

Dynamics of change in multiethnic societies: An archaeological perspective from colonial North America

Kent G. Lightfoot¹

Department of Anthropology, University of California, Berkeley, CA 94720

Edited by Linda R. Manzanilla, Universidad Nacional Autonóma de México, Mexico, D.F., Mexico, and approved March 20, 2015 (received for review November 19, 2014)

This Perspective presents an overview of the archaeology of pluralistic colonies (approximately late 1500s-1800s) in North America. It complements the other special feature papers in this issue on ancient societies in Mesoamerica, the Near East, the Armenian Highlands, Peru, and China by presenting another body of literature for examining the dynamics of change in multiethnic societies from a different time and place. In synthesizing archaeological investigations of mercantile, plantation, and missionary colonies, this Perspective shows how this research is relevant to the study of pluralism in both historic and ancient societies in three ways. (i) It enhances our understanding of interethnic relationships that took place in complex societies with imposing political hierarchies and labor structures. (ii) It helps us to refine the methods used by archaeologists to define and analyze multiethnic communities that were spatially delimited by ethnic neighborhoods. Finally, (iii) it presents more than a half century of experimentation with various models (e.g., acculturation, creolization, ethnogenesis, and hybridity) that have been used to study the dynamics of culture change in multiethnic societies.

European colonies | indigenous peoples | enslaved laborers | colonial hierarchies | ethnic neighborhoods

An important issue in the study of the dynamics of change in multiethnic societies is understanding how pluralism may have created new forms of social relationships, cultural practices, and sociopolitical organizations over time. Archaeologists have long been interested in documenting ancient places where large, pluralistic populations resided. There is growing interest in the investigation of culture contact, pluralism, and social dynamics in ancient cultures using crosscultural, comparative analyses (1-3). The comparative study of social formations in complex societies is particularly timely for the field of archaeology (4, 5). That is why the papers in this PNAS Special Feature are so important: they make a significant contribution in broadening our perspective and understanding about the social dynamics of complex, multiethnic polities in Mesoamerica, the Near East, the Armenian Highlands, Peru, and China.

The purpose of this Perspective is to place the PNAS papers into the broader archaeological literature on pluralistic places. It is important to recognize that an extensive body of research exists for the study of multiethnic communities. Since the 1960s historical archaeologists have used a diverse range of datasets, including archaeological materials, archival documents, ethnographic accounts, and oral traditions to examine interethnic interactions in colonial settings. I begin by presenting a brief overview on the expansion in the western United States in the

archaeology of colonialism in North America that has focused on settler, managerial, and missionary colonies. I then outline how this research may be relevant for scholars working elsewhere in the world who are examining the dynamics of change in multiethnic societies characterized by notable political hierarchies and ethnic neighborhoods.

A Brief Overview

The archaeology of colonialism in North America examines the processes and outcomes of native and colonial interactions that took place as a consequence of European exploration and settlement in indigenous lands from the 1500s through the early 1800s. Archaeologists have investigated a diverse range of colonial settlements founded primarily by Britain, Spain, France, the Netherlands, and Russia. Colonies varied significantly along a continuum marked by the scale of colonial immigration: at one end were settler colonies denoted by hordes of colonial intruders moving into indigenous lands, and at the other end were managerial and missionary colonies where only a small cadre of European managers or missionaries lived and worked at any one time.

Settler colonies, populated by waves of European immigrants who carved out new lives in foreign lands, were typically associated with British colonialism in Eastern North America, Australia, South Africa, and New Zealand, as well as the later American mid-to-late 1800s. The hallmarks of settler colonies were persistent territorial expansion, massive movements of free settlers, extensive agrarian and ranching activities, and the attempted dispossession of indigenous people to make way for immigrant families (6-8). The impetus for these colonies was the land itself to create residences and settlements, as well as the sustenance/income that working the lands would bring to the colonists. Consequently, when lands were occupied by others, the "logic of elimination" was widely practiced (9). Lands were taken away from indigenous communities through conquest, treaty, or persistent land squatting and trespassing. Recent historical overviews of settler colonization in New England and other areas along the East Coast emphasize the violence, factiousness, instability, and atrocities that marked this process that attempted to push indigenous peoples from their homelands (10, 11).

