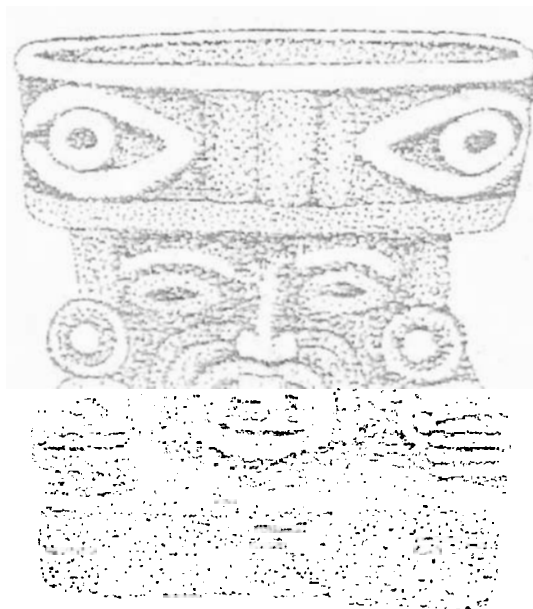


Postclassic Developments at Xochicalco

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Although Xochicalco was occupied continually from its Epiclassic apogee through the Spanish Conquest, the nature of settlement changed dramatically in the Postclassic epoch. Xochicalco was transformed from a large city with widespread economic and stylistic influence into a zone of dispersed rural settlement far from the major Postclassic centers of Central Mexico. There are hints that Xochicalco may have maintained symbolic importance in Postclassic Morelos,¹ but its regional political significance and influence ended with its near-total abandonment in the tenth century.

This chapter begins with a discussion of the research on Postclassic contexts carried out by the Xochicalco Mapping Project (XMP). Although only a few areas were excavated with small test pits, these deposits formed the basis for the establishment of a new Postclassic ceramic chronology for Western Morelos. I describe briefly the derivation of this chronology, which includes the Huautli, Tilancingo, Temazcalli, Early Cuauhnahuac, and Late Cuauhnahuac phases. Next I provide summary descriptions of the major Postclassic ceramic types at Xochicalco. To set the small Postclassic settlements at Xochicalco into a wider regional perspective, I then describe nearby Postclassic sites. After this background I examine processes of change in the Xochicalco area during Postclassic times, including the arrival of the Nahuatl-speaking Tlaluca peoples and a series of regional economic transformations that followed.

XOCHICALCO MAPPING PROJECT EXCAVATIONS

In the 1977 excavations by the XMP, substantial Postclassic deposits were encountered in two areas on the west side of Xochicalco: Cerro Temascal and terrace T85.² This section describes briefly the excava-

tions in these areas; more complete documentation is provided in Smith 1983 and n.d.

Cerro Temascal is a small hilltop where an area of about 1.5 ha has been leveled with stone terraces (see fig. 12.1). The southern end is covered by a large elevated platform, while the northern part is a level area with a small platform and several small houses. Four test pits were excavated in open areas away from obvious architecture, revealing a continuous sequence of deposits from the Gobernador through Late Cuauhnahuac phases (fig. 9.1). The major hilltop leveling and construction activities date to Gobernador times, and several stone walls, plaster floors, and boulder-fill deposits from that phase are found in two of the test pits. Some small-scale terracing and leveling were apparently carried out in the Tilancingo phase, followed by a more intensive occupation in Temazcalli times that produced denser and more widespread secondary refuse deposits. A single stone structure wall can be firmly assigned to this phase. Early Cuauhnahuac deposits are the most widespread at Temascal, followed by a more limited occupation in the Late Cuauhnahuac phase, represented in only one excavation.

Terrace T85 is the second area of Xochicalco where significant Postclassic deposits were excavated. Three 1 m x 3 m test pits were dug here. The first has occupational debris, probably secondary refuse, from the Temazcalli and Early Cuauhnahuac phases. The second and third excavations encountered burials. Burial 1 is a multiple primary interment of at least seven individuals in a pit excavated into the *tepetate* hardpan. These individuals were accompanied by sixteen ceramic vessels, manos, metates, obsidian blades, ceramic spindle whorls, and four copper artifacts. The ceramics date this burial to the Temazcalli phase. Burial 2 is a secondary burial of at least five individuals that intrudes

Date, A.D.	Period	Other Areas		Western Morelos	
		Basin of Mexico	Cuernavaca	Surface Collections	Excavations
1500	Late Postclassic	Late Aztec	Tecpan	Cuauhnahuac	Late Cuauhnahuac
1400					Early Cuauhnahuac
1300	Middle Postclassic	Early Aztec	Teopanzolco	Temazcalli	Temazcalli
1200					Tilancingo
1100	Early Postclassic	Mazapan	(Early Postclassic)	Humo	Huautli
1000					

Fig. 9.1. Postclassic ceramic chronologies for Morelos and the Basin of Mexico

partially into the area of burial 1. This burial was accompanied by nine fragmented ceramic bowls that were evidently broken at the time of burial; they date to the Early Cuauhnahuac phase. The third test pit at terrace T85 encountered another Early Cuauhnahuac burial consisting of three individuals placed in a pit excavated into the tepetate. There were two adult individuals with five associated ceramic vessels, plus a partially articulated youth located just above the adults. A spindle whorl and several obsidian prismatic blades were recovered near the youth and may be associated with it.

THE POSTCLASSIC CHRONOLOGY

The Postclassic chronology currently employed for Western Morelos was first established using ceramics and deposits from the excavations at Cerro Temascal and terrace T85. This chronology was designed to address two objectives. First, an overall chronology of the Postclassic was needed to interpret the excavated remains at Xochicalco and other sites, and to phase surface collections from Hirth's Río Chalma survey (Hirth 1976). In spite of previous archaeological fieldwork at Postclassic sites in Western Morelos (e.g., Noguera and Piña Chán 1956–57; Litvak King 1970a; Mason 1980), no stratigraphy-based chronology had yet been proposed. The second objective was to provide a chronology sufficiently refined to address specific

cultural/historical questions, including the timing and effects of the arrival of the Tlaluca ethnic group and the effects of Aztec conquest on Morelos society. The chronology was developed in four steps (ceramic descriptions follow in the next section).

Step 1: Stratigraphic Analysis

The first step in the derivation of the Postclassic chronology was the analysis of the stratigraphic context of ceramics at Temascal and terrace T85. The resulting pattern was compared to the Postclassic sequence in the Basin of Mexico and to other Postclassic assemblages in Morelos, yielding a three-phase sequence corresponding to the Early, Middle, and Late Postclassic periods.

Step 2: Ceramic Seriation

The Xochicalco ceramics were next quantified and analyzed statistically using a number of computer methods. This seriation work is described in detail elsewhere (Smith 1983:201–273, n.d.; Smith and Doershuk 1991). Briefly, twenty levels from seven excavations with good stratigraphic control and abundant sherds were selected for detailed analysis. After consideration of more than fifty ceramic variables, thirty-two were chosen for the seriation. These variables were quite diverse, including percentages of types, ratios involving both types and forms, and a series of ordinal scales measuring specific form and paste dimensions. Standardized scores were subjected to multidimensional scaling based upon Euclidean distance. The two-dimensional scaling diagram revealed a “horseshoe-shaped” curve common in seriation work (Smith and Doershuk 1991). The accuracy of the seriated sequence was shown by the fact that all stratigraphically related collections were placed in their proper relative order (except for two metric subdivisions of a single soil zone whose relative positions were reversed). Then the sequence was divided into five phases based upon three criteria: the metric intercollection distances used as input to the scaling program, the presence of diagnostic imported sherds from the Basin of Mexico, and stratigraphy. These phases were given the phase names Huautli, Tilancingo, Temazcalli, Early Cuauhnahuac, and Late Cuauhnahuac.

Step 3: Extension of the Seriation to Coatetelco

The weakest segment of the sequence was the Early to Late Cuauhnahuac transition. All Late Cuauhnahuac collections were from a single location, unrelated stratigraphically to the earlier contexts. In order to rule out the possibility that the differences between Early and Late Cuauhnahuac ceramics were due to factors other than chronological change, I extended the seriation to the nearby Late Postclassic site of Coatetelco.

Discriminant analysis was used to extract functions that distinguished between the ceramics of each phase at Xochicalco, and then quantified collections from Coatetelco were classified by these functions. The resulting Early and Late Cuauhnahuac collections at Coatetelco were in correct stratigraphic order, thus providing a stratigraphic confirmation of the temporal relationship between Early and Late Cuauhnahuac.

Step 4: Assignment of Dates

The fourth step in establishing the Postclassic chronology was the assignment of dates to the phases. This was done by comparisons and ceramic cross-ties to other sequences in Central Mexico. The most reliable and fine-grained relative sequence was for the Basin of Mexico (Sanders, Parsons, and Santley 1979), although the Postclassic chronology there was (and continues to be) based upon remarkably few chronometric dates. I relied upon the phase dates published by Sanders, Parsons, and Santley (1979), plus cross-dating with the Middle Postclassic Tetla phase in Eastern Morelos for which two radiocarbon dates were available (Norr 1987). The resulting sequence and dates are shown in the left column of figure 9.1. Subsequent excavations in Temazcalli, Early, and Late Cuauhnahuac deposits at the sites of Capilco and Cuexcomate have added considerable stratigraphic support to the later portion of the sequence, and radiocarbon dates now show that the initial dating of the Early and Late Cuauhnahuac phases was correct (Smith and Doershuk 1991). A recent ceramic seriation at Yautepec in Central Morelos produced a sequence of Postclassic phases that correspond closely to the Western Morelos phases in ceramic content. Radiocarbon dates at Yautepec are consistent with those from Cuexcomate and Capilco (Hare and Smith 1996), providing additional support for the phase dates reported here.

