12

When Is a City-State?

Archaeological Measures of Aztec City-States and Aztec City-State Systems

MARY G. HODGE

Administrative records and histories of the Aztec empire of central Mexico (A.D. 1430–1521) make explicit reference to political units that are in many ways equivalent to the city-state as defined by Charlton and Nichols in the first chapter of this volume: "small, territorially based, politically independent state systems characterized by a capital city or town and socially integrated adjacent hinterland . . . relatively self-sufficient economically, and perceived as being ethnically distinct." City-states usually occur in groups of polities of roughly equivalent size.

This form of polity is represented in Aztec vocabularies and histories and is depicted in maps and codices. In the Aztec language, Nahuatl, this basic political unit is called *altepetl* (pl. *altepeme*), from the root terms *atl* (water) and *tepetl* (hill), referring to the principal physical attributes defining a Nahua community (Karttunen 1983:9). Place names in Nahua codices emphasize this concept, since the symbol for an *altepetl* is a stylized hill with a name glyph attached (Fig. 12.1). Sixteenth-century Nahuatl dictionaries also convey the central connotations of the *altepetl*. Molina's dictionary of 1571, for example, defines *altepetl* as *pueblo o rey* (town or king) (Molina 1970:4): the Spanish word *rey* (king) is recorded as a synonym of *vey tlatoani, altepetl* (great *tlatoani* [speaker, king]) in Molina (1970:103), suggesting that the idea of the *altepetl* is inextricably associated with the presence of a ruler. *Altepetl* thus encompasses the concepts of settlement, city, state, king, sovereign (*poblado, ciudad, estado, rey, soberano;* Siméon 1971:21).

The term *city-state* has been widely applied to the *altepetl* by anthropologists (e.g., Bray 1972a; Calnek 1978; Charlton and Nichols 1990; Hodge 1984).[1] Bray describes the Aztec city-state polity as "a Mexican city state [that] can be defined as a sovereign territory with its own government and with one or more rulers chosen from a royal lineage" (1972a:164). The Aztec city-state was ideally a defined territory containing a capital or central place and rural dependencies. The urban center or town was the seat of government; it contained the principal temple dedicated to a city-state deity and was a center for market exchange and craft production.

Our knowledge of Aztec-period polities (A.D. 1150–1520) comes from documentary reports and archaeological evidence. In textual sources, the Aztec city-state emerges clearly; an archaeological definition poses a greater challenge. This paper observes Aztec city-states from both perspectives and explores

how Aztec city-states changed over time. I summarize below the central characteristics of the Aztec city-state polity, as portrayed in documentary sources. I then examine archaeological evidence, with an emphasis on the polities' territorial organization, to determine when and under what conditions the Aztec city-state can be identified in the archaeological record. I compare a selection of city-states as archaeological entities at two time periods—the preimperial period, corresponding to the Early Aztec archaeological period, and the imperial period (after A.D. 1430), which starts in the middle of the Late Aztec archaeological period (A.D. 1350–1520)—to identify change in city-states during Aztec times.[2] Finally, I assess the degree to which Aztec-period polities in the Basin of Mexico conform to the generalized definitions of a city-state polity and a city-state system, as formulated in the introduction to this volume.

Aztec City-States: The View from the Documents

Documentary descriptions of Aztec city-states come from Nahuatl chronicles written after the Spanish Conquest; copies of traditional painted books of history, taxation, genealogy, and ritual (see Cline 1973–1975); Spanish accounts by participants in the conquest of the Aztec empire (Cortés 1971; Díaz del Castillo 1956); Spanish friars' accounts (e.g., Durán 1967, 1971; Sahagún 1950–1982); and reports by colonial administrators (for example, Zorita 1963). I summarize below the characteristics of Aztec city-state urban centers based on documentary reports, including urban plans: the urban centers' functions (e.g., market exchange), rulers, political administration, state rituals, and the people and their traditional "ethnic" identities. I then present perspectives from the documentary sources on city-state territories (boundary conventions, settlement hierarchies, confederations of city-states, and the original settlement of city-states).

The Urban Design of Aztec City-State Centers: Tenochtitlán

The Aztec empire's central settlement, Tenochtitlán, nearly monopolizes textual reports. Any discussion of city-states must begin there, since Tenochtitlán's predominance in documentary reports has promoted certain assumptions about other Aztec urban centers.

By about A.D. 1500, Tenochtitlán—centered on an island in Lake Texcoco—housed 200,000–250,000

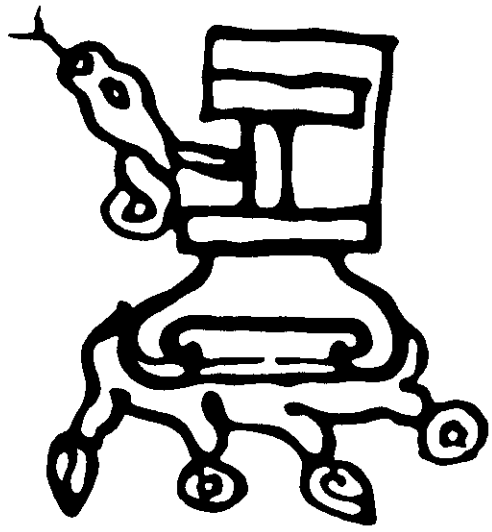

Figure 12.1. A typical place-glyph for an *altepetl.* A sixteenth-century Nahua artist designated the city-state center of Coatlinchán using a symbol for a snake ('*coatl*'), added to the image of a public building and the signs for hill water. Redrawn by R. Richard Rogers from Mapa de Coatlinchán in *Códices de México* (1979).

people and covered an area of 12–15 square kilometers. Its quadriform layout was emphasized by causeways that met at a central plaza-temple-palace complex. The four great sectors of the city were further divided into residential divisions called *tlaxillacalli,* each supporting a temple and civic officials. In the residential sectors, walled compounds composed of separate dwellings were occupied by extended families, each in its own house. Farther outside the center, *chinampa* (raised field) plots produced food for the city (Boone 1987; Calnek 1976; Rojas 1986; Sanders et al. 1979). Located on the same island as Tenochtitlán was the settlement of Tlatelolco. It was conquered by Tenochtitlán in A.D. 1473, and its economy and political organization were thereafter closely controlled by Tenochtitlán's rulers. Between A.D. 1430 and 1500, Tenochtitlán became the political and economic center of the Aztec empire. Tribute collection and its attendant bureaucracy were centered at Tenochtitlán, as was military leadership of the empire. Tenochtitlán controlled the Basin of Mexico's main marketplace at Tlatelolco, and Tlatelolco also housed the central guild of *pochteca* (traders who specialized in sumptuary and extraimperial goods, traded in behalf of the imperial ruler, and obtained information for the empire's ruler on areas where they traded; see Sahagún 1950–1982, Book 9).

Recent comparative research has revealed differences between Tenochtitlán and other Aztec urban centers (Cline 1990; Hodge 1984; Offner 1983;

Schroeder 1991). It now is clear that Tenochtitlán's city plan, its specialized political offices, and its economic complexity were not simply duplicated in other communities and that the majority of Aztec city-states cannot be understood if they are viewed simply as microcosms of Tenochtitlán (Hodge 1984, 1994).

Beyond Tenochtitlán: Documentary Evidence of Other Aztec Cities

City plans

Though each is represented less frequently than Tenochtitlán, many of the nearly forty Aztec period city-state urban centers in the Basin of Mexico are depicted by maps and described in prose documents. Maps painted by Nahua scribes indicate that the commonplace components of city-state urban centers were the central plaza, with civic buildings, temples or shrines, a marketplace, and a *tecpan,* or *tlatoani*'s residence. Residential areas surrounded the ceremonial-civic center; dependent rural communities occupied the territory outside the center. Topographic features such as hills, rivers, or hilltop shrines (Fig. 12.2) defined city-state boundaries (for examples, see the *Santa Cruz Map* [Linné 1948]; *Relaciones geográficas* maps [Acuña 1984–1987; del Paso y Troncoso 1905–1906]; AGN, *Catálogo de Ilustraciones* [1979–1981]). Some plans depict imperial administrative buildings, as in the map accompanying the *Relación de Cempoala,* which shows the imperial administrative-tribute collection building (Acuña 1984–1987). Even the urban organization of Texcoco—the second most important political center in the Basin of Mexico by A.D. 1500—did not mimic Tenochtitlán. It is clear that the palace and perhaps the entire ceremonial center followed a quadriform design (Radin 1920). With 30,000–40,000 inhabitants, Texcoco was the second most populous city in the Basin, but its urban population occupied several irregular sectors or *barrios* (Hicks 1982; Offner 1983). Outside the ceremonial center Texcoco followed a more dispersed plan and lacked the grid-like layout of Tenochtitlán. This less planned, more dispersed layout outside the ceremonial-palace zones seems typical of Aztec city-state centers.

Archaeological evidence supports the generalization based on documents that a nearly constant trait of the Aztec city-state in any period was its central settlement (Sanders et al. 1979). Only a few rich urban centers have been studied intensively by archaeologists, however, since most were covered by colonial-period construction and are now overlain by modern settlements.

