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THE PRECLASSIC SOCIETIES OF THE CENTRAL HIGHLANDS OF MESOAMERICA

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BACKGROUND

The tall mountain ranges of the Sierra Madre Occidental and Oriental parallel the west and east coasts of northern Mexico. Near that country’s midsection they are connected by a more recent mountain chain of volcanic origin that runs east-west across Mexico from nearly coast to coast. The uniting of those three mountain masses creates a vast highland (altiplano) region in central Mexico, characterized by lofty mountains, well-watered valleys, and temperate climates. A cultural focal point during much of the prehistory of that region has been the Basin of Mexico, a broad interior valley at an elevation of 2,200 meters. Two of Mexico’s tallest volcanos, Iztaccihuatl (“White Woman”; 5,230 m) and Popocatepetl (“Smoking Mountain”; 5,465 m), loom over the southeastern fringes of the Basin, and modern Mexico City today spreads across the Basin floor and into the foothills. The tall mountains that surround the Basin now serve to enclose and contain the air pollution produced by one of the world’s largest cities, while in prehispanic times those same encircling characteristics entrapped all waters to create an extensive but shallow lake across the valley floor that attracted animals and humans alike. At the arrival of the Spanish in 1519 the lake was the location of the powerful Aztec island city of Tenochtitlan, precursor to modern Mexico City.

Not far to the north of the Basin is Mexico’s great northern desert, a region of low rainfall and a land where agriculture was usually impossible. Extending as a lobe northeastward from the Basin is the Teotihuacan Valley, location of one of Mexico’s great Classic period cities. Beyond

1 During arid periods the lower lake levels created five or six smaller lakes across the Basin floor rather than one large body of water.
the mountains to the south are the extensive river valley systems of the
states of Puebla, Tlaxcala, Morelos, and Guerrero, regions generally char-
acterized by lower altitudes, temperate to subtropical climates, and fertile
soils. Because of the central highlands’ proximity to Mexico’s arid northern
desert, only the Basin’s south and southwestern areas, and the river
valleys beyond the mountains, provided the circumstances appealing to
early farmers.

The geological complexity of the central highlands is matched by its
great ecological diversity, the latter owing to rapid variations in elevation,
rain shadow patterns, soil types, humidity, and the like. Those features
combined to provide an unusually abundant and varied set of resources
and materials available for exploitation by the societies there. The vari-
ation and uneven distribution of those resources within each valley and
microarea throughout the altiplano often resulted in individual villages
having access to quite different resources or commodities than their
neighbors had. That inequality led to the creation of village craft special-
izations and unquestionably underlay the development over time of local
and regional exchange networks that served to circulate desired commod-
ities among villages.

The primary geographic focus of this chapter is the Basin of Mexico
and its immediate southern neighbor, the state of Morelos (Map 3.1).
Those areas have received more archaeological attention than other
regions of the central highlands, and present a more complete picture of
Preclassic society and lifeways.

THE EARLIEST AGRICULTURAL SETTLEMENTS
(2500–1200 B.C.)

The Preclassic period in the central highlands is the stage classified
elsewhere in the world as fully Neolithic, in that it is characterized by
the presence of agriculturally based societies living in small settled villages
and utilizing a ceramic technology. The timing and order of appearance
of those three characteristics are not entirely clear, although agriculture
and settled life seem to have preceded the utilization of pottery vessels
and are usually classified within the Archaic period (see Zeitlin and
Zeitlin, Chap. 2, this volume). The advent of ceramics is commonly used
as a marker for the beginning of the Preclassic period. Exactly when
pottery use began in the altiplano remains unclear and therefore a begin-
ning date for the Preclassic is left open-ended here.
Preclassic sedentary or semisedentary societies may have been present in the Basin as early as 4000 B.C., subsisting on the rich wild-plant and animal resources present along the shores of the lake. Some of the best data for this early time period come from the site of Zohapilco (also known as Tlapacoya) on the ancient southeastern lakeshore. The recovery there of grains of teosinte, the probable wild ancestor of maize, in levels dating to 5500–3500 B.C., suggests the possibility of incipient agriculture in the Basin at that early date. Although archaeological evidence indicates that domesticated maize was already being grown in other areas of central Mexico at that same time, the elevation and relatively lower temperatures of the Basin may have limited the viability and practicality of early agriculture there. Perhaps the early varieties of domesticated maize were not as easily adaptable to the Basin’s marginal growing conditions as the harder ancestral plant, teosinte, was. The question of whether the teosinte from Zohapilco at 5500–3500 B.C. indicates incipient agriculture remains equivocal. Unfortunately, while incipient agriculture would have been more likely and more productive, and faced fewer hazards in the lower, warmer areas of the central highlands, no good archaeological information exists for the same time period there.

If incipient agriculture was being carried out in the Basin six thousand years ago, lifeways there were quickly shattered around 3000 B.C. by devastating volcanic activity. Those geological forces created extraordinarily destructive pumicit ash deposits that may have rendered the area unlivable for nearly half a millennia. It is to one of those southern Basin villages, Zohapilco, that we must again turn for evidence on the time period immediately following the Basin’s recovery.

Zohapilco

Zohapilco was a community situated on an island in the southeastern portion of the lake, and Christine Niederberger’s deep excavation trenches along the island’s ancient shoreline uncovered occupation levels there dating to 2500–2000 B.C. Stone alignments that may represent house foundations were discovered, indicating the possibility this had been at least a semipermanent settlement. Artifacts recovered included simple grinding tools for processing seeds, and cutting and scraping tools possibly used for working wood. The remains also demonstrate that Zohapilco’s early inhabitants were extensively exploiting the lakeshore habitat for its plant and animal (fish, waterfowl) resources, as well as
hunting deer, rabbit, and other more inland species. While their diet probably also included agricultural products grown in well-watered areas adjacent to the lakeshore, the available archaeological evidence for those foods is poor.

