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MESOAMERICAN CULTURES

THE CIVILIZATIONS OF MEXICO AND CENTRAL AMERICA



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URBANIZATION. Cities and towns were prominent features of the landscape in the ancient civilizations of

Mesoamerica. Urban settlements originated during the social transformation of simple, nonhierarchical farming societies into class-stratified states toward the end of the Formative period. Urban settlements contained most of the key institutions of the ancient complex societies in Mesoamerica, including kingship, state religion, social stratification, and highly developed economies. Although cities and towns in the diverse civilizations of Mesoamerica shared a number of basic features, these settlements exhibited a high degree of variation in size, layout, and function. This article explores that variation, while not losing sight of the shared features of Mesoamerican urban settlements. Descriptions of individual cities and towns can be found in other articles in this work.

Approaches to Urbanization in Mesoamerica. Scholars have applied a number of conceptual approaches to the study of urbanization in Mesoamerica. These can be summarized under the following categories: ecological, functional, cosmovision, and built-environment. Although these views are sometimes seen as incompatible or mutually exclusive, each makes a contribution to our understanding of the ancient cities and towns of Mesoamerica.

The ecological approach was introduced to Mesoamerica by William T. Sanders as part of the "new archaeology" program of the 1960s and 1970s. Cities and towns are viewed as part of a society's adaptation to the natural environment, and research focuses on issues such as subsistence (where did urbanites get their food?), settlement patterns (how are urban settlements distributed across the landscape?), economic organization (what was the role of craft specialists in cities?), and population size. In the ecological perspective, cities are defined as settlements with a large population, dense population nucleation, and high internal social diversity. The huge central Mexican cities of Teotihuacan and Tenochtitlan are seen by Sanders as the most highly developed urban centers in Mesoamerica, whereas most other Mesoamerican cultures, including the Classic Maya, had settlements that either were not truly urban in nature or were less urbanized than these large imperial capitals.

Sanders has emphasized the importance of the energetics of transport in shaping the nature of Mesoamerican cities. Without draft animals and wheeled carts, all goods had to be carried by human porters, and this set severe limits on the distance over which foodstuffs and other bulky goods could be moved. As the argument goes, because most food had to come from locations relatively close to a settlement, this limited the size of urban centers and also contributed to other common features of Mesoamerican cities: weak, decentralized rule; an emphasis on ritual functions; and poorly developed economic institutions. The energetics approach has been

very successful in stimulating archaeological field work at urban sites and at explaining general features of Mesoamerican cities that differ from ancient cities of the Old World.

The functional approach to urbanism developed in the 1970s through a combination of settlement pattern research and influences from the field of economic geography. The initial applications of this approach, from Richard E. Blanton and Stephen A. Kowalewski, emphasized regional economic functions. Economic activities tend to concentrate in specific settlements called central places, which often comprise a hierarchy of function (and size) on a regional level. In this approach, a city is a high-level central place that performs a large number and variety of economic services for a large hinterland, whereas smaller central places called towns have fewer economic functions and serve smaller areas.

In the 1980s the functional approach was broadened by the addition of noneconomic functions, such as administration and religion, following suggestions in Richard Fox's influential book, *Urban Anthropology* (Englewood Cliffs, 1977). This expanded functional view was applied to Mesoamerica by Joyce Marcus, and was later adopted by William Sanders as well. One advantage of the functional perspective is that it focuses attention on a variety of types of urban settlement. Not all Mesoamerican cities were identical. Some emphasized craft production (e.g., Colha, Otumba), others were imperial capitals focused on administration and trade (e.g., Teotihuacan, Tzintzuntzan), whereas many Mesoamerican cities combined ritual and political functions. This latter pattern, codified by Fox as the "regal-ritual city" type, was probably the most common kind of urban center in Mesoamerica. Another advantage of the functional approach is that the smaller Mesoamerican cities, such as those of the Classic Maya, can be viewed as fully urban in nature and not relegated to a less-than-urban status just because they were not as large as Teotihuacan or Tenochtitlan. I adopt a functional approach in the second part of this article; an urban settlement is defined here as one whose activities and institutions (whether economic, political, religious, or cultural) affected areas outside of the settlement proper. Cities are large settlements with many urban functions that affect a large hinterland, whereas towns are smaller settlements with fewer urban functions affecting a smaller region.

