# Spatial Structure of the Mesoamerican World System









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he spatial extent of the Postclassic Mesoamerican world system corresponds closely to the traditional Mesoamerican culture area as defined long ago by Paul Kirchhoff and others from a specific list of traits (Kirchhoff 1943, 1952). Postclassic Mesoamerican societies interacted with peoples to the north and south, obtaining turquoise from the American Southwest, and bronze technology and perhaps other items from South America and lower Central America. Although this might suggest that the relevant world system included these distant areas, the intensity of economic and stylistic interaction was far higher within Mesoamerica than between Mesoamerican societies and these other groups, suggesting that Mesoamerica is indeed a useful scale of analysis for the Postclassic period. In this chapter we discuss the spatial and functional organization of the Postclassic Mesoamerican world system at a large scale. Aspects of this model will be clarified and extended in the remaining chapters in the book.

# BOUNDING THE POSTCLASSIC WORLD SYSTEM

Mesoamerica traditionally has been interpreted as a culture area, meaning a large geographical area whose cultures exhibit numerous similarities. Although in ancient times Mesoamerica was the home of many diverse peoples, cultures, and languages (e.g., Justeson and Broadwell 1996), they all shared a number of traits. Paul Kirchhoff (1943, 1952) was the first scholar to provide a systematic definition of "Mesoamerica" as a meaningful spatial unit. He compiled lists of traits that Mesoamerican cultures shared with other New World cultures, and traits that differentiated Mesoamerican cultures from their neighbors to the north and south. Although Kirchhoff's list was a mixed bag of economic, religious, and social traits, many of the features pertain to elite cul-

ture. But, in the words of Rosemary Joyce, "the vast majority of [Kirchhoff's] traits diagnostic of Mesoamerican civilization can be seen as expressions of a common high culture propagated by social elites: exclusive practices in cuisine, costume, and building; exclusive and expensive ceremonies; and the creation of historical documents" (Joyce 2000b:66).

Kirchhoff did not provide a map of Mesoamerica, but his spatial definition—a sharp but shifting northern boundary signaled by the limits of maize cultivation, coupled with a southern boundary of more gradual cultural transition-has continued to be followed up to the present day by most scholars (e.g., Blanton et al. 1993; Sanders and Price 1968; Weaver 1993). Although Kirchhoff (1952:19) noted explicitly that his study developed out of the culture-area approach popular in early twentieth-century North American anthropology (Kroeber 1931, 1939; Wissler 1914, 1927), he did not apply the diffusionist explanations for trait distributions that were at the heart of culture-area research (Harris 1968:373-379). In fact, Kirchhoff avoided any kind of explanatory model to account for the distribution of Mesoamerican traits. Other authors did apply diffusionist models to explain the widespread distribution of styles and symbols at certain points in the Mesoamerican past. For the Postclassic period, for example, George Vaillant (1940) defined a "Mixteca-Puebla culture" that diffused, he claimed, from central Mexico to the rest of Mesoamerica. Nicholson (1960) refined Vaillant's model, recasting the Mixteca-Puebla phenomenon as an art style that diffused out from central Mexico in successive waves of influence. Some authors (e.g., Smith and Heath-Smith 1980; see also chapters 23, 24) rejected the diffusionist model for the Mixteca-Puebla phenomenon as part of a more general trend emphasizing the role of exchanges of goods and information in linking the diverse



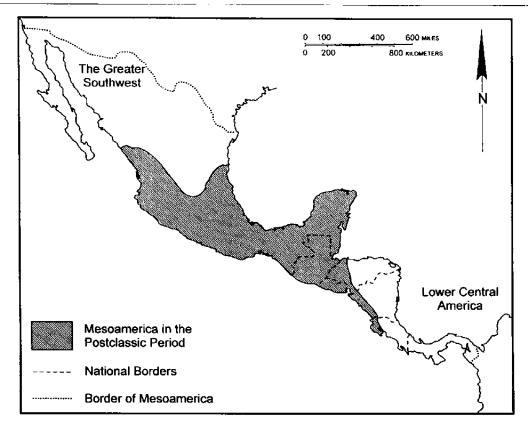


Figure 3.1 Map of Mesoamerica. (Produced by Pamela Headrick.)

regions of Mesoamerica (e.g., Blanton and Feinman 1984; Flannery 1968; Hirth 1984; Schortman et al. 1986; Zeitlin 1982).

During the 1960s and 1970s, as archaeologists focused primarily on local adaptations, there was little research on the definition and nature of Mesoamerica as a unit. With the rise of the world-systems approach in the 1980s (see chapter 2), many scholars redefined Mesoamerica as a zone of economic and stylistic interaction—that is, a world system (Blanton and Feinman 1984; Blanton et al. 1993:219–224; Feinman and Nicholas 1991; Whitecotton and Pailes 1986). We believe that Kirchhoff's initial definition of Mesoamerica is still valid as a descriptive construct (Guzmán and Martínez 1990), but the world-system approach now provides a more adequate explanation for why Mesoamerica looked the way it did in different time periods.

