Historical Archaeology in Yucatan and Central America

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Introduction

This essay attempts to summarize some of the recent trends and developments in the historical archaeology of Yucatan and Central America. The area of Yucatan, as defined here, encompasses the entire Yucatan Peninsula, including the Mexican states of Campeche and Yucatán, the territory of Quintana Roo, the republic of Belize, and the department of El Petén in Guatemala (hence, the northern and southern Maya lowlands). The area of Central America, as used here, includes highland Chiapas (Soconusco is covered in the chapter by Charlton and Fournier) and the republics of Belize, Guatemala, El Salvador, Honduras, Nicaragua, and Panama. Due to limitations on length, this cannot be a comprehensive survey of published research. It should be regarded, at best, as a selective and somewhat idiosyncratic summary of some of the more interesting recent research in historical archaeology in Yucatan and Central America.

At the outset, it should be noted that historical archaeology as a separately recognized discipline barely exists in Mexico and Central America. With few if any exceptions, practioners of historical archaeology working in Yucatan and Central America received their training as anthropological archaeologists. Most combine active research interests and fieldwork on Precolumbian indigenous sites, ethnohistory, and ethnoarchaeology with archaeological and historical work on contact-period and Spanish colonial sites. Many of these practitioners would not even consciously self-identify

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as historical archaeologists. Most would probably accept Deetz's (1991:1) definition of historical archaeology as "the archaeology of the spread of European societies worldwide, beginning in the fifteenth century, and their subsequent development and impact on native peoples in all parts of the world" (Deetz, 1977:5) Most would also accept the injunction of Leone and Potter (1988:19) that "whether or not historical archaeology is to be an archaeology of the emergence and development of capitalism has been settled in the affirmative. There never has been a choice even for those who were indifferent or hostile to the issue." Yet, because of their holistic training and their interests in Precolumbian as well as Postcolumbian cultures, historical archaeologists working in Yucatan and Central America have a natural predisposition to accept the position advocated recently by a number of historical archaeologists working in North America that we must study the articulation of global-scale and local processes and the entanglement of European and indigenous processes (Alexander and Kepecs, 2005; Lightfoot, 1995; Paynter, 2000a, 2000b; Rubertone, 2000; Silliman, 2005). The schism in North America between prehistoric and historical archaeology that prompted these prescriptive comments simply does not exist among specialists in Mexico and Central America.

Historical Background

As Patterson (1993:350–351) has pointed out, the first Spanish expeditions to the Americas were commercial ventures. The political-economic events in

Spain during the fifteenth century form the historical antecedents of the sixteenth-century expansion of Spain in America. Among these events were (1) the decline of the Mediterranean economies of Catalonia and Aragón and the emergence of Genoa as a major commercial center; (2) the growth of wool production in Castille and export to textile factories in Flanders; (3) the expansion of shipbuilding on the north coast of Spain; (4) the marriage of Isabella and Ferdinand, which linked the strategic interests of two major dynastic states; (5) the 1488–1492 civil war in Granada, the last Moorish state on the Iberian peninsula; and (6) Castile's demand for sources of raw materials, slave labor, and manufactured goods. Elliott (1963) and Ruiz (2001) have analyzed these factors in considerable detail.

The indigenous societies of Central America that the Spaniards encountered in the sixteenth century included Mayas from Yucatan to highland Guatemala and western Honduras; Nahuas and Xincas in southeastern Pacific Guatemala; Nahuas and Lencas in El Salvador; Nahuas, Lencas, and Jicaques in western Honduras; Nahuas, Chorotegas, and Subtiabas in western Nicaragua; and Misumalpan and Chibchan groups from eastern Honduras to eastern Nicaragua, Costa Rica, and Panama (Fowler, 1989a, 1989b; Helms, 1976; Ibarra Rojas, 1990; Lara Pinto, 1996:101–139; Stone, 1966:210–214; Weeks et al., 1987). Political integration ranged from small village-level societies to chiefdoms and city-states.

Historical overviews of the initial stages of European exploration, conquest, and colonization of Yucatan and Central America may be found in the works of many scholars. For Yucatan and Belize, the works of Chamberlain (1948), Farriss (1984), G. D. Jones (1989, 1998), Patch (1993), Roys (1972), and Scholes and Roys (1948) are fundamental, and Quezada (2001) provides a good summary. For Central America in general, the works of MacLeod (1973) and Sherman (1979) are indispensable. For Chiapas, the work of Markman (1984) is essential, and Zebadúa (1999) offers a good summary. For the full sweep of the conquest of Central America, Kramer et al. (1993) provide an excellent summary. Early colonial Guatemala is covered by O. L. Jones, Jr. (1994), Kramer (1994), Luján Muñoz and Cabezas Carcache (1994), Lutz (1994),

Markman (1966), and Webre (1989). For El Salvador, the works of Barón Castro (1996), Chamberlain (1947), Escalante Arce (1992), and Lardé y Larín (2000) are most useful. For Honduras, the works of Chamberlain (1953) and Newson (1986) are essential. For Nicaragua, the works of Newson (1987), Radell (1969), and Werner (1996, 2000) are required reading. An excellent source on Costa Rica is Quirós Vargas (1990). Panama is amply covered by the works of Castillero Calvo (1972), Góngora (1962), Mena García (1992, 1998), Romoli (1953, 1987), and Sauer (1966).

Some historical perspective on the origins and development of historical archaeology in Yucatan and Central America is provided by Andrews (1981, 1984, 1985) and McKillop (2002). Andrews (2007) maintains a current website, *Historical Archaeology in the Maya Area: A Working Bibliography*. A perusal of this site reveals a wide range of interests from early urbanism and architecture, the early church, political economy, hacienda archaeology, industrial archaeology, subsistence, salt-making, underwater archaeology, and many other themes. In addition, Andrews and Corletta (1995) have published a survey of underwater archaeology in the Maya area that includes references to the historical period in Yucatan and Central America. Not to appear hortatory, but any reviewer of this corpus of literature would be remiss in not observing that the development of historical archaeology in Yucatan and Central America lags far behind that of its Precolumbian congener. Thus, I echo the sentiment of Rice and Rice (2005:140) that a fascination with exotic issues such as the so-called Classic Maya collapse and the structure and accomplishments of the great Classic-period, Precolumbian cultures of the area accounts in large part for the lack of attention paid to the massive culture changes that occurred from the Postclassic (A.D. 900–1519) into the Conquest and the Colonial period.

Topics and Sites

Landscape and Settlement

The concept of landscape as a means of studying settlement and the cultural modification of the spatial

environment has become very important in historical archaeology (Leone, 1984; Matthews, 2002a, 2002b; Mrozowski, 1991; Orser, 1996:137–157; Pauls, 2006). Anschuetz et al. (2001) suggest that the power of the "landscape paradigm" lies in its potential to connect patterns of human behavior with particular places and times. They outline four interrelated premises that provide the foundations for a landscape paradigm in archaeology: (1) landscapes are not synonymous with natural environments; (2) landscapes are worlds of cultural product (not merely the world we see and not the same as built environments); (3) landscapes are the arena for all of a community's activities; (4) landscapes are dynamic constructions, with each community and each generation imposing its own cognitive map on an anthropogenic world of interconnected morphology, arrangement, and coherent meaning (Anschuetz et al., 2001:160–161). Note that by these premises, especially the first one, the concept of cultural landscape is conflated with landscape in general: "Landscapes are synthetic, with cultural systems structuring and organizing peoples' interactions with their natural environments. Landscapes mediate between nature and culture" (Anschuetz et al., 2001:160).

In precisely defining landscape, Anschuetz et al. (2001:164) take as a point of departure the definition given by Sauer (1925:25):

> The cultural landscape is fashioned from a natural landscape by a culture group. Culture is the agent, the natural area is the medium, the cultural landscape is the result. Under the influence of a given culture, itself changing through time, the landscape undergoes development, passing through phases, and probably reaching ultimately the end of its cycle of development. With the introduction of a different—that is, alien—culture, a rejuvenation of the cultural landscape sets in, or a new landscape is superimposed on the remnants of an older one.

While this definition is certainly relevant to a broad conception of landscape, Sauer's latter point makes his definition especially apropos for historical archaeology.

The Spanish conquest of Yucatan and Central America resulted in the creation of highly structured cultural landscapes in which conquerors and conquered interacted, each bringing their own distinctive cultural attitudes and praxis into the organization and use of space. In research on both rural and urban landscapes in the historical period,

we study the creation of the cultural landscape mediated by the dynamic interactions of its European and indigenous inhabitants. Of vital importance is the idea that cultural landscapes not only reflect the factors that led to their formation, but they are also spatial arenas in which social and physical relations are enacted (Anschuetz et al., 2001:161; Orser, 1996:138). In other words, we are dealing with socially constructed places and spaces, not just where certain actions and interactions occurred, but rather places and spaces with local and multiple constructions, culturally relative, and historically specific—multilocal and multivocal.

Rural Landscapes

Recent research by Sampeck (2007) provides an excellent illustration of the potential of the landscape paradigm for studying rural spatial relations in Central America. Focusing on changes and continuities in the archaeologically indicated use and experience of the landscape, Sampeck's primary research on the landscapes of the Izalcos region in western El Salvador is complemented by material culture analysis and historical research oriented toward the political economy and the place of Izalcos in the early Spanish colonial world-system. Colonial documents indicate that at the time of Spanish conquest in 1524, the Izalcos polity of Nahua-speaking Pipil, whose heartland lies in the Río Ceniza Valley of western El Salvador, was a thriving economic and political power (Fowler, 1991, 1993, 1994, 1995, 2006a; MacLeod, 1973:80–95). This region became a jewel in the Spanish Crown due in large part to its prodigious cacao production. Sampeck (2007) presents the results of an intensive regional survey, test excavations, lithic analysis, local and imported ceramic analysis, and transcription of a local archive in order to assess key elements of the Izalcos political economy before and after the Conquest. Her data show that the Pipils were central actors in Late Postclassic regional integration, which prepositioned the Izalcos region within the world genesis of capitalism and structured Spanish colonialism.