Zohapilco also provides the earliest conclusive date, 1400 B.C., for ceramic utilization by agricultural communities in the Basin. That early ceramic assemblage (with a time range of 1400–1200 B.C.) includes a vessel form more common in lowland areas of southern Mesoamerica at that same time, the *tecomate*. *Tecomate* is a term commonly used today in southern Mexico and Guatemala for gourds as well as bowls and containers made from gourds. The ceramic vessel of the same name is a neckless globular bowl with a restricted mouth opening. The pottery vessel form thus closely replicates the gourd containers utilized both in rural areas of Middle and South America today and by some preceramic societies there in antiquity as well. The early *tecomates* at Zohapilco are buff- or light-brown colored and often have a band of red paint around their rims, another trait also common farther south. By 1200 B.C., white bowls decorated with incised motifs or by rocker stamping, and figurines with baby-like features, were also used by the early villagers there. The wide distribution, beginning about 1400 B.C., of certain ceramic styles, such as red-rimmed *tecomates*, among disparate early farming societies provides some of the earliest archaeological evidence for the spread of ideas, beliefs, and stylistic preferences across regional, ethnic, and linguistic boundaries. Such diffusion probably flowed indirectly through the regional and interregional exchange networks, and may never have involved direct mechanisms such as the long-distance trade characteristic of later Classic and Postclassic period societies.

DEVELOPING COMPLEXITY AND REGIONAL INTERACTION

(1200–900 B.C.)

By 1200 B.C. the Basin and the broad river valleys of the regions lying across the mountains to the south and east saw a growth in human population and an ever increasing number of small villages expanding across the landscape. Those early societies were supported by a maize-based agricultural economy that depended heavily on rainfall and natural humidity for crop productivity, although some simple forms of irrigation may have been practiced as well. Hunting and wild-plant collecting supplemented their diets. Over the three hundred years that characterize
the latter portion of the Early Preclassic period (1200–900 B.C.), that population expansion also brought about a slow but nonetheless marked alteration of the natural environment, as pine and oak forests gave way to cleared agricultural fields.

**Tlatilco**

Of the excavated Early Preclassic sites, the best known and most famous is Tlatilco, a settlement that can serve as a basic model for discussing Early Preclassic agricultural societies. Tlatilco is located on the Basin’s western piedmont slopes. Today the site has disappeared beneath a suburb of Mexico City. Fifty years ago it was a brickyard where, in the course of digging clay, the brickworkers would sometimes uncover human burials associated with a rich variety of ceramic bowls, exotic bottles, and figurines. Those objects were often sold to interested collectors who visited the brickyard. Among those whose attention was drawn to Tlatilco was artist and collector Miguel Covarrubias, who recognized the importance and antiquity of the Tlatilco finds and helped initiate the first official excavations there.

At the time Tlatilco was investigated, potsherds and domestic refuse covered an area of 50 hectares. Covarrubias’s excavations, like those that came later, concentrated primarily on the innumerable burials, and little attention was paid to the possibility that the graves may have underlain or been associated with a village area. Yet the archaeological evidence strongly indicates that such a village existed, although house-by-house data, such as have been recovered elsewhere (e.g., see Marcus and Flannery, Chap. 8, this volume), are not available. If the 50-hectare distribution of surface refuse is reflective of Tlatilco’s size, it would have been an extremely large settlement for its time. However, the refuse represents more than three hundred years of occupation within that 50-hectare area, and at any given time the village was probably significantly smaller.

The earliest inhabitants of Tlatilco settled inland from the lake, near a small, permanent river. They constructed their houses of wattle and daub, the latter creating a barrier against the Basin’s sometimes frigid winter winds. Some houses, perhaps those of the village chief or other high-ranking members of the society, may have been built upon the raised clay-surfaced platforms observed in the excavation profiles. Deep underground bell-shaped pits adjacent to individual houses served for storage and, later, for refuse disposal.
Some aspects of Early Preclassic village life and ritual can be partially reconstructed from the hundreds of magnificent solid and hollow hand-modeled figurines recovered from the graves and refuse at Tlatilco and contemporaneous sites. The majority of the figurines are female and occur in greatest abundance in women's graves, but some males are also depicted. If the clothing depicted on the figures is indicative, dress was minimal, often only "saucy skirts or fancy bloomers," as Muriel P. Weaver so well characterized them (Fig. 3.1, a,b). Faces and unclothed areas of the body may have been decorated with red or yellow ochre designs applied by the cylindrical and flat ceramic seals with deeply incised motifs found in refuse and graves. Some figurines still display traces of similar body decoration. The female figurines also exhibit a remarkable variety of hairdos and head coverings, some of which suggest that women may have interbraided their hair with colored bands of cloth. Such a practice is still carried out today by some Indian groups in southern Mexico and Guatemala, where the colors frequently differ among villages and, together with other clothing distinctions, help to maintain village ethnic identity.

Many figurines occur in poses suggesting the act of dancing (Fig. 3.1b), while others occur in contorted "acrobatic" poses. A few depict individuals wearing small masks on their lower face, and actual clay masks have been unearthed in Tlatilco's graves and refuse deposits. Clay rattles, small clay ocarinas, and whistles in the form of birds and animals are also commonly found. These various objects imply that Early Preclassic village life included a rich variety of ceremonial and ritual activities.

Although houses and the evidence they can provide concerning lifeways may have been destroyed by brickyard activity or missed in the search for burials, a great deal can be learned about the society and its beliefs from the grave offerings. Paul Tolstoy's study of the Tlatilco burials shows that the graves occur in distinct clusters, suggesting the interments had been in close association with house structures, if not directly beneath the structures themselves, a common Preclassic practice. From his exhaustive analysis he suggests that the society may have been divided into two endogamous moieties, and although certain individuals within those moieties seem to have had higher rank or status than other moiety members, a continuum rather than marked class distinctions existed.

Tolstoy also believes that at Tlatilco an individual's rank in life may be discernable archaeologically in the burial treatment he or she received
Figure 3.1. Typical Early Preclassic clay figurines. (a): 15 cm tall. (b): 9.5 cm tall. Both figurines are from the author’s 1970 excavations at Nexpa, Morelos.

at death, and moiety affiliation possibly indicated by the grave’s directional orientation. Highest-ranked individuals seem to have been buried in deeper graves, placed on their backs in an extended position, and to have received thirteen or more objects including small polished iron-ore mirrors. The latter were apparently acquired by trade from regions to the south and most frequently worn as pectorals. All in all, the pattern and level of social organization at Tlatilco appears to have been very similar to that of contemporaneous ranked societies elsewhere in Mesoamerica.