CERAMIC CLASSIFICATION

The goals of my analysis of the Postclassic ceramics from Xochicalco may be summarized under the headings chronology, function, and economics. In order to establish a fine-grained chronological sequence based upon excavated ceramics, I went beyond the standard typological approach and recorded a series of detailed attributes on individual sherds. These formed the basis for the quantitative seriation outlined above. A focus on vessel function led to a classification scheme based primarily upon vessel form rather than on paste or surface finish, and a focus on economic analysis led to an emphasis on the identification of nonlocal ceramics in the Xochicalco collections.

My focus on vessel form as a key criterion in the ceramic classification proved to be particularly appro-

priate for the Postclassic ceramics of Western Morelos. Within the plain ware ceramics, there is little significant variation in paste over space or time. The most obvious variability consists of the quantity of aplastic inclusions, which is associated with vessel form. Painted ceramics, which are quite abundant in Central Mexican Postclassic assemblages, exhibit more variation in paste, and much of the variation is associated with the styles and nature of painted decoration. In order to capture the variability in vessel form, painted decoration, and paste, I employ a classification of vessel-form classes that are subdivided into decorative classes where appropriate.

Table 9.1 presents my classification of the Xochicalco ceramics. It is clear from the data in table 9.1 that nearly all ceramic types span two or more phases. This lack of clear phase markers has important implications for the use of this ceramic chronology. Excavated ceramic collections can be assigned to individual phases with confidence on the basis of quantitative procedures since there are systematic differences in type frequency between phases (Smith and Doershuk 1991). Surface-collected ceramics with low collection sizes, on the other hand, often cannot be assigned to individual phases. For this reason, Hirth was forced to employ a rougher ceramic chronology to date the Postclassic occupation of Xochicalco from the surface collections (see vol. 1, chap. 5). This surface chronology is presented next to the excavation chronology in figure 9.1. The lack of phase markers also has implications for the nature of my ceramic descriptions. In place of the phase-by-phase descriptions employed by Cyphers and Hirth in chapter 6, I describe the ceramics type by type, and the occurrence of types in the phases is indicated in table 9.1. More complete descriptions may be found in Smith 1983, n.d.; Angulo Villaseñor and Arana 1988; Mason 1980; and Noguera and Piña Chán 1956–57.

Plain Vessels

Most plain ware ceramics consist of bowls and jars. *Bowls* are shallow, open serving vessels, often with an orange slip or a black smudged finish. The *jar* category includes both globular vessels with a restricted neck, which were used for storage and transport, and open-necked cooking jars. These functional classes are easy to distinguish for whole vessels, but difficult to tell apart from sherds. *Basins* are very large bowls (rim diameter >28 cm) with everted rims, probably used for food preparation or cooking. *Comals* are large flat griddles used for cooking tortillas and other food. Figure 9.2 illustrates these four plain ware form classes.

Decorated Jars

Painted jars are rare in most Postclassic assemblages, but several distinctive stylistic types have chronological and economic significance.

TABLE 9.1
Frequencies of ceramic types in excavated Postclassic deposits at Xochicalco, Morelos

Ceramic type	Phase				
	Huautli	Tilancingo	Temazcalli	Early Cuauhuahuac	Late Cuauhuahuac
Plain vessels					
Bowl	20.9	21.2	18.1	25.1	24.0
Jar	60.5	54.7	61.4	55.5	60.2
Basin	2.3	1.0	1.0	1.3	1.4
Comal	4.7	5.5	5.5	9.2	6.3
Decorated jars					
Taxco Black-on-White	—	*	—	—	—
Red-on-White	—	1.8	1.0	.5	—
Tlahuica Polychrome	—	—	.7	*	*
Other decorated	—	—	*	*	.9
Local decorated bowls					
Red-on-Buff	9.3	1.0	*	*	*
Guinda	—	3.0	4.6	2.2	.8
Graphite Guinda	—	.6	*	*	—
Tlahuica B-4	—	—	.6	1.7	1.3
Black-rim Orange	—	—	*	*	—
Other local decorated	—	—	1.0	.8	1.6
Imported decorated bowls					
Fine Orange	2.3	—	—	—	—
Toluca Polychrome	—	4.2	1.1	—	*
Wavy-line Red-on-Cream	—	3.2	.6	—	—
Morelos-Puebla	—	*	*	—	*
Black-on-Orange	—	—	*	—	—
Aztec I Black-on-Orange	—	—	*	*	—
Chalco-Cholula Polychrome	—	—	*	*	—
Teopanzolco Polychrome	—	—	.5	.6	*
Aztec III Black-on-Orange	—	—	—	.6	*
Malinalco Polychrome	—	—	—	*	—
Other vessels					
Texcoco Fabric-Marked	—	.8	*	*	*
Ladle-type censer	—	1.0	*	.7	1.4
Large brazier	—	*	1.1	*	1.0
Special-purpose vessels	—	—	*	*	—
Nonvessel artifacts	—	—	*	.5	*
Total quantified sherds	43	495	2,401	2,170	797

Note: Data from Smith n.d. The data are expressed as the percentage of total sherds; values less than .5 percent are denoted by an asterisk

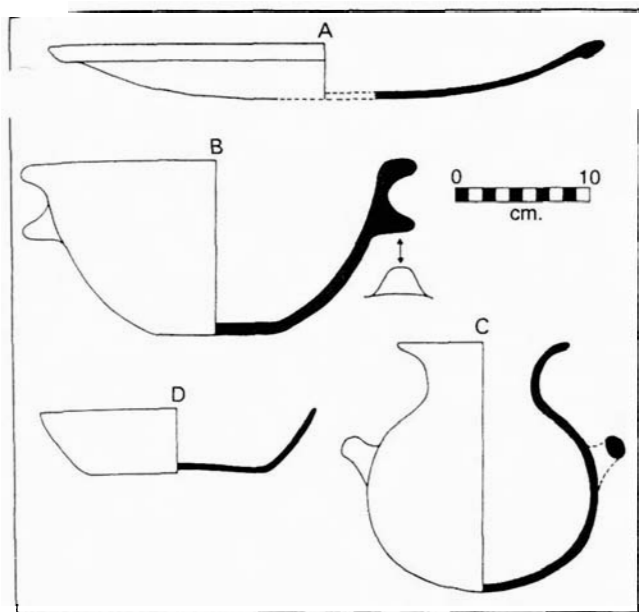


Fig. 9.2. Plain ware vessel forms at Xochicalco: (a) comal; (b) basin; (c) jar; (d) bowl

Taxco Black-on-White Jar. This type, which is found in small quantities in most of the Postclassic complexes of Morelos, consists of vessels with black geometric designs painted on a white background. Its origin in the Taxco area of Guerrero is suggested by its abundance in that region (R. Arana and W. Tommasi, personal communications) and the presence of schist temper; the closest schist deposit to Xochicalco is near Taxco.

Red-on-White Jar. This type is present in small sherds with lustrous red-on-white painting. Red-on-White jars are common in the Postclassic ceramics of the Toluca Valley (Tommasi 1978), and these sherds are probably either Toluca imports or fragments of Tlahuica Polychrome jars.

Tlahuica Polychrome Jar. This type consists of jars painted in the Tlahuica Polychrome style. This style, more commonly applied to bowls, employs black and red painting on a white background. Decorative fields are defined and subdivided by groups of two or three thin, parallel black lines. Decorative motifs, in black or red, tend to be simple geometric elements arranged in repeating series. The most common motifs on Tlahuica Polychrome jars are interlocking "S" designs, concentric circles, and checkerboard patterns. Tlahuica Polychrome jars are more abundant in the Teopanzolco ceramic complex of Cuernavaca than at Xochicalco, and the few examples at Xochicalco may represent imports from Cuernavaca. A Tlahuica Polychrome jar rim is illustrated in figure 9.3 (m).

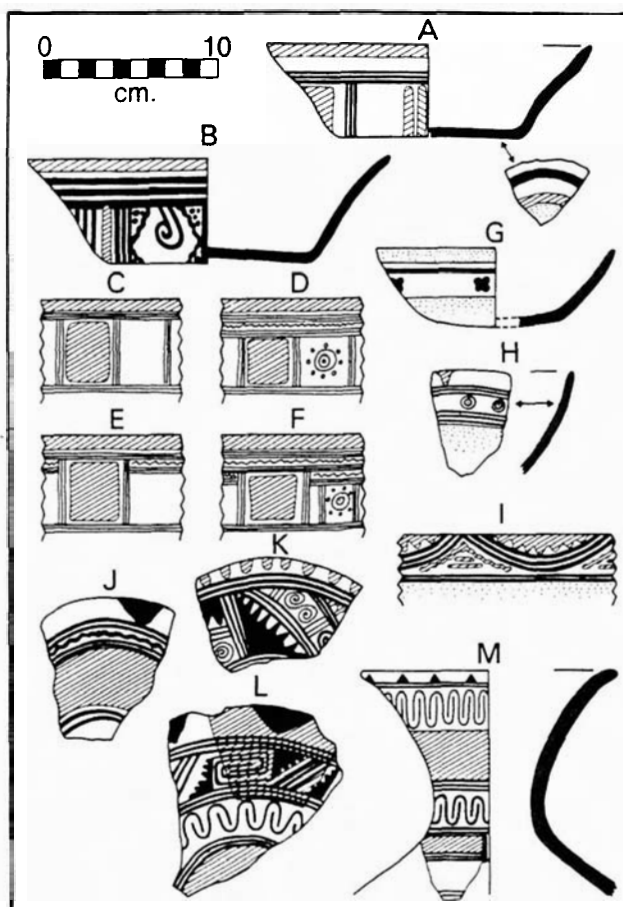


Fig. 9.3. Tlahuica Polychrome bowl and jar types from Xochicalco: (a, b) type B-4; (c-f) design variants of type B-4 bowls; (g) type C; (h) type D; (i) type E; (j) type F; (k) type G; (l) type H; (m) Tlahuica Polychrome jar. In figures 9.3-9.6, colors are represented as follows: red = hatching lower left to upper right; orange paint = hatching lower right to upper left; white, white; black, black; unpainted surface, stippling

Local Decorated Bowls

The most common classes of decorated bowls in all of the Postclassic ceramic complexes of Morelos are *guinda* (polished red ware) and various types of Tlahuica Polychrome. At Xochicalco, Tlahuica Polychrome bowls are represented by type B-4 and by several imported types from the Teopanzolco complex of Cuernavaca.