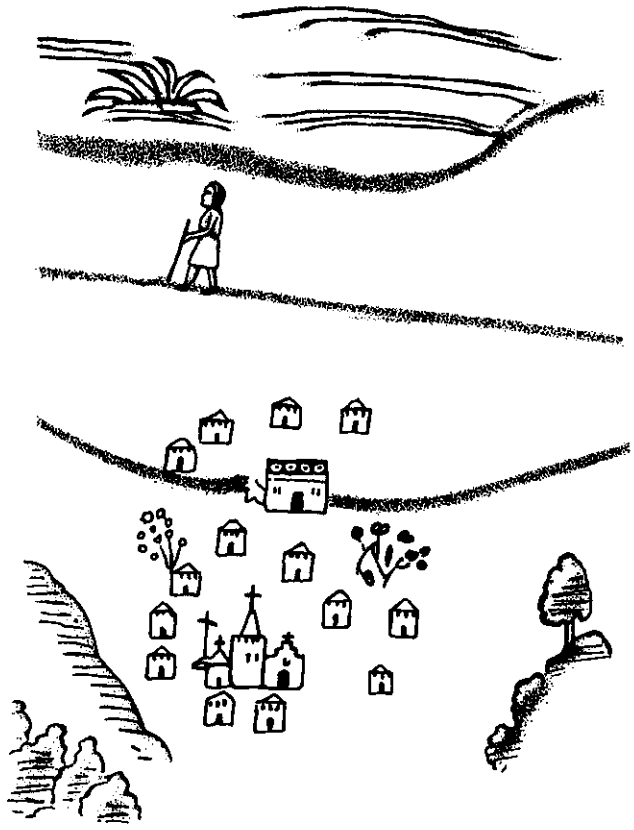

Figure 12.2. Portion of the *Santa Cruz Map* painted in the mid-1500s which exemplifies the layout of an Aztec community in a valley between hills. Here the community of Coatlinchán is shown to contain a public building (located by the road, a flat-topped structure identified by circular decorations and a church (which in Colonial times replaced and often covered the Aztec ceremonial structures). Houses are scattered on the landscape surrounding the public buildings. After Linné (1948). Redrawn by R. Richard Rogers.

City-state society

A major feature of city-state organization was its hereditary ruler, called *tlatoani* (Nahuatl, "speaker"; pl. *tlatoque;* Molina [1970:140] defines *tlatoani* as *"hablador, o gran señor"*). The *tlatoani* was assisted by administrators of the elite class in his leadership, protection, and administration of the *altepetl.* Other specialists included priests and scribes (Carrasco 1977; Hodge 1984). Elites and the state were supported by the commoner class—one chronicler reports that losing the support of commoners signaled the end of a *tlatoani*'s ability to govern (Chimalpahin 1965). Rulers' attempts to attract and retain commoner populations suggest that they were concerned

about commoner labor, a source of wealth (Hicks 1986; Parsons et al. 1982:86–87).

Aztec society, as described in the chronicles, consisted of nobility and commoners. The elite were organized through the "noble house" (*tecpan* or *tecalli*). The head of such a noble house was the *teuctli* ("lord"; pl. *teteuctin*), and his children were *pipiltin* ("noble people"; s. *pilli;* Hicks 1986; Karttunen 1983:195). Commoners were *macehualli* ("subject"; pl. *macehualtin*), but their degree of subjugation and association with the noble houses varies greatly in documentary accounts (see Anderson et al. 1976; Carrasco and Monjarás-Ruíz 1976, 1978; Hicks 1986; Schroeder 1991). Documentary references to craft specialists and traders suggest that these groups formed intermediate social categories (Anderson et al. 1976; Carrasco 1977).

Archaeological research on Aztec-period communities contrasts with the documents' normative descriptions of Aztec social classes. A gradation in economic and perhaps social status seems to have been the case, since domestic architecture and household possessions differ only somewhat between elite and commoner residences (Evans 1988; Smith 1992b). Brumfiel's survey of the urban center of Huexotla shows spatial variation in decorated ceramics, with greater variety in the urban core and less in the rural periphery, suggesting gradations in access to crafts and therefore a gradual decline in wealth from the center to the edges of a city (1976a, 1980).

City-state marketplaces

By A.D. 1500 a regional hierarchy of economic functions created differences among city-states in the Basin of Mexico. Some exchange must have occurred in every community, but official marketplaces operated at different intervals and served different areas (Berdan 1975, 1985, 1987). Markets were held daily, or at five- or twenty-day intervals in accordance with the Nahua calendrical system (Hassig 1982; Hicks 1986:52). Of 38 city-state centers in the Basin of Mexico, 18 had official marketplaces at or near the time of the Spanish conquest (Blanton 1996). Two of these were the major marketplaces that operated daily at Tenochtitlán and Texcoco; they offered the greatest range of goods. The remainder were secondary or tertiary markets.

The relatively regular spacing of the marketplaces conforms to a central-place system, though the marketplace hierarchy's structure and locations were influenced by political contingencies (Blanton 1996; Blanton et al. 1993). Marketplaces as a source of income motivated victorious city-states to take markets and trading specialties from defeated areas (*Anales de Cuauhtitlán* 1975:para. 155–158). Since *tlatoque* acquired income from the fees paid by merchants who traded in the markets, control of marketplaces was desirable (Anderson et al. 1976; Carrasco and Monjarás-Ruíz 1976; Chimalpahin 1965).

City-state territories

Nahuatl documents indicate that boundaries were important, known, and recorded, and Nahuatl dictionaries contain a number of terms relating to boundaries. For example, *altepequaxochtli* refers to *"terminos o mojones de pueblo o ciudad"* (limits or boundaries of a pueblo or city; Molina 1970:4), and *altepetepantli* refers to the limits or boundaries of a city (*"terminos o mojones de la ciudad";* Molina 1970:4). *Quaxochtli* means "end" or "boundary" of lands or cities (*"termino o linde de tierras o de ciudades";* Molina 1970:88). The *Anales de Cuauhtitlán* mentions officials called *quaxochpixque* (border keepers), who governed communities on the borders of Cuauhtitlán (1974:148–149, 180). A town official in charge of land documents within the *altepetl* is reported in colonial documents from Amecamecan in Chalco province (though referred to by the Spanish term *guardapapeles;* see Hodge 1984:41).

In Aztec chronicles, *altepetl* boundaries are denoted in several ways. One is to list communities within a city-state territory. Another convention for delineating the extent of polities is to name boundary points—the communities and topographic features on the edges of a city-state territory. Pictorial representations depict communities, rivers, hills, caves, and other topographic features defining the boundaries of a polity (see, for example, *Anales de Cuauhtitlán* 1974; *Relaciones geográficas* and their maps [Acuña 1984–1987; del Paso y Troncoso 1905–1906]). Since Aztec city-state territories lacked manmade markers that can be identified by archaeologists today, such lists are crucial for identifying city-state territories.

Supra–City-State Organizations

"Tribes" or ethnic groups

Fray Diego Durán reported that the Basin of Mexico was settled by "seven tribes of people [who] went out from Chicomoztoc, the Seven caves" on a migration into central Mexico (Durán 1964:9). He relates how the tribes (the Xochimilca, the Chalca, the Tepaneca,

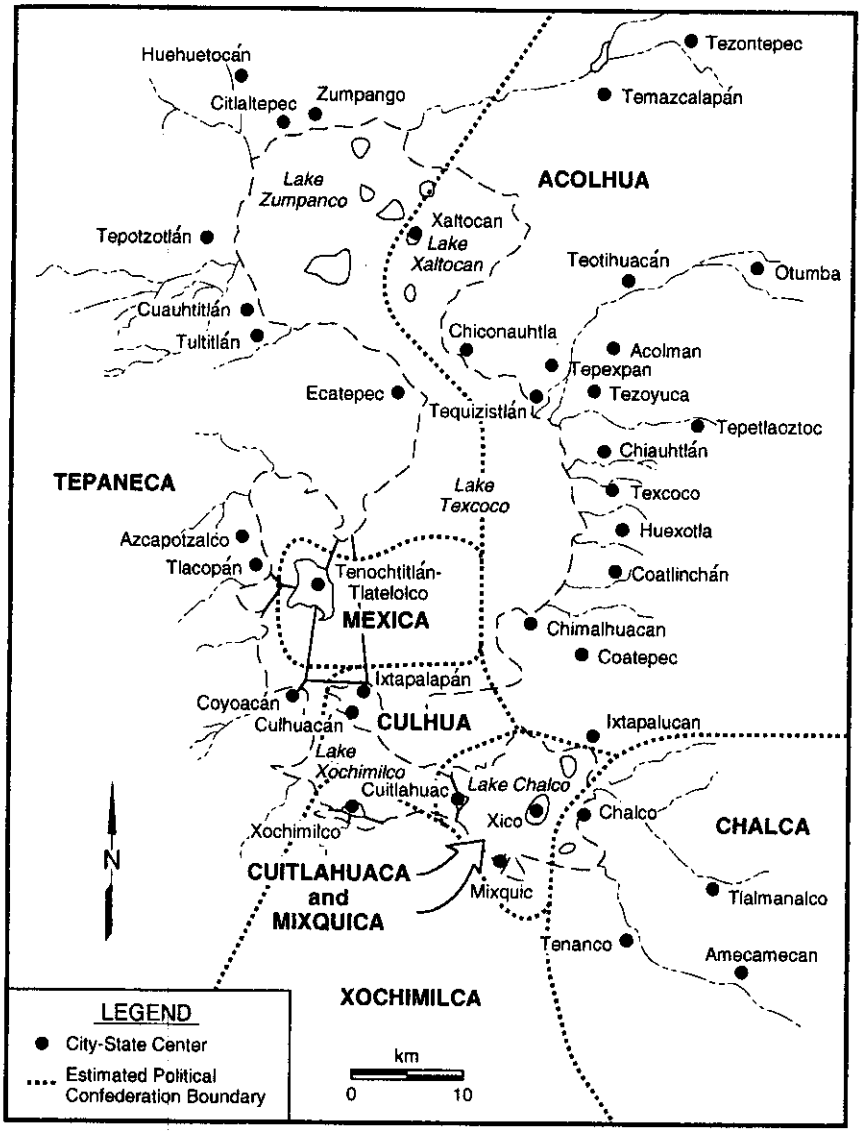

Figure 12.3. Regional city-state confederations in the Basin of Mexico that existed as independent political entities prior to incorporation in the Aztec empire. Drawing by R. Richard Rogers.

the Culhua, the Tlahuica, the Tlaxcallans, and the Mexica) settled in different portions of the Basin of Mexico and the central plateau. By the 1500s, city-state urban centers contained people of different ethnic or tribal identities. Nahuatl predominated in central Mexican city-states, and speakers of Otomí, Popoluca, Matlatzinca or Tepehua are reported in some city-states (Acuña 1984–1987).