Sampeck evaluated each documentary, settlement, and artifactual data set separately for its

unique insights in order to provide different perspectives on the same processes of Izalcos political economy. Sixteenth- to nineteenth-century documents from a local municipal archive and other historical data present strong evidence that the Izalcos Pipils had typically Nahua social and political institutions that were inscribed on the landscape. For example, like all Nahuas and many other indigenous peoples of Mesoamerica, the predominant mode of political organization among the Izalcos Pipils was the *altepetl* or ethnic state (Lockhart, 1992:14–15). The Izalcos Pipil *altepetl* was centered on the region of Izalcos, with its four principal towns of Izalco, Caluco, Tacuscalco, and Nahuilingo, near Sonsonate. Lockhart (1992:436–438) emphasizes the cellular-modular nature of the *altepetl* and its tendency to create larger units by the aggregation of parts that remain relatively separate and independent. Archaeologically, this principle would be manifested on the ground by a tendency toward dispersed settlement with strong nucleation or centralization occurring only in complex, urban landscapes (Lockhart, 1992:19). These Nahua principles are demonstrated in inter- and intrasite organization and provide part of the logic for the distribution of Pipil settlement in Central America. This is also precisely the pattern that Sampeck (2007:232–257) finds in her Izalcos regional settlement survey: slight nucleation balanced by dispersion in late Preconquest times, contrasted with a tendency toward nucleation in Postconquest times, associated with the Spanish legal requirements of *reducción* (Fig. 1) (see Escalante Arce, 1992:1:22–23; Fowler, 1995:40; MacLeod, 1973:122). In addition to the role of Nahua cognitive principles in determining patterns of settlement before the Conquest, Sampeck (2007:232–233) also ascribes a significant role to the requirements of tending cacao orchards at the household level of production (see Fowler, 2006a).

Especially intriguing on a theoretical level is Sampeck's use of Upton's (1990) distinction between articulated and disarticulated landscapes. Specifically, Upton (1990:75) suggested that a disarticulated landscape may limit mobility for certain groups, while mobility may be enhanced in an articulated landscape that is flexible, dynamic, and continuous. An articulated, dynamic landscape cannot be comprehended at a glance. The observer is required to move through space and piece together many partial signals. It is the landscape that relates the parts in space and time (Upton, 1990:75). In a disarticulated conception,

> the landscape is an unrelated collection of barriers or pitfalls with no relation to any other part of the landscape; neutral points were simply forgotten.... [T]his kind of landscape, instead of being a network through which the observer moves, is a series of spots where customary social relationships are in effect, where control and possession are present, and where they are not (Upton, 1990:74).

Documentary evidence shows that in the Izalcos region, private ownership curtailed the Crown's survey efforts by thwarting survey expeditions so even among Spaniards a kind of disarticulated landscape existed. The emic view of the Izalcos Pipil landscape probably perceived it as more articulated in nature.

The other essential component for understanding Pipil settlement structure is their engagement in the expansive trade network that reached into central Mexico. Sampeck has shown that the Izalcos region's importance in long-distance trade was not diminished after the Spanish Conquest. Pipil concepts, institutions, and boundaries structured Spanish political and economic organization, nevertheless the Spanish rationalized the landscape so that wage labor emerged. This new local market of production, consumption, and speculation, however, was not easily molded by the preferences of a colonial state or even the world-system. The Manila galleon trade was a prime catalyst for Mexico to consolidate power by moving the route of New World trade across the isthmus, but the dispersal of porcelain and majolica in the Izalcos area suggests that contraband trade thwarted the Crown's efforts. In each phase, according to Sampeck, Izalco-centered interests exerted a gravity the world-system could not escape.

Another important application of the world-system framework, political economy, and regional settlement analysis is the research by Kepecs (2005) on salt production in Chikinchel, northern Yucatan. Here the focus is on changes from the Late Postclassic into the Early Colonial period. Kepecs (2005:133–136) finds little evidence of Spanish presence in the region during the sixteenth century and considerable evidence for active resistance by the Maya to Spanish domination, colonialism, and capitalism.

Rice and Rice (2005) have mapped sixteenth- and seventeenth-century Maya–Spanish interaction in
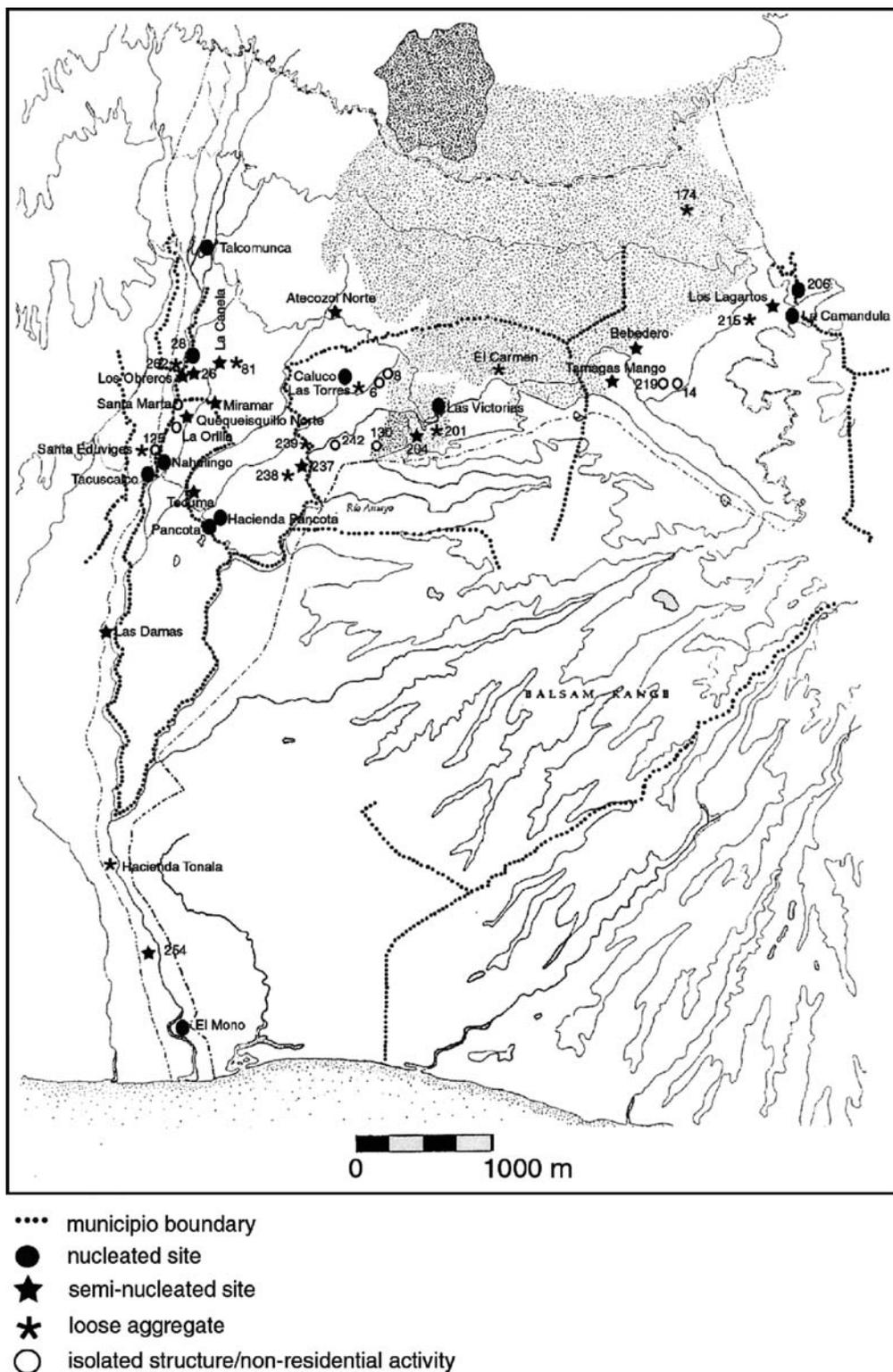
Fig. 1 Marroquín-phase (A.D. 1580–1650) settlement in the Río Ceniza valley, western El Salvador. Nucleation has increased relative to previous phases (from Sampeck, 2007:Fig. 3.31; drawn by Kathryn E. Sampeck)

the central Petén region of Guatemala. These sporadic but prolonged contacts had the most immediate effect of exacerbating tensions between dominant lineage groups and a rapidly changing political geography. They offer a correlation of historical references with archaeological data for the central Petén. They emphasize that this region was occupied by multiple and competing dynastic lineages and ethnic groups, an important fact that the Spaniards attempting to subdue these groups did not realize for almost two centuries. Other important factors in this long struggle involved Maya prophesies of cyclical change, calendrical reckoning, and political organization.

Urban Landscapes

The spread of the Spanish American grid-plan city during the Conquest period provides an opportunity to apply the landscape paradigm to urban settings in Central American historical archaeology (Chueca Goitia et al., 1951; García Fernández, 1989; García Zarza, 1996; Kubler, 1978; Markman, 1978). Early colonial Spanish cities in America functioned overtly as vehicles of conquest and played a crucial part in the radical transformation of the cultural and physical landscape of Spanish America (Centro de Estudios Históricos de Obras Públicas y Urbanismo, 1989). They represented an ideological statement (sensu Leone, 1984:26) by conquistadors acting on behalf of the Crown to impose moral, legal, and religious order, or *policía* (Kagan, 2000a:131–134, 2000b:26–28; Messmacher, 1987:157) on alien and hostile populations. The physical embodiment of *policía*, the imposing plan of the grid-plan city, symbolized Hispanic civilization itself and evoked a propagandistic statement concerning the power of the empire that translated into very specific notions of spatial patterning derived from the social structure of the Conquest (Martínez, 2000:17–19). This patterning takes on great importance as a geographical statement because it allows an understanding of the landscapes of Spanish American grid-plan cities from both emic and etic perspectives. The grid plan was "simultaneously a plan, discourse, and instrument of control . . . , it became one of the central devices of Spanish colonization—at once a sign of the colonizers'

religiosity and civility" (Martínez, 2000:18). The symbolism of the siting of the government buildings and church on the central plaza underscored the power of the sword and the cross in imposing the Spanish imperial will locally (Robinson, 1989:165). Thus, in a very real geopolitical sense, the conquest emanated outward from the plaza and the grid to the surrounding countryside (Domínguez Compañy, 1984:30; Markman, 1978:478).

To understand the foundational process of the Spanish grid-plan city in its full historical and cultural context, one must recognize that the process of landscape production happened recurrently and constantly, repeating itself locally each time and in every place where Spaniards and local labor forces built conquest cities in the New World. Although the founding of Spanish conquest cities in theory was under centralized control, in actual practice the foundings were remarkably decentralized, resulting in a great deal of behavioral autonomy and heterogeneity in local decision-making. Therefore, I emphasize local aspects of the implementation of the grid plan and the implantation on the local landscape of Spanish conquest cities as a means to analyze social relations played out within and upon the landscape.

The first Spanish settlement in the New World was La Isabela, built in 1493 on the north coast of Hispaniola by members of Christopher Columbus's second voyage to America (Deagan and Cruxent, 2002a, 2002b). Santo Domingo and more than a dozen other cities quickly followed suit on the island. The first two decades of the sixteenth century witnessed the first wave of Spanish urban expansion on the islands of Hispaniola, Puerto Rico, Jamaica, and Cuba, followed by an extension to the mainland in the Isthmus of Panama in 1502 and to Mexico by 1519. Spanish American urbanism then spread from Panama and Mexico to Central America beginning in the 1520s and southward from Panama to Colombia, Venezuela, Peru, and the entire Andean area starting in the 1530s. By the end of the sixteenth century, only a century after the first foundings of Spanish conquest cities in the Antilles in the 1490s, more than 400 Spanish American cities had been founded in the New World (Romero Romero, 1989). In Central America alone, approximately 44 Spanish towns and cities were founded during the sixteenth century (Aguilera Rojas, 1994:195–196; Meléndez Chaverri, 1977).