The cosmovision approach to Mesoamerican cities emphasizes the symbolic role of cities as human replications of the cosmos. From this perspective, buildings were built and cities laid out to embody key Mesoamerican concepts of time and space. Cities were sacred places where myth and ritual were acted out, and their organization and nature cannot be explained without reference to cosmo-

logical ideas. Cities were also key nodes in a regional setting where cosmological concepts integrated agriculture, landscape, human society, and the supernatural into a coherent cultural model. This approach, associated most strongly with the work of David Carrasco, Alfred López Austin, and Johanna Broda, has been most successful when archaeological remains can be interpreted using information on beliefs and myths from ethnohistory (e.g., Carrasco and Eduardo Matos's work at the Templo Mayor of Tenochtitlan) or glyphic inscriptions (e.g., Carolyn Tate's study of Yaxchilán). Anthony Aveni's research on the astronomical influences on building alignments is closely aligned with the cosmovision approach.

The built-environment approach applies insights from architectural design theory and environmental psychology to examine the dynamic interaction between human behavior and architecture. People plan and construct buildings to achieve certain ends, but once they are built, structures and cities influence behavior and perceptions by channeling the flow of people and providing clear visual signals about boundaries, interactions, and appropriate behavior. A number of common features of Mesoamerican cities, such as imposing pyramids flanking large plazas and broad ceremonial avenues, can be interpreted as efforts by rulers to impose a political ideology on the people who inhabit and visit the cities. This is a new approach for Mesoamerica that has great potential for unlocking aspects of the meaning of ancient cities from material remains alone, and unlike the cosmovision approach, the built-environment approach does not require written documentation of the specific content of ancient religious beliefs.

Features of Mesoamerican Cities and Towns. Urban settlements in Mesoamerica varied greatly in terms of their size, social composition, economic institutions, administrative role, and religious institutions. Nevertheless, a basic pattern of urban planning is found in most cities and towns.

Size. In most regions of Mesoamerica, a single city stood out as much larger than all others; this is referred to as a primate city-size pattern. For example, in the Classic-period Petén Maya area, Tikal had a population of 40,000 to 60,000, whereas most centers had fewer than 8,000 inhabitants. This situation was typical of many of the best-known Mesoamerican cities, such as Mirador, Chichén Itzá, El Tajín, Monte Albán, Xochicalco, Teotihuacan, Tula, Tenochtitlan, and Tzintzuntzan. These large primate cities were not at all typical of the sizes of urban centers in their region, most of which were much smaller. Aztec central Mexico provides a well-documented example. Tenochtitlan stood out with 200,000 inhabitants, but the average population of city-state capitals (the most common Aztec urban form) was 9,000 in

the Basin of Mexico and 3,000 in Morelos; the second-largest Aztec city, Tetzaco, had 25,000 inhabitants.

Just as Mesoamerican cities varied greatly in their number of inhabitants, they also varied widely in their population densities (number of inhabitants per square kilometer). Tenochtitlan, a grid-plan city on land reclaimed from a swamp, had one of the densest populations (15,000 per square kilometer). Most central Mexican cities, including Teotihuacan, Tula, and Aztec nonimperial cities, had population densities between 5,000 and 7,500 persons per square kilometer. In contrast, the inhabitants of Classic Maya cities in the Petén were far more dispersed; Tikal's population density was around 500 per square kilometer. The highland Maya city of Copán had a small but compact urban core comparable in density to central Mexican cities.

Social composition. Cities were settlements with diverse social compositions. Representatives of most of the social categories that existed in any given Mesoamerican civilization could be found in its urban settlements. Mesoamerican civilizations exhibited class stratification, and their cities contained the residences of both elites and commoners. Kings usually had their major residence in a capital city, and other members of the elite typically lived there too. In some cities, elite residences were concentrated in the downtown area, whereas in other cases wealthy houses were more widely dispersed throughout the city. Elites were not necessarily limited to cities, however; rural elite compounds have been identified among both the Aztec and the Maya.