Durán proposed a date of A.D. 820 for the Nahua migrations into the Basin of Mexico; however, later analyses of the migration myths and comparisons with dates presented in the chronicles produced a consensus that the settlement of Aztec communities in the Basin of Mexico took place between A.D. 1150–1250 (Smith 1984:170–173; see also Davies 1980; Gibson 1964). Archaeological excavations combined with radiocarbon dating now suggest that some city-states were founded much earlier than traditional histories suggest and earlier than the regional archaeological chronology had predicted (see below).

Confederations of city-states

Some attributes of Aztec city-states can be related to the political structures, history, and identity of regional political confederations (Gibson 1971; Hicks 1986; Hodge, in press). The eight geographically discrete confederations of city-states (Fig. 12.3) that occupied the Basin of Mexico in Early Aztec times became components of the Aztec empire. The Tenochca (Mexica), Acolhua, and Tepaneca confederations formed the regional states of the Triple Alliance, while other confederations (Culhua, Xochimilca, Cuitlahuaca, Mixquica, and Chalca) became provinces subject principally to Tenochtitlán within the empire (see Davies 1973, 1980; Gibson 1964; Hodge, in

press; van Zantwijk 1985). Ethnic and historical traditions contributed to the identity of the regional confederations and provided an explanation for their existence, even as provinces within the empire.

Each regional confederation displayed a distinct style of political organization. The Acolhua confederation's structure was characterized by one *tlatoani* in each city-state. This tradition was institutionalized at the time the Aztec empire was formed (ca. A.D. 1430) as part of a reorganization of the Acolhua confederation by its *tlatoani* ("Chichimeca *teuctli*"), Nezahualcoyotl. In this imperial reorganization, some Acolhua-region city-states were demoted to administered territories governed by *calpixque* (administrators). In contrast, the Chalca confederation was characterized by multiple *tlatoani* offices within a single city-state. After the Chalco region's conquest by Tenochtitlán, the political structure of the Chalca confederation was altered, and *tlatoani* offices were reduced in number. Prior to its conquest by Tenochtitlán and Texcoco, moreover, the Chalca confederation had no institutionalized head city-state: *tlatoque* of different city-states provided leadership at different times. After incorporation into the empire, a provincial hierarchy was instituted in the Chalca region (see Chimalpahin 1965; Hodge 1984; Schroeder 1991).

In the Tepaneca realm, composite city-states (in which one ruler and city governed subordinate city-states and *tlatoque*) emerged prior to its conquest by the Aztec empire. In some cases, the political structure of Tepaneca polities was simplified under imperial rule (best documented in Cuauhtitlán, where regional administrative offices held by Cuauhtitlán elites were eliminated). In other Tepaneca city-states, Mexica administrators, rather than local lords, were placed in *tlatoani* offices or in other administrative positions (Hodge 1984; Hicks 1992).

City-state political organizations were also altered in areas of the Basin controlled closely by Tenochtitlán's rulers (the Culhua, Cuitlahuaca, Xochimilca, and Mixquica confederations). New *tlatoani* offices were added to city-states having a hereditary ruling house (notably Azcapotzalco and Xochimilco), and Mexica nobles were placed in these new offices (Brumfiel 1983; Hodge 1984; Rounds 1979).

Selectivity of Textual Accounts of Aztec City-States

Analyses of central Mexican city-states using community-specific documents have revealed social, economic, and political variation (Blanton 1996; Hicks 1982, 1992; Hodge 1984, in press; Schroeder 1991). The concept of the city-state presented in capital-centric documents obscures the variation that actually existed prior to the emergence of the Aztec empire and prior to the Spanish Conquest. Each city-state, for example, can be characterized as having its own deity and ritual cycle, but city-states incorporated into the empire were required to observe Mexica calendrical rituals. Deity images were taken from conquered city-states to Tenochtitlán, and some of the rituals emblematic of conquered city-states were later performed in Tenochtitlán (Durán 1971; López Austín 1973; Umberger 1996). Diachronic analyses of specific city-state organizations have revealed a process of imperialization in central Mexico that transformed Tenochtitlán (Brumfiel 1983; Rounds 1979; van Zantwijk 1985) and suppressed distinctive characteristics of subjugated societies, as is typical of empires (Brumfiel et al. 1994; Hodge 1984). The recent documentary research on specific city-states and regions suggests that significant variation in city-state structures and development processes will be discovered through archaeological study.

Archaeological Evidence of Aztec City-States

Archaeological data serve as a source of information about aspects of Aztec city-states that are absent from documents. In keeping with this volume's theme, I explore the potential contributions of archaeological research to understanding the structure of city-states and the origins of the city-state system in central Mexico as well as lines of inquiry to which the city-state unit of analysis can contribute. The data presented below are Aztec examples of the issues that this volume compares cross-culturally:

1. City-state areal and population size, along with the methods used to determine them;
2. City-state settlement patterns, economic organization, and political systems;
3. Dates for the emergence of city-states, their persistence and termination;
4. The external relationships of city-states, including their degree of incorporation into more inclusive socio-political-economic units;
5. Observations on the factors responsible for the development of city-states.

The Territorial Organization of Aztec City-States

This section reviews the archaeological evidence of Late Postclassic city-states in the Basin of Mexico, which enables us to observe how the city-state entity—so clearly described in documents—appears archaeologically. I also present findings on how dividing archaeological settlement-pattern data into politically meaningful groups permits identification and comparison of Aztec city-states prior to and during the imperial period.

Information about Aztec city-state polities that complements and supplements the documentary sources is provided by regional surveys of the Basin of Mexico. The surveys have furnished data on settlement sizes, locations, populations, and change over time. An important contribution of the regional archaeological surveys is that they provide comparable data on all or most settlements; documents, on the other hand, do not cover all communities and usually emphasize only the most important centers. Indeed, they often omit data on small and rural settlements.

Regional surveys conducted in the 1960s and 1970s of the Basin of Mexico mapped settlements of the Early Aztec (A.D. 1150–1350) and the Late Aztec (also called the Late Horizon—A.D. 1350–1521) periods (Blanton 1972; Parsons 1971; Parsons et al. 1982; Sanders et al. 1979).[3] The Basin of Mexico presents major problems for archaeological survey because Mexico City and other large communities obscure much pre-Columbian settlement. The surveys mapped as many settlements as could be identified through complete coverage of areas not obscured by modern settlement. The data are strongest for the eastern, southern, northern, and northwestern parts of the Basin, which were less populated than the west and south. In this chapter I employ data from the eastern and southern parts of the Basin (the Texcoco, Ixtapalapa, and Chalco-Xochimilco survey regions) because data from these survey zones have been published in full (Blanton 1972; Parsons 1971; Parsons et al. 1982; Parsons et al. 1983) and because this area is the focus of a regional study of ceramic production, stylistic differences, and exchange (Hodge and Minc 1990, 1991).

The surveys identified and classified Aztec settlements according to size, density of artifact scatters, and complexity of architecture. They revealed that during the Late Aztec period the Basin of Mexico contained approximately one million people (Sanders et al. 1979:12–14, 33–40). At least 500,000 of them lived in urban centers at approximately A.D. 1500, and the other half lived in smaller settlements (Sanders et al. 1979:162).

The ubiquity of Late Aztec occupation presented problems for the archaeological survey. Identifying urban centers was possible, since they are named in documents, depicted on historical and modern maps, and are represented by heavy accumulations of artifacts and architectural remains. Smaller sites were more difficult to define, however.

> We have had one outstanding problem in dealing with Late Horizon rural occupation: much of it is so dispersed that we find it difficult, and sometimes impossible, to define sites according to the same considerations we have applied to other periods—basically, delimiting a discrete spatial cluster of occupational remains, clearly separable from other clusters. . . . There is a very distinct tendency for individual houses, or small clusters of individual houses, to be broadly and continuously dispersed over the landscape. . . . Where we are faced with a sea of scattered mounds and sherd clusters, it has been extremely difficult to define objectively a coherent cluster of occupation to which the label site can reasonably be attached. (Sanders et al. 1979:163–166)

Not only are individual site boundaries indistinct, but the extreme density of Late Aztec settlements makes identification of city-state boundaries difficult as well.