Santo Domingo became the first European grid-plan city in the New World. After the original settlemen of Santo Domingo was destroyed by a hurricane in 1502, Governor Nicolás de Ovando rebuilt the city on the other side of the Ozama River in a grid-plan layout, and he supervised the construction of a network of 14 other grid-plan cities during the 8 years of his governorship (Hardoy, 1989:14–17; Sauer, 1966:151–155). Scholars agree that Ovando's model for the plan of Santo Domingo was Santa Fe de Granada, the siege town built to topple the last Moorish kingdom in Spain, but that other antecedents exist in Spain going back to as early as the twelfth century (Luján Muñoz, 1994:691; McAlister, 1984:149; Palm, 1992b). However, the layout of Santo Domingo, while indeed aligned to a grid, is not rigid; the streets are straight but not parallel, and the polygonal blocks vary in size. Likewise, the main plaza is polygonal and off-center (Palm, 1992a; Tejeira-Davis, 1996:33). Concerning the implementation of this particular plan, while Ovando was acting on rather vague instructions from the Crown to found new *villas* for Spaniards throughout the island, his choice of the off-center grid-plan layout appears to have been based on his own discretion and his experience in Granada rather than explicit royal orders (Martínez Lemoine, 1977:24).

From Santo Domingo, the plan was taken to the mainland. Of the half-dozen cities founded by Pedrarias Dávila in Panama, the only ones known and available for study today are Panamá la Vieja (1519)[1] and Natá (1522). Tejeira-Davis (1996) compared the plans of these two cities and found that the layout of Panamá la Vieja, a port city, was quite irregular and polycentric with the plaza being off-center, the lots long and narrow, and the streets unparallel. He concluded that the layout of Panamá la Vieja was closer to the medieval conception of urbanism than to the novel Conquest-period grid-plan city (Tejeira-Davis, 1996:43). On the other hand, Natá, an inland site located 15 km up the Río Chico from the Gulf of Parita, near the populous sixteenth-century chiefdom center of the same name, was laid out on a spacious, orthogonal grid with a central plaza (probably), square lots, and four-lot blocks enclosed by parallel streets

(Tejeira-Davis, 1996:45). Natá represents the first example of a large-scale, orthogonal, grid-plan city in Spanish America, and Tejeira-Davis (1996:52) suggested that it served as the model for similar plans of later date, echoed by later cities built in Central America and Mexico, especially Granada (1524), León (1524), Santiago de Guatemala in Almolonga (1527), San Salvador (1528), and Oaxaca (1529).

Some limited archaeological work has been conducted at León Viejo, Nicaragua (Blaisdell-Sloan, 1999; Dickau, 1999; Espinosa Pérez, 2004; Espinosa Pérez et al., 1999; Ortega, 1988). Most of this work has been aimed at revealing specific buildings: the *convento* of La Merced, the church of La Merced, the Mercedarian chapter house, the cathedral of Santa María las Gracias, the convento of Santo Domingo, and the Fortress (Werner, 2000). Argüello Argüello (1969:136–142) offers a detailed description of the cathedral, including dimensions and building materials. A number of human burials have been excavated, and it is generally believed that three of them may represent the remains of Governor Pedrarias Dávila, Captain Francisco Hernández de Córdoba, and Bishop Antonio de Valdivieso (Espinosa Pérez, 2004). Because the site was covered by the eruption of Momotombo volcano in 1610, it has been difficult to reconstruct its plan, but scholars assume that it was built on a grid (Arellano, 2002:45). Ortega (1988:35) estimated a total area for the site at 40 ha.

The best-preserved example of a grid-plan Conquest town in Central America is Ciudad Vieja, the ruins of the first villa de San Salvador, located in a rural area 10 km south of Suchitoto, El Salvador (Fig. 2). Dispatched from Santiago in Olintepeque under the command of Gonzalo de Alvarado, a small group of Spaniards founded the first villa of San Salvador in April 1525, probably on the same site as the later 1528 settlement. The first European town of El Salvador was built in the valley of La Bermuda, a small pocket to the north of Cuscatlan Pipil territory that apparently had little or no indigenous settlement at the time of the Conquest (Fowler and Earnest, 1985), but it was still prone to attack, especially from the west and the south. The Pipils rebelled and drove out the Spaniards sometime in 1526 (Barón Castro, 1996:39–44), forcing them back to their base in Guatemala. Pipil resistance waned by early 1528, however, allowing the Spaniards to return and found a permanent settlement, which

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[1] The Patronato Panamá Viejo (2007) maintains an excellent Web site with a considerable amount of archaeological and historical information.
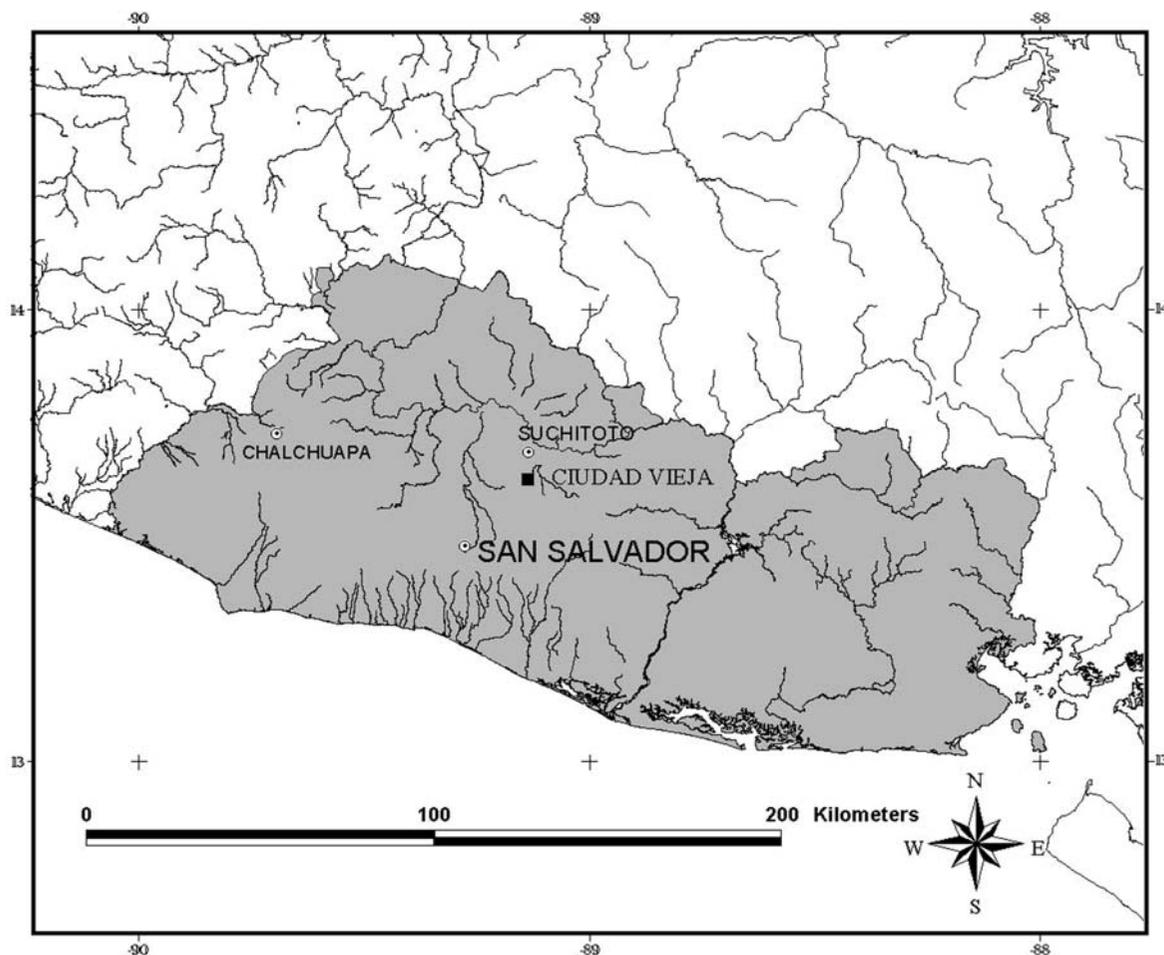
Fig. 2 Map showing location of Ciudad Vieja within El Salvador (from Fowler, 2006d:Fig. 1.2; drawn by Francisco Estrada-Belli, based on data distributed by the National Aeronautics and Space Administration [http://servir.nsstc.nasa.gov])

resulted in the second founding of the villa of San Salvador on April 1, 1528, by 73 conquistadors under the command of Diego de Alvarado, all of whom declared themselves residents of the town (Barón Castro, 1996:87–91, 197–202; Lardé y Larín, 2000: 108–110). The town was abandoned 15 years later and moved to the modern location of San Salvador in 1545 (see Fig. 2).

Two major Pipil polities dominated the territory of modern El Salvador at the time of the Conquest: the relatively small Izalcos kingdom in the west and the larger Cuscatlan kingdom in the central region (Fowler, 1988, 1989a:60–64, 1991, 1994, 1999). The Cuscatlan polity was centered on the *altepetl* of Cuscatlan (modern Antiguo Cuscatlan), located just west of modern San Salvador. Cuscatlan had probably conquered a

number of smaller Pipil polities such as Nonoalcos and Cojutepeque during the late Preconquest period. The Spaniards effectively dominated the Pipils by the time of the second founding of San Salvador in 1528, although some armed resistance still occurred in the region until the end of the 1530s. The eastern portion of the country, between the Lempa River and the Gulf of Fonseca, was held primarily by the Lencas whose distribution extended from eastern El Salvador north into central and western Honduras (Fowler, 1989a:64–65; Lara Pinto, 1991, 1996:116; Newson, 1986:20–25). The Lencas were only partially subdued at the time of the second founding of the town.

Archaeological research at Ciudad Vieja began in 1996 (Card, 2006; Fowler, 2006a, 2006b, 2006c, 2006d; Fowler et al., 2007; Gallardo, 2000, 2004, 2006;

Hamilton, 2006a, 2006b; Hamilton et al., 2006; Scott, 2006). This research has established that the site was built on a grid plan with a core area covering 45 ha (Fig. 3), virtually all of which was artificially leveled and filled with various types of constructions making it truly an urban landscape of impressive proportions. Like the urban plan of Natá, described above, the plan of San Salvador is rigid and strictly orthogonal (see Fig. 3), a paragon of the Conquest-period Spanish American grid-plan city. Visitors to the city, Spanish and Indian alike, in its prime of occupation and expansion, say about 1535, surely would have been impressed with the strict, orderly layout of the site plan with the spacious plaza at the center, the church to the east of the plaza, the *cabildo* and municipal buildings on the north, stores and shops on the west, and a market and shops on the south. Long, straight streets run from (or into) the four corners of the plaza in the cardinal directions. The one exception to the straightness of the streets is the street running south

Fig. 3 Urban grid plan of Ciudad Vieja, the first villa of San Salvador, projected over the natural topography of the site (from Fowler, 2006d:Fig. 1.1; drawn by Conard C. Hamilton)

from the church (and the southeast corner of the plaza) which curves around a natural spring, probably an important water source during the period of the town's occupation. Other streets run parallel and perpendicular to the main streets, bisecting each other to form large lots, most of which were probably subdivided into quadrants for the purpose of assigning them to residents.