Managerial colonies were more focused in their economic objectives. Founded as mercantile (fur trade) outposts, plantations, mining operations, and fishing/whaling factories, they served as bases for exploiting valued raw materials and growing agricultural commodities (12-14). The rapid growth

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¹Email: klightfoot@berkeley.edu.

of managerial colonies in the 1600s and 1700s was facilitated by the creation of chartered, joint-stock trading companies that obtained monopolies for undertaking trade and economic development in new lands (15). These government chartered, quasiprivate companies, such as the Hudson's Bay Company and the Russian-American Company, which were governed by their own board of directors and funded by investors and stockholders, financed the establishment of managerial colonies in places where valued resources, such as skins and furs, could be exploited at great profits. In other cases, investors and planters established plantations to grow cash crops, such as sugar in the Caribbean islands, and cotton, tobacco, and rice in the American South. The salient characteristics of managerial colonies were small colonial administrative staffs, commercialand profit-oriented incentives, and a dependence on indigenous populations and imported workers (some indentured servants, but primarily African slaves) for their labor.

Missionary colonies were founded by Protestant denominations, Roman Catholic orders, and the Russian Orthodox Church, who established a plethora of colonial outposts across North America where missionaries worked with hundreds of tribal groups (13, 16). The salient characteristics of missionary colonies were the small numbers of missionaries assigned to specific places, the central role of religious practices, and a dependence on indigenous populations as laborers for the economic sustainability of the missions. Although the specific goals of the missions varied in time and space, the common target was the two c's: converting the native populations to a Christian faith and civilizing the neophytes by teaching them about European work ethics, foods, dress, and crafts (13).

Archaeological Investigations of Pluralism

The study of pluralistic interactions between indigenous peoples and colonizers in classic settler colonies has proven to be quite challenging (17, 18). Policies and practices that attempted to force native peoples from their lands, in combination with lethal diseases that resulted in appalling mortality rates, left remnant populations with relatively few options: some fled or were forcibly removed to other lands, whereas others remained in the shadows of the colonies, working as servants, cooks, housekeepers, or agrarian laborers or going deep underground in the "voids and pockets" that existed in the dynamic frontier zones (10, 19). Although a few native groups joined Protestant missions or were fortunate enough to reside on reserves set aside for them (20), the majority experienced difficulties remaining together as tribal entities, and as a consequence to survive they often dispersed across the landscape in smaller family groups or as individuals.

The archaeological investigation of dispersed indigenous people who remained in the voids and pockets of settler colonies has been difficult. Previous work has focused on the violence and destruction that confronted indigenous groups and in some cases the extinction of local populations, which has contributed to the "historical erasures" of tribes from some areas of the Eastern Woodlands (21). However, with the advent of new theoretical perspectives that recognize the continued existence of native peoples in the peripheries or cracks of colonial settlements, combined with the development of innovative research agendas and methods, some excellent contributions are now being made. Some of these studies examine the trade or exchange of native craft goods (e.g., ceramics, baskets) with settler colonists and the residences of indigenous itinerant peddlers who sold wares to colonists. Others investigate the missionized Indian communities, the native populations who survived in reservations or along the margins of colonies, and the spaces occupied by indigenous laborers in colonial residences (18, 21-27).

However, the bulk of the studies of pluralism in North American colonies have focused on managerial and missionary outposts where colonial administrators and other foreigners lived and worked in close propinquity to large numbers of native workers and enslaved laborers. This is particularly true in places where separate indigenous neighborhoods or enslaved peoples' quarters can be identified by archival sources and archaeological survey. The remainder of this Perspective will focus on the archaeology of pluralism in mercantile, plantation, and missionary settings, where sizeable populations of colonizers, native peoples, or enslaved laborers resided in multiethnic settlements.