The nearly five hundred graves excavated by archaeologists at Tlatilco cover a time span of c. 1200–900 B.C. and with caution can be placed temporally within the general evolutionary sequence documented in the stratigraphic record at Zohapilco and other sites in the region. The
earliest villagers at Tlatilco used and were buried with pottery, which included red-on-buff bowls, and white flat-bottomed bowls with vertical or out-slanting sides. The latter in particular were often decorated with incised designs. "Differentially fired" bowls, created to achieve sharply contrasting white and black zones, particularly between body and rim, required sophisticated firing techniques and likely had important symbolic significance. Over time the popularity of various ceramic varieties waxed and waned, and later graves more commonly include red-on-brown bottles embellished with "smudge resist" decoration. These were made in an exotic variety of forms, including bottles with long tubular spouts or with unusual stirrup-shaped spouts. Figurines exhibit less change; bald-headed "babies" and a large variety of female figures continued in popularity.

**Village Specialization**

The central highlands, as already noted, is characterized by a rich diversity of resources, and many agricultural villages probably specialized in one form or another of craft production related to those resources. We have no notion of Tlatilco's specialization, if any, although the great diversity exhibited in its burial ceramics suggests pottery production as a possibility. At a few other villages, specialization is more readily apparent. One such site is Coapexco, a settlement atypical in its location, for it is situated high above the Basin on the western slopes of the volcano Iztaccihuatl, at an altitude of 2600 m. Although in agricultural terms that area's greater rainfall may compensate for the lower temperatures of that elevation, the site's unique location suggests that it had been selected for reasons other than those strictly related to agriculture.

The settlement at Coapexco lasted perhaps only a hundred years and was coeval with the earliest period of occupation at Tlatilco. The village may have consisted of about two hundred wattle and daub houses at any one moment, implying a community of about 1,000 inhabitants. The size range (3.3 × 4m to 5.6 × 6m) of the four houses excavated there corresponds closely to that of contemporaneous houses in Oaxaca (see Marcus and Flannery, Chap. 8 this volume).

Two features of Coapexco's material culture stand out. One is the presence at the site of manos and metates (grinding stones used in maize processing) produced from locally available igneous rock and occurring in various stages of manufacture. From that we may suppose that the
villagers specialized in the manufacture of those utilitarian objects and had located their village near both a good source of raw material and acceptable agricultural land. Probably the majority of the manos and metates they made were destined for villages in the Basin and elsewhere, and not merely for their own use.

Coapexco’s second distinctive feature occurs in its obsidian (volcanic glass) artifacts. Among Mesoamerica’s Early Preclassic farming villages, obsidian had rapidly become the preferred material for cutting tools, both in the form of flakes (common) and prepared prismatic blades (uncommon). With the exception of an obsidian source at Otumba in the eastern Teotihuacan Valley, most known sources lie far outside of the Basin: to the north in Hidalgo, to the west in Michoacan, to the east in Veracruz, or far to the south in Guatemala. For most Preclassic societies obsidian in either raw or manufactured form represented an imported commodity acquired through the exchange networks. When compared to the obsidian recovered from other early villages in the Basin, Coapexco’s is uncommon in two respects: prismatic blades rather than flakes predominate, and obsidian from the far distant Mexican sources is significantly more abundant. Martin Boksenbaum has hypothesized that those differences may signify the Coapexcans had also been specialists involved in procuring raw obsidian from distant sources and in fashioning it into long prismatic blades for further trade regionally.

Tlatilco and Coapexco represent villages situated inland from the great lake that covered the Basin’s floor. However, because the lake was rich in aquatic resources and the far southern lakeshore received good rainfall annually, that latter area was particularly attractive to early agriculturalists. Not all settlements were on the mainland. Three villages, Zohapilco, Terremote-Tlaltenco, and Santa Catarina, were situated on small islands or peninsulas in the southeastern thumb of the shallow lake. It is highly probable that various specialized activities were carried out by the lacustrine-based settlements, which could have included an emphasis on fishing and hunting waterfowl. Furthermore, there is excellent evidence that several centuries later the village at Terremote-Tlaltenco was specializing in the production of baskets and woven mats made from the reeds and rushes surrounding their island.

It is obvious that for those communities, agricultural land was more limited than for their lakeshore or inland neighbors yet more productive because of a shallow water table. Because of their circumstances, their subsistence base included quantities of fish, turtles, and ducks and other
waterfowl, in addition to agricultural produce such as maize, beans, and squash. Working on the assumption that the island villages were agricul- 
turally self-sufficient units, the question can be raised, Where did they 
obtain sufficient land to grow their crops? The answer may be that they 
created it out of the marshlands surrounding their communities by build-
ing small raised fields and draining some marsh areas by digging small 
drainage canals. Those activities would have been limited in scope and 
complexity, yet precursors to the extensive system of raised agricultural 
fields (chinampas) in the southern lake area created nearly 2,500 years 
later by the Aztecs.

Morelos

Emphasis to this point has been on the Basin, the area of central Mexico 
that has received the greatest amount of archaeological research. How-
ever, the optimal conditions for early agriculture in central Mexico are 
found not in the Basin but across the mountains to the south, in the 
hot, well-watered, subtropical river valleys of Puebla, Morelos, and Guer-
rero. A greater abundance of Preclassic agricultural villages occurs in 
those regions, and it is conceivable that future research will demonstrate 
that agricultural village life began earlier there than in the higher and 
cooler altitudes of the Basin. Although the archaeological data from those 
areas are presently limited, they do provide some types of information 
unattainable beneath the concrete streets and urbanization now covering 
the Basin.