The plaza measures approximately 100 m on a side including the spaces around the interior streets around the edges on all four sides. The square city blocks measure approximately 80 m (100 varas) on a side, bounded by streets about 8 m in width. Most of the blocks were probably subdivided into four *solares* or house lots of approximately 40 by 40 m (50 by 50 varas) as shown on the projected grid in Fig. 2. This size for house lots was probably modal. The church occupied two entire city blocks on the east of the plaza, while the cabildo and municipal buildings occupied a block on the north. Prominent *vecinos* probably held an entire block. In some cases, they probably occupied or controlled two or more adjacent blocks.

The town displays a great deal of internal functional variability. Among the 18 structures and activity areas that we have excavated, we have identified, in addition to Spanish and indigenous residences, ritual spaces, civic/administrative buildings, food preparation areas, commercial and industrial buildings, warehouses and storage areas, terraces, ramps, and defensive features. The latter consist of guard houses, sentry stations, and a steep, defensible cliff sloping away from the south and east sides of the site. It is expected that future excavations will continue to add to this diverse array of functional variability.

There is also a large degree of internal spatial variability within the city blocks and house lots. While the overall city plan shows strong adherence to the grid-plan layout, excavations and remote sensing data show that there was no prevailing norm concerning the locations of structures within *solares* or the size, shape, and internal arrangement of rooms within structures. There is even significant variation in orientation of structures or parts of structures. Spanish buildings are distinguished by multiroom floor plans, substantial stone foundations measuring 83–84 cm (1 vara) in width, brick tile floors, ceramic roof tiles, and the use of iron nails and other hardware
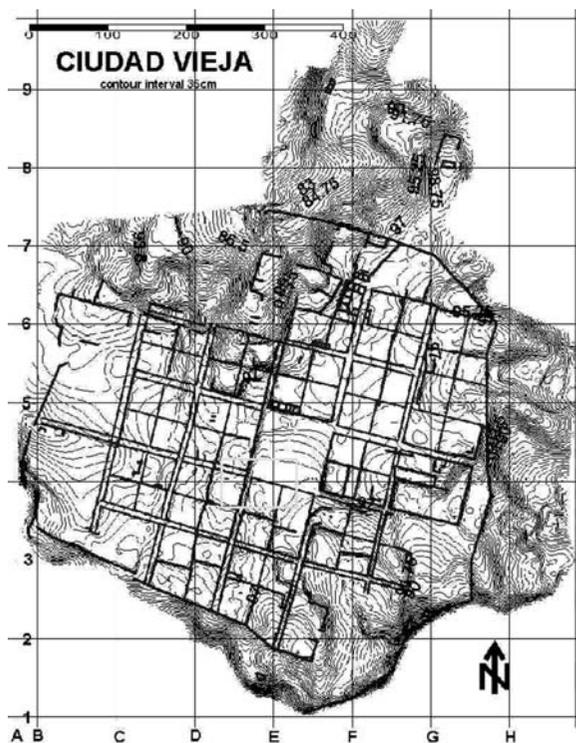
to secure structural elements. They are generally oriented to the overall site alignment of 12 degrees, but exceptions do occur. Indigenous buildings tend to be one-room structures with narrow foundations, packed earth floors, and no evidence for roof tiles (indicating thatched roofs). Their orientation does not follow the overall site grid. Thus, while the overall urban layout appears quite rigid at first glance, there is actually a great deal of flexibility and variability in internal distribution and use of space.

While the Spanish presence is strongly indicated by the layout of the city, the architecture, and certain industries and classes of artifacts such as iron, brick, and glass, a strong indigenous presence at San Salvador is reflected in the ceramics and other artifact complexes of Ciudad Vieja. Indigenous residents of the town would have included indigenous Pipils as well as Mexican and Kaqchikel groups allied with the Spaniards during the Conquest. Excavations and surface collection have recovered more than 60,000 sherds, and project ceramicist Jeb Card (2007) analyzed more than 10,000 sherds. The ceramic complex is eminently indigenous displaying many forms and decorative modes representing continuities with Late Postclassic materials as well as some new forms and motifs that were introduced or developed during the Conquest period. In addition to the highly visible concentrations of ceramics, obsidian artifacts occur in great numbers on the surface and are recovered in excavations (Fowler and Card, 2005). The use of obsidian tools and weapons by Spaniards is highly unlikely. Manos and metates occur in some domestic contexts and on the surface. Polished ceramic earflares and jade objects complete the inventory of indigenous-associated artifacts. In sum, the archaeological evidence indicates that this Spanish American town had a native Mesoamerican population of significant proportion. While the grid-plan layout of the town certainly reflects Spanish attitudes toward urban spatial arrangements, the imposition of order, and the legitimization of conquest, the indigenous presence at the city is also quite visible and tangible.

Material Culture Analysis

Card (2007) analyzed the ceramics from eight excavated contexts and structures at Ciudad Vieja and from an extensive surface collection of the site (see also Fowler and Card, 2005). The most striking aspect of the collection is a class of serving plates produced with native Mesoamerican techniques and painted designs but with forms copied from European majolica (Fig. 4). Card refers to these vessels as "hybrid plates." In a very innovative approach, Card seriated the forms of published European majolica plates and found that the hybrid plates of Ciudad Vieja could be dated very precisely with this method. This method confirmed the historically documented occupation span of the site (1525/28–1545), with perhaps a slightly later abandonment than historical records indicate. More importantly, it also provided more information about European majolica at the site than was available from the recovered majolica specimens. The heavy use of hybrid plates in Spanish and indigenous households invites comparisons with other cases of forced indigenous displacement in the colonial Americas (Card, 2007:276–299). Analysis of vessel form and function from the eight excavated contexts shows similar activities in Spanish and indigenous households, as well as the identification of a tavern or other commercial food and beverage vendor in the center of town. Three microstyles crosscut other classificatory categories, suggesting localized or household distribution and possibly local production of ceramic vessels. These microstyles disappear during the later years of the occupation of Ciudad Vieja, and Card suggested that this development indicates the formation of new community cultural practices. Card used these analyses to evaluate models of colonial societies, suggesting that a model of creolization and ethnogenesis (the creation of a new culture or subculture) would be useful for understanding other contact situations in early colonial Mesoamerica.

Blaisdell-Sloan (1999) also suggested a creolization process for the inhabitants of León Viejo, but she referred primarily to the Spanish residents of León rather than the indigenous or *mestizo* inhabitants as Card referred to in the case of Ciudad Vieja. Blaisdell-Sloan also suggested the intriguing possibility that the historically documented high levels of violence inflicted by the Spanish residents of León against Natives as well as other Spaniards may have been associated with a loss of Spanish cultural identity and that this experience was an integral part of the creolization process.

The recent research of Palka (2005a, 2005b) on the Lacandon Mayas of the Pasión River region of Peten, Guatemala, also represents an interesting trend in

Fig. 4 Ciudad Vieja hybrid plate, Alvarado group (from Card, 2007:Fig. 6.2; profile drawn by Francisco Galdámez; photograph by Jeb J. Card)

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material culture analysis. Palka has shown that rather than being isolated from the outside world, the Lacandons of the nineteenth and early twentieth century were able to acquire all manner of tools (especially machetes, knives, and axes), painted earthenware bowls and cups, and even patent medicines through trade with explorers and loggers. At the same time, they maintained a rich cultural inventory of traditional pottery and chipped-stone tools and weapons. Palka (2005b:193) attributed this pattern to active decision-making on the part of the Lacandons and noted that they were "able to make choices in accepting in trade or not requesting material culture from outsiders."

Simmons (1995) has presented a detailed technological and stylistic analysis of small, side-notched projectile points (arrow points) from Colonial contexts at Tipu, Belize. He suggested that stylistic variation among these points may be associated with ethnic differences among the Maya groups that inhabited

Tipu during the Colonial period until 1697. While some of these points may have been used in hunting, Simmons thinks it more likely that they were used in bow-and-arrow intimidation of Spanish clergy and other acts of resistance against Spanish domination.

Hacienda Archaeology and the Caste War in Yucatan

This discussion could also be treated as a subsection of the discussion of landscape and settlement above, but I treat it separately because of the special relations of production associated with the hacienda or large, landed, private estate in Mexico (Wolf, 1959:202–211, 243–246, 1969:4–7) and the opportunities afforded by a special category of archaeology of the hacienda to explore these relations. In the particular example described here, the research is made even more relevant

because it not only points the way to an archaeology of the hacienda, but it also sheds new light on one of the most interesting conflicts and social movements in the history of Latin America.

Alexander (1997a, 1997b, 1998, 1999, 2003, 2004) has conducted a long-term, interdisciplinary project of investigation of Yaxcaba and its surrounding region in central Yucatan. Yaxcaba was one of the flash points of the Caste War in Yucatan (1847–1901), widely regarded as the most militarily successful indigenous rebellion in Latin America. Scholars have offered a wide range of interpretations of the origins and consequences of the war, but the issues remain controversial. In brief, the rebellion was fueled by the resentment felt by the Maya peasantry felt over increased taxation, the loss of milpas (maize fields), and physical abuse suffered by laborers on the sugar plantations of the southeast. Consequences included the destruction of the southeastern sugar industry, a demographic and economic shift from the southeast to the center and northwest of the peninsula, and eventually the development of the henequen industry in the northwest (Joseph, 1996; Quezada, 2001:140–162; Reed, 1964). Seen from the perspective of the Mayas, the Caste War was a series of events in a long process of resistance, adjustment, and accommodation to colonialism and the emergence of the capitalist market economy. As Alexander (2004:13) has noted, Creoles appear as the dominant force in historical accounts, yet Maya peasant agriculturists are most prominent in the archaeological record.