Red-on-Buff. This is a minor type found in small frequencies in all phases. Two of the four examples from the single Huautli-phase collection resemble the Macana Red-on-Brown type from Tula (Cobean 1990). The low frequencies and small sherd sizes prevent further interpretation of this type beyond the observation that its abundance declines through time (table 9.1).

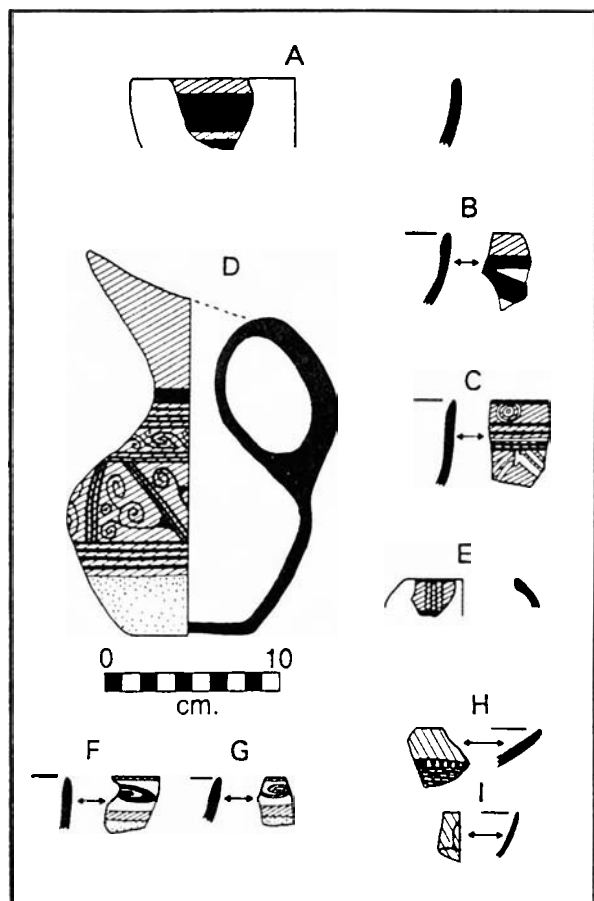


Fig. 9.4. Miscellaneous decorated ceramic types from Xochicalco: (a–c) guinda bowls; (d) guinda pitcher; (e) guinda copa; (f–g) Malinalco Polychrome; (h) Aztec III Black-on-Orange plate; (i) Aztec III Black-on-Orange spinning bowl

Guinda. Guinda, or polished red ware, ceramics are common in Middle and Late Postclassic contexts throughout Central Mexico. The examples from Xochicalco and other Morelos sites resemble guinda ceramics from the Basin of Mexico in paste and decoration (e.g., Séjourné 1970, 1983), but it has not yet been determined whether the guinda ceramics from these areas share a common origin since the limited petrographic research on Morelos Postclassic ceramics by Goodfellow (1990) has not addressed this question. Three guinda bowl sherds are illustrated in figure 9.4 (a–c), along with two special-purpose vessels that also exhibit the guinda paste and finish. Although a few recognizable varieties of guinda bowls have chronological significance (Smith n.d.), a thorough analysis of Central Mexican guinda ceramics would almost certainly discover significant temporal and regional variation within this class.

Graphite Guinda. This type consists of guinda vessels painted with thick zones of black paint that contains high concentrations of graphite, producing a silvery

black color. This type, most common in the Tilancingo phase, is a Middle Postclassic marker. Examples from the Middle Postclassic Tetla complex are described by Norr (1987).

Tlahuica Polychrome Type B-4. Bowls painted in the Tlahuica Polychrome style have been divided into a number of types with geographical and chronological significance. Type B-4 is the most common type in the Middle Postclassic ceramics of Xochicalco and Southwestern Morelos, and in the Late Postclassic ceramics of this area and the Cuemavaca area (Smith n.d.). Type B-4 is defined by painting over the entire exterior wall of the bowl; a red rim band followed by thin black divider lines, and a lower decorative field divided into two to six adjacent zones by vertical dividing lines. Two vessels are illustrated in figure 9.3 (a, b) and the range of variation in decorative zones is illustrated in figure 9.3 (c–f).

Black-Rim Orange. This is a minor type consisting of hemispherical orange-slipped bowls with a black exterior band around the rim. The rim often exhibits traces of fugitive white designs.

Imported Decorated Bowls

The exchange of ceramic vessels among regions was extensive in Central Mexico during the Middle and Late Postclassic periods (Smith 1990). Xochicalco and other Postclassic sites in Western Morelos have yielded ceramic imports from the Basin of Mexico to the north, from Guerrero and Toluca to the west, from other parts of Morelos to the east, and from several other areas (table 9.1). The identification of their places of origin is based upon macroscopic examination of paste and surface finish; in some cases the identifications are secure (e.g., Aztec III Black-on-Orange), while others are tentative (e.g., Wavy-line Red-on-Cream). Petrographic and chemical research on these ceramics is badly needed.

Fine Orange. A single sherd of Gulf Coast Fine Orange ceramics was recovered in the Huautli phase deposit at Xochicalco. Fine Orange ceramics are also present in Postclassic contexts at Teopanzolco and Tepozteco (Smith n.d.).

Toluca Polychrome. Several varieties of polychrome bowls at Xochicalco and other Morelos sites resemble closely the polychrome ceramics of the Postclassic Toluca Valley (Tommasi 1978; García Payón 1941). The most common pattern of decoration has black-on-red (guinda-like) decoration on the interior, and a band of black or red on white around the exterior rim; this occurs on open bowls and plates, often with tripod

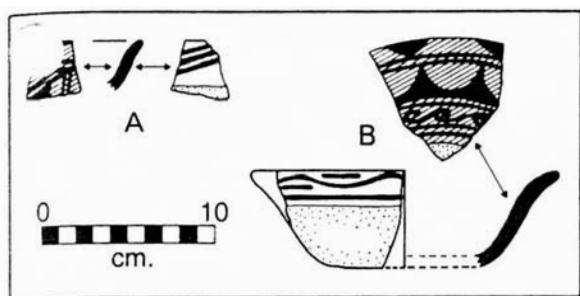


Fig. 9.5. Toluca Polychrome bowls from Xochicalco

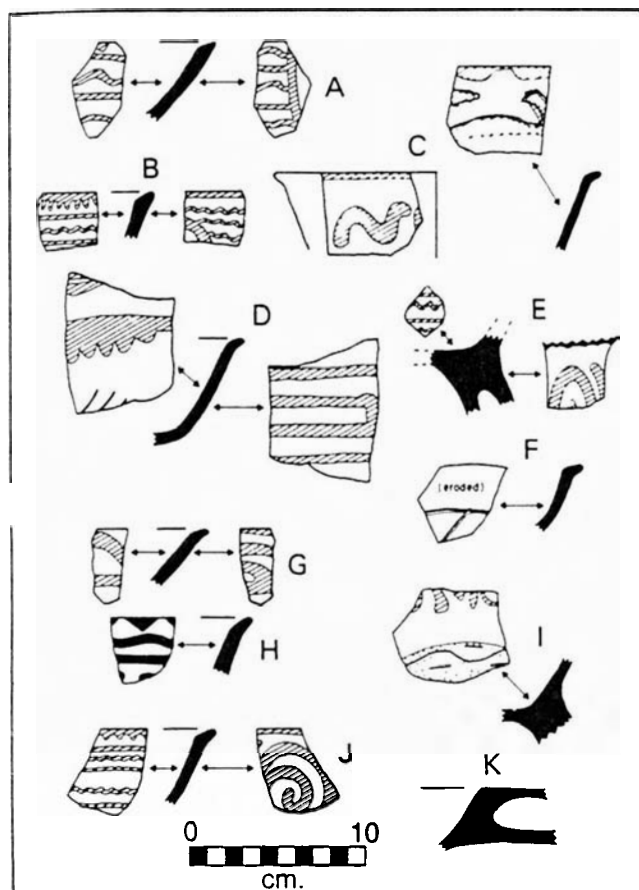


Fig. 9.6. Wavy-Line Red-on-Cream from Xochicalco: (a-j) bowls; (k) ladle-type censer

supports. These ceramics occur almost exclusively in Tilancingo and Temazcalli deposits, with a greater abundance in the former phase (table 9.1). Figure 9.5 illustrates two examples from Tilancingo levels.