The Early Preclassic villages in the state of Morelos, directly south of 
the Basin, are of particular interest for mirroring so closely the lifeways 
and burial patterns of Tlatilco. Because of those strong similarities, some 
form of social integration between the regions can be hypothesized. The 
majority of the Morelos villages occur along the river valleys in the water-
rich western two-thirds of the state. There, they sit on natural terraces 
above areas of river bottomland of sufficient size for farming. A three-
tiered hierarchy of settlements occurs in every valley system: one large 
village, several smaller villages, and numerous hamlets. That distribution 
suggests each valley held a minor chiefdom focused on the largest village, 
the chiefly “center” for exchange and redistribution activities. In the 
villages and hamlets in all those valleys, the grave goods placed with 
burials are nearly identical to those of Tlatilco, and the pottery and
figurines (see Fig. 3.1) follow the identical evolutionary sequence. Very minor variations in the ceramics sometimes occur from valley to valley, but most of those may be attributable to the artistic licenses taken by the potters at each production village. The earlier discussion of lifeways and rituals depicted by figurines at Tlatilco applies equally well to the agricultural societies of Morelos.

**Pottery and “Ethnicity”**

While the pattern of ceramic similarities between Tlatilco, the western Basin, and villages in Morelos is remarkable, the distribution of that pattern is otherwise restricted and does not occur with the villages in Puebla, Guerrero, nor even at sites within the eastern Basin such as Zohapilco. To be sure, across central Mexico there are some ceramic similarities on a general level. Most regional pottery assemblages from the central highlands south to Guatemala include differentially fired vessels, flat-bottomed bowls with iconographic motifs incised on their vertical or out-slanting sides, and baby-faced figurines. However, nearly all such objects appear to have been locally produced and occur together with vessels and figurines that are regionally distinct. Furthermore, while some iconographic motifs decorating the pottery are shared with other regions, many are locally idiosyncratic. Although it does not seem illogical that societies settled along the rivers of Puebla or Guerrero might utilize a somewhat different pottery assemblage than that found at Tlatilco, it is perhaps more difficult to fathom why Tlatilco and the Basin’s western villages had closer ceramically expressed links to distant villages over the mountains to the south in Morelos but few apparent ties to their more immediate neighbors in the southeastern Basin. The red-on-brown stirrup-spout bottles and similar exotic vessels, which brought early fame to Tlatilco and which seem to occur in even greater numbers in Morelos, have never been found across the Basin at sites such as Zohapilco. Why? Here the analogy already presented concerning colored ribbons and clothing as ethnic markers may be relevant again. We can speculate that the highland societies purposely created and maintained certain ceramic similarities and differences to mark themselves as separate from “others.” Although the western and eastern areas of the Basin were in all probability on friendly terms and continually involved in economic interactions, the societies in those two regions perceived the need to
express their separateness symbolically by maintaining two relatively distinctive ceramic assemblages. While the western Basin villages appear to have been maintaining a "ceramic" affiliation with villages to the south in Morelos, Zohapilco's pottery seems to suggest ties with villages in the Izucar de Matamoros Valley of western Puebla (e.g., the site of Las Bocas), to the southeast.

Religion

Although it is impossible to accurately ascertain the religious notions held by the Early Preclassic societies in the central highlands, some inferences can be drawn from the archaeological data and in particular from the recurring iconographic motifs found on Early Preclassic pottery. Whereas many past and current reconstructions of Preclassic lifeways have treated those motifs primarily as indicative of "influences" emanating from the Olmec culture of Mexico's Gulf Coast (see Bibliographic Essay in this chapter), it is more appropriate to consider them for the basic meanings they may have held for the villagers who utilized that pottery (see also Marcus and Flannery, Chap. 8 of this volume).

Various motifs seem idiosyncratic to particular regions, whereas others occur widely. Prominent among those latter designs are (as named by archaeologists) the "were-jaguar," "fire serpent," and "paw-wing" motifs, each always rendered abstractly. There seems little question that those motifs symbolize supernatural spirits or forces and not gods. Each supernatural mentioned seems to characterize a different realm of the cosmos: the earth's surface, the sky above it, and an infraworld beneath it. Perhaps the most common motif is the "fire serpent," abstractly represented in side view by a few features of its head: flamelike eyebrows above an upper mandible (Fig. 3.2, left). Rather than being "serpent," it is actually a legged crocodile-like being. In one aspect (with the paw motif, Fig. 3.3a) it is associated with the surface of the earth, and in another (with the wing motif, Fig. 3.3b) with the upper world above that

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2 In his classic study Political Systems of Highland Burma (1965:86), social anthropologist E. R. Leach described this as a "paradox," noting that "every social group that is to continue as a group must at one and the same time emphasize its difference from other like groups and yet maintain alliances with these other contrasted parties."

3 The identification of such structures at San José Mogote, Oaxaca (see Marcus and Flannery, chap. 8, this volume), suggests they may have been present, but undiscovered, in other regions of Mesoamerica as well.
surface. Those same aspects can also be represented by a paw or wing symbol alone. A third motif, often called the "were-jaguar" (Fig. 3.2, right), is actually a frontal image of the fire serpent’s open maw. For millennia most Mesoamerican societies believed that the major supernatural forces associated with rain and crop fertility resided in the infraworld beneath the earth, a realm accessible through caves or fissures in the earth, or by passing below the surface of bodies of water. The fire serpent’s cavernous mouth (often containing a motif of crossed bands) symbolizes that opening to the infraworld.
A fish or sharklike supernatural, denizen of the watery infraworld, is frequently represented but usually in a highly “collapsed” or reduced abstraction as an empty U-shaped element within a crosshatched background (Fig. 3.4a). From more complete images it is known that the blank U-shaped motif is the eye of that aquatic supernatural (Fig. 3.4b). A few centuries later, the sharklike supernatural and its abstract representations had demonstrable associations with bloodletting, the drawing of one’s own blood for ritual purposes. That symbolism may also have been true during the Early Preclassic. There is evidence at Tlatilco and elsewhere to indicate that some males in the Early Preclassic societies of central Mexico ritually bled themselves (often from the groin area) using a variety of sharp instruments, including sharks’ teeth. Although rituals involving human sacrifice may also have been carried out, the data on that are more equivocal.

Public Architecture

While various public and religious ritual activities may have been carried out in special house-like structures that served ceremonial purposes, such specific buildings have not yet been identified at central highland village sites. In fact, very few Early Preclassic sites there contain raised platforms or mounds classifiable as public architecture. Whether the clay-surfaced platforms at Tlatilco fall within the category of “public architecture” is uncertain. However, several villages in Morelos and Guerrero do exhibit public architecture. Two that became major centers later in the Preclassic merit initial mention here.