Alexander has combined documentary research with the methods of regional settlement survey and household archaeology to address the questions of how the Mayas reacted to the changing economic and political landscape before, during, and after the Caste War. Her survey focused on Yaxcaba parish, identifying 30 sites within an area of 18 by 24 km. To classify the sites, she developed a four-tier settlement hierarchy: the *cabecera* of Yaxcaba; four small towns; 16 haciendas; and nine smaller settlements consisting of rural *ranchos* and *cofradía* estates. Alexander (1997a, 2003, 2004:99–103) raises some very important points with regard to variation among the haciendas. She argues that variability in the amount of masonry architecture of haciendas is not simply an index of relative wealth and prestige but can be attributed to the development of production over time as well as the entrepreneurial strategy pursued by the

hacienda's owner. To demonstrate these points she develops a relative measure of differential wealth expended in architecture through an estimate of total floor areas enclosed by masonry walls.

Alexander's archaeological evidence also demonstrates that agrarian production among the communities of the parish was not uniform. Their strategic responses to economic change, especially the distribution of land, were flexible and varied. Differences in spatial patterning among and within house lots in the parish show variation in production strategies and a wide range of tactics intended to minimize subsistence risk. She links differences in spatial organization among the settlements in the parish to variation in demographic growth, tax structure, and land stress occurring with changes in the local political economy. Ultimately, Alexander's Yaxcaba research indicates that the Caste War rebellion itself was not the prime cause of agrarian reform and other changes that occurred. Rather, the explanation for these changes must be sought in the "long-term processes that link tactics of accommodation, survival, and resistance to agrarian structure" (Alexander, 2004:13).

An interesting complement to the Yaxcaba project is Alexander's work on Isla Civiltuk, southwestern Campeche. In this region, Spanish colonization was much less successful than in the regions closest to Mérida, Valldolid, and Campeche, the centers of Spanish control. Using models from settlement and household ecology, evidence from intensive regional and site survey, and a household archaeology approach, Alexander (2005) attributes an active role to Maya strategies of agriculture and political organization in the Spanish failure to dominate the region.

Archaeology of the Early Church in Yucatan and Central America

In a very important synthesis, Graham (1998) defined what she called "mission archaeology" as "a novel conjunction of terms devised to focus attention on an archaeology of mission sites, and thereby on the light that be shed on the process of Christianization of the Americas by examining the material culture of missions." She suggested that it would be profitable to focus less on early friars as agents of imperialism and more on the concept of

cultural imagination. The idea of a changing cultural imagination as the result of the encounter with Christianity can be examined from both the indigenous and the European perspective, and both lines of inquiry, Graham (1998:28) noted, can profit from archaeological analysis. She pointed out that it is misleading to think that Europeans had a special claim to Christianity. New World indigenous societies experiencing proselytization responded not to an elusive Christian ideal but to a reality that they helped to create, a set of ideas and a material existence about which they thought very deeply. Thus, it is very important to approach studies of the early church as a "reflection of the idea of changing cultural imagination and reordering of a conceptual universe," and to avoid the simplistic approach of either acceptance or rejection of an "orthodox" Christianity and the equally simplistic idea of the church as merely an instrument of colonial domination (Graham, 1998:29).

Such an approach can be illustrated with archaeological data from Franciscan missions in Yucatan from 1544 to 1579. During this time Franciscan friars established *conventos* (friaries) and small churches in both urban and rural settings throughout Yucatan. From these *conventos*, the friars traveled in *visita* rounds to more remote native communities where they often built small chapels or churches (Andrews, 1991; Graham, 1998:50). Remote Maya settlements such as Lamanai and Tipu were served by part-time *visita* missions (Graham, 1991; Graham et al., 1985; Graham et al., 1989; Jones et al., 1986; Pendergast, 1986a, 1986b, 1991; Pendergast et al., 1993). Permanently staffed churches such as the one at Ecab (Andrews et al., 2006), for example, were constructed near larger native population centers. In general, the allocation and distribution of Franciscan missions corresponded with Conquest-period demography.

Building on earlier archaeological studies by Thomas (1988) and Andrews (1991), Hanson (1995) developed a spatial-temporal model of Franciscan missions in Yucatan from 1542 to 1579. These studies outline a sequence from simple ramada chapels to ramada chapels and complex ramada chapels. In simple ramada chapels, a masonry wall enclosed the sanctuary at the east end of the structure. Frequently, the chapel was placed on a Prehispanic platform. Masonry walls consisted of reused or newly quarried blocks. The roof was made of pole and thatch. The nave was less than 20 m in length. The floor of the chapel was often a cemetery.[2] Examples include Ek Balam, Tancah, Xcaret, Lamanai, and Tipu.

Ramada chapels replaced simple ramada chapels, as seen at Lamanai. Other examples include Tecoh, Ecab, and Dzibilchaltun. Many architectural characteristics from the simple ramadas continued, but the masonry sanctuary was now barrel-vaulted. Adjoining rooms for the choir and sacristy had walls more than a meter in thickness supporting roofs of beams and mortar. The nave was still covered by a pole-and-thatch roof, but it now measured 20–30 m in length. Conventos were located to the west or north of the chapel.

Complex ramada chapels represent the final stage of the sequence. Examples may be found at Mani, Sisal, Tizimin, and Calkini. Permanent masonry structures incorporated previous ramada chapels and added a large, attached convento with a colonnaded courtyard. Complex chapel naves were more than 30 m in length. The roofs of the naves were still covered with pole and thatch. *Doctrinas*, administrative centers of the mission system, existed at the locations of complex chapels.

Hanson (1995) links this model to missions in La Florida and New Mexico in a general theory of Franciscan missionization. Certain aspects of the model may also be extended to Chiapas, Guatemala, and further south and be applied to churches of other religious orders and the secular clergy as well. Markman (1984) provided a wealth of architectural information on Dominican churches in highland Chiapas, especially Santo Domingo in Chiapa de Corzo (see also Gasco, 2005; Lee and Markman, 1977). Markman's (1966) monograph on Antigua (Santiago de los Caballeros), Guatemala, has great detail on the town's cathedral and the churches and conventos of the Franciscan, Dominican, and Mercedarian orders. Most of the churches of Chiapa de Corzo and Antigua represent a stage of development even more elaborate than the complex ramada chapel of Yucatan. Fowler (1995) and Verhagen (1997) described the two churches staffed by secular clergy in the cacao-producing center of Caluco, in the Izalcos region of western El Salvador. The first

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[2] Approximately 600 burials were found beneath and around the floor of the church at Tipu (Jacobi, 2000).

Caluco church, built in the 1530s, was a ramada
chapel measuring 12 by 27 m, with the long axis
running east–west and the sanctuary to the east. It
was replaced by the sumptuous, *mudejar*-style
church of San Pedro and San Pablo, built between
1560 and 1580. It measured approximately 20 by 40
m, oriented east–west, and featured brick walls
1.5–2.6 m in thickness. The sanctuary, in the east
end, was covered by a vaulted masonry roof, and
arch-and-beam construction covered with roof tiles
over the nave. This was one of the most elaborate
churches in Central America for its time. Black
(1997), Weeks (1997), and Weeks and Black (1991)
examined the archaeological and historical evidence
for early Mercedarian missionizing among the
Lencas in the Tencoa region of western Honduras.
Their work has added a new dimension to archae-
ology in this region where contact-period sites have
been difficult to recognize. As in Yucatan, the loca-
tions of these early colonial mission churches were
correlated with high native population densities in
the Conquest period. All of these churches, whether
simple or complex, were prominent markers on the
landscape of a new set of ideas and beliefs. They
represented powerful symbolic statements by clergy
and royal officials intended to impress and awe a
newly converted population. Following the lines of
Graham's interpretive suggestions, however, this
message was almost certainly perceived by indigen-
ous converts in a manner very different from the
way in which it was conveyed.

References

Aguilera Rojas, J., 1994, *Fundación de ciudades hispanoamer-icanas*. Editorial MAPFRE, Madrid.
Alexander, R., 1997a, Haciendas and Economic Change in Yucatán: Entrepreneurial Strategies in the Parroquia de Yaxcabá, 1775–1850. *Journal of Archaeological Method and Theory* 4:331–351.
Alexander, R., 1997b, Settlement Patterns of the Late Colonial Periodin Yaxcabá Parish, Yucatán, Mexico: Implications for the Distribution of Land and Population before the Caste War. In *Approaches to the Historical Archaeology of Mexico, Central, and South America*, edited by J. Gasco, G C. Smith, and P. Fournier García, pp. 29–40. Institute of Archaeology, University of California, Los Angeles.
Alexander, R., 1998, Community Organization in the Parroquia de Yaxcaba, Yucatan, Mexico, 1750–1847: Implications for Household Adaptation within a Changing Colonial Economy. *Ancient Mesoamerica* 9:39–54.

Alexander, R.T., 1999, Mesoamerican House Lots and Archaeological Site Structure: Problems of Inference in Yaxcaba, Yucatan, Mexico, 1750–1847. In *The Archae-ology of Household Activities*, edited by P.M. Allison, pp. 78–100. Routledge, London.
Alexander, R.T., 2003, Architecture, Haciendas, and Eco-nomic Change in Yaxcabá, Yucatán, Mexico. *Ethnohis-tory* 50:191–220.
Alexander, R.T., 2004, *Yaxcabá and the Caste War of Yuca-tán: An Archaeological Perspective*. University of New Mexico Press, Albuquerque.
Alexander, R.T., 2005, Isla Cilvituk and the Difficulties of Spanish Colonization in Southwestern Campeche. In *The Postclassic to Spanish-Era Transition in Mesoamerica: Archaeological Per-spectives*, edited by S. Kepecs and R.T. Alexander, pp. 161–181. University of New Mexico Press, Albuquerque.
Alexander, R.T., and Kepecs, S., 2005, The Postclassic to Spanish-Era Transition in Mesoamerica: An Introduc-tion. In *The Postclassic to Spanish-Era Transition in Mesoamerica: Archaeological Perspectives*, edited by S. Kepecs and R.T. Alexander, pp. 1–12. University of New Mexico Press, Albuquerque.
Andrews, A.P., 1981, La arqueología histórica en el área maya. In *Investigaciones recientes en el área maya* 2, pp. 185–193. Sociedad Mexicana de Antropología, Mexico City.
Andrews, A.P., 1984, Historical Archaeology in Yucatan: A Preliminary Framework. *Historical Archaeology* 15:1–18.
Andrews, A.P., 1985, La arqueología histórica en el área maya. *Revista Mexicana de Estudios Antropológicos* 31:9–14.
Andrews, A.P., 1991, The Rural Chapels and Churches of Early Colonial Yucatán and Belize: An Archaeological Perspective. In *The Spanish Borderlands in Pan-American Perspective*, edited by D.H. Thomas, pp. 355–374. Columbian Consequences, vol. 3. Smithsonian Institu-tion Press, Washington, D.C.
Andrews, A.P., 2007, *Historical Archaeology in the Maya Area: A Working Bibliography*. Electronic document, http://faculty.ncf.edu/andrews/research/habib.htm.
Andrews, A.P., Benavides Castillo, A., and Jones, G.D., 2006, Ecab: A Remote Encomienda of Early Colonial Yucatan. In *Reconstructing the Past: Studies in Mesoamerican and Central American Prehistory*, edited by D.M. Pendergast and A.P. Andrews, pp. 5–32. BAR International Series 1529. British Archaeological Reports, Oxford.
Andrews, A.P., and Corletta, R., 1995, A Brief History of Underwater Archaeology in the Maya Area. *Ancient Mesoamerica* 6:101–117.
Anschuetz, K.F., Wilshusen, R.H., and Scheick, C.L., 2001, An Archaeology of Landscapes: Perspectives and Direc-tions. *Journal of Archaeological Research* 9:157–211.
Arellano, J.E., 2002, *León de Nicaragua: Tradiciones y valores de la Atenas centroamericana*. Fondo Editorial CIRA, Managua.
Argüello Argüello, A., 1969, *Historia de León Viejo*. Editorial Antorcha, León.
Barón Castro, R., 1996, *Reseña histórica de la villa de San Salvador desde su fundación en 1525, hasta que recibe el título de ciudad en 1546*. 2nd ed. Consejo Nacional para la Cultura y el Arte, San Salvador.
Black, N.J., 1997, The Mercedarians and the Missionization of the Lenca in Santa Bárbara de Tencoa, Honduras. In

Approaches to the Historical Archaeology of Mexico, Central, and South America, edited by J. Gasco, G.C. Smith, and P. Fournier García, pp. 83–89. Institute of Archaeology, University of California, Los Angeles.