Wavy-line Red-on-Cream. This type consists of bichrome bowls decorated with wavy lines, scrolls, and linear motifs. Most examples have red, maroon, or brown signs on an off-white, or cream-colored, slip, with decoration on the interior and exterior surfaces. Some vessels have hollow tripod supports that sometimes occurs with a wavy-line incised pattern on the exterior base (fig. 9.6a-j). The place of origin of these ceramics

is not known, although they are most abundant at and around the site of Tilancingo southwest of Xochicalco. Chronologically, the type duplicates the pattern of the Toluca Polychromes (table 9.1).

Morelos-Puebla Black-on-Orange. This type, present in small quantities at Xochicalco, is common in Middle Postclassic deposits at Tepozteco (Smith n.d.), Tetla (Norr 1987), and other sites in the central-eastern part of Morelos and southwestern Puebla. The vessel forms and painted decoration are identical to Aztec I Black-on-Orange ceramics from the Basin of Mexico (Séjourné 1970, 1983) but in a coarser, softer orange paste quite different from the hard, fine Aztec orange paste.

Aztec I Black-on-Orange. A few sherds of this type occur in Temazcalli deposits at Xochicalco and other sites (Séjourné 1970, 1983).

Chalco-Cholula Polychrome. A few elaborate polychrome sherds occur at Xochicalco and other sites; these resemble both Chalco polychromes (Séjourné 1983) and Cholula polychromes (Noguera 1954).

Teopanzolco Polychrome. The greatest elaboration of the Tlahuica Polychrome style occurs in the Teopanzolco ceramic complex of Cuernavaca, where a number of distinctive polychrome types have been defined (Smith n.d.). Figure 9.3 (h-l) illustrates several of these types, whose presence in Western Morelos is limited to the Temazcalli and Early Cuauhnahuac phases (table 9.1).

Aztec III Black-on-Orange. This distinctive type from the Basin of Mexico is a marker of the Late Postclassic period throughout Morelos; at Xochicalco it occurs in both the Early and Late Cuauhnahuac phases. Two sherds are illustrated in figure 9.4: a shallow bowl or plate (h) and a small spinning bowl (i).

Malinalco Polychrome. This is a polychrome type similar to the Tlahuica Polychrome style with a band of red and black-on-white decoration on the exterior rims of bowls (fig. 9.4f-g). Given its rarity in Morelos and its abundance at Malinalco (Galván Villegas 1984), it most likely represents an import from the latter area (Smith n.d.).

Other Vessels

This category includes ceramic vessels and artifacts that do not fit within the major form classes of bowls, jars, basins, or comals.

Texcoco Fabric-Marked. This distinctive type occurs in vessels used to manufacture and transport salt from the saline lakes of the Basin of Mexico (Parsons 1994).

It occurs in low frequencies in all of the Postclassic ceramic complexes of Morelos.

Ladle-Type Censers. These incense burners are a common component of Middle and Late Postclassic ceramic assemblages throughout Central Mexico (fig. 9.6k). The distinctive variants known as Texcoco Molded and Texcoco Filleted are limited to Cuauhnahuac phase deposits.

Large Braziers. This type consists of large, coarse basins with appliqué and other designs. They were most likely used to burn incense (Séjourné 1970, 1983).

Special-Purpose Vessels. This catch-all category is represented at Postclassic Xochicalco by pitchers, copas, spinning bowls, molcajetes (grater-bottom bowls), and several other rare forms. A complete guinda pitcher (fig. 9.4d) was recovered in burial 3 at terrace T85. Copa sherds are rare at Xochicalco, although many whole examples were excavated in a Cuauhnahuac phase offering at Coatetelco (Smith n.d.). Spinning bowls from Xochicalco and other sites are described in Smith and Hirth (1988).

Nonvessel Artifacts. This class includes primary spindle whorls and figurines, with a few examples of ceramic stamps, whistles, and bells.

THE POSTCLASSIC OCCUPATION OF XOCHICALCO

Hirth discusses the size and distribution of the Postclassic occupation at Xochicalco in volume 1. As he mentions, the chronology of the surface collections is much broader than the seriation-based chronology of excavated deposits, due to the subtle nature of ceramic change within the Postclassic epoch and the small size and eroded condition of the surface collections. In brief, the size of the occupied area at Xochicalco contracted dramatically in the first part of the Postclassic epoch, or the Humo phase (fig. 9.1). A few hundred people inhabited several settlement clusters totaling 16 ha in area. In the Cuauhnahuac phase, the occupied area grew to 72.4 ha with an estimated population of 965 to 2,060 (Hirth, vol. 1, table 5.4).

Cerro Temascal was a focus of settlement in both Postclassic phases, and the excavations described above reveal a continuity of occupation from Gobernador through Late Cuauhnahuac times. The Postclassic occupants reused the Gobernador-phase terraces here, but no Postclassic houses have been located. The Cuauhnahuac phase occupation described by Hirth in volume 1 includes several spatially discrete sites north and east of Xochicalco. Two of these sites, Capilco

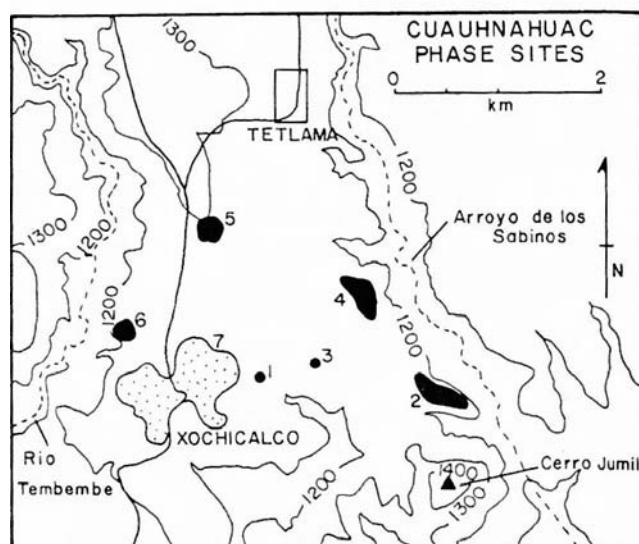


Fig. 9.7. Map of Cuauhnahuac phase sites in the Xochicalco area: (1) Capilco; (2) Cuexcomate; (3) site 3; (4) site XRS-4; (5) El Ciruelo; (6) La Maqueta; (7) Xochicalco

(terrace T117) and Cuexcomate (XRS-3), were later excavated by the Postclassic Morelos Archaeological Project (fig. 9.7).

The prevalence of Postclassic burials at terrace T85 may have larger regional significance. The later excavations at Capilco and Cuexcomate (see below) encountered a number of infant and juvenile burials, but no adults (Smith 1992), whereas the terrace T85 burials contain primarily adults. Thus it is possible that Xochicalco served as a regional burial place for nearby Middle and Late Postclassic communities (K. Hirth, personal communication).

THE REGIONAL ARCHAEOLOGICAL CONTEXT

Apart from settlements in the Epiclassic urban zone itself, there are at least ten Late Postclassic (Cuauhnahuac phase) settlements within 3 km of Xochicalco (fig. 9.7). Most of these were first located by the XMP in 1978, at which time surface collections were made at El Ciruelo, Capilco, Cuexcomate, and other sites. The Postclassic Morelos Archaeological Project, under my direction, then excavated at Capilco, Cuexcomate, and Site 3 (XRS-5). Scott O'Mack mapped several more Cuauhnahuac phase sites to the south and east of Cuexcomate (O'Mack 1991), and Sterpone's (1988) survey of the Buenavista Lomas provides information on additional sites north of Xochicalco. This section briefly summarizes information about these sites and discusses the regional settlement system in the Cuauhnahuac phase.

Cuexcomate (XRS-3) is a 14 ha site with 139 houses spread out along a gently sloping ridge. This site, occupied in the Early and Late Cuauhnahuac phases, is

the largest Postclassic settlement in the area, and it exhibits a number of characteristics of social complexity that led to its classification as a small town. In addition to the numerous small ground-level houses, several large structures raised on platforms indicate the presence of a small elite group at the site, and the architectural distinctions are mirrored by wealth- and status-related differences in domestic artifacts. Craft production was widespread at a domestic level rather than a workshop level (excavated remains point to chert tool manufacture, spinning and weaving of cotton thread, production of bark-cloth paper, and ground-stone tool production). Access to exotic imported items was quite widespread among households. The presence of a moderate-sized temple platform suggests religious rituals that may have involved participants from other communities (where no such buildings have been documented). The sloping sides of the Cuexcomate ridge were covered with agricultural terraces, and a series of check-dams in a small ravine adjacent to the site were also cultivated (Smith 1992; Smith and Heath-Smith 1994; Smith and Price 1994).

Capilco is a small village settlement of twenty-one houses located at the base of Cerro Coatzin. (This site is called terrace T117 in the XMP files.) The site was first settled in the Temazcalli phase, with occupation continuing in Early and Late Cuauhnahuac times. Levels of craft production and access to imports are comparable to Cuexcomate, but the lack of large elevated platform houses argues against the presence of an elite at this settlement. Just north of the site is a small alluvial area with six check-dams. *Site 3* (XRS-5) consists of two houses plus two nonresidential structures in the midst of an area of agricultural terracing. *El Ciruelo* has about fifteen low mounds arranged around two or three formal plaza areas, plus unmapped residential areas now under cultivation. A prismatic blade workshop is located in one of the plaza areas (Sorensen, Hirth, and Ferguson 1989). There is at least one large Cuauhnahuac mound within the modern compact village of *Tetlama*, and traces of Cuauhnahuac occupation are widespread in the village. Additional Postclassic sites are described in O'Mack 1991 and Sterpone 1988.

