

2 The Valley of Oaxaca: a regional setting for an early state

When we speak with the public or beginning students about the pre-Hispanic inhabitants of Mesoamerica, they generally are familiar with the Aztecs, the Maya, and even the great Classic-period central Mexican site of Teotihuacan. There is less recognition of the ancient societies of Oaxaca. This lack of familiarity is somewhat peculiar because the earliest evidence for Mesoamerican writing, dating to 600 B.C., has been found in the Valley of Oaxaca (see box 3). Likewise, Mesoamerica's earliest city, Monte Albán, scenically situated on a 400-meter-high hill at the core of one of Mesoamerica's first states, was founded at the center of the valley around 500 B.C. This early urban center was the capital of a state that endured and remained influential for more than 1000 years.

Archaeologists have long been interested in Monte Albán and its history, antecedents, and surroundings (see Whitecotton 1977). Nineteenth-century archaeological explorers described the famous hilltop city and its carved stones and monumental architectural ruins (e.g., Holmes 1895–97). These pioneers recognized that the glyphs carved on stones at Monte Albán are different from those of the ancient Maya in the eastern lowlands of Mesoamerica. They also noted certain shared conventions between these two sets of hieroglyphs, such as a numerical system in which a bar stood for five and a dot for one.

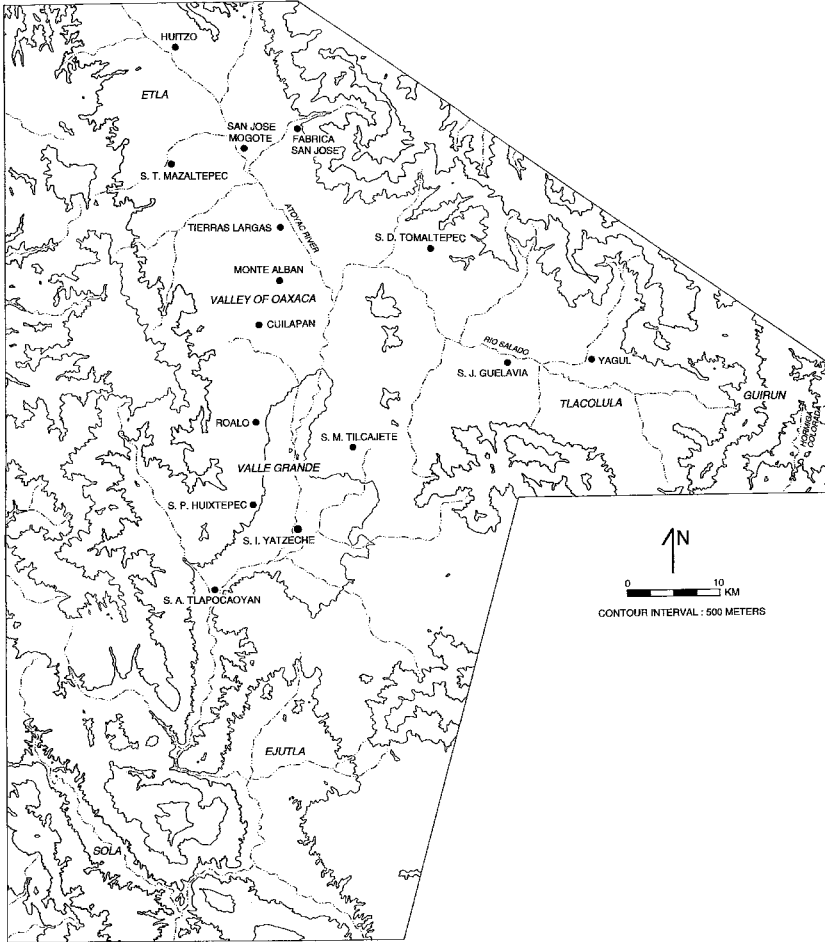
In the 1920s, the pathbreaking Mexican anthropologist Alfonso Caso first identified the Oaxacan stones as culturally Zapotec, carefully describing the differences between Zapotec writing and that found in other regions (Caso 1928, 1965a and b). During his fifty-year career, Caso established that the ancient Zapotecs of the Valley of Oaxaca developed one of the most powerful and important societies in all of ancient Mesoamerica. By the 1950s he had cleared and reconstructed Monte Albán's Main Plaza. Together with his student Ignacio Bernal, he established the basic ceramic chronology that is still used to date sites in the Valley of Oaxaca (Caso, Bernal, and Acosta 1967). Caso also excavated more than 100 pre-Hispanic tombs, including one of the richest (tomb 7)

Box 3 *Mesoamerican writing*

The earliest evidence for Mesoamerican writing dates to roughly 600 B.C., before either the founding of Monte Albán or the emergence of states in this part of the world (Marcus 1976, 1992). The first Mesoamerican writing that has been preserved appears on carved stones at such sites as San José Mogote (Marcus and Flannery 1996: 129–31). Written glyphs on stones from before A.D. 1 have been found along the Gulf Coast and in the highland and Pacific coastal regions of Chiapas. Later Mesoamerican writing systems are best known for four peoples, Zapotec, Mixtec, Aztec, and Maya (Marcus 1992). Records of Mixtec and Aztec writing are composed primarily of late pre-Hispanic texts (or early colonial-period copies of aboriginal texts) written on prepared bark paper or deerskin (see, e.g., Berdan and Anawalt 1997). Most Zapotec writing was preserved on stone. Maya writing, the best known of the four, has survived in a few late pre-Hispanic folding books, or codices, as well as in a large body of texts on stone, pottery, and wall murals from the Classic period. Frequent references to the Mesoamerican calendar led early scholars to believe that the ancient Maya of the Classic period wrote primarily about time and astronomical events. Although time, the calendar, and the cosmos were of great concern to the pre-Hispanic Maya, and other Mesoamerican peoples as well, recent advances in the decipherment of Classic Maya writing have revealed that much of it concerned the recording of dynastic histories, princely accomplishments, and legitimacy to rule.

ever found in the Americas (Caso 1969), and published the first systematic study of ancient Zapotec writing and calendrics.

In 1966, Kent Flannery, who earlier had worked in Oaxaca with Bernal's student John Paddock (1966), initiated a research effort, involving specialists from diverse disciplines, on the origins of plant domestication and the transition from mobile hunting-and-gathering lifeways to sedentary farming villages in the Valley of Oaxaca. Primarily through excavations in dry caves and valley floor sites, Flannery and his colleagues provided an abundance of new information relevant to understanding how humans adapted to their environment from the time of the earliest human occupation of the region (roughly 10,000 years ago) until the beginning of Caso's Monte Albán sequence (ca. 500 B.C.) (for summaries see Flannery 1976; Flannery and Marcus 1983; Flannery and Marcus 1994; and Marcus and Flannery 1996). For over a decade, Flannery and Joyce Marcus directed excavations at San José Mogote, the largest center in the Valley of Oaxaca prior to Monte Albán (Marcus and Flannery 1996) (fig. 2.1). Houses, public buildings, and burials were excavated at other pre-Monte Albán settlements in the valley, including Fábrica San José (Drennan (1976), Huitzo (Flannery and Marcus 1983), Santo Domingo Tomaltepec (Whalen 1981), and Tierras Largas (Winter 1972).