Archaeological investigations have been conducted on North American mercantile outposts established by British, French, Russian, and American fur trade companies that contained a few European or American managers, but also labor consortiums that might include, depending on the location, workers recruited from Eastern and Southeastern North American tribes, Métis, Pacific Islanders, Native Alaskans, and local native peoples (28–32). Another significant body of literature exists for British, French, and American plantations in the American South and Caribbean Islands that were comprised

of colonial planters and various combinations of indentured servants, indigenous workers, and African slaves (33–36). However, another extensive body of literature concerns the archaeology of missionary colonies in North America. These studies examine pluralistic settlements where missionaries, colonial soldiers, and managers, and hundreds of native peoples resided. Much of this research has focused on the borderland Spanish missions established by the Franciscan and Jesuit orders in the American Southeast, Texas, the American Southwest, and California (37–40).

There has yet to be a systematic comparison of the archaeology of pluralism in managerial and missionary colonies in North America. In fact, these fields of study tend to be rather detached from one another. Archaeological investigations of plantations, missions, and mercantile settlements are typically undertaken by different teams of researchers who rarely cross-reference studies outside their fields of investigation or participate in the other field's symposia at national meetings. For example, plantation archaeology focuses primarily on European-African colonial relationships and is largely treated as a separate research domain from culture contact studies that emphasize European-Native interactions (41, 42). However, in writing this Perspective for PNAS, I was intrigued to find that the history of research for each field of study shares many commonalities in their theoretical perspectives and methods.

Archaeological investigations of fur trade outposts, missions, and plantations began with a focus on the restoration and preservation of the imposing buildings where the missionaries, merchants, and planters lived and worked, including forts, churches, and plantation houses (17, 43). The fields gained momentum in the 1960s to 1990s with the development of historical archaeology as an academic discipline, the commencement of cultural resource management, and the marking of the Columbus Quincentenary in 1992. This initiated a concerted effort to investigate the archaeological contexts of outlying spaces containing the work places and residences of native people, enslaved laborers, and other colonial workers. Investigators began to explore the question of identifying the material culture of the primary ethnic groups who were known to have resided in the colonial settlements. For example, there was considerable interest in detecting "Africanisms," African traits that had been transplanted to plantations in the American South and Caribbean Islands (42, 44). Notably, a common theme in much of the

archaeology of pluralism in North American colonies has been examining the livelihoods of Native American or African peoples in multiethnic communities and how they negotiated their interactions with other colonial peoples in the reproduction, modification, and transformation of their cultural practices.

I believe this extensive body of research can provide many insights for archaeological investigations of pluralism in other areas of the world. In this Perspective, I highlight three ways that the archaeological literature on North American colonies can contribute to broader comparative analyses of multiethnic communities in ancient and historical times. First, the investigation of managerial and missionary colonies can enhance our understanding of interethnic relationships that took place in complex societies having imposing political hierarchies and labor structures. I outline a few findings from colonial North America. Second, studies of plantations, mercantile outposts, and missions are useful for refining the methods used by archaeologists to define and analyze multiethnic communities in complex societies. Here I underscore the investigation of ethnic neighborhoods in colonial contexts. Third, historical archaeologists have used a diverse range of concepts and models (e.g., acculturation, creolization, ethnogenesis, and hybridity) to study the dynamics of culture change in multiethnic communities using archaeological materials. A few observations are made concerning this body of research.

The Study of Pluralism in Complex Hierarchical Organizations

The first generation of archaeologists highlighted the hierarchical organizations and labor structures of the North American colonial programs. Colonies were envisioned as complex, stratified, multiethnic places where your status, labor assignments, compensation, and privileges were defined largely by your position in this colonial hierarchy. These hierarchical arrangements were thought to be manifested in the spatial layout of managerial and mission enterprises that typically included office areas, industrial zones, agrarian sectors, elite residential areas, and outlying ethnic neighborhoods. Ethnicity, racial perceptions, and vocational skill, which were believed to be the principal factors that defined a person's position in the colonial hierarchy, influenced where you worked, lived, recreated, and procreated.