Chalcatzingo, the largest Early Preclassic settlement in the Amatlanac Valley of far eastern Morelos, marks the known eastern extent of villages utilizing the “Tlatilco” ceramic assemblage. Though not a large settlement in comparison with villages in the valleys to the west, Chalcatzingo contained public architecture, a characteristic not yet found among those western villages. This implies that the Amatlanac valley chiefdom centered at Chalcatzingo was somehow special. Two probable public structures were discovered during excavations at Chalcatzingo, but neither

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4 The generalized interpretation presented here is based on the motifs as utilized across all of Early Preclassic Mesoamerica. Some of the basic concepts were published in Grove, “Torches, Knuckle Dusters, and the Legitimization of Formative Period Rulership” (1987). Because of obvious regional variations in motifs, the slightly different interpretation proposed by Marcus and Flannery (Chap. 8, this volume) for Oaxaca may certainly be valid for that region.
Figure 3.4. Sharklike supernaturals, La Bocas, Puebla. (a): abstracted motif; (b): entire supernatural. Shading has been added to highlight features.

could be adequately explored. The first is a 2-meters-tall earthen platform mound faced with a thin coating of mud plaster. It represents the earliest construction stage of a massive public mound which by 500 B.C. was 4 meters tall and extended 70 meters in length. The second example, in a different area of the village, may be either public architecture or the raised substructure for the residence of a high-ranking personage. It is a stone-faced rectangular platform, 1 meter in height.

An Early Preclassic village exhibiting a very different and unusual form of public architecture is Teopantecuanitlán, a recently discovered site in the mountains of Guerrero, about 100 miles southwest of Chalcatzingo. There the public construction is a large clay-faced sunken patio, whose earliest building phase is dated c. 1400–900 B.C.; it is unique in Mesoamerica at that time period. Even before the discovery of Teopantecuanitlán, scholars recognized that precocious and elaborate figurines and ceramic vessels had been created by the Early Preclassic farming societies living along the river valleys that cut through the arid mountainous Pacific slopes of Guerrero. Nevertheless, scholars tended to attribute Guerrero’s developments to “influences” from central or southeastern Mexico. Teopantecuanitlán’s unique public architecture suggests that the precocity exhibited in Guerrero was independently developed by its indigenous societies rather than externally inspired.

THE NEW ELITE (900–500 B.C.)

From 900 to 500 B.C. was a time during which population continued to increase rapidly, villages became larger and more numerous, and regions of poorer agricultural potential, such as the northern and eastern areas of
the Basin, became settled. Those changes took place in spite of drier than
“normal” conditions and a continued declining lake level in the Basin. We may suppose that the growth of population and increasing number of farming villages across central Mexico were accompanied by an increase in local chiefdoms and thus even further alliances, more complex exchange networks, and increased competition for natural resources and nonlocal commodities. It is clear that on the village level, chiefly and élite rank rapidly increased in importance.

Chiefly and élite positions are generally insecure and can be ephemeral. Village chiefs and élite must constantly communicate their status and affirm their power by various means, including the acquisition, control, and display of scarce “exotic” objects or materials, and by generosity and gifts to their “clientele.” To the ancient Mesoamericans the most valued of such commodities were jadeite and greenstone. In Middle Preclassic village societies a common means by which chiefs and other individuals of high rank proclaimed their special social position was through their possession of and adornment with jadeite jewelry. From our understanding of chiefdoms in other world-areas, we can presume that the chiefs themselves probably obtained and controlled access to such exotics as jadeite jewelry and iron ore mirror pendants, and distributed them as chiefly gifts to maintain allegiances within their own community, with their subordinate chiefs in nearby villages, or with peers in distant regions.

An important transformation that began in the archaeological record about 900 B.C. may thus be directly related to the rapidly growing importance of chiefly and élite ranks in village society. Over the period of a century or so, the elaborate exotic vessel forms, bowls incised with iconographic motifs related to the cosmos, and the clay baby-like figurines characteristic of the Early Preclassic were gradually replaced by plainer bowls with far simpler decorations and a wide a variety of more modestly executed figurines. As the pottery became more “humble,” jadeite and greenstone beads, pendants, necklaces, figures, and bloodletting lancets appeared for the first time in significant quantities. Importantly, some of those jadeite objects were adorned with iconographic motifs similar to those that only a few hundred years earlier had been executed on pottery.

If in the Early Preclassic certain significant differences in ceramic assemblages between neighboring societies (e.g., Tlatilco and Zohapilco)
reflected purposeful attempts by each to communicate and emphasize its identity, then the "simplification" of the pottery in the Middle Preclassic "erased" many of those ceramic markers. At the same time however, there was an increase in élite objects. Significantly, the iconography that disappeared from the ceramics reappeared in jadeite and greenstone, the medium now restricted to and controlled by the chiefs and élite. The symbols relating to the cosmos were now used to legitimize their status. Perhaps the Middle Preclassic chief and his prestige and power now assumed the major "identity" for his society as well.

While the transformations just described were major, village lifeways, domestic rituals, and farming techniques were not altered significantly. Climatic conditions may have had a more immediate and urgent impact on the people, for while many villages continued in the same location, others declined in size or were "relocated." Zohapilco and Terremote-Tlatenco continued their exploitation of lakeside resources, but at Tlatilco the settlement apparently shifted over time to a nearby hill. New villages appeared, including two on the northwestern lakeshore, El Arbollilo and Zacatenco, both excavated nearly sixty years ago by archaeologist George Vaillant. The continuation of some villages and the relocation of others may perhaps be attributed to the availability of water resources. The decline in rainfall affected lake-oriented villages less than those situated inland. For the latter, the necessity of water for everyday life and the possible need of water sources for simple irrigation to maintain agricultural productivity may have underlain the decision to move to new village locations.