2.1 The Valley of Oaxaca, showing topography, stream drainages, and sites mentioned in the text.

In the 1970s, in cooperation with Flannery's project, his student Richard E. Blanton initiated the systematic surface survey and mapping of archaeological sites in the Valley of Oaxaca. Bernal (1965) previously had located more than 280 large pre-Hispanic sites in the region, reporting many of the area's most significant sites. Blanton (1978) began his more complete and systematic survey by mapping Monte Albán and producing the only complete plan of this ancient urban center (fig. 2.2). Subsequent regional surveys supervised by Blanton and Stephen A. Kowalewski led to full coverage of a 2,150-square-kilometer area that

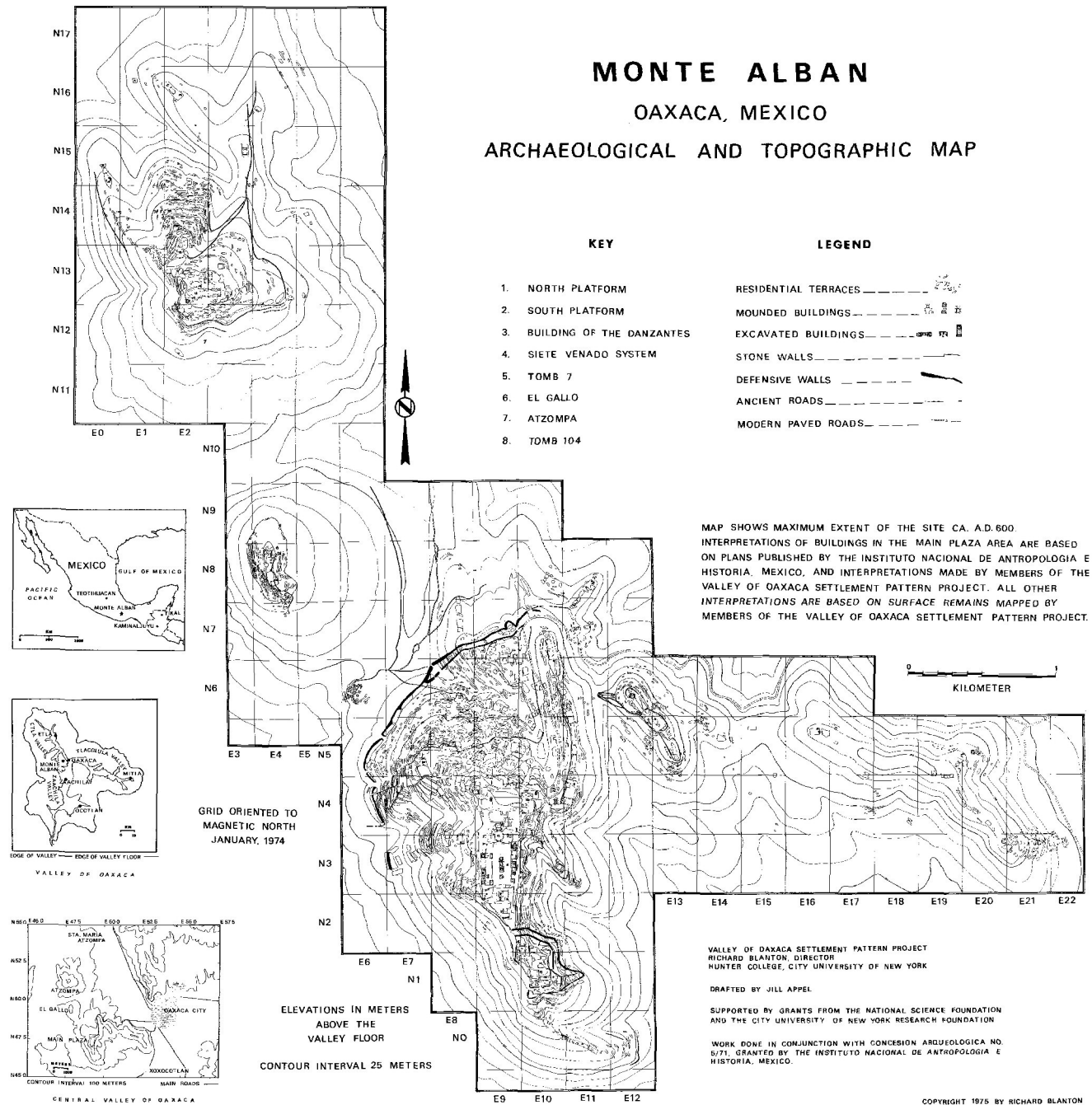
encompasses this large valley and its defining mountain ridges and slopes. Completed in 1980, these surveys recorded more than 2,700 localities with archaeological materials visible on the surface (Blanton, Kowalewski, Feinman, and Appel 1982; Kowalewski et al. 1989).

Full-coverage surveys have been conducted in two adjacent and topographically similar regions situated in the central valleys of Oaxaca, the Ejutla Valley, (Feinman and Nicholas 1990a) and the Sola Valley (Balkansky 1997)(fig. 2–3). South of the Ejutla region, Charles W. Markman (1981) completed a survey transect in the Miahuatlán Valley, where small-scale excavations and a reconnaissance had previously been conducted by Donald L. Brockington (1973).

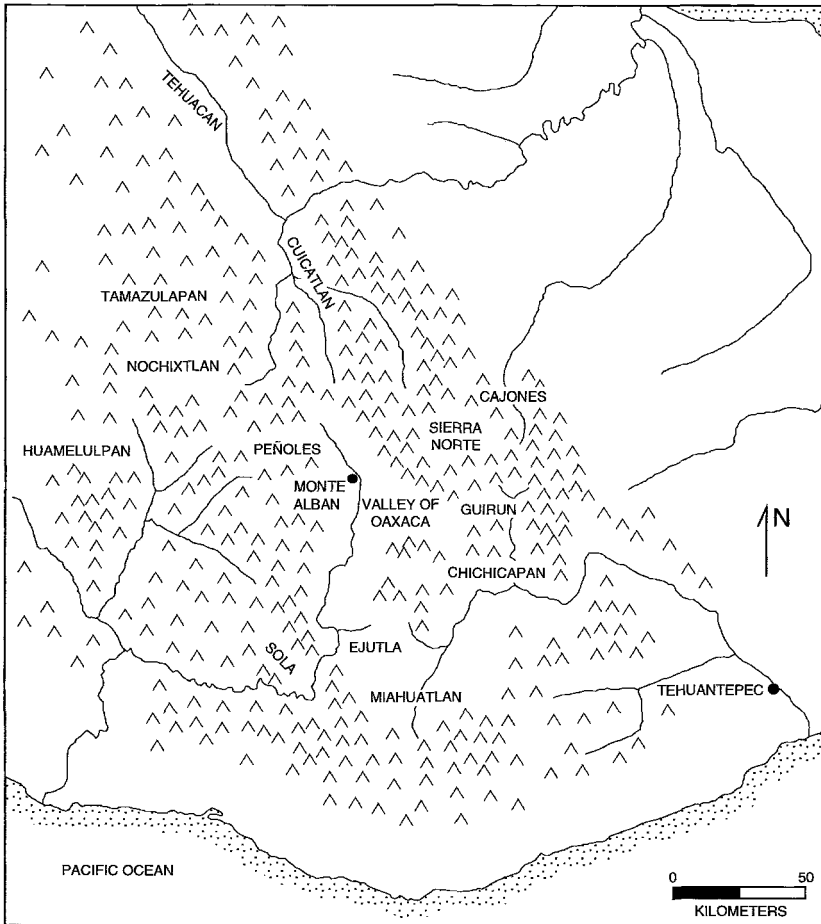
Three mountainous areas that abut the valley also have received full archaeological survey coverage. One of these is the Guirún area (Feinman and Nicholas 1996), running east of the Tlacolula arm of the Valley of Oaxaca almost to the current ethnic divide with the Mixe (fig. 2.4 and box 4). The much larger Peñoles region covers the ridges and slopes between the ETLA arm and the Nochixtlán Valley in the Mixteca Alta (Finsten 1996). This region encompasses another current linguistic boundary, that between the Zapotec and the neighboring Mixtec. The third upland area, the Sierra Norte, extends directly north of the Valley of Oaxaca, in the direction of the low-lying Cuicatlán Cañada (Drennan 1989). Collectively, these studies have made the region one of the most completely surveyed areas in the world. They provide a broad perspective and a dynamic record of how human settlement patterns shifted in the period between the establishment of Oaxaca's first sedentary villages and the consolidation of the early state at Monte Albán.