The world-systems framework that became popular in the 1970s was a significant theoretical perspective that heavily influenced this hierarchical perception of managerial

and mission colonies. Although there are many versions of world-systems or coreperiphery theory (15, 45, 46), the shared characteristics of the models that so markedly influenced historical archaeologists were an emphasis on the broader global picture of colonialism, the perspective that European core-states established colonies in peripheral areas for the extraction of resources that could be marketed at home and abroad, and the formation of a global division of labor that divided the population of the world into a hierarchical system of laboring classes (see for example refs. 28 and 47 for mercantile and plantation colonies). Colonial peripheries were transformed into a stratified system of workers, with indigenous peoples, imported slaves, and immigrant laborers at the bottom rung undertaking the heavy lifting in the extraction of resources for shipment to the core-states.

My work at Colony Ross in the 1980s and 1990s in northern California exemplifies the archaeological investigation of hierarchically structured, spatially stratified, multiethnic colonial communities (13). Administered by the Russian-American Company from 1812 to 1841, Colony Ross is a classic managerial colony established as a base for the commercial hunting of marine mammals, for raising crops and livestock herds, and for producing and trading manufactured goods to the nearby Franciscan missions in Spanish California. The primary economic engine, particularly in the early years, was the massive harvesting of sea otter furs that were shipped to China for great profit. The Russian-American Company imposed a colonial hierarchy that defined the status, pay, and residential arrangement of its workers into four major classes or "estates": "Russians," "Creoles" (people of mixed heritage, typically from Russian men and native women), "Aleuts" (Native Alaskans primarily from the Aleutian Islands, Kodiak Island, and Prince William Sound), and "Indians" (mostly local Kashaya Pomo and Coast Miwok peoples). This four-class colonial hierarchy was visibly reproduced in the spatial layout of the colony that included a palisaded residential/office complex for the managers, an industrial zone, extensive agrarian sector, and series of ethnic neighborhoods discussed below.

Archaeological investigations in Spanish California have also highlighted the stratified, hierarchical structure of Franciscan mission colonies. The Franciscans created a rigid colonial hierarchy for each of its missions that included one or two missionaries at the top who directed the religious and economic operations, a small middle management group of overseers and soldiers who

typically were mestizos or mulattos of Spanish, Native, or African ancestry recruited primarily from northern Mexico, and 1,000 or more baptized Indians or neophytes. The colonial hierarchy influenced the idealized spatial layout of the missions, particularly for residential and work spaces (13, 48, 49).

Plantation archaeology in the American South and Caribbean from its inception has highlighted the power differentials that existed between the planters, the overseers, and the enslaved laborers. Domination, oppression, and even violence were seen as crucial for understanding social relationships on plantations (42, 50, 51). Studies emphasized differences in the archaeological signatures of the planter's big houses compared to outlying slave quarters with respect to the internal layout of houses, architectural embellishments, foodways, and ceramics (47, 52, 53).

A common theme in the study of North American colonies is the relationship between dominance and resistance. As Singleton (42) summarizes for plantation studies, these works examined how the dominant classes exerted power over others, and how subordinated groups attempted to resist these power structures through both overt and covert actions and practices, such as digging storage pits (root cellars) in the residences of enslaved households to hide goods from the overseers and planters (e.g., ref. 54). The planter's prerogative and control in creating the spatial layout of plantations, including the design and ordered location of worker's houses, created underlying tensions and contestations among the laborers (55). In missions, resistance to the dominant order took the form of uprisings and rebellions, assassination of padres, fugitivism, foot dragging, and indifference (13, 49).

Although recognizing the important contributions that these pioneering investigations have made, a number of constructive criticisms have been raised in recent years that are now advancing our understanding of interethnic relationships in managerial and mission colonies. Two observations are relevant here in considering the study of pluralism in complex societies.

First, we must be careful about perceiving the actions of subordinated peoples in multiethnic communities as constantly directed toward resisting the existence of rigid dominance hierarchies. No doubt that when European managers and missionaries attempted to transform the cultural values and work ethics of subordinated people by using enculturation programs, relocation programs, and grueling labor regimes, active resistance was implemented to thwart the burdens that these policies imposed (e.g., ref. 13).