Archaeologists have employed spatial models to define relationships among communities using the regional settlement-pattern data produced by the surveys, and such spatial analyses of settlements and populations have proved useful at the regional scale, if adapted to the terrain of the Basin of Mexico (e.g., Blanton 1996; Evans and Gould 1982; Gordon 1980; Gorenflo and Gale 1990; Smith 1979). However capable of revealing regional structures of economies, transport systems, and so on, such models alone do not help us discern the attributes of individual Aztec city-states. Information from documents, in conjunction with archaeological settlement data, permits Aztec political boundaries to be defined in Aztec terms. Using this direct historical approach, Early and Late Aztec city-state territories and populations can be identified, estimated, and compared.

Identifying city-state territories

I have used information from documents for identifying city-state territories (Hodge 1994) within the

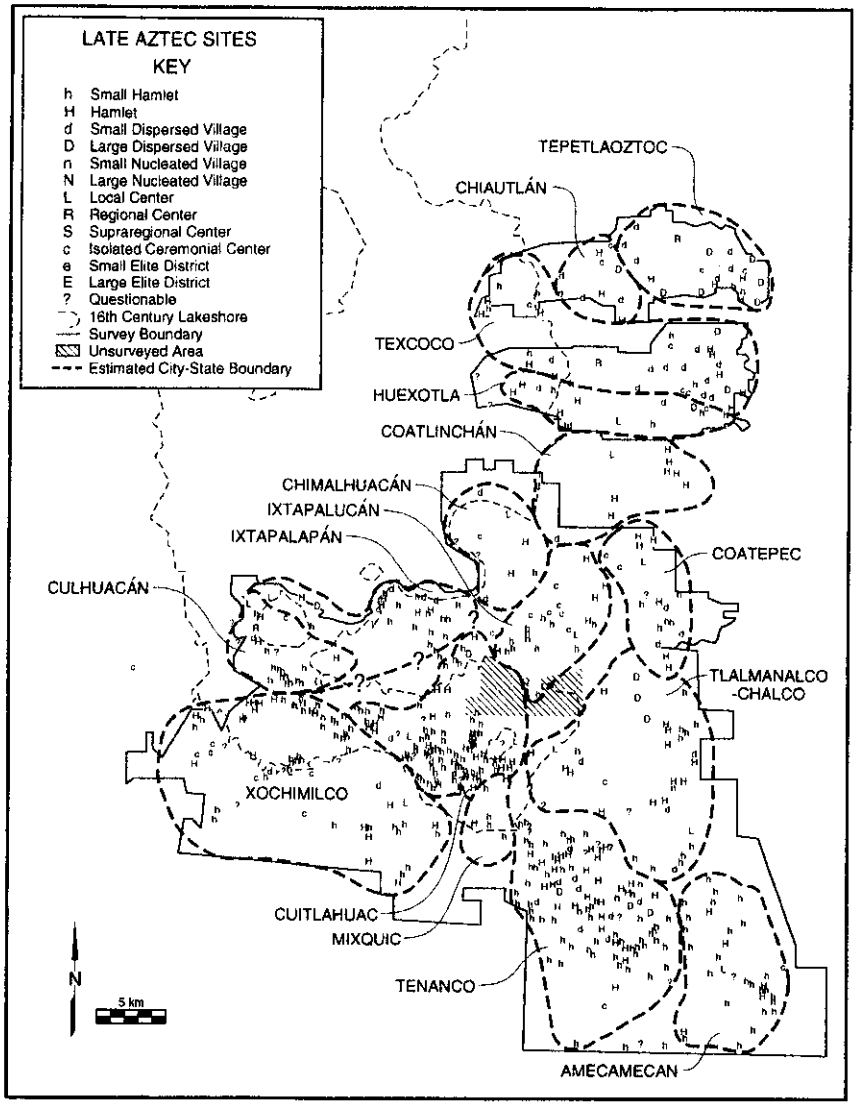

Figure 12.4. City-state territories of the Late Aztec period, identified through use of documentary sources and settlement data from the Texcoco and Chalco-Xochimilco survey regions (Parsons et al. 1983). Base map after Parsons et al. (1983:figure 9). Redrawn by R. Richard Rogers.

nearly uninterrupted expanse of Late Aztec sites in the eastern and southern parts of the Basin, from which regional survey data have been published (Parsons 1971; Parsons et al. 1982; Parsons et al. 1983). My use of the direct historical approach, combined with archaeological settlement data, for the study of Late Aztec polities provided comparable data on the sizes and internal organizations of city-states prior to and during the imperial period (Hodge 1994; the direct historical approach has also been used effectively for identifying the geographic extent of prehispanic confederations, city-states, and early colonial Mexican polities—see Gerhard 1970, 1972; Gibson 1964; Sanders 1970; Trautmann 1968).

By identifying sites that were dependencies of specific city-state urban centers from documents relating to the imperial period and early colonial times, city-state territories can be defined. When archaeological sites are assigned to a city-state, the areal extent of sites provides an estimate of polity size, and the sum of site population estimates provides an estimate of a polity's population. This method permits estimation of the shape, size, and population of city-states. (For a map of the Late Aztec city-states in the eastern and southern part of the Basin of Mexico, see Fig. 12.4.)

Territory form

Figure 12.4 shows that Aztec city-state territories of varied sizes and shapes interlocked around the lakes, attesting to the importance of the Basin of Mexico lakes for transportation and aquatic resources. Categories of city-state territories include valley, hillside, vertical lake-to-piedmont, and lakebed/island polities. Valley systems such as Amecamecan and Tenanco occupy a river valley. A linear, vertical shape characterizes Texcoco, Huexotla, and Coatlinchán, whose territories are long strips extending west

to east from the lakeshore to the highlands. Other city-states—for example, Xochimilco, Mixquic, and Chalco—contain lakeshore and highlands but are less linear. In hillside territories, the city-state center and dependent communities cluster around a slope or the top of a hill (as in Tepetlaoztoc, Ixtapalucan, and Chimalhuacán). Island settlements such as Cuitlahuac (also Tenochtitlán, Xaltocán, and Early Aztec Xico) have a clearly identifiable center, but the association of rural communities with a particular island city-state center is difficult to define, since many rural settlements are simply homesteads on small islands in the lakebed or near *chinampas*.

Chronicles reporting Early Aztec period events make it clear that city-state and confederation boundaries were fluid during the Early Aztec period because of conflicts, conquests, and fission of the communities composing confederations. Spaces between settlement clusters of the Early Aztec period (Fig. 12.5), however, define city-state territories that are similar to the Late Aztec period. Late Aztec territories fill in around Early Aztec city-state centers, suggesting that

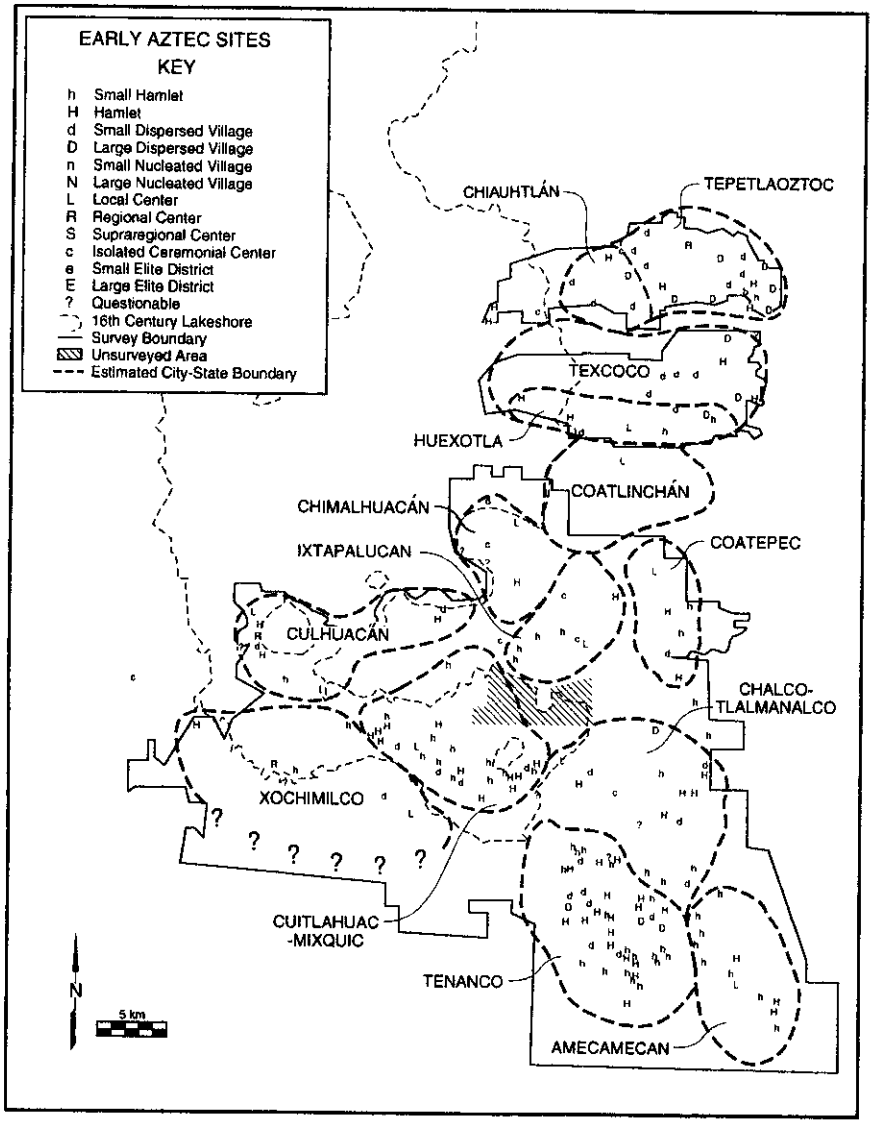

Figure 12.5. City-state territories of the Early Aztec period, identified through using documentary sources and settlement data from the Texcoco and Chalco-Xochimilco survey regions (Parsons et al. 1983). The existence of city-states of the Early Aztec period was established from documentary reports in which each polity operated as a city-state (e.g. had a *tlatoani*) during the Early Aztec period and from dates of settlements in historical chronicles. Territories were identified on the bases of reported dependencies, the location of archaeological sites mapped by the regional surveys, and buffer zones between city-state settlement clusters. Base map after Parsons et al. (1983:figure 8). Redrawn by R. Richard Rogers.