Western Morelos

Various survey and excavation projects provide information on other Postclassic sites in Western Morelos (fig. 9.8). *Coatetelco* is a Cuauhnahuac phase site in the modern town of the same name. A civic-ceremonial zone at the edge of the modern town includes a small pyramid, a ballcourt, and other buildings arranged around a public plaza. Occupation extends under much of the modern town, and the site may have been as large as 1–4 km². Raúl Arana Alvarez (1984) excavated

several of the large structures plus a number of stratigraphic test pits in the 1970s. Although this was a large and impressive settlement, there is little ethnohistoric documentation, and Coatetelco is not included in lists of city-state capitals in Western Morelos (Gerhard 1970; Smith 1994). Ceramics from Arana's test pits are included in the study of economic change discussed below.

The Cuauhnahuac phase site of *Coatlan Viejo* was a city-state capital (Gerhard 1970) even though it is a far smaller and more modest site than Coatetelco. Mapping and intensive surface collecting by Roger Mason (1980) have shown that the site covered about 14 ha, with a central zone of civic-ceremonial architecture surrounded by dispersed habitation. Mason found no evidence for craft specialization or for the existence of status-linked residential zones or districts.

Coatlan Viejo was first located during Kenneth Hirth's (Hirth 1976) Río Chalma Survey Project (see fig. 9.8). This project encountered many Postclassic sites along the Chalma and Amacusac Rivers, but the small sizes of many of the ceramic collections make the confident phasing of sites difficult. Sterpone's survey (1988) of the Buenavista Lomas north of Tetlama (fig. 9.8) revealed dense Cuauhnahuac phase occupation, but apart from the work at Cuexcomate and Capilco, none of these sites have been studied intensively.

The *Palacio de Cortés* site is in downtown Cuernavaca (ancient Cuauhnahuac) under the sixteenth-century palace built by Hernando Cortés. According to documents discussed in Riley (1973:124–125, n. 29), the conqueror built his residence on the site of the former palace of the *tlatoani* (ruler) of Cuauhnahuac. Jorge Angulo Villaseñor's (1979) excavations in the Palacio buildings encountered a number of stratigraphic deposits from the Teopanzolco (A.D. 1150–1400), Tecpan (1400–1520), and Early Colonial phases. Ceramic collections from several of the Tecpan (Late Postclassic) levels are included in the discussion of economic change below. The site of *Teopanzolco* is a major ceremonial complex of the Middle Postclassic period (Teopanzolco phase) located just northeast of downtown Cuernavaca (Noguera and Piña Chán 1956; Angulo Villaseñor 1976). Imported ceramics from this area are common in Temazcalli and Early Cuauhnahuac deposits in Western Morelos.

THE ARRIVAL OF TLAHUICA POPULATIONS

Although the XMP conducted only limited test-pit operations in Postclassic contexts, the resulting data provide important new information on the nature of changes during the Postclassic epoch. In this and the following section, I discuss two types of Postclassic change in Western Morelos: the arrival of the Tlahuica ethnic group, and economic changes as expressed in artifacts.

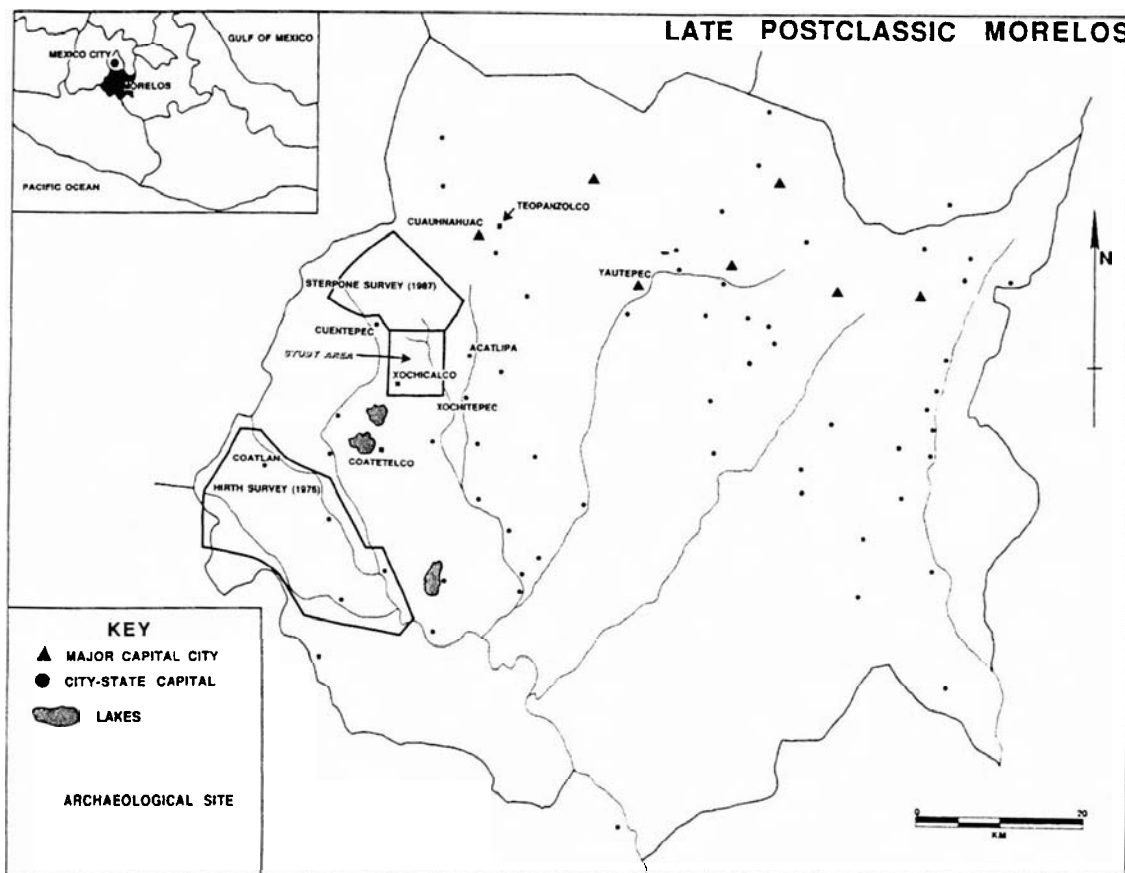


Fig. 9.8. Map of Late Postclassic Morelos showing the locations of sites and surveys discussed in the text. Triangles and circles denote ethnohistorically documented political centers (see Smith 1994)

The Tlahuica were the Nahuatl-speaking inhabitants of Morelos in the sixteenth century. They are listed in Central Mexican native historical accounts as one of the groups who migrated to Central Mexico from the mythical Nahuatl homeland of Aztlan. Comparative analysis of these accounts indicates that the Aztlan migrants, including the Tlahuica, arrived in Central Mexico around A.D. 1200 (Smith 1984). Most Mesoamerican linguists date the initial arrival of Nahuatl-speaking populations in the Basin of Mexico somewhere between the ninth and twelfth centuries A.D. (see Smith 1984:175–176). I have suggested that the Aztlan migrations represent the largest and most significant influx of Nahuatl speakers into Central Mexico, and possibly the initial such migration (Smith 1984).

The most likely language for Xochicalco and Western Morelos prior to the arrival of the Tlahuica is Matlatzinca. Although there is limited archaeological and ethnohistoric support for Matlatzinca as the language of Gobernador phase Xochicalco (Smith 1983:18–21), the strongest evidence is provided by the historical distribution of Matlatzinca speakers. Matlatzinca has long been the dominant native language in the Toluca Valley northwest of Morelos (Quezada 1972), and Matlatzinca speakers were

common in Northeast Guerrero (adjacent to Morelos) in the sixteenth century (the data are reviewed in Smith 1983:21–22). Barlow (1948) has argued for a wide distribution of Matlatzinca in the Upper Balsas area prior to the fifteenth century. Thus historically, Matlatzinca was the closest non-Nahuatl language to Western Morelos, and a few Matlatzinca speakers are reported from Morelos in the sixteenth century (Carrasco 1976:46). Another possible pre-Nahuatl language is Ocuilteca, which is closely related to Matlatzinca. This language has an extremely limited distribution today, being spoken only in the immediate vicinity of Ocuilan, Mexico (adjacent to Northwestern Morelos).

There is no direct ethnohistorical or linguistic evidence for the arrival of the Nahuatl-speaking Tlahuica in Morelos. However, when this event is viewed in the wider context of the arrival of the Aztlan migrants in Central Mexico, an early-thirteenth-century arrival date is suggested. The following section summarizes arguments documented in Smith 1984.

Native historical accounts of the Aztlan migrations are in basic agreement on the relative dates of arrival of three contingents. The first groups (e.g., the Chalca, Acolhua, and Tepaneca) settled in the Basin of Mexico

The next groups to arrive found the basin occupied and moved on to the surrounding highland valleys (e.g., the Tlahuica, Tlaxcalteca, and Coahuixca). Finally the Mexica arrived and settled in a marginal part of the basin. Many independent local historical records provide calendrical dates for the arrival of Nahuatl speakers or the founding of dynasties. These data present the same relative order as the first group of sources, providing arrival dates that average to A.D. 1195, 1220, and 1250 for the basin groups, surrounding valleys, and Mexica. Although no specific historical dates are available for Morelos, the inclusion of the Tlahuica in the second contingent of immigrants points to an early-thirteenth-century arrival date.

