

Ancient Cites of Mesoamerica

Introduction

The development of social complexity, including cities and urbanism, has long been a central focus of archaeological investigation. This was brought into clear focus by V. Gordon Childe (1950) in his seminal article "The Urban Revolution," in which he enumerated ten characteristics of urbanism, using primarily Old World examples. A broader, crosscultural perspective was elaborated by Robert McCormick Adams (1981), in which he compared Mesopotamian and Mesoamerican case studies. As archaeological investigations in Mesoamerica have greatly increased in recent years, urbanism continues to be a popular, but controversial, topic. This article will touch upon some of the recent theoretical debates on the subject, and summarize a series of papers recently presented at the 25th Annual Conference of the Western Humanities Alliance: *What Is a City?* in which members of the University of Calgary's Department of Archaeology presented their recent and ongoing research. We will conclude with a more detailed case study from the pre-Columbian and Colonial urban center of Cholula (Puebla, Mexico), arguably the New World's oldest continuously occupied city.

What Is a Mesoamerican City?

It is only recently that certain pre-Columbian centers, mostly in parts of Mesoamerica, have been granted the label of "city" and designated as urban. These tend to be the exceptional centers of Teotihuacan and Tenochtitlan, exceptional in that they are more similar to Old World concepts of urban. Archaeologists working at other centers, especially in the Maya region, continue to fight for the designations of "urban" and "city." Recent advances in settlement pattern studies, however, including intensive investigations within sites such as Copan and Tikal, have greatly expanded knowledge of Maya urban patterns. If we see urbanism as scalar, representing a continuum that varies between culture areas and between environmental regions (e.g., Graham 1999; Trigger 2003), and "city" simply as one of the potential points along such continua, we could argue for urbanism (not necessarily the presence of cities) throughout the Americas in Pre-Columbian times.

In his famous 1938 sociological essay "Urbanism as a Way of Life," Louis Wirth took the traditional view of urban as city, and identified three primary features of a city that included the following (Wirth 1996:21-27; also summarized in Wheatley 1972):

1. a large population

2. dense population nucleation
3. high internal social heterogeneity

Equally important, however, was the overall experience of urbanism/city-living as distinctive from all other settlements (particularly the hinterland experience). Of secondary importance to the designation of Wirth's city are secularism, anonymity, and vertical and spatial mobility. This theorizing developed through the observation of Western civilizations. Wirth's ideas, along with those of Weber (1958), have strongly influenced the works of urban scholars throughout the social sciences.

Childe's (1950) examination of the concepts of urban and city is a perfect example of the culture-history laundry lists that peppered anthropology during the first half of the twentieth century, and continue to do so in many areas of archaeology (Willey and Sabloff 1996:96-151). Childe defined the "Urban Revolution" as the process by which small, kin-based, nonliterate agricultural villages were transformed into large, socially complex, urban centers (Childe 1950:4). Childe went on to establish a list of ten criteria that a prehistoric city/urban civilization must possess (Childe 1950:9-16). They include:

1. densely populated settlements
2. specialization of labor
3. surplus capital controlled by an elite
4. monumental public works
5. social stratification
6. recording and exact systems (i.e., the beginning of a "true" science)
7. writing
8. "great" art styles (naturalistic)
9. long-distance trade
10. state-level organization

While these characteristics continue to inform interpretation, the mechanistic nature of the attribute list has been discarded for more fluid inferences based on the scalar model.

Adopting concepts from Central Place Theory (Christaller 1966), Richard G. Fox's (1977) categorization of cities is strictly a functional approach to urbanism based on ethnographic and ethno-historic observations from the Old World and Postcolonial/Industrial New World. Fox sees cities (the only urban form) as central places; expanding beyond economic geography he refers to "a process of aggregation of populations where a variety of activities are concentrated" (Fox 1977:20; see Sanders and Webster 1988 for a good summary of Fox's view of urbanism). Cities are more functionally specialized and complex than rural communities, the permanent residences of people whose activities differ from the bulk of the population, and the location of an unusual amount of ritual, political, and economic decision-

making (Fox 1977:17-24; Sanders and Webster 1988:523). Fox outlines five functional types of cities: the regal-ritual city, the administrative city, the mercantile city, the colonial city, and the industrial city. The variability of city function is seen as related to the total nature of a society. This classification system developed out of the pioneering 1955 study of Sjöberg (1996; Sjöberg and Sjöberg 1996) and his distinction between "preindustrial" and "industrial" cities.