Aztec city-state units were relatively stable. Cases of instability are well documented (see below).

Figure 12.4 depicts the extent of city-state territories as estimated for the Late Aztec period. It is important to note that individual city-state boundaries relating to the imperial period cannot be distinguished everywhere in the Basin of Mexico using the method I have described. We know, for example, that city-state boundaries were changed radically in some areas by imperial and regional state rulers, who altered the territorial integrity of city-states for political purposes. The most outstanding example is the Teotihuacán Valley, where dependent communities of city-state centers were intermingled, apparently to undercut the local support base of *tlatoque* and thus reduce their ability to secede from the state (Evans 1980; Gibson 1964:46; Münch 1976). Pronounced integration of city-state centers and dependent rural areas with the regional state capital, Texcoco, typifies the Acolhua regional state. In contrast, in the Tenochca-dominated areas of the Basin, city-state rulers' control over local dependencies was diminished, with less disruption of territory boundaries. Tenochca rulers tended to assign lands in dependent city-states to support rulers and nobles in other city-states, thus putting the dependent elites' source of economic support outside their home city-state.

By defining Aztec city-state territories as described above, it has been possible to estimate the area, population size, population distribution, and settlement hierarchy of individual city-states. These estimates provide uniform, comparable data on polities in the eastern and southern parts of the Basin. Although representative of only about one-half of the Aztec polities in the Basin of Mexico, the data on this selection of polities helps to identify basic trends in Aztec city-state organization. In the future, when such data are assembled for the Cuauhtitlán-Temascalapa survey region (work in progress by Sanders and Gorenflo) and for the Zumpango region (work in progress by Parsons), a more complete picture of Aztec polities can be constructed.

Comparison of polity size, population, and settlement complexity provide perspectives on city-states not available from documentary accounts (Tables 12.1 and 12.2). I have presented in detail the methodology for identifying Late Aztec city-state territories elsewhere (Hodge 1994). I compare the archaeological evidence of Early and Late Aztec period city-states below.

The Territorial Organization of Late Aztec City-States

Late Aztec polities are compared by political rank, population, and territory size in Table 12.1. Among the fifteen city-states compared, the total polity populations average 12,000 but display a wide range, from an estimated high of 40,430 to a low of 2,026. Urban center populations average 8,000 but range from 25,000 to 1,000—although at least one city-state (Tenanco) in the study region had no urban center (it probably had only elite residential precincts). The same may be true of Chiauhtlán, in which no urban center could be found, though the data remain equivocal for this city-state, since the urban center may be obscured by modern communities.

Territory sizes average 75 square kilometers but vary greatly, from approximately 20 square kilometers to 228 square kilometers; elsewhere in the Basin there may have been city-states as large as 900 square kilometers (Hodge 1984). Territory size does not correlate with political rank, but this is not surprising, in view of documentary reports that politically dominant city-states acquired income, including subsistence goods, as tribute from polities that they conquered (Alva Ixtlilxochitl 1975–1977; Berdan and Anawalt 1992; del Paso y Troncoso 1912).

Table 12.1 shows that high political rank in the Aztec imperial hierarchy correlates with large city-state population size. Texcoco, one of the leaders of the Triple Alliance and a founder of the empire, has the largest population of the city-states compared in this study. Texcoco's ability to sustain such a large populace is credible, since documents report that some of its elites and its palace were supported by tribute received from conquered communities such as Chalco, from other city-states within the Acolhua state, and from *calpixqui*-administered territories in the Acolhua state. Rank 3 and 4 city-states had intermediate population sizes, and Rank 5 polities fall below Rank 3 and 4 in total population.

Inspection of rural-urban population distribution with the city-states shows no correlation to polity size or population (Table 12.3). Recent research by Barbara Williams in Tepetlaoztoc suggests that urban-rural population distribution may be related to land quality and land use (1994).

A significant trend in intrapolity settlement patterns is the relative absence of site-size—and presumably functional—hierarchies within the Late Aztec

Table 12.1
Ranking and Size of Late Aztec Polities in the Eastern and Southern Basin of Mexico

Polity Name and Political Rank	Population					Territory Size (km²)
	Urban Center	Percent	Rural Sites	Percent	Total Population	
Political rank 2						
Texcoco	25,000	62	15,430	44	40,430	117
Political rank 3						
Huexotla	15,000	65	8,405	35	23,405	37
Tepetlaoztoc	13,500	60	8,765	40	22,265	93
Tlalmanalco-	4,000		4,340			
Chalco[a]	12,500	76	730	24	25,570	228
Xochimilco	10,700	75	3,545	25	14,245	164
Chimalhuacán	12,000	96	560	4	12,560	37
Cuitlahuac	4,500	47	4,980	53	9,480	68
Ixtapalapa	2,800	80	2,558	20	5,358	20
Culhuacán	3,250	90	480	10	4,830	20
Mexicaltzingo[b]	1,000					
Political rank 4						
Amecameca	10,000	95	515	5	10,515	55
Tenango	150	2	6,350	98	6,500	143
Political rank 5						
Coatepec	2,500	78	710	28	3,210	46
Mixquic	2,250	82	490	18	2,740	16
Ixtapaluca	1,630	80	396	20	2,026	27

Rank 2 = Regional state center; Rank 3 = City-state center with *Tlatoani*; Rank 4 = City-state center subordinate to a level 3 center; Rank 5 = Center governed by administrator

Sources: Blanton 1972; Parsons 1971; Parsons et al. 1983.

Note: Two city-states in Figure 12.4 are omitted here. Chiauhtlán is omitted because no central settlement could be identified by the archaeological survey. Its territory was about 18 square kilometers and its archaeologically estimated population was 1,790. Coatlinchán's urban center was surveyed and estimated to have contained 5,500 to 11,000 people. Most of Coatlinchán's territory fell outside the regional survey boundaries, however, and as a result, its total population could not be estimated using the archaeological survey and ethnohistorical data.

[a]Since Chalco was governed from Tlalmanalco after the Triple Alliance conquered the Chalco region, Chalco is combined here with Tlalmanalco.

[b]Culhuacán's and Mexicaltzingo's small territories could not be distinguished from one another, so their rural and total populations are combined.

city-states (Table 12.4), suggesting that many functions were performed in the city-state center rather than intermediate administrative centers. Calculating the average distance from farthest dependent community to a city-state center supports the conclusion that city-state urban centers were the principal administrative-economic centers in their territories. The distance between the urban centers and rural communities in the city-states examined in this study averages 7.1 kilometers—a walk that could be made in a few hours—a finding that suggests that tribute payment, performing labor on public works, exchange at a marketplace, or attendance at calendrical and religious ceremonies occurred predominantly in the city-state center. The primacy of urban centers within city-states is also clear in those having a pronounced nucleation of population (in nine polities, the urban population was greater than 75 percent of the total). In other polities, the settlement categories consisted of an urban center and small villages and hamlets. Large villages that might have housed intermediate administrative or economic functions are lacking.

The conclusion based on archaeological data that decision making and other polity functions were cen-

Table 12.2
Ranking and Size of Early Aztec Polities and Confederations in the Eastern and Southern Basin of Mexico

	Population				
Polity Name	Urban Center	Percent	Rural Sites	Percent	Total Population
Acolhua Confederation					
Huexotla	7,500	58	4,650	42	12,150
Texcoco	?	—	13,130	100	13,130
Tepetlaoztoc	6,750	62	4,880	38	11,630
Chimalhuacán	6,000	92	550	8	6,550
Coatepec	1,250	95	70	5	1,320
Ixtapaluca	375	70	160	30	535
Cuitlahuaca-Mixquica Confederation					
Cuitlahuac	3,750	83	755	17	4,500
Mixquic	1,125	85	200	15	1,325
Culhua Confederation					
Culhuacán and Mexicaltzingo[a]	1,625 1,100	79	335	21	3,060
Ixtapalapa	1,400	97	50	3	1,450
Chalca Confederation					
Chalco-Tlalmanalco	6,250	60	4,225	40	10,475
Amecameca	5,000	98	125	2	5,125
Tenango	350	9	3,665	91	4,025[b]

Sources: Blanton 1972; Parsons 1971; and Parsons et al. 1983.