Two kinds of archaeological data provide support for the arrival of Nahuatl-speaking populations in Central Mexico in the late twelfth/early thirteenth century. These pertain to changes between the Early and Middle Postclassic periods. First, there is a marked discontinuity in settlement location in the Basin of Mexico at this time (Sanders, Parsons, and Santley 1979:152), and this pattern may also have characterized Western Morelos (K. Hirth, unpublished data). Second, new painted ceramic styles begin in several areas that continue (with stylistic evolution) through the Spanish Conquest, at which time they are associated with the descendants of the Aztlan migrants. The new styles are the Black-on-Orange and guinda styles of the Basin of Mexico; the Black-and-Red on White Polychrome style at Malinalco; and the Tlahuica Polychrome style (in several local variants) and guinda style of Morelos.

As discussed above (see also Smith n.d.), Tlahuica polychrome ceramics first appear in the Temazcalli and Teopanzolco ceramic complexes (fig. 9.1). By the Late Postclassic period, the spatial distribution of Tlahuica Polychrome bowls in Morelos corresponded roughly to the areas said by Durán (1967, 2:22–23) to have been settled by the Tlahuica.

These changes in Morelos and the Basin of Mexico certainly do not prove that the Tlahuica and other Nahuatl-speakers arrived in Central Mexico at the start of the Middle Postclassic period. Nevertheless, the archaeological data are consistent with such a hypothesis, and until we have additional data and better archaeological methods for dealing with ethnic phenomena, I believe that the above associations are reasonable.

POSTCLASSIC ECONOMIC CHANGE

Quantified ceramic data from the Xochicalco excavations, together with comparable data from other sites, provide a view of economic change in Western Morelos between the fall of Xochicalco and the Spanish Con-

quest. Three types of economic measures are considered in this section: the frequency of spinning artifacts as a measure of textile production activities, the frequencies of imported ceramic artifacts as measures of trade and interaction, and a wealth index that serves to assess standards of living and economic prosperity. After a discussion of sites and methods, these three types of measures are discussed in turn, followed by a consideration of general patterns of economic change in Western Morelos. This discussion updates earlier presentations of the Xochicalco data (e.g., Smith 1987a) by considering evidence from a wider range of Postclassic sites.

Sites and Ceramic Quantification

Economic inferences from the Postclassic ceramics of Xochicalco and Coatetelco were published previously by Smith (1987a) and Smith and Hirth (1988). The data in those studies consisted of counts of sherds from well-dated Postclassic contexts. In subsequent research with the Postclassic Morelos Archaeological Project, I have modified earlier methods of ceramic classification and quantification to rely upon estimates of the minimum number of vessels rather than simple sherd counts (Smith and Heath-Smith n.d.). To ensure comparability between the older ceramic studies and the recent work at Capilco and Cuexcomate, I reanalyzed selected sherd lots from Xochicalco, Coatetelco, and the Palacio de Cortés site in 1989 using the new methods. Unfortunately, the pressure of time permitted the reanalysis of only a few ceramic lots, and thus the new data presented here represent a subset of that published earlier. Nevertheless, the economic trends identified for Xochicalco and Coatetelco are the same as those reported in the earlier papers, suggesting that the limited ceramic sample is adequate to monitor economic change.

Table 9.2 lists the archaeological contexts used in the economic analysis. The data for Capilco and Cuexcomate are from excavations of the Postclassic Morelos Archaeological Project (Smith 1992; Smith and Heath-Smith 1994). All ceramics used in this study are from well-phased middens associated with houses. The Cuexcomate deposits are separated into elite and non-elite contexts (see Smith 1992). The Xochicalco ceramics are from the excavations described above. For the Early and Late Cuauhnahuac phases, the vessel estimates from the 1989 reanalysis are used. In contrast, the Tilancingo and Temazcalli data consist of sherd counts, not vessels (these lots were not reanalyzed). Those two contexts, therefore, are not directly comparable to the others, which probably introduces some bias (for most of the ceramic types used in the economic analysis, vessel counts yield higher relative frequencies than sherd counts). The Xochicalco data

TABLE 9.2
Contexts used in economic analysis

Site and phase	Number of contexts	Sherds	Vessels ^a
Xochicalco (XOC) ^b			
Tilancingo	4 excavated levels	497	—
Temazcalli	6 excavated levels	2,413	—
Early Cuauhuahuac	2 excavated levels	1,662	384
Late Cuauhuahuac	1 excavated level	834	220
Capilco (CAD)			
Temazcalli	2 non-elite houses	2,576	774
Early Cuauhuahuac	5 non-elite houses	14,755	2,445
Late Cuauhuahuac	9 non-elite houses	16,173	2,052
Cuexcomate non-elite (CXN)			
Early Cuauhuahuac	3 non-elite houses	1,443	228
Late Cuauhuahuac	22 non-elite houses	7,956	1,160
Cuexcomate elite (CXE)			
Early Cuauhuahuac	4 elite houses	35,354	3,388
Late Cuauhuahuac	4 elite houses	3,832	536
Coatetelco (COA)			
Early Cuauhuahuac	1 excavated level	603	186
Late Cuauhuahuac	1 excavated level	414	191
Palacio de Cortés (PAL)			
Tecpan phase	1 excavated level	458	137

^aThe vessels column lists the total number of vessels as determined by a minimum number of vessels count described in Smith 1992 and Smith and Heath-Smith n.d.

^bThe abbreviations correspond to the labels in figures 9.9–9.11.

are reported by excavation levels, and the contexts contain a mixture of midden and fill deposits. The Coatetelco data are from Arana's test pits in 1976, which probably pertain to middens. The Palacio de Cortés data are ceramics from one level of probable construction fill in a sealed Tecpan phase deposit under the colonial Palacio de Cortés structure.

The data presented in the graphs below are mean figures for the houses or levels in each of the contexts listed in table 9.2; table 9.3 presents the actual quantities. The sites and contexts portrayed by histograms in the graphs are arranged in a series that corresponds roughly to sociopolitical significance: (1) Xochicalco, a small dispersed settlement (Temascal and terrace T85); (2) Capilco, a village; (3) non-elite houses at the Cuexcomate town site; (4) elite houses at Cuexcomate; (5) Coatetelco, a larger and more complex town settlement; and (6) the Palacio de Cortés site, the setting for the palace of the ruler of the Cuauhnahuac polity.

Cotton Spinning

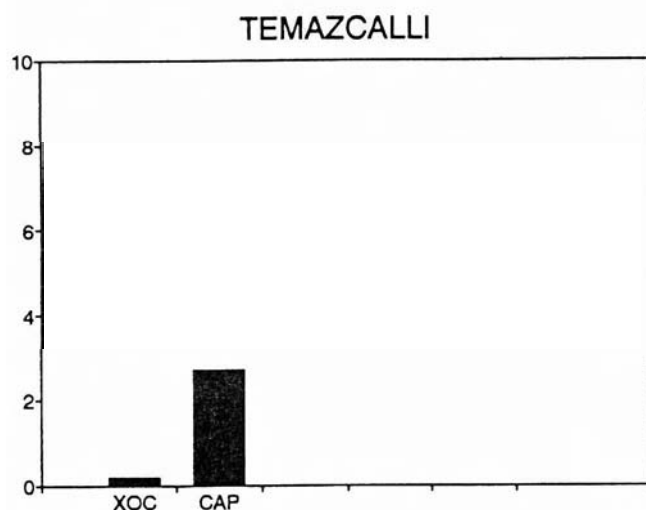
The artifacts used to measure cotton-spinning activities are ceramic spinning bowls and spindle whorls; these artifacts and their functional interpretation are discussed in Smith and Hirth (1988). The small Postclassic spindle whorls used to spin cotton make their first appearance in Tilancingo phase deposits, but none of the quantified sherd lots contain whorls. Spinning bowls are first found in the Temazcalli phase. The frequencies of bowls and whorls in the Temazcalli and Early and Late Cuauhnahuac phases are depicted in figure 9.9 (see also table 9.3). The most dramatic change occurs between Temazcalli and Early Cuauhnahuac times. Frequencies increase at each site, and the mean per phase jumps from 1.5 to 4.5 percent. In contrast, there is little change from Early to Late Cuauhnahuac except at Capilco, where the frequency continues to increase from 5.5 to 8.9 percent of all ceramics.