Fox's model has significant use in archaeological urban studies, but its use has also suffered significant criticism. In their 1988 article "The Mesoamerican Urban Tradition," Sanders and Webster (1988) attempt to determine an urban tradition for all of Mesoamerica transcending time. Their use of Fox's model has sparked much debate concerning the concept of urbanism for the Americas and the use of typologies in the study of pre-Columbian centers (Smith 1989:454). Most of the criticism surrounding their view of urbanism is focused not directly on their use of Fox's typology, but on their actual view of urbanism related solely to demographic definitions. Sanders and Webster adopt Wirth's view of urbanism, but attempt to integrate functional considerations through the use of Fox's categories of cities. Again, their consideration of urbanism involves cities as settlements with large, dense populations and evidence for social or economic complexity (Sanders and Webster 1988:521-522; Smith 2005:404).

Sanders and Webster's attempt to outline a Mesoamerican urban tradition in order to make cross-cultural comparisons is a worthy goal. However, we rarely have enough archaeological information about centers to understand any sort of broad urban tradition, or to create any grand synthetic statements (Smith 1989:454). An important contribution of Sanders and Webster's model is their use of energetics for inferring settlement types within Mesoamerica. They acknowledge the lack of draft animals or use of the wheel as accounting for the need for marketplaces, the smaller sizes of many Mesoamerican centers, and the limited development of craft specialization. Perhaps because of these limitations, they classify most centers into Fox's regal-ritual category.

George Cowgill (2004) uses urbanism to denote "the creation of cities by a society that formerly lacked urban settlements" (Cowgill 2004:527). He expands on this notion to include the possibility of variation in cities from place to place, not resorting to Childe's list. He takes a relational approach to cities, including the following variables (Cowgill 2004:543):

1. area and population
2. sharpness of physical edges of settlement
3. fortifications
4. top-down planning
5. degree of spatial segmentation

6. scale of civic-ceremonial, residential and other built features
 7. division of labor
 8. the presence of various amenities
- Such a relational approach is more commonplace in urban studies today, allowing for greater sensitivity in urban/city designations.

Urban centers may come into existence for a variety of reasons, such as trade, ceremony/religion, strategic placement, administrative demands and environmental features (Jacobs 1961). These areas may be legislated into existence (see for example Cowgill's ideas on individual initiative, Cowgill 2004). However, it takes considerably more to lead them to prosperity. Elizabeth Graham (1999:185) also takes an agency-oriented view of cities, choosing to pay attention to individual decisions made according to local environments, a concept she believes was completely pushed aside when functional views of urbanism became popular. Graham's thoughts on Maya "garden" or "green" cities are also very interesting as they take a self-reflexive, critical look at previous concepts of urbanism which originate from European observations, Western dichotomies, and examples from temperate climates (Graham 1999:185). Although Graham believes that urban centers cannot be understood apart from the larger societal structure in which they are embedded, her method attempts to escape the Mayanists' preoccupation with how state-like the Maya may have been in order to probe more deeply into how Maya cities looked and functioned.

In a more crosscultural summary, Bruce Trigger (1972: 2003:120-141) pictures urbanism as scalar. For example, what we call a village, town and city are all examples of urbanism occurring along a continuum with no fixed outcome. Cities require a higher level of urban organization (e.g., increased social organization, greater populations, and more public amenities). The scale of urbanism depends on the following (Trigger 2003:120):

1. the number and complexity of functions it performs
2. the size of the hinterland it services
3. at best, arbitrary divisions along a continuum of size and function
4. a range of examples—structurally/functionally—that counter views that there is an established priority list of urban principles

Trigger sees a variety of reasons why people settle permanently and in urban aggregations ranging from the hierarchical character of human activities, to the increased definition and focus of activities with socio-political complexity.