However, the chapters in Liebmann and Murphy (56) provide an excellent overview of resistance research in archaeology, including some of the methodological and theoretical problems with these investigations. Although various forms of resistance took place on a daily basis in European colonies, they are often hard to document in the archaeological record (57-59). More importantly, the emphasis on resistance tends to simplify complicated social relations into a binary relationship of dominance and resistance (42). The focus on resistance tends to deflect attention away from other actions and options of indigenous people, including "cooperation, compliance, collusion, mimicry, mockery, ambivalence, flight, feigned ignorance, dissimulation, and a host of other calculated tactics" (60).

Second, we cannot assume that such hierarchical power dynamics were a universal characteristic of complex societies, even in historic North America. Although imperialistic forms of colonialism certainly took root in North America—as exemplified by the stratified, colonial hierarches at such mercantile outposts as Colony Ross, the missions in California, and many of the southern plantations—there are other places where colonized peoples actively participated in the power structure of the colonies and even controlled many aspects of their interactions with the colonists. Defined as Middle Ground colonies by Gosden (61), after the seminal work by White (62) on French managerial bases in the Great Lakes region, this class of colonies is defined by ambiguous relationships of power that were manipulated and negotiated by both the colonized and colonizers in which neither side necessarily had control or authority over the other. The interethnic interactions in these outposts operated more as alliance structures and were based largely on mutual dependence in both trade and warfare.

Recent studies of Franciscan missionary colonies in the American Southeast and American Southwest are also re-evaluating the power dynamics of the colonists and colonized. These studies show that native polities exerted considerable vigor and influence in their dealings with the missionaries, ranging from dictating where they could place missions, forcing missions to move, and maintaining parallel universes of political and religious indigenous authority (63-65). For example, there is ongoing archaeological and ethnohistorical research that makes a strong case for the limited power that the Franciscan friars exerted over the Guale people or their leaders in coastal Georgia. Rather than directing the colonial enterprise, the friars appear to have worked primarily as cultural brokers (not unlike Peace Corps workers) between the various indigenous political factions (66, 67).

We need to generate models that allow us to examine the diverse range of multiethnic relationships that transpired in complex societies, including those with rigid hierarchical political and economic structures, as well as Middle Ground managerial and missionary colonies that do not necessarily assume hierarchies of power, labor, and trade as elaborated in world-systems theory. A similar point has been made for studies of ancient pluralistic societies. Dietler (68, 69), Stein (70, 71), and others emphasize that we cannot assume that interethnic interactions in ancient communities were necessarily structured heirarchically in cases where no evidence exists for the maintenance of asymetrical relationships between groups. There is a flurry of new work taking place that is examining nonhierarchical relationships in ancient settlements based on models of diaspora communities, diaspora trade systems, distance-parity, interaction systems, and the archaeology of consumption and alliance strategies (69, 70, 72, 73).

The Investigation of Ethnic Neighborhoods

Much of the research on pluralism in North American colonies has focused on multiethnic communities composed of discrete neighborhoods. This work complements nicely on-going research on complex societies in other areas of the world. Smith and others have been at the forefront in developing a method for defining neighborhoods and districts in ancient cities (74, 75). This approach involves defining spatial zones in urban places that may be bounded by physical features, such as walls, avenues, canals, or open spaces; that may be characterized by some element of social distinctiveness, such as shared patterns of material culture; or that may be defined by discrete clusters of residential buildings (75). The size and attributes of these spatial zones, along with the spatial analysis of artifacts, may then be used to define neighborhoods and larger-scale administrative districts (typically composed of multiple neighborhoods). Neighborhoods in both modern and ancient cities may be spatially demarcated by wealth and status differences, religious practices, and occupations, but the segregation of populations by ethnicity is very common worldwide and often maintained over time by continued migration into urban places (75).