#### **NEIGHBORS TO THE NORTH AND SOUTH**

During the Postclassic period, a number of Mesoamerican polities traded and exchanged ideas with their far distant neighbors to the north and south (figure 3.1). As noted in chapter 1, the Epiclassic and Early Postclassic periods were a time of intensive long-distance interactions throughout Mesoamerica, particularly in coastal regions. A variety of goods were exchanged, and the standardized symbols of the Early Postclassic International symbol set reached a wide area (Foster 1999; Smith and Heath-Smith 1980). This was the time wher metallurgy was introduced to west Mexico from South America (Hosler 1988b, 1994; see chapter 21), and at this time Southwestern archaeological sites (the Pueble period) contained noticeable quantities of Mesoameric trade items such as copper bells, macaws, and other goods that may have been Mesoamerican imports (McGuire 1989; Meighan 1999). Plumbate pottery, on of the key commodities of the Early Postclassic exchan system, was distributed to all parts of Mesoamerica, reaching as far north as Tepic in Nayarit (Kelley 1995) and south into Costa Rica.

After A.D. 1200, interaction between Mesoamericar polities and the peoples of the American Southwest an lower Central America increased dramatically. Not surprisingly, this expansion of exchange and contact with distant areas accompanied the processes of economic a stylistic expansion outlined in chapter 1. Although the long-distance networks might suggest the inclusion of American Southwest and lower Central America within the Mesoamerican world system (e.g., McGuire 1989; Pailes and Whitecotton 1979), we prefer to view them examples of extra-systemic exchanges. The bounding interaction-based units like world systems is never precise and unequivocal, and the much higher volumes of commercial and information exchanges within Meso-

america (as traditionally defined) compared to the external links justifies our model of the spatial extent of the Postclassic Mesoamerican world system. As Kohl and Chernykh note in chapter 37, the integration and boundedness of Postclassic Mesoamerica were far greater than was the case in the central Asian Bronze Age world system.

Mesoamerica and the American Southwest In contrast to earlier speculations that Mesoamerican traits were introduced to the Southwest by Toltec merchants (e.g., DiPeso 1974) most authorities now see these connections running through west Mexico (Foster 1999; Mathien and McGuire 1986; McGuire 1989; Schaafsma and Riley 1999b). This view is strengthened by the fact that the Epiclassic/Early Postclassic period was a time of extensive trade and interaction within west Mexico (Darling 1998; Pollard 1997; Williams and Weigand 1996). Various other explanations have also been offered for long-distance interactions at this time, including smallscale military activities (Nelson n.d.) and the spread of a new religion focused on Quetzalcoatl (Ringle et al. 1998). Whatever the nature of world-system processes before the twelfth century, these patterns of interaction set the stage for continued exchange between Mesoamerican peoples and their distant neighbors during the Middle and Late Postclassic periods under consideration here.

The emergence of the Postclassic Mesoamerican world system in the twelfth century was marked by an expansion of trade and stylistic interaction between Mesoamerican polities and those of north Mexico. Sites on the Pacific coast as far north as Guasave in Sinaloa established links to west Mexico and even central Mexico through both trade and stylistic interaction as part of what Foster (1999) calls the Late Aztatlan tradition, dating to A.D. 1200-1400 (figure 3.2). The impressive urban center of Casas Grandes (Paquimé) reached its maximum size and regional importance at this time, known locally as the Medio period, now dated to A.D. 1200-1400 (Bradley 2000; Ravesloot et al. 1995). Mesoamerican imports at Casas Grandes include worked copper/bronze, macaws, and perhaps worked shell, conch shell trumpets, and pyrite mosaic plaques (Kelley 1995); these and other goods from west Mexico are also found at Hohokam and other sites in the American Southwest (Cobb et al. 1999; Meighan 1999). Turquoise from areas to the north was also abundant at Casas Grandes, which is generally interpreted as a center for exchange between the American Southwest and Mesoamerica (DiPeso 1974; Kelley 1995; Schaafsma and Riley 1999a). A number of Mesoamerican religious concepts may have been present at Casas Grandes, but the evidence is not unequivocal; in any case, the elements of the Late Postclassic international symbol set are not found at this site.

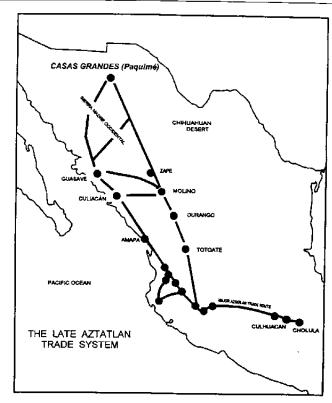


Figure 3.2 Map of the extension of the Postclassic world system into northern Mexico. (From Foster 1999: figure 11.3.)