Carved stone monuments are a significant feature of the archaeological record in Oaxaca. As of 1994 some 2,500 were known from the Valley of Oaxaca and surrounding areas, 647 from Monte Albán alone (Urcid 1994; see also Marcus 1992). Many contain brief texts in the ancient Zapotec writing system. These important monuments, generally found in civic-ceremonial contexts, provide a perspective on the ideological conventions associated with the early state in Oaxaca. Other aspects of material culture, including pottery, stone tools, architectural remains, and funerary contexts, offer archaeologists important insights into past lifeways and yield indicators of different patterns of social and economic behavior.

Further insight into these patterns comes from the study of how settlements were situated in relation to the natural environment. An important study of land and water resources in the Valley of Oaxaca by the geographer Anne Kirkby (1973) compared the agricultural yields from different classes of farmland and extrapolated them to the past, taking into account



2.2 Monte Albán, showing surface archaeological remains dating to Monte Albán Period IIIB (A.D. 500–700).



2.3 The Valley of Oaxaca and adjacent regions in the southern highlands.

the technologies that were available to past Oaxacan farmers. It is important to remember that pre-Hispanic farmers in Oaxaca relied principally on stone axes, hoes, and wooden digging sticks. Having no large draft animals (such as cattle, horses, mules, oxen, or water buffalo) or wheeled vehicles, they did not employ the plow. Archaeological finds and botanical analyses have shown us that the size of maize cobs and therefore the productivity of this staple crop increased during the pre-Hispanic era.

Through careful excavation procedures such as the screening of archaeological sediments through fine mesh and flotation to recover plant

Box 4 *Mixtec, Zapotec, Mixe: the question of identity*

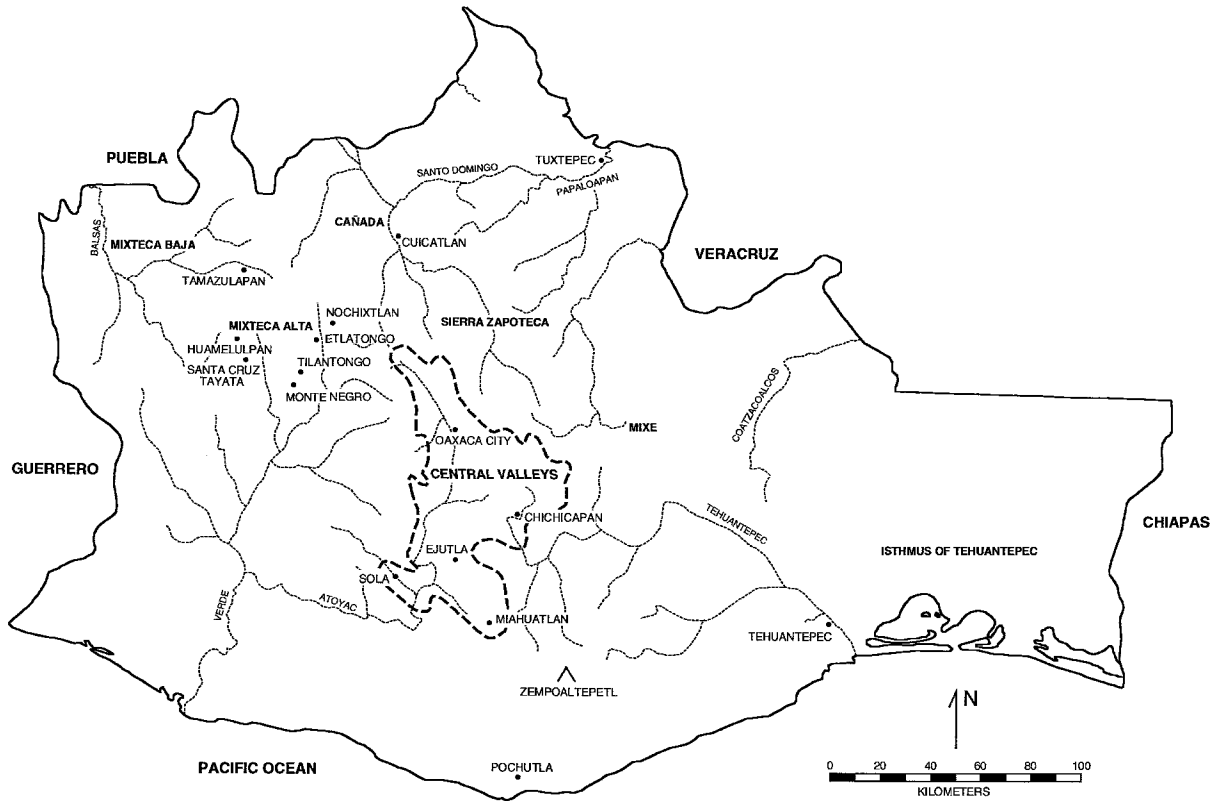
Who were the inhabitants of the Valley of Oaxaca at 1500 B.C. and 500 B.C.? Who were the builders of Monte Albán? What is the name of this civilization? Archaeologists have relatively little interest in such questions; naming groups of people of course has no effect on what the people responsible for the archaeological record did in the past, and their presumed identity should have no influence on archaeologists' analysis and interpretation. It is more important for us to know that cultural groups were being formed and why than to give them names. One cultural boundary in Oaxaca that is relatively easy to recognize today (though not the most important in terms of social or political action) is linguistic. Most people in Oaxaca speak Spanish, but according to the national census about 45 percent of the state's population of 2.5 million also speak one of the sixteen (or sixty, counting the many dialects) indigenous languages.

The main native languages in and around the Valley of Oaxaca today are Mixe, in the mountains to the east of the valley; Mixtec, in the mountains to the west of the valley and historically, at least since late pre-Hispanic times, in many places in the western valley itself; and Zapotec, in the Valley of Oaxaca and in the mountains to the north and south. Monte Albán has usually been considered an ancient city of Zapotec speakers, and its now-extinct writing is a form of Zapotec. What roles non-Zapotec speakers, including Mixe and Mixtec, played at Monte Albán and in its regional state are not known.

remains, archaeologists have obtained evidence of ancient food consumption. These studies of subsistence debris have been supplemented by human skeletal research that also can yield insights into past diet and health. Chemical analysis of samples of human bone from Monte Albán by Jennifer A. Blitz (1995) has shed light on ancient subsistence, and a skeletal analysis of Monte Albán burials by Denise C. Hodges (1989) has reconstructed pre-Hispanic patterns of health and disease.