The methodology for examining the spatial structure of multiethnic colonies is similar to that outlined above. The primary advantage to historical research is that census and other written documents can often be used to identify people's ethnicity and status, and sometimes the locations of their residences (or residential zones) within the colony. The basic spatial unit of many of these studies of pluralistic colonies is the ethnic neighborhood. For example, archaeological work at Colony Ross has focused on the investigation of the distinct ethnic neighborhoods reflecting the four-class colonial hierarchy, including the stockade complex where the elite Russian managers and their visitors lived and worked, the Russian Village or Sloboda where many of the lower-class European workers lived in Russian-style houses with gardens and bathhouses, the Native Alaskan Village where Aleut men and their families resided, and the Native California Neighborhood where local Kashava Pomo and Coast Miwok people dwelled while working for the Russians (76-78).*

Archaeological investigations in Spanish California have also highlighted the distinctive spatial zones of the Franciscan missions. At the center of each mission rose an impressive enclosed quadrangle built of adobe bricks and roof tiles that contained the church, convento or residence for the padres, storerooms, and a dormitory for the unmarried girls and women that was closely monitored by missionary staff. Other nearby architectural complexes included residences for the middle managers and soldiers, storage rooms, shops for craft production, and walled gardens. The Indian neophyte families typically resided in the near hinterland of the mission, within earshot of the mission bells, where adobe dormitories and traditional thatched houses were built (48). Considerable archaeological work has been undertaken examining the spatial layout of the Spanish California missions, including excavations of the central quadrangles, including the churches, conventos, and unmarried women's dormitory, the soldiers' quarters, and the outlying neophyte villages (79-81).

Archaeology in the American South and the Caribbean indicates that considerable variation underlined the spatial layout of plantations depending on geography, the cash crops grown, chronology, and the wealth of the owners. However, in the more affluent plantations that have been excavated, archaeologists have been able to investigate

^{*}Farris GJ, Annual Meeting of the Society for Historical Archaeology, January 7, 1993, Kansas City, MO.

compact settlement patterns comprised of the big houses for the planters (when they lived there), offices, kitchens, residences for the overseers, farm and service buildings, and outlying residential quarters for the enslaved workers (47, 52, 82). Typically the enslaved villages were situated close enough to the overseer's or planter's house to facilitate surveillance of the workers, but they may have been screened from view of the main house (54). The segregation of the plantations into separate "neighborhoods" has facilitated archaeological investigations of the enslaved quarters, as well as their comparison with the residences of the planters or overseers (33, 83-85).

Three observations from these investigations of neighborhoods in colonial settlements are pertinent for archaeological investigations of pluralism. First, although "ethnic neighborhoods" may be defined within colonial settlements, we should recognize that they were probably comprised of disparate populations drawn from diverse homelands, ethnic identities, and family backgrounds whose kin relations, class, social relations, sex, religion, and political organizations varied significantly. Furthermore, the compositions of these neighborhoods were dynamic and ever-changing over time with the growth of families, interethnic cohabitation and marriage, and immigration. For example, the neophyte villages in Franciscan missions in California were aggregations of numerous native groups from distinctive ancestral homelands who often spoke mutually unintelligible languages. The constituents of these villages changed significantly over time because of devastating mortality rates and the continual recruitment of new neophytes from farther and farther away from the missions to replace those that died (13). The residential quarters in plantations might house Africans from diverse homelands, African-Americans, as well as Native Americans whose composition varied through time (85-89).

At Colony Ross, we know from census data the Russian Village or *Sloboda* was populated by Russian and eastern European workers, but it also contained ethnic Siberians and Creole peoples, as well as Native California women who lived with the colonial men. The Native Alaskan Village consisted of a diverse assortment of indigenous peoples from various villages dispersed across southern Alaska, as well as Native California women who cohabited with some of the Native Alaskan men. Given the ethnic heterogeneity at Colony Ross, questions are now being raised by descendant communities about the labeling of the neighborhoods in

the historical and archaeological literature. Members of the Kashaya Pomo tribe are making a strong argument that the Russian Village and Native Alaskan Village should be renamed to more accurately reflect the diverse composition of these neighborhoods and to highlight that the colonists were foreign visitors to Kashaya Pomo territory.