Foster's map of what he calls the "Late Aztatlan Trade System" (figure 3.2) shows the likely network of exchange reaching from west Mexico up to Casas Grandes (Paquimé). This entire area can be considered a distant periphery of the Mesoamerican world system after the twelfth century. McGuire (1989) argues that the U.S. Southwest had been a periphery of Mesoamerica during the Early Postclassic period, but this label does not fit well after A.D. 1200. Importation of turquoise from the Southwest was important in Postclassic Mesoamerica (Weigand and Harbottle 1993; Harbottle and Weigand 1992), but this is best viewed as extra-systemic exchange rather than core/periphery exchange because of the great distances and low quantities involved, and because of the seeming lack of additional linkages (such as information and bulk-goods networks).1

# Mesoamerica and Lower Central America

The polities of lower Central America engaged in active exchange with Mesoamerican polities throughout the Postclassic epoch. Prior to A.D. 1200 (during the Epiclassic and Early Postclassic periods), polychrome ceramics from Honduras to Costa Rica exhibited the symbols of the Early Postclassic international symbol set, suggesting symbolic interaction with many areas of Mesoamerica (Smith and Heath-Smith 1980). These symbols have been particularly well documented in the Middle

Polychrome period ceramics of the Nicoya region of Costa Rica (Lange 1988; Lothrop 1926). Several authors describe evidence for direct commercial and stylistic contacts between the Nicoya area and west Mexico at this time (Smith and Heath-Smith 1980:28–29; Sweetman 1974).

The two distinctive Mesoamerican ceramic trade wares of this period—Fine Orange from the Gulf Coast and Plumbate from coastal Guatemala—are common at Central American sites (Fahmel Beyer 1988; Neff and Bishop 1988; Rands et al. 1982; Shepard 1948; R. Smith 1958). Other trade wares such as obsidian tools and copper bells are also found at Central American sites (Fowler 1989; Healy et al. 1996; Lange 1986; Sharer 1984). Trade in the opposite direction is indicated by numerous objects of gold from Panama (and perhaps other areas of lower Central America) recovered from Early Postclassic deposits at the Great Cenote at Chichén Itzá (Coggins and Shane 1984; Graham 1996; Lothrop 1952). Several groups of Nahua speakers-including the Pipil and Nicarao—migrated to the Mesoamerican frontier zone of El Salvador during Epiclassic/Early Postclassic times, and Fowler (1989:272-276) suggests that the Pipil engaged in an active trade with Toltec merchants. On the other hand, Smith and Heath-Smith (1980) emphasize that the overall spatial configuration of Mesoamerican exchange at this time points to active coastal trade not strongly controlled by Tula or any other single polity.

The processes of commercial and stylistic interaction between Mesoamerican and Central American polities continued in a modified fashion after A.D. 1200. Whereas lower Central America below Nicoya was less involved with Mesoamerican trade networks, polities from El Salvador to Nicoya showed stronger links to Mesoamerica. The symbols of the Late Postclassic international symbol set continue to be found on the Late Polychrome-period ceramics of Nicoya (Day 1994; Lothrop 1926), and some Central American symbols, including images of gold frogs, were incorporated into the Mixteca-Puebla style, including the Codex Nuttall and Mixtec gold jewelry (Day 1994; Graham 1996; Lange 1986).

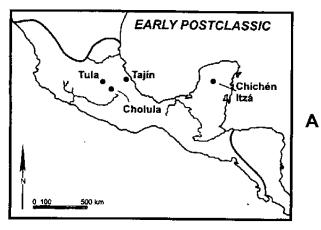
Fewer specific Mesoamerican imports have been reported from Late Postclassic sites in Central America (Late Period VI in the chronology presented in Lange and Stone 1984). Nevertheless, most authors see this as a time of active commercial exchange networks linking Mesoamerica and Central America (Fowler 1989; Lange 1984, 1986; Stone 1982). Fowler (1989:275), for example, emphasizes the role of cacao production for export in El Salvador, and Sharer (1984) points to the large trade canoe encountered by Columbus off the Bay Islands (Edwards 1978; see chapter 1) as exemplifying the long-distance trade that linked the Maya with peoples of the Caribbean coast of Central America. The Pipil of El Salvador maintained their tradition of exchange with

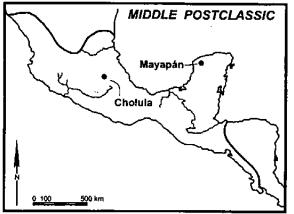
Mesoamerican polities in Late Postclassic times (Fowler 1989:272–276), and documentary sources mention a colony of late Nahuatl-speaking immigrants as far away as Atlantic Panama who maintained an active trade with "Indians from Mexico" (Lothrop 1942). As in the case of the American Southwest, we acknowledge these links between Mesoamerica and Central America as important processes that had impacts on larger world-system dynamics, but prefer to view them as extra-systemic exchanges between the Mesoamerican world system proper and the external polities of Central America because the mutual impact of these exchanges appears to have been relatively small.