Our discussions center on the Valley of Oaxaca and its immediate surroundings, but we also draw on research from more distant locales. Most important are surveys and excavations by Charles S. Spencer and Elsa Redmond in the Cuicatlán Cañada, a long, narrow river canyon situated between the Valley of Oaxaca and the Tehuacán Valley (Redmond 1983; Spencer 1982; Spencer and Redmond 1997). The floor of the tropical Cañada averages 500–700 meters in elevation, well below the temperate Valley of Oaxaca (at 1,500 meters). The people in the Cañada could grow tropical fruits unavailable at higher elevations. Excavations and surveys also have been carried out in the Mixteca Alta, a region of mountains and intermontane valleys (e.g., Balkansky 1998; Byland 1980; Byland and Pohl 1994; Spores 1972; Zárate 1987). We draw on findings from projects conducted along the Pacific Coast of Oaxaca by Robert and Judith Zeitlin (J. Zeitlin 1978; R. Zeitlin 1978, 1993), Arthur Joyce (1993), and Donald Brockington (1957).

Our holistic approach (see also Blanton, Kowalewski, Feinman, and



2.4 The state of Oaxaca, showing sites and regions adjacent to the Valley of Oaxaca.

Finsten 1993) to the rise of the state requires this multiscalar (household, community, region, macroregion) and multidisciplinary (e.g., archaeology, epigraphy, geography, skeletal analysis) perspective. Our analytical considerations range from political economy to ancient land use to iconographic analysis. Admittedly, this study can be complicated – but cultural systems are themselves complicated, especially when viewed over centuries.

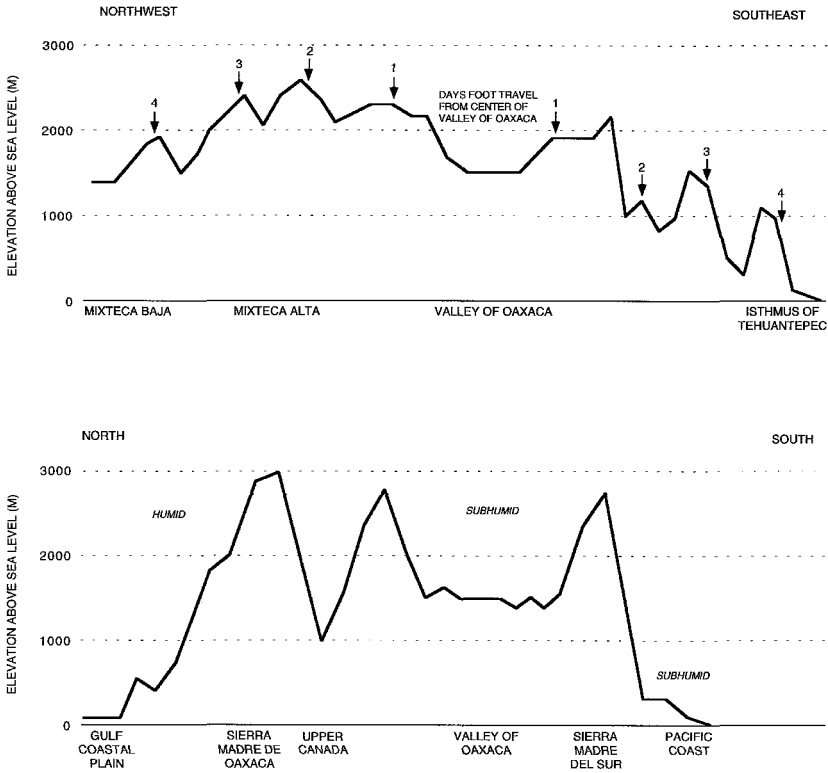
The physical environment

The Valley of Oaxaca is the largest expanse of flat land (roughly 2,500 square kilometers) in Mexico's rugged southern highlands (fig. 2.5). The valley is the upper drainage basin of the Atoyac River and its tributary, the Río Salado. Smaller valleys – Ejutla, Sola, Miahuatlán, and Chichicapan – abut or lie near the valley on the south. These valleys have an average elevation of 1,500 meters and are ringed by mountains that rise to 3,000 meters above sea level. Most of the remainder of the state of Oaxaca also is composed of rugged mountains; the highest point is the dormant volcano Zempoaltepetl (southeast of Miahuatlán), at 3,750 meters above sea level.

We discuss land and water here because these are the resources that the Valley of Oaxaca has in abundance relative to the surrounding regions. The neighboring valleys have narrower floodplains and less farmland than the Valley of Oaxaca. They are higher and colder (Chichicapan), drier (Ejutla and Miahuatlán), or much smaller (Sola).

The terrain of the Valley of Oaxaca is divided into three basic topographic zones – alluvium, piedmont, and mountains – that provide diverse resources and varied farming opportunities (Kirkby 1973; Nicholas 1989) (fig. 2.6). The alluvium or floodplain, which abuts the Atoyac River and its tributaries, is the valley's flattest terrain and has the thickest, richest soils. In many parts of the alluvial zone, shallow wells easily can be dug to the water table, providing the opportunity for well irrigation even in dry years. For millennia the occupants of the valley have dug 1 to 5-meter-deep wells into which they lower pots to retrieve the water. The full pots are then used to hand-carry the water directly to the plants. The fertile soils, relatively gentle grades, and opportunities for irrigation make the alluvium the most favorable farmland in the valley. Originally, the alluvium was heavily forested, but once settled by farming peoples it rapidly became a highly desirable setting for agriculture and was almost totally cleared. The loss of valley-floor forest was probably one of the environmental consequences of the rise of the state.

Above the alluvium lies the foothills or piedmont zone. Compared to

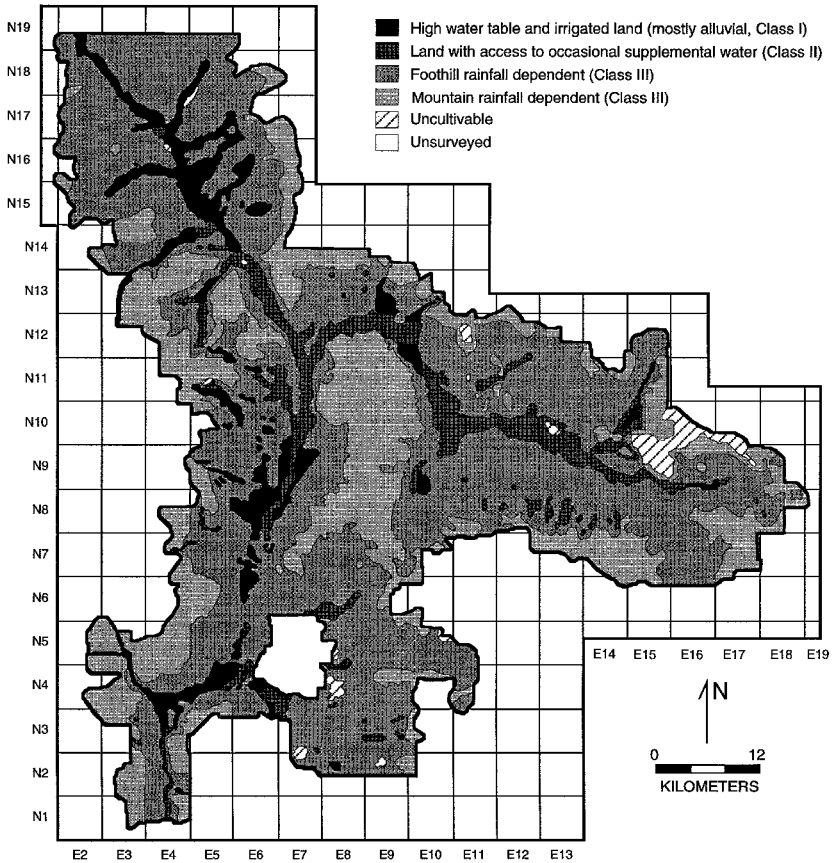


2.5 Topographic variability and travel times in the southern highlands.

the alluvium, the piedmont has thinner soils and more pronounced slopes. Because the water table is much deeper here, the natural vegetation (as well as agricultural activity) is more heavily dependent on rainfall. For this reason, the natural vegetal cover is typically thinner, and agrarian production is more risky than in the alluvium. Yet, in a wet year, high maize yields can be produced in many sections of the piedmont.