Blaisdell-Sloan, K., 1999, A View from the Pacific: Archaeological Analysis of Materials from Nicaragua's Sixteenth Century Spanish Town of Leon Viejo. Unpublished Master's thesis, Department of Geography and Anthropology, Louisiana State University, Baton Rouge.

Cabezas Carcache, H., 1994, El descubrimiento y las exploraciones iniciales. In *Dominación española: Desde la conquista hasta 1700*, edited by E. Chinchilla Aguilar, pp. 39–45. Historia general de Guatemala, edited by J. Luján Muñoz, vol. 2. Asociación de Amigos del País, Fundación para la Cultura y el Desarrollo, Guatemala.

Card, J.J., 2006, Excavaciones y arquitectura de la Estructura 6F4. In *Arqueología histórica de la villa de San Salvador: Informe de las excavaciones (1996–2003)*, edited by W.R. Fowler, pp. 84–92. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Card, J.J., 2007, *The Ceramics of Colonial Ciudad Vieja, El Salvador: Culture Contact and Social Change in Mesoamerica.* Ph.D. dissertation, Tulane University. University Microfilms, Ann Arbor, Michigan.

Castillero Calvo, A., 1972, *Políticas de poblamiento en Castilla del Oro y Veragua en los orígenes de la colonización.* Editorial Universitaria, Panama City.

Centro de Estudios Históricos de Obras Públicas y Urbanismo (CEHOPU) (various authors), 1989, *La ciudad hispanoamericana: El sueño de un orden.* Ministerio de Obras Públicas y Urbanismo, Madrid.

Chamberlain, R.S., 1947, The Early Years of San Miguel de la Frontera. *The Hispanic American Historic Review* 27:623–646.

Chamberlain, R.S., 1948, *The Conquest and Colonization of Yucatan, 1517–1550.* Publication 582. Carnegie Institution of Washington, Washington, D.C.

Chamberlain, R.S., 1953, *The Conquest and Colonization of Honduras, 1502–1550.* Publication 598. Carnegie Institution of Washington, Washington, D.C.

Chueca Goitia, F., Torres Balbás, L., and González y González, J., 1951, *Planos de ciudades iberoamericanas y filipinas existentes en el Archivo de Indias.* Instituto de Estudios de Administración Local, Seminario de Urbanismo, Madrid.

Deagan, K.A., and Cruxent, J.M., 2002a, *Archaeology at La Isabela: America's First European Town.* Yale University Press, New Haven, Connecticut.

Deagan, K.A., and Cruxent, J.M., 2002b, *Columbus's Outpost among the Taínos: Spain and America at La Isabela, 1493–1498.* Yale University Press, New Haven.

Deetz, J., 1977, *In Small Things Forgotten: The Archaeology of Early American Life.* Anchor Books/Doubleday, New York.

Deetz, J., 1991, Introduction: Archaeological Evidence of Sixteenth- and Seventeenth-Century Encounters. In *Historical Archaeology in Global Perspective*, edited by L. Falk, pp. 1–9. Smithsonian Institution Press, Washington, D.C.

Dickau, Ruth, 1999, Paleoethnobotany of the Lake Managua Region, Nicaragua. Unpublished Master's thesis, University of Calgary.

Domínguez Compañy, F., 1984, *Política de poblamiento de España en América: La fundación de ciudades.* Instituto de Estudios de Administración Local, Madrid.

Elliott, J.H., 1963, *Imperial Spain, 1469–1716.* Pelican Books, Harmondsworth, Middlesex.

Escalante Arce, P.A., 1992, *Códice Sonsonate: Crónicas hispánicas.* 2 vols. Consejo Nacional para la Cultura y el Arte, San Salvador.

Espinosa Pérez, E., 2004, Cuarenta años de arqueología en León Viejo. In *León Viejo y Ciudad Vieja: Ciudades de conquistadores*, edited by C. Guido Martínez, pp. 21–27. Centro de Servicios Educativos y Culturales de Nicaragua, Managua.

Espinosa Pérez, E., García Vásquez, R., and Suganuma, F., 1999, La fortaleza de León Viejo: Resultados de la primera etapa de las investigaciones. *Huellas: Revista de Antropología e Historia*, pp. 57–81. Managua.

Farriss, N., 1984, *Maya Society Under Colonial Rule: The Collective Enterprise of Survival.* Princeton University Press, Princeton, New Jersey.

Fowler, W.R., 1988, La población nativa de El Salvador al momento de la conquista española. *Mesoamérica* 15:79–116.

Fowler, W.R., 1989a, *The Cultural Evolution of Ancient Nahua Civilizations: The Pipil-Nicarao of Central America.* University of Oklahoma Press, Norman.

Fowler, W.R., 1989b, Nuevas perspectivas sobre las migraciones de los pipiles y los nicaraos. *Arqueología* 1:89–98.

Fowler, W.R., 1991, The Political Economy of Indian Survival in Sixteenth-Century Izalco, El Salvador. In *The Spanish Borderlands in Pan-American Perspective*, edited by D.H. Thomas, pp. 187–204. Columbian Consequences, vol. 3. Smithsonian Institution Press, Washington, D.C.

Fowler, W.R., 1993, The Living Pay for the Dead: Trade, Exploitation, and Social Change in Early Colonial Izalco, El Salvador. In *Ethnohistory and Archaeology: Approaches to Postcontact Change in the Americas*, edited by J.D. Rogers and S.M. Wilson, pp. 181–199. Plenum Press, New York.

Fowler, W.R., 1994, La región de Izalco y la villa de la Santísima Trinidad de Sonsonate. In *Dominación española: Desde la Conquista hasta 1700*, edited by E. Chinchilla Aguilar, pp. 601–610. Historia general de Guatemala, edited by J. Luján Muñoz, vol. 2. Asociación de Amigos del País, Fundación para la Cultura y el Desarrollo, Guatemala City.

Fowler, W.R., 1995, *Caluco: Historia y arqueología de un pueblo pipil en el siglo XVI.* Patronato Pro-Patrimonio Cultural, San Salvador.

Fowler, W.R., 1999, Los pipiles. In *Epoca precolombina*, edited by M. Popenoe de Hatch, pp. 701–706. Historia general de Guatemala, edited by J. Luján Muñoz, vol. 1. Asociación de Amigos del País, Fundación para la Cultura y el Desarrollo, Guatemala City.

Fowler, W.R., 2006a, Cacao Production, Tribute, and Wealth in Sixteenth-Century Izalcos, El Salvador. In *Chocolate in Mesoamerica: A Cultural History of Cacao*, edited by C.L. McNeil, pp. 307–321. University Press of Florida, Gainesville.

Fowler, W.R., 2006b, Excavaciones y arquitectura de la Estructura 4E1: La casa del cabildo. In *Arqueología histórica de la villa de San Salvador: Informe de las*

excavaciones (1996–2003), edited by W.R. Fowler, pp. 51–56. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Fowler, W.R., 2006c, Excavaciones y arquitectura de la Estructura 6F2. In *Arqueología histórica de la villa de San Salvador: Informe de las excavaciones (1996–2003)*, edited by W.R. Fowler, pp. 96–108. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Fowler,W.R., 2006d, Introducción. In *Arqueología histórica de la villa de San Salvador: Informe de las excavaciones (1996–2003)*, edited by W.R. Fowler, pp. 1–31. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Fowler, W.R., and Card, J.J., 2005, The End of Pre-Columbian Pipil Civilization: Ciudad Vieja, El Salvador. Report submitted to Foundation for the Advancement of Mesoamerican Studies, Crystal River, Florida. Electronic document, http://famsi.org/reports/02091/index.html

Fowler, W.R., and Earnest, H.H., 1985, Settlement Patterns and Prehistory of the Paraíso Basin of El Salvador. *Journal of Field Archaeology* 12:19–32.

Fowler, W.R., Estrada-Belli, F., Bales, J.R., Reynolds, M.D., and Kvamme, K.L., 2007, Landscape Archaeology and Remote Sensing of a Spanish-Conquest Town: Ciudad Vieja, El Salvador. In *Remote Sensing in Archaeology*, edited by J. Wiseman and F. El-Baz, pp. 395–421. Springer, New York.

Gallardo, R., 2000, La casa de un conquistador español en el siglo XVI: La Estructura 6F1 de Ciudad Vieja. Unpublished Licenciatura thesis, Universidad Tecnológica de El Salvador, San Salvador.

Gallardo, R., 2004, Spanish Identity at a Sixteenth-Century Colonial House: Structure 6F1 at Ciudad Vieja, El Salvador. Unpublished Master's thesis, University of Colorado, Boulder.

Gallardo, R., 2006, Excavaciones y arquitectura de la Estructura 6F1. In *Arqueología histórica de la villa de San Salvador: Informe de las excavaciones (1996–2003)*, edited by W.R. Fowler, pp. 57–83. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

García Fernández, J.L., 1989, Trazas urbanas hispanoamericanas y sus antecedentes. In CEHOPU, *La ciudad hispanoamericana: El sueño de un orden*, pp. 213–221. Ministerio de Obras Públicas y Urbanismo, Madrid.

García Zarza, E., 1996, *La ciudad en cuadrícula o hispanoamericana: Origen, evolución y situación actual*. Instituto de Estudios de Iberoamérica y Portugal, Universidad de Salamanca, Salamanca.

Gasco, J., 2005, The Consequences of Spanish Colonial Rule for the Indigenous Peoples of Chiapas, Mexico. In *The Postclassic to Spanish-Era Transition in Mesoamerica: Archaeological Perspectives*, edited by S. Kepecs and R.T. Alexander, pp. 77–96. University of New Mexico Press, Albuquerque.