Another new phenomenon of the Middle Preclassic is the appearance in central Mexico of a very few chiefdoms exhibiting certain special characteristics that made them unique to their individual regions. One such special attribute was the presence of public architecture. Two central Mexican sites definitely fall into that category, Chalcatzingo in Morelos, and Teopantecuanitlán in Guerrero. Cuicuilco in the Basin of Mexico may also deserve that classification. Chalcatzingo and Teopantecuanitlán are also important because they were the only central Mexican centers at that time with another special characteristic, monumental stone art. Because Chalcatzingo is the most extensively published central highlands site of this period, it currently provides greater data on village lifeways and will receive most of the attention here. Cuicuilco is discussed in the section on post-500 B.C. urbanism.
Chalcatzingo

Chalcatzingo had already been unique in Early Preclassic period Morelos because of its public architecture, and that special status continued after 900 B.C. The Middle Preclassic settlement spread across a series of broad terraces created by community labor activities that remodeled the natural hill slopes into a series of broad terraces and destroyed much of the earlier village area. Centrally positioned across the face of the large uppermost terrace was the earthen platform mound begun in the Early Preclassic and now rebuilt and enlarged several times. Its 70-meters-long mass towers above the terraces below it. Nearly 100 meters across the upper terrace, near the base of the stark cliffs of the Cerro Chalcatzingo, was an élite house compound, apparently the residence of Chalcatzingo’s chiefly lineage. That upper terrace seems to have served as the village’s main public area, demarcated on one side by the chiefly compound and on the other by the village’s major public structure. Excavated into one of the lower terraces is another form of public architecture, a large, shallow stone-faced sunken patio, dominated at its south end by a rectangular stone altar. The face of the altar is carved in bas-relief with the eyes of an earth supernatural.

Located at one edge of each of the lower terrace units below the public area was a non-élite residence. Those houses each occupied only a small portion of the land, suggesting that their occupants farmed the remaining terrace area. The houses had been built using two different exterior wall constructions. Front walls (with entrance doors) seem to have been made from wattle and daub, set above a narrow stone foundation. A house’s remaining three walls were of sun-dried mud brick, or bricklike blocks of tepetate, a hardened clay subsoil, held together with a mud mortar and laid upon a wide flat stone foundation. All of the houses were large by Early and Middle Preclassic standards, with their rectangular floor areas averaging over 60 square meters. Narrow stone foundations crossing the packed earthen house floors suggest the house interiors may have been partitioned into several rooms by simple cane walls. Roofs were probably of thatch.

Cooking in the houses appears to taken place on ceramic braziers. Those had projecting tripod supports on their upper rims to hold the cooking vessels above the coals. As in the Early Preclassic, the basic diet consisted mainly of maize, beans, and squash, sometimes supplemented by the meat of domesticated dogs and by wild deer, rabbits, birds, and
iguana lizards. A major innovation in food preparation may also have begun at this time. For centuries every household in the central highlands utilized manos and metates, the basic tools for grinding maize, although the maize may have been primarily consumed in forms such as gruel. New additions to the household artifact assemblage sometime after 900 B.C. are ceramic “griddles” and processed lime, both of which are requisite to making the maize tortilla, an important Mexican dietary staple. Maize is not nutritionally advantageous without lime processing, and thus may only now have become a major staple in the diet. Also, because the entire tortilla-making process is an extremely time-consuming woman’s activity, it is probable that household labor roles underwent a significant reorganization with the adoption of the tortilla.

Villagers were commonly buried beneath the floors of their houses. Few of the villagers buried in the houses on the lower terraces were of a rank high enough to take any greenstone objects to their grave. Furthermore, their graves were usually unembellished. Conversely, many of those buried beneath the elite compound area on the upper terrace were associated with jadeite objects and had graves lined with stone. That practice is not limited to Chalcatzingo. Elite burials at other Middle Preclassic central Mexican villages, including El Arbolillo in the Basin of Mexico, have stone-associated and jadeite-associated burials. However, few burial “rules” can be ascertained at Chalcatzingo and those other sites. Some individuals buried in stone-embellished graves had no (preserved) associated offerings, and some jade-associated burials lacked stone embellishment. That is to be expected in ranked societies, for unlike social strata or classes, distinctions of rank are variable and vague.

Houses such as just described require occasional renovation, for they do not weather the ravages of time or vermin well. Those at Chalcatzingo were periodically dismantled, their adobe wall bricks and main roof-support poles and beams set aside, and the old thatch-and-wattle sections burned where they fell. The house area was then releveled. At that time ritual activities took place involving the smashing of pottery and the “scattering” of small fragments of broken jadeite jewelry, causing those objects, together with the ash from the fires, to become incorporated into the newly leveled subfloor area of the house. The structure was then rebuilt, frequently using most or all of the old stone wall foundations.

Human and animal clay figurines continued to play an important role in Middle Preclassic village ritual. At Chalcatzingo the anthropomorphic figurines occur primarily in household contexts, and particularly around
a house’s kitchen area. They are only infrequently found with burials. Like their Early Preclassic predecessors, a great number of the Middle Preclassic anthropomorphic figurines are “generic” (nonspecific) in their facial and body features, while at the same time exhibiting variability in hair and “turban” forms and adornment. This suggests that the primary meaning or “message” communicated by the figurines resided in the head area. In that respect it is also important that complete figurines are seldom found. Heads were purposely broken from their bodies and discarded separately, an act implying that the ritual or symbolic importance of a figurine was ultimately terminated by the removal of the head.

Nearly half of the identifiable figurines at Chalcatzingo are of a type commonly designated as C.8, a figurine found in only minor quantities at Basin of Mexico sites such as El Arbolillo and Zacatenco. Such figurines have generalized bodies but such carefully hand-modeled facial features that they seem to be “portraits” of specific individuals. Multiple representations of at least twenty different persons have been identified at Chalcatzingo. These portraits figurines may represent particular chiefs or important lineage heads, perhaps elite ancestors revered after their death.

Nearly all the Middle Preclassic human figurines are depicted wearing ear ornaments. Archaeologically such adornments occur primarily as jadeite earspools and thus are symbols of high rank. Only a few clay earspools are known, and it is possible that unless non-elite individuals wore ear ornaments made of a perishable material such as wood, the figurines may all represent humans of “jade earpool” rank. It is also of interest that although most figurines bodies are generalized, without question some of them portray pregnant women. Archaeologist Ann Cyphers Guillén believes that, in fact, various stages of pregnancy are shown. It is perhaps significant, therefore, that anthropomorphic figurines found in house contexts are often associated with women’s work areas.