The data presented in figure 9.9 show that cotton spinning was widely distributed at Postclassic sites

TABLE 9.3
Data for graphs of economic measures

Site	Tilancingo	Temazcalli	Early Cuaunahuac	Late Cuaunahuac
Spinning artifacts				
Xochicalco	—	.2	2.5	2.3
Capilco	—	2.7	5.5	8.9
Cuexcomate non-elite	—	—	8.5	7.7
Cuexcomate elite	—	—	4.8	6.0
Coatetelco	—	—	1.1	2.1
Palacio de Cortés	—	—	—	1.5
Mean	—	1.5	4.5	4.8
Wealth index				
Xochicalco	33.5	21.1	48.7	22.3
Capilco	—	51.4	43.3	37.2
Cuexcomate non-elite	—	—	43.0	34.5
Cuexcomate elite	—	—	62.5	48.3
Coatetelco	—	—	54.3	37.7
Palacio de Cortés	—	—	—	60.6
Mean	33.5	36.3	50.4	40.1
Basin of Mexico imports				
Xochicalco	.8	.2	5.7	.9
Capilco	—	3.0	5.4	6.2
Cuexcomate non-elite	—	—	9.1	7.7
Cuexcomate elite	—	—	10.7	10.0
Coatetelco	—	—	3.2	2.6
Palacio de Cortés	—	—	—	5.8
Mean	.8	1.6	6.8	5.5
Morelos imports				
Xochicalco	.8	2.2	5.8	2.7
Capilco	—	8.6	3.1	1.7
Cuexcomate non-elite	—	—	.3	.4
Cuexcomate elite	—	—	3.0	.9
Coatetelco	—	—	10.2	2.6
Palacio de Cortés	—	—	—	5.8
Mean	.8	5.4	4.5	2.4
Imports from other areas				
Xochicalco	7.4	1.9	.7	.9
Capilco	—	.1	.4	.2
Cuexcomate non-elite	—	—	.3	0.0
Cuexcomate elite	—	—	.9	0.0
Coatetelco	—	—	.5	0.0
Palacio de Cortés	—	—	—	0.0
Mean	7.4	1.0	.6	.2
Sum of all imports				
Xochicalco	9.0	4.3	12.2	4.5
Capilco	—	11.7	8.9	8.1
Cuexcomate non-elite	—	—	9.7	8.1
Cuexcomate elite	—	—	14.6	10.9
Coatetelco	—	—	13.9	5.2
Palacio de Cortés	—	—	—	11.6
Mean	9.0	8.0	11.9	8.1

Note: All figures expressed as the percentage of total vessels or sherds (see text for discussion).



KEY TO SITES:

XOC	Xochicalco
CAP	Capilco
CXN	Cuexcomate, nonelite
CXE	Cuexcomate, elite
COA	Coatetelco
PAL	Palacio de Cortés Site

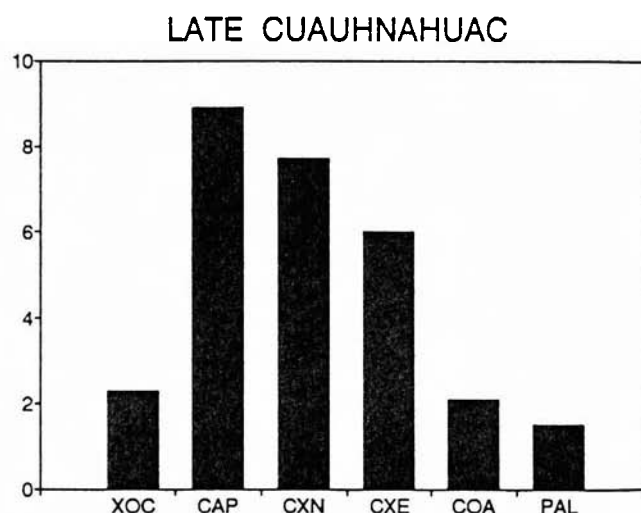
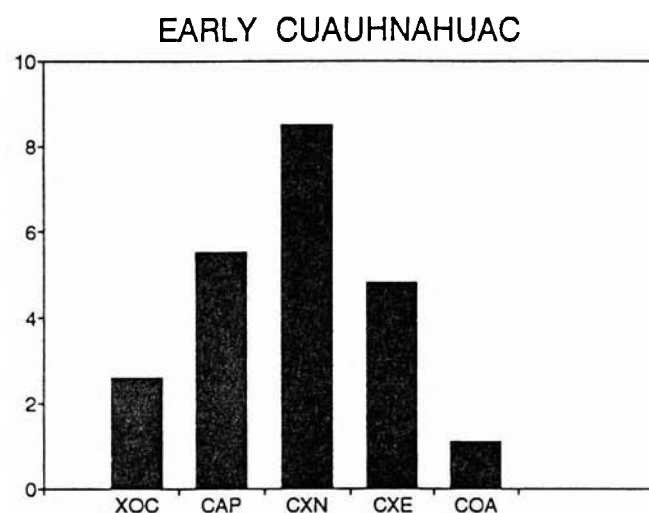


Fig. 9.9. Frequencies of spinning artifacts by phase. Data are expressed as the percentage of total ceramic inventory based upon minimum vessel estimates

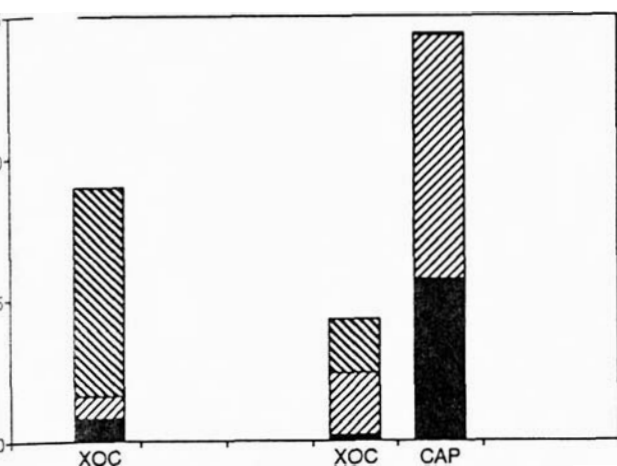
in Morelos. Where data from individual houses are available (Capilco and Cuexcomate), every excavated midden has at least one spinning artifact. At Cuexcomate, both elite and non-elite households practiced cotton spinning, but figure 9.9 suggests a stronger association with non-elite contexts.

Imported Ceramics

The identification of imported ceramics is based upon typology and the principle of abundance (source areas are identified by high frequencies). The limited petrographic work that has been done on these ceramics (Goodfellow 1990) has neither confirmed nor disconfirmed my typological interpretations of trade wares, and more work is urgently needed. Ceramic imports are

classified into three categories: Basin of Mexico, Morelos, and Central Mexico. Basin of Mexico imports were Aztec I and II Black-on-Orange (Tilancingo and Temazcalli phases), Aztec III Black-on-Orange and Xochimilco Polychrome jars (Early and Late Cuauhnahuac phases), and Texcoco Fabric-marked salt basins (all phases). Morelos imports at the western sites include sherds from Cuernavaca, Tepoztlan, Yautepec, and Southeast Morelos. During the Temazcalli and Early Cuauhnahuac phases, polychromes from the Teopanzolco ceramic complex of Cuernavaca predominate at the western sites. During the Late Cuauhnahuac phase polychromes from Cuernavaca and Western Morelos are impossible to distinguish typologically, and thus Cuernavaca imports have not been identified.

TILANCINGO AND TEMAZCALLI



KEY TO SITES:

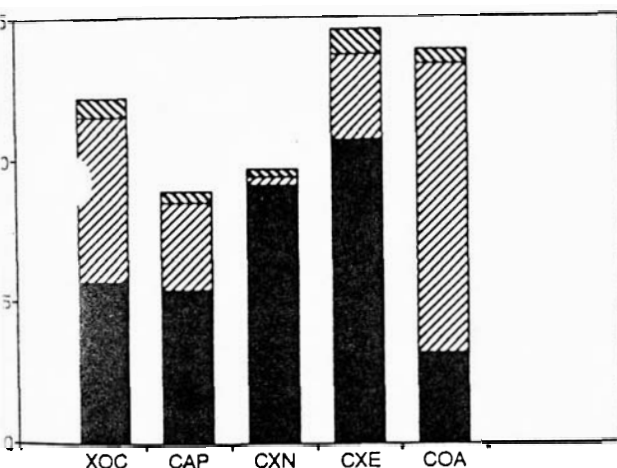
XOC	Xochicalco
CAP	Capilco
CXN	Cuexcomate, nonelite
CXE	Cuexcomate, elite
COA	Coatetelco
PAL	Palacio de Cortés Site

ORIGINS OF IMPORTS:

Central Mexico
Morelos
Basin of Mexico



EARLY CUAUHNAHUAC



LATE CUAUHNAHUAC

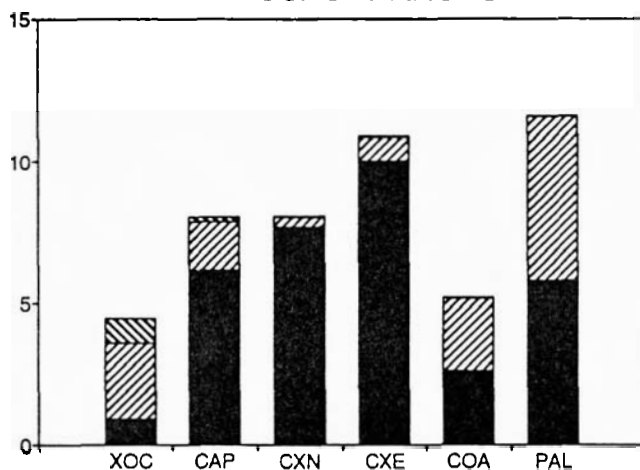


Fig. 9.10. Frequencies of imported ceramics by phase. Data are expressed as the percentage of total ceramic inventory based upon minimum vessel estimates

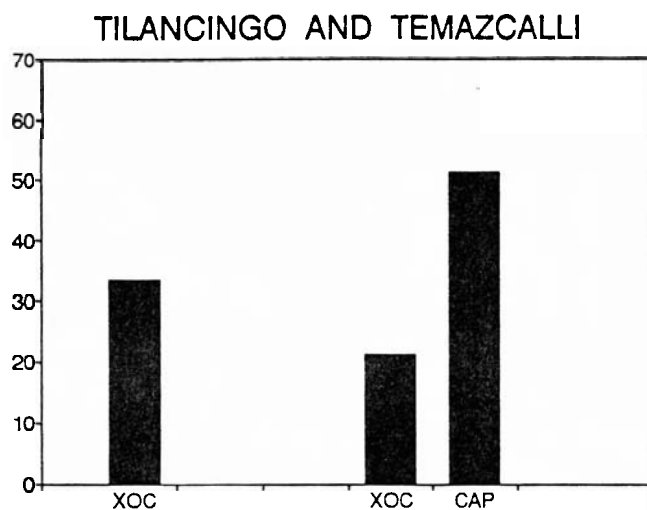
Imports from other areas of Central Mexico include sherds from northeast Guerrero, the Toluca Valley, and Chalco/Cholula polychromes.