Góngora, M., 1962, *Los grupos de conquistadores en Tierra Firme (1509–1530)*. Editorial Universitaria, Universidad de Chile, Santiago.

Graham, E., 1991, Archaeological Insights into Colonial Period Maya Life at Tipu, Belize. In *The Spanish Borderlands in Pan-American Perspective*, edited by D.H.Thomas, pp. 319–335. Columbian Consequences, vol. 3. Smithsonian Institution Press, Washington, D.C.

Graham, E., 1998, Mission Archaeology. *Annual Review of Anthropology* 27:25–62.

Graham, E.A., Jones, G.D., and Kautz, R.R., 1985, Archaeology and Ethnohistory on a Spanish Colonial Frontier: An Interim report on the Macal-Tipu Project in Western Belize. In *The Lowland Maya Postclassic,* edited by A.F. Chase and P.M. Rice, pp. 206–214. University of Texas Press, Austin.

Graham, E., Pendergast, D.M., and Jones, G.D., 1989, On the Fringes of Conquest: Maya-Spanish Contact in Colonial Belize. *Science* 246:1254–1259.

Helms, M.W., 1976, *Ancient Panama: Ancient Chiefs in Search of Power*. University of Texas Press, Austin.

Ibarra Rojas, E., 1990, *Las sociedades cacicales de Costa Rica (siglo XVI)*. Editorial de la Universidad de Costa Rica, San José.

Hamilton, C.C., 2006a, Estructura 1D1: El puesto de vigilancia sur. In *Arqueología histórica de la villa de San Salvador: Informe de las excavaciones (1996–2003)*, edited by W.R. Fowler, pp. 115–118. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Hamilton, C.C., 2006b, Estructura 2F1: Buscando la ocupación indígena en Ciudad Vieja. In *Arqueología histórica de la villa de San Salvador: Informe de las excavaciones (1996–2003)*, edited by W.R. Fowler, pp. 119–128. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Hamilton, C.C., Fowler, W.R., and Gallardo, R., 2006, Levantamiento topográfico. In *Arqueología histórica de la villa de San Salvador: Informe de las excavaciones (1996–2003)*, edited by W.R. Fowler, pp. 32–37. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Hanson, C.A., 1995, The Hispanic Horizon in Yucatan: A Model of Franciscan Missionization. *Ancient Mesoamerica* 6:15–28.

Hardoy, J., 1989, Localización y causas de abandono de las ciudades hispanoamericanas durante las primeras décadas del siglo XVI. In *Nuevas perspectivas en los estudios sobre historia urbana latinoamericana*, edited by J.E. Hardoy and R.P. Morse, pp. 9–39. Grupo Editor Latinoamericano, Buenos Aires.

Ibarra Rojas, E., 1990, *Las sociedades cacicales de Costa Rica (Siglo XVI)*. Editorial de la Universidad de Costa Rica, San José.

Jacobi, K.P., 2000, *Last Rites for the Tipu Maya: Genetic Structuring in a Colonial Cemetery*. University of Alabama Press, Tuscaloosa.

Jones, G.D., 1989, *Maya Resistance to Spanish Rule: Time and History on a Colonial Frontier*. University of New Mexico Press, Albuquerque.

Jones, G.D., 1998, *The Conquest of the Last Maya Kingdom*. Stanford University Press, Stanford, California.

Jones, G.D., Kautz, R.R., and Graham, E., 1986, Tipu: A Maya Town on the Spanish Colonial Frontier. *Archaeology* 39:40–47.

Jones, O.L., Jr., 1994, *Guatemala in the Spanish Colonial Period*. University of Oklahoma Press, Norman and London.

Joseph, G.M., 1996, Caste War of Yucatán. In *Encyclopedia of Latin American History and Culture*, vol. 2, edited by B.A. Tenenbaum, pp. 11–12. Charles Scribner's Sons, New York.

Kagan, R.L., 2000a, A World without Walls: City and Town in Colonial Spanish America. In *City Walls: The Urban Enceinte in Global Perspective*, edited by J.D. Tracy, pp. 117–152. Cambridge University Press, Cambridge.

Kagan, R.L., 2000b, *Urban Images of the Hispanic World, 1493–1793*. Yale University Press, New Haven, Connecticut.

Kepecs, S., 2005, Mayas, Spaniards, and Salt: World Systems Shifts in Sixteenth-Century Yucatan. In *The Postclassic to Spanish-Era Transition in Mesoamerica: Archaeological Perspectives*, edited by S. Kepecs and R.T. Alexander, pp. 117–137. University of New Mexico Press, Albuquerque.

Kramer, W., 1994, *Encomienda Politics in Early Colonial Guatemala, 1524–1544: Dividing the Spoils*. Westview Press, Boulder, Colorado.

Kramer, W., Lovell, W.G., and Lutz, C.H., 1993, La conquista española de Centroamérica. In *El régimen colonial (1524–1750)*, edited by J.C. Pinto Soria, pp. 21–93. Historia general de Centroamérica, vol. 2. Sociedad Estatal Quinto Centenario, Facultad Latinoamericana de Ciencias Sociales, Madrid.

Kubler, G., 1978, Open-Grid Town Plans in Europe and America. In *Urbanization in the Americas from Its Beginnings to the Present*, edited by R.P. Schaedel, J.E. Hardoy, and N.S. Kinzer, pp. 327–341. Mouton, The Hague.

Lara Pinto, G., 1991, Sociopolitical Organization in Central and Southwest Honduras at the Time of the Conquest: A Model for the Formation of Complex Society. In *The Formation of Complex Society in Southeastern Mesoamerica*, edited by W.R. Fowler, pp. 215–235. CRC Press, Boca Raton, Florida.

Lara Pinto, G., 1996, Centroamérica desde la perspectiva indígena (siglos XVI y XVII). In *Los indios de Centroamérica*, by G. Hasemann, G. Lara Pinto, and F. Cruz Sandoval, pp. 99–277. MAPFRE, Madrid.

Lardé y Larín, J., 2000, *El Salvador: Descubrimiento, conquista y colonización*. 2nd ed. Consejo Nacional para la Cultura y el Arte, San Salvador.

Lee, T.A., Jr., and Markman, S.D., 1977, The Coxoh Colonial Project and Coneta, Chiapas, Mexico: A Provincial Maya Village under the Spanish Conquest. *Historical Archaeology* 11:56–67.

Leone, M.P., 1984, Interpreting Ideology in Historical Archaeology: Using the Rules of Perspective in the William Paca Garden in Annapolis, Maryland. In *Ideology, Representation, and Power in Prehistory*, edited by D. Miller and C. Tilley, pp. 25–35. Cambridge University Press, Cambridge.

Leone, M.P., and Potter, P.B., Jr., 1988, Introduction: Issues in Historical Archaeology. In *The Recovery of Meaning: Historical Archaeology in the Eastern United States*, edited by M.P. Leone and P.B. Potter, Jr., pp. 1–22. Smithsonian Institution Press, Washington, D.C.

Lightfoot, K.G., 1995, Culture Contact Studies: Redefining the Relationship between Prehistoric and Historical Archaeology. *American Antiquity* 60:199–217.

Lockhart, J., 1992, *The Nahuas after the Conquest: A Social and Cultural History of the Indians of Central Mexico, Sixteenth through Eighteenth Centuries*. Stanford University Press, Stanford, California.

Luján Muñoz, J., 1994, Urbanismo. In *Dominación española: Desde la Conquista hasta 1700*, edited by E. Chinchilla Aguilar, pp. 691–697. Historia general de Guatemala, edited by J. Luján Muñoz, vol. 2. Asociación de Amigos del País, Fundación para la Cultura y el Desarrollo, Guatemala City.

Luján Muñoz, J., and Cabezas Carcache, H., 1994, La Conquista. In *Dominación española: Desde la Conquista hasta 1700*, edited by E. Chinchilla Aguilar, pp. 47–74. Historia general de Guatemala, edited by J. Luján Muñoz, vol. 2. Asociación de Amigos del País, Fundación para la Cultura y el Desarrollo, Guatemala.

Lutz, C.H., 1994, *Santiago de Guatemala, 1541–1773: City, Caste, and the Colonial Experience*. University of Oklahoma Press, Norman.

MacLeod, M.J., 1973, *Spanish Central America: A Socio-economic History, 1520–1720*. University of California Press, Berkeley.

Markman, S.D., 1966, *Colonial Architecture of Antigua Guatemala*. Memoirs of the American Philosophical Society, vol. 64. Philadelphia, Pennsylvania.

Markman, S.D., 1978, The Gridiron Town Plan and the Caste System in Colonial Central America. In *Urbanization in the Americas from Its Beginnings to the Present*, edited by R.P. Schaedel, J.E. Hardoy, and N.S. Kinzer, pp. 471–489. Mouton, The Hague.

Markman, S.D., 1984, *Architecture and Urbanization in Colonial Chiapas, Mexico*. American Philosophical Society, Philadelphia, Pennsylvania.

Martínez, M.E., 2000, Space, Order and Group Identities in a Spanish Colonial Town: Puebla de los Angeles. In *The Collective and the Public in Latin America: Cultural Identities and Political Order*, edited by L. Roniger and T. Herzog, pp. 14–36. Sussex Academic Press, Brighton.

Martínez Lemoine, R., 1977, *El modelo clásico de ciudad colonial hispanoamericana: Ensayo sobre los orígenes del urbanismo en América*. Universidad de Chile, Santiago.

Matthews, C.N., 2002a, Landscape Studies. In *Encyclopedia of Historical Archaeology*, edited by C.E. Orser, Jr., pp. 308–311. Routledge, London.

Matthews, C.N., 2002b, Power in Place: Site, Region, and Landscape in Historical Archaeology. In *The Dynamics of Power*, edited by M. O'Donovan, pp. 324–340. Occasional Paper, No. 30. Center for Archaeological Investigations, Southern Illinois University, Carbondale.

McAlister, L.N., 1984, *Spain and Portugal in the New World, 1492–1700*. University of Minnesota Press, Minneapolis.

McKillop, H., 2002, *Central America*. In *Encyclopedia of Historical Archaeology*, edited by C.E. Orser, Jr., pp. 91–94. Routledge, London.

Meléndez Chaverri, C., 1977, Ciudades fundadas en la América Central en el siglo XVI. *Anuario de Estudios Centroamericanos* 3:57–79.

Mena García, M.C., 1992, *La ciudad en un cruce de caminos: Panamá y sus orígenes urbanos*. Escuela de

Estudios Hispano-Americanos, Universidad de Sevilla, Seville.

Mena García, M.C., 1998, *Sevilla y las flotas de Indias: La gran armada de Castilla del Oro (1513–1514)*. Universidad de Sevilla, Fundación El Monte, Seville.