Most zoomorphic figurines are hollow whistles or two-tone ocarinas, and were probably used in village and household rituals and dances. Ducks and canine-like forms (dogs?) predominate, but a wide variety of animals are depicted including turkeys, turtles, deer, peccaries, squirrels, opossums, and monkeys (monkeys are not native to the central high-

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5 It is noteworthy that jade earpools are rare in Early Preclassic contexts, and that representations of ear ornaments are also less common on figurines of that period. However, some Early Preclassic clay earpools have been found archaeologically.
lands). The animal figurines also seem to have been terminated by decapitation.

In most respects the lifeways of the Middle Preclassic village at Chalcatzingo fairly accurately reflect those of its contemporaries across the central highlands. Yet in two important respects the chiefdom at Chalcatzingo was also greatly different. As already noted, it included public architecture, as did at least two subordinate villages in the same valley. However, unlike any other villages in Morelos or the Basin, Chalcatzingo’s chiefs also displayed carved stone monuments,

Two different themes are apparent in the monumental art. On the Cerro Chalcatzingo behind the village are bas-relief carvings of ritual and mythico-religious importance. For example, one large boulder at the base of the cliffs is a carved scene portraying four humans (Monument 2; Fig. 3.5). Three wear tall turban-like headdresses and their faces are hidden behind birdlike masks. Each holds a staff-like object. Two of them approach a bearded personage seated before them, while the third leaves the scene, apparently having already performed his task. The seated personage receiving the ritual attention has once been masked, but now that mask hangs from the back of his head. Although we may not

Figure 3.5. Ritual scene, Monument 2, Chalcatzingo. Drawing by Barbara W. Fash.
understand the ceremony taking place, that carving literally depicts a ritual “frozen in time” and affords a brief glimpse into the richness of Middle Preclassic ceremonial activities not otherwise retrievable by regular archaeological means. A second major carving is found on a cliff face high above the village. It is a large bas-relief portraying a personage seated within U-shaped niche, the mouth of an earth supernatural, symbolically a cave, an entrance to the underworld (Monument 1; Fig. 3.6). Clouds with falling raindrops frame the top of the scene, and raindrops decorate the figure’s headdress and garment. That personage, portrayed seated at the point of access to the infraworld, was perhaps a deceased ancestral chief, now revered by the village as their mediator to the supernatural forces that bring rain and thus agricultural fertility.

In contrast to those cliffside reliefs, political carvings were erected on the village’s ritual plaza and at least two adjoining terraces. Those monuments are stone statues, or stelae with bas-relief carvings, which depict specific personages, apparently portrait carvings of the chief. At least three of the portrait stelae were erected beside low stone-faced platforms. Most of those monuments had suffered decapitation, a form of termination analogous to that of the clay figurines. An élite burial beneath the village’s chiefly residence had been interred with one such stone monument head, suggesting the monument decapitation may have taken place at the death of the person portrayed.

**Teopantecuanitlán**

Teopantecuanitlán, Guerrero, is near the junction of two major rivers, the Amacuzac and the Mezcalá. This important center is just now coming to light archaeologically. Two types of public architecture dominate the Middle Preclassic village area: stone-faced mounds and a sunken patio. The latter structure, as already noted, was begun in the Early Preclassic; it maintained its sacred characteristics over many centuries, during which time it underwent modification and embellishment. By 800 B.C. the earthen patio walls had been faced with large cut-stone blocks, and an impressive stone-lined drain system had been added. Projecting upward from the center of each of the patio’s four walls were large monolithic supernatural faces carved in bas-relief on inverted T-shaped stone blocks.

Alliances are common among chiefdoms, and evidence suggests that the chiefs of Teopantecuanitlán were probably importantly allied with
Figure 3.6. Cliff carving of personage seated within a supernatural mouth-cave entrance, Monument 1, Chalcatzingo.
those at Chalcatzingo. Only those two central Mexican centers exhibit stone-faced patios and bas-relief monumental art. They also utilized and shared certain distinctive stone construction techniques in their public architecture. The greater antiquity of Teopantecuanitlán’s sunken patio implies that Chalcatzingo’s could have been “inspired” by contacts with the Guerrero center. The Chalcatzingo – Teopantecuanitlán relationship may possibly have been cemented at one time through a marriage alliance, and commemorated through the erection of a stone monument at Chalcatzingo. A bas-relief stela at the latter center depicts the only woman yet identified in Middle Preclassic monumental art (Monument 21; Fig. 3.7). Several symbols embellishing her carving appear to link her to Teopantecuanitlán, including one motif found only at Teopantecuanitlán and Chalcatzingo.

**Implications of Highland Monumental Art**

Stone monumental art is a phenomenon atypical of the Preclassic highland ideological and political systems, and is characteristic of only one culture of Early and Middle Preclassic Mesoamerica, the Olmec of Mexico’s Gulf Coast, some 300 mountainous kilometers to the southeast (see Diehl, Chap. 4, this volume). Thus the presence of carved monuments at Middle Preclassic Chalcatzingo and Teopantecuanitlán indicates that at one time significant associations existed between those centers and one or more Gulf Coast Olmec chiefdoms. The motivation underlying such relationships may have involved the need by Gulf Coast chiefs to acquire central Mexican exotic commodities, such as serpentine and other greenstone from Guerrero. Alliances may have been formed to ensure the access to those long-distance resources. For a time, the chiefs at Chalcatzingo created and displayed certain Gulf Coast Olmec symbols of ideological and political power, yet those were executed in a quite distinctive “frontier” style. The monuments carved at the behest of the Teopantecuanitlán chiefs to adorn the sunken patio there, show even fewer direct similarities to those of Gulf Coast Olmec centers. Several other Guerrero villages also contain minor quantities of Middle Preclassic frontier-style monumental art, including painted art at the caves of Oxtotitlán and Juxtlahuaca, to the west of Teopantecuanitlán. By displaying such “foreign” symbols, the chiefs of Chalcatzingo and Teopantecuanitlán would have enhanced their own prestige and power by publicly communicating
Figure 3.7. Stela depicting woman, Monument 21, Chalcatzingo. Drawing by Barbara W. Fash.
their associations with distant societies as well as with the supernatural realm.