#### SPATIAL COMPONENTS OF THE WORLD SYSTEM

As noted in chapter 2, the traditional units of worldsystem theory—cores, peripheries, and semi-peripheries —do not adequately model the spatial organization or the dynamic processes of the Postclassic Mesoamerican world system. Compared to prior models of ancient and modern world systems, we see a greater diversity of interactions among regions (including stylistic and well as economic exchange) and a greater diversity of functional roles for the individual regions that composed the Postclassic world system. In order to address this diversity, we employ the following set of functional and spatial concepts. Core zones correspond to some prior definitions of world-systems cores (see chapter 2), but without the connotation that cores must dominate peripheries. Our concept of core zones emphasizes high populations, concentrated political power, and urbanization. We introduce the new concept affluent production zone to describe areas of high economic production and the generation and accumulation of wealth, but without the same level of political centralization and urbanization as cores. Functionally these areas are closer to cores than to peripheries in traditional world-systems models, and the areas we designate as affluent production zones have been variously included as cores, peripheries, and semiperipheries in past studies (Blanton et al. 1992; Carmack 1996; Schortman and Urban 1996; Whitecotton and Pailes 1986).

We divide other areas traditionally classified as peripheries (or semi-peripheries) into three categories. Resource-extraction zones are areas where important raw materials were mined or obtained, whether by local residents or foreigners. Unspecialized peripheral zones were areas whose inhabitants participated in the processes of the world system, but at lower levels of economic and political activity; these include many of the sparsely populated, rugged mountainous regions of Mesoamerica. Contact peripheries describe distant areas—such as Casas Grandes and the American Southwest, and lower Central America—that exchanged goods





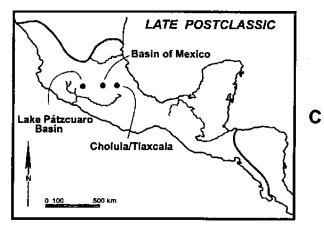


Figure 3.3 Map of Postclassic core zones through time. (Produced by Pamela Headrick.)

and information with the polities of Mesoamerica, but were outside of that world system proper.

We also consider a larger spatial scale and define exchange circuits. These are large systems within which the movement of goods and ideas was particularly frequent and intensive; they correspond to Abu-Lughod's (1989) use of the term "subsystem." International trade centers were cities or towns heavily involved in long-distance exchanges. One of their primary roles was as entrepôts or

gateways linking various exchange circuits with other parts of the world system. Finally, *style zones* describe large areas characterized by distinctive Postclassic art styles; these tend to crosscut the economic units defined above. The rest of this chapter is devoted to a discussion of these concepts and their distributions in Postclassic Mesoamerica. Additional details can be found in the succeeding chapters of the book.

#### **CORE ZONES**

As discussed in chapter 2, our notion of core zone is somewhat different from the various definitions found in the world-systems literature. In our usage, cores are areas of high populations and concentrated political power. These features lead to urbanization (typically including major investments in monumental architecture) and to a high demand for luxury goods by core-zone elites. It is important to note that levels of economic and intellectual production are not necessarily higher in cores than in other areas, although artistic production of large public objects such as architecture and sculpture is often concentrated in cores. We have identified several core zones for the Early, Middle, and Late Postclassic periods (figure 3.3).

# Early Postclassic

В

Although our focus is on the Middle and Late Postclassic periods, it is important to understand the Early Postclassic situation out of which the Late Postclassic world system evolved. Early Postclassic core zones include Chichén Itzá, El Tajín, Cholula, and Tula. Chichén Itzá was the center of a powerful polity, probably a small empire, and its monumental architecture is among the most impressive in ancient Mesoamerica (Andrews 1990b; Kepecs et al. 1994; Schele and Mathews 1998; Tozzer 1957). El Tajín was an impressive urban center in the Epiclassic and Early Postclassic periods whose artistic style was highly influential over large parts of Mesoamerica (Brüggemann 1994a, 1994b; Castillo Peña 1995). Cholula was a major political capital in central Mexico during the Classic and Postclassic periods, but its interval of maximum power was probably the Early Postclassic period, when its huge pyramid, the largest in Mesoamerica, was built (Marquina 1964; McCafferty 1996a, 1996b). Tula was another large central Mexican urban center with impressive architecture (Fuente et al. 1988; Diehl 1983; Healan 1989; Matos Moctezuma 1974). Although not the capital of an empire, as some have claimed (see Smith and Montiel 2001), Tula ruled a powerful regional state just north of the Basin of Mexico.

# Middle Postclassic

We have identified only two core zones for the Middle Postclassic period. In Yucatán, Mayapán took over from Chichén Itzá as the major political capital. Although a

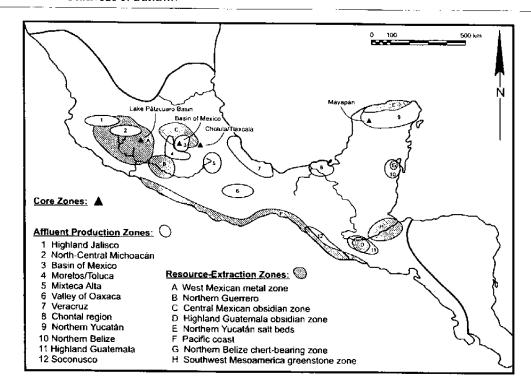


Figure 3.4 Map of affluent production zones, resource-extraction zones, and unspecialized peripheries in the Late Postclassic period. The Basin of Mexico was transformed from an affluent production zone in the Middle Postclassic period to a core zone in the Late Postclassic period. (Produced by Pamela Headrick, from base maps compiled by Timothy S. Hare.)

more modest city and polity than its predecessor, Mayapán was large and powerful enough to qualify as a core zone (Pollock 1962; Roys 1972; Masson 2000a; see chapter 5). In central Mexico, the Cholula/Tlaxcala region can be considered a dispersed core zone. Cholula remained an important urban center, and a number of new and powerful Nahua polities emerged nearby. These polities were based in relatively small and dispersed urban centers compared to most other core zones (see chapters 10 and 22). Although the Aztec city-states in the Basin of Mexico and Morelos were growing in size and strength at this time, we feel that they were not yet sufficiently powerful to warrant calling those areas core zones.