Research Papers

With these ideas and theories in mind, members (and recent graduates) of the University of Calgary's Department of Archaeology presented a series

of papers as an organized symposium for the 2006 Western Heritage Association Conference that was held in concert with the Western Humanities Alliance Conference. Several of the papers were developments of papers for a seminar on complex societies of the New World, directed by Dr. Scott Raymond. They represent a strong tradition in the department regarding Mesoamerican studies. Following a general introduction to the conference theme, theoretical foundations for the study of Mesoamerican urbanism were presented by Meaghan Peuramaki-Brown (2006). Her ideas have been incorporated into the introduction of this paper.

The largest component of the 2006 session focused on the Classic Period Maya center of Naachtun located in the north-central Peten region of Guatemala. Four papers showcased the center in their discussions of urbanization, available infrastructure, use of space and the built environment, and multi-ethnic arenas. In her introductory presentation, Dr. Kathryn Reese-Taylor (2006), co-director of the Proyecto Arqueológico Naachtun, explored the process of urbanization in north-central Peten between 150 C.E. and 400 C.E. Her summary of regional and site chronologies, as well as a step-by-step discussion following archaeological and epigraphic discoveries in the region, outlined the process of urbanization which eventually led to the formation of later Classic Maya city-states.

Roberta Parry (2006) investigated the development of infrastructure coinciding with urban expansion and elite centralization through an analysis of the Naachtun water system. Parry's work on the central reservoir of the site emphasizes the numerous implications, both advantageous and disadvantageous, presented by such water management and dealt with by the Naachtun urban population on a daily basis. Her main emphasis on potential health risks associated with water quality in the tropics is a timely critique of urban water management which is so often considered only in terms of urban advantages and power.

With a potential processional route through the Naachtun site core as backdrop to discussion, Shawn Morton (2006) emphasized the use of urban centers as central places, ritual canvases, and stages of public performance during the Maya Late Classic period. Such performances not only functioned as externally projected messages in a tumultuous political period, but they also served as a horizontal integration method within the community at large and the creation of Classic period city-states. Such an integrational method is crucial in any urban situation, especially when a community is divided by socio-economic stratification.

Jeffrey Seibert (2006) investigated multi-ethnic influences within the architectural program of the Late Classic area of the Naachtun core. His study of architectural construction techniques and facade iconography led him to a comparison with "Central Yucatecan Style" architecture, among

other architectural programs. His comparison emphasized the recognition of Mesoamerican cities as socially heterogeneous entities made up of numerous groups of people of different social statuses and ethnic affiliations. This mixing of "ethnic" traits noted by Seibert supports the location of the Naachtun urban center at an ethnic frontier within the Maya world during the Late Classic period, and it identifies a "cosmopolitan" function that is native to the center.

Several additional papers considered Maya cities as the intersections of social and cosmological concepts that reflected ideas of the symbolic landscape best enunciated by Paul Wheatley (1972). Karen Bassie's (2006) paper was derived from her larger body of work on Maya sacred geography, and it focused on the symbolism of the Creator Grandparents. Drawing on insights provided in the Popol Vuh, the Maya book of creation, Bassie explored the various ways that the ruling elite of the city of Palenque replicated the household of the Creator Grandparents in the urban landscape of their community to make their city symbolically the center of the world.

Alejandro Patino (2006) argued that the moral and social values attached to the city are formalized in the planning and the layout of buildings and open spaces, as well in the painted and carved motifs displayed on them. To illustrate this argument, the spatial organization and the iconography of structures located within the walled area of Tulum were analyzed to demonstrate that the spatial arrangement of the buildings inside the walled area followed the quadripartite scheme of the universe characteristic of Maya cosmology.

Patterns of social order were considered in the paper by Alejandra Alonso Olvera (2006) who compared the Maya city of Copan with Pkllilacta in the Wari area of southern Peru to evaluate the degree of conceptual similarity between Mesoamerica and South America. Her criteria for comparison included analysis of the general site layout, aspects of centrality, and the correlation between public and private spaces, and their density. The analysis of the access and mobility patterns, and aspects of visual command as well as patterns of sight, are taken into account. Elements of human perception and the concept of permanence are also discussed. Both architectural programs suggest tension between the construction of public and private spaces, reflecting new configurations in the social order and the variety of activities performed by different emerging social groups.