THE RISE OF URBAN CENTERS (500–100 B.C.)

The second half of the first millennium B.C., the Late Preclassic period, persisted as a period of reduced rainfall in the central highlands. In addition, deforestation of the hill slopes and valleys continued, as the constantly increasing population cleared new land to farm and sought fuel for their cooking fires and wood for construction. By 500 B.C., or soon thereafter, a major realignment occurred in settlement location priorities. Chalcatzingo and a number of other Middle Preclassic village were abandoned as populations reestablished themselves in other settings. In many instances the need to resettle near an assured water supply, in a time of diminished rainfall, may again have been a factor. However, a social realignment was also under way across much of Mesoamerica, with a shift in focus to large “central place” villages and a nucleation of population around those settlements. Many of these Late Preclassic nucleated centers were newly important, rather than having developed from prominent Middle Preclassic chiefly villages. Characteristic of such centers was public architecture, previously so rare in central Mexico, a category that now included tall pyramidal structures.

It is notable that the nucleation of populations around central places occurred in a period when climatic conditions were actually adverse to such a move, for larger population concentrations require more assured food and water supplies. That those congregations took place in spite of the increased aridity suggests that agriculture now relied upon more productive farming methods, including systems of intensive irrigation.

Before 500 B.C. the Basin of Mexico offered primarily marginal agricultural conditions to Preclassic societies utilizing simple agricultural techniques. The hot and humid river valleys in the regions to the south of the Basin held greater attraction to those early agrarian societies and thus witnessed the early major advances. However, the Late Preclassic...

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6 The decline of Chalcatzingo as a major center may have been strongly related also to the decline of the Olmec centers on the Gulf Coast, and the site’s diminished role in highland exchange (see Grove, Chalcatzingo: Excavations on the Olmec Frontier [1984], pp. 161–65, or Ancient Chalcatzingo [1987], pp. 438–44).
saw a significant transformation, and for at least the next millennium major cultural developments would focus on the previously marginal area, the Basin of Mexico.

Cuicuilco

Within the Basin the most favorable conditions for agriculture were always to be found along the southern lakeshore. The major Late Preclassic developments there initially focused on that area, and in particular on the village of Cuicuilco, situated on the largest expanse of agricultural land in the southern Basin. That village was soon to evolve into the central highland’s first urban center.

The early prehistory of Cuicuilco is clouded because that area of the Basin, the southwest corner, today lies buried under a thick blanket of lava, the result of volcanic eruptions that began in the southern foothills about 100 B.C. Archaeological explorations of the site have always been difficult and have frequently depended on modern construction activities to remove the rock entombing Cuicuilco. A small quantity of pottery sherds, similar in appearance to some of the earliest pottery from Zohapilco but found in the earthen fill of some later-period mounds, suggests the possible presence of an Early Preclassic village in the immediate area, somewhere under the lava. A few earthen platforms uncovered by excavations in 1957 were attributed at that time to the Middle Preclassic period, and Cuicuilco was said to be “already very large.” If those interpretations are correct, the Middle Preclassic chiefdom at Cuicuilco was unique in the Basin in size and the presence of public architecture.

Whatever its antecedents, Cuicuilco seems to have rapidly become the largest settlement in the Basin by 300 B.C. Its public architecture is larger and more numerous than at any other Late Preclassic settlement in the central highlands. The lava that buried Cuicuilco could not completely obliterate its most famous architectural construction, a 27-meters-high circular stone-faced pyramid whose upper stages still rise above the engulfing lava. This unusual construction, a truncated cone ascending in several stages, is 80 meters in diameter. During the relatively recent construction of high-rise apartments nearly a kilometer from the circular pyramid, eleven other pyramid structures (rectangular) were uncovered. At its height, Cuicuilco may have covered approximately 400 hectares and sustained a population of 20,000. The remains of large irrigation
canals preserved beneath the destructive lava flow provide evidence for the intensive agricultural activities that served to support what may have been "Mesoamerica’s first city-state."

By 300 B.C. regional centers with significant public architecture were common across the central highlands. Irrigation systems and public architecture occur at Amalucan, Puebla, and Late Preclassic structures underlie the massive pyramid at the great Classic and Postclassic period city of Cholula. Among the Late Preclassic centers and villages in Morelos is a settlement at Xochicalco, another site destined to grow into a major Classic center. Guerrero’s Late Preclassic is less well known but probably experienced similar developments.

In the Basin, other centers flourished in addition to Cuicuilco, including Tlapacoya/Zohapilco, which like many of its contemporaries now exhibited a Late Preclassic pyramid mound. The eastern Basin, a region never previously greatly favored for settlement, rapidly gained in importance. There population soon was primarily concentrated around three large centers on the lower piedmont, each characterized by public architecture. However, the most extreme transformation occurring at that time took place slightly to the northeast in a side valley of the Basin, the Teotihuacan Valley.

During the initial stages of the Preclassic, the Teotihuacan valley had clearly been marginal to the developments occurring within the Basin proper. Its most exploitable resources consisted of a small river, a large spring near the center of the valley, and an obsidian source near modern-day Otumba at the valley’s eastern end. Although Otumba obsidian was "mined" and widely exchanged throughout the central highlands during the Early and Middle Preclassic, no Early Preclassic villages have ever been identified in the entire Teotihuacan valley, and the few small Middle Preclassic villages known there present no evidence of having been directly involved in the exploitation of Otumba obsidian. Two of those villages seem merely to have been small farming settlements situated near the valley’s best water source, the spring.

During the beginning centuries of the Late Preclassic the two farming villages grew in size and in time merged into one large settlement. By 300 B.C. the community and its public architecture covered 600–800 hectares, and contained between 20,000 and 40,000 inhabitants. For a time it obviously rivaled Cuicuilco in size and complexity, but about 100 B.C. a volcanic eruption in the hills behind Cuicuilco produced a lava flow that laid waste to much of that city, devastated prime agricultural
land, and forced most of the population elsewhere. A second eruption a few centuries later finished Cuicuilco completely. The process of urbanization in the central highlands was left to the burgeoning center in the Teotihuacan Valley.