Note: The Xochimilca Confederation is omitted because nearly all Early Aztec sites are obscured by the concrete of modern settlements. The urban center of Xochimilco is estimated at 5,000–10,000 people; surveyable areas suggest that its rural population numbered only 130. Because the data represent a restricted—and therefore unreliable—sample, they provide very inaccurate estimates.

[a]The small, closely packed territories of Mexicaltzingo and Culhuacán could not be differentiated based on current data; thus they are combined here.

[b]Total Acolhua population = 45,315; total Cuitlahuaca population = 5,825; total Culhua population = 4,510; total Chalca population = 19,625. Confederation population estimates are incomplete for Acolhua and Chalca, since they extend beyond the area under study.

tralized is supported by documentary reports of administrative personnel resident in the urban centers and people's attendance at rituals performed at the urban center by the *tlatoani* (Anderson et al. 1976; Carrasco 1977; Carrasco and Monjarás-Ruíz 1976, 1978; *Relación de Huexotla* and other *Relaciones geográficas* in Acuña 1984–1987 and del Paso y Troncoso 1905–1906). Additional support comes from reports that the complexity of intrapolity hierarchies was reduced in some city-states in Late Aztec times by the imperial rulers. For example, in Cuauhtitlán, an intermediate level of administrative offices composed of governors of dependent towns (offices filled by persons appointed by the ruler of Cuauhtitlán) was eliminated after Cuauhtitlán entered the Aztec empire (perhaps to leave more of Cuauhtitlán's income available for imperial taxation). And, as mentioned previously, in Amecamecan-Chalco multiple *tlatoani* offices were reduced in number. In the Chalco region, a provincial administrative hierarchy was created in imperial times, probably to increase control over this rebellious part of the Basin (Hodge 1984, 1991; Schroeder 1991).

The Territorial Organization of Early Aztec City-States

The Basin of Mexico archaeological surveys identified four Early Aztec cities with populations of 10,000–15,000, two on each side of Lake Texcoco. On the eastern side of the Basin were Huexotla and Coatlinchán, balanced by Azcapotzalco and Tenayuca (unsurveyable because it is covered by Mexico City) on the west. All other city-state centers were estimated to have had closer to 5,000 occupants. Communities of various sizes surrounded the city-state centers, and in some instances, there are breaks in occupation that suggest boundaries between territories (Parsons 1974).[4]

Estimates of fourteen Early Aztec city-state territo-

Table 12.3
Percentage of Late Aztec Urban Center versus Rural Communities in the Eastern and Southern Basin of Mexico

		Population Estimates				
Rank	Polity Name[a]	Urban Center Maximum	Urban Center Minimum	Rural Maximum	Urban Maximum Percent	Urban Minimum Percent
2	Texcoco	25,000	12,500	15,430	62	44
3	Huexotla	15,000	7,500	8,405	65	47
3	Tepetlaoztoc	13,500	6,750	8,765	60	77
3	Xochimilco	10,700	5,350	3,545	75	60
3	Chimalhuacán	12,000	6,000	560	96	91
3	Cuitlahuac	4,500	2,250	4,980	47	31
3	Tlalmanalco-Chalco[b]	4,000 12,500	2,000 6,000	5,070	76	61
3	Ixtapalapa	2,800	1,400	2,558	52	35
3	Mixquic	2,250	1,125	490	82	70
3	Culhuacán and Mexicaltzingo[c]	3,250 1,100	1,650 550	480	90	82
4	Amecameca	10,000	5,000	515	95	91
4	Tenango	150	75	6,350	2	1
5	Coatepec	2,500	1,250	710	78	64
5	Ixtapaluca	1,630	862	396	80	69

Rank 2 = Regional state center; Rank 3 = City-state center with *Tlatoani*; Rank 4 = City-state center subordinate to a Level 3 center; Rank 5 = Center governed by administrator

[a]Two city-states in the study area—Chiauhtlán and Coatlinchán—are omitted from these comparisons because much of the area surrounding Coatlinchán fell between regional survey strips and because surveys were unable to detect a political center in Chiautla's territory.

[b]Combined; see Table 12.1, note a.

[c]Urban populations of Culhuacán and Mexicaltzingo are estimated separately, but their very small neighboring territories are combined. Rural population size and settlement patterns are difficult to estimate in areas like Culhuacán, Mexicaltzingo, and Ixtapalapa, where modern settlements cover many prehispanic rural sites.

ries, populations, and settlement hierarchies (Tables 12.2 and 12.5) present a contrasting view of city-states when compared to the Late Aztec data. Though difficult to measure because Early Aztec sites are in the same locations as Late Aztec sites and their remains are greatly outnumbered by Late Aztec artifacts and construction (Sanders et al. 1979), the population size of Early Aztec urban centers averaged 4,000 persons, with a range of 375 to 7,500 persons. Total city-state population size ranged between 535 and 13,130 persons, averaging 6,000. Intrapolity site-size hierarchies are slightly more pronounced during the Early Aztec period than during the Late (Tables 12.4 and 12.5). As mentioned above, there are suggestions in documents that intrapolity hierarchies existing in preimperial times were later suppressed.

Compared to the Late Aztec period, Early Aztec settlement patterns conform more closely to the definition of a city-state posed at the beginning of this chapter: "small, territorially-based . . . with a city and hinterland, . . . relatively self-sufficient" and appearing in "groups of roughly equivalent size." The balance of size, urban center population, and total population characteristic of the Early Aztec period are congruent with documentary reports that the Early Aztec period was characterized by competing polities that formed alliances and regional confederations for protection and aggression. City-states such as Texcoco in the Late Aztec period are better described as regional state centers, if not imperial centers, which achieved great size and wealth through exaction of tribute from dependent polities. In the Acolhua region, for example, former city-states such as Coatepec were reduced to administered territories, presumably releas-

Table 12.4
Settlement-Size Distribution of Late Aztec City-States in the Eastern and Southern Basin of Mexico

Rank	Polity Name	Regional Center	Local Center	Large Village	Small Village	Hamlet	Small Hamlet	Questionable
Acolhua State (core area only)								
2	Texcoco	1	0	3	12	11	7	5
3	Huexotla	0	1	0	2	1	3	0
3	Chiautlán	0	?	1	5	3	0	0
3	Tepetlaoztoc	0	1	7	5	3	2	1
3	Chimalhuacán	0	1	0	0	2	1	2
5	Coatepec	0	1	0	3	4	4	0
5	Ixtapaluca	0	1	0	0	4	13	0
Tenochca Zone (southeast area only)								
3	Cuitlahuac	0	1	1	2	13	53	3
3	Mixquic	0	1	0	1	4	8	1
3	Xochimilco	0	1	0	2	18	37	4
3	Culhuacán and	0	2	0	1	2	11	3
3	Mexicaltzingo							
3	Ixtapalapa	0	1	1	5	5	9	0
3	Tlalamanalco-	0	1	2	4	11	15	0
4	Chalco	0	1	0	1	10	15	8
4	Tenanco	0	0	3	9	22	51	3
4	Amecameca	0	1	0	0	5	21	2
	Total	1	13	15	38	100	212	28

Note: Regional survey site categories for the Late Aztec period are Supraregional Centers (with monumental public architecture and 25,000+ residents); Provincial Centers (with distinct elite architecture, well-defined public architecture, and 1,000–10,000 residents); Large and Small Nucleated Villages (concentrated populations of 500–1,000+ and 100–500, respectively, but minimal public architecture); Large and Small Dispersed Villages (with populations of 500–1,000 and 100–500, respectively, and light surface remains); Hamlets (20–100 people; no public architecture); Small Hamlets (20 or fewer residents), and Isolated Ceremonial Centers (no permanent occupants). For a more complete explanation of site-size categories, see Parsons (1971:21–25) and Sanders et al. (1979:55).

ing the labor and land that might have been used to support a *tlatoani* and his *tecalli,* thereby allowing it to be absorbed as tribute by Texcoco's elites.

Initial Emergence

> Pottery, so dismal to read about, so important in reflecting cultural patterns, tells the story of this process [spread of Aztec culture].
>
> (Vaillant 1966:100)

Although we can compare Early Aztec city-state polities to those of the Late Aztec period and infer their political organization from territory size, population size, population distribution, and internal hierarchy, one question that remains is: When can Aztec city-states be recognized archaeologically? Without the support of imperial and colonial documentation, what features characterize a city-state? Are there such characteristics (as seen in earlier central Mexican city-state systems; see J. Marcus 1989), or like the Aztec empire (Smith and Berdan 1992), are Aztec city-states almost invisible archaeologically?