# Late Postclassic

Mayapán continued to thrive into the first part of the Late Postclassic period, but after its fall around 1450, no comparable core zone developed in Yucatán (Masson 2000a). Cholula/Tlaxcala remained a core zone, and the Basin of Mexico emerged as a new and powerful core at this time. As the seat of the Tepanec empire (ca. 1370–1428), followed by the Aztec empire (1428–1519), the Basin of Mexico contained the largest cities and most powerful polities of Late Postclassic Mesoamerica (see chapters 9 and 30). The Lake Pátzcuaro Basin of Michoacán, the heart of the Tarascan empire, was another Late Postclassic core zone (see chapters 13 and 29). An-

other possible Late Postclassic core zone is the Mixteca/ Valley of Oaxaca region, but we feel that the small size of the urban centers and polities argues against core status for this area.

#### AFFLUENT PRODUCTION ZONES

We are introducing the concept of the affluent production zone to describe areas of high populations and intensive economic activity (both production and exchange) that lacked the powerful polities and large urban centers found in core zones. Core zones were not the only areas with busy commercial economies; in fact, the dispersion of commercialization across the Mesoamerican land-scape was one of the notable features of the Postclassic world system (see chapters 1, 16), and the small polities of the affluent production zones were conducive to this growth of commercial exchange.

Scholarly attention has traditionally focused on core zones because they were politically powerful, they had large urban centers with impressive monuments, and they left a disproportionate amount of material behind. Nevertheless, the affluent production zones also played crucial roles in the world system. There were a greater number of these zones than cores, and they contained a larger proportion of the population, and thus were the scenes for high levels of production and exchange activities. The key economic role played by these zones may have been one of the features that differentiated the Post-

Table 3.1 Functional zones in the Postclassic world system

Type of Zone		Functional zones in the Postclassic world system
	Ar	ea
Core Zones	1	
	2	Basin of Mexico
	3	Tlaxcala/Cholula
	4	Mayapán
Affluent Production Zones	1	Highland Jalisco
	2	North-central Michoacán
	3	Basin of Mexico
	4	Morelos/Toluca
	5	Mixteca Alta
	6	Valley of Oaxaca
	7	Veracruz
	8	Chontal region
	9	Northern Yucatán
	10	Northern Belize
	11	Highland Guatemala
	12	Soconusco
Resource-Extraction Zones	1	West Mexican metal zone
	2	Northern Guerrero
	3	Central Mexican obsidian zone
	4	Highland Guatemala obsidian zone
	5	Northern Yucatán salt beds
	6	Pacific coast
	7	Northern Belize chert-bearing zone
	8	Southwest Mesoamerica greenstone zone
Exchange Circuits	1	West Mexico
	2	The Aztec empire
	3	The Maya zone
	4	Southern Pacific coastal plain
Style Zones	1	Aztec style
	2	Mixteca-Puebla style
	3	Coastal Maya mural style
	4	Southwest Maya style

classic world system from earlier Mesoamerican economies. These zones are called "affluent" because their inhabitants were economically successful due to some combination of highly productive intensive agriculture, active craft industries, and/or specialized extraction industries (Rathje 1975; Sabloff and Rathje 1975b). Following is a list of areas we have classified as affluent production zones. It is likely that additional fieldwork and archival research will permit the addition of other areas to this list (table 3.1, figure 3.4).

- 1. Highland Jalisco. This lake region was rich in agricultural and lacustrine resources, some of which were exported. Craft industries such as basketmaking and ceramics also flourished using local raw materials (Pollard 1997; Valdez et al. 1996; see chapter 8).
- 2. North-Central Michoacán. Well-endowed for high agricultural productivity, this region also was known for its abundant fish resources and for salt and obsidian. The manufacture of a variety of products—ceramics, reed baskets and mats, and metal objects—

also contributed to the region's affluent economy (Pollard 1997; chapter 29).