The piedmont grades up to more mountainous terrain. Surrounding the valley, the mountains of Oaxaca are still covered with dense stands of oak and pine. The mountains generally provide fewer opportunities for reliable farming than the alluvium and the piedmont, but these forested uplands were the principal source of timber and deer.

The key determinant of agricultural yield in the valley is the availability of water (Kirkby 1973). The Valley of Oaxaca is semiarid, with a valley-wide average of 550 millimeters (22 inches) of annual rainfall. Precipitation occurs primarily during the May-to-October wet season,



2.6 Distribution of three classes of agricultural land in the Valley of Oaxaca.

turning a brown-gray-yellow dry season (November to April) environment into a verdant green landscape. Rainfall is highly variable spatially, seasonally, and from year to year. In an average year, a given locale receives between 400 and 800 millimeters of rain. If propitiously timed, this is marginally adequate to produce a single crop of maize. Supplemental water from wells, small-scale canal irrigation, and floodwater runoff helps prevent crop failures in many years; in some parts of the valley it may support more than one crop per year.

The Valley of Oaxaca is markedly different from the mountainous terrain that surrounds it for approximately 200 kilometers in every direction. Yet this great breadth of flat land also is internally diverse. The valley

is shaped like a Y with the right arm bent down. The northern or Etla arm is narrow and fairly dry but offers the best opportunities for irrigation. To the south lies the largest segment of the valley, the Valle Grande. Typically, it receives somewhat more rain than other areas of the valley, so dry (rainfall) farming is more productive. The Valle Grande also has more land that can be farmed by irrigation, drainage works, or tapping the high water table. But because of its greater size, a smaller proportion of its arable land is irrigable than in Etla. The eastern, Tlacolula arm has less irrigation potential and also receives less rain in most years. Farming generally is a riskier endeavor in Tlacolula.

Where the three arms of the Valley of Oaxaca converge is a knot of low hills that rise above the valley floor; it was on these hills that the urban center of Monte Albán was situated. We often refer to this section of the valley, within a 10-kilometer radius of the ancient capital, as the “central” area. Generally, the land here does not have high agricultural potential (Nicholas 1989). This area also was most influenced by the ancient capital.

The temperate Valley of Oaxaca lacked many of the goods that were highly prized by pre-Hispanic people, such as cacao, brightly colored bird feathers, marine shell, jade, turquoise, and tropical fruits. Most cotton had to be imported from the lowlands, where growing conditions were more suitable for it. Obsidian, a volcanic glass that is more easily worked and produces a sharper cutting edge than the locally available chert and quartz, also had to be procured from distant locales. The Valley of Oaxaca’s relative poverty in these other key resources reinforced the significance of its potential to produce a wealth of food.

Before Monte Albán

The San José phase

Human occupation of the Valley of Oaxaca goes back some 10,000 years, but people began living in sedentary villages, growing crops as a main subsistence pursuit, and making pottery around 2000–1500 B.C. We begin our discussion of human activity in the valley at about 1000 B.C., in the middle of the Early Formative San José phase. This was the time of the Early Horizon “Olmec” art, discussed previously, and a key turning point in the evolution of social complexity in the Valley of Oaxaca, as it was elsewhere in Mesoamerica. But was the Early Horizon, with its pan-Mesoamerican “Olmec” style and symbolic themes, a necessary evolutionary step in the direction of the later development of Mesoamerican civilization (e.g., Grove 1997)? We return to consider the evolutionary

significance of the “Olmec” phenomenon in our concluding chapter.

The scale of society in the Valley of Oaxaca was small during the San José phase, and it did not change appreciably until Period I, when the early state evolved (Kowalewski et al. 1989:ch. 3). We estimate a total population of about 2,000 for the region at 1000 B.C., far below what anthropologists associate with the minimum population sizes for most early states. Such low numbers are in the size range of many well-described Native American societies of historic times (e.g., the Pueblo societies of the American Southwest, the small chiefdoms of the Northwest Coast, and the tribal subdivisions of the Huron and Iroquois).

In contrast with some of these small-scale societies, the population of the Valley of Oaxaca evidenced some social inequality among households by the San José phase, although not to the degree seen during the first millennium A.D. and later. The indications of social inequality at 1000 B.C. come from excavated houses, burials, and other features (Flannery and Marcus 1994; Marcus and Flannery 1996:ch. 8; see also Feinman et al. 1985; Kowalewski et al. 1989:ch. 3 for additional data from regional surveys).

The study of burials nearly always proves invaluable for an archaeologist attempting to understand social inequality, and this is true in Oaxaca. During the San José phase, high-status burials, so identified by the presence of fancier than usual grave goods such as decorated ceramic vessels, magnetite mirrors, and elaborate jade pieces, were found tightly flexed. This positioning probably reflects some special treatment, involving wrapping, that bodies received prior to burial. Lower-status individuals, interred with fewer and plainer grave goods, generally were buried in extended positions. The graves of higher-ranking individuals also tended to be covered by stone slabs. These individuals were more likely to be buried with multiple wives or retainers and to have deformed skulls. Skull deformation was a sign of beauty and high status among some Mesoamerican peoples and was practiced on certain infants by binding the head shortly after birth. Such depictions are seen in pictorial sources from later periods, and we assume this practice was an indicator of high status during the San José phase as well.

Body posture may be another indicator of status differences. Certain ceramic figurines display what Marcus and Flannery interpret as obeisance postures, that is, postures that show deference to persons of high status. The artifact assemblages found in houses indicate considerable variation in degree of household access to major prestige goods, including mica, marine shell, jade, magnetite, and decorated pottery, some of which were imported from distant regions outside the valley. The houses themselves varied in quality; for example, finer houses had whitewashed walls.

Wattle and daub (wooden posts, sticks, and mud plaster) was the major construction method, and size differences between houses were not great, although one excavated structure at the site of Tomaltepec, which may have been a house, was built on a meter-high platform (Whalen 1981:38–43). We can infer from excavated data recovered through screening and flotation that some households apparently ate more venison than others. Overall, the various material indicators point in the direction of differences in wealth and status between households but do not provide evidence of sharply distinct social classes.

Inequality also is seen in the differential growth of one community. San José Mogote, in the Etna arm of the valley, grew to some 1,000 persons, approximately ten times the size of the next largest community. Evidently, some combination of economic, ritual, and political activities had been concentrated primarily in this settlement, attracting households who migrated there to live (growth may have been due as well to the higher fertility of the community's families). Compared with other areas of the valley, San José Mogote also has more evidence for the specialized production and the import and export of prestige goods.

Wealth, prestige, status, and power

One of the most challenging aspects of any anthropological analysis is to understand the relationships among wealth (control of material resources), prestige (esteem), status (social position), and power (the ability of one person or group to direct the actions of others). The power dimension of inequality has received the most attention in anthropological research on state formation and its antecedents (e.g., Service 1971:140 and *passim*). How is it that power comes to be concentrated in the hands of certain groups or persons? Although some differences in power are found in all human societies (for example, within households, based on gender and generation), in a category of societies that we call chiefdoms positions of power relevant to governance somehow come to be limited so that not all those persons with sufficient talent to occupy such statuses actually achieve them (here we paraphrase Morton Fried [1967:109]). In anthropological theories of state formation (e.g., Service 1975:15–16), chiefdoms are considered a stage of political evolution antecedent and transitional to states. Obviously, then, we want to know when and how chiefdoms evolved in the Valley of Oaxaca.

