patterns with limited isotopic evidence for nonlocal populations, against a backdrop of sociopolitical continuity at Lamanai and less so at the associated seaport of Marco Gonzalez. Short-range mobility seems widespread, and the authors argue for some degree of cosmopolitanism among the new local elites relative to traditional elites, and little migration that might have destabilized the exchange system. The situation seems to have been volatile, which would have been the case well into the Postclassic and even Colonial periods.

In chapter 6, Nancy Gonlin and Kristin Landau review the demographic trajectory of the Maya city of Copan, concluding that migration played a role in the urbanizing process, something that several independent isotopic analyses tend to confirm. But they go further in calling on a variety of archaeological evidence to suggest that ongoing mobility between the city and its hinterlands (subsumed under Tilly's categories of migrations) may have also contributed to local urban dynamics. Although mostly punctuated and dispersed, specific data identify field huts, and show a degree of heterogeneity in construction modes, rituals, and ceramics that suggest both regional mobility and some migration from lower Central America.

Chapter 7 by Nicholas Dunning, Michael Smyth, Eric Weaver, and David Ortégón Zapata starts from a geographical and sociocultural analysis of Puuc settlement patterns in the northern Maya lowlands. They evaluate mobility as a plausible peasant strategy during the Late Preclassic (200 BC–AD 150) and Classic (AD 200–800) periods. They use material culture, residential morphology, and water-storage technology (chultuns, or reservoirs) to suggest a degree of control by local social hierarchies. Demographic evidence, like the burst of population at the large city of Uxmal in the ninth century, also suggests another avenue for research on regional mobility. Their cautious, integrated approach finds only limited regional-scale mobility in the Puuc region due to the constraints associated with water distribution, but also due to stabilizing factors like the formation of noble estates and agricultural intensification.

Charlotte Arnauld, Eva Lemonnier, Dominique Michelet, and Mélanie Forné (chapter 8) infer from the long-term demographic trajectories of a few selected lowland Maya cities—where they have developed research projects—that mobility and migration must have frequently shaped and dissolved urban settlements. In a multiscale approach centered on (mainly Classic period) intra-settlement evidence, the stratigraphy of minimal household units, episodes of monumental construction, and developments in residential architecture, they characterize mobility within, into, and away from urban settlement. Mobility should help further in characterizing the final abandonment of inner lowland cities by AD 800–1000.

The last four chapters on several Mesoamerican regions, including the Maya, revert to the more conventional theme of migration. In chapter 9, Sarah Clayton takes as her starting point the demise of Teotihuacan at the onset of the Epiclassic (AD 600–900). She evaluates possible migration from Teotihuacan to a peripheral settlement in the southeastern Basin of Mexico by looking for changes in community size and composition. After discussing the migration issue at the end of Teotihuacan, Clayton attempts to integrate the demographic trajectory of Chicoloapan Viejo with material culture variation on the household scale, in order to conclude that the settlement expansion would have followed immigration of families from Teotihuacan and elsewhere in the Basin, with subsequent settlement reorganization.

Chapter 10, by Grégory Pereira, Marion Forest, Elsa Jadot, and Véronique Darras, reviews the narrative from the *Relación de Michoacán* of Postclassic migrations into and off the Zacapu lava flows in the Michoacán highlands, where several large cities appear to quickly come and go from AD 1200 to 1520. They use such archaeological proxies as demographic trajectory, neighborhood composition and expansion, ceramic-waste accumulations, and quantities of burials compared to demographic population estimates. They find that these centers rapidly formed and dispersed along a north–south trajectory over time. This study does focus on the singular urban tradition of Mesoamerica with its sweeping migratory movements. The stake is to attain chronologies of sufficiently high resolution and precision to assess the relocations of short-time settlements.

Prudence Rice (chapter 11) starts from the ethnohistorically rich documentation of migrations across the Maya lowlands during the Terminal Classic (AD 800–1000), Postclassic (1000–1520), and Colonial (1520–1697) periods, and interrogates their veracity using a wide array of archaeological evidence from the Petén Lakes region and elsewhere. She ranges from the elite, strongly ethnicized sphere (public architecture and associated funerary rituals, settlement layout, and location), to the inner, intimate sphere of households (ceramic technological styles and decoration, forms associated with specific foodways). Even though some mobility may be involved, the movements documented are largely migratory. The author also discusses related issues of sociopolitical fission and fusion.

Chapter 12 by Chris Beekman takes place in the heterogeneous ethnic landscape between the Tarascan and Aztec Empires of the Late Postclassic period (AD 1450–1520). He considers historically documented and politically driven migrations into the Tarascan Empire that formed enclaves, and why some of them retained their ethnolinguistic identity over time. He notes parallels in how these migrations were organized and carried out when compared to the more “mythical” migration narratives from the Early to Middle Postclassic. He compares the lessons learned from these documented enclaves to earlier archaeological case studies in the central Mexican highlands. Archaeological evidence

for the existence of earlier enclaves with strong, persisting identity is then discussed (at Teotihuacan, Chingu, and Ucareo settlements). Beekman argues that the fate of migrant communities depends greatly on their “institutional completeness,” and whether they maintained their independence or relied upon the host economy to meet social needs.

FINAL WORDS

The position taken in the present volume is that urban mobility and migration must be studied as modalities that partially overlapped and articulated, thereby opening the way to more differentiated perspectives on the Classic, Epiclassic, and Postclassic periods in distinct urbanized areas of Mesoamerica. The balance between systemic mobility and idiosyncratic migration was dynamic, and changed across time and space. The array of methodologies that can be combined now allows us to envision various lines of research, and we stress that there must be a shift away from simply documenting population movements to developing our understanding of the role that mobility and migration played in an ancient complex agrarian society.

We support a wider dialogue that includes modern population migrations (Baker and Tsuda 2015), which have accelerated rapidly alongside many political and economic events and processes. Movement will continue to increase as climatic and environmental hazards upset current cycles of mobility and dislodge anchored farmers (Black et al. 2011). The scale of movement will not be captured by narrow definitions of individual versus household migration, as larger groups will send members as scouts to develop opportunities, and new diaspora networks will form (Faist 2013, 1638). Whereas disruptive events and circumstances today often force people to take to the road with no greater goal than survival, in many cases the role of underlying patterns of mobility in supporting the more widely discussed migrations remains to be clarified. By focusing on ancient urbanization and deemphasizing the modern focus on borders, we hope to shift attention to the urban “poverty traps” to which so many migrants are drawn in search of solutions to insurmountable problems.