- 3. Basin of Mexico. As an affluent production zone in the Middle Postclassic period, the Basin of Mexico produced salt, obsidian tools, and decorated ceramic vessels for export (Sanders et al. 1979). Highly productive agricultural systems, including the chinampas and canal irrigation, were developed at this time (Parsons 1991), setting the scene for the transformation of the basin into a core zone in the Late Postclassic period (see chapters 9 and 30).
- 4. Morelos/Toluca. The productive irrigated agriculture of the Morelos and Toluca valleys supported dense, economically active populations in the Middle and Late Postclassic periods. Polities in both areas paid tribute in grains and textiles to the Aztec empire; Morelos also produced paper for tribute and trade (Smith 1994a, 1994b; see chapter 32).
- 5. Mixteca Alta. This region of competitive city-states exhibited a varied economy based first and foremost on agriculture. Elite artisans produced luxury goods including decorated cotton textiles, feather adornments, polished greenstones, gold and other metal jewelry, painted codices, and polychrome ceramics (chapters 22, 31). By the Late Postclassic, towns in the region were paying tribute to the Aztec empire in many of these goods, plus cochineal (a red dye) and gold dust. These small polities (chapter 10) were among the most affluent in Postclassic Mesoamerica (Berdan and Anawalt 1992:4: f. 43r; Byland and Pohl 1994a; Spores 1967, 1984).
- 6. Valley of Oaxaca. The agricultural importance of this area during Late Postclassic times is highlighted by Aztec imperial tribute demands in staple foodstuffs; no other conquered province at such a distance from the imperial capitals paid tribute in such foodstuffs. Towns in this area also paid tribute in cochineal and gold disks, emphasizing the local availability of these raw materials and manufacturing in, at least, gold objects. The valley was known for its metallurgical craftsmanship throughout the Postclassic (Berdan and Anawalt 1992:4: f. 44r; Blanton et al. 1993; Flannery and Marcus 1983; Pohl 1999; see chapters 22, 31).
- 7. Veracruz. Coastal Veracruz, from Tabasco to the Huaxteca, was a rich agricultural region that produced large quantities of cotton (in several varieties) as well as reliable yields of foodstuffs. Tropical feathers, cacao, rubber, and liquidambar were also prominent resources in this region (Curet et al. 1994; Medellín Zeñil 1960; Stark et al. 1998).
- 8. Chontal region. This region is a humid lowland coastal zone between the Laguna de Términos and the Río Usumacinta. Its rich agricultural and natural products—cotton, cacao, rubber, and tropical feathers (Izquierdo 1997; Scholes and Roys 1968)—paralleled those of Veracruz. Three international trade centers (Xicalanco, Potonchan, and Itzamkanak) were located in

- this region, which we classify as an international trade center as well as an affluent production zone (see chapter 17).
- 9. Northern Yucatán. With the exception of the area around Mayapán, northern Yucatán was an affluent production zone from the fall of the large Early Postclassic polities (including Chichén Itzá) until the advent of Spanish administration. These small polities, often ruled by merchant lineages, engaged in competitive production and exchange on regional and macroregional scales. High-grade salt was especially important (Freidel and Sabloff 1984; Kepecs 1997, 1999; Quezada 1993; Roys 1972). See chapters 5, 19, and 33).
- 10. Northern Belize. The Postclassic populations of northern Belize produced cacao, honey, wax, cotton, and textiles, and extracted a variety of animal products such as pelts and feathers. Exports from this area included forest products such as dyes, paints, vanilla and achiote seasonings, copal, canoes and paddles (Jones 1989; Masson 2000a; Piña Chán 1978), as well as high-quality chert from the Colha area (see chapter 34).
- 11. Highland Guatemala. Excellent soil and rainfall conditions combined to make this a highly productive agricultural region where irrigation enhanced crop yields. In addition, the highlands were endowed with valuable resources such as obsidian, copper and some gold, jade, and clay for pottery making (Carmack 1981; Fox 1987; see chapters 6, 12).
- 12. Soconusco. This region, along the Pacific coast of present-day Chiapas and Guatemala, was noted especially for its cacao cultivation. However, the economy was diversified, as Aztec imperial tribute demands included large quantities of tropical feathers, amber and amber adornments, jaguar pelts, and greenstone beads. The region also served as an important international trade center (Berdan and Anawalt 1992:4: f. 47r; Gasco 1996b; Voorhies 1989b; see chapters 17, 35).

All of these zones exhibit features of affluence: they contained substantial populations supported by a relatively rich and reliable resource foundation. Furthermore, they augmented this economic base with a diversity of additional production activities drawing on local resource availabilities. Many of the resulting products were exported to other regions, linking these zones to nearby and distant cores, international trading centers, and other affluent production zones.

# **RESOURCE-EXTRACTION ZONES**

A resource-extraction zone is a peripheral area (in worldsystems terms) where important nonagricultural raw materials were mined or obtained. Many resourceextraction zones are regions with several individual mines or extraction loci, and thus not every locale within the larger area was necessarily involved in the extraction of the particular resources. "Important" raw materials were those used to manufacture key commodities (defined in chapter 18) and other products that were distributed widely through Mesoamerica. These areas are mapped in figure 3.4 (table 3.1).