In Tilancingo deposits at Xochicalco, most imports are from areas of Guerrero and Toluca to the west. This may represent a continuation of trade relationships from the Gobernador phase, when Xochicalco was more involved with Western Mexico than with the Basin of Mexico (see vol. 1, chap. 9). Western imports remain prominent in the Temazcalli phase at Xochicalco but not at Capilco, and exchange relationships undergo reorientation in favor of Cuernavaca and the Basin of Mexico (Fig. 9.10). Imports from the latter area increase dramatically from a mean of 1.6 percent in Temazcalli to 6.8 percent in the Early Cuauhnahuac

phase. These quantities then remain at a similar level in Late Cuauhnahuac times. Morelos imports gradually decline from Temazcalli through the Late Cuauhnahuac phase, but the latter frequencies may be artificially low because of the typological similarity of polychromes at this time.

Wealth Levels

I have constructed a simple wealth index to examine broad changes in wealth levels and standard of living. This index is defined as the frequency of local decorated ceramics plus two times the frequency of imported ceramics; it can vary from 0 to 200, but in fact most values fall between 20 and 60. The use of this index is based upon comparative data and theoretical



KEY TO SITES:

XOC	Xochicalco
CAP	Capilco
CXN	Cuexcomate, nonelite
CXE	Cuexcomate, elite
COA	Coatetelco
PAL	Palacio de Cortés Site

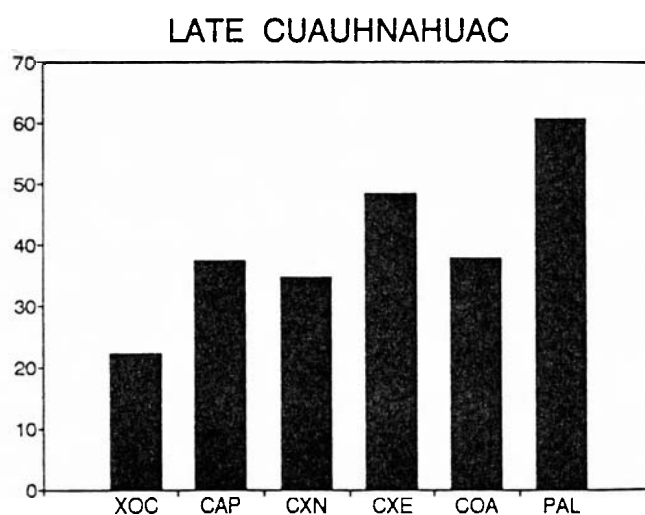
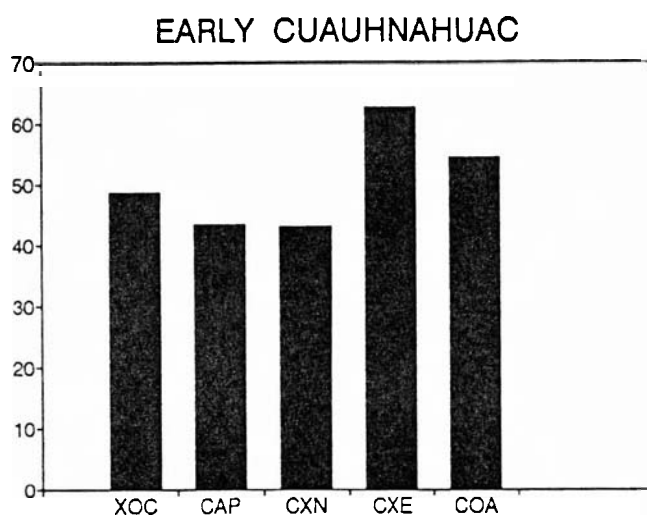


Fig. 9.11. Wealth index values by phase

expectations of the expression of household wealth in preindustrial states. The material and social bases of wealth in Postclassic Central Mexico were landholdings, tribute obligations (both labor and goods), and household labor practices. Decorated and imported ceramics probably constituted only a very small part of overall household wealth, but this kind of artifact often serves as an accurate measure of wealth and standard of living (Smith 1987b).

The low values of the wealth index for Xochicalco in the first two phases (fig. 9.11) is due at least in part to the use of sherd counts rather than vessel estimates for these collections. The values for the Early Cuauhnahuac phase are quite uniform, with only the Cuexcomate elite contexts standing out. In Late Cuauhnahuac, the wealth index for every site declines,

and the highest value is for the Palacio de Cortés site.

The Late Cuauhnahuac decline in the wealth index was dramatic; the phase means (excluding the Palacio site) are 50.4 and 36.0 for Early and Late Cuauhnahuac. This suggests a decline in the standard of living at all of the sites in Western Morelos with data. In Late Cuauhnahuac times, the wealth values are correlated with the sociopolitical scale of sites as one would expect, from the lowest value at Xochicalco to the highest value at the Palacio de Cortés site.

Patterns of Economic Change

Although the ceramic changes discussed above form a limited base for socioeconomic inferences, the fact that many of the patterns are replicated at several sites suggests that they probably do monitor important

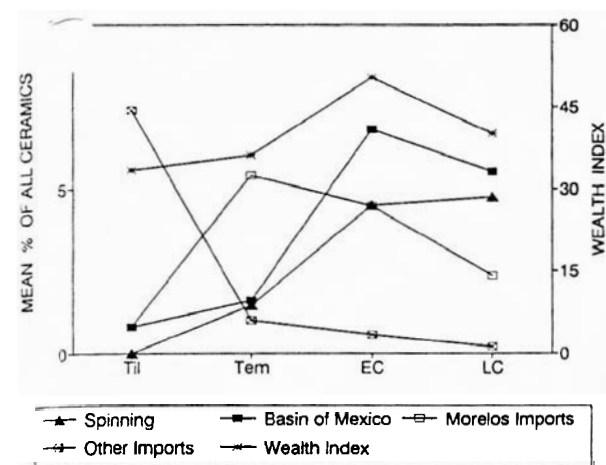


Fig. 9.12. Mean values of economic variables by phase

regional processes of economic change. The overall trends in the three measures discussed above (spinning artifacts, imports, and wealth index) point to a growth cycle of increasing economic prosperity through the Early Cuauhnahuac phase followed by declines in the Late Cuauhnahuac phase. These trends are illustrated by the mean values for all contexts in each phase, presented in figure 9.12. During the first part of the cycle from Tilancingo through Early Cuauhnahuac, textile production increased, overall imports grew, and wealth levels rose as the inhabitants of Western Morelos were drawn increasingly into exchange relationships with the Basin of Mexico and other areas of the Central Mexican highlands. This economic integration with the basin was matched by the active participation of the Cuexcomate elite in long-distance cultural networks of Central Mexican elite groups. The Early Cuauhnahuac period was a time of population growth, colonization of new lands like the Buenavista Lomas, and agricultural intensification in the form of terrace construction and irrigation (Smith 1992, 1994).

In the Late Cuauhnahuac phase, population continued to grow (Smith 1992), but all of the economic measures decline except for cotton-spinning artifacts (fig. 9.12). At Cuexcomate, the Early Cuauhnahuac elite compound was abandoned, and a new, smaller elite compound constructed. In both architectural and artifact terms, differences between elite and non-elite houses at this site were much reduced over Early Cuauhnahuac levels. Although it is difficult to isolate specific causes of the Late Cuauhnahuac regional decline, it appears to be due to a combination of a local demographic-economic crisis in rural Western Morelos

the indirect effects of the Aztec conquest of this area. These indirect effects probably consisted of increased levels of economic and political exploitation at the hands of local polities and the Cuauhnahuac

state (this argument is elaborated in Smith and Heath-Smith 1994).

The fall of the Gobernador phase city and state at Xochicalco was an event of major magnitude in Western Morelos. Although the causes of that fall are not entirely clear (see vol. 1, chaps. 11 and 12), the consequences can be seen in the Postclassic archaeological record. The Xochicalco site itself was transformed from a thriving metropolis to a rural backwater. Small, dispersed populations continued to live at the lower edges of the site, but with little evidence of large architecture. No large influential urban center arose to take Xochicalco's place until the city of Cuauhnahuac expanded in the Middle or Late Postclassic period. The Postclassic occupations at Xochicalco and nearby sites consisted for the most part of small, rural settlements. Nevertheless, they provide important data on the nature of social and economic changes in the old Xochicalco hinterland in the centuries between the fall of the Epiclassic city and the arrival of Spanish conquerors in 1519.

NOTES

1. Alva Ixtlilxochitl (1975, 1:272) describes a "Toltec palace" in Cuauhnahuac that was in ruins in the sixteenth century. Xochicalco would have been the most impressive ruin in the province of Cuauhnahuac in the sixteenth century. The Mexica of Tenochtitlan deliberately drew on the sculptural style of Xochicalco during the period of the Aztec empire as part of their rulers' attempt to portray their legitimacy and continuity with past cultures (Umberger 1987). Also, the Postclassic burials discussed in this chapter may signal a burial ground of regional symbolic importance.

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