Messmacher, M., 1987, El urbanismo en México, Guatemala, Honduras, Honduras Británica, El Salvador, parte de Costa Rica y Nicaragua, en los siglos XVI y XVII. In *De Teotihuacán a Brasilia: Estudios de historia urbana iberoamericana y filipina*, edited by G. Alomar, pp. 129–211. Instituto de Estudios de Administración Local, Madrid.

Mrozowski, S.A., 1991, Landscapes of Inequality. In *The Archaeology of Inequality*, edited by R.H. McGuire and R. Paynter, pp. 79–101. Basil Blackwell, Oxford.

Newson, L., 1986, *The Cost of Conquest: Indian Decline in Honduras Under Spanish Rule*. Westview Press, Boulder, Colorado.

Newson, L., 1987, *Indian Survival in Colonial Nicaragua*. University of Oklahoma Press, Norman.

Orser, C.E., Jr., 1996, *A Historical Archaeology of the Modern World*. Plenum Press, New York.

Ortega, E., 1988, Informe de las excavaciones del sitio histórico de León Viejo. Unpublished manuscript on file, Organization of American States, Managua.

Palka, J.W., 2005a, Postcolonial Conquest of the Southern Maya Lowlands, Cross-Cultural Interaction, and Lacandon Maya Culture Change. In *The Postclassic to Spanish-Era Transition in Mesoamerica: Archaeological Perspectives*, edited by S. Kepecs and R.T. Alexander, pp. 183–201. University of New Mexico Press, Albuquerque.

Palka, J.W., 2005b, *Unconquered Lacandon Maya: Ethnohistory and Archaeology of Indigenous Culture Change*. University Press of Florida, Gainesville.

Palm, E.W., 1992a, La place excentrée. In *Heimkehr ins Exil: Schriften zu Literatur und Kunst*, edited by H. von Kügelgen and A. Rothe, pp. 155–163. Böhlau Verlag, Cologne.

Palm, E.W., 1992b, La ville espagnole au Nouveau Monde dans la première moitié du XVI siècle. In *Heimkehr ins Exil: Schriften zu Literatur und Kunst*, edited by H. von Kügelgen and A. Rothe, pp. 129–141. Böhlau Verlag, Cologne.

Patronato Panamá Viejo, 2007, Patronato Panamá Viejo homepage. Electronic document, http://www.panamaviejo.org.

Patch, R.W., 1993, *Maya and Spaniard in Yucatan, 1648–1812*. Stanford University Press, Stanford, California.

Patterson, T.C., 1993, *Archaeology: The Historical Development of Civilizations*. 2nd ed. Prentice Hall, Englewood Cliffs, New Jersey.

Pauls, E.P., 2006, The Place of Space: Architecture, Landscape, and Social Life. In *Historical Archaeology*, edited by M. Hall and S.W. Silliman, pp. 65–83. Blackwell Publishers, Malden, Massachusetts.

Paynter, R., 2000a, Historical and Anthropological Archaeology: Forging Alliances. *Journal of Anthropological Research* 8:1–37.

Paynter, R., 2000b, Historical Archaeology and the Post-Columbian World of North America. *Journal of Archaeological Research* 8:169–216.

Pendergast, D.M., 1986a, Under Spanish Rule: The Final Chapter in Lamanai's Maya History. *Belcast Journal of Belizean Affairs* 3(1–2):1–7. Belize College of Arts, Science, and Technology, Belize City.

Pendergast, D.M., 1986b, Stability through Change: Lamanai, Belize, from the Ninth Century to the Seventeenth Century. In *Late Lowland Maya Civilization: Classic to Postclassic*, edited by J.A. Sabloff and E. W. Andrews V, pp. 223–249. University of New Mexico Press, Albuquerque.

Pendergast, D.M., 1991, The Southern Maya Lowlands Contact Experience: The View from Lamanai, Belize. In *The Spanish Borderlands in Pan-American Perspective*, edited by D.H.Thomas, pp. 337–354. Columbian Consequences, vol. 3. Smithsonian Institution Press, Washington, D.C.

Pendergast, D.M., Jones, G.D., and Graham, E., 1993, Locating Maya Lowlands Spanish Colonial Towns: A Case Study from Belize. *Latin American Antiquity* 4:59–73.

Quezada, S., 2001, *Breve historia de Yucatán*. Fondo de Cultura Económica, Mexico City.

Quirós Vargas, C., 1990, *La era de la encomienda*. Editorial de la Universidad de Costa Rica, San José.

Radell, D.R., 1969, *An Historical Geography of Western Nicaragua: The Spheres of Influence of Leon, Granada, and Managua, 1519–1965*. Ph.D. dissertation, University of California Berkeley. University Microfilms, Ann Arbor, Michigan.

Reed, N., 1964, *The Caste War of Yucatan*. Stanford University Press, Stanford, California.

Rice, D.S., and Rice, P.M., 2005, Sixteenth- and Seventeenth-Century Maya Political Geography in Central Petén, Guatemala. In *The Postclassic to Spanish-Era Transition in Mesoamerica: Archaeological Perspectives*, edited by S. Kepecs and R.T. Alexander, pp. 139–160. University of New Mexico Press, Albuquerque.

Robinson, D., 1989, The Language and Significance of Place in Latin America. In *The Power of Place: Bringing Together Geographical and Sociological Imaginations*, edited by J.A. Agnew and J.S. Duncan, pp. 157–184. Unwin Hyman, Boston, Massachusetts.

Romero Romero, C., 1989, Fundaciones españolas en América: Una sucesión cronológica. In CEHOPU, *La ciudad hispanoamericana: El sueño de un orden*, pp. 275–302. Ministerio de Obras Públicas y Urbanismo, Madrid.

Romoli, K., 1953, *Balboa of Darién, Discoverer of the Pacific*. Doubleday, Garden City, New York.

Romoli, K., 1987, *Los de la lengua de Cueva: Los grupos indígenas del istmo oriental en la época de la conquista española*. Instituto Colombiano de Antropología, Bogotá.

Roys, R.L., 1972, *The Indian Background of Colonial Yucatan*. 2nd ed. University of Oklahoma Press, Norman.

Rubertone, P., 2000, The Historical Archaeology of Native Americans. *Annual Review of Anthropology* 29:425–446.

Ruiz, T.F., 2001, *Spanish Society, 1400–1600*. Harlow, Essex, England.

Sampeck, K.E., 2007, *Late Postclassic to Colonial Landscapes and Political Economy of the Izalcos Region, El Salvador*. Ph.D. dissertation, Tulane University. University Microfilms, Ann Arbor, Michigan.

Sauer, C.O., 1925, The Morphology of Landscape. *Publications in Geography* 2(2):19–53. University of California, Berkeley.

Sauer, C.O., 1966, *The Early Spanish Main*. University of California Press, Berkeley.

Scholes, F.V., and Roys, R.L., 1948, *The Maya Chontal Indians of Acalán-Tixchel*. Publication 560. Carnegie Institution of Washington, Washington, D.C.

Scott, E.M., 2006, Observaciones preliminares sobre los restos fáunicos de la Operación 99–2. In *Arqueología histórica de la villa de San Salvador: Informe de las excavaciones (1996–2003)*, edited by W.R. Fowler, pp. 93–95. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Sherman,W.L., 1979, *Forced Native Labor in Sixteenth-Century Central America*. University of Nebraska Press, Lincoln.

Silliman, S.W., 2005, Culture Contact or Colonialism? Challenges in the Archaeology of Native North America. *American Antiquity* 70:55–74.

Simmons, S., 1995, Maya Resistance, Maya Resolve: The Tools of Autonomy from Tipu, Belize. *Ancient Mesoamerica* 6:135–146.

Stone, D., 1966, Synthesis of Lower Central American Ethnohistory. In *Archaeological Frontiers and External Connections*, edited by G.F. Ekholm and G.R. Willey, pp. 209–242. Handbook of Middle American Indians, edited by R. Wauchope, vol. 4. University of Texas Press, Austin.

Tejeira-Davis, E., 1996, Pedrarias Dávila and His Cities in Panama, 1513–1522: New Facts on Early Spanish Settlements in America. *Jahrbuch für Geschichte von Staat Wirtschaft und Gesellschaft Lateinamerikas* 33:27–61.

Thomas, D.H., 1988, Saints and Soldiers at Santa Catalina: Hispanic Designs for Colonial America. In *The Recovery of Meaning: Historical Archaeology in the Eastern United States*, edited by M.P. Leone and P.B. Potter, Jr., pp. 73–140. Smithsonian Institution Press, Washington, D.C.

Upton, D., 1990, Imagining the Early Virginia Landscape. In *Earth Patterns: Essays in Landscape Archaeology*, edited by W. Kelso and R. Most, pp. 71–88. University Press of Virginia, Charlottesville.

Verhagen, I.L., 1997, *Caluco, El Salvador: The Archaeology of a Colonial Indian Town in Comparative Perspective*. Ph. D. dissertation, Vanderbilt University, Nashville. University Microfilms, Ann Arbor, Michigan.

Weeks, J.M., 1997, The Mercedarian Mission System in Santa Bárbara de Tencoa, Honduras. In *Approaches to the Historical Archaeology of Mexico, Central, and South America*, edited by J. Gasco, G.C. Smith, and P. Fournier García, pp. 91–100. Institute of Archaeology, University of California, Los Angeles.

Weeks, J.M., and Black, N.J., 1991, Mercedarian Missionaries and the Transformation of Lenca Indian Society in Western Honduras, 1550–1700. In *The Spanish Borderlands in Pan-American Perspective*, edited by D.H. Thomas, pp. 245–261. Columbian Consequences, vol. 3. Smithsonian Institution Press, Washington, D.C.

Weeks, J.M., Black, N.J., and Speaker, J.S., 1987, From Prehistory to History in Western Honduras: The Care Lenca in the Colonial Province of Tencoa. In *Interaction on the Southeast Mesoamerican Frontier: Prehistoric and Historic Honduras and El Salvador*, edited by E.J. Robinson, pp. 65–94. BAR International Series 327(i). British Archaeological Reports, London.

Webre, S., 1989, *La sociedad colonial en Guatemala: Estudios regionales y locales*. Centro de Investigaciones Regionales de Mesoamérica, South Woodstock, Vermont.

Werner, P.S., 1996, *Los reales de minas de la Nicaragua colonial y la ciudad perdida de Nueva Segovia*. Instituto Nicaragüense de Cultura, Managua.

Werner, P.S., 2000, *Epoca temprana de León Viejo: Una historia de la primera capital de Nicaragua*. Instituto Nicaragüense de Cultura, Managua.

Wolf, E.R., 1959, *Sons of the Shaking Earth*. University of Chicago Press, Chicago.

Wolf, E.R., 1969, *Peasant Wars of the Twentieth Century*. Harper & Row, New York.

Zebadúa, E., 1999, *Breve historia de Chiapas*. Fondo de Cultura Económica, Mexico City.