- 1. West Mexican metal zone. Michoacán and Guerrero are heavily mineralized, with extensive occurrences of copper, silver, and arsenical copper ores found throughout both areas. Local documentary sources from the sixteenth century mention many copper deposits and mines. Most were probably small-scale local operations, with a few of the larger mines under the control of the Tarascan state (Hosler 1994; Hosler and Macfarlane 1996; Pollard 1987, 1993; see chapter 21).
- 2. Northern Guerrero. This mountainous zone had copper and many other resources sought by the Tarascan and Aztec empires (Berdan et al. 1996; Brand 1943; Litvak King 1971).
- 3. Central Mexican obsidian zone. Numerous obsidian sources are known from the northern Basin of Mexico and areas to the north and east, and this obsidian was traded over much of Mesoamerica (Charlton and Spence 1982; Cobean 1991; Pastrana 1991, 1998; see chapter 20).
- 4. Highland Guatemala obsidian zone. This zone covers the three major obsidian sources in highland western Guatemala (Braswell 1998a; Braswell and Glascock 1998; see chapter 20).
- 5. Northern Yucatán salt beds. Throughout the Prehispanic sequence and up to modern times, the northern Yucatán salt beds have been the most productive salt resource in Mesoamerica (Andrews 1983; Ewald 1985; Kepecs 1999; see chapters 19 and 33).
- 6. Pacific coast. Several marine and other resources were harvested along the Pacific coast of Mexico, including Spondylus and other shells for jewelry (Feinman and Nicholas 1993), purpura dyes (Turok et al. 1988; Turok 96), feathers, cacao, and other products.
- 7. Northern Belize chert-bearing zone. Specialists at the settlement of Colha had exploited the high-quality chert from this zone since Preclassic times. Early Postclassic household-based artisans at Colha produced a series of distinctive tools that were traded throughout Belize and perhaps as far as Mayapán (Dockall and Shafer 1993; Hester and Shafer 1991; Michaels 1987). Although Late Postclassic production has yet to be documented extensively at Colha, Postclassic tool types characteristic of Colha have been recovered in Late Postclassic contexts at Laguna de On and Caye Coco (Masson 2000a; Oland 1999), suggesting that production continued unabated.
- 8. Southwest Mesoamerican greenstone zone. The precise sources of jadeite and other forms of greenstone are not known, but many authorities think that these crucial materials came from the Motagua Valley or parts of Honduras (Lange 1993; Thouvenot 1982). Costa Rica

is another source of greenstone used in Mesoamerica (Graham et al. 1998).

# UNSPECIALIZED PERIPHERAL ZONES

This is a residual category that covers areas within the Mesoamerican world system that do not fall into one of the previous categories. Most of these areas were mountainous, had poor soils, or were remote and isolated, and as a result they had relatively low populations without large cities. These features also led to lower levels of historical documentation and archaeological fieldwork, and it is possible that some of the areas classified as unspecialized peripheral zones were in fact affluent production zones or resource-extraction zones, but we lack the research to establish this. Unspecialized peripheral zones in the Postclassic world system include parts of the lowland Maya area (Demarest 1997), many areas in Guerrero (Harvey 1971; Vega Sosa and Cervantes-Delgado 1986), west Mexico (Michelet 1995; Pollard 1997), and the northern rim of Mesoamerica.

#### **CONTACT PERIPHERIES**

"Contact periphery" is Chase-Dunn and Hall's (1997: 61) term for areas that had only slight contact with a world system. These areas, discussed above, include the Greater Southwest area of Casas Grandes and the American Southwest, and lower Central America (see figure 3.1). We do not discuss these areas further, apart from the goods they provided to the polities of Postclassic Mesoamerica. Of these, turquoise was by far the most important (chapter 17).

# **EXCHANGE CIRCUITS**

Exchanges of goods and information were not uniform throughout Mesoamerica during the Postclassic period. Instead, most exchange took place within smaller areas or subsystems that we call exchange circuits (see Abu-Lughod 1989). We have identified four such circuits for the Late Postclassic period: west Mexico, the Aztec empire, the Maya zone, and the southern Pacific coastal zone. If there were abundant data on imported goods and styles from numerous sites, lines connecting exchange partners would cluster within these subsystems, with fewer lines extending outside of them (as in the maps produced by interaction studies in the field of geography). Although we do not have that level of coverage, the available archaeological and ethnohistoric data do support our identification of exchange circuits for the Late Postclassic period (figure 3.5; table 3.1).

We refrain from formal identification of exchange circuits in the Early and Middle Postclassic periods because of the smaller amounts of relevant data. We can make a few suggestions, however. In Early Postclassic times the main exchange circuit linked central Mexico, the Gulf Coast, and northern Yucatán; this included the four Early Postclassic core zones identified above

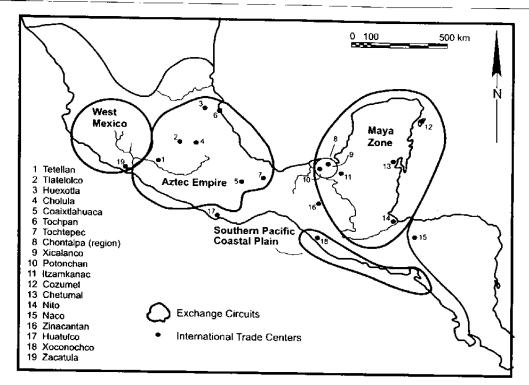


Figure 3.5 Map of exchange circuits and international trade centers. The Chontalpa region, trade center no. 8, had many trade centers, including Xicalanco and Potonchan. (Map produced by Pamela Headrick, from base maps compiled by Timothy S. Hare.)