It is evident that wealth differences existed in the valley in 1000 B.C. and that control of wealth was tied in part to differential access to foreign, exotic goods. Some households were linked into social networks extending to other Mesoamerican regions where these goods originated. The

members of these households were treated differentially in life and in death; they had relatively high prestige and perhaps special social positions or statuses. Did these same households also have power in society? No known household controlled the bulk of specialized production or exchange of exotic goods, although the number of households involved in such exchange constitutes a small minority. Nor did any particular household or group monopolize access to important supernatural forces. In fact, two distinct symbolic sets (described below) predominated in religious imagery, and neither of these was monopolized by a particular household, neighborhood, or community.

Although chiefly households known ethnographically and historically often reside in especially elaborate houses (e.g., Helms 1979:9), in the Valley of Oaxaca of 1000 B.C. no elite residence is known that would be analogous to, for example, the elevated chiefs' houses of southeastern North American chiefdoms such as the Natchez (Nabokov 1989:96–97). By the second half of the San José phase, the major architectural feature of San José Mogote was an 18-meter-wide stone-faced terrace upon which sat a multitiered pyramidal platform some 2 meters high (Marcus and Flannery 1996:108–10). Access to the broad terrace surface in front of the platform was by way of two narrow staircases. Two carved stones, bearing feline and bird imagery, had been incorporated into an extension of the terrace face, strongly suggesting that the terraced space was symbolically important. Some of the stones used in the construction of the terrace-facing wall had been brought in from other places in the Etna Valley, perhaps signifying the participation of other communities in the construction and use of the ceremonial space (Marcus and Flannery 1996:110). There is no house architecturally connected to or located on the platform, suggesting that the complex was a public, nonresidential ceremonial space rather than a chiefly residence. In sum, no architectural feature, whether house, burial mound, or any other, can be said to glorify or commemorate any particular group, household, or individual.

In the absence of any secure architectural indicators, evidence of the existence of a chieftainship might be found in the kinship organization of society. In many ethnographically and historically known chiefdoms, in Polynesia and sub-Saharan Africa and elsewhere, political power is vested in a hierarchy of officeholders centered on one household and its chiefly head. Often, this person is the highest-ranking member of the highest-ranking descent group (Service 1971:ch. 5; 1975: ch. 4). In these cases, the society as a whole (or, at least, its most prominent households) is organized as a system of kin groups made up of persons who trace their descent through either males or females (i.e., unilineally) to a common ancestor. In some chiefdoms, certain descent groups establish

their political and social preeminence and their control of wealth on the basis of a reckoning of descent that links high-ranking individuals through many generations of distinguished ancestors to the society's founders or to powerful supernatural forces. Secondary elites depend for their status on their genealogical nearness to the chief. Anthropologists refer to these various arrangements as systems of ranked descent groups, conical clan systems, ramages, or ranked society.

There may be evidence of descent reckoning in the Valley of Oaxaca of 1000 B.C. At San José Mogote and several other excavated communities, carved pottery depicts two distinct symbolic patterns, one stylistically representing lightning or sky (the fire-serpent) and the other earth (portrayed as "earthquake") (Flannery and Marcus 1994:136–39; Marcus 1989). That this pottery may refer to male descent groups is indicated by the fact that only males (including children) are buried with the carved imagery. Further, these decorated pots symbolize spatially distinct social groupings. Some whole communities are associated with either sky or earth; at San José Mogote the community was partitioned into two areas, one sky and the other earth (Pyne 1976). In addition, as Marcus and Flannery (1996:105) remind us, children's burials in some cases include high-status items, and this may indicate that status was conferred by descent-group membership (ascribed) rather than achieved.

Although many anthropologists correctly link the emergence of chiefdoms to the hereditary ranking of descent groups, we doubt that hereditary ranking or a chiefdom (in Service's sense) was present in the Valley of Oaxaca at 1000 B.C. Because a funeral may reflect the status of a deceased person's household as much as that of the person himself or herself (see, e.g., Cannon 1989), we cannot assume that an elaborate child's burial reflects ascribed status. Another discrepancy that we see in the data of 1000 B.C. relates to the nature of craft production and other economic activities of households at San José Mogote. In many chiefdoms known ethnographically elite households frequently are exempt from any direct involvement in production, depending instead on tribute from other households and their control of the labor of craft specialists (e.g., Earle 1987; Helms 1979:14, 15). At San José Mogote, however, high-status households were involved in the normal range of subsistence activities. Their storage pits and food preparation facilities and implements are similar to those of lower-ranking households, and they may in fact have processed exotic goods more than their lower-ranked contemporaries. For example, an elite house excavated by Flannery and Marcus (1994:333–39) contains evidence for cooking, food storage, the smoothing of wood, the manufacture of heat-treated chert bifaces, basket making, pearl oyster ornament manufacture, and pottery making. This

was hardly a household exempt from work or one whose status was clearly determined through descent reckoning. What it suggests is that wealth and status accrued to households that were central to exchange networks linking them to people in other regions and that turned out goods involved in these exchanges in large quantities.

Ethnographic examples of systems that link prestige and wealth to exchange and production rather than to descent reckoning include certain “big-man” societies of Highland New Guinea (such as the Kapauku [Pospisil 1963:214–15]) and the seventeenth-through nineteenth-century Plains Indians (e.g., Lewis 1942). In both of these cases, influential household heads were successful in part because they were able to assemble and motivate a household capable of high levels of production (for example, on the Plains, in fur processing). One of the strategies they employed to this end was expanding the working capacity of the household through polygyny (Lewis 1942). The association of high-status individuals with multiple burials in the Valley of Oaxaca suggests that this may have been one strategy for building a productive household during the San José phase as well.

Moiety organization rather than a chiefdom?

How do people manage to incorporate competing “big men” and their factions into a single, integrated society? On the Plains of western North America, the creative solutions developed to solve this problem included elaborate tribal rituals, tribal councils, rotating chiefships, medicine and war societies, and many other mechanisms of social integration (e.g., Hoebel 1978). For us, the most pervasive feature of social structure of the San José phase of the Valley of Oaxaca is not a system of ranked descent groups but the duality of earth-and-sky symbolism. We suggest that this dual emphasis is inconsistent with social structure based on unilineal descent. Unilineal descent-group systems such as those of the Hopi, the Northwest Coast Indians, the Iroquois, and the Huron are much more fragmented (Driver 1969:248, map 33), although some cases also have a dual grouping of descent groups (moieties). Typically the society is made up of more than two descent groups, each with its own totemic symbolism, sacred objects, emblems, residences or clusters of houses, rituals, and even ritual structures. For example, the Hopi, with a turn-of-the-twentieth-century population of about 2,000 (the same as the Valley of Oaxaca in 1000 B.C.), were divided into about thirty clans (Ortiz 1979; Titiev 1944). Some grouping of related clans (called phratries) occurred, but even combined in this way there were fourteen groupings rather than just two.

Social structure based on descent groups is likely to show greater diversity in symbolism than we have in the Valley of Oaxaca at 1000 B.C. Given the wide distribution of earth-and-sky symbolism throughout Mesoamerica during the Early Horizon (Coe 1989; Flannery and Marcus 1994:387), it is difficult to see how it could have represented the same descent groups over such a large, culturally diverse area. This degree of uniformity seems unlikely since descent group systems in general tend to be variable from region to region. This discrepancy throws additional doubt on the hypothesis that the Valley of Oaxaca had a political structure based on descent reckoning.