The bulk of the urban population were commoners, and in many cases these urbanites were farmers, cultivating urban garden plots and/or exterior fields. Because cities were centers for economic, political, and religious activities, many occupational specialists were urbanites. Artisans, merchants, bureaucrats, scribes, priests, and other specialists were found in most Mesoamerican cities, although in varying numbers depending on the size of the city and its functional orientation. Many Mesoamerican cities also had more than one ethnic or cultural group.

Economic institutions. Mesoamerican cities varied widely in the degree and nature of urban economic activities. Some cities had large-scale craft industries (e.g., Colha, Matcapan, Teotihuacan), but this was probably the exception rather than the rule. Craft specialization in Mesoamerica was more typically organized at the level of the household, and specialists, both full-time and part-time, worked out of their homes. The extent to which goods were manufactured in urban versus rural locations is currently a topic of research and debate. It appears that many Mesoamerican cities, including those of the Classic Maya, witnessed only limited production of utilitarian

goods, whereas artisans producing luxury items for the elite were more common. On the other hand, extensive utilitarian craft specialization took place in some cities, such as Tenochtitlan, Otumba, Teotihuacan, Maticapan, and Tzintzuntzan. In these cities, specialists tended to be concentrated in wards or neighborhoods.

At the time of the Spanish conquest, marketplaces were prominent features in most Mesoamerican cities, reflecting the importance of commerce. For earlier periods, archaeologists have not been able to identify marketplaces, and the importance of commerce and markets is the subject of debate. Cities were certainly the focal points of Mesoamerican long-distance exchange networks, whether the exchange was commercially oriented, state controlled, or organized in some other fashion.

One interesting feature of Mesoamerican cities is that many of the residents were farmers. In large, densely populated cities like Teotihuacan and Mayapan, urban farmers had to walk out to their fields beyond the city. In less densely settled cities, commoners cultivated gardens and fields inside the city itself. This is probably a major reason for the very low population density in Tikal and other Maya cities. Research at Sayil in the Puuc region has uncovered chemical evidence for the use of fertilized intensive garden plots adjacent to residences, and agricultural terraces are found within Aztec towns located in hilly settings. Despite the presence of farming within their boundaries, these settlements are considered "urban" in the functional perspective if they were the setting for central activities and institutions for a larger area.

Administrative role. Most Mesoamerican cities were political capitals. Royal palaces typically were among the largest buildings in a city (along with temples), and they were the setting not only for administration and rule but also for economic, religious, and social activities. The palace was usually at the center of the city, and its size and grandeur proclaimed the greatness and power of the ruler. Indigenous views of the nature of cities, as reconstructed from Aztec texts, emphasized the royal palace as the key institution, the presence of which qualified a settlement as a city.

This emphasis on the grandeur of the palace and the greatness of the ruler was not found in all Mesoamerican cities, however; Teotihuacan was a notable exception. There is no obvious palace at the site, and individual rulers were not glorified as they were among the Maya and many other Mesoamerican cultures. Although the government of Teotihuacan was different from most Mesoamerican states, its rulers were able to control a powerful empire in central Mexico. Another political role of some cities was their function as fortresses. This was most common during periods of warfare and balkanization

(such as after the fall of Teotihuacan in central Mexico) and along the boundaries of empires (such as the Aztec/Tarascan imperial frontier). In these cases, cities were often located on defensible hilltops, ringed with walls and ditches.