Aspects of site planning were central to the second paper presented by Jeffrey Seibert (with Peter Dawson as co-author; 2006), in which they applied axial analysis, a formal spatial analytical tool, to the central Mexican urban center of Teotihuacán. Teotihuacán's layout appears on initial examination to be highly regular and orthogonal in design with two very strong axes of integration. This has led many scholars to suggest that the final form

of Teotihuacán represented a highly structured and planned community. Instead, Seibert argued that this apparent degree of planning is largely illusory, and that Teotihuacán's layout represents a combination of intentional planning and accretional growth.

At the other end of the scalar continuum, and on the southern frontier of the Mesoamerican culture area, Larry Steinbrenner (2006) discussed the "garden cities" of the Greater Nicoya region of Nicaragua. Ethno-historic accounts collected in the sixteenth century described a typical community pattern as a series of widely dispersed plazas surrounded by elite residences, council halls and temples, and separated by gardens or orchards. Colonial chroniclers described large populations living in these "cities." This paper considered some of the ways in which Mesoamerican and Chibchan cultural traditions may have contributed to this settlement pattern and discussed implications for archaeologists attempting to delineate the boundaries of Greater Nicoyan communities and/or identify elite centers.

Ancient Cholula

One final paper presented a *longue durée* approach to the pre-Columbian city of Cholula (McCafferty 2006), arguably the earliest urban center in Mesoamerica as it has been continuously occupied for at least 3000 years. Because of the outstanding archaeological and ethno-historical documentation, it is an important setting for studying prehispanic urbanism. Cholula is located in the highland Puebla valley, east of the Basin of Mexico and about 100 km southeast of Teotihuacán.

The earliest evidence for occupation at Cholula dates to the Middle Formative period, about 1000 B.C.E., when distinctive pottery is found over a dispersed area of about two square kilometers (McCafferty 1996a). This time period is poorly represented due to the more intensive occupations from a subsequent time period, but architectural remains are known from several loci including some that were public buildings. To the extent that this is a large population concentration, perhaps numbering in the thousands, and with public mounded architecture, Cholula may be considered as an advanced stage on the scale towards cityhood.

During the subsequent Late Formative period (500 B.C.E.—0 C.E.) the earliest stage of Cholula's Great Pyramid was built. The Great Pyramid, later known as the *Tlachihualtepetl* ("artificial mountain"), quickly grew to become one of the most massive constructions in the prehispanic Americas. At Stage 1, it measured 19m in height by 90m to a side (Marquina 1970; McCafferty 1996b). Little is known, however, about the extent of the settlement itself; archaeological investigations at Cholula have largely been focused on the ceremonial precinct around the Great Pyramid. Outlying

urban areas are buried beneath both later prehispanic levels of the city and the modern city of about 50,000 inhabitants.

The Great Pyramid continued to grow through sequential construction stages in the Classic Period (200-600 C.E.). Stage 2 was notable because it consisted of nine levels, each with continuous staircases on all four sides. This is distinctly different from the *talud-tablero* architectural style found at nearby Teotihuacán. And yet the predominant ceramics used at Cholula were quite similar to Teotihuacán styles in both vessel form and surface finish. The clay figurines are also quite similar (McCafferty 2000). This suggests shared elements of daily practice, possibly an indication that they were of the same or closely related ethnic groups. The Classic Period occupation has been found over an area estimated at four square kilometers, suggesting that the population had at least doubled in size over the preceding millennium.

Demographic expansion continued in the Epiclassic and Early Postclassic periods (600-1200 C.E.) with the urban sprawl reaching an estimated six square kilometers, and the Great Pyramid reaching its greatest size. This explosive growth is probably related, in part, to the collapse of nearby Teotihuacán, but it is also linked to changing cultural composition as a foreign group, the Olmeca-Xicallanca from the southern Gulf Coast, became a prominent factor in the multi-ethnic city. This is suggested in ethno-historical accounts that are supported by changes in architectural style at the *Tlachihualtepetl* and the introduction of colorful and symbolically rich polychrome pottery (McCafferty 2003).