A significant feature of the valley's symbolic system of 1000 B.C. is its emphasis on two primary principles, sky and earth, manifested as lightning and earthquake. Together they represented the most important supernatural forces affecting humans. But they are, at the same time, opposites, reflecting the contrastive nature of supernatural power. This brings to mind other instances of dual symbolic systems that are thought to contribute to the integration of social systems. The anthropologist A. R. Radcliffe-Brown referred to this process as "opposition." As Radcliffe-Brown (quoted in Kuper 1977:65–66) expressed it, the

Yin-Yang philosophy of ancient China is the systematic elaboration of the principle that can be used to define the social structure of moieties in Australian tribes, for the structure of moieties is . . . one of a unity of opposing groups, in the double sense that the two groups are friendly opponents, and they are represented as being in some sense opposites, in the way in which eaglehawk and crow or black and white are opposites.

Eggan (1950:302) writes in a similar vein about the dual organization of New Mexico Pueblos such as the Tewa: "dual organizations in a broad sense are devices to organize and regulate rivalry and opposition in order to serve the purposes of the group as a whole. . . Ceremonial dual divisions . . . reflect differences in seasonal activities, observations of solar phenomena, and the like; they control ceremonial rivalry by regulating competition and dividing responsibility in channeled areas" (cf. Lowell 1996).

We lack the data that would allow us to understand the dual divisions in the Valley of Oaxaca of 1000 B.C. in detail, but the pervasive duality of earth-and-sky symbolism suggests that social integration was achieved through a principle of moiety opposition rather than through the centralized political offices of a chieftainship. A productive analogy for San José Mogote and the rest of the Valley of Oaxaca in 1000 B.C. might be found among ethnographically described Mesoamerican peasant communities with moiety structures. This pattern of dualistically partitioned communities (which in some cases links outlying dependent communities to partitions of a central one) is regarded by cultural anthropologists as a

survival of an ancient aboriginal Mesoamerican social structure, because most of the communities still displaying it are those that were least influenced by Spanish imperial policies. In addition, there are no known Spanish or more recent Mexican government policies that would have produced it (Hunt and Nash 1967:261–68).

These dual partitions or *barrios* generally are not composed of ranked unilineal descent groups such as the conical clan systems of chiefdoms (Beals 1945; Hunt and Nash 1967:261–68). Indeed, Mesoamerica is not recognized as an area in which unilineal descent played an important role in aboriginal social structure (Driver 1969:map 32). Furthermore, moiety structure and descent groups need not coexist; many known moiety systems (for example, the Tewa Pueblos of New Mexico) exist in the absence of descent group structure (Beals 1945).

The dual partitions or *barrios* known ethnographically have primarily ceremonial and political functions. For example, among the Western Mixe speakers of the mountains just north and east of the Valley of Oaxaca (Beals 1945), each *barrio* has its own saint as a key symbol and is charged with carrying out the associated saint's-day ritual. In addition to ritual, governance of Mixe communities is structured by the dual system. An important feature of dual governance is that it prevents the concentration of power in any one group or household. At any one time the two most important Mixe officials, mayor and judge, must be of different *barrios*, and these offices are reversed between *barrios* annually. Lower officials involved in day-to-day governance rotate offices between *barrios* in alternate weeks.

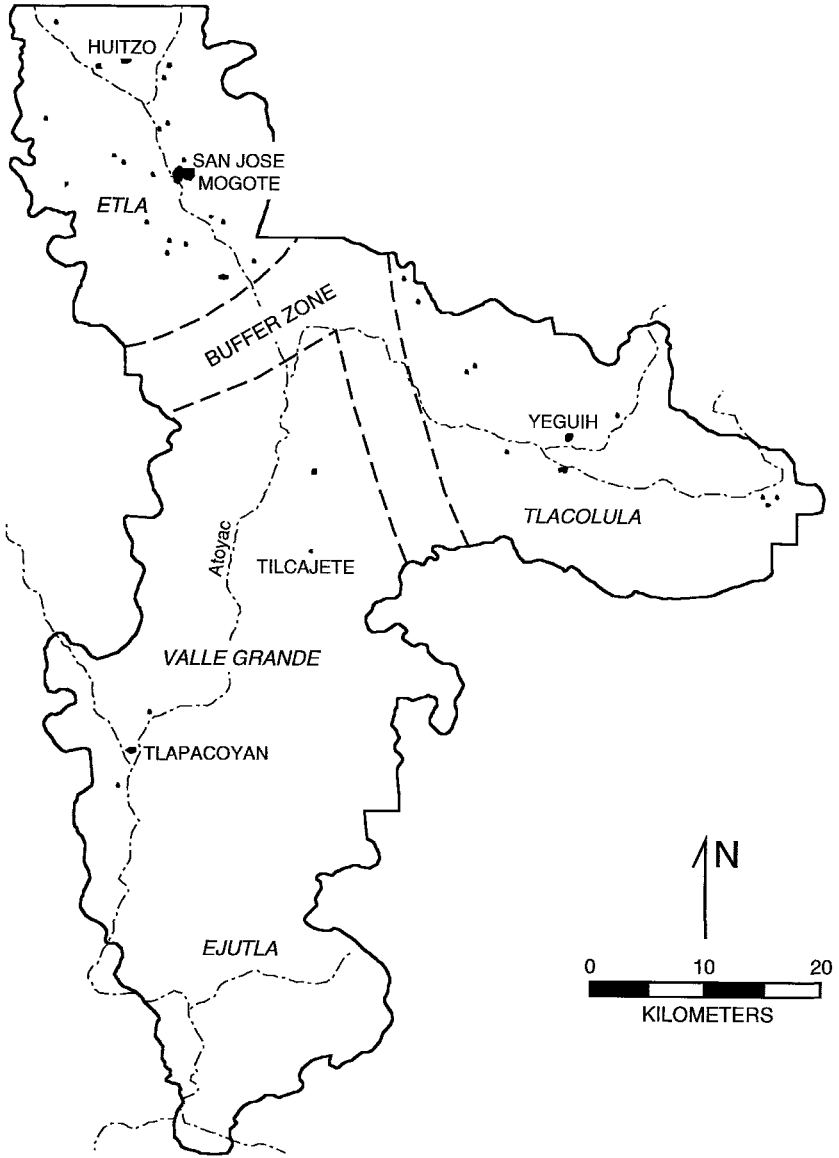
Applying a dual-*barrio* analogy to the Valley of Oaxaca of 1000 B.C. does not provide all the answers about how society was governed, but it does allow us to posit a political structure in which governance was corporate – in which power was shared across the main constituent groups of society rather than being vested primarily in a specific chiefly household or high-ranking descent group. Given the social and wealth inequality apparent in the San José phase, it is interesting that in some ethnographically known Native American societies, such as the Plains tribes mentioned above, various systems of corporate governance permitted considerable leeway for individual households to engage in trade and to accumulate prestige and even wealth (Hoebel 1978). At the same time, these systems of governance prevented the concentration of power in the hands of particular wealthy or prestigious families or groups (see, e.g., Trigger 1990). Interestingly in light of our Oaxaca case, these Native American systems often reflect the application of concepts of dual governance, for example, in the distinction frequently made between peace (or internal) chief and war (or external) chief (e.g., Miller 1955).