According to the Basin of Mexico survey findings, Early Aztec settlement locations generally differed from those of the preceding Late Toltec period, characterized by relatively sparse occupation and a tendency for sites to be on top of hills. The Early Aztec settlement preference is for the Basin floor (Parsons 1974), but the Early Aztec occupation nonetheless proved difficult to define because most Early Aztec sites occur in the same locations as Late Aztec sites. Even though the Early Aztec period is represented by different ceramics than Late Aztec, the Early Aztec population was also difficult to measure because Late Aztec sherds on site surfaces greatly outnumbered the Early Aztec ones. The survey found on a Basin-wide

Table 12.5
Settlement-Size Distribution of Early Aztec City-States in the Eastern and Southern Basin of Mexico

Polity Name	Regional Center	Local Center	Large Village	Small Village	Hamlet	Small Hamlet	Questionable
Acolhua Confederation							
Huexotla	0	1	0	1	2	1	0
Coatlinchan	0	1	?	?	?	?	?
Texcoco	0	?	3	6	5	0	1
Tepetlaoztoc	1	0	7	10	3	2	0
Chimalhuacán	0	1	0	0	2	0	2
Coatepec	0	1	0	2	1	2	0
Ixtapaluca	0	1	0	0	1	4	0
Total	1	5	10	19	14	9	3
Cuitlahuaca Confederation							
Cuitlahuac	0	0	2	6	7	1	1
Mixquic	0	1	0	0	1	1	0
Total	0	1	2	6	7	2	1
Xochimilca Confederation							
Xochimilco	0	1	0	1	1	2	0
Total	0	1	0	1	1	2	0
Culhua Confederation							
Culhuacán-	0	1					
Mexicaltzingo	0	1	0	1	1	1	2
Ixtapalapa	1	0	0	0	1	0	0
Total	1	2	0	1	3	1	2
Chalca Confederation							
Amecameca	0	1	0	0	1	5	0
Chalco	0	1	0	3	5	3	5
Tlalmanalco	0	1	3	3	4	6	0
Tenanco	0	0	3	7	14	16	1
Total	0	3	6	13	24	30	6

Note: Based on archaeological data from the eastern and southern Basin of Mexico (Early Aztec period).

See Table 12.4 for a discussion of site typology.

scale that the Early Aztec period sites indicate a smaller population, one estimated at half the Late Aztec population.

The remains of Aztec urban centers, mapped according to sherd scatters and architectural remains, represent material evidence of the existence of Early Aztec sites and polities. To date, the best-known Early Aztec civic-ceremonial centers are at Tenayuca, where twin pyramid-temples were excavated (Noguera 1935), and at Huexotla, where several pyramids and a massive wall are evident (Brumfiel 1976a; García García 1987). From the archaeological evidence, these centers stand out as the most monumental of city-states in Early Aztec times. The archaeological surveys identified other city-state centers of this period that are less well-preserved (Table 12.2; Fig. 12.5). A survey of documentary histories found that all the city-state centers examined in this study reportedly functioned as city-states (e.g., had *tlatoque*, participated in wars, made political alliances, or had marketplaces) by the A.D. 1200s. The exception is Chiauhtlán, which is described as a settlement in the Early Aztec period, but it may not have been a *tlatoani* center until Nezahualcoyotl's reorganization of the Acolhua regional state in the 1430s (see Alva Ixtlilxochitl 1975–1977, 2:89; Alvarado Tezozomoc 1975; *Anales de Cuauhtitlán* 1974; Chimalpahin 1960, 1965; Davies 1980; Durán 1967; Offner 1983).

The Early Aztec period in the Basin of Mexico represents a change in settlement locations from the preceding Late Toltec period. Several large communities were spaced about 20 kilometers apart around the

Basin's lakes (except for a few island cities such as Tenochtitlán, Cuitlahuac, and Xaltocán), and these urban centers were surrounded by smaller settlements (Fig. 12.5). The Aztec communities are "new," in the sense that they do not overlap with the locations of Late Toltec communities. For example, Aztec remains at Chalco are stratigraphically above Toltec remains but appear after a near-abandonment or even a hiatus in occupation, perhaps the result of displacement of the occupants during all or part of the Late Toltec period (Hodge 1993).

Aztec culture is evident in a new ceramic assemblage. According to Smith (1984:178), "In the Basin of Mexico, the Middle and Late Postclassic 'Aztec' orangeware tradition is clearly intrusive, since the component orange paste ceramics have no local antecedents (see Parsons 1966:442–445) and are quite distinct from the Early Postclassic (Tollan phase) orange ceramics of Tula (Cobean 1978)." Smith adds that Aztec occupation is manifested by

> The inception of new ceramic styles or traditions in central Mexico at approximately the same time. These ceramic manifestations continue from their first appearance until the sixteenth century, at which time they are associated with Nahuatl-speaking descendants of the Aztlan migrants. Although the origins of the ceramic styles are uncertain and cannot be traced to a north Mexican hearth, the fact that they first appear in central Mexico close to the historical date of arrival of the Aztlan groups and then continued with evidence of stylistic evolution until the 16th century strongly argues for their association with the Nahuatl immigrants and supports the historical date derived above. (Smith 1984:177–178)

Recent field research has produced information on the timing of Aztec city-states' settlement (via radiocarbon dating of ceramics), based on the assumption that the initial appearance of Aztec ceramics signals the foundation of Aztec communities and city-states. At Chalco, Aztec ceramics (Aztec I Black-on-Orange, Chalco Polychrome and Aztec Red ware) appear at A.D. 1100 (calibrated intercept; uncalibrated A.D. 1010 ±100; Beta-73525), a date close to that estimated in the regional chronology. Other sites show an earlier appearance of Aztec I ceramics. At nearby Ch-Az-195, Early Aztec ceramics appear at A.D. 690 (calibrated intercept; uncalibrated A.D. 640 ±60; Beta-4458) and at Xaltocán at A.D. 880 (calibrated intercept; uncalibrated A.D. 770 ±60; Beta-50317).

Aztec II Black-on-Orange, also associated with the Early Aztec period, appears at Chalco dated ca. A.D. 1240 (calibrated intercept; uncalibrated A.D. 1190 ±90; Beta-57757). At Xaltocán, Aztec II appears at A.D. 1235 (calibrated intercept; uncalibrated A.D. 1130 ±70; Beta-14910). Also in the northern Basin, at Azcapotzalco, Aztec II appears at A.D. 1240 (calibrated intercept; uncalibrated A.D. 1140 ±90; Beta-57759) directly over Coyotlatelco (Early Toltec) ceramics, as at Chalco. At Otumba, in the northeast Basin, the initial Aztec occupation is evident in Aztec II ceramics as well (for more information on the chronology, see Brumfiel 1992; Hodge 1993; Nichols and Charlton 1996; Parsons et al. 1996; Smith and Doershuk 1991).

These dates show that some Aztec city-states are older than previously thought because the initial dating was based on excavations that lacked absolute dates (e.g., Vaillant 1962); others seem to have been founded in the 1100s–1200s, as predicted by the current regional chronology (Sanders et al. 1979).

External Relationships

It is clear that the Aztec empire altered regional confederation relationships and created a hierarchy of political power and economic strength (measured by access to land and labor) in the Basin of Mexico. Economic relationships, especially those focusing on production and exchange, constitute an important area of inquiry to which archaeological research can contribute, and such research can complement documentary reports of a marketplace economy in the Basin of Mexico and the presence of craftspeople in city-states.

Archaeological research shows that craft specialization was present in some city-state centers. Survey data suggest suppression of craft specialization in the Late Aztec period in favor of agricultural production at city-states nearest to the dominant urban centers like Texcoco and Tenochtitlán. In contrast, there is clear evidence that intensive craft production did occur at sites farther from the imperial capital—sites such as Otumba (for a discussion of ceramic, lithic, lapidary, and fiber production at Otumba, see Charlton et al. 1991; Nichols 1994; Otis Charlton et al. 1993; Otis Charlton 1994). Examples of other types of goods produced outside the imperial capitals included fine crafts and ceramic serving dishes (Brumfiel 1987; Hodge 1992; Hodge et al. 1992, 1993).

Exchange patterns shed some light on relations among city-states. Analyses of the sources and distributions of ceramics to identify regional patterns of

exchange have shown that in the Early Aztec period exchange occurred with the greatest intensity among city-states in the same confederation. Less intense exchange took place between city-states of different confederations (Hodge and Minc 1990, 1991). At least one Early Aztec Black-on-Orange ceramic style (Mixquic Black-on-Orange) had a distribution sufficiently localized to characterize city-state boundaries (Minc et al. 1994), but in general, exchange occurred at the supra–city-state or confederation level. For example, Figure 12.6 shows the sites where Chalco Polychrome was recovered at Early Aztec sites during surveys (Parsons et al. 1982) of the area examined in this paper. The greatest concentration of such sites is in the Chalco Valley, and the sites correspond to the area of the Chalco confederation. The Late Aztec exchange of ceramics occurred with greatest intensity at the confederation level despite a regional consolidation of ceramic styles, exemplified by Aztec III Black-on-Orange, which is an archaeological marker