Religious institutions. The most impressive buildings in Mesoamerican cities were the pyramid-temples of the state religion. The largest of these monuments were usually located in the center of the city, near the royal palace, and in most cities many additional smaller pyramids could be found throughout the urban zone. A variety of rituals and ceremonies were conducted by priests at the temples, including human sacrifices. Pyramid-temples were usually associated with open public plazas that were used in public ceremonies, either for ritual acts or for crowds to gather to watch ceremonies atop the pyramids. Ballcourts were another form of urban religious architecture found in many cities. The Aztec and other cultures at the time of the Conquest had professional priests who lived in religious compounds near the temples. Mesoamerican priests engaged in astronomical observations, and the knowledge gained from this activity was put to work in the placement and orientation of buildings and even whole cities. This practice was done by rulers to achieve a harmony between their city and the cosmos, and it illustrates the close links that existed between politics and religion in ancient Mesoamerica.

Urban centers were sacred places. In addition to conducting ceremonies at the temples and in their compounds, priests often participated in processions throughout the city and conducted rituals at various shrines and holy places (such as caves) both within and outside cities. The commoners in Mesoamerican cities also conducted their own rituals in their homes.

Urban planning. An ancient and fundamental pattern of urban planning informed the layout of most Mesoamerican cities and towns. The central areas were carefully planned and laid out according to religious and political principles, whereas the surrounding residential zones were unplanned and lacked an overall organizing theme. The pyramids, palaces, ballcourts, and plazas found in the urban core were integrated into a coherent architectural and spatial unit through a combination of common compass orientations and the use of walls and passageways. This arrangement was often dictated by religious ideas, both astronomical and mythological. The imposing Templo Mayor pyramid at the center of Aztec Tenochtitlan, for example, was aligned with the course of the sun across the sky, and it was viewed as an architectural manifestation of a sacred place (Coatepec, or serpent mountain) from Aztec mythology.

The central ceremonial plazas of most cities were large open spaces flanked by tall pyramids. When people gath-

ered in the plaza to witness ceremonies or for other business, they could not help but be impressed by the monumental buildings that towered over the plaza. This pyramid-plaza arrangement, replicated at a smaller scale in other parts of the city, was a component of urban planning whose political message accompanied its overt religious symbolism. The central urban zone showed off the magnificence of the city's ruler and elites, and the massed architecture was a material manifestation of their power and control over the labor of their subjects. Outside of the central urban core, the residential zones in Mesoamerican cities generally lacked overall planning and organization. Houses were often built in compounds or patio groups, but the locations and layout of these groups do not appear to have been coordinated.

Although this pattern of urban planning was widespread in Mesoamerica, not all cities conformed to it. One alternative arrangement was the central Mexican imperial capital pattern. Teotihuacan, the first large city and the earliest imperial capital in highland central Mexico, shows a high degree of centralized planning over the entire city. All buildings followed a common grid that was aligned with a central ceremonial avenue, the "Street of the Dead." The grid was established early in the city's history as a symbol of power by the city's rulers. The economic and symbolic influences of Teotihuacan were felt throughout Mesoamerica, and the city was probably known as Tollan (place of reeds), a label meaning sacred metropolis. The later Toltec rulers of Tula adopted the name Tollan for their city, and they established a grid layout modeled after Teotihuacan. When the Mexica Aztec came to power in the fifteenth century, they transformed Tenochtitlan from a small city into an imperial capital using their knowledge of the ancient capitals of Teotihuacan and Tula. These three large urban centers exhibited a distinctive pattern of urban planning that was a modification of the older Mesoamerican principles described above.

Conclusion. Because cities contained many of the key social institutions of past civilizations, they provide a crucial window into life and culture in ancient Mesoamerica. Mesoamerican urban centers shared a number of distinctive features. Most cities and towns were small settlements laid out around a carefully planned central urban core consisting of monumental architecture. The nature of this architecture—temple-pyramids, palaces, plazas, and ballcourts—identifies the fundamental features of most cities as political and religious institutions. Although Richard Fox's concept of the regal-ritual city is therefore an apt characterization of many Mesoamerican urban centers, there was considerable variation within the overall pattern, and not all cities fit the model. The central Mexican imperial capitals of Teotihuacan and Te-

nochtitlan, for example, were large, dense cities whose administrative and economic functions were more prominent than can be predicted by the regal-ritual model. Mesoamerican urbanization was thus a complex and multifaceted phenomenon.

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