We conclude that in the Valley of Oaxaca of 1000 B.C. it was possible for some households to accumulate wealth and prestige to a degree not seen previously. The major cause of the growing social differentiation was participation in the Early Horizon interaction sphere. Especially at San José Mogote, important households with ties to distant regions were able to obtain exotic goods that served as personal adornments, were used in ritual, and were buried with esteemed individuals. We do not doubt that these same well-connected households played important political roles in society, although how power was exercised and who exercised it are still unclear. Although participation in the Mesoamerican interaction sphere by Valley of Oaxaca households was a cause for the growing differences in access to wealth and prestige, it did not produce a centralized chiefdom of the type anthropologists consider a stepping-stone to the state. Instead, the Valley of Oaxaca combined a dual symbolic system with community-based ritual, and this was built around a dual social structure of barrios and their dependent communities. This was a corporate local government embedded in a larger, Mesoamerican social network.

The Middle Formative

By the Middle Formative Rosario phase (700–500 B.C.) the Early Horizon interaction sphere had changed substantially (Grove 1987). While some goods, such as obsidian, continued to be exchanged over long distances, by the end of this phase the amount of intergroup interaction and stylistic sharing had declined. For example, many localized ceramic styles had developed in different Mesoamerican regions (e.g., Demarest 1989). In the Valley of Oaxaca, some fancy pottery of the Rosario phase still expressed symbolic themes that were seen in the San José phase, especially earth symbolism, but other decoration appears to consist of geometric designs that may have had less specific symbolic content. The system of dual barrios did not continue through the Middle Formative, and at this point we do not fully understand what kind of social system had developed to replace it (see Feinman et al. 1985; Kowalewski et al. 1989:ch. 4; Marcus and Flannery 1996:ch. 10).

During the Rosario phase, San José Mogote continued as the region's major center, but other communities had grown substantially. Huitzo in the far northern end of the Etla arm, Tilcajete in the Valle Grande, and Yegüih in the Tlacolula arm are the most important such "head towns" (fig. 2.7). Surrounding these centers were clusters of smaller communities. These site clusters, consisting of centers plus dependent communities, were separated from each other by largely unoccupied areas that we interpret as buffer zones (contested areas in which settlement would have



2.7 Rosario-phase settlements with populations of ten or more and buffer zones.

been unsafe). These changes in settlement pattern suggest the development of competing polities and a reduction of San José Mogote regional dominance.

There was evidently a considerable amount of public construction in the various head towns. At San José Mogote, Flannery and Marcus excavated a large Rosario-phase platform (Structure 19) atop a high hill. The culmination of several building stages here was a platform roughly 22 by 29 meters supported by large quarried limestone blocks, some weighing half a ton. The platform's west-facing staircase led to a lime-plastered platform (Structure 28) on which stood a large wattle-and-daub temple. Thus, an Early Formative social system that devoted more energy to the construction of public ritual buildings than to the construction of elite residences or burial monuments of chiefs persisted but on a grander scale. (Later in the Rosario phase, however, this temple and its platform were superseded by an elite residence.)

Excavations in and around Structure 19 provide intriguing evidence of an important element of the changing social system of the later Rosario phase. At some point the temple atop Structure 28 had been intentionally burned, suggesting conflict between communities or within San José Mogote itself. In a passageway between Structure 19 and another large Rosario-phase platform, Flannery and Marcus discovered an impressive carved-stone monument (Monument 3) that is the first of its kind (fig. 2.8). On this slab was carved a naked man, whose heart had been removed. This figure, its accompanying hieroglyphs (indicating that his name may have been "1 Earthquake"), and other evidence from the Structure 19 area led Marcus and Flannery (1996:130) to several inferences about the Rosario phase:

(1) The 260-day calendar clearly existed by this time. (2) The use of Xòo, a known Zapotec day-name, relates the hieroglyphs to an archaic form of the Zapotec language. (3) The carving makes clear that Rosario phase sacrifice was not limited to drawing one's own blood with stingray spines; it now included human sacrifice by heart removal. (4) Since 1 Earthquake is shown naked, even stripped of whatever ornaments he might have worn, he fits our sixteenth-century descriptions of prisoners taken in battle. This carving of a prisoner, combined with the burning of the temple on Structure 28, suggests that by 600 B.C. the well-known Zapotec pattern of raiding, temple-burning, and capture of enemies for sacrifice had begun. (5) Many later Mesoamerican peoples, including the Maya, set carvings of their defeated enemies where they could be literally and metaphorically "trod upon." The horizontal placement of Monument 3 suggests that it, too, was designed for that visual metaphor.

Sometime after Structure 28 was burned, still within the Rosario phase, this same location, commanding a hill 15 meters above the rest of



2.8 Top and side views of Monument 3 at San José Mogote, discovered by Joyce Marcus and Kent V. Flannery. Drawing by Mark Orsen, courtesy of Joyce Marcus. Length 1.45 m.

the settlement, was used for the construction of an elaborate residence. The site chosen for this commanding house, one previously used for communal ritual, suggests increasing concentration of power in the hands of a particular household or households rather than in social-integrative rituals and their public ceremonial spaces.

In previous phases, all houses, regardless of status, were built near the

center of an open yard. The Rosario-phase elite house described here took the form of an interior patio surrounded by room complexes (Marcus and Flannery 1996: fig. 139), much like the later houses in the valley, whose floor plans tended to restrict access to the more private living spaces of a patio and adjacent rooms that faced onto it. Its construction was of adobe rather than the usual wattle and daub, indicating a growing dichotomy in the material worlds of elite and nonelite. Although the house produced little evidence of craft production, its members may have been oriented toward military activities (suggested by an offering of eleven obsidian projectile points) and ritual (suggested by whistles and bloodletting tools).

Additionally, this household may have made use of descent rhetoric in a manner not seen previously. An anthropomorphic brazier found here could be a predecessor of incense burners that later figured in Zapotec rituals of ancestor worship (Marcus and Flannery 1996: fig. 141). A large (2-by-3 meter) stone-lined, two-chambered tomb under the house's patio is also the earliest known example of a major feature of Zapotec elite houses. Like the brazier, the tomb likely signifies an intensifying interest in connecting the household to its forebears through the material culture of ancestor worship. The brazier and tomb still do not constitute definitive evidence of a system of ranked descent groups, but they do suggest that by the Rosario phase there may have been more use of a rhetoric that claimed a connection between wealth, status, power, and ancestors. The use of the term "chiefdom" might be appropriate for this social formation, with the proviso that we still cannot be sure that ranked descent groups were part of the social matrix.

The next major step toward the development of the state in the Valley of Oaxaca was the founding of a new regional political capital at Monte Albán. The Rosario-phase social context for this profound transformation included increased political fragmentation in the region, the development of a warfare-sacrifice complex, and an evident increase in the degree of political centralization. An additional set of factors conditioning the choice to build a new capital was the changing nature of the Mesoamerican world of the latter Middle Formative period. By 500 B.C. the Mesoamerican interaction sphere of the Early Horizon had largely disintegrated and regionalism had increased. Many of the communities that had played major roles in the interaction sphere – Tlatilco in the Basin of Mexico, San Lorenzo in Veracruz, and Chalcatzingo in Morelos – were no longer active, or had diminished roles; in their stead new centers had emerged. In this changing social environment, it may have been difficult for people to maintain the social ties that supplied exotic goods, and this too could have brought increased uncertainty and

conflict. A dynamic, perhaps chaotic or unpredictable Mesoamerican scene may have been another factor conditioning the decision to establish a new form of political structure, one that had the capacity to integrate the Valley of Oaxaca into a single political system.