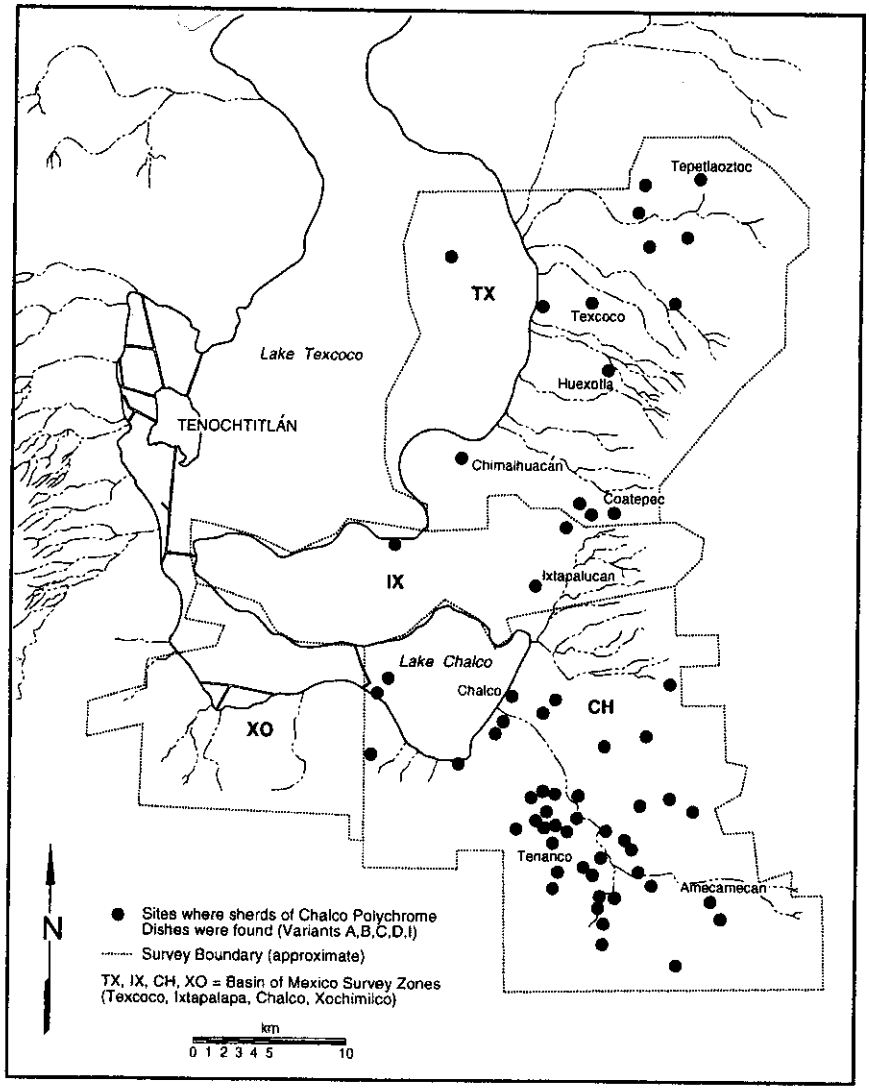

Figure 12.6. Sites in the Texcoco, Ixtapalapa, Chalco, and Xochimilco survey regions (Parsons et al. 1982) where Chalco Polychrome was recovered. Chalco Polychrome is found at nearly every site in the area corresponding to the Chalco confederation, indicating that these politically allied city-states shared a common exchange system as well. Outside this region, it is less frequent, suggesting that communities outside the Chalco confederation obtained it through (different) market systems in which this ceramic was a "trade ware." Of the sites where Chalco Polychrome was recovered, 53 percent are located in the Chalco confederation's territory, 21 percent are in the Acolhua confederation's territory, and the remaining 16 percent are in the Xochimilca, Cuitlahuaca-Mixquica or Culhua confederations. Compositional analyses indicate that Chalco Polychrome was produced in the Chalco region (Minc et al. 1994; Hodge et al. 1992, 1993). Base map after Parsons et al. (1983:figure 8). Redrawn by R. Richard Rogers.

throughout Late Postclassic Mesoamerica of contact with the Basin of Mexico (Hodge 1992; Hodge et al. 1992, 1993). Late Aztec exchange involving specialized, labor-intensive decorated ceramics made in craft workshops operated at the confederation level and sometimes on a regional scale as well.

Ceramics represent only a portion of the Aztec exchange system of course. Spence (1985) concluded that obsidian followed a noncentralized exchange system during the Late Aztec period, suggesting that this product, which had only a few sources, involved a different exchange system than that of decorated ceramic serving dishes, which were made in several cities. Research on clay figurine manufacture may result in the identification of yet another series of economic relationships between Aztec city-states (Otis Charlton 1994). Research focused on city-state economies and the classes of goods that moved through them (such as work in progress by Minc to characterize community-specific ceramic production) is necessary to characterize economic activities at the city-state level.

When Is a City-State Recognizable as an Archaeological Entity?

This comparative study of a selection of Aztec city-states has demonstrated that polities changed over time and that external relationships, including confederation affiliation and incorporation into the Aztec empire, altered their internal organizations. The city-state polity's compact scale—with a political and economic center within a day's walking distance of most communities and a political leadership composed of the *tlatoani, tecalli,* and some administrators—may have contributed to its persistence over time. Aztec city-states, founded by the A.D. 1100s, endured through the Aztec empire (A.D. 1430–1520) and became the administrative units within the Spanish colonial empire (Gibson 1964; Gerhard 1972).

Early Aztec city-states (A.D. 800–1150) were characterized by balanced population sizes, political powers, and economic strengths. Groups of them allied to form regional confederations. In contrast, Late Aztec city-states were part of the Aztec empire's regional political system, and some achieved much greater political power, population size, and wealth than others.

A new era of city-state archaeology has begun in central Mexico, one based on regional surveys that provide a context for the single city-state. Polity-focused studies are acquiring data for diachronic studies of individual city-states, as well as comparative, synchronic studies. In response to the threat to Aztec period archaeological sites near Mexico City from urban expansion, much research is now being conducted in the Basin of Mexico (Brumfiel 1976a, 1991, 1992; Charlton and Nichols 1990; Hodge 1993). In addition, in other regions of the Mesa Central, where construction is impinging on Postclassic sites, research on city-states has also been initiated (McVicker and Urquizo 1991; Neff et al. 1991; Smith and Heath-Smith 1994; de Vega Nova and Mayer Guala 1991).

Some themes in the archaeology of Aztec city-states for which comparative data would be useful to supplement existing studies are: investigation of domestic units, including rulers' houses and elite dwellings as well as commoner residences (for comparison to those by Evans 1991, 1993; Smith 1992b; Smith et al. 1994; Vaillant 1962); studies of Aztec ceremonial activities at the city-state level (following Cook de Leonard and Lemoine 1954–1955); and urban excavations (as at Tlatelolco—see, for example, Arroyo 1990; and analyses of Tenochtitlán—e.g., Aveni et al. 1988; Matos M. 1988). Economic studies at the city-state level of production, markets, exchange, and potential for self-sufficiency would also address issues raised by the comparative study of city-states. The archaeology of social organization and social change is possible at Aztec city-state sites through studies of the archaeological evidence for sociopolitical identities and/or ethnicities (e.g., Brumfiel et al. 1994; Hodge 1992; Otis Charlton 1994).

Summary: The City-State as a Unit for Archaeological Analysis of Aztec Culture

The Aztec city-state, in its different forms over time and space, is clearly evident in documentary accounts that describe the cities and their rulers' lives, actions, and dynasties and the wars and alliances among city-states. Aztec city-states and their confederations claimed distinct identities based on their historical traditions, deities, rituals, and locations. Urban centers show great continuity in location from their founding in Early Aztec times through the Aztec imperial period and on into the present day.

The archaeological picture is different. In its clearest archaeological form, the Aztec city-state is easily recognized, but many identified in documentary accounts are difficult to define from archaeological data alone. The elusive nature of Aztec city-state territorial

units results from the fact that most Aztec city-state centers are difficult to study archaeologically because they are obscured by modern urban settlements and because boundaries between city-states are often not evident from either manmade markers or from the settlement patterns. Until recently, the difficulties in identifying archaeological data at the city-state level led to an emphasis on regional or site-specific studies—for example, studies of Aztec culture using broader or more restricted scales of analysis than the city-state. Combining information from documents on culturally and historically defined territories with archaeological data permits identification and measurement of political territories as the Aztecs defined them. Although the individual Aztec city-state can be an elusive archaeological unit, current research focusing on city-state units is providing new insights into Aztec life.

Notes

1. Some authors have employed terms that emphasize the rulers and political organization—for example, *kingdom* (Schroeder 1991), *petty kingdom* (Brumfiel 1987), *state* (Hicks 1986:41–45), or *town* (Gibson 1964:31).
2. The Early Aztec period is currently defined in the regional archaeological chronology as A.D. 1150–1350 (see below for new data on the beginning of this period). The Late Aztec archaeological period is defined by a regional spread of Aztec III, or Tenochtitlán Phase, Black-on-Orange ceramics, a style perhaps distributed by the short-lived expansionist Tepaneca empire and later by the Aztec empire, A.D. 1430–1521 (Vaillant 1938; Parsons 1966; Smith and Berdan 1992).
3. These time spans begin with the formation of the Aztec city-state system and go through the Aztec imperial period, A.D. 1430–1520. Since the Late Aztec ceramic period emerged prior to the empire, the two periods cannot be used to compare preimperial and imperial-period city-states precisely; however, general comparisons between preimperial and imperial-period conditions can be made and must serve until the ceramic chronology has been further refined.
4. Early Aztec territories were estimated by overlaying the Late Aztec boundaries onto those of the Late Aztec period, if no contradictory data appear in documentary sources. The Early Aztec territories may have been somewhat smaller than Late Aztec ones, but in this study, Early Aztec territory sizes are considered to be in the same locations and about the same sizes as the Late Aztec territories (in the cases where Late Aztec city-states succeed Early Aztec ones) because there is very little detail in the documents on Early Aztec polity boundaries. Documentary reports of border disputes suggest that open buffer zones may have been common. When the Basin's polities were politically unified under the empire in Late Aztec times, spaces between city-states were filled in by new communities.