Second, our investigations of pluralism should not stop at the boundaries of the neighborhood or multiethnic colonial settlement. Recent research stresses that Native Americans and enslaved peoples residing in their villages or quarters were connected through social networks to outlying populations dispersed across the broader landscape (e.g., ref. 38). Enslaved people often had spouses or lovers who resided in other plantations or were related to workers stationed in remote areas of the planation (83). Native Americans incorporated into both mercantile outposts and missions were typically connected to indigenous populations in the hinterland on whom they depended for support, indigenous foods, traditional goods, and places of refuge (13, 90).

Third, colonial neighborhoods were places where individuals and families made their homes. Even under the most brutal conditions of subjugation, the archaeology of North American colonies shows that men, women, and children were able to build communities in colonial places. Native Americans and enslaved peoples in plantations, missions, and trade outposts created their own sense of space even in assigned barracks and cabins by adding architectural embellishments (indoor storage pits), preparing and cooking traditional meals, and making and modifying their own material culture. The archaeological record indicates that much living went on behind closed doors or in screened patios; people relaxed in small groups smoking pipes, gathered for feasts, and conducted folk religious practices and dances (13, 36, 91).

Studying the Dynamics of Change in Multiethnic Societies

Historical archaeologists have been using concepts and models to study the dynamics of culture change in multiethnic communities for more than five decades. The earliest work was influenced by acculturation research that assumed an inevitable process of assimilation would take place among indigenous and enslaved people as they adopted European materials and lifeways as a matter of choice, force, or survival. This process was supposedly stimulated by the directed enculturation programs of the colonizers (particularly in the missions), the

supposed technological superiority of European materials, and the prestige accrued to early adopters in multiethnic communities. Using various acculturation indices based on changes in artifact types or artifact ratios, archaeologists measured the degree of assimilation taking place over time in mission, trade outpost, and plantation communities (42, 53, 92–94).

Acculturation research soon came under fire for accentuating models of unidirectional change in which the stimuli for cultural transformations flowed primarily from colonists to passive populations of colonized people without fully considering the power dynamics or social intricacies of these relationships, or the agency of the actors (87, 95, 96). Understanding the agency or diverse tactics and practices used by colonized people in their negotiation with colonial programs was recognized as an important research issue. In the 1990s and 2000s, archaeologists began to experiment with other theoretical approaches that were believed to be better suited for examining the dynamics of change resulting from agency and interethnic interactions in colonial settlements. Although various approaches have been used, the most common ones are derived from the literature on creolization, ethnogenesis, and hybridity.

Creolization models, which are particularly popular among scholars working with diasporic populations on plantations in the American South and Caribbean, are used to examine how interethnic interactions may have stimulated cultural transformations involving creative combinations of African, European, and Native American elements. Some studies use a linguistic analogy in which cultural elements (e.g., architectural components, foodways, ceramic artifacts, and so forth) are adopted, modified, and transformed according to the ethnic group's cultural "grammar," resulting in something that is both similar and divergent from that which existed before (34, 42, 89). Ethnogenesis or transculturation usually refers to models that explore the birthing of new ethnic identities in colonial contexts that are distinctive from extant colonial or indigenous ethnic groups. The process of ethnogenesis often took place in negotiation with oppressive colonial hierarchies that provided options for people to enhance their own positions of power and status in multiethnic communities through the creation of innovative identities, such as in the case of the Californios in Spanish/ Mexican California (97, 98). Hybridity models examine negotiations between domineering colonists and subalterns in multiethnic colonial contexts that resulted in the creation of innovative material culture and

cultural practices (see other papers cited in ref. 99 and see ref. 100). The concept of hybridity used in archaeology, largely derived from the postcolonial literature, tends to highlight the contested, unsettling, and subversive processes of cultural transformations in colonial settings (101, 102).