A final development in the prehispanic city occurred in about 1200 C.E. when Cholula was conquered by the Toiteca-Chichimeca group. At this time the Great Pyramid was abandoned and the surrounding ceremonial precinct turned into a cemetery. A new pyramid was built which was dedicated to the wind god Quetzalcoatl, and it was described by Spanish *conquistadores* as 120 steps high—taller than the Aztecs' Great Temple. The city seems to have been divided into ethnic districts with the Toiteca-Chichimeca as the dominant faction when the Spanish arrived in 1519. The urban center of Cholula was depicted in several early Colonial manuscripts, including the *Historia Toiteca-Chichimeca* (1976), with prominent lineage heads represented around the Great Square that also featured the Pyramid of Quetzalcoatl.

Several Spanish chroniclers described Cholula at the time of the Conquest and in the early Colonial period. Hernán Cortés (1986) remarked on the more than 400 temples in the city, and his lieutenant Bernal Díaz del Castillo (1963) estimated that there were 20,000 houses within the city, though some of them were reserved for visitors during religious celebrations. Cortés commented that the number of beggars on the street reminded him of

Spanish cities; Diego Duran (1971) described performances by sick and lame pilgrims who visited Cholula's temple to be healed, and acted out their afflictions. The Colonial corregidor of the city, Gabriel de Rojas (1927), recorded information on the pre-Columbian politico-religious organization based around dual high priests who controlled internal and external relations. The *Descripción de Cholula* portrays the city as it appeared in 1581, with a neat grid system radiating out from the San Gabriel cathedral, but with the abandoned Great Pyramid (and other pyramids) scattered around the community.

The modern capital of Puebla state, the city of Puebla, was founded in 1531 about 15 kilometers east of Cholula as an attempt to usurp the political and economic importance of the indigenous city. Cholula continued as a center for native culture, however, and the pilgrimage to the Catholic church on top of the Great Pyramid attracts hundreds of thousands of worshippers to the annual festival (Olivera 1970). Today it has regained its status as a center for learning and international tourism, yet with important potential still for research into indigenous and *mestizo* religious practices.

Cholula has survived many changes over the past 3000 years. A question that needs to be asked, particularly in the face of the episodic rise and decline of so many other pre-Columbian cities, is why has Cholula been able to weather millennia of ethnic invasions. Cholula is located on an alluvial plain with abundant year-round water resources from the summer rains and run-off from snow-capped mountains surrounding the valley. It is also located on crossroads linking the Basin of Mexico, the Gulf Coast, and the rich regions of southern Puebla and Oaxaca. So there are natural resources that make this a favorable location.

Yet there are other spots in the Valley of Puebla with similar access to agriculture and trade. Why Cholula? The Great Pyramid *Tlachihualtepetl* is a prominent feature of the cultural landscape, and McCafferty (2001) has argued that the symbolic significance of the pyramid—even up to the present—may be a valuable clue to the longevity of the city. The Great Pyramid is located over a natural spring, and thus represents a “water mountain,” the indigenous term for “city” and “cultural hub.” As both link to the watery underworld as well as a “stairway to heaven,” the Great Pyramid united the vertical dimensions of the Mesoamerican cosmos.

A second symbolic element of the Great Pyramid is its orientation at 25 degrees north of west toward the setting sun at the summer solstice. Chronicler Diego Duran (1971) noted that the “lord of all creation,” Tonacatecutli, was worshiped on a mountaintop at the summer solstice, and Cholula was likely an important shrine for this practice.

Finally, Cholula was known as an international marketplace with precious goods brought from throughout Mesoamerica by the long-distance trading guild known as the *pochteca*. Colonial chroniclers marveled at the

exotic riches of the market, and recorded rituals of the merchants as they returned from their multi-year trading ventures. The annual fair associated with the pilgrimage to the shrine of the Virgin of the Remedies, atop the *Tlachihualtepetl*, continues to feature all manner of indigenous crafts from throughout Mesoamerica.

Conclusion

Cholula is one of many cities of ancient Mesoamerica that offer valuable insights into anthropological considerations of urbanism as a process. As demonstrated by the variety of papers presented at the Western Humanities Alliance Conference, many of the theoretical insights of Bruce Trigger, as well as Sanders and Webster, serve as important directives for understanding what a city is in Mesoamerican urban tradition.

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