(Kepecs et al. 1994; Kepecs 1999). A second, smaller system may have existed on the southern Pacific coast centered on the city of Cotzumalhuapa (Parsons 1967–1969; Thompson 1948). Iconographic similarities between inscriptions at Cotzumalhuapa and El Tajín suggest connections between these two exchange circuits. In the Middle Postclassic period, the larger exchange circuit contracted to include just central Mexico. For the Late Postclassic period, we see four significant exchange circuits.

- 1. West Mexico. This exchange circuit included the Tarascan empire and adjacent areas of Jalisco and Nayarit. The exchange of obsidian, ceramics, copper-bronze objects, and other goods was particularly extensive in this area in Postclassic times (Foster 1999; Hosler 1994; Pollard 1997). As discussed above, the polities in this area were in contact with Casas Grandes and other settlements in northern Mexico and the American Southwest. Turquoise from the latter area passed through the west Mexico exchange circuit on its way to the rest of Mesoamerica.
- 2. The Aztec empire. This circuit corresponds to the territory of the Aztec empire. In addition to the flow of tribute from the Aztec provinces to Tenochtitlan, processes of commercial exchange and elite interaction were particularly prominent within the Aztec empire (Berdan et al. 1996; Smith 1990; Umberger and Klein 1993; see chapters 11 and 27).

- 3. The Maya zone. This exchange circuit includes the Maya area from Yucatán south to the highlands of Guatemala and Chiapas. During the Postclassic period, exchange and stylistic interaction, particularly along coastal routes, linked this whole area into a single circuit or subsystem of intensive interaction (Chase and Rice 1985; Masson 2000a; Scholes and Roys 1968).
- 4. Southern Pacific coastal plain. This area, among the more poorly known of Postclassic Mesoamerica, was the setting for a variety of active trade networks involving cacao, tropical feathers, and other goods (Voorhies 1989b; Edwards 1978; Feldman 1985). Contact with lower Central America and even South America passed through this exchange circuit.

Exchange circuits were of fundamental importance to the construction and dynamics of the Mesoamerican Postclassic world system. These "mini-world systems" are the largest subunits within the system, and highlight the intensity of interactions among polities within each unit. While we subsume them under one category, they nonetheless exhibited considerable variability: two subsystems—west Mexico and the Aztec empire—essentially encompassed the territories of empires, while the others included many polities of differing sizes. The empires emphasized integration through political and economic means, with more political emphasis in the Tarascan empire, and more economic emphasis in the Aztec empire. Polities in the Mayan zone were primarily linked through

economic and symbolic exchanges, while those in the southern Pacific coastal zone emphasized maritime trade and commercial interactions. Each of these subsystems, therefore, developed its own workable strategy for large-scale regional integration.

# INTERNATIONAL TRADE CENTERS

We propose this category as a replacement for the Polanyi/Chapman "port of trade" model traditionally used for centers of long-distance trade in Late Postclassic Mesoamerica. International trade centers have several or all of the following characteristics: they engage in trade with distant areas; they trade with many different areas; they have a high volume of trade; and they exhibit a great diversity of trade goods (figure 3.5). These centers are discussed in greater detail in chapter 17.

# STYLE ZONES

We are using the term style zone to depict large areas characterized by distinctive Late Postclassic art styles. We have identified a single Postclassic international style that divides into four substyles: the Aztec style, the Mixteca-Puebla style, the coastal Maya mural style, and the southwest Maya style (figure 3.5). The existence of these zones, which cut across polity boundaries and economic regions, implies high levels of interaction among artists or patrons within each zone.

1. The Aztec style corresponds to most of the Aztec empire, whose scattered provincial and core-zone elites engaged in numerous types of intensive communication and interaction (Berdan et al. 1996; see chapter 27).

- 2. In our usage, the Mixteca-Puebla style is a pictorial style found in the codices, murals, and polychrome ceramics of the Mixteca-Puebla area (from Tlaxcala through Cholula and central Puebla into the Valley of Oaxaca and down the Río Verde Valley to the Pacific Coast). The distribution of this style includes areas both outside of and within the Aztec empire, where it overlaps with the Aztec style (chapters 26, 27).
- 3. The coastal Maya mural style describes Postclassic mural paintings from Tulum, Santa Rita, Mayapán, and other sites in northern and eastern Yucatán (chapter 25).
- 4. The southwest Maya style is a poorly documented but distinctive style found in the highland Maya region. These styles, their distributions, and their implications are discussed in greater detail in chapters 23 and 24.

#### **SYNTHESIS**

The fundamental spatial building blocks of the Postclassic Mesoamerican world system were individual small polities or city-states. Some of these polities (singly or in concert) emerged in different times as focal points in the system as cores, affluent production centers, international trading centers, or resource-extraction zones. These and other city-states, discussed in greater depth in the chapters in part 2, established and maintained significant links with other city-states on a variety of intertwined dimensions: economic, political, social, and religious. It is the nature of these linkages that gives this world system its special texture, and it is to the small polities of Postclassic Mesoamerica that we now turn.