Three observations from this literature are relevant for studying the dynamics of change in multiethnic settings in both historic and ancient settlements. First, it is crucial that researchers define how they are using concepts, such as acculturation, creolization, ethnogenesis, and hybridity in their case studies. Current use by historical archaeologists is not very rigorous and the concepts tend to be used interchangeably in discussions involving cultural mixtures in multiethnic contexts. Consequently, it is not always clear why an archaeologist is using a model of creolization in contrast to one of hybridity (or vice versa) to examine cultural transformations resulting from interethnic interactions (101-103). Second, it is also crucial to maintain rigorous chronologies when examining these transformative processes in archaeological contexts. Some concepts, such as creolization, may be applicable for studying cultural transformations among the first generation of people in colonial contexts, but may lose their interpretive value in subsequent generations as individuals born in multiethnic communities grow up, interact, and cohabit with diverse peoples, eventually creating their own families, memories, and traditions (89, 103).

Third, although models of change should remain an important topic of inquiry in the study of multiethnic communities, there is now growing interest in the investigation of cultural persistence (27, 41, 104, 105). Rather than viewing change and continuity as diametrically opposed, the archaeology of persistence views them as two different sides of the same process that unfolds during pluralistic interactions. As Panich (104) emphasizes, there may be situations where "indigenous cultural practices and ethnic identities were simultaneous perpetuated as they were transformed." Significant changes in the diet, material culture, and spatial layout of households may be evident in pluralistic settlements, at the same time that people were maintaining many of their cultural values and world views. Future research in the archaeology of pluralism in both historic colonial and ancient societies will need to refine models for examining the social dynamics of change in multiethnic societies that involves the continual interplay of change and continuity over time. This raises the thorny question of where to draw the line in interpreting the creation of new ethnic identities (e.g., ethnogenesis) in the long-term study of pluralistic places as opposed to changing configurations of persistent ethnic identities. Models and interpretations of change and continuity will increasingly take on serious political ramifications for descendant communities who are grappling with issues of federal recognition, repatriation rights, and the development of indigenous archaeologies (24, 27, 104, 106).

Conclusion

The papers in this PNAS Special Feature make an important contribution to the study of the dynamics of change in ancient, multiethnic societies from Mesoamerica, the Near East, the Armenian Highlands, Peru, and China. The purpose of this Perspective is to place them within the larger body of archaeological literature on pluralism, specifically research undertaken on historic European colonies in North America. I argue that investigations of managerial and mission colonies may be pertinent for archaeologists working elsewhere for three reasons. First, the studies can enhance our understanding of interethnic relationships that took place under specific conditions: the incorporation of diverse peoples into complex societies with imposing political hierarchies and labor structures. This literature illustrates the problems of becoming too dependent on models of dominance and resistance in these contexts, as well as the considerable variation that characterizes relationships of power between colonists and indigenous populations in multiethnic communities.

Second, the study of mercantile outposts, plantations, and missions are also pertinent for refining the methods used by archaeologists to define and analyze multiethnic communities that were spatially segregated into

ethnic neighborhoods. This body of literature highlights the heterogeneous composition of many ethnic neighborhoods, emphasizes how people in these colonial settlements were often interconnected with other people across the broader landscape, and demonstrates how subjected people, even in the most brutal situations, converted these spaces into homes with their own unique touches.

Third, archaeological investigations of North American colonies provide more than five decades of experience in applying a diverse range of concepts and models (e.g., acculturation, creolization, ethnogenesis, and hybridity) to study the dynamics of culture change in multiethnic communities. This body of research underscores the point that archaeologists need to be more precise about how they define and use these concepts in their case studies. It also demonstrates the need to maintain rigorous chronologies in archaeological studies of pluralism that allow us to track changes taking place through successive generations of people. Finally, although it is imperative that we continue to develop models for the study of change, it is also important that we consider models of cultural persistence in pluralistic settings as well. The concept of "changing continuities" in which the cultural practices and ethnic identities of people will undergo change, but still remain persistent over time, is important (104). One of the directions for future research in the archaeology of pluralism is developing and refining models for the study of the dynamics of change in multiethnic societies that involves the continual interplay of transformation and persistence over time.

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